ਸ਼ਹੀਦ ਮੇਜਰ ਹਰਮਿੰਦਰਪਾਲ ਸਿੰਘ (ਸ਼ੌ.ਚੱ.) ਸਰਕਾਰੀ ਕਾਲਜ, ਸਾਹਿਬਜ਼ਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ

SHAHEED MAJOR HARMINDERPAL SINGH (Shaurya Chakra) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

ਫੇਸ-6, ਸਾਹਿਬਜ਼ਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ (ਮੋਹਾਲੀ)-160056 Phone No. 0172-2225164 e-mail ID: principal.gcmohali@gmail.com

SHAHEED MAJOR HARMINDERPAL SINGH (SHAURYA CHAKRA) GOVERNMENT COLLEGE, S.A.S NAGAR

1.1.1: **The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment**

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Harjeet Gujral
Principal
SMHS Govt. College
Sahibzada Ajit Singh Nagar

ਸ਼ਹੀਦ ਮੇਜਰ ਹਰਮਿੰਦਰਪਾਲ ਸਿੰਘ (ਸ਼ੈ.ਚੱ.) ਸਰਕਾਰੀ ਕਾਲਜ, ਸਾਹਿਬਜ਼ਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ

SHAHEED MAJOR HARMINDERPAL SINGH (Shaurya Chakra) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

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Curriculum Policy of the Institution

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SHAHEED MAJOR HARMINDERPAL SINGH (Shaurya Chakra) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

ਫੇਸ-6, ਸਾਹਿਬਜ਼ਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ (ਮੋਹਾਲੀ)-160056 Phone No. 0172-2225164 e-mail ID: principal.gcmohali@gmail.com

Curriculum Policy Statement

Curriculum of a higher education institution reflects the values the institution stands for. The nature and means of imparting knowledge determine the success of a higher education institution in developing young men and women for a holistic and meaningful life. The Shaheed Major Harminderpal Singh (Shaurya Chakra) Government College, Sahibzada Ajit Singh Nagar (Mohali) aims to offer education through a curriculum that shapes the students holistically. The Curriculum delivery not only considers intellectual, vocational and social dimensions but also promote civic behaviour, social cohesion and spiritual development.

The institution tries to deliver a curriculum that is relevant to the changing circumstances and environment; hence it is subjected to timely evaluation and restructuring. The curriculum delivery of the institute aims to instil the quality of discipline, effective communication and competitive spirit. The curriculum not only focuses on teaching the syllabi but also ensures that education imparted is value based, community orientated with an aim of nation building, promotes academic excellence, provides career opportunities, ensures skill development and in the end creates socially responsible citizens.

The Shaheed Major Harminderpal Singh (Shaurya Chakra) Government College is affiliated to Punjabi University, Patiala and hence follows the curriculum designed by it. The college follows a pre-defined plan for curriculum delivery that includes consistent teaching, experiential learning, formative assessment and an explicit focus on monitoring and feedback. Curricular delivery framework of the college with important components is outlined below:

- **Academic Calendar:** The College follows the broad academic calendar issued by the University. In addition to this, all the departments in the college have their own academic calendars clearly specifying the teaching of the syllabus, extra-curricular & extension activities, evaluation & assessment, remedial/tutorial learning plan, guidance and facilitation of advanced and meritorious students.

- **Time Table & Unitization:** The College follows a strict time table for delivery of lectures and conduct of extra-curricular activities. The adherence to time table ensures effective

Principal
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Sahibzada Ajit Singh Nagar

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SHAHEED MAJOR HARMINDERPAL SINGH (Shaurya Chakra) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

ਫੇਸ-6, ਸਾਹਿਬਜ਼ਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ (ਮੋਹਾਲੀ)-160056 Phone No. 0172-2225164 e-mail ID: principal.gcmohali@gmail.com

utilization of time while ensuring every aspect of the curriculum finds enough space in the academic calendar for students to have appropriate participation in experiential learning. Further, every department publish unitization plan for the subjects depicting the time bound coverage of the syllabus.

- **Tutorials & Continuous Internal Assessment:** The College inculcates in its academic schedule the provision for tutorial classes to guide students on regular bases. Further, continuous internal assessment is to be ensured through performance of students in monthly tests, mid-semester tests, assignments and participation in activities conducted by the departments and the institution.

- **Experiential Learning**: The institute through its NCC, NSS, Buddy and Red Ribbon wings creates opportunities to the students for experiential learning through engagement in activities that contributes in nation building and community participation. Besides, all the departments of the college are encouraged to establish link with the community and industry for creating opportunities for experiential learning of students through field works and internships.

- **Counselling & Career Guidance:** For realization of a holistic learning environment the college aims at providing counselling for its students to achieve personality and character building. Also, through Career Counselling and Placement Cell, the college aims to provide relevant information and connect to the students for achieving a successful career in their chosen fields.

Though, the college follows the curriculum designed by Punjabi University, Patiala, all the faculty members are encouraged and advised to go beyond the prescribed curriculum framework of the university and integrate an interdisciplinary and participatory approach in their teaching for comprehensive learning.

Principal
SMHS Govt. College
Sahibzada Ajit Singh Nagar

ਫੇਸ-6, ਸਾਹਿਬਜ਼ਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ (ਮੋਹਾਲੀ)-160056 Phone No. 0172-2225164 e-mail ID: principal.gcmohali@gmail.com

Academic Calendars for Academic Sessions for the Last Five Years

The College is affiliated to Punjabi University Patiala and is a Government College directly under the Department of Higher education, Government of Punjab. It follows the Directions/guidelines from the University and the Government. The College prepares its Annual Academic Calendar on the basis of the schedule announced by the Government and the academic calendar issued by the University. The College strives to go beyond the curriculum prescribed by the University and inculcate various academic and extracurricular activities that are beneficial for overall development of the students. The Academic Calendar for the last five years of the college can be accessed on the following link:

https://smhsgcmohali.in/AcademicCalendar

The College ensures that curriculum and the various academic and extra-curricular activities are delivered to the students in a planned manner. The academic calendar is prepared by a committee and is approved by the Principal annually. The calendar is uploaded on the institutional website as well as displayed on students notice boards also. Further, all the departments of the college prepare departmental academic calendar based on the academic calendar of the college. The departmental calendars illustrate the activities that departments of the college undertake for their students such as orientation, celebration of important relevant days and internal assessment related dates. The departmental calendars can also be accessed from the departmental web pages on the institutional website.

https://smhsgcmohali.in/Departments

ACADEMIC CALENDAR 2018-19

The Day	The Date
Session Commencement Date	16/07/2018
Orientation of B.A, B.Com, B.Sc, M.A and M.Sc I semester	20/7/2018
Independence Day	15/08/2018
Festival of Teej	20/07/2018
Talent Competition	4/9/2018
Teachers Day	5/9/2018
Celebration of Gandhi Jayanti	2/10/2018
Educational Tour	October(Last Week)
MST-I	01/09/2018 onwards
Punjab Day	1/11/2018
Constitution Day	26/11/2018
AIDS Day	1/12/2018
Army Day	7/12/2018
Voters Day	25/01/2019
Republic Day	26/01/2019
Lohri	13/01/2019
MST-II	Last week of January
Placement Drive	January
The Festival of Basant Panchami	February
Convocation	Last week of February
Annual Sports Day	First week of February
International Women's Day	8/3/2019
MST-II	Second week of March
Annual Prize Distribution	Second week of April

N. Tripathi
IQAC Coordinator

Principal
Govt. College
Sahibzada Ajit Singh Nagar

Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

Jaspal

ACADEMIC CALENDAR 2019-20

The Day	The Date
Session Commencement Date	30/07/2019
Orientation of B.A, B.Com, B.Sc, M.A and M.Sc I semester	8/8/2019
Independence Day	15/08/2019
Festival of Teej	23/8/2019
Talent Competition	1/9/2019
Teachers Day	5/9/2019
MST-I	20/09/2019 to 27/9/2019
Celebration of Gandhi Jayanti	2/10/2019
Educational Tour	First and Second week of October
Food Safety Day	15/10/2019
MST-II	2/11/2019 to 8/11/2019
Punjab Day	1/11/2019
Mother Language Month Activities	Every week of November
Constitution Day	26/11/2019
AIDS Day	1/12/2019
International Day for Persons with Disabilities	3/12/2019
Army Day	26/12/2019
Lohri	13/01/2020
Voters Day	25/01/2020
Republic Day	26/01/2020
Festival of Basant Panchami	4/2/2020
International Day for Social Justice	20/2/2020
International Mother's Day	21/2/2020
Convocation	22/2/2020
National Science Day	28/2/2020
Placement Drive	March
Annual Sports Day	3/3/2020
MST-I	6/3/2020 to 14/3/2020
International Women's Day	8/3/2020
International Zero Waste Day	30/3/2020
International Health Day	7/4/2020
MST-II	10/4/2020 to 18/4/2020
Earth Day	22/4/2020
Environment Day	5/5/2020

N. Tripathi
IQAC Coordinator

Jaspreet

Principal
SMHS Govt. College
Sahibzada Ajit Singh Nagar

ACADEMIC CALENDAR 2020-21

The Day	The Date
Session Commencement Date	17/08/2020
Orientation of BA, B.Com, B. Sc., MA and M.Sc. Semester-1	20/8/2020
Independence Day	15-08-2020
Talent Competition	1/10/2020
Celebration of Gandhi Jayanti	2/10/2020
Food Safety Day	15-10-2020
Punjab Day	1/11/2020
Constitution Day	26-11-2020
AIDS Day	1/12/2020
International Day for Persons with Disabilities	3/12/2020
Army Day	26-12-2020
Lohri	13-01-2021
Voter's Day	25-01-2021
Republic Day	26-01-2021
International Mother's Day	21-02-2021
National Science Day	28-02-2021
Placement Drive	Month of March
International Women's Day	8/3/2021
International Zero Waste Day	30-03-2021
International Health Day	7/4/2021
Earth day	22-04-2021
Environment Day	5/5/2021
Tree planting campaign	First week of July, last of September and second week of March

N. Pippalli
IQAC Coordinator

Principal
SMHS Govt. College
Sahibzada Ajit Singh Nagar

Inspect

Academic calendar year 2021-2022

The Day	The Date
Session Commencement Date	1/9/2021
Orientation of BA, B.Com, B. Sc., MA and M.Sc. Semester-1	10/9/2021
Independence Day	15-08-2021
Festival of Teej	23/08/2021 (Virtual)
Talent Competition	01/09/2021 (Virtual)
MST - 1	25/10/2021 to 03/11/2021
Celebration of Gandhi Jayanti	2/10/2021
Food Safety Day	15-10-2021
MST- 2	25-11-2021 to 03-12-2021
Punjab Day	1/11/2021
Mother Language Month Activities	Every week of November
Constitution Day	26-11-2021
AIDS Day	1/12/2021
International Day for Persons with Disabilities	3/12/2021
Army Day	26-12-2021
Lohri	13-01-2022
Voter's Day	25-01-2022
Republic Day	26-01-2022
International Social Justice Day	20-02-2022
International Mother's Day	21-02-2022
National Science Day	28-02-2022
Placement Drive	March
MST-1	22/03/2022 to 28/03/2022
International Women's Day	8/3/2022
International Zero Waste Day	30-03-2022
Annual sports day	7/4/2022
International Health Day	9/4/2022
MST-2	26/04/2022 to 28/04/2022
Earth day	22-04-2022
Environment Day	5/5/2022
Tree planting campaign	First week of July, last of September and second week of March

N. Gupta
IQAC Coordinator

Principal
SMHS Govt. College
Sahibzada Ajit Singh Nagar

Academic calendar year 2022-23

The Day	The Date
Session Commencement Date	30/07/2022
Orientation of BA, B.Com, B. Sc., MA and M.Sc. Semester-1	8/8/2022
Independence Day	15-08-2022
Festival of tea	23/08/2022
Talent Competition	1/9/2022
Teachers Day	5/9/2022
MST - 1	20-09-2022 to 27-09-2022
Azadi ka Mahotsav	28-09-2022
Celebration of Gandhi Jayanti	2/10/2022
Educational tour	October first and second week
Food Safety Day	15-10-2022
MST- 2	02-11-2022 to 08-11-2022
Punjab Day	1/11/2022
Mother Language Month Activities	Every week of November
Constitution Day	26-11-2022
AIDS Day	1/12/2022
International Day for Persons with Disabilities	3/12/2022
Army Day	26-12-2022
Lohri	13-01-2023
Voter's Day	25-01-2023
Republic Day	26-01-2023
The festival of Basant Panchami	4/2/2023
International Social Justice Day	20-02-2023
International Mother's Day	21-02-2023
Convocation	22-02-2023
National Science Day	28-02-2023
Placement Drive	March
Annual sports day	3/3/2023
MST-1	06-03-2023 to 14-03-2023
International Women's Day	8/3/2023
International Zero Waste Day	30-03-2023
International Health Day	7/4/2023
MST-2	10-04-2023 to 18-04-2023
Earth day	22-04-2023
Environment Day	5/5/2023
Tree planting campaign	First week of July, last of September and second week of March
G-20 Activities	First and third week of February, March, April

N. Tripathi
IQAC Coordinator

Jaspreet

SMHS Govt. College
Sahibzada Ajit Singh Nagar

Academic calendar year 2023-24

The Day	The Date
Session Commencement Date	1/8/2023
Orientation of BA, B.Com, B. Sc., MA and M.Sc. Semester-1	2/8/2023
Orientation of MA and M.Sc.	17/8/2023
Independence Day	15-08-2023
Festival of Teej	23/08/2023
Talent Competition	1/9/2023
Teachers Day	5/9/2023
MST - 1	25-09-2023 to 30-09-2023
Celebration of Gandhi Jayanti	2/10/2023
Educational tour	October first and second week
Food Safety Day	15-10-2023
MST- 2	06-11-2023 to 11-11-2023
Punjab Day	1/11/2023
Mother Language Month Activities	Every week of November
Constitution Day	26-11-2023
AIDS Day	1/12/2023
International Day for Persons with Disabilities	3/12/2023
Army Day	26-12-2023
Lohri	13-01-2024
Voter's Day	25-01-2024
Republic Day	26-01-2024
The festival of Basant Panchami	4/2/2024
International Social Justice Day	20-02-2024
International Mother's Day	21-02-2024
Convocation	22-02-2024
National Science Day	28-02-2024
Placement Drive	March
Annual sports day	3/3/2024
MST-1	24-02-2024 to 5-03-2024
International Women's Day	8/3/2024
International Zero Waste Day	30-03-2024
International Health Day	7/4/2024
MST-2	2-04-2023 to 11-04-2023
Earth day	22-04-2024
Environment Day	5/5/2024
Tree planting campaign	First week of July, last of September and second week of March
G-20 Activities	First and third week of the Month

Jaspreet N. Tripathi
IQAC Coordinator

Principal
SMHS Govt. College
Sahibzada Ajit Singh Nagar

SHAHEED MAJOR HARMINDERPAL SINGH (SHAURYA CHAKRA) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Commerce Department

Academic calendar (2018-2019)

Semester 1,3,5		
Month	**Activity**	**Goals/Learning Outcomes**
July	• Admission • Commencement of classes B.Com 1st , 3rd and 5th semester • Orientation of B.COM I	• To make teaching effective and convenient. • To make teaching-learning effective. • To inform students the syllabus and books to be purchased. • To ensure that syllabus is finished on time.
August	• Commerce day • Independence day • Talent hunt	• To aware students regarding commerce topics through slogan writing, paper presentation • Students learns importance of service to nation • To encourage the students to participate in extracurricular activities
September	• Teachers day • Teej celebration • Personality development	• To commemorate the birthday of india's first vice president Dr.SarvopalliRadhakrisnan and to aware the students regarding role of teacher in their life and to • To encourage the students to participate in extracurricular activities • To ensure overall development of students
October	• Gandhi jayanti • Youth festival	• Learn self determination • To encourage the students to participate in extracurricular activities
November	• Filling Of Examination	• To ensure effective

	Form • Classes for Advanced Learners • Remedial classes	learning so that students achieve better grades in exams. This benefits both slow and advanced learners.
December	• Internal assessment • Final exams	• Internal assessment based on MST, Assignments, attendance.

Monthly test.

Assignment collection.

MST in moth of October

Semester 2,4,6

Month	Activity	Goals/Learning Outcomes
January	• Commencement of classes B.Com 2nd ,4th and 6th Semester • Republic day • Voter day	• To inform students regarding syllabus, books. • Republic Day celebrates the adoption of the Indian Constitution. • To encourage more young voters to take part in the political process
February	• Paper reading competition • Quiz competition	• To prepare students to speak with greater control and charisma in front of others. • Students can "think outside the box" or from diverse perspectives by participating in quiz competition
March	• Educational trip • International women day • Athletic meet • Prize distribution	• Educational Excursion and field trip for students is to reinforce experiential and contextual learning • A global day celebrating the social, economic, cultural, and political achievements of women. • To Promote sports among the students for their

		overall development and encourage in Sport. • To generates new enthusiasm in the students
April	• Resume writing for final year • Farewell party	• Students able to make their resume that describes the education ,skills, experiences and achievements with proper format • To address outgoing students and wishing them best for future endeavours and appreciate their academic journey.
May	• Classes for Advanced Learners • Remedial classes	• To ensure effective learning so that students achieve better grades in exams. This benefits both slow and advanced learners.
June	• Yoga day • Internal assessment • Final exams	• To develop the habit of meditation among youngsters so that they can enjoy more peace of mind and self-awareness. • Internal assessment based on MST, Assignments, attendance.

Monthly test.

Assignment collection.

MST in moth of April

Sunita Mittal

SHAHEED MAJOR HARMINDERPAL SINGH (SHAURYA CHAKRA) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Commerce Department

Academic calendar (2019-2020)

Semester 1,3,5		
Month	**Activity**	**Goals/Learning Outcomes**
July	• Admission • Commencement of classes B.Com 1st , 3rd and 5th semester • Orientation of B.COM I	• To facilitate new comers' students and also inform regarding syllabus, books, rules and regulation of college • To ensure that syllabus is finished on time.
August	• Commerce day • Independence day • Talent hunt	• To aware students regarding commerce topics through slogan writing, paper presentation • Students learns importance of service to nation • To encourage the students to participate in extracurricular activities
September	• Teachers day • Teej celebration • Personality development	• To commemorate the birthday of india's first vice president Dr.SarvopalliRadhakrisnan and to aware the students regarding role of teacher in their life • To encourage the students to participate in extracurricular activities • To ensure overall development of students
October	• Gandhi jayanti • Youth festival	• Learn self determination • To encourage the students to participate in extracurricular activities
November	• Filling Of Examination Form • Classes for Advanced Learners • Remedial classes	• To ensure effective learning so that students achieve better grades in exams. This benefits both slow and advanced

		learners.
December	• Internal assessment • Final exams	• Internal assessment based on MST, Assignments, attendance.

Monthly test.

Assignment collection.

MST in month of October

Semester 2,4,6

Month	Activity	Goals/Learning Outcomes
January	Commencement of classes B.Com 2nd ,4th and 6th Semester • Republic day • Voter day • Girl chid day	• To inform students regarding syllabus, books. • Republic Day celebrates the adoption of the Indian Constitution. • To encourage more young voters to take part in the political process
February	• Paper reading competition • Quiz competition	• To prepare students to speak with greater control and charisma in front of others. • Students can "think outside the box" or from diverse perspectives by participating in quiz competition
March	• Open-book test for all the three years on alternate days in the first week from the syllabus done so far. • To organize a trip to Science City, Kapurthala.	• To test the overall understanding and ability to respond answers correctly. • Learning-by-exploring and to complete Field Report for Environment and Road Safety Awareness paper for B.com II-year students.
April	• Resume writing for final year • Farewell party	• Students able to make their resume that describes the education ,skills, experiences and achievements with proper format • To address outgoing students and wishing them best for future endeavours

		and appreciate their academic journey.
May	• Classes for Advanced Learners • Remedial classes	• To ensure effective learning so that students achieve better grades in exams. This benefits both slow and advanced learners.
June	• Yoga day • Internal assessment • Final exams	• To develop the habit of meditation among youngsters so that they can enjoy more peace of mind and self-awareness. • Internal assessment based on MST, Assignments, attendance.
Monthly test. Assignment collection. MST in moth of April		

Sunita Mittal

SHAHEED MAJOR HARMINDERPAL SINGH (SHAURYA CHAKRA) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Commerce Department

Academic calendar (2020-2021)

Semester 1,3,5		
Month	**Activity**	**Goals/Learning Outcomes**
August	Online admission Commencement of online classes Online orientation Commerce day Independence day	• To facilitate new comers' students and also inform regarding syllabus, books, rules and regulation of college • To ensure that syllabus is finished on time. • To aware students regarding commerce topics through slogan writing, paper presentation • Students learns importance of service to nation
September	Teachers day Online paper reading competition Agriculture bill in favour and against Teej celebration Personality development	• To commemorate the birthday of India's first vice president Dr.SarvopalliRadhakrishnan and to aware the students regarding role of teacher in their life • Paper reading build confidence among students and to understand new agriculture bill • To encourage the students to participate in extracurricular activities • To ensure overall development of students
October	Gandhi jayanti Youth festival	• Learn self determination • To encourage the students to participate in extracurricular activities
November	Filling Of Examination Form • Classes for Advanced Learners • Remedial classes	• To ensure effective learning so that students achieve better grades in exams. This benefits both slow and advanced

		learners.
December	• To inform students regarding online mode of examinations. • Continuous doubt-clearing sessions for all the three classes on alternate days. • Commencement of semester examinations.	• To prepare the students for new of its kind exam pattern. • To ensure effective learning so that students achieve better grades in exams. This benefits both slow and advanced learners.
Monthly test. Assignment collection. MST in month of October		
Semester 2,4,6		
Month	**Activity**	**Goals/Learning Outcomes**
January	Commencement of classes B.Com 2nd ,4th and 6th Semester • Republic day • Voter day • Girl chid day	• To inform students regarding syllabus, books. • Republic Day celebrates the adoption of the Indian Constitution. • To encourage more young voters to take part in the political process
February	• Online Seminar on Teachings of Sri Guru TegBahadurJi. • Paper reading competition • Quiz competition	• Sri Guru TegBahadurJi guided his followers to peace and contentment by being happy with what they had. • To prepare students to speak with greater control and charisma in front of others. • Students can "think outside the box" or from diverse perspectives by participating in quiz competition
March	• To organize a trip to Science City, Kapurthala • International women day • Athletic meet • Prize distribution	• Learning-by-exploring and to complete Field Report for Environment and Road Safety Awareness paper for B.com II-year students • A global day celebrating the social, economic, cultural, and political achievements of women. • To promote sports among the students for their overall development and encourage in Sport. • To generates new

		enthusiasm in the students
April	• Resume writing for final year	• Students able to make their resume that describes the education ,skills, experiences and achievements with proper format
May	• Classes for Advanced Learners • Remedial classes	• To ensure effective learning so that students achieve better grades in exams. This benefits both slow and advanced learners.
June	• Online quiz on drug abuse. • To address outgoing students online and wishing them best for future endeavours. • Yoga day • Internal assessment • Final exams	• To aware the students regarding drug abuse and drug addiction. • To appreciate their academic journey. • To develop the habit of meditation among youngsters so that they can enjoy more peace of mind and self-awareness. • Internal assessment based on MST, Assignments, attendance.
Monthly test. Assignment collection. MST in moth of April		

Sumita Mittal

SHAHEED MAJOR HARMINDERPAL SINGH (SHAURYA CHAKRA) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Commerce Department

Academic calendar (2021-2022)

Semester 1,3,5		
Month	**Activity**	**Goals/Learning Outcomes**
August	Admission Commencement of classes Commerce day Independence day Talent hunt	• To facilitate new comers' students and also inform regarding syllabus, books, rules and regulation of college • To ensure that syllabus is finished on time.
September	Teachers day Teej celebration Personality development	• To commemorate the birthday of India's first vice president Dr.SarvopalliRadhakrisnan and to aware the students regarding role of teacher in their life • To encourage the students to participate in extracurricular activities To ensure overall development of students
October	Gandhi jayanti Youth festival	• Learn self determination • To encourage the students to participate in extracurricular activities
November	Filling Of Examination Form Classes for Advanced Learner Remedial classes	• To ensure effective learning so that students achieve better grades in exams. This benefits both slow and advanced learners.
December	Internal assessment Final exams	• Internal assessment based on MST, Assignments, attendance.
Monthly test. Assignment collection. MST in month of October		

Semester 2,4,6		
Month	**Activity**	**Goals/Learning Outcomes**
January	Commencement of classes B.Com 2nd ,4th and 6th Semester • Republic day • Voter day	• To inform students regarding syllabus, books. • Republic Day celebrates the adoption of the Indian Constitution. • To encourage more young

		voters to take part in the political process
February	• Paper reading competition • Quiz competition	• To prepare students to speak with greater control and charisma in front of others. • Students can "think outside the box" or from diverse perspectives by participating in quiz competition
March	• Educational trip • International women day • Athletic meet • Prize distribution	• Educational Excursion and field trip for students is to reinforce experiential and contextual learning • A global day celebrating the social, economic, cultural, and political achievements of women. • To Promote sports among the students for their overall development and encourage in Sport. • To generates new enthusiasm in the students
April	• Resume writing for final year • Farewell party	• Students able to make their resume that describes the education ,skills, experiences and achievements with proper format • To address outgoing students and wishing them best for future endeavours and appreciate their academic journey.
May	• Classes for Advanced Learners • Remedial classes	• To ensure effective learning so that students achieve better grades in exams. This benefits both slow and advanced learners.
June	• Yoga day • Internal assessment • Final exams	• To develop the habit of meditation among youngsters so that they can enjoy more peace of mind and self-awareness. • Internal assessment based on MST, Assignments, attendance.
Monthly test. **Assignment collection.** **MST in moth of April**		

Sumita Mittal

SHAHEED MAJOR HARMINDERPAL SINGH (SHAURYA CHAKRA) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Commerce Department

Academic calendar (2022-2023)

Semester 1,3,5		
Month	**Activity**	**Goals/Learning Outcomes**
August	• Admission • Commencement of classes • Commerce day • Independence day • Talent hunt	• To facilitate new comers' students and also inform regarding syllabus, books, rules and regulation of college • To ensure that syllabus is finished on time.
September	• Teachers day • Teej celebration • Personality development	• To commemorate the birthday of India's first vice president Dr.Sarvopalli Radhakrisnan and to aware the students regarding role of teacher in their life • To encourage the students to participate in extracurricular activities To ensure overall development of students
October	• Gandhi jayanti • Youth festival	• Learn self determination • To encourage the students to participate in extracurricular activities
November	• Filling Of Examination Form • Classes for Advanced Learner • Remedial classes	• To ensure effective learning so that students achieve better grades in exams. This benefits both slow and advanced learners.
December	• Internal assessment • Final exams	• Internal assessment based on MST, Assignments, attendance.
Monthly test. Assignment collection. MST in month of October		
Semester 2,4,6		
Month	**Activity**	**Goals/Learning Outcomes**
January	• Commencement of classes B.Com 2nd ,4th and 6th Semester • Republic day	• To inform students regarding syllabus, books. • Republic Day celebrates the

	• Voter day	adoption of the Indian Constitution. • To encourage more young voters to take part in the political process
February	• Paper reading competition • Quiz competition	• To prepare students to speak with greater control and charisma in front of others. • Students can "think outside the box" or from diverse perspectives by participating in quiz competition
March	• Educational trip • International women day • Athletic meet • Prize distribution • Global Money Week	• Educational Excursion and field trip for students is to reinforce experiential and contextual learning • A global day celebrating the social, economic, cultural, and political achievements of women. • To promote sports among the students for their overall development and encourage in Sport. • To generates new enthusiasm in the students • To aware the regarding save money and invest money
April	• Resume writing for final year	• Students able to make their resume that describes the education ,skills, experiences and achievements with proper format
May	• Classes for Advanced Learners • Remedial classes	• To ensure effective learning so that students achieve better grades in exams. This benefits both slow and advanced learners.
June	• Yoga day • Internal assessment • Final exams	• To develop the habit of meditation among youngsters so that they can enjoy more peace of mind and self-awareness. • Internal assessment based on MST, Assignments, attendance.
Monthly test. Assignment collection. MST in moth of April		

Sunita Mittal
HOD

PRINCIPAL

DEPARTMENT OF PHYSICS

ACADEMIC CALENDAR

(2017-2018)

Semester 1,3,5		
Month	**Activity**	**Goals/Learning Outcomes**
July	• Preparing workload for the upcoming session. • Curriculum distribution and preparing Lesson Plans. • To have an introductory session for B.Sc. II and III-year students. • To begin theory and practical classes of B.Sc. II and III-year students.	• To make teaching effective and convenient. • To make teaching-learning effective. • To inform students the syllabus and books to be purchased. • To ensure that syllabus is finished on time.
August	• Orientation day for the entry-class students. • One lecture per week on Saturdays to familiarize students with current research area in Physics.	• To familiarize the students with general code of conduct in department as well as in college. • To update and upgrade students' current knowledge and showing them the possibilities in this field.
September	• To celebrate "Environment and Cleanliness Day" with students exhibiting posters and showcasing working models. • Paper reading competition on the topic "Michael Faraday – his life and achievements" commemorating his birth anniversary.	• To develop practical skills regarding the subject and raise environmental awareness. • Learning by self-reading and self-analyzing so that students genuinely understand the greatness of the famous physicists.
October	• Department's cleanliness and beautification on the eve of Diwali.	• To inculcate moral, ethical values and sense of oneness.
November	• Completion of syllabus followed by revision.	• To ensure students have ample time for revision.
December	• Continuous doubt-clearing sessions for all the three classes on alternate days. • Commencement of semester examinations.	• To ensure effective learning so that students achieve better grades in exams. This benefits both slow and advanced learners.
* Monthly test of B.Sc. III, II and I on Mondays, Wednesdays and Fridays of third week, respectively in August, September and October. *Assignment collection of B.Sc.-III, II and I on Tuesday, Thursday and Saturday, respectively of third week of October.		

*MST of B.Sc. III, II and I on the first Monday, Wednesday and Friday of November, respectively. *Remedial classes in the zero period for the second and third week in the month of November. *Classes for Advanced Learners in the zero period in the fourth week of November.		
Semester 2,4,6		
Month	**Activity**	**Goals/Learning Outcomes**
January	• Commencement of the theory classes and practicals.	• To ensure that syllabus is finished on time.
February	• Preparing student teams for quiz, debates and declamations for Tech-Fest 2018. • Science Day celebration with paper-reading contest and science exhibition of working/non-working models.	• To ensure all-round development of student's personality. • To achieve learning-by-doing and establishing a sense of gratitude towards science.
March	• Educational tour to Chahal. • Open-book test for B.Sc. I, II and III on consecutive days of second week.	• Learning-by-exploring. • To test the overall understanding and ability to respond answers correctly.
April	• To deliver a lecture on "Stephen Hawking". • Completion of syllabus followed by revision.	• To break the monotony of routine classes and commemorate the memories of the great scientist. • To ensure students have ample time for revision.
May	• Continuous doubt-clearing sessions for all the three classes on alternate days. • Commencement of semester examinations.	• To ensure effective learning so that students achieve better grades in exams. This benefits both slow and advanced learners.
June	• To organize Farewell for outgoing students.	• To appreciate their academic journey.
* Monthly test of B.Sc. III, II and I on Mondays, Wednesdays and Fridays of third week, respectively in February, March and April. *Assignment collection of B.Sc.-III, II and I on Tuesday, Thursday and Saturday, respectively of third week of April. *MST of B.Sc. III, II and I on the first Monday, Wednesday and Friday of April, respectively. *Remedial classes in the zero period for the third and fourth week in the month of April. *Classes for Advanced Learners in the zero period in the first week of May.		

(2018-2019)

Semester 1,3,5		
Month	**Activity**	**Goals/Learning Outcomes**
July	• Preparing workload for the upcoming session.	• To make teaching effective and convenient.

	• Curriculum distribution and preparing Lesson Plans. • To have an introductory session for B.Sc. II and III-year students. • To begin theory and practical classes of B.Sc. II and III-year students.	• To make teaching-learning effective. • To inform students the syllabus and books to be purchased. • To ensure that syllabus is finished on time.
August	• Orientation day for the entry-class students. • To start 'Science Club' and to appoint President, Vice-President, Secretary, Joint-Secretary and Class Representatives for the same. • Starting tutorials and "Buddy Groups". • To organize workshop on "Entrepreneurship".	• To familiarize the students with general code of conduct in department as well as in college. • To inculcate the leadership, management qualities and a sense of responsibility among the students. • To aware students regarding drug abuse. • To make students self-reliant and inculcate business skills.
September	• Preparation of charts by students and decoration of notice board.	• For department's beautification and imbibing a sense of relatedness among students
October	• To organize a seminar on "Career options after graduation" for final year students.	• To make students self-reliant and future-ready.
November	• To take final year students to Job-fair at ITI, Phase-5, Mohali. • Completion of syllabus followed by revision.	• To prepare the students for future job interviews. • To ensure students have ample time for revision.
December	• Continuous doubt-clearing sessions for all the three classes on alternate days. • Commencement of semester examinations.	• To ensure effective learning so that students achieve better grades in exams. This benefits both slow and advanced learners.
* Monthly test of B.Sc. III, II and I on Mondays, Wednesdays and Fridays of third week, respectively in August, September and October. *Assignment collection of B.Sc.-III, II and I on Tuesday, Thursday and Saturday, respectively of third week of October. *MST of B.Sc. III, II and I on the first Monday, Wednesday and Friday of November, respectively. *Remedial classes in the zero period for the second and third week in the month of November. *Classes for Advanced Learners in the zero period in the fourth week of November.		

Semester 2,4,6		
Month	**Activity**	**Goals/Learning Outcomes**
January	• Commencement of the theory classes and practicals.	• To ensure that syllabus is finished on time.
February	• To organize poster-making, working models and PowerPoint-presentations competitions on the occasion of Science Day.	• To achieve learning-by-doing and establishing a sense of gratitude towards science.
March	• Open-book test for all the three years on alternate days in the first week from the syllabus done so far.	• To test the overall understanding and ability to respond answers correctly.
April	• Completion of syllabus followed by revision.	• To ensure students have ample time for revision.
May	• Continuous doubt-clearing sessions for all the three classes on alternate days. • Commencement of semester examinations.	• To ensure effective learning so that students achieve better grades in exams. This benefits both slow and advanced learners.
June	• To organize Farewell for outgoing students.	• To appreciate their academic journey.
* Monthly test of B.Sc. III, II and I on Mondays, Wednesdays and Fridays of third week, respectively in February, March and April. *Assignment collection of B.Sc.-III, II and I on Tuesday, Thursday and Saturday, respectively of third week of April. *MST of B.Sc. III, II and I on the first Monday, Wednesday and Friday of April, respectively. *Remedial classes in the zero period for the third and fourth week in the month of April. *Classes for Advanced Learners in the zero period in the first week of May.		

(2019-2020)

Semester 1,3,5		
Month	**Activity**	**Goals/Learning Outcomes**
July	• Preparing workload for the upcoming session. • Curriculum distribution and preparing Lesson Plans. • To have an introductory session for B.Sc. II and III-year students. • To begin theory and practical classes of B.Sc. II and III-year students.	• To make teaching effective and convenient. • To make teaching-learning effective. • To inform students the syllabus and books to be purchased. • To ensure that syllabus is finished on time.
August	• Orientation day for the entry-class students.	• To familiarize the students with general code of conduct in department as well as in college.

	• To encourage students to prepare resumes and appear for interviews in the Job-fair to be held at college.	• To remove their interview-phobia and make them future ready.
September	• To organize Freshers' Party. • To take regular theory and practical classes.	• For better interaction with staff and their seniors. • To ensure that syllabus is finished on time.
October	• To encourage students to showcase their hidden talents and organize on-spot debates.	• To create a feeling of oneness and equality where everyone is given an equal chance to speak their heart out.
November	• Female students of B.Sc. (all three years) to present small talk or presentation on "The Life and Achievements of Marie Curie" on account of her birth anniversary. • Completion of syllabus followed by revision.	• To ascertain gender empowerment and motivating girl students to actively participate in extra-curricular activities. • To ensure students have ample time for revision.
December	• Continuous doubt-clearing sessions for all the three classes on alternate days. • Commencement of semester examinations.	• To ensure effective learning so that students achieve better grades in exams. This benefits both slow and advanced learners.
* Monthly test of B.Sc. III, II and I on Mondays, Wednesdays and Fridays of third week, respectively in August, September and October. *Assignment collection of B.Sc.-III, II and I on Tuesday, Thursday and Saturday, respectively of third week of October. *MST of B.Sc. III, II and I on the first Monday, Wednesday and Friday of November, respectively. *Remedial classes in the zero period for the second and third week in the month of November. *Classes for Advanced Learners in the zero period in the fourth week of November.		
Semester 2,4,6		
Month	**Activity**	**Goals/Learning Outcomes**
January	• Commencement of the theory classes and practicals.	• To ensure that syllabus is finished on time.
February	• To organize poster-making, working models and PowerPoint-presentations competitions on the occasion of Science Day.	• To achieve learning-by-doing and establishing a sense of gratitude towards science.
March	• Open-book test for all the three years on alternate days in the first week from the syllabus done so far.	• To test the overall understanding and ability to respond answers correctly.

	• To organize a trip to Science City, Kapurthala.	• Learning-by-exploring and to complete Field Report for Environment and Road Safety Awareness paper for B.Sc. II-year students.
April	• Completion of syllabus followed by revision.	• To ensure students have ample time for revision.
May	• Continuous doubt-clearing sessions for all the three classes on alternate days. • Commencement of semester examinations.	• To ensure effective learning so that students achieve better grades in exams. This benefits both slow and advanced learners.
June	• To organize Farewell for outgoing students.	• To appreciate their academic journey.
* Monthly test of B.Sc. III, II and I on Mondays, Wednesdays and Fridays of third week, respectively in February, March and April. *Assignment collection of B.Sc.-III, II and I on Tuesday, Thursday and Saturday, respectively of third week of April. *MST of B.Sc. III, II and I on the first Monday, Wednesday and Friday of April, respectively. *Remedial classes in the zero period for the third and fourth week in the month of April. *Classes for Advanced Learners in the zero period in the first week of May.		

(2020-2021)

Semester 1,3,5		
Month	**Activity**	**Goals/Learning Outcomes**
July	• Preparing workload for the upcoming session. • Curriculum distribution and preparing Lesson Plans. • To have an introductory session for B.Sc. II and III-year students. • To begin theory and practical classes of B.Sc. II and III-year students. • To gear up for Online Admissions.	• To make teaching effective and convenient. • To make teaching-learning effective. • To inform students the syllabus, books to be purchased and online teaching via Zoom, Google Meet, etc. • To ensure that syllabus is finished on time. • Admitting students via Online Admission Portal to tackle the pandemic time.
August	• Online-Orientation for the entry-class students.	• To inform students the syllabus, books to be purchased and online teaching via Zoom, Google Meet, etc.

	• To celebrate "Independence Day" by encouraging students to present a patriotic poem, slogan or speech.	• To generate the feeling of patriotism and oneness among students .
September	• Online inter-class paper reading competition on the current theoretical topics going in the class.	• To ensure the efficacy of online teaching-learning during pandemic.
October	• To ask students to take e-pledge on "National Unity Day" on Google Platform.	• To inculcate the feeling of equality among the students.
November	• To organize inter-college online quiz competition dedicated to the 400th Parkash Purab of Guru Tegh Bahadur ji. • Completion of syllabus followed by revision.	• To familiarize the students with great Sikh history and to inculcate respect for all religions. • To ensure students have ample time for revision.
December	• To inform students regarding online mode of examinations. • Continuous doubt-clearing sessions for all the three classes on alternate days. • Commencement of semester examinations.	• To prepare the students for new of its kind exam pattern. • To ensure effective learning so that students achieve better grades in exams. This benefits both slow and advanced learners.
* Monthly test of B.Sc. III, II and I on Mondays, Wednesdays and Fridays of third week, respectively in August, September and October. *Assignment collection of B.Sc.-III, II and I on Tuesday, Thursday and Saturday, respectively of third week of October. *MST of B.Sc. III, II and I on the first Monday, Wednesday and Friday of November, respectively. *Remedial classes in the zero period for the second and third week in the month of November. *Classes for Advanced Learners in the zero period in the fourth week of November.		
Semester 2,4,6		
Month	**Activity**	**Goals/Learning Outcomes**
January	• Commencement of the online theory classes.	• To ensure that syllabus is finished on time.
February	• Online Science Day celebration with students presenting talks, PPTs and e-posters on theme "Women in Science".	• To achieve learning-by-doing and establishing a sense of gratitude towards science.
March	• To celebrate Holi by asking students to make e-posters on the theme "VIBGYOR".	• To encourage the aesthetic and scientific temperament among students.
April	• Inter-college online Quiz on 'Earth Day'. • Completion of syllabus followed by revision.	• To spread environmental awareness. • To ensure students have ample time for revision.

May	• Online Doubt clearing sessions	• To ensure effective learning so that students achieve better grades in exams. This benefits both slow and advanced learners.
June	• Online Group Discussion on the topic 'Role of students against drug abuse and Buddies Programme'. • To address outgoing students online and wishing them best for future endeavours.	• To aware the students regarding drug abuse and drug addiction. • To appreciate their academic journey.
* Monthly test of B.Sc. III, II and I on Mondays, Wednesdays and Fridays of third week, respectively in February, March and April. *Assignment collection of B.Sc.-III, II and I on Tuesday, Thursday and Saturday, respectively of third week of April. *MST of B.Sc. III, II and I on the first Monday, Wednesday and Friday of April, respectively. *Remedial classes in the zero period for the third and fourth week in the month of April. *Classes for Advanced Learners in the zero period in the first week of May.		

(2021-2022)

Semester 1,3,5		
Month	**Activity**	**Goals/Learning Outcomes**
July	• Preparing workload for the upcoming session. • Curriculum distribution and preparing Lesson Plans. • To have an introductory session for B.Sc. II and III-year students. • To begin theory and practical classes of B.Sc. II and III-year students.	• To make teaching effective and convenient. • To make teaching-learning effective. • To inform students the syllabus and books to be purchased. • To ensure that syllabus is finished on time.
August	• Orientation day for the entry-class students. • To educate the students regarding the COVID-19 vaccination drive and encouraging them to get vaccinated.	• To familiarize the students with general code of conduct in department as well as in college. • To ensure health safety.
September	• To assign the responsibility of giving a short lecture on any topic of B.Sc. Physics for 15 minutes in the class to the students of B.Sc. III year roll number-wise.	• To enhance their public speaking skills and overall subject-related knowledge.

	• Paper reading competition on the topic "Volunteering for Blood Donation".	• To educate students about Blood Donation – Do's and Don'ts.
October	• Online addressing students on the importance of festivals and motivating them to present scientific aspect of light in the form of talk/PPT on lieu of Diwali.	• Learning-by-doing and to imbibe the self-learning skills.
November	• Lecture on "National Constitution Day". • Completion of syllabus followed by revision.	• To educate students regarding Constitutional Rights.
December	• To motivate students to get enrolled as voters and guiding them in 'Voter Registration' process. • Continuous doubt-clearing sessions for all the three classes on alternate days. • Commencement of semester examinations in blended mode.	• A step taken in the direction of building responsible citizens of India. • To ensure effective learning so that students achieve better grades in exams. This benefits both slow and advanced learners.
* Monthly test of B.Sc. III, II and I on Mondays, Wednesdays and Fridays of third week, respectively in August, September and October. *Assignment collection of B.Sc.-III, II and I on Tuesday, Thursday and Saturday, respectively of third week of October. *MST of B.Sc. III, II and I on the first Monday, Wednesday and Friday of November, respectively. *Remedial classes in the zero period for the second and third week in the month of November. *Classes for Advanced Learners in the zero period in the fourth week of November.		
Semester 2,4,6		
Month	**Activity**	**Goals/Learning Outcomes**
January	• Commencement of the theory classes and practicals in offline mode. • To educate students to follow all the COVID-safety related protocols.	• To ensure that syllabus is finished on time. • To ensure general safety.
February	• To organize poster making, slogan writing, working models, skits and video-making competitions on the occasion of the "National Science Day" celebration.	• To achieve learning-by-doing and establishing a sense of gratitude towards science.
March	• Open-book test for B.Sc. I, II and III on consecutive days of	• To test the overall understanding and ability to respond answers correctly.

	second week from the syllabus done so far.	
April	• Reading competition of B.Sc. II-year students to commemorate Max Planck's birthday. • Completion of syllabus followed by revision.	• To celebrate the achievements of great physicist. • To ensure students have ample time for revision.
May	• To organize poster-making and slogan-writing competitions on the occasion of "International Yoga Awareness". • To provide guidelines regarding offline mode of theory examinations and practicals. • Continuous doubt-clearing sessions for all the three classes on alternate days. • Commencement of semester examinations.	• To motivate the students to incorporate Yoga in their daily routine. • To prepare them for offline exams after a long pandemic. • To ensure effective learning so that students achieve better grades in exams. This benefits both slow and advanced learners.
June	• To organize Farewell for outgoing students.	• To appreciate their academic journey.
* Monthly test of B.Sc. III, II and I on Mondays, Wednesdays and Fridays of third week, respectively in February, March and April. *Assignment collection of B.Sc.-III, II and I on Tuesday, Thursday and Saturday, respectively of third week of April. *MST of B.Sc. III, II and I on the first Monday, Wednesday and Friday of April, respectively. *Remedial classes in the zero period for the third and fourth week in the month of April. *Classes for Advanced Learners in the zero period in the first week of May.		

ACADEMIC CALENDAR

HOME SCIENCE

Class	Paper (Sem I III V)	Paper (Sem II IV VI)
BA I	Home Management & Hygiene (Theory and Practical)	Resource Management & Human Psychology (Theory and Practical)
BA II	Clothing (Theory and Practical)	Textiles (Theory and Practical)
BA III	Food Science & Child Development (Theory and Practical)	Food Science and Child Development (Theory and Practical)

CLASS TESTS

11 to 15 September	BA I BA II AND BA III
11 to 15 October	-Do-
11 to 15 November	-Do-

Oral tests, Blackboard tests, Paper reading, Quiz competition are conducted throughout the session to evaluate the students

PROJECT WORK

Project work assigned to students on the basis of syllabus(BA I BA II and BA III)

(August to October end)	(March end)

ASSIGNMENTS

Syllabus bases topics assigned to students for evaluation.(BA I BA II and BA III)

(August to October End)	(March End)

Remedial Classes

For those students who are weak, participated in College Co-Curricular Activities

(NCC Sports, NSS, Youth Festivals, Competition held outside the college or students with late admission,advanced learned Students who desire to learn advanced skills of stitching and cooking are given extra classes to prepare them for entrepreneurship opportunities.)

(October End)	(March End)

Month	Activity	Learning Outcomes
29 July 2017 To 2 August 2017	Orientation program-rules and regulations,classes,evaluation,NSS,NCC,Anti Ragging,PrizesScholarshipsLibrary-visit	-To adapt to new college life for all round development and good academic achievement - To enable students to participate in all extra-curricular activities of sports, NSS, NCC, Red ribbon, Home Science Club, Hunar to Rozgar Program
1/9/2017 to 15/6/2017	Swachhta Pakhwada -National Swachhta Abhiyan activities by students -Dengue, Malaria, prevention program	-To create awareness about health and hygiene. - To train students to participate in Community programs
August 2017	Teej Celebration -Festival celebration -Gender equality theme -Cultural relevance of Teej -Traditional Foods, clothing, Traditional dances, bhangra, gidha and folk songs -Mehndi stall by HunaR to Rozgar Club	-To promote cultural values and skills among students -To create sensitization about gender equality -Earn and learn through Mehndi applicants
15 August 2017	-Independence Day Celebration -Rangoli in National Integration Theme	-To promote patriotism and values of secularism
5 September 2017	-Teacher's Day Program by students of Department	-To create awareness about role of teachers. -Mark the birth anniversary of Dr. SarvepalliRadhakrishnan
6 Septmber 2017	-Talent Hunt -Competitions for all students-rangoli,embroidery,weaving basket,pakhi, pirhi,nala,dollmaking,ennu,rassi	-Talent hunt competition to select talented students for zonal youth festival -Prepare students for Hunar to Rozgar activities -To learn traditional folk items from senior citizens in rural areas.
8 & 9 September 2017	-Industry collaboration-pidilite workshop by Shashi Guleria	-To impart practical skills in fabric painting -Liquid embroidery -Tie-Dye -To prepare students for entrepreneurship
27 September 2017	-Zonal Youth Festival-Rangoli,FOLK items -Folk items	-To prepare students for inter-college competition.
October 2017	Remedial classes	-To assist weak learners in learning and exam preparation -To provide extra classes to students missing regular classes due to participation in extra curricular activities.

15 November 2017	-Industry Collaboration with Himalaya Drug company - Conduct workshop on use of cosmetics under Beat the Pimple Mission	-To create awareness about safe usage of the cosmetics -To assess the performance of students
Nov, 2017	-Exhibition-cum- sale Diwali Mela	-Hunar to Rozgar Club -Earn while learn
7 December 2017	Flag day celebration sale of flags to students and staff, collected money for the welfare of families of martyrs	-To encourage patriotism and enhance college unity, spirit and pride, freedom.
December 2017	-University exams	
January 2018	-Lohri Celebration Participation of Department girls	-To promote gender equality Lohri celebration for girls
24 January 2018	National Girl Child Day celebrations	-To spread Public awareness about inequities that girls face in indian society.
25 January 2018	National voter day celebration	-Registration of new voters of 18 years of age
26 January 2018	District level Republic day celebration function in college students did their decoration part with administration	-To promote values of patriotism and National integration
March,2018	Review of Internal Assessment records of students	-To bring about transparency evaluation process -To allow students to submit assignment for improvement of internal assessment
13 April,2018	Baisakhi Celebrated	-Students learn cooking of traditional foods of Baisakhi
14 April, 2018	Dr Ambedkar"s Birthday (Constitution Day)	-To create awareness regarding constitution of our country
May, 2018	Remedial Classes External practical examination	
June 2018	Final examination	-To fulfill university norms of evaluation
21 June. 2018	Yoga Day celebration	-To raise awareness worldwide of the many benefits of practicing yoga.

Department of Chemistry
ACADEMIC CALENDER-2021-22
ODD SEMESTER

ACTIVITY	DATES	OBJECTIVES
REGISTERATION OF STUDENTS FOR NEW SESSION	20-7-2021	ADMISSION
TIMETABLE FINALIZATION	29-7-2021	TEACHING SCHEDULE
BEGINNING OF CLASSES	1-8-2021	TEACHING
COURSE/SUBJECT CHANGE REQUEST	25-8-2021 TO 6-9-2021	STUDENTS REDRESSAL
TUTORIAL CLASSES	Second week of August	PROBLEM SOLVING SESSION
ORIENTATION PROGRAMME	Last week of Aug, 2021	INFORMING STUDENTS ABOUT VARIOUS RESOURCES,LIBRARY VISIT .SSS
REGISTRATION OF NCC	11-10-2021	DEVELOPING CHARACTER, DISCIPLINE, SPIRIT OF ADVENTURE AND SELFLESSNESS AMONGST STUDENTS.
YOUTH FESTIVAL	SEP-OCT 2021	PARTICIPATION IN EXTRA CURRICULAR ACTIVITIES
MID SEMESTER EXAMS	NOVEMBER,2021	EVALUATION /ASSESSMENT
INTERNAL ASSESSMENT TESTS- 3	Mid of AUG, SEP, OCT-2021	PRACTICE FOR FINAL EXAMINATIONS
INTERNAL EVALUATION/ASSIGNMENT-2	SEP/OCT,2021	EVALUATION OF STUDENTS UNDERSTANDING
REMEDIAL CLASSES	Zero period daily in November.	TO CATER THE NEEDS OF WEEK STUDENTS
MERIT CLASSES	Zero period daily in November.	TO CATER HIGHER LEVEL KNOWLEDGE
PRACTICAL EXAMINATION	NOVEMBER,2021	PART OF EVALUATION

DISPERSAL OF CLASSES	MID of NOVEMBER	FOR SELF PREPARATION
FINAL END SEMESTER EXAMINATION	29-11-2021	PART OF EVALUATION AND ASSESSMENT

ACADEMIC CALENDER-2021-22

EVEN SEMESTER

ACTIVITY	DATES	OBJECTIVES
REGISTERATION OF STUDENTS FOR NEW SESSION	7-2-2022	ADMISSION
TIMETABLE FINALIZATION	14-3-2022	TEACHING SCHEDULE
BEGINNING OF CLASSES	16-3-2022	TEACHING
COURSE/SUBJECT CHANGE REQUEST	4-4-2022 TO 11-4-2022	STUDENTS REDRESSAL
TUTORIAL CLASSES	Third week of March	PROBLEM SOLVING SESSION
ORIENTATION PROGRAMME	Last week of March, 2022	INFORMING STUDENTS ABOUT VARIOUS RESOURCES
SCIENCE DAY	28-2-2022	TO SPREAD A MESSAGE ABOUT THE IMPORTANCE OF SCIENCE USED IN DAILY LIFE OF THE PEOPLE.
ANNUAL SPORTS MEET	MARCH-APR 2022	PARTICIPATION IN EXTRA CURRICULAR ACTIVITIES
MID SEMESTER EXAMS	28-4-22 TO 7-5-22	EVALUATION /ASSESSMENT
INTERNAL ASSESSMENT TEST 3	MAY 2022	PRACTICE

INTERNAL EVALUATION/ASSIGNMENT-2	MAY 2022	EVALUATION
REMEDIAL CLASSES	Zero period daily in JUNE.	TO CATER THE NEEDS OF WEEK STUDENTS
MERIT CLASSES	Zero period daily in JUNE.	TO CATER HIGHER LEVEL KNOWLEDGE
PRACTICAL EXAMINATION	JUNE,2022	PART OF EVALUATION
DISPERSAL OF CLASSES	MID of JUNE	FOR SELF PREPARATION
FINAL END SEMESTER EXAMINATION	21-6-2022	PART OF EVALUATION

ਫੇਸ-6, ਸਾਹਿਬਜ਼ਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ (ਮੋਹਾਲੀ)-160056 Phone No. 0172-2225164 e-mail ID: principal.gcmohali@gmail.com

Academic Calendar of Department of Public Administration		
Odd Semesters- I, III & V (June-December)		
Activities/Event	**Dates**	**Objective/Purpose**
Orientation	First Week of July	To facilitate transition to higher education of the incoming students and to apprise the students regarding syllabus, learning outcomes, learning resources, etc. for the new class.
Beginning of Classes	First Week of July	Formal delivery of Syllabus content as per Departmental Unitization Plan.
Tutorial Classes	Last Period Daily	To improve academic performance of the students through additional guidance, doubt clearance and general support to improve learning.
Monthly Test	Last working day of every Month	A component of continuous assessment of students in terms of achieving learning outcome as per unitization plan.
Public Service Day	23, June	To aware students and instill in them the value of public service through activities such as Quiz, Debates, Speech, Essay Writing, etc.
National Unity Day	31, October	To aware the students about the contribution of Sardar Vallabh Bhai Patel in achieving the unity after Indian independence.

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Mid Semester Test	Mid of November	A component of Internal Assessment for evaluating the learning progress through a formal exam of 15 marks.
Constitution Day	26, November	To celebrate and inform students the ideas and values our constitution stands for through activities such as Quiz, Debates, Speech, Essay Writing, etc.
Internal Assessment	Mid of December	Interaction with students regarding their final evaluation of the learning progress.
Good Governance Day	25, December	To make student aware about and celebrate the important steps taken for good governance in India.
Remedial Classes	Last Week of December	Based on the final internal evaluation, special classes to be organized to help week students for their final end semester examination.
Dispersal of Classes	Last Week of December	For students to have time for preparation of final end semester examinations.

Note: The dates may vary as per the instructions received from Punjabi University, Patiala regarding commencement of the session and examination schedule.

ਰੋਹਿਤ ਬਰਾਚ (ਸਹਾਇਕ ਪ੍ਰੋਫੈਸਰ)
ਪਬਲਿਕ ਐਡਮਨਿਸਟਰੇਸ਼ਨ ਵਿਭਾਗ

Please allow to follow the above mentioned schedule and conduct of activities mentioned therein.

ਫੇਸ-6, ਸਾਹਿਬਜ਼ਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ (ਮੋਹਾਲੀ)-160056 Phone No. 0172-2225164 e-mail ID: principal.gcmohali@gmail.com

Academic Calendar of Department of Public Administration		
Even Semesters- II, IV & VI (January-May)		
Orientation	First Week of January	To facilitate transition to higher education of the incoming students and to apprise the students regarding syllabus, learning outcomes, learning resources, etc. for the new class.
Beginning of Classes	First Week of January	Formal delivery of Syllabus content as per Departmental Unitization Plan.
Tutorial Classes	Last period Daily	To improve academic performance of the students through additional guidance, doubt clearance and general support to improve learning.
Monthly Test	Last working day of every Month	A component of continuous assessment of students in terms of achieving learning outcome as per unitization plan.
National Youth Day	12, January	To celebrate and make students aware about the philosophical ideas of Swami Vivekananda and instill in students values that will help them shape not only their future but also of the nation.
Mid Semester Test	Mid of April	A component of Internal Assessment for evaluating the learning progress through a formal exam of 15 marks.

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Civil Services Day	21, April	To understand and make students aware the contribution civil Services in the nation building of our nation.
Panchayati Raj Day	24, April	To understand and make student aware the role of grassroot level governance and the importance of people's participation in administration.
Internal Assessment	April	Interaction with students regarding their final evaluation of the learning progress.
Remedial Classes	Last week of April	Based on the final internal evaluation, special classes to be organized to help week students for their final end semester examination.
Dispersal of Classes	Last week of April	For students to have time for preparation of final end semester examinations.

Note: The dates may vary as per the instructions received from Punjabi University, Patiala regarding commencement of the session and examination schedule.

ਰੋਹਿਤ ਬਰਾਚ (ਸਹਾਇਕ ਪ੍ਰੋਫ਼ੈਸਰ)
ਪਬਲਿਕ ਐਡਮਨਿਸਟਰੇਸ਼ਨ ਵਿਭਾਗ

Please allow to follow the above mentioned schedule and conduct of activities mentioned therein.

ਫੇਸ-6, ਸਾਹਿਬਜ਼ਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ (ਮੋਹਾਲੀ)-160056 Phone No. 0172-2225164 e-mail ID: principal.gcmohali@gmail.com

Department of History

Academic Calendar (January 2023 to June 2023)

Activity	Dates	Objective
Orientation Programme	First week of January	To introduce the faculty members and inform students about the syllabus.
Beginning of Classes	Mid-January	Teaching the course syllabus
Tutorial Classes	1st Period every Saturday	To clear the doubts of students
Remedial Classes	2nd Period every Saturday	To clear the doubts week of students
Merit Classes	3rd Period every Saturday	To provide higher level of knowledge to the students
Monthly Tests	Last Friday every month	To evaluate progress of students
Trip to Sanghol & Ropar	First Week of February	To understand the past through the site of Indus Valley Civilization
Paper Presentation	Last Monday every month	To enhance the confidence in students through paper-presentation
Lecture of Prof. Sukhmani Bal Riar	Mid-February	To know the importance of History in our life by Prof. Sukhmani Bal Riar
Quiz	Last Tuesday every Month	To enhance the knowledge of general awareness in students
Trip to Museum & Archives	First week of March	To know the importance of sources of History
Grand Parents Memoir	Mid of April	To make students understand the importance of old people
Internal Assessment	Last week of April	Evaluate the students by their assessment

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Project Work Sec 17, Mohali Village Matur	Month of April	To know the culture of history and of Punjab at the ground level.
Mid Semester Test	First week of May	Evaluation and Assessment of students

*Start of the class will be selected every week on their behavioral and class performance.

Mrs. Nishtha Tripathi,
Associate Professor, Department of History

ਫੇਸ-6, ਸਾਹਿਬਜ਼ਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ (ਮੋਹਾਲੀ)-160056 Phone No. 0172-2225164 e-mail ID: principal.gcmohali@gmail.com

Time Table & Workload

The College has a Time Table & Workload committee that ensures Time table is prepared in such a manner that venues for classes are available to all faculty members and classes are held smoothly without any clash. The timetable is also uploaded on the institutional website and displayed on notice boards also. The Timetable committee coordinate with all the faculty members to ensure that there is no conflict with respect to schedule of the classes and the interest of students is safeguarded. The time table for the last five years can be accessed from the following link:

https://smhsgcmohali.in/TimeTable

The Committee is also responsible for collecting the workload from all the departments. The workload is prepared in the college teacher wise that is finally approved by the Principal. The Committee collects the workload for the college and also submit the workload to the Department of Higher Education, Government Punjab annually at the start of the new session. The Committee ensures that an effective student teacher ratio is maintained and if required, the requirement for faculty is also communicated to the Department of Higher education.

The time tables and the workload is also attached herewith.

TIME TABLE B.A. SEMESTER -II (SESSION 2022-23)

ZERO Remedial 8:15 – 9:00	1 9:00-9:45	2 9:45-10:30	3 10:30-11:15	4 11:15-12:00	5 12:00-12:45	6 12:45-1:30	7 1:30-2:15	8 2:15-3:00	9 3:00-3:45	10 3:45-4:30
	H.SCIENCE (1-6) Sec-B Dept. of H.Science Room No.15 Mrs. Sukhvir Kaur (1-6) Sec- A Mrs. Preetinder Kaur Room No.10	**GEOGRAPHY** (1-6) Deptt-Room Prof. Sharanjeet Singh	**ENGLISH** (1-6) Sec-A Room no-101 Dr. Rupinder Kaur	**HISTORY(1-6)** Sec-A Hall no-2 Prof.Nishtha	**FINE ARTS** (1-3) Theory Dept. Room Prof.Kirandeep Kaur Kalsi	**PUNJABI** (1-6) Sec-A Room no 101 Prof.Ghansham Singh	**ENGLISH (Elect)** (1-6) Room No-104 Prof. Arvind Kaur	**ECONOMICS** (1-3) Room No.106 Prof.Surinder Paul		**MATHS** (1-3) Hall.No-3
	PUBLIC ADMINISTRATION (1-6) Prof.Rohit Barach Old GCMSIP	**COMPUTER SCIENCE** (1-6) COMPUTER LAB Mr.Guljeet Singh	**ENGLISH** (1-6) Sec-B Room no-102 Prof. Jaspreet Kaur	**HISTORY(1-6)** Sec-B Room no-102	**ECONOMICS** (1-6) Hall No.2 Prof.Surinder Paul	**PUNJABI** (1-6) Sec-B Room no-102 Prof.Pushpinder Kaur	**PUNJABI (Elect)** (1-6) Room no-115 Dr.Gurpreet Singh			
	PHY.EDUCATION (1-6) Sec-A Room no-110 Mrs.Simarpreet	**MUSIC VOCAL** (1-3) Theory (4-6) Practical Dept.Room	**ENGLISH** (1-6) Sec-C Room no-105 Prof.Nandini	**MATHS** (1-6) Hall.No-3 Mr.Inderjeet singh	**SOCIOLOGY** (1-6) Sec-A Room no-110 Dr. Prabhjot Kaur Gill	**PUNJABI** (1-6) Sec-C Room no-105 Mrs.Sarabjeet Kaur	**HINDI (Elect)** (1-6) Room no- 105 Mrs. Sarabjeet Kaur			
	PHY.EDUCATION (1-6) Sec-B Room no-115 Mr.Hanish		**ENGLISH** (1-6) Sec-D Room no-107 Dr.Inderjeet Kaur	**PSYCHOLOGY** (1-6) Dept. Room Mrs.Tejinder Kaur	**SOCIOLOGY** (1-6) sec-B Room no-101 Prof.Monika	**Mudla Gyan** (1-3) Punjabi dept. Dr.Amandeep Kaur	**POL SCIENCE** (1-6) Room no-102 Mr. Sukhwinder Singh			
	MUSIC (I) (1-3) Theory (4-6) Practical Music Dept. room Mr. Manoj		**ENGLISH** (1-6) Sec-E Room no.106 Prof. Rashmi			**PUNJABI** (1-6) Sec-D Room no-107 Dr.Gurpreet Singh				
	MATHS (1-6) Hall.No-3 Dr. Amritpal Singh		**ENGLISH** (1-6) Sec-F Room no.110 Prof.Gurpreet Kaur							

TIME TABLE B.A. SEMESTER – IV (SESSION 2022-23)

ZERO Remedial 8:15 – 9:00	1 9:00-9:45	2 9:45-10:30	3 10:30-11:15	4 11:15-12:00	5 12:00-12:45	6 12:45-1:30	7 1:30-2:15	8 2:15-3:00	9 3:00-3:45	10 3:45-4:30
	HISTORY (1-6) Sec-A Hall no-2 Prof.Nishtha	**ECONOMICS** (1-6) Room No.115 Mrs.Ravinder Kaur	**GEOGRAPHY** (1-6) Dep. Room Prof. Sharanjeet Singh	**ENGLISH** (1-6) Sec-A Room no-101 Prof. Jaspreet Kaur	**PUNJABI** (1-6) Sec-A Room no 105 Prof.Ghansham Singh	**ENGLISH(Elect)** (1-6) Room no-104 Prof. Tejinder Kaur	**PUBLIC ADMINISTRATION** (1-6) Room no 106 Prof.Rohit Barach			
	HISTORY (1-6) Sec-B R No-101	**SOCIOLOGY** (1-6) Sec-A Room No.110 Dr. Prabhjot Kaur Gill	**MUSIC VOCAL** (1-3) Theory Deptt.Room	**ENGLISH** (1-6) Sec-B Room no-105 Dr.Inderjeet Kaur	**PUNJABI** (1-4) Sec-B Room no-106 Mrs.Sarabjeet Kaur	**PUNJABI (Elect)** (1-6) Punjabi dept. Resource Person	**H.SCIENCE** (1-6) Dept. of H.Science Room No.10 Prof. Harsh Bala	**ECO (Hons.)** (1-6) Room NO.202 Mrs.Ravinder Kaur		
	PSYCHOLOGY (1-6) Dept. of Psy. Mr. Vipin	**SOCIOLOGY** (1-6) sec-B Room no-101 Prof.Monika	**COMPUTER SCI.**(1-4) Comp. Lab Mr.Guljeet Singh	**ENGLISH** (1-6) Sec-C Room no-106 Prof. Nandini	**PUNJABI** (1-4) Sec-C Room no-107 Dr.Kulwinder Kaur	**HINDI (Elect)** (1-6) Room no-106 Prof. Sarabjeet Kaur	**PHY.EDUCATION** (1-6) Room no-107 Mr.Hanish	**SOCIOLOGY (Hons.)** (1-6) Dr.Prabhjot Kaur Room no-110		
	MATHS (1-6) Hall no-1 Dr.Harjinder Singh	**FINE ARTS** (1-3) Theory Dept. Room Mrs.Gayatri	**Mudla Gyan** (1-3) Punjabi Dept. Resource Person	**ENGLISH** (1-6) Sec-D Room no-107 Prof.Gurpreet Kaur		**POL. SCIENCE** (1-6) Room no-115 Mr. Sukhwinder Singh	**MUSIC (I)** (1-3) Theory Music Dept. room Mr. Manoj	**PSYCHOLOGY (Hons.)**(1-6) Dept. Room Mrs. Tejinder Kaur		
				ENGLISH (1-6) Sec-E Prof.Tejinder Kaur Room No.104	**MATHS** (6) Hall.No-4	**MATHS** (5-6) Hall.No-4	**MATHS** (1-6) Hall no-1 Mr.Inderjeet Singh	**HISTORY(Hons.)** (1-6) Room No-		

TIME TABLE B.A. SEMESTER –VI (SESSION 2022-23)

ZERO Remedial 8:15 – 9:00	1 9:00-9:45	2 9:45-10:30	3 10:30-11:15	4 11:15-12:00	5 12:00-12:45	6 12:45-1:30	7 1:30-2:15	8 2:15-3:00	9 3:00-3:45	10 3:45-4:30
	PUNJABI (1-6) Sec-A Room no 102 Prof.Pushpinder Kaur	**ENGLISH** (1-6) Sec-A Room no-105 Prof.Arvind Kaur	**ENGLISH(Elect)** (1-6) Room no-103 Prof. Harpriya Singh	**PUBLIC ADMINISTRATION** (1-6) Room no 115 Prof.Rohit Barach	**GEOGRAPHY** (1-6) Dep. Room Dr.Jaspal Singh	**HISTORY** (1-6) Sec-A Hall no.2 Prof.Nishtha	**ECONOMICS** (1-6) Hall No-2 ~~Mr.Maheep~~ Bhatia	**ECONOMICS (Hons.)** (1-6) Hall No-2 ~~Mr.Maheep Bhatia~~		
	PUNJABI (1-6) Sec-B Room no-105 Dr.Amandeep Kaur	**ENGLISH** (1-6) Sec-B Room no-106 Prof. Tejinder Kaur	**PUNJABI (Elect)** (1-6) PG Panjabi Dept. Mrs.Sarabjit Kaur	**H.SCIENCE** (1-6) Dept. of H.Sci. Room No.10 Prof.Gunjeet Kaur	**MUSIC VOCAL** (1-3) Theory Deptt.Room	**HISTORY** (1-6) Sec-B R No- 110	**SOCIOLOGY** (1-6) Sec-A Room no-110 Dr. Prabhjot Kaur Gill	**PSYCHOLOGY (Hons.) (1-6)** Dept. Room Mr.Vipin		
	PUNJABI (1-6) Sec-C Room no-106 Mrs.Sarabjit Kaur	**ENGLISH** (1-6) Sec-C Room no-102 Dr.Rupinder Kaur	**HINDI (Elect)** (1-6) Room no-115 Prof. Sarabjeet Kaur	**PHY.EDUCATION** (1-6) Room no-110 Mrs.Simarpreet	**COMPUTER SCI.** (1-6) Comp. Lab Mr.Guljeet Singh	**PSYCHOLOGY** (1-6) Dept. of Psy. Mrs.Tejinder Kaur	**SOCIOLOGY** (1-6) sec-B Room no-101 Prof.Monika	**SOCIOLOGY (Hons.)** (1-6) Prof. Monika Room no-101		
	PUNJABI (1-6) Sec-D Room no-107 Resource Person	**ENGLISH** (1-6) Sec-D Hall No.2 Prof.Rashmi Prabhakar	**POL. SCIENCE** (1-6) Hall no.2 Mr. Sukhwinder Singh	**MUSIC (I)** (1-3) Theory Music Dept. room Mr. Manoj		**MATHS** (1-6) Hall no-1	**FINE ARTS** (1-3) Theory Dept. Room Prof.Kirandeep Kaur Kalsi	**HISTORY(Hons.)** (1-6) Prof.Nishtha Room No-107		
		ENGLISH (1-6) Sec-E Room No.107 Prof.Nandini		**ECONOMICS (Hons.)** (1-3) Gen (4-6) Room No-202 ~~Mr.Maheep Bhatia~~		**Mudla Gyan** (4-6) Punjabi Dept. Dr.Amandeep Kaur	**MATHS** (1-6) Hall no-3 Dr.Harjinder Singh			**MATHS** (4-6) Hall.No-1

TIME TABLE INCHARGE

PRINCIPAL

ਟਾਈਮ ਟੇਬਲ (2022-23)

ਪੋਸਟ ਗ੍ਰੈਜੁਏਟ ਪੰਜਾਬੀ ਵਿਭਾਗ

ਨਾਮ	1	2	3	4	5	6	7	8	9
ਪ੍ਰੋ. ਘਣਸ਼ਾਮ ਸਿੰਘ	ਐਮ.ਏ 1	ਐਮ.ਏ 2			ਬੀ.ਏ 2 ਲਾਜਮੀ ਪੰਜਾਬੀ	ਬੀ.ਏ 1 ਲਾਜਮੀ ਪੰਜਾਬੀ	ਬੀ.ਏ 1 ਮੁੱਢਲਾ ਗਿਆਨ (1-3)		
ਪ੍ਰੋ. ਪੁਸਪਿੰਦਰ ਕੌਰ	ਬੀ.ਏ 3 ਲਾਜਮੀ ਪੰਜਾਬੀ	ਐਮ.ਏ 1			ਐਮ.ਏ 2	ਬੀ.ਏ 1 ਲਾਜਮੀ ਪੰਜਾਬੀ	ਬੀ.ਕਾਮ 2 ਪੰਜਾਬੀ ਲਾਜਮੀ (1-3)		
ਡਾ. ਅਮਨਦੀਪ ਕੌਰ	ਬੀ.ਏ 3 ਲਾਜਮੀ ਪੰਜਾਬੀ		ਐਮ.ਏ 2		ਬੀ.ਐਸ.ਸੀ 1 ਲਾਜਮੀ ਪੰਜਾਬੀ	ਐਮ.ਏ 1	ਬੀ.ਏ 3 ਮੁੱਢਲਾ ਗਿਆਨ (1-3)		
ਡਾ. ਗੁਰਪ੍ਰੀਤ ਸਿੰਘ	ਐਮ.ਏ 2	ਬੀ.ਏ 2 ਮੁੱਢਲਾ ਗਿਆਨ (1-3)		ਐਮ.ਏ 1	ਬੀ.ਏ 2 ਲਾਜਮੀ ਪੰਜਾਬੀ		ਬੀ.ਏ 1 ਪੰਜਾਬੀ ਸਾਹਿਤ		
ਡਾ. ਕੁਲਵਿੰਦਰ ਕੌਰ			ਐਮ.ਏ 1		ਬੀ.ਏ 2 ਲਾਜਮੀ ਪੰਜਾਬੀ	ਬੀ.ਏ 1 ਲਾਜਮੀ ਪੰਜਾਬੀ	ਐਮ.ਏ 2		ਬੀ.ਐਸ.ਸੀ 2 ਲਾਜਮੀ ਪੰਜਾਬੀ
ਪ੍ਰੋ. ਸਰਬਜੀਤ ਕੌਰ			ਬੀ.ਏ 3 ਪੰਜਾਬੀ ਸਾਹਿਤ		ਬੀ.ਏ 2 ਲਾਜਮੀ ਪੰਜਾਬੀ	ਬੀ.ਏ 1 ਲਾਜਮੀ ਪੰਜਾਬੀ			ਬੀ.ਐਸ.ਸੀ 3 ਲਾਜਮੀ ਪੰਜਾਬੀ
ਪ੍ਰੋ. ਪਰਮਿੰਦਰਪਾਲ ਸਿੰਘ	ਬੀ.ਏ 3 ਲਾਜਮੀ ਪੰਜਾਬੀ			ਬੀ.ਕਾਮ 3 ਪੰਜਾਬੀ ਲਾਜਮੀ (1-3)	ਬੀ.ਕਾਮ 1 ਪੰਜਾਬੀ ਲਾਜਮੀ (1-3)	ਬੀ.ਏ 2 ਪੰਜਾਬੀ ਸਾਹਿਤ			

TIME TABLE (SESSION 2022-23)

P.G. DEPARTMENT OF ENGLISH w.e.f November 01, 2022

Teacher Name	1 9:00-9:45	2 9:45-10:30	3 10:30-11:15	4 11:15-12:00	5 12:00-12:45	6 12:45-1:30	7 1:30-2:15	8 2:15-3:00	Total
Prof. Tejinder Kaur	MA II MONDAY R.NO-104	B.A III(B) 1-6 R.NO-106	M.A II 1-6 R,NO- 104 ENGLISH LIBRARY	B.A II(E) 1-6 R.NO-104		B.A II ENGLISH ELECTIVE 1-6 R.NO-104			24+1 25
Prof. Arvind Kaur	MA II TUESDAY/ WEDNESDAY R.NO-104	B.A III (A) 1-6 R.NO-105	BA III ENGLISH LIT 1-6 R.NO-103		M.A II 1-6 R.NO-104		M.A II 1-6 R.NO-- 104 ENGLISH LIBRARY		24+1 25
Prof. Jaspreet Kaur Bains	MA I MONDAY R.NO-103	M.A I 1-6 R.NO-103	B.A I (B) 1-6 R.NO-102	B.A II(A) 1-6 R.NO-102			B.COM I (A) 1-6 R.NO-203		24+1 25
Prof. Rashmi Parbhakar	B.COM II (A) 1-6 R.NO-202	BA III (D) 1-6 HALL NO-02	B.A I (E) 1-6 R.NO-105	MA I TUESDAY R.NO-103			MA I 1-6 R.NO-103		24+1 25
Prof. Inderjeet Kaur	B.COM II (B) 1-6 R.NO-204	MA II THURSDAY R.NO-104	B.A I(D) 1-6 R.NO-107	BA II(B) R.NO-105		M.A II 1-6 ENGLISH LIBRARY PAPER-1			24+1 25
Prof. Nandini Vaid	MA I WEDNESDAY R.NO-103	BA III(E) 1-6 R.NO-107	BA I (C) 1-6 R.NO-106		MA I 1-6 R.NO-103		BA I ENGLISH LIT R.NO-104		24+1 25
Prof. Gurpreet Kaur	MA I THURSDAY R.NO-103		BA I(F) 1-6	BA II(D) 1-6		MA I (1-6) R.NO-103	B.COM I(B) R.NO-206 1-6		24+1 25
Prof. Neeta Manro			BA I (G) 1-6 R.NO-104	BA II (C) 1-6 R.NO-106				B.SC II 1-6 HALL NO—3	18
Prof. Anita Shrivastav			BA I (A) 1-6 R.NO-101						06

BA III SECTION –C HAS BEEN MERGE AS FOLLOWING:-

SECTION -A - ROLL NO-2661-2680, SECTION-B - ROLL NO-2681-2700, SECTION-D- ROLL NO-2701-2720,SECTION-E -ROLL NO-2721-2740

TOTAL WORK LOAD-205 PERIODS per week

Principal
Govt.College Mohali

TIME TABLE (SESSION 2022-23)
P.G. DEPARTMENT OF ENGLISH w.e.f April 01, 2023

Teacher Name	1 9:00-9:45	2 9:45-10:30	3 10:30-11:15	4 11:15-12:00	5 12:00-12:45	6 12:45-1:30	7 1:30-2:15	8 2:15-3:00	Total
Prof. Arvind Kaur	M.A-2 Tuesday R.No- 104	B.A-3 (A) (1-6) R.No-105	B.A -3 Elec. Eng (1-6) R.No 103	----------	M.A-2 (1-6) R.No 104	B.A -2 Elec. Eng (1-6) R.No 104	----------	----------	25
Prof. Reetinder Joshi	M.A-2 Wednesday R.No- 104	B.A-3 (C) (1-6) R.No-101	B.A-1 (A) (1-6) R.No-101	M.A-2 (1-6) Dep.Lab	--------	----------	------	B.Sc-2 (1-6) Hall No-3	25
Prof. Jaspreet Kaur Bains	M.A-1 Monday R.No- 103	M..A-1 (1-6) R.NO-103	B.A-1(B) (1-6) R.NO-102	B.A-1(A) (1-6) R.NO-102	----------	----------	B.Com.1 (1-6) (A) R.No-203	----------	25
Prof. Rashmi Parbhakar	M.A-1 Tuesday R.No- 103	B.A-3 (D) (1-6) .Hall.No-02	B.A-1 (E) (1-6) R.No-105	M.A-1 (1-6) R.No-103	----------	B.Com.2 (1-6) (A) R.No-202	----------	---------	25
Prof. Inderjeet Kaur	B.Com.2 (1-6) (B) R.No-204	M.A-2 Thursday R.No- 104	B.A-1 (B) (1-6) R.No-107	B.A-2 (B) (1-6) R.No-105	----------	M.A-2 (1-6) Eng. Lib	----------	----------	25
Prof. Nandini Vaid	M.A-1 Wednesday R.No- 103	B.A -3 (E) (1-6) R.No 107	B.A-1 (C) (1-6) R.No-106	----------	M.A-1 (1-6) R.No-103	----------	B.A-1 (1-6) Elec .Eng R.No-103	----------	25
Prof. Gurpreet Kaur	M.A-1 Thursday R.No- 103	----------	B.A-1 (F) (1-6) R.No-110	B.A-2 (D) (1-6) R.No-107	----------	M.A-1 (1-6) R.No-103	B.Com.1 (1-6) (B) R.No-15	----------	25
Prof. Aarti Bakshi	M.A-2 Monday R.No- 104	B.A -3 (B) (1-6) R.No 106	B.A-1 (G) (1-6) R.No-104	B.A-2 (C) (1-6) R.No-106	----------	----------	M.A-2 (1-6) R.No 104	----------	25
Vacant Post	----------	----------	----------	----------	----------	----------	----------	----------	

Note:- B.A-2 Section-(E) 6 Periods per Week has been merged with B.A-2 Section-(C)

TOTAL WORK LOAD- 206

No of Posts -09

A. Kaur

HOD (ARVIND KAUR)
P.G. DEPARTMENT OF ENGLISH

Harjeet Singh

Principal
Govt. College Mohali

TIME TABLE (SESSION 2022-23)
P.G. DEPARTMENT OF ENGLISH w.e.f April 01, 2023

Teacher Name	1 9:00-9:45	2 9:45-10:30	3 10:30-11:15	4 11:15-12:00	5 12:00-12:45	6 12:45-1:30	7 1:30-2:15	8 2:15-3:00	Total
Prof. Arvind Kaur	M.A-2 Tuesday R.No- 104	B.A-3 (A) (1-6) R.No-105	B.A -3 Elec. Eng (1-6) R.No 103	----------	M.A-2 (1-6) R.No 104	B.A -2 Elec. Eng (1-6) R.No 104	----------	----------	25
Prof. Reetinder Joshi	M.A-2 Wednesday R.No- 104	B.A-3 (C) (1-6) R.No-101	B.A-1 (A) (1-6) R.No-101	M.A-2 (1-6) Dep.Lab	--------	----------	------	B.Sc-2 (1-6) Hall No-3	25
Prof. Jaspreet Kaur Bains	M.A-1 Monday R.No- 103	M..A-1 (1-6) R.NO-103	B.A-1(B) (1-6) R.NO-102	B.A-1(A) (1-6) R.NO-102	----------	----------	B.Com.1 (1-6) (A) R.No-203	----------	25
Prof. Rashmi Parbhakar	M.A-1 Tuesday R.No- 103	B.A-3 (D) (1-6) .Hall.No-02	B.A-1 (E) (1-6) R.No-105	M.A-1 (1-6) R.No-103	----------	B.Com.2 (1-6) (A) R.No-202	----------	---------	25
Prof. Inderjeet Kaur	B.Com.2 (1-6) (B) R.No-204	M.A-2 Thursday R.No- 104	B.A-1 (B) (1-6) R.No-107	B.A-2 (B) (1-6) R.No-105	----------	M.A-2 (1-6) Eng. Lib	----------	----------	25
Prof. Nandini Vaid	M.A-1 Wednesday R.No- 103	B.A -3 (E) (1-6) R.No 107	B.A-1 (C) (1-6) R.No-106	----------	M.A-1 (1-6) R.No-103	----------	B.A-1 (1-6) Elec .Eng R.No-103	----------	25
Prof. Gurpreet Kaur	M.A-1 Thursday R.No- 103	----------	B.A-1 (F) (1-6) R.No-110	B.A-2 (D) (1-6) R.No-107	----------	M.A-1 (1-6) R.No-103	B.Com.1 (1-6) (B) R.No-15	----------	25
Prof. Aarti Bakshi	M.A-2 Monday R.No- 104	B.A -3 (B) (1-6) R.No 106	B.A-1 (G) (1-6) R.No-104	B.A-2 (C) (1-6) R.No-106	----------	----------	M.A-2 (1-6) R.No 104	----------	25
Vacant Post	----------	----------	----------	----------	----------	----------	----------	----------	

Note:- B.A-2 Section-(E) 6 Periods per Week has been merged with B.A-2 Section-(C)

TOTAL WORK LOAD- 206

No of Posts -09

A. Kaur

HOD (ARVIND KAUR)
P.G. DEPARTMENT OF ENGLISH

Harjeet Singh

Principal
Govt. College Mohali

POST GRADUATE DEPT. OF FINE ARTS (2022-23) [redacted]

	1 9.00- 9.45 AM	2 9.45- 10.30 AM	3 10.30- 11.15 AM	4 11.15- 12.00 PM	5 12.00- 12.45 PM	6 12.45- 1.30 PM	7 1.30- 2.15 PM	8 2.15- 3.00 PM	
KIRANDEEP KAUR	MA2 PAPER-1 (1-6)			MA1 PAPER-[redacted] (1-6)	BA1 (1-3) TH	MA2 PAPER-2 (1-6)	BA3 TH (4-6)		24
GAYATRI SINGH	BA2 PR (1-6)	BA2 TH (1-3) PR (4-6)		MA2 PAPER-4 (1-6)	MA2 PAPER-4 (1-6)	BA3 PR(1-6)	BA3 PR(1-3)		33
SONIA SHARMA		MA2 PAPER-3 (1-6)	MA2 PAPER-3 (1-6)	BA1 GP-1 PR(1-6)	BA1 GP-1 PR(4-6)	MA1 PAPER-4 (1-6)	MA1 PAPER-4 (1-6)		33
HARCHARAN SINGH		MA1 PAPER-3 (1-6)	MA1 PAPER-3 (1-6)	BA1 GP-2 PR(1-6)	BA1 GP-2 PR(4-6)			MA1 PAPER-2 (1-6)	27
									Total=117

Hayat-G-1

S.M.H.S Govt College Mohali, Phase-6.

TIME TABLE B.Com Sem-2,4,6 (SESSION 2022-23)

Classes	0 08:15 - 09:00	1 9:00-9:45	2 9:45-10:30	3 10:30-11:15	4 11:15-12:00	5 12:00-12:45	6 12:45-1:30	7 1:30-2:15
B.com-1 Sec-A Room no- 203		Business mathematics. (1-6) Prof. Maheep Singh	Business Law-II (1-6) Prof. Rohini	Principle of Economics-II (1-6) Prof.Ravinder Kaur R No 203		Punjabi (1-6) Mr.Parminder Singh (Resource Person)	Financial Accounting (1-6) Prof.Navneet Kaur	English (1-6) Dr.Rupinder Kaur R.NO- 203
B.com-1 Sec-B Room no-			Financial Accounting (1-6) Prof.Navneet Kaur Room no.206	Business mathematics. (1-6) Prof. Maheep Singh	Business Law-II (1-6) Prof. Rohini R No 202		Principle of Economics-II (1-6) Prof. Ravinder Kaur R No 202	English (1-6) Prof.Gurpreet Kaur R.NO- 15
B.com-2 Sec-A Room no-202		English (1-6) Prof.Rashmi Prabhakar Room No.	Income Tax-II (1-6) Prof.Anureet Bhalla	Business Management (1-6) Prof.Sunita Mittal		Corporate Accounting-II (1-6) Prof. Harpreet Kaur	Operation Research (1-6) Dr.Surinder Paul Room No.102	Punjabi (1-6) Prof.Pushpinder Kaur
B.com-2 Sec-B Room no-204		English (1-6) Dr.Inderjeet Kaur		Corporate Accounting-II (1-6) Prof. Harpreet Kaur	Operation Research (1-6) Dr.Surinder Paul Room No.102	Business Management (1-6) Prof.Sunita Mittal	Income Tax-II (1-6) Prof.Anureet Bhalla	
B.com-3 Sec-A Room no-205			Cost Accounting-II (1-6) Prof.Sunita Mittal	International Marketing (1-6) Prof.Navneet Kaur	Punjabi (5-6) Mr.Parminder Singh (Resource Person)	Entrepreneurship (1-6) Prof. Anureet Bhalla	Business Environment (1-6) Prof. Rohini	Management Accounting-II (1-6) Prof. Harpreet Kaur
B.com-3 Sec-B Room no-206			Management Accounting-II (1-6) Prof. Harpreet Kaur	Entrepreneurship (1-6) Prof. Anureet Bhalla		Business Environment (1-6) Prof. Rohini	Cost Accounting-II (1-6) Prof.Sunita Mittal	Fundamental of Insurance (1-6) Prof. Navneet Kaur

TIME TABLE (2022-23)
GOVT.COLLEGE SAHIBZADA AJIT SINGH NAGAR (MOHALI)
CHEMISTRY DEPARTMENT

CLASS	I	II	III	IV	V	VI	VII	VIII	IX	X
B.SC I		1,2 Phy(A.T) 3,4 inorg(B.K) 5,6 org(H.G)				1, Phy(A.T) 2 inorg(B.K) 3 org(H.G)	Pratical B.sc I Medical, Non-medical 3-6			
B.SC II			1,2 Phy(A.T) 3,4 inorg (B.K) 5,6 org(H.G)	Pratical B.sc I Medical, Non-medical 1-2 A.T , 3-4 H.G					1, Phy(A.T) 2 inorg(B.K) 3 org(H.G)	1 Inorg (B.K) 2 Phy(A.T) 3 Org (H.G)
B.SC III	Pratical B.sc III Medical, Non-medical 3-6(B.K and A.T)			1,2 Inorg (B.K) 3,4 org(H.G) 5,6 Phy (A.T)				4 Phy (A.T) 5 inorg(B.K) 6 org(H.G)		
M.SC II Org	Paper 321-NK 4 periods onMonday Paper 322- JP 4 period on Tuesday Paper 323- AB 4 periods on Wednesday					Practical 324 Saturday,Monday,Tuesdaay (Dr.AK) Practical 325 (B.K) Wednesday ,Thursday,Friday				
M.SC II Inorg	311 Dr. A.K Saturday,Monday,Tuesday 312 Dr. A.K Saturday,Monday,Tuesday 313 Ajay Kumar Saturday,Monday,Tuessday 314,315 Practical 1 and 2 Ajay Kumar 4 Periods Each on Monday ,Wednesday,Friday									

Principal

DEPARTMENT OF ECONOMICS (TIME -TABLE)

SEM- II, IV, & VI (Session 2022-23)

Periods / Name of the Teacher	1	2	3	4	5	6	7	8	Total
Dr. Surindr Paul	B. Com II Sec- A Operation Research (1-6) R.NO 202			B.Com -II Sec -B Operation Research (1-6) R. NO 204	BA I (Gen) SEC. A Room No. 113 (1-6)			B.A-I Sec A (Gen) (1-3) B.A I Sec B (Gen) (4-6) Room No. 106	24
Prof. Maheep Bhatia	B. Com -I B. Maths (1-6) Room No 203			B.A- III (1-3) (Gen) (4-6) Hons			B.A-III (Gen) (1-6) Hall No. 2	B.A- III, (1-6) (Hons) Hall No 2	24
Prof. Rawinder Kaur		B.A -II (Gen) Room No. 204 (1-6)	B.Com -I Economics (1-6) Room No 203		BA I (Gen) SEC. B Room No. 204 (1-6)			B.A-II (Honours) (1-6) Room No 202	24

TIME TABLE DEPARTMENT OF COMPUTER SCIENCE (SESSION 2022-23)

CLASS	1 9:00-9:45	2 9:45-10:30	3 10:30-11:15	4 11:15-12:00	5 12:00-12:45	6 12:45-1:30	7 1:30-2:15	8 2:15-3:00
BA 1/ B.Sc 1		COMPUTER SCIENCE (1-6) COMPUTER LAB					Practical 3-4 BSC ⟷	
BA 2/ B.Sc 2			COMPUTER SCI. (1-4) Comp. Labs	Practical 1-2 BSC ⟷		Practical 1-2 BSC ⟷		
BA 3/ B.Sc 3	Practical 5-6 BSC ⟷		Practical 5-6 BSC		COMPUTER SCIENCE (1-6) Computer Lab			

Teacher Wise Time Table / Work Load
(Session- 2021-22)

Sr. No.	Name of official	0	1	2	3	4	5	6	7	8	9	10	Total
		8:15 AM	9:00 AM	9:45 AM	10:30 AM	11:15 AM	12:00 PM	12:45 PM	1:30 PM	2:15 PM	3:00 PM	3:45 PM	
1	Prof.Harpriya Singh			M.A.-2 (1-6) ROOM NO.103	B.A-3 ENG ELEC. ROOM NO.103	B.A-2 SEC-D (4-6) ROOM NO.103		M.A.-1 (1-6) ROOM NO.103		M.A.-2 SEMINAR (5-6) ENG. LIB.			21+2
2	Prof.Sunita Mittal			B.COM 3 (1-6) ROOM NO.206	B.COM 2 (1-6) ROOM NO.202		B.COM 2 (1-6) ROOM NO.204	B.COM 3 (1-6) ROOM NO.205					24
3	Prof.Arvind Kaur			B.A-3 (1-6) SEC-A ROOM NO.105		B.A-2 (1-3) SEC-D ROOM NO.107	M.A.-2 (1-6) ROOM NO.104		B.A-1 (1-6) ENG ELEC. ROOM NO.104	M.A.-2 SEMINAR (1-2) ROOM NO.104			21+2
4	Prof.Tejinder Kaur			B.A-3 (1-6) SEC-B ROOM NO.106		B.A-2 (1-6) SEC-E ROOM NO.104		B.A-2 (1-6) ENG ELEC. ROOM NO.104	M.A.-2 (1-6) ROOM NO. 104	M.A.-2 SEMINAR (3-4) DEPT. LIBRARY			24+2
5	Prof.Rupinder Kaur			B.A-3 (1-6) SEC-C ROOM NO.110	B.A-1 (1-6) SEC-A ROOM NO.101	M.A.-1 SEMINAR (5-6) DEPT.LIBRARY	M.A.-1 (1-6) ROOM NO.103		B.COM 1 SEC-A (1-6) ROOM NO.203				24+2
6	Prof.Seema Saini		M.SC-1 (5-6) B.SC-3 PRAC (3-4) CHEM LAB.	M.SC-1 (1-2) CHEM. LAB, B.SC-3 PRAC (3-4) CHEM LAB, B.SC-1 (5-6) HALL NO.3	B.SC-2 (1-2) HALL NO.2 B.SC-3 PRAC (3-4)	B.SC-2 (1-2) PRAC CHEM LAB	B.SC-2 (1-2) PRAC CHEM LAB B.SC-3 (3-4) HALL NO.1	B.SC-2 (1-2) PRAC CHEM LAB	B.SC-1 (1) PRAC CHEM LAB.	B.SC-1 (1) PRAC CHEM LAB.	B.SC-1 (1) PRAC CHEM LAB.		25 (T=10) (P=15)
7	Dr.Jaspal Singh				B.A.-3 (1-6) PRAC GEO ROOM NO.208		B.A.-3 (1-6) TH DEPTT ROOM		B.A.-3 (1-6) PRACTICAL ROOM NO 207	B.A.-3 (1-6) PRACTICAL ROOM NO207			24 (T=6) P=18)
8	Prof.Gunjeet Kaur			B.A.-1 PRAC (1-6) RNO.10	B.A.-3 PRAC (1-6) LAB NO.9	B.A.-3 TH (1-6) RNO.10		B.A.-3 PRAC (1-6) FOODS LAB					24 (T=6) (P=18)
9	Prof.Ghansham Singh		M.A.-1 (1-6) ROOM NO.111		M.A.-2 (1-6) ROOM NO.115		B.A.-2 SEC-A (1-6) ROOM NO.110	B.A.-1 SEC-A (1-6) ROOM NO.115					24
10	Dr.Surinder Paul		B.COM -2 SEC-B (1-6) ROOM NO.202			B.COM -2 SEC-A (1-6) ROOM NO.204	B.A.-1 SEC-A (1-6) HALL NO.2			B.A.-1 (1-3) B.A-2 (4-6) GEN ROOM NO.106			24
11	Dr.Prabhjot Kaur			B.A.-2 (1-6) RNO.101			B.A.-1 SEC-A (1-6) RNO.101		B.A.-3 SEC-A (1-6) RNO.101	B.A.-2 HONS (4-6) RNO.101			21
12	Prof.Pushpinder Kaur		B.A.-3 SEC-A (1-6) ROOM NO.102		M.A.-1 (1-6) ROOM NO.111	M.A.-2 (1-6) ROOM NO.115		B.A.-1 SEC-B (1-6) ROOM NO.102					24

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SMHS Govt. College
Sahibzada Ajit Singh Nagar

TIME TABLE CUM WORKLOAD

	ficial	0	1	2	3	4	5	6	7	8	9	10	Total
13	Dr.Mandeep Kaur		B.SC-3 (3-4) PRAC BOTONY LAB.	B.SC-3 (3-4) PRAC BOTONY LAB., B.SC-2 (1,2,6) TH BOTONY LAB.	B.SC-3 (3-4) PRAC BOTONY LAB.	B.SC-2 (6) PRAC BOTO. LAB.,B.SC-3 (1-4) TH BOTONY LAB (5) BOT. CLASS ROOM	B.SC-2 (6) PRAC BOTONY LAB.	B.SC-2 (6) PRAC BOTONY LAB.	B.SC-2 (1,2,3) TH BOTONY class ROOM, B.SC-3 (4-6) TH BOTONYclass ROOM				23
14	Prof.Anita Garg (M.VOCAL)			B.A.-1 (1-3) TH (4-6) PRAC DEPTT. ROOM	B.A.-2 (1-3) TH (4-6) PRAC DEPTT. ROOM		B.A.-3 (1-3) TH (4-6) PRAC DEPTT. ROOM						18
15	Prof.Jaspreet Kaur Bains		M.A.-1 (1-6) ROOM NO.104	M.A.-1 (1-2) SEMINAR ENG.LIB	B.A.-1 SEC-B(1-6) ROOM NO.102	B.A.-2 SEC-A (1-6) ROOM NO.102			B.COM-1 SEC-B (1-6) ROOM NO.206				24+2
16	Prof.Nishtha		B.A.-2 SEC-A(1-6) HALLNO.2			B.A.-1 SEC-A (1-6) HALL NO.2		B.A.-3 SEC-A (1-6) HALLNO.2		B.A-2 HONS. (1-3) ROOM NO.107			21
17	Prof.Rashmi Prabhakar			B.A.-3 SEC-D (1-6) HALL NO.2	B.A.-1 SEC-C (1-6) ROOM NO.105	M.A.-1 (3-4) SEMINAR LANG. LAB		B.COM-2 (1-6) SEC-A ROOM NO.202	M.A-1 (1-6) ROOM NO.103				24+2
18	Dr.Inderjeet Kaur		B.COM-2 (1-6) SEC-B ROOM NO.204	M.A.-2(1-2) SEMINAR ROOM NO.104	B.A.-1 SEC-D (1-6) ROOM NO.107	B.A.-2 SEC-B (1-6) ROOM NO.105		M.A-2 (1-6) ENG LIB.					24+2
19	Prof.Kulwinder Kaur		B.A.-2 SEC-B (1-6) ROOM NO.101			B.A.-1 SEC-B(1-6) ROOM NO.101		B.A.-3 SEC-B (1-6) ROOM NO.101		B.A-2 HONS.(4-6) ROOM NO.107			21
20	Prof.Harsh Bala			B.A.-2 PRAC (1-6) CLOTHING LAB		B.A.-1 PRAC (1-6) HOME SCI.LAB	B.A.-1 PRAC (1-6) HOME SCI. LAB		B.A.-2 TH (1-6) ROOM NO.10				24 (T=6) (P=18)
21	Prof.Nadini Vaid			B.A-3 SEC-E (1-6) ROOM NO.107	B.A.-1 SEC-E (1-6) ROOM NO.106	B.A.-2 SEC-C (1-6) ROOM NO.113				←	B.SC-2 (1-6) HALL NO.3		24
22	Dr.Harjinder Singh		B.A/B.SC-2 09:00 TO 09:45 (1-6) HALL NO 1	M.SC-1 10:00 TO 11:00(1-6) HALL NO 4		M.SC-2 12:15 TO 01:15 (1-6) HALL NO 4			B.A. & B.SC-3 01:30 TO 02:15 (1-3) HALLNO.1				27
23	Prof.Anureet Bhalla			B.COM-2 SEC A (1-6) ROOMNO.202	B.COM-2 SEC B (1-6) ROOMNO.204		B.COM-3 SEC A (1-6) ROOMNO.205	B.COM-3 SEC B(1-6) ROOMNO.206					24
24	Prof.Gurpreet Kaur												

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SMHS Govt. College
Sahibzada Ajit Singh Nagar

TIME TABLE CUM WORKLOAD

	Official	0	1	2	3	4	5	6	7	8	9	10	Total
25	Dr.Amritpal Singh		B.A./ B.SC-1 (1-3) 09:00 TO 09:45 HALLNO.3	M.SC-2 10:00 TO 11:00 (1-6) ZOOLOGY LAB 2		M.SC-1 12:15 TO 01:15 (1-6) ZOOLOGY LAB 2	M.SC-1 01:15 TO 02:15 (1-6) HALL NO.4						27
26	Prof.Sharanjit Singh			B.A.-1 (1-6) TH ROOM 207	B.A.-2 (1-6) TH ROOM NO 207			B.A.-2 (4-6) PRACTICAL ROOM NO 207	B.A.-1 (1-3) PRAC B.A-2 (4-6)PRAC ROOM NO 204	B.A.-1 (1-3) PRAC ROOM NO 204			24 (T=12) (P=12)
27	Prof.Amrish		MSC (1-2) B.SC-3 (5-6) PRAC CHEM LAB	B.SC-1 (1-2) HALL NO.3 ,M .SC-1 (3-4) B.SC-3 (5-6) PRAC CHEM LAB	BS.C-2 (3-4) HALL NO.1, B.SC-3 (5-6) PRAC CHEM LAB	BS.C-2 (3-4) PRAC CHEM LAB.	B.SC-3 (5-6) HALL NO.1 ,BS.C-2 (3-4) PRAC CHEM LAB.	BS.C-2 (3-4) PRAC CHEM LAB.	B.SC-1 (2) PRAC CHEM LAB.	B.SC-1 (2) PRAC CHEM LAB.	B.SC-1 (2) PRAC CHEM LAB.		25((T=10) (P=15)
28	Dr.Mani Nandini				M.A.1 (1-6) PRAC DEPT.ROOM	M.A.1 (1-6) PRAC DEPT.ROOM		M.A.2 PAPER-1 (1-3) TH M.A-2 PAPER-2 (4-6) TH DEPT.ROOM	M.A.2 PAPER-1(1-3) TH M.A-2 PAPER-2 (4-6) TH DEPT.ROOM	M.A.1 PAPER-3 PRAC (1) , M.A-1 PRAC(3) DEPT. ROOM			26 (T=12) (P=14)
29	Mrs.Sukhvir Kaur		B.A.-1 TH(1-6) ROOM NO-10		B.A.-2 (1-6) PRAC CLOTHING LAB		B.A.-3 (1-6) PRAC CLOTHING LAB	B.A.-2 (1-6) PRAC ROOM NO.10					24 (T=6) (P=18)
30	Mrs.Sarabjeet Kaur		B.SC-3 (1) PRAC ZOO LAB, B.SC-2 (2)TH ZOO. ROOM (3,4,5) ZOO.LAB	B.SC-3 (1) PRAC ZOO LAB	B.SC-3 (1) PRAC ZOO LAB,B.SC-1 (2)TH ZOO. ROOM (3,5,6) ZOO.LAB	B.SC-2 (3) PRAC ZOO LAB, B.SC-1 (4)TH ZOO. ROOM	B.SC-2 (3) PRAC ZOO LAB	B.SC-2 (3) PRAC ZOO LAB,B.SC-3 (1,2,4,5,6)TH ZOO. LAB	B.SC-1 (5) PRAC ZOO LAB, B.SC-2 (6)TH ZOO. ROOM	B.SC-1 (5) PRAC ZOO LAB	B.SC-1 (5) PRAC ZOO LAB		24(T=15) (P=9)
31	Dr.Amandeep Kaur		B.A.-3,B.SC-3,B.COM-3 (5-6) MUDLA GYAN ROOM NO.107	M.A.-2 (1-6) ROOM NO.115	B.A.3 (1-6) PBI SAHIT ROOM NO.110		M.A.-1 (1-6) ROOM NO.111	B.A.-1,B.SC-1,B.COM-1 (3-4) MUDLA GYAN ROOM NO.107	B.A.-2,B.SC-2,B.COM-2 (1-2) MUDLA GYAN ROOM NO.115				24
32	Mrs.Simarpreet		B.A.-1 SEC-A TH (1-6) ROOM NO.110	B.A.-1 GROUP -A (1-6) PRAC		B.A.-3 (1-6) TH ROOM NO.110	B.A-3 (1-6) PRAC GROUP-A		B.A. 1- GROUP-B (1-6) PRAC				30 (T=12) (P=18)
33	Mrs.Monica Sarhadi			B.A.-2 (1-6) RNO.102			B.A.-1 SEC-A (1-6) RNO.102		B.A.-3 SEC-A (1-6) RNO.102	B.A.-2 HONS (1-3) RNO.101			21
34	Mrs.Munisha		B.SC-3 (1-2) PRAC PHY LAB	B.SC-3 (1-2) PRAC PHY LAB, B.SC-2 (4-6) TH HALL NO.1	B.SC-3 (1-2) PRAC PHY LAB, B.SC-1 (4-6) TH HALL NO.3	B.SC-2 (3-4) PRAC PHY LAB, B.SC-3 (1,2,5) TH HALL NO.1	B.SC-2 (3-4) PRAC PHY LAB	B.SC-2 (3-4) PRAC PHY LAB	B.SC-1 (5) PRAC PHY LAB	B.SC-1 (5) PRAC PHY LAB , B.SC-3 (1-3) TH HALL NO.1	B.SC-1 (5) PRAC PHY LAB		27 (T=12) (P=15)

Principal
SMHS Govt. College
Sahibzada Ajit Singh Nagar

TIME TABLE CUM WORKLOAD

	ficial	0	1	2	3	4	5	6	7	8	9	10	Total
35	Miss.Navneet Kaur			B.COM 1 (1-6) ROOM NO.203	B.COM 3 (1-6) ROOM NO.205		B.COM 3 SEC-B (1-6) ROOM NO.206		B.COM 3 SEC-A (1-6) ROOM NO.205				24
36	Mr.Manoj Kumar		B.A-1 (1-3) TH (4-6) GROUP-1 PRAC DEPTT. ROOM		B.A-3 (1-6) PRAC DEPT. ROOM	B.A-3 (1-3) TH (4-6) PRAC GROUP-1 DEPT. ROOM	B.A-1 (1-6) PRAC GROUP-2 DEPT.ROOM	B.A-2 (1-6) PRAC DEPT.ROOM	B.A-2(1-3) TH DEPTT. ROOM				33
37	Dr.Gurpreet Singh		M.A.-2 (1-6) ROOM NO.115			M.A.-1 (1-6) ROOM NO.111	B.A.-2 SEC-B (1-4) B.COM-1 (5-6) ROOM NO.107		B.A.-1 (1-6) PBI SAHIT ROOM NO.113				24
38	Mr.Sukhwinder Singh				B.A.3 (1-6) HALL NO 2			B.A.2 (1-6) ROOM NO 113	B.A.1 (1-6) ROOM NO 107				18
39	Mr.Harcharan Singh			M.A.-2 (1-6) PRAC DEPT.ROOM	M.A.-2 (1-6) PRAC DEPT.ROOM			M.A.-1 (1-6) TH DEPT.ROOM	M.A.-1 (1-6) TH DEPT.ROOM	M.A.-2 (1) PRAC M.A-2 TUTORIAL (3) M.A-1 TUTORIAL (6) DEPT.ROOM			27 (T=14) (P=13)
40	Mr.Vipin Chaudhary		B.A.-2 TH (1-6) ROOM NO.209		B.A.-2 (1-3) PRAC GROUP-1 ROOM NO.209	B.A.-3 (1-3) PRAC GROUP-1 (4-6) PRAC GROUP-2 ROOM NO.210		B.A.-2 (1-3) PRAC GROUP-2 ROOM NO.210		B.A.-3 Hons. (1-6) ROOM NO.209			24(T=12) (P=12)
41	Mr.Hanish Guretia		B.A.-1 SEC.B (1-6) TH ROOM NO.113		B.A.-2 G-A (1-6) PRACTICAL		B.A.-3 G-B (1-6) PRACTICAL		B.A.-2 (1-6) TH ROOM NO.110	B.A.-2 G-B (1-6) PRACTICAL			30 (T=12) (P=18)
42	Mr.Guljeet Singh		B.SC-3 (5-6)	BA/B.SC 1-3 (1-6) COM LAB	B.A-2/B.SC-2(1-4) B.SC-3 (5-6) COM LAB	B.SC-2 (1-2) COM LAB	B.A-3 (1-6) B.SC-3 (1-6) COM LAB BA / BSC 2 (1-2)	BA / BSC 2 (1-2)	B.SC-1 (3-4) COM LAB	B.SC-1 (3-4) COM LAB	B.SC-1 (3-4) COM LAB		34 (T=16) (P=18)
43	Mr.Inderjeet Singh	B.A./B.SC-1 08:15 TO 09:00 (1-3) HALL NO.1	M.SC-2 (1-6) 09:00 TO 10:00 ZOOLOGY LAB 2		M.SC-1 (1-6) 11:00 TO 12:00 HALL NO.4			B.A./ B.SC-3 (1-6) 12:45 TO 01:30 HALLNO.1	B.A./ B.SC-2 (1-3) 01:30 TO 02:15 HALLNO.3				28
44	Mr.Maheep Singh				B.COM.-3 (1-6) ROOMNO.206	B.A.-3 (1-3) HONS.(4-6) GEN ROOM NO.202			B.A.-3 (1-6) GEN HALL NO.2	B.A.-3 (1-6) HONS. HALL NO.2			24
45	Mrs.Tejinder Kaur			B.A-1 (1-3) PRAC - GROUP-1 ROOM NO. 209		B.A-1 (1-6) TH ROOM NO. 209		B.A-3(1-6) TH ROOM NO. 209	B.A-1 (1-3) PRAC - GROUP-2 ROOM NO. 209	B.A-2(1-6) TH HONS. ROOM NO. 210			24(T=18) (P=6)
46	Mrs.Sarabjit Kaur (HINDI)				B.A.-3 (1-6) ROOMNO.113			B.A.-2 (1-6) ROOMNO.106	B.A.1 (1-6) ROOM NO 105				18

Principal
SMHS Govt. College
Sahibzada Ajit Singh Nagar

TIME TABLE CUM WORKLOAD

		0	1	2	3	4	5	6	7	8	9	10	Total
47	Mrs.Ravinder Kaur			B.A.-2 (1-6) GEN ROOMNO.113	B.COM.-1 (1-6) ROOM NO.205		B.A.-1 SEC-B (1-6) GEN ROOM NO.113	B.A.-2 (1-3) HONS. ROOM NO.202		B.A.-2 (1-6) HONS. ROOM NO.202			27
48	Mrs.Gayatri Singh		M.A.-2 (1) PRAC DEPTROOM	B.A.-2 (1-3)TH B.A-2 (4-6) PRAC DEPTROOM		M.A.-2 (1-6) PRACTICAL DEPTROOM	M.A.-2 (1-6) PRACTICAL DEPTROOM	B.A.-3 (1-6) PRAC DEPTROOM	B.A.-2 (1-6) PRAC DEPTROOM				31 (T=3) (P=28)
49	Mrs.Sonia Sharma		M.A.-1 (1-6) PRACTICAL DEPTROOM	M.A.-1 (1-6) PRACTICAL DEPTROOM	\	B.A.-1 (1-6) PRAC DEPTROOM	B.A.-1 (1-3) TH (4-6) PRAC DEPT.ROOM		B.A.-3 (1-3)TH (4-6) PRAC DEPT.ROOM				30 (T=6) (P=24)
50	Mrs.Sarabjeet Kaur (PBI)		B.A.-3 (1-6) ROOMNO.105		B.Sc 3 (1-2) B.Sc 2(5-6)		B.A.-2 SEC.B (1-4) B.SC-1 (5-6) ROOMNO.106	B.A.-1 SEC-C (1-6) ROOM NO.105	B.COM-2 (3-4) ROOM NO.202				24
51	Dr.Kulwinder Kaur		B.A.-3 (1-4) ROOMNO.106	M.A.-1 (1-6) ROOMNO.111		B.COM.-3 (5-6) ROOM NO.206	M.A.-2 (1-6) ROOMNO.115	B.A.-2 (1-6) PBI SAHIT ROOMNO.110					24
52	Mrs.Shallu Devi		B.SC-1 (1-6) TH BOTONY CLASS ROOM	B.SC-2 (3,4,5) TH ZOO LAB		B.SC-2 (5) PRAC BOT. LAB , B.SC-3 (6) TH BOT. CLASS ROOM, B.SC-1(1-3) TH BOT. CLASS ROOM	B.SC-2 (5) PRAC BOT. LAB	B.SC-2 (5) PRAC BOT. LAB	B.SC-1 (3-4) PRAC BOT. LAB	B.SC-1 (3-4) PRAC BOT. LAB	B.SC-1 (3-4) PRAC BOT. LAB		22
53	Mrs.Shilpy Bhullar		B.SC-3 (5-6) PRAC PHY LAB	B.SC-2 (1-3) TH HALL NO.1 ,B.SC-3 (5-6) PRAC PHY LAB	B.SC-3 (5-6) PRAC PHY LAB , B.SC-1 (1-3) TH HALL NO.3	B.SC-3 (3,4,6) TH HALL NO.1 , B.SC-2 (5) TH HALL NO.1 , B.SC -2 (1-2) PRAC PHY.LAB	B.SC -2 (1-2) PRAC PHY.LAB, , B.SC-2 (5) TH HALL NO.1	B.SC-1 (4-6) TH HALL NO.3, B.SC - 2 (1-2) PRAC PHY.LAB	B.SC-1 (6) PRAC PHY LAB.	B.SC-1 (6) PRAC PHY LAB.	B.SC-1 (6) PRAC PHY LAB.	B.SC-2 (6) TH PHY. LAB	30 (T=15) (P=15)
54	Mrs.Harpreet Kaur		B.COM.-3 (1-6) ROOMNO.205	B.COM.-2 SEC-B (1-6) ROOMNO.204			B.COM.-2 SEC-A (1-6) ROOMNO.202	B.COM.-1 (1-6) ROOMNO.203					24
55	VACANT (PUB. AD.		B.A-1 (1-6) HALL NO.1			B.A-3 (1-6) ROOM NO.106			B.A-2 (1-6) ROOM NO.106				18

TIME TABLE INCHARGE

PRINCIPAL

S.M.H.SINGH GOVT. COLLEGE SAHIBZADA AJIT SINGH NAGAR

DEPT. OF SCIENCE B.Sc.I-II-III

TIME TABLE SESSION-2021-22

Periods/ Class	1 9.00	2 9.45	3 10.00	4 11.15	5 12.00	6 12.45	7 1.30	8 2.15	9 3.00	10 3.45
BSc.-1	Maths (1-6) A.P Hall No-III Botany (1-6) S Botany lab/Room	Chem (1-6) Hall No-III Computer (1-6) G.S Comp. Lab	Physics (1-3) S (4-6) M Hall No-III Zoology (1, 4) G.F (2,3,5,6) S.K Zoology Room/ Lab	Maths (1-6) G.F Hall No-III Botany (1-3) S Botany Lab Zoology (4)S.K (5,6)G.F Zoology Lab	Phi. (1-6) A.K Hall No-III	Chemistry (1-3) Hall No-III Computer (1-3) G.S Comp. Lab Physics (4-6)S Hall No-III	PRACTICALS Chemistry N & M (1-2) Botany (3-4) S Zoo. (5) S.K, (6) G.F Physics N & C.A (5) M (6) S Computer(3-4) G.S			Math (1-3) G.F Hall No-III
BSc.-2	Maths (1-6)G.F Hall No-I Zool. (2,3,4,5) S.K Zoo. Lab/ Room (1,6) G.F Zoo. Lab	Phy. (1-3)S (4-6) M Hall.No-I Bot (1,2,6)M.K Botany lab (3,4,5)S Zoo. Lab	Chem (1-6) Hall No-I Comp. (1-6) G.S Comp. Lab	PRACTICALS Botany(5) S,(6) M.K Zoo. (3)S.K , (4)G.F Physics N(1-2) S CA(3-4) M Chem N (3-4) M (1-2) Computer (1-2)G.S			Math (1-6) I.S Hall No-III Botany (1-3) M.K Bot. Lab Zoo (6) S.K Zoo. Room (4,5) G.F Zoo. Room	Eng (1-6) H.S Hall No-III	Punjabi (1-6)R1 Hall No-III	Chemistry (1-3) Chem. Lab Physics (6) S Phy. Lab Comp (1-3) G.S Comp. Lab
				Physics (5) S Phy. Lab	Math (6) G.F Hall No-IV Physics (5) S Phy. Lab	Math (5-6) G.F Hall No-IV				
BSc.-3	PRACTICALS Botany.(3-4)M.K Zoo.(1) S.K Zoo.(2) G.F Phy N(5-6) S CA(1-2)M Chem N (3-4), M (5-6) Computer (5-6) G.			Bot (1-5)M.K (6) S Bot.Lab/Room Physics (1,2,5)M (3,4,6) S Hall No-I	Chem (1-6) Hall No-I Comp (1-6) G.S Comp. Lab	Math (1-6) I.S Hall No-I Zool. (1,2,4,5,6) S.K Zoo. Lab (3) G.F Zoo.Room	Math (1-3) H.S (4-6) G.F Hall No-I Botany (4-6) M.K Bot.Lab Zool. (1-3) G.F Zoo. Lab	Chem (4-6) Hall No-I Physics (1-3)M Hall No-I Comp (4-6) G.S Comp. Lab	Punjabi (1-6)R2 Hall No-I	Math (1-3) G.F Hall No-I

Mandeep Kaur

Principal
S.M.H Singh Govt College SAS Nagar

SMHPS (S.C.) Govt. College Mohali, (Session 2020-21)

TIME TABLE CUM WORKLOAD

		0	1	2	3	4	5	6	7	8	9	10	Total
ਲੜੀ ਨੰ:	ਪ੍ਰਾਧਿਆਪਕ ਦਾ ਨਾਂ	08:15	09:00	09:45	10:30	11:15	12:00	12:45	01:30	02:15	03:00	03:45	
1	ਪ੍ਰੋ ਤੇਜਿੰਦਰ ਕੌਰ			M.A.-2 (1-2) DEPTT ROOM	B.A.-3 SEC-A (1-6) RNO.105		M.A.-2 (1-6) DEPTT ROOM	M.A.-1 (1-6) DEPTT ROOM	M.A.-1 (1-2) DEPTT ROOM				22
2	ਪ੍ਰੋ ਹਰਪ੍ਰਿਯਾ ਸਿੰਘ			B.A.-3 (1-6) RNO.103	M.A.-2 (1-6) DEPTT ROOM		B.SC-2 (1-6)		M.A.-2 (1-2) DEPTT ROOM				20
3	ਪ੍ਰੋ ਸੁਨੀਤਾ ਮਿੱਤਲ			B.COM-3 (1-6) ROOMNO.203	B.COM-3 (1-6) ROOMNO.203		B.COM-3 (1-6) ROOMNO.206						18
4	ਪ੍ਰੋ ਸੀਮਾ ਸੈਣੀ		B.SC-3 MED (5-6) PRAC	B.SC-3 MED (5-6) PRAC MSC (1,2,5,6) TH CHEM LAB	B.SC-3 MED (5-6) PRAC MSC (1,2,5,6) TH CHEM LAB BSC-	B.SC-1 (3,4) HALL NO.4 BS.C-2 MED (1,2) PR	B.SC-3 (1,2) HALL NO.1 BS.C-2 MED (1,2) PR	BS.C-2 MED (1.2) PR MSC (3,4) PR	MSC (3,4) PR BSC MED (3,4) PR	MSC (3,4) PR BSC MED (3,4)PR			34
5	ਪ੍ਰੋ ਅਰਵਿੰਦ ਕੌਰ				B.A.-3 SEC-B (1-6) RNO.106		B.A.-1 SEC-F (1-6) RNO.101	M.A.-2 (1-6) DEPTT ROOM	M.A.-2 (3-4) DEPTT ROOM				20
6	ਡਾ. ਜਸਪਾਲ ਸਿੰਘ			B.A.-1 (1-6) PRACTICAL GEO DEPT			B.A.-3 (1-6) TH DEPTT ROOM		B.A.-3 (1-6) PRACTICAL GEO DEPT	B.A.-3 (1-6) PRACTICAL GEO DEPT			24
7	ਪ੍ਰੋ ਸੁਰਿੰਦਰਪਾਲ			B.COM-2 SEC-B (1-6) RNO.202	B.A.-1 (1-6) HALLNO.2		B.COM-2 SEC-A (1-6) RNO.204	B.A-3 (1-3) DEPTROOM		B.A.-1 (1-3) DEPTT ROOM			24

Ravinder Kaur

Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

TIME TABLE CUM WORKLOAD

		0	1	2	3	4	5	6	7	8	9	10	Total
8	ਡਾ ਪ੍ਰਭਜੋਤ ਕੌਰ				B.A.-1 SEC-A (1-6) RNO.101	B.A.-2 SEC-A (1-6) RNO.101			B.A.-3 SEC-A (1-6) RNO.101				18
9	ਪ੍ਰੋ ਘਣਅੰਮ ਸਿੰਘ		B.A.-2 SEC-A (1-6) RNO.102					M.A.- 1 (1-6) ROOMNO.111	M.A.-2 (1-6) ROOMNO.115		B.SC-2 (1-6) HALL NO.3		24
10	ਪ੍ਰੋ ਗੁਨਜੀਤ ਕੌਰ			B.A.-3 (1-6) PRACTICAL	B.A.-1 (1-6) PRACTICAL	B.A.-1 (1-6) PRACTICAL		B.A.-3 (1-6) DEPTT ROOM					24
11	ਡਾ ਮਨਦੀਪ ਕੌਰ		B.SC.-3 (1-2) PRACTICAL BOTONY LAB	B.SC.-3 (1-2) PRACTICALB.SC -2 (3-6)TH BOTONY LAB	B.SC.-3 (1-2) PRACTICAL BOTONY LAB	B.SC.-3 (1-3) (5-6) B.SC-2 (4) PRAC BOTONY LAB	B.SC-2 (4) PRAC BOTONY LAB	B.SC-2 (4) PRAC BOTONY LAB	B.SC.-3 (4-6) ZOO LAB B.SC-2 TH (2-3) BOT LAB				24
12	ਪ੍ਰੋ ਨੰਦਿਨੀ ਵੈਦ		B.COM-2 SEC-A RNO.204	B.A.-2 (1-6) HOSPITALITY ROOM			B.A.-1 SEC-E (1-6) RNO.113	B.A.-2 (1-6) RNO.104					24
13	ਡਾ ਹਰਜਿੰਦਰ ਸਿੰਘ		M.SC-1 (1-6) HALL NO 4	M.SC-1 (1-6) HALL NO 4	M.SC-2 (1-3) HALL NO.4	B.A / B.SC-3 (4-6) HALLNO.3	M.SC-2 (4-6)			B.A / B.SC-3 (4-6) HALLNO.3			24
14	ਪ੍ਰੋ ਹਰਓ ਬਾਲਾ			B.A.-1 (1-6) PRACTICAL		B.A.-2 (1-6) PRACTICAL	B.A.-2 (1-6) DEPTT ROOM	B.A.-2 (1-6) PRACTICAL					24
15	ਪ੍ਰੋ ਕੁਲਵਿੰਦਰ ਕੌਰ			B.A.-1 SEC-A (1-6) HALLNO.2		B.A.-3 SEC-A (1-6) HALLNO.2			B.A.-2 SEC-B (1-6) RNO.106				18

Principal
SMHS Govt. College
Sahibzada Ajit Singh Nagar

TIME TABLE CUM WORKLOAD

		0	1	2	3	4	5	6	7	8	9	10	Total
16	ਪ੍ਰੋ ਜਸਪ੍ਰੀਤ ਕੌਰ ਬੈਂਸ		M.A.-1 (1-2) DEPTT ROOM	B.A.-2 SEC-B (1-6) RNO.105		M.A.-1 (1-6) DEPTT ROOM	B.A.-1 SEC-A (1-6) RNO.103		B.A.-1 (1-6) RNO.107				26
17	ਪ੍ਰੋ ਅਨੀਤਾ ਗਰਗ				B.A-2 (1-3)TH (4-6)PRAC DEPTROOM	B.A-1 (1-3) TH (4-6)PRAC DEPTROOM	B.A-3 (1-3)TH (4-6)PRAC DEPTROOM						18
18	ਡਾ: ਗੁਰਪ੍ਰੀਤ ਕੌਰ		B.A./ B.SC-2 (1-6) HALLNO.3	B.A./ B.SC-1 (1-6) HALLNO.1	M.SC-2 (4-6) HALL NO.4	B.A / B.SC-3 (1-3) HALLNO.1	M.SC-2 (1-3) HALL NO.3	M.SC-1 (1-6) HALL NO.4					27
19	ਪ੍ਰੋ ਰਸ਼ਮੀ ਪ੍ਰਭਾਕਰ		M.A.-1 (3-4) DEPTT ROOM	M.A.-1 (1-6) DEPTT ROOM	B.A.-3 SEC-C (1-6) RNO.107		B.A.-1 SEC-B (1-6) RNO.105	B.COM-1 SEC-A (1-6) RNO.205					26
20	ਪ੍ਰੋ ਭਰਪੂਰ ਕੌਰ ਠੇਰਗਿੱਲ			B.A.-1 SEC-B (1-6) ROOMNO.102		B.A.-3 SEC-B (1-6) RNO.105			B.A.-2 SEC-A (1-6) HALLNO.2	B.A.-3 HONOURS (1-6) RNO.15			24
21	ਡਾ: ਇੰਦਰਜੀਤ ਕੌਰ		B.COM-2 SEC-B (1-6) RNO.202	B.A.-2 SEC-C (1-6) RNO.106		M.A.-2 (1-6) DEPTT ROOM	B.A.-1 SEC-C (1-6) RNO.106		M.A.-2 (5-6) DEPTT ROOM				26
22	ਪ੍ਰੋ ਰਮੇਸ ਚੰਦ ਕਾਂਗੋ		B.A.-1 (1-6) HALLNO.2				B.A.-2 (1-6) HALLNO.2	B.A.-3 (1-6) HALLNO.2					18
23	ਪ੍ਰੋ ਅਨੁਰੀਤ ਭੱਲਾ			B.COM-2 SEC A (1-6) ROOMNO.204		B.COM-3 SEC B (1-6) ROOMNO.204	B.COM-2 SEC B (1-6) ROOMNO.202	B.COM-3 SEC A (1-6) ROOMNO.203					24

Principal
SMHS Govt. Co
Sahibzada Ajit Singh Nagar

TIME TABLE CUM WORKLOAD

		0	1	2	3	4	5	6	7	8	9	10	Total
24	ਪ੍ਰੋ ਗੁਰਪ੍ਰੀਤ ਕੌਰ		M.A.-1 (5-6) DEPTT ROOM	B.A.-2 SEC-D (1-6) RNO.107	M.A.-1 (1-6) DEPTT ROOM		B.A.-1 SEC-D (1-6) RNO.107	B.COM-1 SEC-B (1-6) RNO.206					26
25	ਪ੍ਰੋ: ਅੰਮ੍ਰਿਪਾਲ ਸਿੰਘ		B.A./ B.SC-1 (1-6) HALLNO.1	M.SC-2 (1-6) HALL NO.3			M.SC-1 (1-6) HALL NO.4	M.SC-2 (1-6) HALL NO.3		B.A./ B.SC-2 (1-3) HALLNO.1			27
26	ਪ੍ਰੋ: ਹਰਜੀਤ ਸਿੰਘ			B.A.-1 (1-6) PRACTICAL	B.A.-2 (1-6) TH DEPTT ROOM	B.A.-1 (1-6) TH DEPTT ROOM			B.A.-2 (1-6) PRACTICAL GEO DEPT	B.A.-2 (1-6) PRACTICAL GEO DEPT			30
27	ਪ੍ਰੋ: ਅਮਰੀਹ		BS.C-3 (3,4)	BS.C-3 (3,4) MSC TH CHEM LAB	BS.C-3 (3,4) MSC (1,2,5,6) CHEM LAB	BSC.1 (1-2) BS.C-2 (5,6)	B.SC-3 (5-6) BS.C-2 (5-6) HALL NO.1	B.SC-2 (5-6) MSC (1-2) PR	MSC (1-2) PR BSC-1 NM (1-2)	B.SC-1 NM (1-2)	B.SC-1 NM (1-2)		30
28	ਡਾ ਮਨੀ ਨੰਦਿਨੀ ਹੋਰਮਾ		M.A.1 (1-6) PRAC DEPTROOM	M.A.1 (1-6) PRAC DEPTROOM	M.A.1 (1-6) PRAC DEPTROOM	M.A.2 (1-6) TH DEPTROOM		M.A.2 (1-6) TH DEPTROOM					30
29	ਸ੍ਰੀਮਤੀ ਸੁਖਵੀਰ ਕੌਰ		B.A.-1 (1-6) DEPTT ROOM		B.A.-2 (1-6) PRACTICAL	B.A.-3 (1-6) PRACTICAL	B.A.-3 (1-6) PRACTICAL						24
30	ਸ੍ਰੀਮਤੀ ਸਰਬਜੀਤ ਕੌਰ		B.SC-3 (3-4) PRAC ZOO LAB	B.SC-3 (3-4) PRAC ZOO LAB B.SC-1 (1-2,6) TH	B.SC-3 (3-4) PRAC ZOO LAB		B.SC-1 (1-3) TH	B.SC-3 (1-6) TH ZOO LAB	B.SC-3 (1-3) TH B.SC-1 (2) PRAC ZOO LAB	B.SC-1 (2) PRAC ZOO LAB	B.SC-1 (2) PRAC ZOO LAB		24
31	ਸ੍ਰੀਮਤੀ ਅਮਨਦੀਪ ਕੌਰ		B.A.-2 /3 (1-2)(5-6) RNO.	B.A.-3 (1-6) RNO.115		M.A.-2 (1-6) ROOMNO.115	M.A.-1 (1-6) ROOMNO.111	B.A.-1 (3-4) RNO.102					24

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TIME TABLE CUM WORKLOAD

		0	1	2	3	4	5	6	7	8	9	10	Total
32	ਸ੍ਰੀਮਤੀ ਸਿਮਰਪ੍ਰੀਤ		B.A.-3 G-1 PRACTICAL	B.A.-3 G-2 PRACTICAL	B.A.-2 G-1 PRACTICAL	B.A.-2 G-2 PRAC ROOMNO.110		B.A.-3 (1-6) RNO.110	B.A.-A SEC-B (1-6) RNO.110				36
33	ਸ੍ਰੀਮਤੀ ਮੋਨਿਕਾ ਸਰਹੱਦੀ				B.A.-1 SEC-B (1-6) RNO.102	B.A.-2 SEC-B (1-6) RNO.102			B.A.-3 SEC-B (1-6) RNO.102	B.A.-3 HONOURS (1-6) RNO.102			24
34	ਸ੍ਰੀਮਤੀ ਮੁਨੀਠਾ		B.SC-3 (4-6) PRAC PHY LAB	B.SC-3 (4-6) PRAC PHY LAB B.SC-2 (1-3) TH ROOM NO.24	B.SC-3 (4-6) PRAC PHY LAB	B.SC-2 (1-2) PRAC PHY LAB	B.SC-2 (1-2) PRAC PHY LAB B.SC-1 (4-6) TH	B.SC-2 (1-2) PRAC PHY LAB B.SC-1 (4-6) TH	B.SC-1 (1-3) PRAC PHY LAB B.SC-3 (4-6) TH	B.SC-1 (1-3) PRAC PHY LAB	B.SC-1 (1-3) PRAC PHY LAB	B.SC-2 (4-6) TH ROOMNO.24	39
35	ਮਨੋਜ ਕੁਮਾਰ		B.A.-1 (1-3)TH (4-6) PRAC-G-1 DEPTROOM	B.A.-1 (1-6) PRAC G-2 DEPTROOM	B.A.-3 (1-3)TH (4-6) PRAC-DEPTROOM	B.A.-1 (1-3) PRAC G-1 / B.A-2 (4-6) PR DEPTROOM		B.A.-2 (1-3)TH (4-6) PRAC DEPTROOM	B.A.-3 (4-6) PRAC-DEPTROOM				33
36	ਸੁਖਵਿੰਦਰ ਸਿੰਘ			B.A-3 (1-6) RNO.110				B.A-2 (1-6) RNO.110	B.A-1 (1-6) RNO.105				18
37	ਹਰਚਰਨ ਸਿੰਘ		M.A-2 (1-6) PRAC DEPTROOM	M.A-2 (1-6) PRAC DEPTROOM	M.A-2 (1-6) PRAC DEPTROOM			M.A-1 (1-6) TH DEPTROOM	M.A-1 (1-6) TH DEPTROOM				30
38	ਵਿਪਿਨ ਚੌਧਰੀ			B.A.-1 (1-6)TH PSY LAB		B.A.-2 (1-3) PRAC PSY LAB	B.A.-3 (1-3) PRAC PSY LAB		B.A.-2 (1-6)TH PSY LAB	B.A.-2 (1-6)TH PSY LAB			27
39	ਗੁਰਪ੍ਰੀਤ ਸਿੰਘ		B.A.-2 SEC.C (1-6) ROOMNO.105	M.A.-2 (1-6) ROOMNO.115		M.A.-1 (1-6) ROOMNO.111			B.COM-1 SEC-A-B (1-6) RNO.205				24

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TIME TABLE CUM WORKLOAD

		0	1	2	3	4	5	6	7	8	9	10	Total
40	ਹਨੀਫ਼ ਗੁਰੇਟੀਆ		B.A.-1 SEC.A (1-6) ROOMNO.110	B.A.-1 G-1 PRACTICAL	B.A.-1 G-2 PRACTICAL	B.A.-1 G-3 PRACTICAL	B.A.-2 SEC.A (1-6) ROOMNO.110		B.A.-1 G-4 PRACTICAL				36
41	ਗੁਲਜੀਤ ਸਿੰਘ		B.SC-3 (5-6)	B.SC-3 (5-6)	B.A-2 (1-6) B.SC-2(1-6) B.SC-3 (5-6) COM LAB	B.A-1 (1-6) B.SC-1 (1-6) B.SC-2 (1-2) COM LAB	B.A-3 (1-6) B.SC-3 (1-6) COM LAB	B.SC-1 (1-3) COM LAB	B.SC-1 (3-4) COM LAB	B.SC-1 (3-4) B.SC-3 (1-3) COM LAB	B.SC-1 (3-4) COM LAB	B.SC-2(1-3) COM LAB	43
42	ਇੰਦਰਜੀਤ ਸਿੰਘ		M.SC-2 (1-6)		M.SC-1 (1-6) HALLNO.3			B.A./ B.SC-3 (1-6) HALLNO.1	B.A./ B.SC-2 (1-6) HALLNO.3	B.A./ B.SC-1 (1-3) HALLNO.3			27
43	ਮਹੀਪ ਸਿੰਘ ਭਾਟੀਆ		B.COM.-1 SEC.A (1-6) ROOMNO.205		B.COM.-3 SEC.B (1-6) ROOMNO.202	B.COM.-1 SEC.B (1-6) ROOMNO.206			B.A.-3 (1-6) ROOMNO-113	B.A.-3 (1-6) DEPTROOM			30
44	ਤੇਜਿੰਦਰ ਕੌਰ		B.A-1 (1-3) PRAC G-1 PSY LAB	B.A-3 (1-3) PRAC G-1 PSY LAB	B.A-3 (4-6) PRAC G-2 PSY LAB	B.A-3 (1-6) TH PSY LAB	B.A-3 (4-6) PRAC G-3 PSY LAB		B.A-1 (1-3) PRAC G-2 PSY LAB	B.A-3 (1-6) TH HONO PSY LAB			27
45	ਸਰਬਜੀਤ ਕੌਰ			B.A.-3 (1-6) ROOMNO.15				B.A.-2 (1-6) ROOMNO.111	B.A.-1 (1-6) ROOMNO.111				18
46	ਰਵਿੰਦਰ ਕੌਰ		B.COM.-1 SEC.B (1-6) ROOMNO.206		B.COM.-1 SEC.A (1-6) ROOMNO.205	B.A.-2 (1-6) ROOMNO.107			B.A.-2 (1-3) DEPTROOM	B.A.-2 (1-6) DEPTROOM			27
47	ਗਾਇਤਰੀ ਸਿੰਘ			B.A.-3 (1-6) PRACTICAL DEPTROOM	B.A.-2 (1-6) PRACTICAL DEPTROOM	B.A.-2 (1-3)TH (4-6)PRAC DEPTROOM	M.A.-2 (1-6) PRACTICAL DEPTROOM		M.A.-2 (1-6) PRACTICAL DEPTROOM	M.A.-2 (1-6) PRACTICAL DEPTROOM			36

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TIME TABLE CUM WORKLOAD

		0	1	2	3	4	5	6	7	8	9	10	Total
48	ਸੋਨੀਆ ਓਰਮਾ			B.A.-1 (1-6) PRACTICAL DEPTROOM	B.A.-1 (1-3)TH (4-6) PRAC DEPTROOM	M.A.-1 (1-6) PRACTICAL DEPTROOM	M.A.-1 (1-6) PRACTICAL DEPTROOM		B.A.-3 (1-3)TH (4-6) PRAC DEPTROOM	M.A.-1 (1-6) PRACTICAL DEPTROOM			36
49	ਸਰਬਜੀਤ ਕੌਰ		B.A.-2 SEC.B (1-6) ROOMNO.115		M.A.-2 (1-6) ROOMNO.115			B.A.-1 SEC.A (1-6) ROOMNO.113	B.A.-1 (1-6) ROOMNO.				24
50	ਕੁਲਵਿੰਦਰ ਕੌਰ				M.A.-1 (1-6) ROOMNO.111		M.A.-2 (1-6) ROOMNO.115	B.A.-2 (1-6) ROOMNO.107			B.SC.-3 (1-6) ROOMNO.105		24
51	ਓਾਲੂ ਦੇਵੀ		B.SC-2 (1-2) TH ZOO LAB (3-6) BOT LAB	B.SC-2 (1-2) TH ZOO LAB		B.SC-2 (3) PRAC BOT LAB B.SC-3 (4) TH ZOO LAB	B.SC-2 (3) PRAC BOT LAB B.SC-1 (4-6) BOT LAB	B.SC-2 (3) PRAC BOT LAB	B.SC-2 (1) TH BOT LAB B.SC-1 (5-6) PRAC BOT LAB	B.SC-1 (5-6) PRAC BOT LAB	B.SC-1 (5-6) PRAC BOT LAB		24
52	ਰੋਹਿਨੀ ਦੇਵੀ			B.COM.-3 SEC.B (1-6) ROOMNO.202	B.COM.-2 SEC.A (1-6) ROOMNO.204		B.COM.-3 SEC.A (1-6) ROOMNO.203	B.COM.-2 SEC.B (1-6) ROOMNO.202					24
53	ਓਿਲਪੀ ਭੁੱਲਰ		B.SC-3 (1-3) PRAC PHY LAB	B.SC-3 (1-3) PRAC PHY LAB B.SC-2 (4-6) TH ROOMNO.24	B.SC-3 (1-3) PRAC PHY LAB	B.SC-2 (5-6) PRAC PHY LAB	B.SC-2 (5-6) PRAC PHY LAB B.SC-1 (1-3) TH ROOMNO.24	B.SC-2 (5-6) PRAC PHY LAB	B.SC-1 (4-5) PRAC PHY LAB B.SC-3 (1-3) TH ROOMNO.24	B.SC-1 (4-5) PRAC PHY LAB	B.SC-1 (4-5) PRAC PHY LAB	B.SC-3 (4-6) TH ROOMNO.24	36
54	ਹਰਪ੍ਰੀਤ ਕੌਰ			B.COM.-1 SEC.B (1-6) ROOMNO.206		B.COM.-3 SEC.A (1-6) ROOMNO.203	B.COM.-1 SEC.A (1-6) ROOMNO.205	B.COM.-3 SEC.B (1-6) ROOMNO.203					24
55	ਪਰਮਿੰਦਰਪਾਲ ਸਿੰਘ		B.A.-3 SEC.A (1-6) ROOMNO.107	M.A.-1 (1-6) ROOMNO.111				B.A.-1 SEC.B (1-6) ROOMNO.101	B.COM.-2 (1-6) ROOMNO.204				24

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TIME TABLE CUM WORKLOAD

		0	1	2	3	4	5	6	7	8	9	10	Total
56	ਤਜਿੰਦਰ ਕੌਰ (ਵਥਛ+ਓਵਝਥ੍ਵ ।)		B.A.-3 SEC.B (1-6) ROOMNO.106		B.SC.-1 (1-6) HALLNO.3			B.A.-1 SEC.C (1-6) ROOMNO.106	B.COM.-3 (1-6) ROOMNO.203				24
57	RESOURCE PERSON (SCI)		B.SC-2 (1-6) TH ZOO LAB	B.SC-1 (3,4,5) TH		B.SC-2 (5-6) PRAC ZOO LAB	B.SC-2 (5-6) PRAC ZOO LAB	B.SC-2 (5-6) PRAC ZOO LAB	B.SC-2 (4-6) TH ZOO LAB B.SC-1 (1) PRAC ZOO LAB	B.SC-1 (1) PRAC ZOO LAB	B.SC-1 (1) PRAC ZOO LAB		21

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Revised

ਟਾਈਮ ਟੇਬਲ ਕਲਾਸ-ਬੀ.ਏ-ਭਾਗ- ਪਹਿਲਾ ਸਮੈਸਟਰ-ਪਹਿਲਾ

ਸੈਸ਼ਨ-2018-19

0 08:15	1 9:00am	2 9:45am	3 10:30am	4 11:15am	5 12:00pm	6 12:45pm	7 1:30pm	8 2:15pm	9 3:00pm
Remedial Classes	**HISTORY (1-6)** Sec-A Room-no-101 Prof. Kulwinder K Sec-B Room No-102 Prof. Bharpur K **MATHS** (1-6) Hall no-1 Dr. Gurpreet K **PSYCHOLOGY** 1-6 Dept. of Psy. Ms. Tejinder Kaur **MUSIC (I)** 1-3 (Theory) 4-6 (Prac.) Dept. of Music Prof. Manoj **HOME SCI.** 1-6 (Pr.) G1 Prof.Gunjeet G2 Prof. Harsh Dept. of H Sci.	**PUBLIC ADMIN** 1-6 Room.No-115 Prof. R.C. Kango **PHYSICAL EDU.** 1-6 Room.No-110 Dr. Jaswinder K **MATHS** (1-6) Hall no-1 Dr. Gurpreet Kaur **HOME SCI.** 1-6 Dept. of H Sci. Prof. Sukhvir K **MUSIC (I)** 1-6 (Prac.) Dept. of Music Prof. Manoj **PSYCHOLOGY** 1-3 (Pr.) G1 Psychology Lab Ms Tejinder K **GEOGRAPHY** **Practical G1** Dept. of Geog. Lab-1 Dr. Jaspal Singh	**SOCIOLOGY** 1-6 Sec-A Room No-101 Dr. Prabhjot K Sec-B Room No-102 Prof. Suneet **ECONOMICS** 1-6 Room no-115 Dr. Surinderpaul **FINE ARTS** 1-6 (Prac.) Room No-116 Ms. Sonia **MUSIC(V)** 1-6 (Pract.) Dept. of Music Prof. Anita Garg **HOME SCI.** 1-3 (Pr.) G3 Prof.Harsh **PHYSICAL EDU.** **Practical** **G1** Dr. Jaswinder K	**GEOGRAPHY** 1-6 Dept. of Geog. Dr. Jaspal Singh **COMPUTER SC.** 1-6 (Th) Room no-107 Prof.G.S.Sekhon **MUSIC VOCAL** 1-3 (Theory) 4-6 (Prac.) Dept. of Music Prof Anita Garg **HOME SCI.** 1-6 (Pr.) G4 &5 Home Sc. Lab Prof.Gunjeet **PSYCHOLOGY** 1-3 (Pr.) G2 Psychology Lab G.Faculty **PHYSICAL EDU.** **Practical** **G2** Dr. Jaswinder K	**ENGLISH** 1-6 Sec-A Room No-101 Prof Arvind Kaur Sec-B Room No-102 Prof. Nandini Sec-C Room No-105 Prof. Jaspreet K Sec-D Room No-106 Prof. Rashmi Prabhakar Sec-E Room No-107 Dr. Inderjeet K Sec-F Room No-103 Prof Gurpreet K	**PUNJABI (C)** 1-6 Sec-A Room No-101 Dr. Jasbir K Sec-B Room No-102 Prof. Ghansham S Sec-C Room No-105 Resource Person Sec-D Room No-110 Ms. Sarabjit Sec-E Room No-115 Resource Person	**ENGLISH (Lit.)** 1-6 Room No-104 Prof. Arvind K **PUNJABI (Lit)** 1-6 Room No-102 Prof. Sarabjit K **HINDI (Lit.)** 1-6 Room No-105 Prof. Sarabjit K **POLITICAL SCI.** 1-6 Room No-106 Prof. Sukhwinder S **PHYSICAL EDU.** **Practical G3** Dr. Jaswinder K **GEOGRAPHY** **Practical G2** Dept. of Geog. Lab-1 Dr. Jaspal Singh	**MUSIC (I)** 1-3 Practical Dept. of Music Prf. Manoj **FINE ARTS** 1-4 (Th) 5-6 (Pr.) Dept. of Fine Arts Prof. Sonia **COMPUTER SC.** 1-6 (Pr) Comp. Lab Prof. Guljeet S **PSYCHOLOGY** 4-6 (Pr.) G3 Psychology Lab G.Faculty **GEOGRAPHY** **Practical G3** Dept. of Geog. Lab-1 Dr. Jaspal Singh	**ECONOMICS** Tutorial 1-3 Room No-106 Prof. Surinder **MUSIC (V)** 1-3 Practical Dept. of Music Prof. Anita **PSYCHOLOGY** Practical 1-3 Dept. of Psy. Prof. Tejinder Kaur

KB 7/9/18

ਸਰਕਾਰੀ ਕਾਲਜ, ਐਸ.ਏ.ਐਸ. ਨਗਰ

ਟਾਈਮ ਟੇਬਲ ਕਲਾਸ-ਬੀ.ਏ-ਭਾਗ- ਦੂਜਾ ਸਮੈਸਟਰ-ਤੀਜਾ ਸੈਸ਼ਨ-2018-19

0 08:15	1 9:00am	2 9:45am	3 10:30am	4 11:15am	5 12:00pm	6 12:45pm	7 1:30pm	8 2:15pm	9 3:00pm
Remedial Classes	**PUNJABI (C)** **1-6** **Sec-A** Room-no-105 Prof. Ghansham Singh **Sec-B** Room No-106 Prof. Sarabjit Kaur **Sec-C** Room No-107 Resource Person	**ECONOMICS** 1-6 Room no-112 Prof. Ravinder K **SOCIOLOGY** 1-6 **Sec-A** Room No-106 Dr. Prabhjot K Gill **Sec-B** Room No-107 Prof. Suneet **FINE ARTS** 1-6 (Pr.) Room No-116 Dept. of Fine Arts Prof. Gayatri **HOME SCI.** 1-6 (Pr.) G1 Home Sc. Lab Prof. Harsh Bala	**ENGLISH** 1-6 **Sec-A** Room No-105 Prof Nandini **Sec-B** Room No-106 Prof Jaspreet Bains **Sec-C** Room No-107 Dr. Inderjeet Kaur **Sec-D** Room No-103 Prof. Gurpreet Kaur	**HISTORY** 1-6 **Sec-A** Room no-101 Prof. Kulwinder Kaur **Sec-B** Room No-102 Prof. Bharpur Kaur **PSYCHOLOGY (Th.)** 1-6 Dept. of Psy. Ms. Tejinder **MATHS** 1-6 Hall no-2 Dr. Gurpreet Kaur **HOME SCI.** 1-6 (Pr.) G2 Home Sc. Lab Prof. Sukhbir	**GEOGRAPHY** 1-6 Dept. of Geog. Dr. Jaspal Singh **PUNJABI (Lit)** 1-6 Room No-113 Dr. Jasbir Kaur **ENGLISH (Lit.)** 1-6 Room no-104 Prof. Tejinder K. **HINDI (Lit.)** 1-6 Room No-112 Prof. Sarabjit Kaur **MATHS** 1-6 Hall no-2 Prof. Santosh Kumar **MUSIC(V) Pract.** 1-6 Dept. of Music Prof. Anita Garg **HOME SCI.** 1-6 (Pr.) G3 Prof. Sukhbir **PHYSICAL EDU.** **Practical G1** Dr. Jaswinder K	**POL SCIENCE** 1-6 Room No-112 Prof. Sukhwinder Singh **PUBLIC ADMINISTRATION** 1-6 Room no-15 Prof. R.C Kango **PHYSICAL EDU.** 1-6 Room no-113 Dr. Jaswinder Kaur **HOME SCI.** 1-6 (Theory) Dept. of Home Sci. Prof. Harsh Bala **MUSIC (I)** 1-6 (theory & Prac.) Dept. of Music Prof.Manoj **PSYCHOLOGY (Pr.)** 4-6 G1 Dept. of Psy. Ms. Tejinder	**ECONOMICS (HONS.)** 1-6 Room No-204 Prof. Ravinder **PSYCHOLOGY (Hons.)** 1-6 Guest Faculty **GEOGRAPHY PRAC.** 1-6 GEOG. LAB-3 Guest Faculty **MUSIC (V)** Theory 1-3 Prof. Anita **SOCIOLOGY (HONS.)** 1-6 Prof. Suneet Room no-15 **HISTORY (HONS.)** 1-6 Room No-101 Prof.Kulwinder K **PHYSICAL EDU.** **Practical G2** Dr. Jaswinder K	**FINE ARTS** 1-4 (Th.) 5-6 (Pr.) Ms. Gayatri **MATHS** 1-3 G.F. **MUSIC (I)** 4-6 (Prac.) Dept. of Music Prof. Manoj **PSYCHOLOGY (Pr.)** 4-6 G2 Dept. of Psy. Ms. Tejinder **Economics Tut.** 4-6 Gen Prof. Surinderpaul **GEOGRAPHY** **Practical G2** Dept. of Geog. Lab-3 Guest Faculty	

7/9/18

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ਟਾਈਮ ਟੇਬਲ ਕਲਾਸ-ਬੀ.ਏ-ਭਾਗ- ਤੀਜਾ (ਸਮੈਸਟਰ-ਪੰਜਵਾਂ) ਸੈਸ਼ਨ-2018-19

0 08:15	1 9:00am	2 9:45am	3 10:30am	4 11:15am	5 12:00pm	6 12:45pm	7 1:30pm	8 2:15pm	9 3:00pm
Remedial Classes	**MATHS** 1-2 Hall no-2 Prof. Santosh K **Geography (TH.)** (1-6) Geog.Dept. G.F. **PUNJABI (Lit)** (1-6) Room No-110 Dr. Jasbir Kaur **HINDI (Lit.)** 1-6 Room No-115 Prof. Sarabjit K **ENGLISH (Lit.)** 1-6 Room No-104 Prof. Tejinder K **MUSIC(V) Pract.** 1-6 Dept. of Music Prof. Anita Garg	**ENGLISH** (1-6) **Sec-A** Room No-101 Prof Tejinder Kaur **Sec-B** Room No-102 Prof. Arvind Kaur **Sec-C** Room No-105 Prof. Rashmi	**POL SCIENCE** (1-6) Room No-112 Prof. Sukhwinder Singh **PUBLIC ADMINISTRATION** 1-6 Room No-113 Prof. R.C Kango **PHYSICAL EDU.** (1-6) Room No-110 Dr. Jaswinder Kaur **HOME SCI. Theory** (1-6) Dept. of H. Sci. Prof. Gunjeet K. **MUSIC (I)** 1-3 (Th) 4-6 (Pr.) Dept. of Music Prof Manoj **PSYCHOLOGY (Pr.)** 1-3 G1 Dept. of Psy G.Faculty	**PUNJABI (C)** **(1-6)** **Sec-A** R-no-105 Dr. Jasbir Kaur **Sec-B** Room No-106 Prof. Ghansham Singh	**HISTORY** (1-6) **Sec-A** Room no-115 Prof. Kulwinder K **Sec-B** Room No-110 Prof. Bharpur Kaur **MATHS** 1-6 Hall no-2 Dr. Gurpreet Kaur **PSYCHOLOGY (Th.)** 1-6 Dept. of Psy. G.Faculty **GEOGRAPHY** 1-6 (Pr.) G1 Dept. of Geog. Guest Faculty **HOME SCI. (Pr.)** 1-6 G1 Food Lab Prof. Gunjeet K.	**SOCIOLOGY** (1-6) **Sec-A** Room No-106 Dr. Prabhjot K Gill **Sec-B** Room No-107 Prof. Suneet **ECONOMICS** (1-6) Room no-13 Prof. Surinder pal **FINE ARTS** 1-6 Dept of Fine Arts Prof. Gayatri **HOME SCI. (Pr.)** 1-6 G2 Food Lab Prof. Sukhbir	**ECONOMICS (HONS.)** 1-6 Room No-110 Mr. Maheep **MUSIC (V)** Theory 4-6 Prof. Anita **PSYCHOLOGY (Hons.)** 1-6 Room No-15 Prof. Gurmeet Anand **FINE ARTS** 1-4 (Th.) Ms. Sonia 5-6 (Pr.) Ms. Gayatri **HISTORY** (Hons.) 1-6 Room no-107 Prof.Bharpur K	**ECONOMICS (HONS.)** 4-6 (Tut.) Mr. Maheep **Economics (Gen) (Tut.)** (1-3) Mr. Maheep **PSYCHOLOGY (Pr.)** 1-3 G2 Dept. of Psy. G.Faculty **PHYSICAL EDU. Practical** Dr. Jaswinder K	**MATHS** 1-6 Hall no-2 G.F. **MUSIC (I)** 4-6 (Th.) Dept. of Music Prof. Manoj

7/9/18

ਸਰਕਾਰੀ ਕਾਲਜ, ਐਸ.ਏ.ਐਸ. ਨਗਰ

ਟਾਈਮ ਟੇਬਲ ਕਲਾਸ-ਬੀ.ਕਾਮ (ਸਮੈਸਟਰ-ਪਹਿਲਾ, ਤੀਜਾ ਅਤੇ ਪੰਜਵਾਂ) ਸੈਸ਼ਨ-2018-19

	0 (Remedial Classes) 8.15-9.00	1 9.00-9.45	2 9.45-10.30	3 10.30-11.15	4 11.15-12.00	5 12.00-12.45	6 12.45-1.30	7 1.30-2.15
.om I sem.I Section A		**Computer Application in Business** 1-4 (Th) 5-6 (Pr.) Room no-205 Mr. Ashish	**Business Laws-I** 1-6 Room no-205 Prof. Kamna Gupta	**Principles of Economics-I** 1-6 Room no-205 Ms. Ravinder Kaur		**Financial A/C-I** 1-6 Room no-205 Prof. Surinder Singh	**English** 1-6 Room no-103 Prof. Rashmi	**Pbi/PHC** 1-6 Room no-205 Resource Person Sec-A & B
B.Com 1 Sem. I Section-B			**Financial Accounting-I** 1-6 Room no-206 Prof. Surinder Singh	**Business Law** 1-6 Room no-206 Prof. Kamna	**Principles of Economics** 1-6 Room no-206 Mr. Maheep Singh		**English** 1-6 Room no-205 Prof. Gurpreet Kaur	
B.Com II Sem-III Section (A)		**Eng** 1-6 Room no-206 Prof. Nandini	**Business Mgt.** 1-6 Room no-204 Prof. Rohini		**Business Statistics** 1-6 Room no-204 Ms. Ravinder Kaur	**Income Tax** 1-6 Room no-204 Prof. Anureet Bhalla	**Corp A/C** 1-6 Room no-204 Prof. Surinder Singh	**Pbi/PHC** 1-6 Room no-202 Prof. Simranjeet K Sec A & B
B.Com II Sem. III Section B		**Eng.** 1-6 Dr. Inderjit Kaur Room No 204	**Business Statistics** 1-6 Room no-113 Prof. Surinderpaul	**Corporate A/C** 1-6 Room no-204 Prof. Surinder Singh		**Business Mgt.** 1-6 Room no-206 Prof. Rohini	**Income Tax** 1-6 Room no-206 Prof. Anureet Bhalla	
B.Com III Sem-V Section (A)		**Indirect Tax** 1-6 Room no-203 Prof. Rohini	**E-Governance** 1-6 Room no-203 Prof. Anureet	**Cost A/C** 1-6 Room no-203 Prof. Sunita		**Marketing** 1-6 Room no-203 Prof. Sunita	**Management A/C** 1-6 Room no-203 Prof. Kamna	**Pbi/PHC** 4-6 Room no-203 Resource Person Sec- A & B
B.Com III Sem-V Section (B)		**E-Governance** 1-6 Room no-202 Prof. Anureet	**Cost A/C** 1-6 Room no-202 Prof. Sunita	**Indirect Tax** (1-6) Room no-202 Prof. Rohini		**Management A/C** 1-6 Room no-202 Prof. Kamna	**Indian Banking Sys.** 1-6 Room no-202 Prof. Maheep Bhatia	

7/9/18

ਸਰਕਾਰੀ ਕਾਲਜ, ਐਸ.ਏ.ਐਸ. ਨਗਰ

ਟਾਈਮ ਟੇਬਲ ਕਲਾਸ-ਬੀ.ਐਸ.ਸੀ. ਭਾਗ- ਪਹਿਲਾ ਸਮੈਸਟਰ-ਪਹਿਲਾ, ਤੀਜਾ ਅਤੇ ਪੰਜਵਾਂ ਸੈਸ਼ਨ-2018-19

Class	0 8:15	1 9.00	2 9.45	3 10.00	4 11.15	5 12.00	6 12.45	7 1.30	8 2.15	9 3.00	10 3.45
BSC-1	Remedial Classes	**MATHS** (1-6) G.K **BOTANY** (1-6) S.	**MATHS** (1-6) G.K **ZOOLOGY** (1-6) S.K	**PHYSICS** (1-6) JSB **ZOOLOGY** 1-3 S.K **BOTANY** (4-6) S	**CHEM.** (1-6) **COMP.SCI** (1-6)	**PRACTICALS** **ZOO** (1,2) S.K **BOTANY** (3,4) **CHEM** (1,2) HG (3,4) AS (5,6) AK **PHYSICS** (1,2) JSB (3,4) JSB			**PUNJABI** 1-6	**CHEM.** (1-3) AK **COMP.SCI** (1-3) **PHYSICS** (4-6) JSB	**MATHS** 1-3 SK
BSC-2	Remedial Classes	**ENG** 1-6	**PUNJABI** 1-6	**CHEM.** (1-6) AS **COMP.SCI** (1-6)	**MATHS** (1-6) GK **ZOOLOGY** (1-6) SK	**MATHS** (1-6) SK **BOTANY** (1-6) MK & S	**PHYSICS** (1-6)GSS **ZOOLOGY** (1-3) KS **BOTANY** (4-6) MK **PHYSICS** (4-6) JSB	**PRACTICALS** **MATHS (TH)** **MATHS (TH)** **ZOO** SK (3-4) KS **BOTANY** **PHYSICS** (5-6) MK & S (1-2) JSB (3-4) JSB **CHEM** **CA** (1-2) AS (1-2) (3-4) AK (5-6) HG		**CHEM.** (4-6) HG **COMP.SCI** (4-6) **PHYSICS** (1-3) GSS **BOTANY** (3)
BSC-3	Remedial Classes	**PHYSICS** (1-6) GSS **BOTANY** (1-6) MK	**PRACTICALS** **BOTANY (1-2)** MK **ZOOLOGY (5-6)** KS **CHEM** **PHYSICS** (1-2) AK (1-2) GSS (3-4) HG (3-4) GSS (5-6) AS (5-6) GSS **MATHS (TH)** (1-2)			**MATHS** (1-6) GK **ZOOLOGY** (1-6) KS	**CHEM.** (1-6) AK **COMP.SCI** (1-6)	**PUNJABI** 1-6	**CHEM.** (1-3) AS **COMP.SCI** (1-3) **PHYSICS** (4-6) GSS	**BOTANY** (1-3) MK **ZOOLOGY** (4-6) KS **MATHS** (1-6) SK	

7/9/18

Post Graduate Dept of English Time Table 2018-19

	1	2	3	4	5	6	7	8
M.A-I	1-6 Room no-103 Prof. Rashmi	1-6 Room no-103 Prof. Gurpreet		1-6 Room no-103 Prof Jaspreet		1-6 Room no-104 Prof Nandini	Seminar Room no-104 1-2 Prof. Nandini 3-4 Prof. Jaspreet 5-6 Prof Rashmi	Seminar 1-2 Room.no-104 Prof. Gurpreet
M.A-II		1-6 Room.no-104 Dr. Inderjit	1-6 Room.no-104 Prof. Harpriya	1-6 Room.no-104 Prof. Arvind	1-6 Room.no-104 Prof. Tejinder		Seminar (Dept. Library) Room no-104 1-2 Prof.Tejinder 3-4 Prof. Harpriya 5-6 Dr. Inderjit	Seminar 1-2 Room.no-104 Prof. Arvind

KS 7/9/18

ਟਾਈਮ ਟੇਬਲ ਐਮ.ਏ ਪੰਜਾਬੀ ਭਾਗ ਪਹਿਲਾ ਸਮੈਸਟਰ-ਪਹਿਲਾ ਸੈਸ਼ਨ 2018-19

ਅਧਿਆਪਕ ਦਾ ਨਾਂ	1	2	3	4	5
ਡਾ ਜਸਬੀਰ ਕੌਰ					ਪੇਪਰ-ਤੀਜਾ ਪੰਜਾਬੀ ਨਾਟਕ
ਪ੍ਰੋ ਘਣਸ਼ਾਮ ਸਿੰਘ		ਪੇਪਰ-ਪਹਿਲਾ ਸਾਹਿਤ ਦਾ ਇਤਿਹਾਸ			
ਪ੍ਰੋ ਸਰਬਜੀਤ ਕੌਰ				ਪੇਪਰ-ਚੌਥਾ ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਕਾਵਿ	
ਡਾ ਗੁਰਪ੍ਰੀਤ ਸਿੰਘ			ਪੇਪਰ-ਦੂਜਾ ਪੰਜਾਬੀ ਆਲੋਚਨਾ		
ਪ੍ਰੋ ਪਰਮਿੰਦਰਪਾਲ ਸਿੰਘ	ਪੇਪਰ-ਪੰਜਵਾਂ ਆਧੁਨਿਕ ਪੰਜਾਬੀ ਗਲਪ				

7/9/18

Department of Fine Arts
M.A Time Table 2018-19

	1 9:00	2 9:45	3 10:30	4 11:15	5 12:00	6 12:45	7 1:30	8 2:15
Prof.Gayatri Singh			MA 2 (1-6)	MA 2 (1-6)	MA 2 (1-6)			
Prof.Sonia Sharma				MA 1 (1-6)	MA 1 (1-6)	MA 1 (1-6)		
Prof.Harcharan Singh	MA 1 (1-6)	MA 1 (1-6)	MA 1 (1-6)			MA 2 (1-6)	MA 2 (1-6)	MA 2 (1-6)
Prof.Neha Sood	MA 2 (1-6)	MA 2 (1-6)					MA 1 (1-6)	MA 1 (1-6)

KS
7/9/18

Department of Fine Arts
M.A Time Table 2018-19

	1 9:00	2 9:45	3 10:30	4 11:15	5 12:00	6 12:45	7 1:30	8 2:15
Prof.Gayatri Singh			MA 2 (1-6)	MA 2 (1-6)	MA 2 (1-6)			
Prof.Sonia Sharma				MA 1 (1-6)	MA 1 (1-6)	MA 1 (1-6)		
Prof.Harcharan Singh	MA 1 (1-6)	MA 1 (1-6)	MA 1 (1-6)			MA 2 (1-6)	MA 2 (1-6)	MA 2 (1-6)
Prof.Neha Sood	MA 2 (1-6)	MA 2 (1-6)					MA 1 (1-6)	MA 1 (1-6)

KS
7/9/18

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: ENGLISH Session: 2023-2024

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared Admitted approx.	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A.I	English Comp.	523	06	87	80	06	42	—	—	—	—	—	9
2	B.A.II	English Comp.	334	04	84	80	06	24	—	—	—	—	—	Same of Column-9
3	B.A.III	English Comp.	324	05	65	80	06	30	—	—	—	—	—	
4	B.A.I	English Elec.	42	01	42	80	06	06	—	—	—	—	—	
5	B.A.II	English Elec.	29	01	29	80	06	06	—	—	—	—	—	
6	B.A.III	English Elec.	16	01	16	80	06	06	—	—	—	—	—	
7	B.Com.I	English Comp.	137	02	59+58	60	06	12	—	—	—	—	—	
8	B.Com.II	English Comp.	95	02	48+47	60	06	12	—	—	—	—	—	
9.	B.Sc.II	English Comp.	59	01	59	80	06	06	—	Total Periods of All Classes :				200
10.	M.A.I	English	02	01	02		07	28	—	Required Posts :				09
11.	M.A.II	English	14	01	14		07	28	—	Sanctioned Posts :				09
										Difference :				NIL

This is to Certify that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

A. Kaur (Arvind Kaur)
Signature Head of The Department 12/8/20
Mobile No. 8427344344

Signature Incharge Time Table
Mobile No. 9855644472

* Admission Process Going on.
12/8/2023

Counter Signature

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: ECONOMICS Session: 2023-24

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared Admitted	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	BA I	Elective	75	01	75	80	9	9	—	—	—	—	—	9
2	BA II	Elective	63	01	63	80	9	9	—	—	—	—	—	9
3	BA III	Elective	59	01	59	80	9	9	—	—	—	—	—	9
4	BA II	Honours	18	01	18	—	9	9	—	—	—	—	—	9
5	BA III	Honours	16	01	16	—	9	9	—	—	—	—	—	9
6	B.Com I	Economics	137	02	68+69	60	6	12	—	—	—	—	—	12
7	B.Com II	Stats/OR	95	02	50+45	60	6	12	—	—	—	—	—	12
8	B.Com I	B. Maths	137	02	68+69	60	6	12	—	—	—	—	—	12
													Total Periods of All Classes :	81
													Required Posts :	03
													Sanctioned Posts :	03
													Difference :	NIL

This is to Certify that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that

Signature Head of The Department
Mobile No. 9815322455

Signature Incharge Time Table
Mobile No.

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Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: Hindi Elective Session: 2023-24

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A. I	Hindi Elective	60	01		70-80	06	06	—	—	—	—	—	06
2	B.A. II	Hindi Elective	45	01		70-80	06	06	—	—	—	—	—	06
3	B.A III	Hindi Elective	33	01		70-80	06	06	—	—	—	—	—	06
4														
5														
6														
7														
8														
													Total Periods of All Classes :	18
													Required Posts :	01
													Sanctioned Posts :	01
													Difference :	Nil

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

Signature Incharge Time Table
Mobile No. 9855644472

डा० सरबजीत कौर
Signature Head of The Department
Mobile No. 9478655181

Counter Signature

Harjeet Gujral
Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: Political Science Session: 2023-24

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A I	Elective	160	01	160	70-80	06	06	—	—	—	—	—	06
2	B.A II	Elective	68	01	68	70-80	06	06	—	—	—	—	—	06
3	B.A III	Elective	73	01	73	70-80	06	06	—	—	—	—	—	06
4														
5														
6														
7														
8													Total Periods of All Classes :	18
													Required Posts :	02
													Sanctioned Posts :	02
													Difference :	NIL

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that

Signature Incharge Time Table
Mobile No. 9855644772

Signature Head of The Department
Mobile No. 9855525613

Counter Signature

Harjeet Gujral
Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: Physical-Education Session: 2023-24

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A Ist	—	155	2	80	70-80	6	12	2	80	30-40	6	12	24
2	B.A IInd	—	80	2	40	70-80	6	12	2	40	30-40	6	12	24
3	B.A IIIrd	—	90	2	45	70-80	6	12	2	45	30-40	6	12	24
4														
5														
6														
7														
8														
													Total Periods of All Classes :	72
													Required Posts :	2
													Sanctioned Posts :	2
													Difference :	2

This is to Certify that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that

Signature Incharge Time Table
Mobile No. 9855644472

Signature Head of The Departmer
Mobile No. 9646289462

Counter Signature

Principal
Mobile No.

S. M. N. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD

Subject: Music Instrumental

Session: 2023-2024

Sr. No	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A. I	U.G. Elective	39	01	39	80	03	03	03	13	15	06	18	21
2	B.A. II	"	24	01	24	80	03	03	02	12	15	06	12	15
3	B.A. III	"	22	01	22	80	03	03	02	11	15	06	12	15
4														
5														
6														
7														
8														

Total Periods of All Classes	51
Required Posts	02
Sanctioned Posts	01
Difference	01

This is to Certify that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be responsible for that.

Signature Head of The Department
Mobile No. 9888669758

Signature Incharge Time Table
Mobile No. 9855644472

Counter Signature

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: History Session: 2023 - 2024

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A.I	History	Ad. process on	02	-	80	6	12						12
2	B. A. II	History	105	02	55	80	6	12						12
3	B. A III	History	137	02	68	80	6	12						12
4	Hon's	History	10	01	-	-	6	6						6
5	Hons	History	10	01	-	-	6	6						6
6														
7														
8														
													Total Periods of All Classes :	48
													Required Posts :	Nil
													Sanctioned Posts :	02
													Difference :	Nil

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

N. Tripathi

Signature Head of The Department

Mobile No. 9779024357

Signature Incharge Time Table

Mobile No. 9855644472

Counter Signature

Principal

Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD

Subject: Geography

Session: 2023-24

(As on dt. 11/08/2023 Admission process still going on

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	BA-I	Elective	110	02	80	80	6 per week	12	05	25	25	03	15	27
2	BA-II	Elective	77	01	77	80	6/week	06	03	25	25	03	09	15
3	BA-III	Elective	87	01	87	80	6/week	06	04	25	25	03	12	18
4														
5														
6														
7													Total Periods of All Classes :	60
8													Required Posts :	03
													Sanctioned Posts :	02
													Difference :	01

This is to Certify that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

11/08/2

Signature Head of The Department

Mobile No. 8146

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Mobile No. 9855644472

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Principal

Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: Psychology Session: 2023-24

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Thepry Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A. 1st	Elective	55	01	55	80	06	06	02	28	20-25	03	06	12
2	B.A. II	Elective	49	01	49	80	06	06	02	25	20-25	03	06	12
3	B.A. III	Elective	36	01	36	80	06	06	02	18	20-25	03	06	12
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	B.A. II	Hons.	15	01	15	10 minimum	06	06	—	—	—	—	01	06
6	B.A. III	Hons.	14	01	14	10 minimum	06	06	—	—	—	—	01	06
7														
8														

Total Periods of All Classes : 48
Required Posts : 02
Sanctioned Posts : 02
Difference : Nil

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

11/8/2023

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Mobile No. 9855644472

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S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: SOCIOLOGY Session: 2023 - 24

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared/ admitted	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A-I	Sociology (G)	159	02	80 (Appx)	80	06	12	—	—	—	—	—	12
2	B.A-II	Sociology (G)	92	02	70 (Appx)	80	06	12	—	—	—	—	—	12
3	B.A-III	Sociology (G)	112	02	80 (approx)	80	06	12	—	—	—	—	—	12
4	B.A. II	(Honrs)	15	01	15	15	06	06	—	—	—	—	—	06
5														
6														
7														
8														
													Total Periods of All Classes :	42
													Required Posts :	02
													Sanctioned Posts :	02
													Difference :	Nil

This is to Certify that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

* admission is still going on

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Mobile No. 9855644472

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Mobile No. 9855644472

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Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: Public Administration Session: 2023-24

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	BA SEM I	Compulsory	78*	01	78	80	06	06	—	—	—	—	—	06
2	BA SEM III	Compulsory	45	01	45	80	06	06	—	—	—	—	—	06
3	BA SEM V	Compulsory	37	01	37	80	06	06	—	—	—	—	—	06
4														
5														
6														
7														
8														
													Total Periods of All Classes :	18
													Required Posts :	01
													Sanctioned Posts :	01
													Difference :	—

* Admission still in process.

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Mobile No. 9855644472

Signature Head of The Department
Mobile No. 8054373257

Counter Signature

Principal
Mobile No.

Workload of Post. Graduation Dept. of Fine Arts (Session- 2023-2024)

Sr. No.	Class	Paper for UG and PG	Total No. of Students Admitted	Total No. of Theory Sections	No. of students in one theory section	Uni Norms	No. of Periods allotted to one section	Total Theory Period 5*8	Total No. of Composition/ Practical Group	No. of students in one Group	Uni Norms	No. of Periods allotted to one Group	Total Period of Group 10*13	Total Period of Theory and Practical Group (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1.	B.A. 1st	UG	68*	1	68	80	3	3	3	22	20	09	27	30
2.	B.A. 2nd	UG	40*	1	40	80	3	3	2	20	20	09	18	21
3.	B.A. 3rd	UG	35*	1	35	80	3	3	1	35	20	09	09	12
4.	M.A. 1 (Paper 1& 2)	PG	10	1	10	15	8+8	16	-	-				16
5.	M.A. 1 (Paper 3& 4)	PG	10	-	-	15	-	-	1	07	15	16	16+16	32
6.	M.A. 2 (Paper 1&2)	PG	06	1	06	15	8+8	16	-	-	-	-	-	16
7.	M.A. 2 (Paper 3& 4)	PG	06	-	-	15	-	-	1	06	15	16	16+16	32

Total Periods of All Class
Required P
Sanctioned P
Differ

* Admissions are still in Progress.

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9855644472

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S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD | Subject: HOME SCIENCE | Session: 2023 - 2024

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compo sitions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	BA-I	UG	120	2	80/40	80	6	12	6	20	15-20	6	36	48
2														
3	BA-II	UG	84	1	84	80	6	6	4	20	15-20	6	24	30
4														
5	BA-III	UG	49	1	80	80	6	6	3	20	15-20	6	18	21
6														
7														
8														

Total Periods of All Classes :	99
Required Posts :	4
Sanctioned Posts :	3
Difference :	1

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that

NOTE:- Admission are going on [illegible] 9-8-23

[illegible]

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Mobile No. 9855644472

[illegible]

(GUNJEET KAUR) 11-8-23

Signature Head of The Department

Mobile No. (9876609509)

Counter Signature

Principal

Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD

Subject: Commerce

Session: 2023–24

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared/ Admitted Approx.	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.Com I		137	02	59+58	60	12	24	—	—	—	—	—	24
2	B.Com. II		95	02	48+47	60	18	36	—	—	—	—	—	36
3	B.Com III		94	02	47	60	30	60	—	—	—	—	—	60
4														
5														
6														
7														
8														
												Total Periods of All Classes :		120
												Required Posts :		05
												Sanctioned Posts :		05
												Difference :		Nil

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposible for that.

Sunita Mittal 11/8/23

Signature Head of The Department

Mobile No. 98720-91904

Signature Incharge Time Table

Mobile No. 9855644472

Counter Signature

Principal

Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: MATHEMATICS Session: 2023-24

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	M.Sc-I	Paper 1,2,3,4&5	40	01	40	40	25	25	—	—	—	—	00	25
2	M.Sc-II	Paper 1,2,3,4&5	06	01	06	40	30	30	—	—	—	—	00	30
3	B.A/B.Sc-I	Comp./ Elective	29	01	29	60	12	12	—	—	—	—	00	12
4	B.A/B.Sc-II	Comp./ Elective	25	01	25	60	15	15	—		—	—	00	15
5	B.A/B.Sc-III	Comp./ Elective	27	01	27	60	15	15	—	—	—	—	00	15
6														
7														
8														
													Total Periods of All Classes :	55+42=97
													Required Posts :	05
													Sanctioned Posts :	04
													Difference :	01

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

Note : One period of UG class is of 45 minutes and One period of PG class is 60 minutes

11/8/23

Signature Head of The Department

Mobile No. 9417088538

Signature Incharge Time Table

Mobile No. 9855644472

Counter Signature

Principal

Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: Physics Session: 23-24

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.Sc I st	(i) Mechanics	28	01	28	60	09	09	02	14+14	15	06	12	21
2		(ii) Vibrations & Waves												
3		(iii) Electricity & Magnetism												
4	B.Sc II nd	(i) Statistical Physics	19	01	19	60	09	09	01	19	15	06	06	15
5		(ii) Optics & Lasers												
6		(iii) Quantum Physics												
7	B.Sc III rd	(i) Condensed Matter Physics	22	01	22	60	09	09	01	22	15	06	06	15
8		(ii) Electronics												
		(iii) Nuclear & Radiation Physics												
													Total Periods of All Classes :	51
													Required Posts :	02
													Sanctioned Posts :	02
													Difference :	Nil

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

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Mobile No. 9855644472

Signature Head of The Department
Mobile No. 9417073908

Counter Signature

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD

Subject: CHEMISTRY

Session: 2025-26

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.Sc-1	1, 2, 3	45	1	45	80	9	9	3	15	3	6	18	27
2	B.Sc-2	1, 2, 3	39	1	39	80	9	9	2	20	2	6	12	21
3	B.Sc-3	1, 2, 3	28	1	28	80	9	9	2	14	2	6	12	21
4	M.Sc-1 CHEM	1, 2, 3	40	1	40	40	20	20	2	20	2	8	16	36
5	M.Sc-2 CHEM.	1, 2, 3, 4 (Org)	15	1	15	20	27	27	1	15	1	8	8	35
6														
7														
8														
											Total Periods of All Classes :			140
											Required Posts :			6
											Sanctioned Posts :			1
											Difference :			5

This is to Certify that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

Signature Head of The Department
Mobile No. 9888082807

Signature Incharge Time Table
Mobile No. 9855644472

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Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: Zoology Session: 2023-24

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B Sc I	Zoology Paper I & II	22	01	22	60	9	9	01	22	15	06	06	15
2		III & IV												
3	B Sc II	Zoology Paper V, VI,	15	01	15	60	9	9	01	15	15	06	06	15
4		VII, VIII												
5	B Sc III	Zoology Paper IX, X,	09	01	09	60	9	9	01	09	15	06	06	15
6		XI, XII												
7														
8														
													Total Periods of All Classes :	45
													Required Posts :	NIL
													Sanctioned Posts :	02
													Difference :	NIL

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Mobile No. 98159-95196

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Mobile No.

Counter Signature

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: Computer Science. Session: 2023-24.

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	BA I	UG(E)	64	01	64	80	6	6	2	64	30	6	12	18
2	BA II	UG(E)	37	01	37	80	6	6	2	37	30	6	12	18
3	BA III	UG(E)	58	01	58	80	6	6	2	58	30	6	12	18
4	BSC I	UG(E)	16	01	16	60	6	6	1	16	30	6	6	12
5	BSC II	UG(E)	14	01	14	60	6	6	1	14	30	6	6	12
6	BSC III	UG(E)	16	01	16	60	6	6	1	16	30	6	6	12
7														
8														
												Total Periods of All Classes		90
												Required Posts		04
												Sanctioned Posts		02
												Difference		02

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Signature Incharge Time Table
Mobile No. 9855644472

Signature Head of The Department
Mobile No. 7814552553.

Counter Signature

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD GCMS/P Subject: Computer Session: 23-24.

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	BCA-I	Computer	104	02	52	50	12	24	04	26	25	12	48	72
2	BCA-II	"	42	01	42	40	18	18	02	22	25	12	24	42
3	BCA-III	"	37	01	37	40	24	24	02	19	25	12	24	48
4	PGDCA	"												
5	MSC(IT)-I	"												
6	MSC(IT)-II	"												
7	MSC(IT)(LE)	"												
8														
											Total Periods of All Classes :			
											Required Posts :			
											Sanctioned Posts :			
											Difference :			

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Signature Head of The Department
Mobile No. 9872647133

Signature Incharge Time Table
Mobile No. 9855644472

Counter Signature

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: Diploma in Food Production session: Semester - 2023-24

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	D.F.P	Compulsory	60	01	60	70/60	05	05	01	30	30	10	20	25
2														
3														
4														
5														
6														
7														
8														
												Total Periods of All Classes :		
												Required Posts :		
												Sanctioned Posts :		
												Difference :		

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Signature Incharge Time Table
Mobile No. 8283858028

Signature Head of The Department
Mobile No. 9914015740

Counter Signature

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: ENGLISH Session: 2022-23

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A.I	English Comp.	629	7	90	80	06	42	—	—	—	—	—	As per Column No 7
2	B.A.II	English Comp.	435	5	87	80	06	30	—	—	—	—	—	
3	B.A.III	English Comp.	368	5	74	80	06	30	—	—	—	—	—	
4	B.A.I	English elec.	59	1	59	80	06	06	—	—	—	—	—	
5	B.A.II	English elec.	24	1	24	80	06	06	—	—	—	—	—	
6	B.A.III	English elec.	19	1	19	80	06	06	—	—	—	—	—	
7	B.Com.I	English Comp.	118	02	59	60	06	12	—	—	—	—	—	Same of Column No 7
8	B.Com.II	English Comp.	99	02	50+49	60	06	12	—	—	—	—	—	
9	B.Sc.II	English Comp.	67	01	67	80	06	06	—					
10	M.A.I	English	22	01	22	—	07	28	—					
11	M.A.II	English	12	01	12	—	07	28	—					

Total Periods of All Classes :	206
Required Posts :	09
Sanctioned Posts :	09
Difference :	NIL

This is to Certify that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

A. Kaur (Arvind Kaur
Signature Head of The Department
Mobile No. 8427344344

Signature Incharge Time Table
Mobile No. 9855644472

Counter Signature

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: Economics Session: 2022-23

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared Admitted	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	BA I Gen	Elective	113	02	57+56	80	9	18	—	—	—	—	—	18
2	BA II Gen	Elective	85	01	85	80	9	9	—	—	—	—	—	9
3	BA III Gen	Elective	58	01	58	80	9	9	—	—	—	—	—	9
4	BA II Hons	Honours	20	01	20	—	9	9	—	—	—	—	—	9
5	BA III Hons	Honours	15	01	15	—	9	9	—	—	—	—	—	9
6	B.Com I	Economics	118	02	59+59	60	6	12	—	—	—	—	—	12
7	B.Com II	Stats/O.R	99	02	50+49	60	6	12	—	—	—	—	—	12
8	B.Com I	B. Maths	118	02	59+59	60	6	12	—	—	—	—	—	12
													Total Periods of All Classes :	90
													Required Posts :	03
													Sanctioned Posts :	03
													Difference :	NIL

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Signature Head of The Department
Mobile No. 9815322455

Signature Incharge Time Table
Mobile No.

Counter Signature

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD

Subject: HINDI Elective

Session: 2022-23

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A I	HINDI Elective	86	01	86	70-80	06	06	—	—	—	—	—	06
2	B.A II	HINDI Elective	49	01	49	70-80	06	06	—	—	—	—	—	06
3	B.A III	HINDI Elective	49	01	49	70-80	06	06	—	—	—	—	—	06
4														
5														
6														
7														
8														

Total Periods of All Classes : 18

Required Posts : 01

Sanctioned Posts : 01

Difference : NIL

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that

Signature Incharge Time Table

Mobile No. 9855644472

डॉ० सरबजीत कौर

Signature Head of The Department

Mobile No. 9478655181

Counter Signature

Harjeet Gujral

Principal

Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD

Subject: Political Science

Session: 2022-23

Sr.No	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A I	Elective	160	01	160	70-80	06	06	—	—	—	—	—	06
2	B.A II	Elective	114	01	114	70-80	06	06	—	—	—	—	—	06
3	B.A III	Elective	118	01	118	70-80	06	06	—	—	—	—	—	06
4														
5														
6														
7														
8														
													Total Periods of All Classes :	18
													Required Posts :	02
													Sanctioned Posts :	02
													Difference :	NIL

This is to Certify that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that

Signature Head of The Department

Mobile No. 9855525613

Signature Incharge Time Table

Mobile No. 9855644472

Counter Signature

Harjeet Gujral

Principal

Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: Physical- Education Session: 2022-23

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A I	—	155	2	78	70-80	6	12	2	78	30-40	6	12	24
2	B.A II	—	152	2	76	70-80	6	12	2	76	30-40	6	12	24
3	B.A III	—	125	2	63	70-80	6	12	2	63	30-40	6	12	24
4														
5														
6														
7														
8														
													Total Periods of All Classes :	72
													Required Posts :	2
													Sanctioned Posts :	2
													Difference :	2

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Signature Head of The Department
Mobile No.. 9646285462

Signature Incharge Time Table
Mobile No. 9855644472

Counter Signature

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: Music Instrumental Session: 2022-2023

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A I	U.Gr. Elective	54	01	54	80	03	03	03	18	15	06	18	21
2	B.A II	"	33	01	33	80	03	03	02	16-17	15	06	12	15
3	B.A III	"	28	01	28	80	03	03	02	14-14	15	06	12	15
4														
5														
6														
7														
8														
												Total Periods of All Classes :		51
												Required Posts :		02
												Sanctioned Posts :		01
												Difference :		01

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Signature Head of The Department
Mobile No. 9888669758

Signature Incharge Time Table
Mobile No. 9855644472

Counter Signature

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD

Subject: History

Session: 2022-23

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Pr Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A.I	History	201	02	100	80	6	12	–	–	–	–	–	12
2	B.A.II	History	171	02	85	80	6	12	–	–	–	–	–	12
3	B.A III	History	250	02	125	80	6	12	–	–	–	–	–	12
4	Hon's	History	7	01	–	–	6	6	–	–	–	–	–	6
5	Hon's	History	10	01	–	–	6	6	–	–	–	–	–	6
6														
7														
8														
													Total Periods of All Classes :	4
													Required Posts :	Ni
													Sanctioned Posts :	02
													Difference :	Ni

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Signature Incharge Time Table
Mobile No. 9855644472

N. Tripathi
Signature Head of The Departmen
Mobile No.
9779024357.

Counter Signature

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD

Subject: Geography

Session: 2022-2023
2023-2024

Sr.No.	Class	Paper For UG ✓ (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	BA-I	Elective	127	02	80	80	06 per week	12	05	25	25	03	15	27
2	BA-II	Elective	114	02	80	80	06 per week	12	05	25	25	03	15	27
3	BA-III	Elective	62	01	62	80	06 per week	06	03	25	25	03	09	15
4														
5														
6														
7														
8														
													Total Periods of All Classes :	69
													Required Posts :	03
													Sanctioned Posts :	02
													Difference :	01

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11/08/23

Signature Head of The Department
Mobile No. 8146856631

Signature Incharge Time Table
Mobile No. 9855644472

Counter Signature

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: Psychology Session: 2022-23

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A-I	Elective	88	01	88	80	06	06	03	25	20-25	03	09	15
2	B.A-II	Elective	59	01	59	80	06	06	02	25	20-25	02	06	12
3	B.A-III	Elective	17	01	17	80	06	06	01	17	20-25	03	03	09
4	—	—	—	—	—	—	—	—	—	—	—	—	—	—
5	B.A-2(Hons)	(Hons)	14	01	14	10 minimum	06	06	—	—	—	—	01	06
6	B.A-3(Hons)	(Hons)	06	01	06	10 minimum	06	06	—	—	—	—	01	06
7														
8														
												Total Periods of All Classes		48
												Required Posts		02
												Sanctioned Posts		02
												Difference		NIL

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Signature Incharge Time Table
Mobile No. 9855244472

Signature Head of The Department
Mobile No. 9988776364

Counter Signature

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: SOCIOLOGY Session: 2022-2023

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A. I	Sociology (G)	226	02	100+	80	06	12	—	—	—	—	—	12
2	B.A. II	Sociology (G)	159	02	80(appx)	80	06	12	—	—	—	—	—	12
3	B.A. III	Sociology (G)	154	02	80(appx)	80	06	12	—	—	—	—	—	12
4	B.A. III	(Honrs)	12	01	12	15	06	06	—	—	—	—	—	06
5														
6														
7														
8														
													Total Periods of All Classes :	42
													Required Posts :	02
													Sanctioned Posts :	02
													Difference :	Nil

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

Signature Incharge Time Table
Mobile No. 9855644472

Signature Head of The Department
Mobile No. 9855644472

Counter Signature

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD

Subject: Public Administration

Session: 2022-23

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	BA SEM-I		105	01	105	80	06	06	—	—	—	—	—	06
2	BA SEM-III		50	01	50	80	06	06	—	—	—	—	—	06
3	BA SEM-V		32	01	32	80	06	06	—	—	—	—	—	06
4														
5														
6														
7														
8														
													Total Periods of All Classes :	18
													Required Posts :	01
													Sanctioned Posts :	01
													Difference :	—

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that

Signature Incharge Time Table
Mobile No. 9855644472

Signature Head of The Department
Mobile No. 8054373257

Counter Signature

Principal
Mobile No.

Workload of Post. Graduation Dept. of Fine Arts (Session- 2022-2023)

Sr. No.	Class	Paper for UG and PG	Total No. of Students Admitted	Total No. of Theory Sections	No. of students in one theory section	Uni Norms	No. of Periods allotted to one section	Total Theory Period 5*8	Total No. of Composition/ Practical Group	No. of students in one Group	Uni Norms	No. of Periods allotted to one Group	Total Period of Group 10*13	Total Period of Theory and Practical Group (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
1.	B.A. 1st	UG	79	1	79	80	3	3	3	26	20	09	27	30
2.	B.A. 2nd	UG	45	1	45	80	3	3	2	22	20	09	18	21
3.	B.A. 3rd	UG	32	1	32	80	3	3	1	32	20	09	09	12
4.	M.A. 1 (Paper 1& 2)	PG	07	1	07	15	8+8	16	-	-				16
5.	M.A. 1 (Paper 3& 4)	PG	07	-	-	15	-	-	1	07	15	16	16+16	32
6.	M.A. 2 (Paper 1&2)	PG	06	1	06	15	8+8	16	-	-	-	-	-	16
7.	M.A. 2 (Paper 3& 4)	PG	06	-	-	15	-	-	1	06	15	16	16+16	32

Total Periods of All Classes:

Required Posts

Sanctioned Posts

Difference

11 April 24

Counter Signature

9855244472

Signature Incharge Time Table

Signature of the Head of the Departm

4/08/2

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: HOME SCIENCE Session: 2022-2023

Sr.No	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	BA-I	UG	163	2	80/83	80	6+6	12	8	20	15-20	6	48	60
2														
3	BA-II	UG	78	1	78	80	6	6	4	20	15-20	6	24	30
4														
5	BA-III	UG	46	1	46	80	6	6	3	20	15-20	6	18	24
6														
7														
8														
													Total Periods of All Classes :	114
													Required Posts :	4
													Sanctioned Posts :	3
													Difference :	1

This is to Certify that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

(GUNJEET KAUR) 11/8/22

Signature Head of The Department

Mobile No. (9876609509)

Signature Incharge Time Table

Mobile No. 9855644472

Counter Signature

Principal

Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: Commerce Session: 2022-23

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compo sitions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.Com-I		118	02	59	60	12	24	—	—	—	—	—	24
2	B.Com-II		99	02	50+49	60	18	36	—	—	—	—	—	36
3	B.Com-III		113	02	57+56	60	30	60	—	—	—	—	—	60
4														
5														
6														
7														
8														
													Total Periods of All Classes :	120
													Required Posts :	05
													Sanctioned Posts :	05
													Difference :	Nil.

This is to Certify that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that

Sumita Mittal 11/8/23
Signature Head of The Department
Mobile No. 98720-91904

Signature Incharge Time Table
Mobile No. 9855644472

Counter Signature

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: MATHEMATICS Session: 2022-23

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	M.Sc -I	Paper 1,2,3,4 & 5	07	01	07	40	30	30	—	—	—	—	00	30
2	M.Sc -II	Paper 1,2,3,4 & 5	28	01	28	40	30	30	—	—	—	—	00	30
3	B.A/B.Sc-I	Comp. / Elective	36	01	36	60	15	15	—	—	—	—	00	15
4	B.A/B.Sc-II	Comp. / Elective	32	01	32	60	15	15	—	—	—	—	00	15
5	B.A/B.Sc-III	Comp / Elective	39	01	39	60	15	15	—	—	—	—	00	15
6														
7														
8														

Total Periods of All Classes :	60+45=105
Required Posts :	06
Sanctioned Posts :	04
Difference :	02

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that

NOTE : One period of UG Class is of 45 minutes and One period of PG class is 60 minutes

11/8/23

Signature Head of The Department

Mobile No. 9417088538

Signature Incharge Time Table

Mobile No. 9855644472

Counter Signature

Principal

Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: Physics Session: 22-23

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.Sc II nd	(i) Mechanics	23	01	23	60	09	09	01	23	15	06	06	15
2		(ii) Vibrations & waves												
3		(iii) Electricity & Magnetism												
4	B.Sc II nd	(i) Statistical Physics	24	01	24	60	09	09	01	24	15	06	06	15
5		(ii) Optics & Lasers												
6		(iii) Quantum Physics												
7	B.Sc II rd	(i) Condensed Matter Physics	31	01	31	60	09	09	02	16+15	15	06	12	21
8		(ii) Electronics												
		(iii) Nuclear & Radiation Physics											Total Periods of All Classes :	51
													Required Posts :	02
													Sanctioned Posts :	02
													Difference :	Nil

This is to Certify that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

Signature Incharge Time Table
Mobile No. 9855644472

Signature Head of The Department
Mobile No. 9417073908

Counter Signature

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD

Subject: CHEMISTRY

Session: 2022-23

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.Sc-1	1, 2, 3	57	1	57	80	9	9	3	19	3	6	18	27
2	B.Sc-2	1, 2, 3	34	1	34	80	9	9	2	17	2	6	12	21
3	B.Sc-3	1, 2, 3	53	1	53	80	9	9	3	18	3	6	18	27
4	MSc-1 CHEMISTRY	1, 2, 3	16	1	16	40	20	20	1	16	1	8	8	28
5	MSc-2 CHEMISTRY	1, 2, 3, 4 (Org)	13	1	13	20	27	27	1	13	1	8	8	35
6		1, 2, 3, 4 (Inorg)	15	1	15	20	27	27	1	15	1	8	8	35
7														
8														
												Total Periods of All Classes :		173
												Required Posts :		7
												Sanctioned Posts :		1
												Difference :		6

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that

Signature Head of The Department

Mobile No. 9888082807

Signature Incharge Time Table

Mobile No. 9855644472

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Principal

Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: Computer Science Session: 2022-23

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	BA I	UG(E)	55	01	55	80	6	6	2	55	30	6	12	18
2	BA II	UG(E)	64	01	64	80	6	6	2	64	30	6	12	18
3	BA III	UG(E)	42	01	42	80	6	6	2	42	30	6	12	18
4	BSc I	UG(E)	14	01	14	60	6	6	1	14	30	6	6	12
5	BSc II	UG(E)	16	01	16	60	6	6	1	16	30	6	6	12
6	BSc III	UG(E)	11	01	11	60	6	6	1	11	30	6	6	12
7	MSc Chem	PG(C)	16	01	16	60	6	6	-	-	-	-	-	06
8													Total Periods of All Classes :	96
													Required Posts :	04
													Sanctioned Posts :	02
													Difference :	02

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

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Mobile No. 9855644472

Signature Head of The Department
Mobile No. 7814952553

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Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD GCMSIP Subject: Computers Session: 22-23

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5*8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10*13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	BCA I	Computers	46	01	46	40	12	12	02	23	25	12	24	36
2	BCA II	"	40	01	40	40	18	18	02	20	25	12	24	42
3	BCA III	"	38	01	38	40	24	24	02	19	25	12	24	48
4	PGDCA	"	39	01	39	60	18	18	01	39	25	16	16	34
5	MSC IT I	"	17	01	17	30	24	24	01	17	25	16	16	40
6	MSC IT II		11	01	11	30	24	24	01	11	25	16	16	40
7	MSC IT Lateral Entry		10	01	10	40	Combined class with MSc IT 2nd yr.							240
8													Total Periods of All Classes :	240
													Required Posts :	10
													Sanctioned Posts :	8
													Difference :	2

This is to Certify that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

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Mobile No. 9855644472

Signature Head of The Department
Mobile No. 9872647133

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Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject Wise WORK LOAD

Subject: Diploma in Food Production

Session: 2022-23

Sr No	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni Norms	No. of Periods allotted to one section	Total Theory Period (5 * 9)	Total No of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	D.F.P	Compulsory	60	01	60	70/20	05	05	02	30	30	10	20	25
3														
4														
5														
6														
7														
8														

Total Periods of All Classes

Required Posts

Sanctioned Posts

Difference

This is to Certify that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be responsible for that

Signature Head of The Department

Mobile No 9914015740

Signature Incharge Time Table

Mobile No. 8283858028

Counter Signature

19.9.1

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: Zoology Session: 2022-23

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper I/ Paper II/ Paper III/ Paper IV)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No of Compo sitions / Practicals Groups	No of Studs in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups ((10 * 12)	Total periods Theory & Comp./Prac. Groups (9+13)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	BSc I	Zoology Paper I, II, III, IV	20	01	20	60	9	9	01	20	15	6	6	15
2	BSc II	Zool. Paper, V, VI, VII, VIII	09	01	09	60	9	9	01	09	15	6	6	15
3	BSc III	Zool. Paper- IX, X, XI, XII	24	01	24	60	9	9	01	24	15	6	6	15
4														
5														
6														
													Total Periods of All Classes :	45
													Required Posts :	NIL
													Sanctioned Posts :	02
													Difference :	NIL

This is to Certify that above information is correct as per College Record and University Norms. Incase of any discrepency I/we will be responsible for that

Signature Incharge Time Table
Mobile No. 9855644472

Signature Head of The Department
Mobile No. 98159-95196

Counter Signature

Principal
Mobile No.

Teacher Wise Time Table / Work Load
(Session- 2021-22)

Sr. No.	Name of official	0	1	2	3	4	5	6	7	8	9	10	Total
		8:15 AM	9:00 AM	9:45 AM	10:30 AM	11:15 AM	12:00 PM	12:45 PM	1:30 PM	2:15 PM	3:00 PM	3:45 PM	
1	Prof.Harpriya Singh			M.A.-2 (1-6) ROOM NO.103	B.A-3 ENG ELEC. ROOM NO.103	B.A-2 SEC-D (4-6) ROOM NO.103		M.A.-1 (1-6) ROOM NO.103		M.A.-2 SEMINAR (5-6) ENG. LIB.			21+2
2	Prof.Sunita Mittal			B.COM 3 (1-6) ROOM NO.206	B.COM 2 (1-6) ROOM NO.202		B.COM 2 (1-6) ROOM NO.204	B.COM 3 (1-6) ROOM NO.205					24
3	Prof.Arvind Kaur			B.A-3 (1-6) SEC-A ROOM NO.105		B.A-2 (1-3) SEC-D ROOM NO.107	M.A.-2 (1-6) ROOM NO.104		B.A-1 (1-6) ENG ELEC. ROOM NO.104	M.A.-2 SEMINAR (1-2) ROOM NO.104			21+2
4	Prof.Tejinder Kaur			B.A-3 (1-6) SEC-B ROOM NO.106		B.A-2 (1-6) SEC-E ROOM NO.104		B.A-2 (1-6) ENG ELEC. ROOM NO.104	M.A.-2 (1-6) ROOM NO. 104	M.A.-2 SEMINAR (3-4) DEPT. LIBRARY			24+2
5	Prof.Rupinder Kaur			B.A-3 (1-6) SEC-C ROOM NO.110	B.A-1 (1-6) SEC-A ROOM NO.101	M.A.-1 SEMINAR (5-6) DEPT.LIBRARY	M.A.-1 (1-6) ROOM NO.103		B.COM 1 SEC-A (1-6) ROOM NO.203				24+2
6	Prof.Seema Saini		M.SC-1 (5-6) B.SC-3 PRAC (3-4) CHEM LAB.	M.SC-1 (1-2) CHEM. LAB, B.SC-3 PRAC (3-4) CHEM LAB, B.SC-1 (5-6) HALL NO.3	B.SC-2 (1-2) HALL NO.2 B.SC-3 PRAC (3-4)	B.SC-2 (1-2) PRAC CHEM LAB	B.SC-2 (1-2) PRAC CHEM LAB B.SC-3 (3-4) HALL NO.1	B.SC-2 (1-2) PRAC CHEM LAB	B.SC-1 (1) PRAC CHEM LAB.	B.SC-1 (1) PRAC CHEM LAB.	B.SC-1 (1) PRAC CHEM LAB.		25 (T=10) (P=15)
7	Dr.Jaspal Singh				B.A.-3 (1-6) PRAC GEO ROOM NO.208		B.A.-3 (1-6) TH DEPTT ROOM		B.A.-3 (1-6) PRACTICAL ROOM NO 207	B.A.-3 (1-6) PRACTICAL ROOM NO207			24 (T=6) P=18)
8	Prof.Gunjeet Kaur			B.A.-1 PRAC (1-6) RNO.10	B.A.-3 PRAC (1-6) LAB NO.9	B.A.-3 TH (1-6) RNO.10		B.A.-3 PRAC (1-6) FOODS LAB					24 (T=6) (P=18)
9	Prof.Ghansham Singh		M.A.-1 (1-6) ROOM NO.111		M.A.-2 (1-6) ROOM NO.115		B.A.-2 SEC-A (1-6) ROOM NO.110	B.A.-1 SEC-A (1-6) ROOM NO.115					24
10	Dr.Surinder Paul		B.COM -2 SEC-B (1-6) ROOM NO.202			B.COM -2 SEC-A (1-6) ROOM NO.204	B.A.-1 SEC-A (1-6) HALL NO.2			B.A.-1 (1-3) B.A-2 (4-6) GEN ROOM NO.106			24
11	Dr.Prabhjot Kaur			B.A.-2 (1-6) RNO.101			B.A.-1 SEC-A (1-6) RNO.101		B.A.-3 SEC-A (1-6) RNO.101	B.A.-2 HONS (4-6) RNO.101			21
12	Prof.Pushpinder Kaur		B.A.-3 SEC-A (1-6) ROOM NO.102		M.A.-1 (1-6) ROOM NO.111	M.A.-2 (1-6) ROOM NO.115		B.A.-1 SEC-B (1-6) ROOM NO.102					24

Principal
SMHS Govt. College
Sahibzada Ajit Singh Nagar

TIME TABLE CUM WORKLOAD

Sr. No.	Name of official	0	1	2	3	4	5	6	7	8	9	10	Total
13	Dr.Mandeep Kaur		B.SC-3 (3-4) PRAC BOTONY LAB.	B.SC-3 (3-4) PRAC BOTONY LAB., B.SC-2 (1,2,6) TH BOTONY LAB.	B.SC-3 (3-4) PRAC BOTONY LAB.	B.SC-2 (6) PRAC BOTO. LAB.,B.SC-3 (1-4) TH BOTONY LAB (5) BOT. CLASS ROOM	B.SC-2 (6) PRAC BOTONY LAB.	B.SC-2 (6) PRAC BOTONY LAB.	B.SC-2 (1,2,3) TH BOTONY class ROOM, B.SC-3 (4-6) TH BOTONYclass ROOM				23
14	Prof.Anita Garg (M.VOCAL)			B.A.-1 (1-3) TH (4-6) PRAC DEPTT. ROOM	B.A.-2 (1-3) TH (4-6) PRAC DEPTT. ROOM		B.A.-3 (1-3) TH (4-6) PRAC DEPTT. ROOM						18
15	Prof.Jaspreet Kaur Bains		M.A.-1 (1-6) ROOM NO.104	M.A.-1 (1-2) SEMINAR ENG.LIB	B.A.-1 SEC-B(1-6) ROOM NO.102	B.A.-2 SEC-A (1-6) ROOM NO.102			B.COM-1 SEC-B (1-6) ROOM NO.206				24+2
16	Prof.Nishtha		B.A.-2 SEC-A(1-6) HALLNO.2			B.A.-1 SEC-A (1-6) HALL NO.2		B.A.-3 SEC-A (1-6) HALLNO.2		B.A-2 HONS. (1-3) ROOM NO.107			21
17	Prof.Rashmi Prabhakar			B.A.-3 SEC-D (1-6) HALL NO.2	B.A.-1 SEC-C (1-6) ROOM NO.105	M.A.-1 (3-4) SEMINAR LANG. LAB		B.COM-2 (1-6) SEC-A ROOM NO.202	M.A-1 (1-6) ROOM NO.103				24+2
18	Dr.Inderjeet Kaur		B.COM-2 (1-6) SEC-B ROOM NO.204	M.A.-2(1-2) SEMINAR ROOM NO.104	B.A.-1 SEC-D (1-6) ROOM NO.107	B.A.-2 SEC-B (1-6) ROOM NO.105		M.A-2 (1-6) ENG LIB.					24+2
19	Prof.Kulwinder Kaur		B.A.-2 SEC-B (1-6) ROOM NO.101			B.A.-1 SEC-B(1-6) ROOM NO.101		B.A.-3 SEC-B (1-6) ROOM NO.101		B.A-2 HONS.(4-6) ROOM NO.107			21
20	Prof.Harsh Bala			B.A.-2 PRAC (1-6) CLOTHING LAB		B.A.-1 PRAC (1-6) HOME SCI.LAB	B.A.-1 PRAC (1-6) HOME SCI. LAB		B.A.-2 TH (1-6) ROOM NO.10				24 (T=6) (P=18)
21	Prof.Nadini Vaid			B.A-3 SEC-E (1-6) ROOM NO.107	B.A.-1 SEC-E (1-6) ROOM NO.106	B.A.-2 SEC-C (1-6) ROOM NO.113				←	B.SC-2 (1-6) HALL NO.3		24
22	Dr.Harjinder Singh		B.A/B.SC-2 09:00 TO 09:45 (1-6) HALL NO 1	M.SC-1 10:00 TO 11:00(1-6) HALL NO 4		M.SC-2 12:15 TO 01:15 (1-6) HALL NO 4			B.A. & B.SC-3 01:30 TO 02:15 (1-3) HALLNO.1				27
23	Prof.Anureet Bhalla			B.COM-2 SEC A (1-6) ROOMNO.202	B.COM-2 SEC B (1-6) ROOMNO.204		B.COM-3 SEC A (1-6) ROOMNO.205	B.COM-3 SEC B(1-6) ROOMNO.206					24
24	Prof.Gurpreet Kaur												

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SMHS Govt. College
Sahibzada Ajit Singh Nagar

TIME TABLE CUM WORKLOAD

Sr. No.	Name of official	0	1	2	3	4	5	6	7	8	9	10	Total
25	Dr.Amritpal Singh		B.A./ B.SC-1 (1-3) 09:00 TO 09:45 HALLNO.3	M.SC-2 10:00 TO 11:00 (1-6) ZOOLOGY LAB 2		M.SC-1 12:15 TO 01:15 (1-6) ZOOLOGY LAB 2	M.SC-1 01:15 TO 02:15 (1-6) HALL NO.4						27
26	Prof.Sharanjit Singh			B.A.-1 (1-6) TH ROOM 207	B.A.-2 (1-6) TH ROOM NO 207			B.A.-2 (4-6) PRACTICAL ROOM NO 207	B.A.-1 (1-3) PRAC B.A-2 (4-6)PRAC ROOM NO 204	B.A.-1 (1-3) PRAC ROOM NO 204			24 (T=12) (P=12)
27	Prof.Amrish		MSC (1-2) B.SC-3 (5-6) PRAC CHEM LAB	B.SC-1 (1-2) HALL NO.3 ,M .SC-1 (3-4) B.SC-3 (5-6) PRAC CHEM LAB	BS.C-2 (3-4) HALL NO.1, B.SC-3 (5-6) PRAC CHEM LAB	BS.C-2 (3-4) PRAC CHEM LAB.	B.SC-3 (5-6) HALL NO.1 ,BS.C-2 (3-4) PRAC CHEM LAB.	BS.C-2 (3-4) PRAC CHEM LAB.	B.SC-1 (2) PRAC CHEM LAB.	B.SC-1 (2) PRAC CHEM LAB.	B.SC-1 (2) PRAC CHEM LAB.		25((T=10) (P=15)
28	Dr.Mani Nandini				M.A.1 (1-6) PRAC DEPT.ROOM	M.A.1 (1-6) PRAC DEPT.ROOM		M.A.2 PAPER-1 (1-3) TH M.A-2 PAPER-2 (4-6) TH DEPT.ROOM	M.A.2 PAPER-1(1-3) TH M.A-2 PAPER-2 (4-6) TH DEPT.ROOM	M.A.1 PAPER-3 PRAC (1) , M.A-1 PRAC(3) DEPT. ROOM			26 (T=12) (P=14)
29	Mrs.Sukhvir Kaur		B.A.-1 TH(1-6) ROOM NO-10		B.A.-2 (1-6) PRAC CLOTHING LAB		B.A.-3 (1-6) PRAC CLOTHING LAB	B.A.-2 (1-6) PRAC ROOM NO.10					24 (T=6) (P=18)
30	Mrs.Sarabjeet Kaur		B.SC-3 (1) PRAC ZOO LAB, B.SC-2 (2)TH ZOO. ROOM (3,4,5) ZOO.LAB	B.SC-3 (1) PRAC ZOO LAB	B.SC-3 (1) PRAC ZOO LAB,B.SC-1 (2)TH ZOO. ROOM (3,5,6) ZOO.LAB	B.SC-2 (3) PRAC ZOO LAB, B.SC-1 (4)TH ZOO. ROOM	B.SC-2 (3) PRAC ZOO LAB	B.SC-2 (3) PRAC ZOO LAB,B.SC-3 (1,2,4,5,6)TH ZOO. LAB	B.SC-1 (5) PRAC ZOO LAB, B.SC-2 (6)TH ZOO. ROOM	B.SC-1 (5) PRAC ZOO LAB	B.SC-1 (5) PRAC ZOO LAB		24(T=15) (P=9)
31	Dr.Amandeep Kaur		B.A.-3,B.SC-3,B.COM-3 (5-6) MUDLA GYAN ROOM NO.107	M.A.-2 (1-6) ROOM NO.115	B.A.3 (1-6) PBI SAHIT ROOM NO.110		M.A.-1 (1-6) ROOM NO.111	B.A.-1,B.SC-1,B.COM-1 (3-4) MUDLA GYAN ROOM NO.107	B.A.-2,B.SC-2,B.COM-2 (1-2) MUDLA GYAN ROOM NO.115				24
32	Mrs.Simarpreet		B.A.-1 SEC-A TH (1-6) ROOM NO.110	B.A.-1 GROUP -A (1-6) PRAC		B.A.-3 (1-6) TH ROOM NO.110	B.A-3 (1-6) PRAC GROUP-A		B.A. 1- GROUP-B (1-6) PRAC				30 (T=12) (P=18)
33	Mrs.Monica Sarhadi			B.A.-2 (1-6) RNO.102			B.A.-1 SEC-A (1-6) RNO.102		B.A.-3 SEC-A (1-6) RNO.102	B.A.-2 HONS (1-3) RNO.101			21
34	Mrs.Munisha		B.SC-3 (1-2) PRAC PHY LAB	B.SC-3 (1-2) PRAC PHY LAB, B.SC-2 (4-6) TH HALL NO.1	B.SC-3 (1-2) PRAC PHY LAB, B.SC-1 (4-6) TH HALL NO.3	B.SC-2 (3-4) PRAC PHY LAB, B.SC-3 (1,2,5) TH HALL NO.1	B.SC-2 (3-4) PRAC PHY LAB	B.SC-2 (3-4) PRAC PHY LAB	B.SC-1 (5) PRAC PHY LAB	B.SC-1 (5) PRAC PHY LAB , B.SC-3 (1-3) TH HALL NO.1	B.SC-1 (5) PRAC PHY LAB		27 (T=12) (P=15)

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SMHS Govt. College
Sahibzada Ajit Singh Nagar

TIME TABLE CUM WORKLOAD

Sr. No.	Name of official	0	1	2	3	4	5	6	7	8	9	10	Total
35	Miss.Navneet Kaur			B.COM 1 (1-6) ROOM NO.203	B.COM 3 (1-6) ROOM NO.205		B.COM 3 SEC-B (1-6) ROOM NO.206		B.COM 3 SEC-A (1-6) ROOM NO.205				24
36	Mr.Manoj Kumar		B.A-1 (1-3) TH (4-6) GROUP-1 PRAC DEPTT. ROOM		B.A-3 (1-6) PRAC DEPT. ROOM	B.A-3 (1-3) TH (4-6) PRAC GROUP-1 DEPT. ROOM	B.A-1 (1-6) PRAC GROUP-2 DEPT.ROOM	B.A-2 (1-6) PRAC DEPT.ROOM	B.A-2(1-3) TH DEPTT. ROOM				33
37	Dr.Gurpreet Singh		M.A.-2 (1-6) ROOM NO.115			M.A.-1 (1-6) ROOM NO.111	B.A.-2 SEC-B (1-4) B.COM-1 (5-6) ROOM NO.107		B.A.-1 (1-6) PBI SAHIT ROOM NO.113				24
38	Mr.Sukhwinder Singh				B.A.3 (1-6) HALL NO 2			B.A.2 (1-6) ROOM NO 113	B.A.1 (1-6) ROOM NO 107				18
39	Mr.Harcharan Singh			M.A.-2 (1-6) PRAC DEPT.ROOM	M.A.-2 (1-6) PRAC DEPT.ROOM			M.A.-1 (1-6) TH DEPT.ROOM	M.A.-1 (1-6) TH DEPT.ROOM	M.A.-2 (1) PRAC M.A-2 TUTORIAL (3) M.A-1 TUTORIAL (6) DEPT.ROOM			27 (T=14) (P=13)
40	Mr.Vipin Chaudhary		B.A.-2 TH (1-6) ROOM NO.209		B.A.-2 (1-3) PRAC GROUP-1 ROOM NO.209	B.A.-3 (1-3) PRAC GROUP-1 (4-6) PRAC GROUP-2 ROOM NO.210		B.A.-2 (1-3) PRAC GROUP-2 ROOM NO.210		B.A.-3 Hons. (1-6) ROOM NO.209			24(T=12) (P=12)
41	Mr.Hanish Guretia		B.A.-1 SEC.B (1-6) TH ROOM NO.113		B.A.-2 G-A (1-6) PRACTICAL		B.A.-3 G-B (1-6) PRACTICAL		B.A.-2 (1-6) TH ROOM NO.110	B.A.-2 G-B (1-6) PRACTICAL			30 (T=12) (P=18)
42	Mr.Guljeet Singh		B.SC-3 (5-6)	BA/B.SC 1-3 (1-6) COM LAB	B.A-2/B.SC-2(1-4) B.SC-3 (5-6) COM LAB	B.SC-2 (1-2) COM LAB	B.A-3 (1-6) B.SC-3 (1-6) COM LAB BA / BSC 2 (1-2)	BA / BSC 2 (1-2)	B.SC-1 (3-4) COM LAB	B.SC-1 (3-4) COM LAB	B.SC-1 (3-4) COM LAB		34 (T=16) (P=18)
43	Mr.Inderjeet Singh	B.A./B.SC-1 08:15 TO 09:00 (1-3) HALL NO.1	M.SC-2 (1-6) 09:00 TO 10:00 ZOOLOGY LAB 2		M.SC-1 (1-6) 11:00 TO 12:00 HALL NO.4			B.A./ B.SC-3 (1-6) 12:45 TO 01:30 HALLNO.1	B.A./ B.SC-2 (1-3) 01:30 TO 02:15 HALLNO.3				28
44	Mr.Maheep Singh				B.COM.-3 (1-6) ROOMNO.206	B.A.-3 (1-3) HONS.(4-6) GEN ROOM NO.202			B.A.-3 (1-6) GEN HALL NO.2	B.A.-3 (1-6) HONS. HALL NO.2			24
45	Mrs.Tejinder Kaur			B.A-1 (1-3) PRAC - GROUP-1 ROOM NO. 209		B.A-1 (1-6) TH ROOM NO. 209		B.A-3(1-6) TH ROOM NO. 209	B.A-1 (1-3) PRAC - GROUP-2 ROOM NO. 209	B.A-2(1-6) TH HONS. ROOM NO. 210			24(T=18) (P=6)
46	Mrs.Sarabjit Kaur (HINDI)				B.A.-3 (1-6) ROOMNO.113			B.A.-2 (1-6) ROOMNO.106	B.A.1 (1-6) ROOM NO 105				18

SMHS Govt. College
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TIME TABLE CUM WORKLOAD

Sr. No.	Name of official	0	1	2	3	4	5	6	7	8	9	10	Total.
47	Mrs.Ravinder Kaur			B.A.-2 (1-6) GEN ROOMNO.113	B.COM.-1 (1-6) ROOM NO.205		B.A.-1 SEC-B (1-6) GEN ROOM NO.113	B.A.-2 (1-3) HONS. ROOM NO.202		B.A.-2 (1-6) HONS. ROOM NO.202			27
48	Mrs.Gayatri Singh		M.A.-2 (1) PRAC DEPTROOM	B.A.-2 (1-3)TH B.A-2 (4-6) PRAC DEPTROOM		M.A.-2 (1-6) PRACTICAL DEPTROOM	M.A.-2 (1-6) PRACTICAL DEPTROOM	B.A.-3 (1-6) PRAC DEPTROOM	B.A.-2 (1-6) PRAC DEPTROOM				31 (T=3) (P=28)
49	Mrs.Sonia Sharma		M.A.-1 (1-6) PRACTICAL DEPTROOM	M.A.-1 (1-6) PRACTICAL DEPTROOM	\	B.A.-1 (1-6) PRAC DEPTROOM	B.A.-1 (1-3) TH (4-6) PRAC DEPT.ROOM		B.A.-3 (1-3)TH (4-6) PRAC DEPT.ROOM				30 (T=6) (P=24)
50	Mrs.Sarabjeet Kaur (PBI)		B.A.-3 (1-6) ROOMNO.105		B.Sc 3 (1-2) B.Sc 2(5-6)		B.A.-2 SEC.B (1-4) B.SC-1 (5-6) ROOMNO.106	B.A.-1 SEC-C (1-6) ROOM NO.105	B.COM-2 (3-4) ROOM NO.202				24
51	Dr.Kulwinder Kaur		B.A.-3 (1-4) ROOMNO.106	M.A.-1 (1-6) ROOMNO.111		B.COM.-3 (5-6) ROOM NO.206	M.A.-2 (1-6) ROOMNO.115	B.A.-2 (1-6) PBI SAHIT ROOMNO.110					24
52	Mrs.Shallu Devi		B.SC-1 (1-6) TH BOTONY CLASS ROOM	B.SC-2 (3,4,5) TH ZOO LAB		B.SC-2 (5) PRAC BOT. LAB , B.SC-3 (6) TH BOT. CLASS ROOM, B.SC-1(1-3) TH BOT. CLASS ROOM	B.SC-2 (5) PRAC BOT. LAB	B.SC-2 (5) PRAC BOT. LAB	B.SC-1 (3-4) PRAC BOT. LAB	B.SC-1 (3-4) PRAC BOT. LAB	B.SC-1 (3-4) PRAC BOT. LAB		22
53	Mrs.Shilpy Bhullar		B.SC-3 (5-6) PRAC PHY LAB	B.SC-2 (1-3) TH HALL NO.1 ,B.SC-3 (5-6) PRAC PHY LAB	B.SC-3 (5-6) PRAC PHY LAB , B.SC-1 (1-3) TH HALL NO.3	B.SC-3 (3,4,6) TH HALL NO.1 , B.SC-2 (5) TH HALL NO.1 , B.SC -2 (1-2) PRAC PHY.LAB	B.SC -2 (1-2) PRAC PHY.LAB, , B.SC-2 (5) TH HALL NO.1	B.SC-1 (4-6) TH HALL NO.3, B.SC - 2 (1-2) PRAC PHY.LAB	B.SC-1 (6) PRAC PHY LAB.	B.SC-1 (6) PRAC PHY LAB.	B.SC-1 (6) PRAC PHY LAB.	B.SC-2 (6) TH PHY. LAB	30 (T=15) (P=15)
54	Mrs.Harpreet Kaur		B.COM.-3 (1-6) ROOMNO.205	B.COM.-2 SEC-B (1-6) ROOMNO.204			B.COM.-2 SEC-A (1-6) ROOMNO.202	B.COM.-1 (1-6) ROOMNO.203					24
55	VACANT (PUB. AD.		B.A-1 (1-6) HALL NO.1			B.A-3 (1-6) ROOM NO.106			B.A-2 (1-6) ROOM NO.106				18

TIME TABLE INCHARGE

PRINCIPAL

SMHPS (S.C.) Govt. College Mohali, (Session 2020-21)

TIME TABLE CUM WORKLOAD

ਲੜੀ ਨੰ:	ਪ੍ਰਾਧਿਆਪਕ ਦਾ ਨਾਂ	0	1	2	3	4	5	6	7	8	9	10	Total
		08:15	09:00	09:45	10:30	11:15	12:00	12:45	01:30	02:15	03:00	03:45	
1	ਪ੍ਰੋ ਤੇਜਿੰਦਰ ਕੌਰ			M.A.-2 (1-2) DEPTT ROOM	B.A.-3 SEC-A (1-6) RNO.105		M.A.-2 (1-6) DEPTT ROOM	M.A.-1 (1-6) DEPTT ROOM	M.A.-1 (1-2) DEPTT ROOM				22
2	ਪ੍ਰੋ ਹਰਪ੍ਰਿਯਾ ਸਿੰਘ			B.A.-3 (1-6) RNO.103	M.A.-2 (1-6) DEPTT ROOM		B.SC-2 (1-6)		M.A.-2 (1-2) DEPTT ROOM				20
3	ਪ੍ਰੋ ਸੁਨੀਤਾ ਮਿੱਤਲ			B.COM-3 (1-6) ROOMNO.203	B.COM-3 (1-6) ROOMNO.203		B.COM-3 (1-6) ROOMNO.206						18
4	ਪ੍ਰੋ ਸੀਮਾ ਸੈਣੀ		B.SC-3 MED (5-6) PRAC	B.SC-3 MED (5-6) PRAC MSC (1,2,5,6) TH CHEM LAB	B.SC-3 MED (5-6) PRAC MSC (1,2,5,6) TH CHEM LAB BSC-	B.SC-1 (3,4) HALL NO.4 BS.C-2 MED (1,2) PR	B.SC-3 (1,2) HALL NO.1 BS.C-2 MED (1,2) PR	BS.C-2 MED (1.2) PR MSC (3,4) PR	MSC (3,4) PR BSC MED (3,4) PR	MSC (3,4) PR BSC MED (3,4)PR			34
5	ਪ੍ਰੋ ਅਰਵਿੰਦ ਕੌਰ				B.A.-3 SEC-B (1-6) RNO.106		B.A.-1 SEC-F (1-6) RNO.101	M.A.-2 (1-6) DEPTT ROOM	M.A.-2 (3-4) DEPTT ROOM				20
6	ਡਾ. ਜਸਪਾਲ ਸਿੰਘ			B.A.-1 (1-6) PRACTICAL GEO DEPT			B.A.-3 (1-6) TH DEPTT ROOM		B.A.-3 (1-6) PRACTICAL GEO DEPT	B.A.-3 (1-6) PRACTICAL GEO DEPT			24
7	ਪ੍ਰੋ ਸੁਰਿੰਦਰਪਾਲ			B.COM-2 SEC-B (1-6) RNO.202	B.A.-1 (1-6) HALLNO.2		B.COM-2 SEC-A (1-6) RNO.204	B.A-3 (1-3) DEPTROOM		B.A.-1 (1-3) DEPTT ROOM			24

Ravinder Kaur

Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

TIME TABLE CUM WORKLOAD

		0	1	2	3	4	5	6	7	8	9	10	Total
8	ਡਾ ਪ੍ਰਭਜੋਤ ਕੌਰ				B.A.-1 SEC-A (1-6) RNO.101	B.A.-2 SEC-A (1-6) RNO.101			B.A.-3 SEC-A (1-6) RNO.101				18
9	ਪ੍ਰੋ ਘਣਅੋਮ ਸਿੰਘ		B.A.-2 SEC-A (1-6) RNO.102					M.A.- 1 (1-6) ROOMNO.111	M.A.-2 (1-6) ROOMNO.115		B.SC-2 (1-6) HALL NO.3		24
10	ਪ੍ਰੋ ਗੁਨਜੀਤ ਕੌਰ			B.A.-3 (1-6) PRACTICAL	B.A.-1 (1-6) PRACTICAL	B.A.-1 (1-6) PRACTICAL		B.A.-3 (1-6) DEPTT ROOM					24
11	ਡਾ ਮਨਦੀਪ ਕੌਰ		B.SC.-3 (1-2) PRACTICAL BOTONY LAB	B.SC.-3 (1-2) PRACTICALB.SC -2 (3-6)TH BOTONY LAB	B.SC.-3 (1-2) PRACTICAL BOTONY LAB	B.SC.-3 (1-3) (5-6) B.SC-2 (4) PRAC BOTONY LAB	B.SC-2 (4) PRAC BOTONY LAB	B.SC-2 (4) PRAC BOTONY LAB	B.SC.-3 (4-6) ZOO LAB B.SC-2 TH (2-3) BOT LAB				24
12	ਪ੍ਰੋ ਨੰਦਿਨੀ ਵੈਦ		B.COM-2 SEC-A RNO.204	B.A.-2 (1-6) HOSPITALITY ROOM			B.A.-1 SEC-E (1-6) RNO.113	B.A.-2 (1-6) RNO.104					24
13	ਡਾ ਹਰਜਿੰਦਰ ਸਿੰਘ		M.SC-1 (1-6) HALL NO 4	M.SC-1 (1-6) HALL NO 4	M.SC-2 (1-3) HALL NO.4	B.A / B.SC-3 (4-6) HALLNO.3	M.SC-2 (4-6)			B.A / B.SC-3 (4-6) HALLNO.3			24
14	ਪ੍ਰੋ ਹਰਅੋ ਬਾਲਾ			B.A.-1 (1-6) PRACTICAL		B.A.-2 (1-6) PRACTICAL	B.A.-2 (1-6) DEPTT ROOM	B.A.-2 (1-6) PRACTICAL					24
15	ਪ੍ਰੋ ਕੁਲਵਿੰਦਰ ਕੌਰ			B.A.-1 SEC-A (1-6) HALLNO.2		B.A.-3 SEC-A (1-6) HALLNO.2			B.A.-2 SEC-B (1-6) RNO.106				18

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TIME TABLE CUM WORKLOAD

		0	1	2	3	4	5	6	7	8	9	10	Total
16	ਪ੍ਰੋ ਜਸਪ੍ਰੀਤ ਕੌਰ ਬੈਂਸ		M.A.-1 (1-2) DEPTT ROOM	B.A.-2 SEC-B (1-6) RNO.105		M.A.-1 (1-6) DEPTT ROOM	B.A.-1 SEC-A (1-6) RNO.103		B.A.-1 (1-6) RNO.107				26
17	ਪ੍ਰੋ ਅਨੀਤਾ ਗਰਗ				B.A-2 (1-3)TH (4-6)PRAC DEPTROOM	B.A-1 (1-3) TH (4-6)PRAC DEPTROOM	B.A-3 (1-3)TH (4-6)PRAC DEPTROOM						18
18	ਡਾ: ਗੁਰਪ੍ਰੀਤ ਕੌਰ		B.A./ B.SC-2 (1-6) HALLNO.3	B.A./ B.SC-1 (1-6) HALLNO.1	M.SC-2 (4-6) HALL NO.4	B.A / B.SC-3 (1-3) HALLNO.1	M.SC-2 (1-3) HALL NO.3	M.SC-1 (1-6) HALL NO.4					27
19	ਪ੍ਰੋ ਰਸਮੀਂ ਪ੍ਰਵਾਕਰ		M.A.-1 (3-4) DEPTT ROOM	M.A.-1 (1-6) DEPTT ROOM	B.A.-3 SEC-C (1-6) RNO.107		B.A.-1 SEC-B (1-6) RNO.105	B.COM-1 SEC-A (1-6) RNO.205					26
20	ਪ੍ਰੋ ਭਰਪੂਰ ਕੌਰ ਠੇਰਗਿੱਲ			B.A.-1 SEC-B (1-6) ROOMNO.102		B.A.-3 SEC-B (1-6) RNO.105			B.A.-2 SEC-A (1-6) HALLNO.2	B.A.-3 HONOURS (1-6) RNO.15			24
21	ਡਾ: ਇੰਦਰਜੀਤ ਕੌਰ		B.COM-2 SEC-B (1-6) RNO.202	B.A.-2 SEC-C (1-6) RNO.106		M.A.-2 (1-6) DEPTT ROOM	B.A.-1 SEC-C (1-6) RNO.106		M.A.-2 (5-6) DEPTT ROOM				26
22	ਪ੍ਰੋ ਰਮੇਸ ਚੰਦ ਕਾਂਗੋ		B.A.-1 (1-6) HALLNO.2				B.A.-2 (1-6) HALLNO.2	B.A.-3 (1-6) HALLNO.2					18
23	ਪ੍ਰੋ ਅਨੁਰੀਤ ਭੱਲਾ			B.COM-2 SEC A (1-6) ROOMNO.204		B.COM-3 SEC B (1-6) ROOMNO.204	B.COM-2 SEC B (1-6) ROOMNO.202	B.COM-3 SEC A (1-6) ROOMNO.203					24

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TIME TABLE CUM WORKLOAD

		0	1	2	3	4	5	6	7	8	9	10	Total
24	ਪ੍ਰੋ ਗੁਰਪ੍ਰੀਤ ਕੌਰ		M.A.-1 (5-6) DEPTT ROOM	B.A.-2 SEC-D (1-6) RNO.107	M.A.-1 (1-6) DEPTT ROOM		B.A.-1 SEC-D (1-6) RNO.107	B.COM-1 SEC-B (1-6) RNO.206					26
25	ਪ੍ਰੋ: ਅੰਮ੍ਰਿਪਾਲ ਸਿੰਘ		B.A./ B.SC-1 (1-6) HALLNO.1	M.SC-2 (1-6) HALL NO.3			M.SC-1 (1-6) HALL NO.4	M.SC-2 (1-6) HALL NO.3		B.A./ B.SC-2 (1-3) HALLNO.1			27
26	ਪ੍ਰੋ: ਹਰਜੀਤ ਸਿੰਘ			B.A.-1 (1-6) PRACTICAL	B.A.-2 (1-6) TH DEPTT ROOM	B.A.-1 (1-6) TH DEPTT ROOM			B.A.-2 (1-6) PRACTICAL GEO DEPT	B.A.-2 (1-6) PRACTICAL GEO DEPT			30
27	ਪ੍ਰੋ: ਅਮਰੀਹ		BS.C-3 (3,4)	BS.C-3 (3,4) MSC TH CHEM LAB	BS.C-3 (3,4) MSC (1,2,5,6) CHEM LAB	BSC.1 (1-2) BS.C-2 (5,6)	B.SC-3 (5-6) BS.C-2 (5-6) HALL NO.1	B.SC-2 (5-6) MSC (1-2) PR	MSC (1-2) PR BSC-1 NM (1-2)	B.SC-1 NM (1-2)	B.SC-1 NM (1-2)		30
28	ਡਾ ਮਨੀ ਨੰਦਿਨੀ ਹਰਮਾ		M.A.1 (1-6) PRAC DEPTROOM	M.A.1 (1-6) PRAC DEPTROOM	M.A.1 (1-6) PRAC DEPTROOM	M.A.2 (1-6) TH DEPTROOM		M.A.2 (1-6) TH DEPTROOM					30
29	ਸ੍ਰੀਮਤੀ ਸੁਖਵੀਰ ਕੌਰ		B.A.-1 (1-6) DEPTT ROOM		B.A.-2 (1-6) PRACTICAL	B.A.-3 (1-6) PRACTICAL	B.A.-3 (1-6) PRACTICAL						24
30	ਸ੍ਰੀਮਤੀ ਸਰਬਜੀਤ ਕੌਰ		B.SC-3 (3-4) PRAC ZOO LAB	B.SC-3 (3-4) PRAC ZOO LAB B.SC-1 (1-2,6) TH	B.SC-3 (3-4) PRAC ZOO LAB		B.SC-1 (1-3) TH	B.SC-3 (1-6) TH ZOO LAB	B.SC-3 (1-3) TH B.SC-1 (2) PRAC ZOO LAB	B.SC-1 (2) PRAC ZOO LAB	B.SC-1 (2) PRAC ZOO LAB		24
31	ਸ੍ਰੀਮਤੀ ਅਮਨਦੀਪ ਕੌਰ		B.A.-2 /3 (1-2)(5-6) RNO.	B.A.-3 (1-6) RNO.115		M.A.-2 (1-6) ROOMNO.115	M.A.-1 (1-6) ROOMNO.111	B.A.-1 (3-4) RNO.102					24

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TIME TABLE CUM WORKLOAD

		0	1	2	3	4	5	6	7	8	9	10	Total
32	ਸ੍ਰੀਮਤੀ ਸਿਮਰਪ੍ਰੀਤ		B.A.-3 G-1 PRACTICAL	B.A.-3 G-2 PRACTICAL	B.A.-2 G-1 PRACTICAL	B.A.-2 G-2 PRAC ROOMNO.110		B.A.-3 (1-6) RNO.110	B.A.-A SEC-B (1-6) RNO.110				36
33	ਸ੍ਰੀਮਤੀ ਮੋਨਿਕਾ ਸਰਹੱਦੀ				B.A.-1 SEC-B (1-6) RNO.102	B.A.-2 SEC-B (1-6) RNO.102			B.A.-3 SEC-B (1-6) RNO.102	B.A.-3 HONOURS (1-6) RNO.102			24
34	ਸ੍ਰੀਮਤੀ ਮੁਨੀਰਾ		B.SC-3 (4-6) PRAC PHY LAB	B.SC-3 (4-6) PRAC PHY LAB B.SC-2 (1-3) TH ROOM NO.24	B.SC-3 (4-6) PRAC PHY LAB	B.SC-2 (1-2) PRAC PHY LAB	B.SC-2 (1-2) PRAC PHY LAB B.SC-1 (4-6) TH	B.SC-2 (1-2) PRAC PHY LAB B.SC-1 (4-6) TH	B.SC-1 (1-3) PRAC PHY LAB B.SC-3 (4-6) TH	B.SC-1 (1-3) PRAC PHY LAB	B.SC-1 (1-3) PRAC PHY LAB	B.SC-2 (4-6) TH ROOMNO.24	39
35	ਮਨੋਜ ਕੁਮਾਰ		B.A.-1 (1-3)TH (4-6) PRAC-G-1 DEPTROOM	B.A.-1 (1-6) PRAC G-2 DEPTROOM	B.A.-3 (1-3)TH (4-6) PRAC-DEPTROOM	B.A.-1 (1-3) PRAC G-1 / B.A-2 (4-6) PR DEPTROOM		B.A.-2 (1-3)TH (4-6) PRAC DEPTROOM	B.A.-3 (4-6) PRAC-DEPTROOM				33
36	ਸੁਖਵਿੰਦਰ ਸਿੰਘ			B.A-3 (1-6) RNO.110				B.A-2 (1-6) RNO.110	B.A-1 (1-6) RNO.105				18
37	ਹਰਚਰਨ ਸਿੰਘ		M.A-2 (1-6) PRAC DEPTROOM	M.A-2 (1-6) PRAC DEPTROOM	M.A-2 (1-6) PRAC DEPTROOM			M.A-1 (1-6) TH DEPTROOM	M.A-1 (1-6) TH DEPTROOM				30
38	ਵਿਪਿਨ ਚੌਧਰੀ			B.A.-1 (1-6)TH PSY LAB		B.A.-2 (1-3) PRAC PSY LAB	B.A.-3 (1-3) PRAC PSY LAB		B.A.-2 (1-6)TH PSY LAB	B.A.-2 (1-6)TH PSY LAB			27
39	ਗੁਰਪ੍ਰੀਤ ਸਿੰਘ		B.A.-2 SEC.C (1-6) ROOMNO.105	M.A.-2 (1-6) ROOMNO.115		M.A.-1 (1-6) ROOMNO.111			B.COM-1 SEC-A-B (1-6) RNO.205				24

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TIME TABLE CUM WORKLOAD

		0	1	2	3	4	5	6	7	8	9	10	Total
40	ਹਨੀô ਗੁਰੇਟੀਆ		B.A.-1 SEC.A (1-6) ROOMNO.110	B.A.-1 G-1 PRACTICAL	B.A.-1 G-2 PRACTICAL	B.A.-1 G-3 PRACTICAL	B.A.-2 SEC.A (1-6) ROOMNO.110		B.A.-1 G-4 PRACTICAL				36
41	ਗੁਲਜੀਤ ਸਿੰਘ		B.SC-3 (5-6)	B.SC-3 (5-6)	B.A-2 (1-6) B.SC-2(1-6) B.SC-3 (5-6) COM LAB	B.A-1 (1-6) B.SC-1 (1-6) B.SC-2 (1-2) COM LAB	B.A-3 (1-6) B.SC-3 (1-6) COM LAB	B.SC-1 (1-3) COM LAB	B.SC-1 (3-4) COM LAB	B.SC-1 (3-4) B.SC-3 (1-3) COM LAB	B.SC-1 (3-4) COM LAB	B.SC-2(1-3) COM LAB	43
42	ਇੰਦਰਜੀਤ ਸਿੰਘ		M.SC-2 (1-6)		M.SC-1 (1-6) HALLNO.3			B.A./ B.SC-3 (1-6) HALLNO.1	B.A./ B.SC-2 (1-6) HALLNO.3	B.A./ B.SC-1 (1-3) HALLNO.3			27
43	ਮਹੀਪ ਸਿੰਘ ਭਾਟੀਆ		B.COM.-1 SEC.A (1-6) ROOMNO.205		B.COM.-3 SEC.B (1-6) ROOMNO.202	B.COM.-1 SEC.B (1-6) ROOMNO.206			B.A.-3 (1-6) ROOMNO-113	B.A.-3 (1-6) DEPTROOM			30
44	ਤੇਜਿੰਦਰ ਕੌਰ		B.A-1 (1-3) PRAC G-1 PSY LAB	B.A-3 (1-3) PRAC G-1 PSY LAB	B.A-3 (4-6) PRAC G-2 PSY LAB	B.A-3 (1-6) TH PSY LAB	B.A-3 (4-6) PRAC G-3 PSY LAB		B.A-1 (1-3) PRAC G-2 PSY LAB	B.A-3 (1-6) TH HONO PSY LAB			27
45	ਸਰਬਜੀਤ ਕੌਰ			B.A.-3 (1-6) ROOMNO.15				B.A.-2 (1-6) ROOMNO.111	B.A.-1 (1-6) ROOMNO.111				18
46	ਰਵਿੰਦਰ ਕੌਰ		B.COM.-1 SEC.B (1-6) ROOMNO.206		B.COM.-1 SEC.A (1-6) ROOMNO.205	B.A.-2 (1-6) ROOMNO.107			B.A.-2 (1-3) DEPTROOM	B.A.-2 (1-6) DEPTROOM			27
47	ਗਾਇਤਰੀ ਸਿੰਘ			B.A.-3 (1-6) PRACTICAL DEPTROOM	B.A.-2 (1-6) PRACTICAL DEPTROOM	B.A.-2 (1-3)TH (4-6)PRAC DEPTROOM	M.A.-2 (1-6) PRACTICAL DEPTROOM		M.A.-2 (1-6) PRACTICAL DEPTROOM	M.A.-2 (1-6) PRACTICAL DEPTROOM			36

Principal
SMHS Govt. College
Sahibzada Ajit Singh Nagar

TIME TABLE CUM WORKLOAD

		0	1	2	3	4	5	6	7	8	9	10	Total
48	ਸੋਨੀਆ ਓਰਮਾ			B.A.-1 (1-6) PRACTICAL DEPTROOM	B.A.-1 (1-3)TH (4-6) PRAC DEPTROOM	M.A.-1 (1-6) PRACTICAL DEPTROOM	M.A.-1 (1-6) PRACTICAL DEPTROOM		B.A.-3 (1-3)TH (4-6) PRAC DEPTROOM	M.A.-1 (1-6) PRACTICAL DEPTROOM			36
49	ਸਰਬਜੀਤ ਕੌਰ		B.A.-2 SEC.B (1-6) ROOMNO.115		M.A.-2 (1-6) ROOMNO.115			B.A.-1 SEC.A (1-6) ROOMNO.113	B.A.-1 (1-6) ROOMNO.				24
50	ਕੁਲਵਿੰਦਰ ਕੌਰ				M.A.-1 (1-6) ROOMNO.111		M.A.-2 (1-6) ROOMNO.115	B.A.-2 (1-6) ROOMNO.107			B.SC.-3 (1-6) ROOMNO.105		24
51	ਓਾਲੂ ਦੇਵੀ		B.SC-2 (1-2) TH ZOO LAB (3-6) BOT LAB	B.SC-2 (1-2) TH ZOO LAB		B.SC-2 (3) PRAC BOT LAB B.SC-3 (4) TH ZOO LAB	B.SC-2 (3) PRAC BOT LAB B.SC-1 (4-6) BOT LAB	B.SC-2 (3) PRAC BOT LAB	B.SC-2 (1) TH BOT LAB B.SC-1 (5-6) PRAC BOT LAB	B.SC-1 (5-6) PRAC BOT LAB	B.SC-1 (5-6) PRAC BOT LAB		24
52	ਰੋਹਿਨੀ ਦੇਵੀ			B.COM.-3 SEC.B (1-6) ROOMNO.202	B.COM.-2 SEC.A (1-6) ROOMNO.204		B.COM.-3 SEC.A (1-6) ROOMNO.203	B.COM.-2 SEC.B (1-6) ROOMNO.202					24
53	ਓਿਲਪੀ ਭੁੱਲਰ		B.SC-3 (1-3) PRAC PHY LAB	B.SC-3 (1-3) PRAC PHY LAB B.SC-2 (4-6) TH ROOMNO.24	B.SC-3 (1-3) PRAC PHY LAB	B.SC-2 (5-6) PRAC PHY LAB	B.SC-2 (5-6) PRAC PHY LAB B.SC-1 (1-3) TH ROOMNO.24	B.SC-2 (5-6) PRAC PHY LAB	B.SC-1 (4-5) PRAC PHY LAB B.SC-3 (1-3) TH ROOMNO.24	B.SC-1 (4-5) PRAC PHY LAB	B.SC-1 (4-5) PRAC PHY LAB	B.SC-3 (4-6) TH ROOMNO.24	36
54	ਹਰਪ੍ਰੀਤ ਕੌਰ			B.COM.-1 SEC.B (1-6) ROOMNO.206		B.COM.-3 SEC.A (1-6) ROOMNO.203	B.COM.-1 SEC.A (1-6) ROOMNO.205	B.COM.-3 SEC.B (1-6) ROOMNO.203					24
55	ਪਰਮਿੰਦਰਪਾਲ ਸਿੰਘ		B.A.-3 SEC.A (1-6) ROOMNO.107	M.A.-1 (1-6) ROOMNO.111				B.A.-1 SEC.B (1-6) ROOMNO.101	B.COM.-2 (1-6) ROOMNO.204				24

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SMHS Govt. College
Sahibzada Ajit Singh Nagar

TIME TABLE CUM WORKLOAD

		0	1	2	3	4	5	6	7	8	9	10	Total
56	ਤਜਿੰਦਰ ਕੌਰ (ਦਥਛ+ਓਦਝਥ੍ਰ ।)		B.A.-3 SEC.B (1-6) ROOMNO.106		B.SC.-1 (1-6) HALLNO.3			B.A.-1 SEC.C (1-6) ROOMNO.106	B.COM.-3 (1-6) ROOMNO.203				24
57	RESOURCE PERSON (SCI)		B.SC-2 (1-6) TH ZOO LAB	B.SC-1 (3,4,5) TH		B.SC-2 (5-6) PRAC ZOO LAB	B.SC-2 (5-6) PRAC ZOO LAB	B.SC-2 (5-6) PRAC ZOO LAB	B.SC-2 (4-6) TH ZOO LAB B.SC-1 (1) PRAC ZOO LAB	B.SC-1 (1) PRAC ZOO LAB	B.SC-1 (1) PRAC ZOO LAB		21

Principal
SMNS Govt. College
Sahibzada Ajit Singh Nagar

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

ubject wise WORK LOAD

Subject: English

Session: 2019-20

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students ~~Appeared~~ Admitted	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	BA I	Compulsory	634	7	92 or 91	80+15%	6	6X7	—	—	—	—	—	42
2	BA II	Compulsory	407	5	81 or 80	80+15%	6	6X5	—	—	—	—	—	30
3	BA III	Compulsory	262	3	88 or 87	80+15%	6	6X3	—	—	—	—	—	18
4	B.Com I	Compulsory	117	2	59,58	60	6	6X2	—	—	—	—	—	12
5	B.Com II	Compulsory	113	2	57,56	60	6	6X2	—	—	—	—	—	12
6	BSC II	Compulsory	81	1	81	80	6	6X1	—	—	—	—	—	06
7	BA I, II, III	Elective	47,24,25	1+1+1	47,24,25	25	6+6+6	6+6+6	—	—	—	—	—	18
8	MA I & MA II	Compulsory	19,19	1, 1	19,19	25	6+2 7 6+2	8X4 7 8X4	—	—	—	—	—	32+32
													Total Periods of All Classes :	202
													Required Posts :	09
													Sanctioned Posts :	07
													Difference :	02

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

Due to shortage of faculty members, 7 Sections of BA I were merged into 6 & 5 sections of BA II were merged into 4 sections.

Counter Signature

Kamal Bedi

Principal

Mobile No.

Signature Incharge Time Table

Mobile No.

Tejinder Kaur

Signature Head of The Department

Mobile No. 9814117774

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD

Subject: PUNJABI

Session: 2019-20

Sl.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	BA I	Compulsory	572	07	81	80	06	42						42
2	BA II	" "	401	05	80	80	06	30						30
3	BA III	" "	257	03	85	80	06	18						18
4	BA I	Literature	112	02	56	80	06	12						12
5	BA II	" "	85	01	85	80	06	06						06
6	BA III	" "	44	01	44	80	06	06						06
7	Bcom I	Compulsory	113	02	56	60	06	12						12
8	Bcom II	Compulsory	112	02	56	60	06	12						12
9	Bcom III	" "	125	02	62	60	06	12						12
10	* BSc I	" "	89	01	89	80	06	06						06
11	* BSc II	" "	89	01	89	80	06	06						06
12	* BSc III	" "	73	01	73	80	06	06						06
13	MA I	Paper I, II, III, IV, V,	35	05	35	40	06	30						30
14	MA II	Paper I, II, III, IV, V	31	05	31	40	06	30						30
15	All Classes	Mudda Gyan	64	01	64	80	06	06						06
													Total Periods of All Classes :	234
													Required Posts :	10
* BSc. (N.Med, Med, Comp-Appli)													Sanctioned Posts :	05
													Difference :	05

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Signature Head of The Department
Mobile No. 9988488013

Signature Incharge Time Table
Mobile No. 9855644472

Counter Signature

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

ct wise WORK LOAD Subject: Economics Session: 2019-20

.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students ~~Appeared~~ Admitted	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A.I		80	1	80	80	9	9	—					9
2	B.A.II		50	1	50	80	9	9						9
3	B.A.III		32	1	32	80	9	9						9
4	B.A.II(H)		16	1	16	25	9	9						9
5	B.A.III(H)		08	1	08	25	9	9						12
6	B.Com I		120	2	60	60	06	12						12
7	B.Com II		120	2	60	60	06	12						06
8	B.Com III		65	1	65	60	06	06						75
													Total Periods of All Classes :	3
													Required Posts :	3
													Sanctioned Posts :	—
													Difference :	

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Signature Head of The Department
Mobile No. 94174/0955

Signature Incharge Time Table
Mobile No.

Counter Signature

Harpal Gujral
Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

ject wise WORK LOAD

Subject: HINDI

Session: 2019-20

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A. I	Elective	87	01	87	80	6	6	—	—	—	—	—	—
2	B.A. II	"	47	01	47	80	6	6	—	—	—	—	—	—
3	B.A III	"	27	01	27	80	6	6	—	—	—	—	—	—
4														
5														
6														
7														
8														
													Total Periods of All Classes :	18
													Required Posts :	01
													Sanctioned Posts :	01
													Difference :	0

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

Counter Signature

Principal
Mobile No.

Signature Incharge Time Table
Mobile No. 9855644472

Signature Head of The Department
Mobile No 9478655181

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD

Subject: Political Science

Session: 2019-20

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A I	U.G	160	02	80	80	06	12	-	-	-	-	-	12
2	B.A. II	"	87	01	87	80	06	06	-	-	-	-	-	06
3	B.A. III	"	45	01	45	80	06	06	-	-	-	-	-	06
4														
5														
6														
7														
8														
													Total Periods of All Classes :	24
													Required Posts :	01
													Sanctioned Posts :	01
													Difference :	Nil

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

Sukhwinder Singh

Signature Head of The Department

Mobile No. 9855525613

Counter Signature

Signature Incharge Time Table

Mobile No.

Principal

Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

ct wise WORK LOAD Subject: Physical Education Session: 2019-20

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	BA I	UG	190	02	95	80	06	12	06	32	30	06	36	48
2	BA II		83	01	83	80	06	06	02	42	30	06	12	18
3	BA III		80	01	80	80	06	06	02	40	30	06	12	18
4														
5														
6														
7														
8														
													Total Periods of All Classes :	84
													Required Posts :	03.5
													Sanctioned Posts :	02
													Difference :	01.5

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Principal
Mobile No.

Signature Incharge Time Table
Mobile No.

Signature Head of The Department
Mobile No. 9501004544

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD

Subject: MUSIC INSTRUMENTAL Session: 2019-20

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A. I	UG Elective	44	01	44	80	03	03	03	15	15	06	18	21
2	B.A. II	"	37	01	37	80	03	03	02	18	15	06	12	15
3	B.A. III	"	26	01	26	80	03	03	02	15	15	06	12	15
4														
5														
6														
7														
8														
													Total Periods of All Classes :	51
													Required Posts :	02
													Sanctioned Posts :	01
													Difference :	01

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Principal
Mobile No.

Signature Incharge Time Table
Mobile No.

Signature Head of The Department
Mobile No. 9417893812

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD

Subject: MUSIC VOCAL

Session: 2019-20

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A. I	UG. Elective	61	01	61	80	03	03	04	15	15	06	24	27
2	B.A. II	"	30	01	30	80	03	03	02	15	15	06	12	15
3	B.A. III	"	31	01	31	80	03	03	02	15	15	06	12	15
4														
5														
6														
7														
8														
													Total Periods of All Classes :	57
													Required Posts :	02
													Sanctioned Posts :	01
													Difference :	01

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Counter Signature

Principal

Mobile No.

Signature Incharge Time Table

Mobile No.

Signature Head of The Department

Mobile No. 9417893812

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

...t wise WORK LOAD

Subject: History

Session: 2019-20

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1														
2	B.A-I sem I		263	04	66	80	6	24	NA.	–	–	–	–	
3	B.A-II Sem III		209	03	70	80	6	18						
4	B.A-III Sem IV		159	02	79	11	6	12						
5	B.A-II Hon's		05	01	05	11	6	06						
6	B.A-III Hon's		08	01	08	11	6	06						
7														
8														
													Total Periods of All Classes :	66
													Required Posts :	03
													Sanctioned Posts :	03 (one vacant)
													Difference :	

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

Counter Signature

Principal
Mobile No.

Signature Incharge Time Table
Mobile No.

Signature Head of The Department
Mobile No. 9888174933

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: Geography Session: 2019-20

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B A - I	UG (Elective)	117	02	80	80	6	12	6	20	20	6	36	48
2	B.A - II	UG (Elective)	64	01	64	80	6	06	3	20	20	6	18	24
3	B.A - III	UG (Elective)	51	01	51	80	6	06	2	25	20	6	12	18
4														
5														
6														
7														
8														
													Total Periods of All Classes :	90
													Required Posts :	04
													Sanctioned Posts :	02
													Difference :	02

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

Signature Head of The Department
Mobile No. 8146563631

Counter Signature

Signature Incharge Time Table
Mobile No.

Hajeed Gyod
Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD

Subject: PSYCHOLOGY

Session: 2019-20

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A.I	UG- Elective	89	1	89	80	6	6	6	15	15	3	18	24
2	B.A.II	UG- Elective	60	1	60	80	6	6	4	15	15	3	12	18
3	B.A-III	UG- Elective	30	1	30	80	6	6	2	15	15	3	06	12
4	B.A II(Hons)	UG- (Honours)	19	1	12	10	6	6	-	-	-	-	06	06
5	B.A III (Hons)	UG- (Honours)	10	1	10	10	6	6	-	-	-	-	06	06
6														
7														
8														
													Total Periods of All Classes :	66
													Required Posts :	03
													Sanctioned Posts :	02
													Difference :	01

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

Signature Head of The Department
Mobile No.

Counter Signature

Principal
Mobile No.

Signature Incharge Time Table
Mobile No.

Tejinder Kaur 9988776364

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD

Subject: PSYCHOLOGY

Session: 2019-20

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A-I	UG- Elective	89	1	89	80	6	6	6	15	15	3	18	24
2	B.A-II	UG- Elective	60	1	60	80	6	6	4	15	15	3	12	18
3	B.A-III	UG- Elective	30	1	30	80	6	6	2	15	15	3	06	12
4	B.A II (Hons)	UG- (Honours)	19	1	12	10	6	6	-	-	-	-	06	06
5	B.A III (Hons)	UG- (Honours)	10	1	10	10	6	6	-	-	-	-	06	06
6														
7														
8														
													Total Periods of All Classes :	66
													Required Posts :	03
													Sanctioned Posts :	02
													Difference :	01

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

Signature Head of The Department

Mobile No.

Counter Signature

Principal

Mobile No.

Signature Incharge Time Table

Mobile No.

Tejinder Kaur

9988776364

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD   Subject: SOCIOLOGY   Session: 2019-20

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared Admitted	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compo sitions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A. I		298	02+1	150 appr	80	06	24	—	—	—	—	—	24
2	B.A. II		223	02+1	112 appr	80	06	18	—	—	—	—	—	18
3	B.A. III		124	02	62 appr	80	06	12	—	—	—	—	—	12
4	B.A. II Honours		17	01	17		06	06	—	—	—	—	—	06
5	B.A. III (Honours)		10	01	10		06	06	—	—	—	—	—	06
6														
7														
8														
													Total Periods of All Classes :	66
													Required Posts :	02.75
													Sanctioned Posts :	02
													Difference :	.75

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

Note: B.A-I ਦੇ Uni ਨਿਯਮਾਂ ਦੇ ਮੁਤਾਬਿਕ 04 sections ਚਾਹੀਦੇ ਹਨ ਅਤੇ B.A-II ਦੇ ਵੀ ਤਿੰਨ Sections ਚਾਹੀਦੇ ਹਨ। ਇਸ ਕਰਕੇ 01 Post ਹੋਰ ਚਾਹੀਦੀ।

Signature Head of The Department
Mobile No. 9855644472

Counter Signature

Signature Incharge Time Table
Mobile No. 9855644472

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD

Subject: Public Administration Session: 2019-20

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.A I		85	01	85	–	06	06	–	–	–	–	–	06
2	B.A II		56	01	56	–	06	06	–	–	–	–	–	06
3	B.A III		21	01	21	–	06	06	–	–	–	–	–	06
4														
5														
6														
7														
8														
													Total Periods of All Classes :	18
													Required Posts :	01
													Sanctioned Posts :	01
													Difference :	–

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

(Rhand (Ramesh Chand Rango)

Signature Head of The Department

Mobile No. 9417306160

Signature Incharge Time Table

Mobile No. 9855644472

Counter Signature

(I) Hoyal 9.1

Principal

Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

ect wise WORK LOAD Subject: FINE ARTS Session: 2019-20

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	बी.ए. I	ड्राईंग आर्ट्स (थ्योरी + प्रैक्टीकल)	70	1	70	80	3	3	3	23	20	09	27	30
2	बी.ए. II	"	20	1	20	80	3	3	1	20	20	09	09	12
3	बी.ए. III	"	27	1	27	80	3	3	1	27	20	09	09	12
4	ऑन.ए-I	पेपर 1 & 2.	11	1	11	15	8+8	16	-	-	-	-	-	16
5		पेपर 3 & 4.	11	-	-	15	-	-	1	11	15	16	16+16	32
6	ऑन.ए-II	पेपर 1 & 2.	05	1	05	15	8+8	16	-	-	-	-	-	16
7		पेपर 3 & 4.	05	-	-	15	-	-	1	05	15	16	16+16	32
8														
													Total Periods of All Classes :	150
													Required Posts :	06
													Sanctioned Posts :	04
													Difference :	02

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

Signature Head of The Department
Mobile No. 8146505631

Signature Incharge Time Table
Mobile No.

Counter Signature

Principal
Mobile No.

7814093769

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

wise WORK LOAD

Subject: ਧਰਮ ਅਧਿਐਨ

Session: 2019-20

No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compo sitions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	ਬੀ ਏ I	Elective	117	02	80	80	6	12	06	20	15-20	06	36	48
2	ਬੀ ਏ II	Elective	109	02	80	80	6	12	05	20	15-20	06	30	42
3	ਬੀ ਏ III	Elective	47	01	47	80	6	6	02	20	15-20	06	12	18
4														
5														
6														
7														
8														
													Total Periods of All Classes :	108
													Required Posts :	04
													Sanctioned Posts :	03
													Difference :	01

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

ਕੁੱਲ ਪੀਰੀਅਡ ਯੂਨੀਵਰਸਿਟੀ ਦੇ ਮਾਪਦੰਡ - 108 ਪੀਰੀਅਡ
Covered ਪੀਰੀਅਡ - 72 (3 Posts)
Uncovered - 26 (1 Post)

ਸਾਰੇ uncovered period merge ਕਰ ਕੇ ਪੜ੍ਹਾਏ ਜਾਂਦੇ ਹਨ।

Counter Signature

Signature Incharge Time Table
Mobile No.

Signature Head of The Department
Mobile No. 9876609509

Harjit Gujral
Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: ..... Session: 2019-20

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B. Com. I	Comp.	120	02	60	60	12	24	—	—	—	—	—	24
2	B. Com. II	Comp	120	02	60	60	18	36	—	—	—	—	—	36
3	B. Com. III	Comp.	125	02	62 63	60	30	60	—	—	—	—	—	60
4														
5														
6														
7														
8														
													Total Periods of All Classes :	120
													Required Posts :	05
													Sanctioned Posts :	05
													Difference :	Nil

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

20-11-19

Signature Head of The Department

Mobile No. 98720-91904

Counter Signature

Signature Incharge Time Table

Mobile No.

Hajed Gujral

Principal

Mobile No.

S.M.H.S. GOVERNMENT COLLEGE, SAHBZADA AJIT SINGN NAGAR

...bject wise WORKLOAD

Subject: MATHEMATICS **Session: 2019-20**

	...ass	Paper For UG (Comp./Elective/Honours For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No.of Students in one Theory Section	Uni. Norms	No. of periods allotted to one Section	Total Theory Periods (5*8)	Total No. of Composition /Practicals Groups	No.of Students in one Group	Uni. Norms for Groups	Periods allotted to one Group	Total Periods of Groups (10*13)	Total Periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	BA/BSc . 1st Year	UG (Compulsory)	56	1	56	60	15	15	NA	NA	NA	NA	NA	15
2	BA/BSc. 2nd Year	UG (Compulsory)	56	1	54	60	15	15	NA	NA	NA	NA	NA	15
3	BA/BSc. 3rd Year	UG (Compulsory)	55	1	57	60	15	15	NA	NA	NA	NA	NA	15
4	M.Sc. 1st Year	PG (Paper1/Paper2/ Paper3/ Paper4/Paper5)	21	1	21	40	30	30	NA	NA	NA	NA	NA	30
5	M.Sc. 2nd Year	PG (Paper1/Paper2/ Paper3/ Paper4/Paper5)		1			30	30	NA	NA	NA	NA	NA	30
													Total Periods of All Classes:	**105**
													Required Posts:	**6**
													Sanctioned Posts:	**4**
													Difference:	**2**

NOTE: The New course of MSc.(Maths) 1st Year has been started w.e.f. Session 2019-20 and MSc. (Maths) 2nd Year is going to be started in coming Session 2020-21.

- One theory period of UG class = 45 minutes and One theory period of PG class = 60 minutes. Therefore Workload = 93 hours 45 minutes
- As per UGC regulations 2010 and 2018, the teacher-wise workload **per week** of Assistant Professor = 16 hours & Associate Professor/ Professor = 14 hours
- Presently two regular Associate Professor are working and their combined workload = 28 hours per week. Extra workload = 65 hrs & 45 min per week
- Atleast 02 (Two) more posts in the subject of Mathematics are required.

This is to certify that the above information is correct as per College and University/UGC Norms. In case of any discrepency I/We will be responsible for that.

Counter Signature

Principal
Mobile No. 21/11/19

Signature Incharge Time Table
Mobile No. 9855644472

Signature Head of the Department
Mobile No. 9417088538
Date: 21/11/2019

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD Subject: PHYSICS Session: 2019-20

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	BSc I	Comp	49	01	49	80	9	9	3	16-17	15	06	18	27
2	BSc II	Comp	53	01	53	80	9	9	3	17-18	15	06	18	27
3	BSc III	Comp	47	01	47	80	9	9	3	15-16	15	06	18	27
4														
5														
6														
7														
8														
													Total Periods of All Classes :	81
													Required Posts :	03
													Sanctioned Posts :	02
													Difference :	01

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

21-11-19

Signature Head of The Department

Mobile No. 9888289101

Counter Signature

Signature Incharge Time Table

Mobile No.

Principal

Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

ect wise WORK LOAD Subject: Chemistry Session: 2019-20

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B.Sc I	Compulsory	78	1	78	80	9	9	5	15	15	6	30	39
2	B.Sc II	Compulsory	71	1	71	80	9	9	5	14	15	6	30	39
3	B.Sc III	Compulsory	55	1	55	80	9	9	4	14	15	6	24	33
4														
5														
6														
7														
8														
													Total Periods of All Classes :	111
													Required Posts :	4
													Sanctioned Posts :	3
													Difference :	1

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

Signature Incharge Time Table
Mobile No. 9855644472

Signature Head of The Department
Mobile No. 9501806666

Counter Signature

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

ject wise WORK LOAD

Subject: ZOOLOGY

Session: 2019-20

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B. Sc I		27	01	27	60	9	9	02	14+13	15	6	12	21
2	B. Sc II		27	01	27	60	9	9	02	14+13	15	6	12	21
3	B. Sc III		17	01	17	60	9	9	01	17	15	6	06	15
4														
5														
6														
7														
8														
													Total Periods of All Classes :	57
													Required Posts :	02
													Sanctioned Posts :	02
													Difference :	Nil

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

Counter Signature

Signature Incharge Time Table
Mobile No. 9855644472

Signature Head of The Department
Mobile No. 9814807021

Principal
Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD

Subject: Computer Science

Session: 2019-20

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	BSc I + BA I	Comp.	18+40=58	01	58	80	06	06	03	18 & 20	15	06	18	24
2	BSc II	Comp	18	01	18	80	06	06	01	18	15	06	06	12
3	BSc III	Comp	18	01	18	80	06	06	01	18	15	06	06	12
4														
5														
6														
7														
8														
													Total Periods of All Classes :	48
													Required Posts :	02
													Sanctioned Posts :	01
													Difference :	01

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

21-11-19

Signature Head of The Department

Mobile No. 9888289101

Counter Signature

Signature Incharge Time Table

Mobile No.

Principal

Mobile No.

S. M. H. S. GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

Subject wise WORK LOAD

Subject: Botany

Session: 2019-20

Sr.No.	Class	Paper For UG (Comp./ Elective/ Honours) For PG (Paper1/Paper2/Paper3/ Paper4/Paper5)	Total No. of Students Appeared	Total No. of Theory Sections	No. of Students in one Theory Section	Uni. Norms	No. of Periods allotted to one section	Total Theory Period (5 * 8)	Total No. of Compositions / Practicals Groups	No of Studs. in one Group	University Norms for Norms for Groups	Period Allotted to one Group	Total Period of Groups (10 * 13)	Total periods Theory & Comp./Prac. Groups (9+14)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	B. Sc. I		27	01	27	60	9	9	02	14+13	15	6	12	21
2	B. Sc. II		27	01	27	60	9	9	02	14+13	15	6	12	21
3	B. Sc. III		17	01	17	60	9	9	01	17	15	6	06	15
4														
5														
6														
7														
8														
													Total Periods of All Classes :	57
													Required Posts :	02
													Sanctioned Posts :	02
													Difference :	Nil

This is to Certifiy that above information is correct, as per College Record and University Norms. Incase of any discrepency I/we will be resposcible for that.

Mandeep Kaur 21/11/19

Signature Head of The Department

Mobile No. 9815962518

Signature Incharge Time Table

Mobile No. 9855644472

Counter Signature

Principal

Mobile No.

ਫੇਸ-6, ਸਾਹਿਬਜ਼ਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ (ਮੋਹਾਲੀ)-160056 Phone No. 0172-2225164 e-mail ID: principal.gcmohali@gmail.com

Unitization of Syllabus

An important aspect of curriculum delivery is unitization of syllabus. All the faculty members prepare a syllabus plan detailing the parts of the syllabus to be covered during the semester. The purpose is to provide a clear and structured framework for learning. It breaks down the curriculum into manageable sections, making it easier for students to understand and navigate the content. The Unitization of the syllabus is also available on the institutional website and widely circulated among the students to ensure that students have relevant information regarding the syllabus. The departmental webpage on the institutional website is regularly updated and the department wise unitization can be accessed from departmental webpage also-

https://smhsgcmohali.in/Departments

The subject wise unitization is also attached here.

ਸ਼ਹੀਦ ਮੇਜਰ ਹਰਮਿੰਦਰਪਾਲ ਸਿੰਘ (ਸ਼ੌ.ਚੱ.) ਸਰਕਾਰੀ ਕਾਲਜ, ਸਾਹਿਬਜ਼ਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ

SHAHEED MAJOR HARMINDERPAL SINGH (Shaurya Chakra) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

ਫੇਸ-6, ਸਾਹਿਬਜ਼ਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ (ਮੋਹਾਲੀ)-160056 Phone No. 0172-2225164 e-mail ID: principal.gcmohali@gmail.com

Post Graduate Department of Fine Arts

NOTE- From 2018 through 2023, unitization continues to be the same as the syllabus perscribed by the University remains the same.

Subject	History of Art
Classes	M.A. I (Paper -1) M.A.II (Paper -1 and 2)
Name of Teacher	Kirandeep Kaur (Assistant Professor), History of Art

Paper: Art And Cultural History Of India (M.A. – I, Sem. I)

Learning Outcomes	
1.	The knowledge of art practices particularly in painting in India from the earliest to Ca. 1850 A.D.
2.	The ability to read artworks in terms of style, socio-political contexts and cross-cultural influences over time.
3.	To understand the concept of the gradual development of humans and their relation with artistic activities.

Month-wise Unitization Plan		
Session	**Month**	**Topics from the Syllabus**
July	August	Discussion concerning India's early architectural development and gradual development of Prehistoric Paintings in the Bhimbetka Caves and Associated Caves. Following the conversation, a documentary about each is screened. Images and videos to enhance understanding. Discussions on Buddhist practices have been prevalent in India at times, Beginning of manuscripts painting (Pala and Jaina)
	September	The formation of the Ajanta Caves. Understanding the sociopolitical shifts and gradual inclination toward sculptural trends in the development of Ellora Caves. Discussion of multiple cultures coexisting and patronage flow.

Harjeet Gujral

Kirandeep Kaur

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SHAHEED MAJOR HARMINDERPAL SINGH (Shaurya Chakra) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

ਫੇਜ਼-6, ਸਾਹਿਬਜ਼ਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ (ਮੋਹਾਲੀ)-160056 Phone No. 0172-2225164 e-mail ID: principal.gcmohali@gmail.com

	October	Political, geographical and economical shifts with the incoming of Mughals and the introduction to the formation of miniature painting, the establishment of Royal ateliers and various foreign influences on art. Introduction to Rajasthani painting. ➢ Mid Semester Test & Assignments
	November	Introduction to Pahari school of painting. Establishment of Sikh Painting under the rule of Ranjit Singh and Company painting with the incoming of Britishers.
	December & January	Revision/Preparation of Exams

Note: Dates may vary as per the instruction received for the beginning of classes and the conduct of examinations by the University.

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Post Graduate Department of Fine Arts

Paper: Art and Cultural History of Europe (M.A. – II, Sem. III)

	Learning Outcomes
1.	The knowledge of art practices in Europe from the earliest to contemporary times.
2.	The students will have the ability to read artworks in terms of style, socio-political contexts and crosscultural influences over time.
3.	Students will learn about the founders of many 'isms' as well as various European, Dutch, Italian, Venetian, and German painters who established trends for future generations all over the world.

Month-wise Unitization Plan		
Session	**Month**	**Topics from the Syllabus**
July	August	Early Renaissance: Introduction, formation, development, famous artists. High Renaissance: Further development in techniques and subject matter, famous artists of the period. (covering- Italy, Venice, and North)
	September	Mannerism: Change in painting technique, subject matter and discussion of artists belonging to the 'ism'.
	October	Baroque Art: Introduction. ➢ Mid Semester Test & Assignments
	November	Discussion on the famous artists of the Baroque period in class with help of Visual aid such as images and videos, documentaries on Smart Board in the dept.
	December & January	Revision/Preparation of Exams

Note: Dates may vary as per the instruction received for the beginning of classes and the conduct of examinations by the University.

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Post Graduate Department of Fine Arts

Paper: Art And Cultural History Of India (Paintings and Sculptures upto 1850 A.D.) (M.A. – I, Sem. II)

	Learning Outcomes
1.	The knowledge of art practices particularly in sculptures in India from 3300 B.C.E. to Ca. 1850 A.D.
2.	The ability to read artworks in terms of style, socio-political contexts and cross-cultural influences over time.
3.	To understand the concept of the gradual development of humans and their relation with artistic activities

Month-wise Unitization Plan		
Session	**Month**	**Topics from the Syllabus**
January	January	Final Exams of Sem - I
	February	Indus Valley Civilization: Social and geographical background, Material Culture such as pottery, beads, necklaces and sculptures. Mauryan Dynasty: Social background, artistic developments, the shift from painting towards sculptures. Shungs: development of Stupas in Sanchi, Bharut and Bodhgaya, sculptures of the Hinyana Phase in Buddhism.
	March	Khushana: Development of Mahayana Phase and sculptural trends of Mathura and Gandhara school. Guptas: Historical Background and further development in sculptures under their rule. ➢ Assignment and Mid-Semester Test
	April	South Indian Temple Structure and South Indian Bronzes. Visual Aids such as Short videos, Slides of Sculptures and Historical sites.
	May	Revision/Preparation of Exams

Note: Dates may vary as per the instruction received for the beginning of classes and the conduct of examinations by the University.

Harjeet 9/1

Dipandeep Kaur

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Post Graduate Department of Fine Arts

Paper: Art and Cultural History of Europe (from Reinassance upto 1870 A.D.) (M.A. – II, Sem. IV)

	Learning Outcomes
1.	The knowledge of art practices in Europe from the early 17th century onwards.
2.	Students will learn about the evolution of art during the Baroque and Romanticism periods in several European cities.
3.	Students will have the ability to understand the Christian Biblical subject matter and its popular demand amongst patrons.

Month-wise Unitization Plan

Session	Month	Topics from the Syllabus
January	January	Final Exams of Sem - III
	February	Baroque in Holland, France. Rococo art.
	March	Neo-Classicism and Romanticism in Spain and France. Assignment, Presentations and Mid-Semester Test
	April	Approach Towards Landscape in England by Turner and Constable. Realism, its features and characteristics.
	May	Revision/Preparation of Exams

Note: Dates may vary as per the instruction received for the beginning of classes and the conduct of examinations by the University.

Harjeet Singh

Dipankar Das

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Post Graduate Department of Fine Arts

Paper: Modern Movements in Art (M.A. Sem. IV)

	Learning Outcomes
1.	Knowledge of various aspects of modern art prevailing in the West and the East.
2.	Understanding the difference between the core concepts and values of occidental and oriental art.
3.	Students will comprehend the significant impact and influence that Western art had on Indian art and contemporary artists.

Month-wise Unitization Plan		
Session	**Month**	**Topics from the Syllabus**
January	January	Final Exams of Sem - III
	February	Difference and development of Abstract art and Abstract Expressionism. Modern Art in Bengal and the establishment of Bengal Group.
	March	Kinetic Art, Pop Art. Emerging artists of Modern art in India; Nandlal Bose, Raja Ravi Varma, Amrita Shergill. ➢ Assignment, Presentations and Mid-Semester Test
	April	Op Art, Conceptual Art. P.A.G. Group, Chola Mandala Artists and Calcutta Group.
	May	Revision/Preparation of Exams

Note: Dates may vary as per the instruction received for the beginning of classes and the conduct of examinations by the University.

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UNITIZATION OF SYLLABUS	SEM 1, 3, 5
Classes	MA2, BA2, BA3
TEACHER'S NAME:	GAYATRI SINGH

1.	MA 2 SEM3 PAPER 4 PAINTING FROM LIFE (100 MARKS)	JULY	ADMISSIONS
2.	BA2 SEM 3 THEORY (30 MARKS)AND PRACTICAL(60 MARKS)		ADMISSIONS
3.	BA3 SEM 5 PRATICAL(60 MARKS)		ADMISSIONS
	MA 2 SEM3 PAPER 4 PAINTING FROM LIFE	August	The study of the human body is demonstrated through sketching The study of the human head, hands, feet, muscles and bones is demonstrated. Study of anatomical details of the human body, male and female figures from life in different poses in different angles. Demonstration of Figure study through Oil Color to suggest skin tones
	BA2 SEM 3 THEORY AND PRACTICAL		The teaching of UNIT 1 of SECTION A (Theory) POSTER MAKING Introduction to letter writing with a brush, in all three languages Punjabi, English and Hindi, various fonts to be taught through demonstration.
	BA3 SEM 5 PRACTICAL		POSTER MAKING Introduction to letter writing with the brush, and various fonts to be taught through demonstration. Letter writing in all three Languages Punjabi, English and Hindi are demonstrated.
	MA 2 SEM3 PAPER 4 PAINTING FROM LIFE	September	Demonstration of Figure study in Oil, gesture Drawing, sketching demonstrations MST
	BA2 SEM 3 THEORY AND PRACTICAL		The teaching of UNIT 2 of Section A (Theory) Demonstration of head study in different angles, poses, Color demonstration in Pencil Color MST
	BA3 SEM 5 PRACTICAL		Demonstration of Life Study MST
	MA 2 SEM3 PAPER 4 PAINTING FROM LIFE	October	Demonstration of Figure study from live models, from great artists works
	BA2 SEM 3 THEORY AND PRACTICAL		Demonstration of head study in Oil Pastel The teaching of Section B
	BA3 SEM 5 PRACTICAL		Demonstration of Life Study
	MA 2 SEM3 PAPER 4 PAINTING FROM LIFE	November	Demonstration of Figure study through sketching The teaching of Section B

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	BA2 SEM 3 THEORY AND PRACTICAL		Demonstration of a head study REVISION OF THEORY REMEDIAL CLASSES FOR SLOW LEARNERS AND ADVANCED LEARNERS
	BA3 SEM 5 PRACTICAL		Demonstration of Life Study in Oil Colour
		December	EXAMS

UNITIZATION OF SYLLABUS SEM 2, 4, 6

1.	MA 2 SEM4 PAPER 4 PAINTING FROM LIFE	January	HOLIDAYS AND EXAMS
	BA2 SEM 4 THEORY AND PRACTICAL		HOLIDAYS AND EXAMS
	BA3 SEM 5 PRACTICAL		HOLIDAYS AND EXAMS
	MA 2 SEM4 PAPER 4 PAINTING FROM LIFE	February	Study of various gestures of the human body, display of muscles and tendons in humans. Various studies suggesting the complexion of the model
	BA2 SEM 4 THEORY AND PRACTICAL		The teaching of Theory Section A, Part 1 Demonstration of outdoor Landscape in Acrylic and Watercolor
	BA3 SEM 5 PRACTICAL		Demonstration of outdoor Landscape in Acrylic and Watercolor Demonstration of Figure Study in Oil/Watercolor/Acrylic
	MA 2 SEM4 PAPER 4 PAINTING FROM LIFE	march	Demonstration of Figure Study in various mediums like charcoal, Oil Pastels, and Watercolor to make students understand the different dimensions of colour in figure Study
	BA2 SEM 4 THEORY AND PRACTICAL		The teaching of Theory Section A, Part 2&3 Demonstration of outdoor Landscape in Acrylic and Watercolor Demonstration of Figure Study in Oil/Watercolor/Acrylic
	BA3 SEM 5 PRACTICAL		Demonstration of outdoor Landscape in Acrylic and Watercolor Demonstration of Figure Study in Oil/Watercolor/Acrylic
	MA 2 SEM4 PAPER 4 PAINTING FROM LIFE	April	Demonstration of Figure Study in various mediums like charcoal, Oil Pastels, and Watercolor to make students understand the different dimensions of colour in figure Study MST
	BA2 SEM 4 THEORY AND PRACTICAL		The teaching of Theory Section A, Part 4 Demonstration of outdoor Landscape in Acrylic and Watercolor Demonstration of Figure Study in Oil/Watercolor/Acrylic MST
	BA3 SEM 5 PRACTICAL		Demonstration of outdoor Landscape in Acrylic and Watercolor Demonstration of Figure Study in Oil/Watercolor/Acrylic MST REMEDIAL CLASSES FOR SLOW LEARNERS AND ADVANCED LEARNERS
		May	EXAMS

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UNITIZATION OF SYLLABUS	SEM 1, 3, 5 [illegible]
Classes	MA1,MA2 , BA1
TEACHER'S NAME:	SONIA SHARMA

1.	MA 1 SEM 1 PAPER 3 PORTRAIT PAINTING (100 MARKS)	JULY	ADMISSIONS
2.	MA2 SEM-3 PAPER 3 CREATIVE COMPOSITION(100 MARKS)		ADMISSIONS
3.	BA1 SEM 1 PRACTICAL(60 MARKS)		ADMISSIONS
	MA 1 SEM 1 PAPER 3 PORTRAIT PAINTING (100 MARKS	August	Demonstration of basics of sketching Study of a human head, eyes, nose, ears, lips Study of basics of the head, male and female faces in different angles. Demonstration of head study through Oil Color to suggest skin tones
	MA2 SEM-3 PAPER 3 CREATIVE COMPOSITION(100 MARKS)		Demonstration of basics of a good composition Study of various nearby elements still and live Sketching of figures from different angles
	BA1 SEM 1 PRACTICAL(60 MARKS)		Introduction of basic tools for drawing and sketching Demonstration of shading in any shape Introduction of 2d and 3d shading of still objects Sketching of eyes, nose, ears, lips and basics of face
	MA 1 SEM 1 PAPER 3 PORTRAIT PAINTING (100 MARKS)	September	Demonstration of the live portrait in Oil. The practice of sketching portraits of different age groups from different angles
	MA2 SEM-3 PAPER 3 CREATIVE COMPOSITION(100 MARKS)		Composition on canvas on the topic festival Composition on canvas on topic landscape Sketching of a variety of elements on sketchbooks
	BA1 SEM 1 PRACTICAL(60 MARKS)		Demonstration of still life on half cartridge sheet with oil pastels Study of 2 still life on half cartridge sheet with oil pastels Study of 2 head studies on the half sheet with pencil shading
	MA 1 SEM 1 PAPER 3 PORTRAIT PAINTING (100 MARKS)	October	Study of the portrait of a female modal on canvas Study of the portrait of a male modal on canvas The practice of sketching different angles of the face
	MA2 SEM-3 PAPER 3 CREATIVE COMPOSITION(100 MARKS)		Composition on canvas on topic meditation Composition on canvas on topic conversation Sketching of different elements on sketchbooks
	BA1 SEM 1 PRACTICAL(60 MARKS)		Study of 2 still life on half cartridge sheet with oil pastels Study of 2 head studies on a half sheet with pencil shading The practice of sketching different angles of the face

	MA 1 SEM 1 PAPER 3 PORTRAIT PAINTING (100 MARKS	November	Study of a portrait of a female modal on canvas Study of a portrait of a male modal on canvas The practice of sketching different angles of the face
	MA2 SEM-3 PAPER 3 CREATIVE COMPOSITION(100 MARKS)		Composition on canvas on topic music Sketching of different elements
	BA1 SEM 1 PRACTICAL(60 MARKS)		The practice of sketching of different angles of face Sketching and shading of still objects
		December	EXAMS

UNITIZATION OF SYLLABUS

Classes: MA1,MA2 ,BA1

1.	MA 1 SEM 1 PAPER 3 PORTRAIT PAINTING (100 MARKS)	January	HOLIDAYS AND EXAMS
	MA2 SEM-3 PAPER 3 CREATIVE COMPOSITION (100 MARKS)		HOLIDAYS AND EXAMS
	BA1 SEM 1 PRACTICAL(60 MARKS)		HOLIDAYS AND EXAMS
	MA 1 SEM 1 PAPER 3 PORTRAIT PAINTING (100 MARKS)	February	Sketching of portrait of different age groups Portrait on canvas using oil and acrylic colors
	MA2 SEM-3 PAPER 3 CREATIVE COMPOSITION (100 MARKS)		Sketching of different elements indoor and outdoor using variety of mediums Composition on canvas on topic Spring season
	BA1 SEM 1 PRACTICAL(60 MARKS		Demonstration of outdoor Landscape in Acrylic and Watercolor Sketching of heads from different angles
	MA 1 SEM 1 PAPER 3 PORTRAIT PAINTING (100 MARKS)	march	2 Portrait painting on canvas in oil and acrylic colors Sketching of portrait of different age groups using charcoal and colored pencils

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ਫੇਜ਼-6, ਸਾਹਿਬਜ਼ਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ (ਮੋਹਾਲੀ)-160056 Phone No. 0172-2225164 e-mail ID: principal.gcmohali@gmail.com

	MA2 SEM-3 PAPER 3 CREATIVE COMPOSITION (100 MARKS)		Sketching of different elements indoor and outdoor using variety of mediums Composition on canvas on topic sisters Composition on topic harmony
	BA1 SEM 1 PRACTICAL (60 MARKS)		2 Landscapes in Acrylic and Watercolor 2 Head studies on half sheet with pencil shading
	MA 1 SEM 1 PAPER 3 PORTRAIT PAINTING (100 MARKS)	April	2 Portrait paintings on canvas in oil and acrylic colors Sketching of portrait of different age groups using charcoal and colored pencils
	MA2 SEM-3 PAPER 3 CREATIVE COMPOSITION (100 MARKS)		Sketching of different elements indoor and outdoor using variety of mediums Composition on canvas on topic Bird Seller Composition on topic Rhythm
	BA1 SEM 1 PRACTICAL (60 MARKS)		2 Landscapes in Acrylic and Watercolor 2 Head studies on half sheet with pencil shading
		May	EXAMS

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SHAHEED MAJOR HARMINDERPAL SINGH (Shaurya Chakra) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

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Unitization Plan

M.A Fine Arts

Paper III: CREATIVE COMPOSITION

Session :

Teacher Name- Harcharan Singh

SEMESTER -I

SEPTEMBER-

Section A

Working with different materials and techniques on paper and canvas

OCTOBER-

Composition shall extend to the- human figure, birds, animals, creative landscapes, still life objects, etc.

Collages and experimentation with mixed media.

NOVEMBER-

Section B

Work with mixed media and installation, enhancing the work done during the semester.

DECEMBER-

Introduction to Mural drawing and painting.

SEMESTER -II

January-

Section A

Working with different materials and techniques on paper and canvas

February-

Composition shall extend to the- human figure, birds, animals, creative landscapes, still life objects, etc.

Collages and experimentation with mixed media.

March-

Section B

Work with mixed media and installation, enhancing the work done during the semester.

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April-

Introduction to Mural drawing and painting.

Unitization Plan

M.A Fine Arts

Paper II: AESTHETICS AND PRINCIPLES OF ART APPRECIATION

Session

SEMESTER -I

September –

Section A

Definition of Art and its Intrinsic values; Inter-relation between Art and Craft; Structure of Art – Line, form, tone, colour, texture, space, perspective and composition

October-

Six limbs of Indian Painting; Principles of Art Appreciation; Mudras, Postures, Asanas; Form and Content.

November-

Section B

Indian concept of Beauty; Beauty is a state of mind; Theory of Rasa and Bhava; Nature of Aesthetic Experience

December-

Creative Process; Expression; Art and Intuition.

SEMESTER -II

January-

Section A

Imagination in Art, Art and Conscious, Art and Unconscious

February-

Art and Religion, Art and Culture, Art and Society.

March-

Section B

Art and Nature, Art and Symbolism, Taste and Tradition

April-

Art and Emotion, Art and Illusion, Concept of Folk Art.

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Unitization Plan

B.A Fine Arts (Drawing and Painting)

Session

Semester 1

Section- Still Life Study

AUGUST –

Sketching, Study of Still Life objects for proportions

SEPTEMBER–

Volume, texture, light and shade and rhythmic

Relationship of masses.

Section B: Head Study

OCTOBER-

Study of human head (life cast) for proportions. Balance and study of angles

NOVEMBER-

Rhythmic rendering of structure through light and shade

Semester II

Section A Landscape

JANUARY-

Pencil sketching of outdoor landscape

FEBRUARY-

Colour study of the outdoor landscape.

Section B Head Study

MARCH-

Study of the human head (life cast) for proportions, Balance and study of joints and angles

APRIL-

Rhythmic rendering of structure through light and shade.

UNITIZATION OF SYLLABUS

BA 2 SEMESTER 3 (Home Science)

2018-19

July – September

1. Sewing equipment and supplies used in clothing construction and their use and care.
2. Sewing machine and its parts, accessories of sewing machine, common defects and remedies.
3. Anthropometry (body measurements), precaution in taking and recording measurements.
4. Drafting and its importance.

Practical

1. Embroidery-Make a sample of 10 embroidery stitches.
2. Processes- Continuous wrap, two piece placket opening, pleats, gathers into band.
3. Make Samples of the following:
   a. Tacking, running stitch, hemming, back-stitch, button hole stitch, fasteners.
   b. Seams-Flat seam, counter hem, montua maker, run and fell. French seam.

October – December

HOD

PRINCIPAL

Principal,
SMHPSSCV, Govt. College
Sahibzada Ajit Singh Naga

1. Principles for design such as harmony, balance, rhythm, emphasis and proportion.
2. Selection of suitable clothing with reference to income, climate, occasion, occupation and fashion etc. for Infants and toddlers, Adolescents, adults and elderly persons.
3. Pattern making - types, advantages and disadvantages.
4. Elements of design such as color, line, form and texture.

Practical

1. Taking body measurements.
2. Drafting of child's bodice block, sleeve, adult's bodice block, petticoat, jangia. Stitching of salwar kameez, frock, jangia and petticoat.

BA 2 SEMESTER 4 (Home Science)

January – February

1. Care and storage of clothes.
2. Selection and care of linen.
3. Manufacture (in brief) and properties of synthetic fibers- nylon, polyester, rayon- viscose and acetate.
4. Bleaches- oxidizing, reducing and their suitability to different fibers.

5. Finishes, Embossing, tentering, calendering, sanforizing, mercerization, crease- resistant, water proofing and repellency, flame resistant and flame proof.

Practical

1. Testing of cotton, wool and silk by microscopic and burning.
2. Stain removal-Rust, coffee, pan, paint, dye, nail polish, lipstick, perfume, blood, medicine, boot polish turmeric and tea.

March – April

1. Classification of textile fibers, different types of yams- simple, novelty and bulk.
2. Manufacture and properties of natural fibers and synthetic fibers.
3. Washing of different types of gam1ents.
4. Dyeing-dyeing of cotton and wool with direct and acid dyes. Resist dyeing-tie and dye, Batik.
5. Printing: Block, screen and roller printing.

Practical

1. Spot , cleaning of any one woolen garment.
2. Simple household dyeing of a cotton fabric of size 12" X 12" and preparing samples of various methods of tie and dye.

UNITIZATION OF SYLLABUS

BA 3 SEMESTER 5 (Home Science)

2018-19

July – September

1. Importance and functions of food, Study of basic food groups.
2. Essential food constituents: Carbohydrate, Proteins and Fats; Functions, Source and requirements and deficiency.
3. Source and deficiency, functions, requirements and excess of: Vitamins: A, B complex, C, D, E and K, Minerals: Ca, P, Na, Fe, K, I.
4. Methods of cooking, reasons for cooking food-cooking methods by moist heat, dry heat, by fat, microwave cooking.

Practical

1. Preparation of minimum five dishes by using various methods of cooking - boiling, steaming, baking), frying (deep and shallow) and roasting with different food groups (cereals, pulses and vegetable groups).
2. Hot and cold beverages (two each).

October – December

HOD

Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar

1. Definition, importance and objectives of child development.
2. The physical and motor development of the child and factors affecting the same. Language development and factors affecting language development.
3. Emotional development: Characteristics of childhood emotions Common Emotions: fear, anger, joy, jealousy, anxiety, curiosity, etc. and factors affecting the emotional development.
4. Social development-during infancy, babyhood, childhood, and adolescence, the role of family

Practical

1. Food preservation: pickles, chutneys, jams, squashes, (two each).
2. Preparation of scrap book showing different stages of development (physical, motor, emotional and social).

UNITIZATION OF SYLLABUS

BA 1 SEMESTER 1 (Home Science)

2019-20

July – September

1. Home: Meaning and importance of Home Science.
   a. Functions of Home
   b. Renting v/s owning
   c. Selection of site, soil, locality for a house
   d. Principles of planning a house, orientation aspect, prospect, privacy, roominess, grouping, flexibility, circulation, sanitation, furniture requirement and practical considerations.
2. Furniture: Basic consideration while selection of furniture.
3. Hygiene:
   a. Definition of hygiene.
   b. Definition of infection, sources, carrier and control
   c. Definition and types of immunity.
4. Purification and storage of water for home.

Practical

1. Cleaning and polishing of household metals: brass, copper, silver, gold, aluminum, iron and steel, non stick pans.
2. Cleaning of leather.

October - December

1. Elements of Art: Line, form, shape, texture, size.

HOD

PRINCIPAL

Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

2. Principles of Art in relation to interior decoration, harmony, balance, rhythm, proportion and emphasis.
3. Causes and spread of following diseases:
    a. Caused by insects-malaria, dengu
    b. Conveyed by ingestion-enteric fever, cholera, dysentery and diarrhea.
    c. Spread by droplet infection, chicken pox, measles, mumps and tuberculosis.
    d. Sexually transmitted diseases – AIDS. 7.
4. Food Hygiene:
    a. Definition
    b. Hygiene during preparation, service and storage of food.
    c. Food poisoning, causes and prevention.

Practical

1. Cleaning of glass window panes and plastic articles.
2. Care and cleaning of refrigerators, food processors and micro-ovens.
3. Cleaning and polishing of wooden furniture.

BA 1 SEMESTER 2 (Home Science)

January – February

1. Color:
    a. Characteristics of color
    b. Color Wheel
    c. Color schemes
    d. Use of color in interior decoration for various rooms.

2. Money management:
3. Types of income, budgeting its advantages and limitations.
    a. Planning of budget
    b. Means of supplementing family income.
4. Flower Arrangement: Types, essential equipments used in flower arrangement, selection of materials, application of elements and principles of art in it.
5. Resources: Classification of resources human and non-human, factors affecting the use of resources.

Practical

1. Floor decoration – making of alpana and rangoli for different occasions.
2. Making of flower arrangement for different rooms.

March – April

1. Circulatory System:
    a. Blood and its composition.
    b. Coagulation of blood.
    c. Structure and functions of heart.
2. Structure and function of lungs, kidney and skin.
3. Time management:
   Steps in making time plans,
   tools in the time management – peak loads, work curves, rest periods.
4. Energy Management:
    a. Introduction
    b. Fatigue – types, cause and effects of fatigue

c. Principles of work simplification.

5. Digestive System: Structure and function of the alimentary canal.

Practical

1. Preparing time plans for adolescents and home makers.
2. One decorative/utility article from waste material.
3. Table setting, table manners and napkin foldings.

UNITIZATION OF SYLLABUS

BA 3 SEMESTER 5 (Home Science)

2019-20

July - September

1. Importance and functions of food, Study of basic food groups.
2. Essential food constituents: Carbohydrate, Proteins and Fats; Functions, Source and requirements and deficiency.
3. Source and deficiency, functions, requirements and excess of: Vitamins: A, B complex, C, D, E and K, Minerals: Ca, P, Na, Fe, K, I.
4. Methods of cooking, reasons for cooking food-cooking methods by moist heat, dry heat, by fat, microwave cooking.

Practical

1. Preparation of minimum five dishes by using various methods of cooking - boiling, steaming, baking), frying (deep and shallow) and roasting with different food groups (cereals, pulses and vegetable groups).
2. Hot and cold beverages (two each).

October - December

HOD

Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

1. Definition, importance and objectives of child development.
2. The physical and motor development of the child and factors affecting the same. Language development and factors affecting language development.
3. Emotional development: Characteristics of childhood emotions Common Emotions: fear, anger, joy, jealousy, anxiety, curiosity, etc. and factors affecting the emotional development.
4. Social development-during infancy, babyhood, childhood, and adolescence, the role of family

Practical

1. Food preservation: pickles, chutneys, jams, squashes, (two each).
2. Preparation of scrap book showing different stages of development (physical, motor, emotional and social).

UNITIZATION OF SYLLABUS

BA 2 SEMESTER 3 (Home Science)

2019-20

July – September

1. Sewing equipment and supplies used in clothing construction and their use and care.
2. Sewing machine and its parts, accessories of sewing machine, common defects and remedies.
3. Anthropometry (body measurements), precaution in taking and recording measurements.
4. Drafting and its importance.

Practical

1. Embroidery-Make a sample of 10 embroidery stitches.
2. Processes- Continuous wrap, two piece placket opening, pleats, gathers into band.
3. Make Samples of the following:
   a. Tacking, running stitch, hemming, back-stitch, button hole stitch, fasteners.
   b. Seams-Flat seam, counter hem, montua maker, run and fell, French seam.

October – December

HOD

Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar

1. Principles for design such as harmony, balance, rhythm, emphasis and proportion.
2. Selection of suitable clothing with reference to income, climate, occasion, occupation and fashion etc. for Infants and toddlers, Adolescents, adults and elderly persons.
3. Pattern making - types, advantages and disadvantages.
4. Elements of design such as color, line, form and texture.

Practical

1. Taking body measurements.
2. Drafting of child's bodice block, sleeve, adult's bodice block, petticoat, jangia. Stitching of salwar kameez, frock, jangia and petticoat.

BA 2 SEMESTER 4 (Home Science)

January – February

1. Care and storage of clothes.
2. Selection and care of linen.
3. Manufacture (in brief) and properties of synthetic fibers- nylon, polyester, rayon- viscose and acetate.
4. Bleaches- oxidizing, reducing and their suitability to different fibers.

5. Finishes, Embossing, tentering, calendering, sanforizing, mercerization, crease- resistant, water proofing and repellency, flame resistant and flame proof.

Practical

1. Testing of cotton, wool and silk by microscopic and burning.
2. Stain removal-Rust, coffee, pan, paint, dye, nail polish, lipstick, perfume, blood, medicine, boot polish turmeric and tea.

March – April

1. Classification of textile fibers, different types of yams- simple, novelty and bulk.
2. Manufacture and properties of natural fibers and synthetic fibers.
3. Washing of different types of gam1ents.
4. Dyeing-dyeing of cotton and wool with direct and acid dyes. Resist dyeing-tie and dye, Batik.
5. Printing: Block, screen and roller printing.

Practical

1. Spot , cleaning of any one woolen garment.
2. Simple household dyeing of a cotton fabric of size 12" X 12" and preparing samples of various methods of tie and dye.

UNITIZATION OF SYLLABUS

BA 2 SEMESTER 3 (Home Science)

2020-21

July – August

1. Sewing equipment and supplies used in clothing construction and their use and care.
2. Sewing machine and its parts, accessories of sewing machine, common defects and remedies.

Practical

1. Make Samples of the following:
   a. Tacking, running stitch, hemming, back-stitch, button hole stitch, fasteners.
   b. Seams-Flat seam, counter hem, montua maker, run and fell, French seam.

September – October

1. Anthropometry (body measurements), precaution in taking and recording measurements.
2. Drafting and its importance.
3. Pattern making - types, advantages and disadvantages.
4. Elements of design such as color, line, form and texture.

HOD

Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

Practical

1. Processes- Continuous wrap, two piece placket opening, pleats,
2. gathers into band.
3. Taking body measurements.

November – December

1. Principles for design such as harmony, balance, rhythm, emphasis and proportion.
2. Selection of suitable clothing with reference to income, climate, occasion, occupation and fashion etc. for Infants and toddlers, Adolescents, adults and elderly persons.

Practical

1. Embroidery-Make a sample of 10 embroidery stitches.

BA 2 SEMESTER 4 (Home Science)

January – February

1. Classification of textile fibers, different types of yams- simple, novelty and bulk.
2. Manufacture and properties of natural fibers and synthetic fibers.

3. Manufacture (in brief) and properties of synthetic fibers- nylon, polyester, rayon- viscose and acetate.
4. Bleaches- oxidizing, reducing and their suitability to different fibers.
5. Finishes, Embossing, tentering, calendering, sanforizing, mercerization, crease- resistant, water proofing and repellency, flame resistant and flame proof.

Practical

1. Testing of cotton, wool and silk by microscopic and burning.
2. Stain removal-Rust, coffee, pan, paint, dye, nail polish, lipstick, perfume, blood, medicine, boot polish turmeric and tea.

March – April

1. Care and storage of clothes.
2. Selection and care of linen.
3. Washing of different types of gam1ents.
4. Dyeing-dyeing of cotton and wool with direct and acid dyes. Resist dyeing-tie and dye, Batik.
5. Printing: Block, screen and roller printing.

Practical

1. Spot, cleaning of any one woolen garment.
2. Simple household dyeing of a cotton fabric of size 12" X 12" and preparing samples of various methods of tie and dye.

UNITIZATION OF SYLLABUS

BA 3 SEMESTER 5 (Home Science)

2020-21

July - September

1. Importance and functions of food, Study of basic food groups.
2. Essential food constituents: Carbohydrate, Proteins and Fats; Functions, Source and requirements and deficiency.
3. Source and deficiency, functions, requirements and excess of: Vitamins: A, B complex, C, D, E and K, Minerals: Ca, P, Na, Fe, K, I.
4. Methods of cooking, reasons for cooking food-cooking methods by moist heat, dry heat, by fat, microwave cooking.

Practical

1. Preparation of minimum five dishes by using various methods of cooking - boiling, steaming, baking), frying (deep and shallow) and roasting with different food groups (cereals, pulses and vegetable groups).
2. Hot and cold beverages (two each).

October - December

HOD
Gurpreet Kaur.

Principal,
SMHPSSCV, Govt. College
Sahibzada Ajit Singh Nagar.

1. Definition, importance and objectives of child development.
2. The physical and motor development of the child and factors affecting the same. Language development and factors affecting language development.
3. Emotional development: Characteristics of childhood emotions Common Emotions: fear, anger, joy, jealousy, anxiety, curiosity, etc. and factors affecting the emotional development.
4. Social development-during infancy, babyhood, childhood, and adolescence, the role of family

Practical

1. Food preservation: pickles, chutneys, jams, squashes, (two each).
2. Preparation of scrap book showing different stages of development (physical, motor, emotional and social).

UNITIZATION OF SYLLABUS

BA 1 SEMESTER 1 (Home Science)

2020-21

July – August

1. Home: Meaning and importance of Home Science.
   a. Functions of Home
   b. Renting v/s owning
   c. Selection of site, soil, locality for a house.
   d. Principles of planning a house, orientation aspect, prospect, privacy, roominess, grouping, flexibility, circulation, sanitation, furniture requirement and practical considerations.
2. Furniture: Basic consideration while selection of furniture.
3. Hygiene:
   a. Definition of hygiene.
   b. Definition of infection, sources, carrier and control
   c. Definition and types of immunity.

Practical

1. Cleaning and polishing of household metals: brass, copper, silver, gold, aluminum, iron and steel, non stick pans.
2. Cleaning of leather.

September – October

1. Elements of Art: Line, form, shape, texture, size.
2. Principles of Art in relation to interior decoration, harmony, balance, rhythm, proportion and emphasis.

HOD
Gurjeet Kaur

Principal,
SMHPSSCV, Govt. C...
Sahibzada Ajit Singh...

3. Causes and spread of following diseases:
    a. Caused by insects-malaria, dengu
    b. Conveyed by ingestion-enteric fever, cholera, dysentery and diarrhea.
    c. Spread by droplet infection, chicken pox, measles, mumps and tuberculosis.
    d. Sexually transmitted diseases – AIDS. 7.
4. Food Hygiene:
    a. Definition
    b. Hygiene during preparation, service and storage of food.
    c. Food poisoning, causes and prevention.

Practical

1. Cleaning of glass window panes and plastic articles.
2. Care and cleaning of refrigerators, food processors and micro-ovens.

November – December

1. Purification and storage of water for home.

Practical

1. Cleaning and polishing of wooden furniture.

BA 1 SEMESTER 2 (Home Science)

January – February

1. Color:

a. Characteristics of color
b. Color Wheel
c. Color schemes
d. Use of color in interior decoration for various rooms.

2. Flower Arrangement: Types, essential equipments used in flower arrangement, selection of materials, application of elements and principles of art in it.
3. Resources: Classification of resources human and non-human, factors affecting the use of resources.
4. Circulatory System:
   a. Blood and its composition.
   b. Coagulation of blood.
   c. Structure and functions of heart.
5. Structure and function of lungs, kidney and skin.

Practical

1. Floor decoration – making of alpana and rangoli for different occasions.
2. Making of flower arrangement for different rooms.

March - April

1. Money management:
2. Types of income, budgeting its advantages and limitations.
   a. Planning of budget.
   b. Means of supplementing family income.
3. Time management:
   a. Steps in making time plans,
   b. tools in the time management – peak loads, work curves, rest periods.

4. Energy Management:
    a. Introduction
    b. Fatigue – types, cause and effects of fatigue
    c. Principles of work simplification.
5. Digestive System: Structure and function of the alimentary canal.

Practical

1. Preparing time plans for adolescents and home makers.
2. One decorative/utility article from waste material.
3. Table setting, table manners and napkin foldings.

UNITIZATION OF SYLLABUS

BA 2 SEMESTER 3 (Home Science)

2021-22

July – August

1. Sewing equipment and supplies used in clothing construction and their use and care.
2. Sewing machine and its parts, accessories of sewing machine, common defects and remedies.

Practical

1. Make Samples of the following:

   a. Tacking, running stitch, hemming, back-stitch, button hole stitch, fasteners.
   b. Seams-Flat seam, counter hem, montua maker, run and fell, French seam.

September – October

1. Anthropometry (body measurements), precaution in taking and recording measurements.
2. Drafting and its importance.
3. Pattern making - types, advantages and disadvantages.
4. Elements of design such as color, line, form and texture.

H.O.D

Principal,
SMHPSSCV, Govt. College
Sahibzada Ajit Singh Nagar

Practical

1. Processes- Continuous wrap, two piece placket opening, pleats,
2. gathers into band.
3. Taking body measurements.

November - December

1. Principles for design such as harmony, balance, rhythm, emphasis and proportion.
2. Selection of suitable clothing with reference to income, climate, occasion, occupation and fashion etc for Infants and toddlers, Adolescents, adults and elderly persons.

Practical

1. Embroidery-Make a sample of 10 embroidery stitches.

BA 2 SEMESTER 4 (Home Science)

January - February

1. Classification of textile fibers, different types of yarns- simple, novelty and bulk.
2. Manufacture and properties of natural fibers and synthetic fibers.

3. Manufacture (in brief) and properties of synthetic fibers- nylon, polyester, rayon- viscose and acetate.
4. Bleaches- oxidizing, reducing and their suitability to different fibers.
5. Finishes, Embossing, tentering, calendering, sanforizing, mercerization, crease- resistant, water proofing and repellency, flame resistant and flame proof.

Practical

1. Testing of cotton, wool and silk by microscopic and burning.
2. Stain removal-Rust, coffee, pan, paint, dye, nail polish, lipstick, perfume, blood, medicine, boot polish turmeric and tea.

March – April

1. Care and storage of clothes.
2. Selection and care of linen.
3. Washing of different types of gam1ents.
4. Dyeing-dyeing of cotton and wool with direct and acid dyes. Resist dyeing-tie and dye, Batik.
5. Printing: Block, screen and roller printing.

Practical

1. Spot , cleaning of any one woolen garment.
2. Simple household dyeing of a cotton fabric of size 12" X 12" and preparing samples of various methods of tie and dye.

UNITIZATION OF SYLLABUS

BA 3 SEMESTER 5 (Home Science)

2021-22

July – September

1. Importance and functions of food, Study of basic food groups.
2. Essential food constituents: Carbohydrate, Proteins and Fats; Functions, Source and requirements and deficiency.
3. Source and deficiency, functions, requirements and excess of: Vitamins: A, B complex, C, D, E and K, Minerals: Ca, P, Na, Fe, K, I.
4. Methods of cooking, reasons for cooking food-cooking methods by moist heat, dry heat, by fat, microwave cooking.

Practical

1. Preparation of minimum five dishes by using various methods of cooking - boiling, steaming, baking), frying (deep and shallow) and roasting with different food groups (cereals, pulses and vegetable groups).
2. Hot and cold beverages (two each).

October – December

HOD

Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

1. Definition, importance and objectives of child development.
2. The physical and motor development of the child and factors affecting the same. Language development and factors affecting language development.
3. Emotional development: Characteristics of childhood emotions Common Emotions: fear, anger, joy, jealousy, anxiety, curiosity, etc. and factors affecting the emotional development.
4. Social development-during infancy, babyhood, childhood, and adolescence, the role of family

Practical

1. Food preservation: pickles, chutneys, jams, squashes, (two each).
2. Preparation of scrap book showing different stages of development (physical, motor, emotional and social).

UNITIZATION OF SYLLABUS

BA 1 SEMESTER 1 (Home Science)

2021-22

July – August

1. Home: Meaning and importance of Home Science.
   a. Functions of Home
   b. Renting v/s owning
   c. Selection of site, soil, locality for a house.
   d. Principles of planning a house, orientation aspect, prospect, privacy, roominess, grouping, flexibility, circulation, sanitation, furniture requirement and practical considerations.
2. Furniture: Basic consideration while selection of furniture.
3. Hygiene:
   a. Definition of hygiene.
   b. Definition of infection, sources, carrier and control
   c. Definition and types of immunity.

Practical

1. Cleaning and polishing of household metals: brass, copper, silver, gold, aluminum, iron and steel, non stick pans.
2. Cleaning of leather.

September – October

1. Elements of Art: Line, form, shape, texture, size.
2. Principles of Art in relation to interior decoration, harmony, balance, rhythm, proportion and emphasis.

HOD

PRINCIPAL

Principal,
SMHPSSCV, Govt. Co
Sahibzada Ajit Singh

3. Causes and spread of following diseases:
    a. Caused by insects-malaria, dengu
    b. Conveyed by ingestion-enteric fever, cholera, dysentery and diarrhea.
    c. Spread by droplet infection, chicken pox, measles, mumps and tuberculosis.
    d. Sexually transmitted diseases – AIDS. 7.
4. Food Hygiene:
    a. Definition
    b. Hygiene during preparation, service and storage of food.
    c. Food poisoning, causes and prevention.

Practical

1. Cleaning of glass window panes and plastic articles.
2. Care and cleaning of refrigerators, food processors and micro-ovens.

November – December

1. Purification and storage of water for home.

Practical

1. Cleaning and polishing of wooden furniture.

BA 1 SEMESTER 2 (Home Science)

January – February

1. Color:

a. Characteristics of color
b. Color Wheel
c. Color schemes
d. Use of color in interior decoration for various rooms.

2. Flower Arrangement: Types, essential equipments used in flower arrangement, selection of materials, application of elements and principles of art in it.
3. Resources: Classification of resources human and non-human, factors affecting the use of resources.
4. Circulatory System:
   a. Blood and its composition.
   b. Coagulation of blood.
   c. Structure and functions of heart.
5. Structure and function of lungs, kidney and skin.

Practical

1. Floor decoration – making of alpana and rangoli for different occasions.
2. Making of flower arrangement for different rooms.

March – April

1. Money management:
2. Types of income, budgeting its advantages and limitations.
   a. Planning of budget.
   b. Means of supplementing family income.
3. Time management:
   a. Steps in making time plans.
   b. tools in the time management – peak loads, work curves, rest periods.

4. Energy Management:
    a. Introduction
    b. Fatigue – types, cause and effects of fatigue
    c. Principles of work simplification.
5. Digestive System: Structure and function of the alimentary canal.

Practical

1. Preparing time plans for adolescents and home makers.
2. One decorative/utility article from waste material.
3. Table setting, table manners and napkin foldings.

UNITIZATION OF SYLLABUS

BA 1 SEMESTER 1 (Home Science)

2022-23

September - October

1. Home: Meaning and importance of Home Science.
   a. Functions of Home
   b. Renting v/s owning
   c. Selection of site, soil, locality for a house.
   d. Principles of planning a house, orientation aspect, prospect, privacy, roominess, grouping, flexibility, circulation, sanitation, furniture requirement and practical considerations.
2. Furniture: Basic consideration while selection of furniture.
3. Elements of Art: Line, form, shape, texture, size.
4. Principles of Art in relation to interior decoration, harmony, balance, rhythm, proportion and emphasis.

Practical

1. Cleaning and polishing of household metals: brass, copper, silver, gold, aluminum, iron and steel, non stick pans.
2. Cleaning of leather.

November- December

1. Hygiene:
   a. Definition of hygiene.
   b. Definition of infection, sources, carrier and control
   c. Definition and types of immunity.

HOD

Principal,
SMHPSSCV, Govt. Col
Sahibzada Ajit Singh

2. Causes and spread of following diseases:
    a. Caused by insects-malaria, dengu
    b. Conveyed by ingestion-enteric fever, cholera, dysentery and diarrhea.
    c. Spread by droplet infection, chicken pox, measles, mumps and tuberculosis.
    d. Sexually transmitted diseases – AIDS. 7.
3. Food Hygiene:
    a. Definition
    b. Hygiene during preparation, service and storage of food.
    c. Food poisoning, causes and prevention.
4. Purification and storage of water for home.

Practical

1. Cleaning of glass window panes and plastic articles.
2. Care and cleaning of refrigerators, food processors and micro-ovens.
3. Cleaning and polishing of wooden furniture.

BA 1 SEMESTER 2 (Home Science)

January – February

1. Color:
    a. Characteristics of color
    b. Color Wheel
    c. Color schemes
    d. Use of color in interior decoration for various rooms.

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2. Flower Arrangement: Types, essential equipments used in flower arrangement, selection of materials, application of elements and principles of art in it.
3. Resources: Classification of resources human and non-human, factors affecting the use of resources.
4. Circulatory System:
    a. Blood and its composition.
    b. Coagulation of blood.
    c. Structure and functions of heart.
5. Structure and function of lungs, kidney and skin.

Practical

1. Floor decoration – making of alpana and rangoli for different occasions.
2. Making of flower arrangement for different rooms.

March – April

1. Money management:
2. Types of income, budgeting its advantages and limitations.
    a. Planning of budget.
    b. Means of supplementing family income.
3. Time management:
    a. Steps in making time plans,
    b. tools in the time management – peak loads, work curves, rest periods.
4. Energy Management:
    a. Introduction
    b. Fatigue – types, cause and effects of fatigue

c. Principles of work simplification.

5. Digestive System: Structure and function of the alimentary canal.

Practical

1. Preparing time plans for adolescents and home makers.
2. One decorative/utility article from waste material.
3. Table setting, table manners and napkin foldings.

UNITIZATION OF SYLLABUS

BA 2 SEMESTER 3 (Home Science)

2022-23

July – September

1. Sewing equipment and supplies used in clothing construction and their use and care.
2. Sewing machine and its parts, accessories of sewing machine, common defects and remedies.
3. Anthropometry (body measurements), precaution in taking and recording measurements.
4. Drafting and its importance.

Practical

1. Make Samples of the following:
   a. Tacking, running stitch, hemming, back-stitch, button hole stitch, fasteners.
   b. Seams-Flat seam, counter hem, montua maker, run and fell, French seam.
2. Processes- Continuous wrap, two piece placket opening, pleats, gathers into band.

October – December

1. Principles for design such as harmony, balance, rhythm, emphasis and proportion.
2. Selection of suitable clothing with reference to income, climate, occasion, occupation and fashion etc. for Infants and toddlers, Adolescents, adults and elderly persons.
3. Pattern making - types, advantages and disadvantages.
4. Elements of design such as color, line, form and texture.

Practical

1. Embroidery-Make a sample of 10 embroidery stitches.
2. Taking body measurements.

BA 2 SEMESTER 4 (Home Science)

January – February

1. Classification of textile fibers. different types of yams- simple, novelty and bulk.
2. Manufacture and properties of natural fibers and synthetic fibers.

3. Manufacture (in brief) and properties of synthetic fibers- nylon, polyester, rayon- viscose and acetate.

4. Bleaches- oxidizing, reducing and their suitability to different fibers.
5. Finishes, Embossing, tentering, calendering, sanforizing, mercerization, crease- resistant, water proofing and repellency, flame resistant and flame proof.

Practical

1. Testing of cotton, wool and silk by microscopic and burning.
2. Stain removal-Rust, coffee, pan, paint, dye, nail polish, lipstick, perfume, blood, medicine, boot polish turmeric and tea.

March – April

1. Care and storage of clothes.
2. Selection and care of linen.
3. Washing of different types of gam1ents.
4. Dyeing-dyeing of cotton and wool with direct and acid dyes. Resist dyeing-tie and dye, Batik.
5. Printing: Block, screen and roller printing.

Practical

1. Spot , cleaning of any one woolen garment.
2. Simple household dyeing of a cotton fabric of size 12" X 12" and preparing samples of various methods of tie and dye.

UNITIZATION OF SYLLABUS

BA 3 SEMESTER 5 (Home Science)

2022-23

July – September

1. Importance and functions of food, Study of basic food groups.
2. Essential food constituents: Carbohydrate, Proteins and Fats; Functions, Source and requirements and deficiency.
3. Source and deficiency, functions, requirements and excess of: Vitamins: A, B complex, C, D, E and K, Minerals: Ca, P, Na, Fe, K, I.
4. Methods of cooking, reasons for cooking food-cooking methods by moist heat, dry heat, by fat, microwave cooking.

Practical

1. Preparation of minimum five dishes by using various methods of cooking - boiling, steaming, baking), frying (deep and shallow) and roasting with different food groups (cereals, pulses and vegetable groups).
2. Hot and cold beverages (two each).

October – December

1. Definition, importance and objectives of child development.
2. The physical and motor development of the child and factors affecting the same. Language development and factors affecting language development.
3. Emotional development: Characteristics of childhood emotions Common Emotions: fear, anger, joy, jealousy, anxiety, curiosity, etc. and factors affecting the emotional development.
4. Social development-during infancy, babyhood, childhood, and adolescence, the role of family

Practical

1. Food preservation: pickles, chutneys, jams, squashes, (two each).
2. Preparation of scrap book showing different stages of development (physical, motor, emotional and social).

UNITIZATION OF SYLLABUS

BA 3 SEMESTER 5 (Home Science)

2022-23

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October – December

HOD

Principal,
SMHPSSCV, Govt. College,
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Practical

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UNITIZATION OF SYLLABUS

BA 2 SEMESTER 3 (Home Science)

2022-23

July – September

1. Sewing equipment and supplies used in clothing construction and their use and care.
2. Sewing machine and its parts, accessories of sewing machine, common defects and remedies.
3. Anthropometry (body measurements), precaution in taking and recording measurements.
4. Drafting and its importance.

Practical

1. Make Samples of the following:
   a. Tacking, running stitch, hemming, back-stitch, button hole stitch, fasteners.
   b. Seams-Flat seam, counter hem, montua maker, run and fell, French seam.
2. Processes- Continuous wrap, two piece placket opening, pleats, gathers into band.

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October – December

1. Principles for design such as harmony, balance, rhythm, emphasis and proportion.
2. Selection of suitable clothing with reference to income, climate, occasion, occupation and fashion etc. for Infants and toddlers, Adolescents, adults and elderly persons.
3. Pattern making - types, advantages and disadvantages.
4. Elements of design such as color, line, form and texture.

Practical

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BA 2 SEMESTER 4 (Home Science)

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5. Printing: Block, screen and roller printing.

Practical

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UNITIZATION OF SYLLABUS

BA 1 SEMESTER 1 (Home Science)

2022-23

September - October

1. Home: Meaning and importance of Home Science.
   a. Functions of Home
   b. Renting v/s owning
   c. Selection of site, soil, locality for a house.
   d. Principles of planning a house, orientation aspect, prospect, privacy, roominess, grouping, flexibility, circulation, sanitation, furniture requirement and practical considerations.
2. Furniture: Basic consideration while selection of furniture.
3. Elements of Art: Line, form, shape, texture, size.
4. Principles of Art in relation to interior decoration, harmony, balance, rhythm, proportion and emphasis.

Practical

1. Cleaning and polishing of household metals: brass, copper, silver, gold, aluminum, iron and steel, non stick pans.
2. Cleaning of leather.

November- December

1. Hygiene:
   a. Definition of hygiene.
   b. Definition of infection, sources, carrier and control
   c. Definition and types of immunity.

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2. Causes and spread of following diseases:
    a. Caused by insects-malaria, dengu
    b. Conveyed by ingestion-enteric fever, cholera, dysentery and diarrhea.
    c. Spread by droplet infection, chicken pox, measles, mumps and tuberculosis.
    d. Sexually transmitted diseases – AIDS. 7.
3. Food Hygiene:
    a. Definition
    b. Hygiene during preparation, service and storage of food.
    c. Food poisoning, causes and prevention.
4. Purification and storage of water for home.

Practical

1. Cleaning of glass window panes and plastic articles.
2. Care and cleaning of refrigerators, food processors and micro-ovens.
3. Cleaning and polishing of wooden furniture.

BA 1 SEMESTER 2 (Home Science)

January – February

1. Color:
    a. Characteristics of color
    b. Color Wheel
    c. Color schemes
    d. Use of color in interior decoration for various rooms.

2. Flower Arrangement: Types, essential equipments used in flower arrangement, selection of materials, application of elements and principles of art in it.
3. Resources: Classification of resources human and non-human, factors affecting the use of resources.
4. Circulatory System:
    a. Blood and its composition.
    b. Coagulation of blood.
    c. Structure and functions of heart.
5. Structure and function of lungs, kidney and skin.

Practical

1. Floor decoration – making of alpana and rangoli for different occasions.
2. Making of flower arrangement for different rooms.

March – April

1. Money management:
2. Types of income, budgeting its advantages and limitations.
    a. Planning of budget.
    b. Means of supplementing family income.
3. Time management:
    a. Steps in making time plans,
    b. tools in the time management – peak loads, work curves, rest periods.
4. Energy Management:
    a. Introduction
    b. Fatigue – types, cause and effects of fatigue

c. Principles of work simplification.

5. Digestive System: Structure and function of the alimentary canal.

Practical

1. Preparing time plans for adolescents and home makers.
2. One decorative/utility article from waste material.
3. Table setting, table manners and napkin foldings.

UNITIZATION OF SYLLABUS

BA 1 SEMESTER 1 (Home Science)

2018-19

July – September

1. Home: Meaning and importance of Home Science.
   a. Functions of Home
   b. Renting v/s owning
   c. Selection of site, soil, locality for a house.
   d. Principles of planning a house, orientation aspect, prospect, privacy, roominess, grouping, flexibility, circulation, sanitation, furniture requirement and practical considerations.
2. Furniture: Basic consideration while selection of furniture.
3. Hygiene:
   a. Definition of hygiene.
   b. Definition of infection, sources, carrier and control
   c. Definition and types of immunity.
4. Purification and storage of water for home.

Practical

1. Cleaning and polishing of household metals: brass, copper, silver, gold, aluminum, iron and steel, non stick pans.
2. Cleaning of leather.

October - December

1. Elements of Art: Line, form, shape, texture, size.

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2. Principles of Art in relation to interior decoration, harmony, balance, rhythm, proportion and emphasis.
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    a. Caused by insects-malaria, dengu
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    b. Hygiene during preparation, service and storage of food.
    c. Food poisoning, causes and prevention.

Practical

1. Cleaning of glass window panes and plastic articles.
2. Care and cleaning of refrigerators, food processors and micro-ovens.
3. Cleaning and polishing of wooden furniture.

BA 1 SEMESTER 2 (Home Science)

January – February

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    a. Characteristics of color
    b. Color Wheel
    c. Color schemes
    d. Use of color in interior decoration for various rooms.

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3. Types of income, budgeting its advantages and limitations.
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SHAHEED MAJOR HARMINDERPAL SINGH (SHAURYA CHAKRA) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

DEPARTMENT OF PHYSICS

UNITIZATION PLAN (2018-2019)

B.Sc. I

Mechanics-I

August: Cartesian and spherical polar co-ordinate systems, area, volume, displacement, velocity and acceleration in these systems, Solid angle, Various forces in Nature(brief introduction), Centre of mass, Equivalent one body problem.

September: Central forces, Equation of motion under central force, Equation of orbit in inverse square, Force field and turning points, Kepler laws and their derivations, Relationship of conservation laws and symmetries of space and time.

October: Inertial frame of reference, Coriolis force and its applications, Variation of acceleration due to gravity with latitude, Focault pendulum (qualitative), Elastic collision in Laboratory and C.M. system, velocities, angels and energies.

November: Cross section of elastic scattering, Rutherford scattering (qualitative).

Mechanics-II

January: Rigid body motion: Rotational motion, principal moments and axe, Euler's equations; precession and elementary gyroscope, Galilean transformation and Invariance, Non-Inertial frames, concept of stationary universal frame of reference and ether.

February: Michelson-Morley experiment and its result, Postulates of special theory of relativity, Lorentz transformations, Observer and viewer in relativity, Relativity of simultaneity.

March: Length, Time, Velocities, Relativistic Doppler effect, Variation of mass with velocity, mass-energy equivalence, rest mass in an inelastic collision.

April: Relativistic momentum and energy, their transformation, concepts of Minkowski space, four vector formulation.

Vibrations and Waves-I

August: Simple harmonic motion, energy of a Simple Harmonic Oscillation (SHO), Compound pendulum, Electrical oscillations, Transverse vibrations of a mass on a string, composition of two perpendicular SHM of same period and of period ratio 1 : 2, Anharmonic oscillations.

September: Decay of free vibrations due to damping, Differential equation of motion, types of damping, Determination of damping co-efficient-logarithmic decrement, relaxation time and Q-Factor, Electromagnetic damping (Electrical oscillator).

(SHILPY BHULLAR)
DEPARTMENT OF PHYSICS

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October: Differential equation for forced mechanical and electrical oscillators, Transient and steady state oscillation, Displacement and velocity variation with driving force frequency, variation of phase with frequency resonance.
November: Power supplied to an oscillator and its variation with frequency, Q value of a forced oscillator and band width, Q-value as an amplification factor of low frequency response.

Vibrations and Waves-II
January: Stiffness coupled oscillators, Normal co-ordinates and normal modes of vibration, Inductance coupling of electrical oscillators, Types of waves, Wave equation (transverse) and its solution, The string as a forced oscillator, Characteristic impedance of a string, Impedance matching.
February: Reflection and transmission of energy, Reflection and Transmission Energy, Reflection and transmission of string, wave and group velocity, Standing waves on a string of fixed length, Energy of vibrating energy string, wave and group velocity.
March: Physical interpretation of Maxwell's equations, Electromagnetic waves and wave equation in a medium having finite permeability and permittivity but with conductivity $\sigma=0$, Pointing vector, Impedance of a dielectric to EM waves, EM waves in a conducting medium and skin depth, EM waves velocity in a conductor an anomalous dispersion.
April: Response of a conducting medium of EM waves, Reflection and transmission of EM waves at a boundary of two dielectric media for normal incidence, Reflection of EM waves from the surface of a conductor at normal incidence.

Electricity and Magnetism-I
August: Basic ideas of vector calculus, Gradient, Divergence, curl and their physical significance, Coulomb's law in vector form, long uniformly charged wire, Charged disc. Stokes's theorem and its applications in electrostatic field, curl E= 0.
September: Electric field as gradient of scalar potential, Calculation of E due to a point charge and dipole from potential, Potential due to arbitrary charge distribution and multipole moments, Poisson and Laplace's equations and their solutions in Cartesian and concept of electrical images.
October: Calculation of electric potential and field due a point charge placed near an infinitely conducting sheet, Current and current density, equation of continuity, Microscopic form of Ohm's Law, ($J=\sigma E$) and conductivity, Failure of Ohm's Law.
November: Invariance of charge, E in different frames of reference, Field of a point charge moving with constant velocity, Interaction between moving charges and force between parallel currents.

Electricity and Magnetism-II
January: Behaviour of various substances in magnetic field, Definition of **M** and **H** and their relation to free and bound currents, Permeability and susceptibilities and their inter-relationship, Orbital motion of electrons and diamagnetism, Electron spin and paramagnetism, Ferromagnetism, Domain theory of Ferromagnetism, Hysteresis Loss.
February: Magnetisation curve Ferrites, Lorentz's force, Definition of B, Biot-Savart's Law and its applications to long straight wire, circular current loop and solenoid, Ampere's Circuital law and its applications, Divergence and curl of **B**, Hall effect, expression and co-efficient.
March: Vector potential, Definition and derivation of current density and its use in calculation of change in magnetic field at a current sheet, Transformation equations for **E** and **B** from one frame to another, Faraday's Law and EM induction, Displacement current, Maxwell's equations.

April: Mutual inductance and reciprocity theorem, Self-inductance L for solenoid, Coupling of Electrical circuits, Analysis of LCR series and parallel resonant circuits, Q-factor, Power consumed, Power factor.

Sem I Practicals

August:

1. To establish relationship between torque and angular acceleration using fly wheel and hence to find inertia of flywheel.
2. To study one-dimensional collision using two hanging spheres of different materials.

September:

1. Study the dependence of moment of inertia on distribution of mass (by noting time periods of oscillations) using objects of various geometrical shapes but of same mass.
2. To set up CRO for Sine and Square wave and to find their frequency and amplitude.

October:

1. To study the efficiency of an electric kettle/heater element with varying input voltages.
2. To study the working of energy meter.

Sem II Practicals

January:

1. To study the variation of time period with distance between centre of suspension and centre of gravity for a bar pendulum and to determine
   i) Radius of gyration of bar pendulum about an axis through its Centre of Gravity and perpendicular to its length.
   ii) Value of Centre of Gravity, g.
2. Determination of g by Kater's pendulum.

February:

1. Determination of unknown capacitance by flashing and quenching of neon lamp.
2. To study the resonance in series and parallel LCR circuits for different resistances and calculate Q-value.

March:

1. Determination of modulus of rigidity of material of a wire using Maxwell's needle.
2. Verify laws of electromagnetic induction.

B.Sc. II

Statistical Physics and Thermodynamics-I

August: Basic ideas of statistical physics, Scope of statistical physics, Basic ideas about probability, distribution of four distinguishable particles in two compartments of equal size. Concept of macro states, microstates, thermodynamic probability, Effects of constraints on the system.

September: Distribution of n particles in two compartments, Deviation from the state of maximum probability, equilibrium state of dynamic system, Distribution of distinguishable n particles in k compartments of unequal sizes, Phase space and its division into elementary cells, Three kinds of statistics, The basic approach in the three statistics.

October: Maxwell Boltzmann (MB) statistics applied to an ideal gas in equilibrium, Experimental verification of Maxwell Boltzmann law of distribution of molecular speeds, Need for quantum statistics-Bose-Einstein (B.E.) statistics, Derivation of Planck's law of radiation.

November: Deduction of Wien's displacement law and Stefan's law from Planck's law, Fermi-Dirac (F.D.) statistics, Comparison of M.B., B.E. and F.D. statistics.

Statistical Physics and Thermodynamics-II

January: Statistical definition of entropy, Change of entropy of a system, Additive nature of entropy, Law of increase of entropy, Reversible and irreversible process and their examples, Work done in a reversible process, Examples of increase of entropy in natural processes, Entropy and disorder, Brief review of terms and laws of thermodynamics.

February: Carnot's cycle, Entropy changes in Carnot cycle, Applications of thermodynamics to thermoelectric effect, Change of entropy along a reversible path in a P.V. diagram, Entropy of a perfect gas, Equation of state of an ideal gas from simple statistical consideration, Heat death of the universe.

March: Derivation of Maxwell's thermodynamical relations, Cooling produced by adiabatic stretching, Adiabatic compression, Change of internal energy with volume, specific heat at constant pressure and constant volume, Expression for Cp-Cv , Change of state and Clapeyron equation.

April: Thermodynamical treatment of Joule-Thomson effect, Use of Joule-Thomson effect, liquefaction of helium, Production of very low temperature by adiabatic demagnetization.

Optics

August: Concept of coherence, Spatial and temporal coherence, Coherence time, Coherence length, Area of coherence, Conditions for observing interference fringes, Interference by wave front division and amplitude division, Michelson's interferometer—working.

September: Principle and nature of fringes, Interference in thin films, Role of interference in anti-reflection and high reflection dielectric coatings, Multiple beam interference, Fabry-Perot interferometer, Nature of fringes, Newton Rings.

October: Huygens-Fresnel theory, half-period zones, Zone plates, Distinction between Fresnel and Fraunhofer diffraction, Fraunhofer diffraction at rectangular and circular apertures, Effects of diffraction in optical imaging, resolving power of telescope, The diffraction grating, its use as a spectroscopic element and its resolving power.

November: Concept and analytical treatment of un-polarized, plane polarized and elliptically polarized light. Double refraction, Nicol prism, Sheet polarizer, Retardation plates, Production and analysis of polarized light (quarter and half wave plates).

Lasers

January: Derivation of Einstein's relations, Concept of stimulated emission and population inversion, Broadening of spectral lines, natural, collision and Doppler broadening, Line width, Line profile, Absorption and amplification of a parallel beam of light passing through a medium.

February: Threshold condition, Introduction of three level and four level laser schemes, elementary theory of optical cavity, Longitudinal and transverse modes.

March: Types of lasers, Ruby and Nd: YAG lasers, He-Ne and CO_2 lasers-construction, mode of creating population inversion and output characteristics, Semiconductor lasers.

April: Dye lasers, Q-switching, Mode locking, Applications of lasers–a general outline, Basics of holography.

Quantum Mechanics-I

August: Brief introduction to need and development of quantum mechanics, Wave-particle duality, de-Broglie hypothesis, Complementarity and uncertainty principle, Gaussian wave-

packet, Schrodinger equation for a free particle, operator correspondence and equation for a particle subject to forces, Normalization and probability.

September: Interpretation of wave function, Super position principle, Expectation value, probability current and conservation of probability, Admissibility conditions on the wave function, Ehrenfest theorem, Fundamental postulates of wave mechanics, Eigen functions and eigen values, Operator formalism, Orthogonal systems, Expansion in eigen functions.

October: Hermitian operators, Simultaneous eigen functions, Equation of motion, Time dependent Schrodinger equation. Application to stationary states for one-dimension, Potential step, Potential barrier, Rectangular potential well, Degeneracy, Orthogonality, Linear harmonic oscillator.

November: Schrodinger equation for spherically symmetric potential, Spherical harmonics. Hydrogen atom energy levels and eigen functions. Degeneracy, Angular momentum.

Quantum Mechanics-II

January: Excitation of atom with radiation, Transition probability, Spontaneous transition, Selection rules and life time, Spectrum of hydrogen atom, Frank Hertz Experiment, Line structure, Normal Zeeman effect, Electron spin.

February: Stern Gerlach experiment, Spin orbit coupling (electron magnetic moment, total angular momentum), Hyperfine structure, Examples of one electron systems, Anomalous, Zeeman effect, Lande's-g factor (sodium D-lines).

March: Exchange symmetry of wave functions, exclusion principle, Shells, Sub shells in atoms, atomic spectra (Helium), L.S. coupling, Selection rules, Regularities in atomic spectra, Interaction energy, X-ray spectra, Mosley law, Absorption spectra, Auger effect, Molecular bonding.

April: Molecular spectra, Selection rules, Symmetric structures, Rotational, vibrational electronic level and spectra of molecules, Raman spectra.

Sem III Practicals

August:

1. Probability distribution using coloured dice coins.
2. Study the photoelectric effect and determine the value of Planck's constant.
3. To determine the refractive index of liquid using spectrometer.

September:

1. To determine the Cauchy's constants.
2. To study the refractive index of doubly refracting prism.

October:

1. To determine the wave length of a given light using bi-prism.
2. To determine the resolving power of a telescope.

Sem IV Practicals

January:

1. Study of rotation of plane of polarization with a polarimeter.
2. Set up Newton's rings to determine wave length of sodium light.

February:

1. To determine the wave length and dispersive power using plane diffraction grating (Use Hg source).
2. To determine the resolving power of a grating.
3. To determine the ionization potential of mercury.

March:

1. To measure an inaccessible height using sextant.

2. To study the absorption spectra of iodine vapours.
3. Study of variation of light intensity using photovoltaic cell/inverse square law.

B.Sc. III

Condensed Matter Physics-I

August: Crystal Structure, Symmetry operations for a two-dimensional crystal, Two dimensional Bravais lattices, Three dimensional Bravais lattices, Basic primitive cells.

September: Crystal planes and Miller indices, Diamond and NaCI structure, Packing fraction for Cubic and hexagonal closed packed structure.

October: Bragg's Law, Experimental methods for crystal structure studies, laue equations, Reciprocal lattices of SC, BCC and FCC.

November: Bragg's Law in reciprocal lattice, Brillouin zones and its derivation in two dimensions, Structure factor and atomic form factor.

Condensed Matter Physics -II

January: Lattice vibrations, Concepts of phonons, Scattering of protons by phonons, Vibration of mono-atomic, di-atomic, linear chains, Density of modes.

February: Einstein and Debye models of specific heat, Free electron model of metals, Free electron, Fermi gas and Fermi energy, Band theory, Kronig-Penney Model, Metals and insulators.

March: Conductivity and its variation with temperature in semiconductors, Fermi levels in intrinsic and extrinsic semiconductors, Qualitative discussion of band gap in semiconductors, superconductivity.

April: Magnetic field effect in superconductors, BCS theory, Thermal properties of superconductors.

Electronics-I

August: Concept of current and voltage sources, p-n junction, Biasing of diode, V-A characteristics. Diode equation, Breakdown diodes: Zener breakdown and avalanche breakdown, Zener diode. Rectification: half wave, full wave rectifiers and bridge rectifiers, Qualitative analysis of Filter circuits (RC LC and π filters) Efficiency, Ripple factor, Voltage regulation, Voltage multiplier circuits.

September: Structure and working, relation between different currents in transistors, Sign conventions, Amplifying action, Different configurations of a transistor and their comparison, CB and CE characteristics.

October: Structure, Characteristics, operation of FET, JFET and MOSFET, Pinch off voltage, Enhancement and Depletion mode, Comparison of JFETs and MOSFETs, Difference in field effect transistor and junction type transistor.

November: Photo-conductive devices: Photo-conductive cell, Photodiode, Solar cell, LED, LCD.

Electronics-II

January: Thyristor, SCR, TRIAC, DIAC: Construction, Characteristics and Operation; Comparison between transistors and thyristors; Difference between SCR and TRIAC, UJT: its construction, Equivalent circuit, Characteristics and parameters, uses, Thermistor: Types, Construction, Characteristics, Uses, Advantages over other temperature sensing devices.

February: IMPATT and TRAPATT devices, PIN diode: Construction, Characteristics, Applications, Gunn effect and diodes: Mechanism, Characteristic, Negative differential

resistivity and Domain formation, Tunnel diode: Tunnelling Phenomenon, Operation, Applications, Merits and Drawbacks.

March: Transistor biasing: Stabilization of operating point, Fixed bias, Collector to base bias, Bias circuit with emitter resistor, Voltage divider biasing circuit, CE amplifier: Working and analysis using h-parameters, Equivalent circuits, Determination of current gain, Power gain, Input impedance, FET amplifier: Voltage, Current and Power gain.

April: Feed-back in amplifiers: Types & advantage of negative feedback, Emitter follower as negative feed-back circuit.

Nuclear and Radiation Physics

August: Constituents of nucleus and their intrinsic properties, Qualitative facts about size, mass, density, energy, charge, Binding energy, angular momentum, magnetic moment and electric quadruple moments of the nucleus, Wave mechanical properties of nucleus, average binding energy and its variation with mass numbers.

September: Properties of nuclear forces, Non-existence of electrons in the nucleus and neutron-proton model, Liquid drop model and semi empirical mass formula, Conditions of nuclear stability, Fermi gas model, Nuclear shell model, Experimental evidence of magic numbers and its explanation.

October: Radioactivity, Modes of decay and successive radioactivity, Alpha emission, Electron emission, Positron emission, Electron capture, Gamma-ray emission, Internal conversion, Qualitative discussion of alpha, beta and gamma spectra, Geiger-Nuttal rule, Neutrino hypothesis of beta decay, Evidence of existence of neutrino.

November: Qualitative discussion of alpha and beta decay theories, Nuclear reactions, Reaction cross section, Conservation laws, Kinematics of nuclear reaction, Q-value and its physical significance, Compound nucleus, Possible reaction with high energy particles.

Nuclear and Particle Physics

January: Energy loss due to ionization (Bethe's formula), Energy loss of electrons, Bremsstrahlung, Interactions of gamma rays with matter, Radiation loss by fast electrons, Radiation length, Electron-positron annihilation.

February: Cyclotron, Betatron, Qualitative discussion of Synchrotron, Collider machines and linear accelerator, Ionization chamber, Proportional counter, GM counter, Scintillation counter, Solid state detectors, Elementary particles and their masses.

March: Decay modes, Classification of these particles, types of interactions, Conservation laws and quantum numbers, Concepts of isospin, Strangeness, Parity, Charge conjugation, Antiparticles, Gell-Mann method, Decay and strange particles.

April: Particle symmetry, Introduction to quarks and qualitative discussion of the quark model.

Sem V Practicals

August:

1. Measurement of reverse saturation current in p-n junction diode at various temperatures and to find the approximate value of energy gap.
2. To draw forward and reverse bias characteristics of a p-n junction diode and draw a load line.
3. Study of a diode as clipping element.

September:

1. To show the variation of resistance of a thermistor with temperature.

2. To measure the efficiency and ripple factors for a) Half-wave (b) full wave and (C) bridge rectifier circuits.
3. To draw the characteristics of a Zener diode.

October:

1. To study the stabilization of output voltage of a power supply with Zener diode.
2. To Plot common Emitter Characteristics of a transistor (pnp or npn).
3. To draw output and mutual Characteristics of an FET and determine its parameters.

Sem VI Practicals

January:

1. To trace the B-H curves for different materials using CRO and find the magnetic parameters from these.
2. Study of a diode as clamping element.

February:

1. To Plot common base Characteristics and determine h-parameters of a given transistor.
2. To study the characteristics of a thermistor and find its parameters.
3. To study the gain of an amplifier at different frequencies and to find band width and gain bandwidth product.

March:

1. To draw the plateau of a GM counter and find its operating voltage.
2. To study the statistical fluctuations of G.M. Counter to find its standard deviation.

SHAHEED MAJOR HARMINDERPAL SINGH (SHAURYA CHAKRA) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

DEPARTMENT OF PHYSICS

UNITIZATION PLAN (2019-2020)

B.Sc. I

Mechanics-I

August: Cartesian and spherical polar co-ordinate systems, area, volume, displacement, velocity and acceleration in these systems, Solid angle, Various forces in Nature(brief introduction), Centre of mass, Equivalent one body problem.

September: Central forces, Equation of motion under central force, Equation of orbit in inverse square, Force field and turning points, Kepler laws and their derivations, Relationship of conservation laws and symmetries of space and time.

October: Inertial frame of reference, Coriolis force and its applications, Variation of acceleration due to gravity with latitude, Focault pendulum (qualitative), Elastic collision in Laboratory and C.M. system, velocities, angels and energies.

November: Cross section of elastic scattering, Rutherford scattering (qualitative).

Mechanics-II

January: Rigid body motion: Rotational motion, principal moments and axe, Euler's equations; precession and elementary gyroscope, Galilean transformation and Invariance, Non-Inertial frames, concept of stationary universal frame of reference and ether.

February: Michelson-Morley experiment and its result, Postulates of special theory of relativity, Lorentz transformations, Observer and viewer in relativity, Relativity of simultaneity.

March: Length, Time, Velocities, Relativistic Doppler effect, Variation of mass with velocity, mass-energy equivalence, rest mass in an inelastic collision.

April: Relativistic momentum and energy, their transformation, concepts of Minkowski space, four vector formulation.

Vibrations and Waves-I

August: Simple harmonic motion, energy of a Simple Harmonic Oscillation (SHO), Compound pendulum, Electrical oscillations, Transverse vibrations of a mass on a string, composition of two perpendicular SHM of same period and of period ratio 1 : 2, Anharmonic oscillations.

September: Decay of free vibrations due to damping, Differential equation of motion, types of damping, Determination of damping co-efficient-logarithmic decrement, relaxation time and Q-Factor, Electromagnetic damping (Electrical oscillator).

Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

(SHILPY BHULLAR)
DEPARTMENT OF PHYSICS

October: Differential equation for forced mechanical and electrical oscillators, Transient and steady state oscillation, Displacement and velocity variation with driving force frequency, variation of phase with frequency resonance.
November: Power supplied to an oscillator and its variation with frequency, Q value of a forced oscillator and band width, Q-value as an amplification factor of low frequency response.

Vibrations and Waves-II
January: Stiffness coupled oscillators, Normal co-ordinates and normal modes of vibration, Inductance coupling of electrical oscillators, Types of waves, Wave equation (transverse) and its solution, The string as a forced oscillator, Characteristic impedance of a string, Impedance matching.
February: Reflection and transmission of energy, Reflection and Transmission Energy, Reflection and transmission of string, wave and group velocity, Standing waves on a string of fixed length, Energy of vibrating energy string, wave and group velocity.
March: Physical interpretation of Maxwell's equations, Electromagnetic waves and wave equation in a medium having finite permeability and permittivity but with conductivity $\sigma=0$, Pointing vector, Impedance of a dielectric to EM waves, EM waves in a conducting medium and skin depth, EM waves velocity in a conductor an anomalous dispersion.
April: Response of a conducting medium of EM waves, Reflection and transmission of EM waves at a boundary of two dielectric media for normal incidence, Reflection of EM waves from the surface of a conductor at normal incidence.

Electricity and Magnetism-I
August: Basic ideas of vector calculus, Gradient, Divergence, curl and their physical significance, Coulomb's law in vector form, long uniformly charged wire, Charged disc. Stokes's theorem and its applications in electrostatic field, curl E= 0.
September: Electric field as gradient of scalar potential, Calculation of E due to a point charge and dipole from potential, Potential due to arbitrary charge distribution and multipole moments, Poisson and Laplace's equations and their solutions in Cartesian and concept of electrical images.
October: Calculation of electric potential and field due a point charge placed near an infinitely conducting sheet, Current and current density, equation of continuity, Microscopic form of Ohm's Law, ($J=\sigma E$) and conductivity, Failure of Ohm's Law.
November: Invariance of charge, E in different frames of reference, Field of a point charge moving with constant velocity, Interaction between moving charges and force between parallel currents.

Electricity and Magnetism-II
January: Behaviour of various substances in magnetic field, Definition of **M** and **H** and their relation to free and bound currents, Permeability and susceptibilities and their inter-relationship, Orbital motion of electrons and diamagnetism, Electron spin and paramagnetism, Ferromagnetism, Domain theory of Ferromagnetism, Hysteresis Loss.
February: Magnetisation curve Ferrites, Lorentz's force, Definition of B, Biot-Savart's Law and its applications to long straight wire, circular current loop and solenoid, Ampere's Circuital law and its applications, Divergence and curl of **B**, Hall effect, expression and co-efficient.
March: Vector potential, Definition and derivation of current density and its use in calculation of change in magnetic field at a current sheet, Transformation equations for **E** and **B** from one frame to another, Faraday's Law and EM induction, Displacement current, Maxwell's equations.

April: Mutual inductance and reciprocity theorem, Self-inductance L for solenoid, Coupling of Electrical circuits, Analysis of LCR series and parallel resonant circuits, Q-factor, Power consumed, Power factor.

Sem I Practicals

August:

1. To establish relationship between torque and angular acceleration using fly wheel and hence to find inertia of flywheel.
2. To study one-dimensional collision using two hanging spheres of different materials.

September:

1. Study the dependence of moment of inertia on distribution of mass (by noting time periods of oscillations) using objects of various geometrical shapes but of same mass.
2. To set up CRO for Sine and Square wave and to find their frequency and amplitude.

October:

1. To study the efficiency of an electric kettle/heater element with varying input voltages.
2. To study the working of energy meter.

Sem II Practicals

January:

1. To study the variation of time period with distance between centre of suspension and centre of gravity for a bar pendulum and to determine
   i) Radius of gyration of bar pendulum about an axis through its Centre of Gravity and perpendicular to its length.
   ii) Value of Centre of Gravity, g.
2. Determination of g by Kater's pendulum.

February:

1. Determination of unknown capacitance by flashing and quenching of neon lamp.
2. To study the resonance in series and parallel LCR circuits for different resistances and calculate Q-value.

March:

1. Determination of modulus of rigidity of material of a wire using Maxwell's needle.
2. Verify laws of electromagnetic induction.

B.Sc. II

Statistical Physics and Thermodynamics-I

August: Basic ideas of statistical physics, Scope of statistical physics, Basic ideas about probability, distribution of four distinguishable particles in two compartments of equal size. Concept of macro states, microstates, thermodynamic probability, Effects of constraints on the system.

September: Distribution of n particles in two compartments, Deviation from the state of maximum probability, equilibrium state of dynamic system, Distribution of distinguishable n particles in k compartments of unequal sizes, Phase space and its division into elementary cells, Three kinds of statistics, The basic approach in the three statistics.

October: Maxwell Boltzmann (MB) statistics applied to an ideal gas in equilibrium, Experimental verification of Maxwell Boltzmann law of distribution of molecular speeds, Need for quantum statistics-Bose-Einstein (B.E.) statistics, Derivation of Planck's law of radiation.

November: Deduction of Wien's displacement law and Stefan's law from Planck's law, Fermi-Dirac (F.D.) statistics, Comparison of M.B., B.E. and F.D. statistics.

Statistical Physics and Thermodynamics-II

January: Statistical definition of entropy, Change of entropy of a system, Additive nature of entropy, Law of increase of entropy, Reversible and irreversible process and their examples, Work done in a reversible process, Examples of increase of entropy in natural processes, Entropy and disorder, Brief review of terms and laws of thermodynamics.

February: Carnot's cycle, Entropy changes in Carnot cycle, Applications of thermodynamics to thermoelectric effect, Change of entropy along a reversible path in a P.V. diagram, Entropy of a perfect gas, Equation of state of an ideal gas from simple statistical consideration, Heat death of the universe.

March: Derivation of Maxwell's thermodynamical relations, Cooling produced by adiabatic stretching, Adiabatic compression, Change of internal energy with volume, specific heat at constant pressure and constant volume, Expression for Cp-Cv , Change of state and Clapeyron equation.

April: Thermodynamical treatment of Joule-Thomson effect, Use of Joule-Thomson effect, liquefaction of helium, Production of very low temperature by adiabatic demagnetization.

Optics

August: Concept of coherence, Spatial and temporal coherence, Coherence time, Coherence length, Area of coherence, Conditions for observing interference fringes, Interference by wave front division and amplitude division, Michelson's interferometer—working.

September: Principle and nature of fringes, Interference in thin films, Role of interference in anti-reflection and high reflection dielectric coatings, Multiple beam interference, Fabry-Perot interferometer, Nature of fringes, Newton Rings.

October: Huygens-Fresnel theory, half-period zones, Zone plates, Distinction between Fresnel and Fraunhofer diffraction, Fraunhofer diffraction at rectangular and circular apertures, Effects of diffraction in optical imaging, resolving power of telescope, The diffraction grating, its use as a spectroscopic element and its resolving power.

November: Concept and analytical treatment of un-polarized, plane polarized and elliptically polarized light. Double refraction, Nicol prism, Sheet polarizer, Retardation plates, Production and analysis of polarized light (quarter and half wave plates).

Lasers

January: Derivation of Einstein's relations, Concept of stimulated emission and population inversion, Broadening of spectral lines, natural, collision and Doppler broadening, Line width, Line profile, Absorption and amplification of a parallel beam of light passing through a medium.

February: Threshold condition, Introduction of three level and four level laser schemes, elementary theory of optical cavity, Longitudinal and transverse modes.

March: Types of lasers, Ruby and Nd: YAG lasers, He-Ne and CO_2 lasers-construction, mode of creating population inversion and output characteristics, Semiconductor lasers.

April: Dye lasers, Q-switching, Mode locking, Applications of lasers–a general outline, Basics of holography.

Quantum Mechanics-I

August: Brief introduction to need and development of quantum mechanics, Wave-particle duality, de-Broglie hypothesis, Complementarity and uncertainty principle, Gaussian wave-

packet, Schrodinger equation for a free particle, operator correspondence and equation for a particle subject to forces, Normalization and probability.

September: Interpretation of wave function, Super position principle, Expectation value, probability current and conservation of probability, Admissibility conditions on the wave function, Ehrenfest theorem, Fundamental postulates of wave mechanics, Eigen functions and eigen values, Operator formalism, Orthogonal systems, Expansion in eigen functions.

October: Hermitian operators, Simultaneous eigen functions, Equation of motion, Time dependent Schrodinger equation. Application to stationary states for one-dimension, Potential step, Potential barrier, Rectangular potential well, Degeneracy, Orthogonality, Linear harmonic oscillator.

November: Schrodinger equation for spherically symmetric potential, Spherical harmonics. Hydrogen atom energy levels and eigen functions. Degeneracy, Angular momentum.

Quantum Mechanics-II

January: Excitation of atom with radiation, Transition probability, Spontaneous transition, Selection rules and life time, Spectrum of hydrogen atom, Frank Hertz Experiment, Line structure, Normal Zeeman effect, Electron spin.

February: Stern Gerlach experiment, Spin orbit coupling (electron magnetic moment, total angular momentum), Hyperfine structure, Examples of one electron systems, Anomalous, Zeeman effect, Lande's-g factor (sodium D-lines).

March: Exchange symmetry of wave functions, exclusion principle, Shells, Sub shells in atoms, atomic spectra (Helium), L.S. coupling, Selection rules, Regularities in atomic spectra, Interaction energy, X-ray spectra, Mosley law, Absorption spectra, Auger effect, Molecular bonding.

April: Molecular spectra, Selection rules, Symmetric structures, Rotational, vibrational electronic level and spectra of molecules, Raman spectra.

Sem III Practicals

August:

1. Probability distribution using coloured dice coins.
2. Study the photoelectric effect and determine the value of Planck's constant.
3. To determine the refractive index of liquid using spectrometer.

September:

1. To determine the Cauchy's constants.
2. To study the refractive index of doubly refracting prism.

October:

1. To determine the wave length of a given light using bi-prism.
2. To determine the resolving power of a telescope.

Sem IV Practicals

January:

1. Study of rotation of plane of polarization with a polarimeter.
2. Set up Newton's rings to determine wave length of sodium light.

February:

1. To determine the wave length and dispersive power using plane diffraction grating (Use Hg source).
2. To determine the resolving power of a grating.
3. To determine the ionization potential of mercury.

March:

1. To measure an inaccessible height using sextant.

2. To study the absorption spectra of iodine vapours.
3. Study of variation of light intensity using photovoltaic cell/inverse square law.

B.Sc. III

Condensed Matter Physics-I

August: Crystal Structure, Symmetry operations for a two-dimensional crystal, Two dimensional Bravais lattices, Three dimensional Bravais lattices, Basic primitive cells.

September: Crystal planes and Miller indices, Diamond and NaCI structure, Packing fraction for Cubic and hexagonal closed packed structure.

October: Bragg's Law, Experimental methods for crystal structure studies, laue equations, Reciprocal lattices of SC, BCC and FCC.

November: Bragg's Law in reciprocal lattice, Brillouin zones and its derivation in two dimensions, Structure factor and atomic form factor.

Condensed Matter Physics -II

January: Lattice vibrations, Concepts of phonons, Scattering of protons by phonons, Vibration of mono-atomic, di-atomic, linear chains, Density of modes.

February: Einstein and Debye models of specific heat, Free electron model of metals, Free electron, Fermi gas and Fermi energy, Band theory, Kronig-Penney Model, Metals and insulators.

March: Conductivity and its variation with temperature in semiconductors, Fermi levels in intrinsic and extrinsic semiconductors, Qualitative discussion of band gap in semiconductors, superconductivity.

April: Magnetic field effect in superconductors, BCS theory, Thermal properties of superconductors.

Electronics-I

August: Concept of current and voltage sources, p-n junction, Biasing of diode, V-A characteristics. Diode equation, Breakdown diodes: Zener breakdown and avalanche breakdown, Zener diode. Rectification: half wave, full wave rectifiers and bridge rectifiers, Qualitative analysis of Filter circuits (RC LC and π filters) Efficiency, Ripple factor, Voltage regulation, Voltage multiplier circuits.

September: Structure and working, relation between different currents in transistors, Sign conventions, Amplifying action, Different configurations of a transistor and their comparison, CB and CE characteristics.

October: Structure, Characteristics, operation of FET, JFET and MOSFET, Pinch off voltage, Enhancement and Depletion mode, Comparison of JFETs and MOSFETs, Difference in field effect transistor and junction type transistor.

November: Photo-conductive devices: Photo-conductive cell, Photodiode, Solar cell, LED, LCD.

Electronics-II

January: Thyristor, SCR, TRIAC, DIAC: Construction, Characteristics and Operation; Comparison between transistors and thyristors; Difference between SCR and TRIAC, UJT: its construction, Equivalent circuit, Characteristics and parameters, uses, Thermistor: Types, Construction, Characteristics, Uses, Advantages over other temperature sensing devices.

February: IMPATT and TRAPATT devices, PIN diode: Construction, Characteristics, Applications, Gunn effect and diodes: Mechanism, Characteristic, Negative differential

resistivity and Domain formation, Tunnel diode: Tunnelling Phenomenon, Operation, Applications, Merits and Drawbacks.

March: Transistor biasing: Stabilization of operating point, Fixed bias, Collector to base bias, Bias circuit with emitter resistor, Voltage divider biasing circuit, CE amplifier: Working and analysis using h-parameters, Equivalent circuits, Determination of current gain, Power gain, Input impedance, FET amplifier: Voltage, Current and Power gain.

April: Feed-back in amplifiers: Types & advantage of negative feedback, Emitter follower as negative feed-back circuit.

Nuclear and Radiation Physics

August: Constituents of nucleus and their intrinsic properties, Qualitative facts about size, mass, density, energy, charge, Binding energy, angular momentum, magnetic moment and electric quadruple moments of the nucleus, Wave mechanical properties of nucleus, average binding energy and its variation with mass numbers.

September: Properties of nuclear forces, Non-existence of electrons in the nucleus and neutron-proton model, Liquid drop model and semi empirical mass formula, Conditions of nuclear stability, Fermi gas model, Nuclear shell model, Experimental evidence of magic numbers and its explanation.

October: Radioactivity, Modes of decay and successive radioactivity, Alpha emission, Electron emission, Positron emission, Electron capture, Gamma-ray emission, Internal conversion, Qualitative discussion of alpha, beta and gamma spectra, Geiger-Nuttal rule, Neutrino hypothesis of beta decay, Evidence of existence of neutrino.

November: Qualitative discussion of alpha and beta decay theories, Nuclear reactions, Reaction cross section, Conservation laws, Kinematics of nuclear reaction, Q-value and its physical significance, Compound nucleus, Possible reaction with high energy particles.

Nuclear and Particle Physics

January: Energy loss due to ionization (Bethe's formula), Energy loss of electrons, Bremsstrahlung, Interactions of gamma rays with matter, Radiation loss by fast electrons, Radiation length, Electron-positron annihilation.

February: Cyclotron, Betatron, Qualitative discussion of Synchrotron, Collider machines and linear accelerator, Ionization chamber, Proportional counter, GM counter, Scintillation counter, Solid state detectors, Elementary particles and their masses.

March: Decay modes, Classification of these particles, types of interactions, Conservation laws and quantum numbers, Concepts of isospin, Strangeness, Parity, Charge conjugation, Antiparticles, Gell-Mann method, Decay and strange particles.

April: Particle symmetry, Introduction to quarks and qualitative discussion of the quark model.

Sem V Practicals

August:

1. Measurement of reverse saturation current in p-n junction diode at various temperatures and to find the approximate value of energy gap.
2. To draw forward and reverse bias characteristics of a p-n junction diode and draw a load line.
3. Study of a diode as clipping element.

September:

1. To show the variation of resistance of a thermistor with temperature.

2. To measure the efficiency and ripple factors for a) Half-wave (b) full wave and (C) bridge rectifier circuits.
3. To draw the characteristics of a Zener diode.

October:

1. To study the stabilization of output voltage of a power supply with Zener diode.
2. To Plot common Emitter Characteristics of a transistor (pnp or npn).
3. To draw output and mutual Characteristics of an FET and determine its parameters.

Sem VI Practicals

January:

1. To trace the B-H curves for different materials using CRO and find the magnetic parameters from these.
2. Study of a diode as clamping element.

February:

1. To Plot common base Characteristics and determine h-parameters of a given transistor.
2. To study the characteristics of a thermistor and find its parameters.
3. To study the gain of an amplifier at different frequencies and to find band width and gain bandwidth product.

March:

1. To draw the plateau of a GM counter and find its operating voltage.
2. To study the statistical fluctuations of G.M. Counter to find its standard deviation.

SHAHEED MAJOR HARMINDERPAL SINGH (SHAURYA CHAKRA) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

DEPARTMENT OF PHYSICS

UNITIZATION PLAN (2020-2021)

B.Sc. I

Mechanics-I

August: Cartesian and spherical polar co-ordinate systems, area, volume, displacement, velocity and acceleration in these systems, Solid angle, Various forces in Nature(brief introduction), Centre of mass, Equivalent one body problem.

September: Central forces, Equation of motion under central force, Equation of orbit in inverse square, Force field and turning points, Kepler laws and their derivations, Relationship of conservation laws and symmetries of space and time.

October: Inertial frame of reference, Coriolis force and its applications, Variation of acceleration due to gravity with latitude, Focault pendulum (qualitative), Elastic collision in Laboratory and C.M. system, velocities, angels and energies.

November: Cross section of elastic scattering, Rutherford scattering (qualitative).

Mechanics-II

January: Rigid body motion: Rotational motion, principal moments and axe, Euler's equations; precession and elementary gyroscope, Galilean transformation and Invariance, Non-Inertial frames, concept of stationary universal frame of reference and ether.

February: Michelson-Morley experiment and its result, Postulates of special theory of relativity, Lorentz transformations, Observer and viewer in relativity, Relativity of simultaneity.

March: Length, Time, Velocities, Relativistic Doppler effect, Variation of mass with velocity, mass-energy equivalence, rest mass in an inelastic collision.

April: Relativistic momentum and energy, their transformation, concepts of Minkowski space, four vector formulation.

Vibrations and Waves-I

August: Simple harmonic motion, energy of a Simple Harmonic Oscillation (SHO), Compound pendulum, Electrical oscillations, Transverse vibrations of a mass on a string, composition of two perpendicular SHM of same period and of period ratio 1 : 2, Anharmonic oscillations.

September: Decay of free vibrations due to damping, Differential equation of motion, types of damping, Determination of damping co-efficient-logarithmic decrement, relaxation time and Q-Factor, Electromagnetic damping (Electrical oscillator).

Munish
Physics
Department

Principal,
SM[illegible] Govt. College,
Sahibzada Ajit Singh Nagar.

October: Differential equation for forced mechanical and electrical oscillators, Transient and steady state oscillation, Displacement and velocity variation with driving force frequency, variation of phase with frequency resonance.
November: Power supplied to an oscillator and its variation with frequency, Q value of a forced oscillator and band width, Q-value as an amplification factor of low frequency response.

Vibrations and Waves-II
January: Stiffness coupled oscillators, Normal co-ordinates and normal modes of vibration, Inductance coupling of electrical oscillators, Types of waves, Wave equation (transverse) and its solution, The string as a forced oscillator, Characteristic impedance of a string, Impedance matching.
February: Reflection and transmission of energy, Reflection and Transmission Energy, Reflection and transmission of string, wave and group velocity, Standing waves on a string of fixed length, Energy of vibrating energy string, wave and group velocity.
March: Physical interpretation of Maxwell's equations, Electromagnetic waves and wave equation in a medium having finite permeability and permittivity but with conductivity $\sigma=0$, Pointing vector, Impedance of a dielectric to EM waves, EM waves in a conducting medium and skin depth, EM waves velocity in a conductor an anomalous dispersion.
April: Response of a conducting medium of EM waves, Reflection and transmission of EM waves at a boundary of two dielectric media for normal incidence, Reflection of EM waves from the surface of a conductor at normal incidence.

Electricity and Magnetism-I
August: Basic ideas of vector calculus, Gradient, Divergence, curl and their physical significance, Coulomb's law in vector form, long uniformly charged wire, Charged disc. Stokes's theorem and its applications in electrostatic field, curl $E=0$.
September: Electric field as gradient of scalar potential, Calculation of E due to a point charge and dipole from potential, Potential due to arbitrary charge distribution and multipole moments, Poisson and Laplace's equations and their solutions in Cartesian and concept of electrical images.
October: Calculation of electric potential and field due a point charge placed near an infinitely conducting sheet, Current and current density, equation of continuity, Microscopic form of Ohm's Law, ($J=\sigma E$) and conductivity, Failure of Ohm's Law.
November: Invariance of charge, E in different frames of reference, Field of a point charge moving with constant velocity, Interaction between moving charges and force between parallel currents.

Electricity and Magnetism-II
January: Behaviour of various substances in magnetic field, Definition of **M** and **H** and their relation to free and bound currents, Permeability and susceptibilities and their inter-relationship, Orbital motion of electrons and diamagnetism, Electron spin and paramagnetism, Ferromagnetism, Domain theory of Ferromagnetism, Hysteresis Loss.
February: Magnetisation curve Ferrites, Lorentz's force, Definition of B, Biot-Savart's Law and its applications to long straight wire, circular current loop and solenoid, Ampere's Circuital law and its applications, Divergence and curl of **B**, Hall effect, expression and co-efficient.
March: Vector potential, Definition and derivation of current density and its use in calculation of change in magnetic field at a current sheet, Transformation equations for **E** and **B** from one frame to another, Faraday's Law and EM induction, Displacement current, Maxwell's equations.

Member
Physics Deptt.

April: Mutual inductance and reciprocity theorem, Self-inductance L for solenoid, Coupling of Electrical circuits, Analysis of LCR series and parallel resonant circuits, Q-factor, Power consumed, Power factor.

Sem I Practicals

August:

1. To establish relationship between torque and angular acceleration using fly wheel and hence to find inertia of flywheel.
2. To study one-dimensional collision using two hanging spheres of different materials.

September:

1. Study the dependence of moment of inertia on distribution of mass (by noting time periods of oscillations) using objects of various geometrical shapes but of same mass.
2. To set up CRO for Sine and Square wave and to find their frequency and amplitude.

October:

1. To study the efficiency of an electric kettle/heater element with varying input voltages.
2. To study the working of energy meter.

Sem II Practicals

January:

1. To study the variation of time period with distance between centre of suspension and centre of gravity for a bar pendulum and to determine
   i) Radius of gyration of bar pendulum about an axis through its Centre of Gravity and perpendicular to its length.
   ii) Value of Centre of Gravity, g.
2. Determination of g by Kater's pendulum.

February:

1. Determination of unknown capacitance by flashing and quenching of neon lamp.
2. To study the resonance in series and parallel LCR circuits for different resistances and calculate Q-value.

March:

1. Determination of modulus of rigidity of material of a wire using Maxwell's needle.
2. Verify laws of electromagnetic induction.

B.Sc. II

Statistical Physics and Thermodynamics-I

August: Basic ideas of statistical physics, Scope of statistical physics, Basic ideas about probability, distribution of four distinguishable particles in two compartments of equal size. Concept of macro states, microstates, thermodynamic probability, Effects of constraints on the system.

September: Distribution of n particles in two compartments, Deviation from the state of maximum probability, equilibrium state of dynamic system, Distribution of distinguishable n particles in k compartments of unequal sizes, Phase space and its division into elementary cells, Three kinds of statistics, The basic approach in the three statistics.

October: Maxwell Boltzmann (MB) statistics applied to an ideal gas in equilibrium, Experimental verification of Maxwell Boltzmann law of distribution of molecular speeds, Need for quantum statistics-Bose-Einstein (B.E.) statistics, Derivation of Planck's law of radiation.

Manisha

November: Deduction of Wien's displacement law and Stefan's law from Planck's law, Fermi-Dirac (F.D.) statistics, Comparison of M.B., B.E. and F.D. statistics.

Statistical Physics and Thermodynamics-II

January: Statistical definition of entropy, Change of entropy of a system, Additive nature of entropy, Law of increase of entropy, Reversible and irreversible process and their examples, Work done in a reversible process, Examples of increase of entropy in natural processes, Entropy and disorder, Brief review of terms and laws of thermodynamics.

February: Carnot's cycle, Entropy changes in Carnot cycle, Applications of thermodynamics to thermoelectric effect, Change of entropy along a reversible path in a P.V. diagram, Entropy of a perfect gas, Equation of state of an ideal gas from simple statistical consideration, Heat death of the universe.

March: Derivation of Maxwell's thermodynamical relations, Cooling produced by adiabatic stretching, Adiabatic compression, Change of internal energy with volume, specific heat at constant pressure and constant volume, Expression for Cp-Cv , Change of state and Clapeyron equation.

April: Thermodynamical treatment of Joule-Thomson effect, Use of Joule-Thomson effect, liquefaction of helium, Production of very low temperature by adiabatic demagnetization.

Optics

August: Concept of coherence, Spatial and temporal coherence, Coherence time, Coherence length, Area of coherence, Conditions for observing interference fringes, Interference by wave front division and amplitude division, Michelson's interferometer—working.

September: Principle and nature of fringes, Interference in thin films, Role of interference in anti-reflection and high reflection dielectric coatings, Multiple beam interference, Fabry-Perot interferometer, Nature of fringes, Newton Rings.

October: Huygens-Fresnel theory, half-period zones, Zone plates, Distinction between Fresnel and Fraunhofer diffraction, Fraunhofer diffraction at rectangular and circular apertures, Effects of diffraction in optical imaging, resolving power of telescope, The diffraction grating, its use as a spectroscopic element and its resolving power.

November: Concept and analytical treatment of un-polarized, plane polarized and elliptically polarized light. Double refraction, Nicol prism, Sheet polarizer, Retardation plates, Production and analysis of polarized light (quarter and half wave plates).

Lasers

January: Derivation of Einstein's relations, Concept of stimulated emission and population inversion, Broadening of spectral lines, natural, collision and Doppler broadening, Line width, Line profile, Absorption and amplification of a parallel beam of light passing through a medium.

February: Threshold condition, Introduction of three level and four level laser schemes, elementary theory of optical cavity, Longitudinal and transverse modes.

March: Types of lasers, Ruby and Nd: YAG lasers, He-Ne and CO_2 lasers-construction, mode of creating population inversion and output characteristics, Semiconductor lasers.

April: Dye lasers, Q-switching, Mode locking, Applications of lasers–a general outline, Basics of holography.

Quantum Mechanics-I

August: Brief introduction to need and development of quantum mechanics, Wave-particle duality, de-Broglie hypothesis, Complementarity and uncertainty principle, Gaussian wave-

Manisha

packet, Schrodinger equation for a free particle, operator correspondence and equation for a particle subject to forces, Normalization and probability.

September: Interpretation of wave function, Super position principle, Expectation value, probability current and conservation of probability, Admissibility conditions on the wave function, Ehrenfest theorem, Fundamental postulates of wave mechanics, Eigen functions and eigen values, Operator formalism, Orthogonal systems, Expansion in eigen functions.

October: Hermitian operators, Simultaneous eigen functions, Equation of motion, Time dependent Schrodinger equation. Application to stationary states for one-dimension, Potential step, Potential barrier, Rectangular potential well, Degeneracy, Orthogonality, Linear harmonic oscillator.

November: Schrodinger equation for spherically symmetric potential, Spherical harmonics. Hydrogen atom energy levels and eigen functions. Degeneracy, Angular momentum.

Quantum Mechanics-II

January: Excitation of atom with radiation, Transition probability, Spontaneous transition, Selection rules and life time, Spectrum of hydrogen atom, Frank Hertz Experiment, Line structure, Normal Zeeman effect, Electron spin.

February: Stern Gerlach experiment, Spin orbit coupling (electron magnetic moment, total angular momentum), Hyperfine structure, Examples of one electron systems, Anomalous, Zeeman effect, Lande's-g factor (sodium D-lines).

March: Exchange symmetry of wave functions, exclusion principle, Shells, Sub shells in atoms, atomic spectra (Helium), L.S. coupling, Selection rules, Regularities in atomic spectra, Interaction energy, X-ray spectra, Mosley law, Absorption spectra, Auger effect, Molecular bonding.

April: Molecular spectra, Selection rules, Symmetric structures, Rotational, vibrational electronic level and spectra of molecules, Raman spectra.

Sem III Practicals

August:

1. Probability distribution using coloured dice coins.
2. Study the photoelectric effect and determine the value of Planck's constant.
3. To determine the refractive index of liquid using spectrometer.

September:

1. To determine the Cauchy's constants.
2. To study the refractive index of doubly refracting prism.

October:

1. To determine the wave length of a given light using bi-prism.
2. To determine the resolving power of a telescope.

Sem IV Practicals

January:

1. Study of rotation of plane of polarization with a polarimeter.
2. Set up Newton's rings to determine wave length of sodium light.

February:

1. To determine the wave length and dispersive power using plane diffraction grating (Use Hg source).
2. To determine the resolving power of a grating.
3. To determine the ionization potential of mercury.

March:

1. To measure an inaccessible height using sextant.

2. To study the absorption spectra of iodine vapours.
3. Study of variation of light intensity using photovoltaic cell/inverse square law.

B.Sc. III

Condensed Matter Physics-I

August: Crystal Structure, Symmetry operations for a two-dimensional crystal, Two dimensional Bravais lattices, Three dimensional Bravais lattices, Basic primitive cells.

September: Crystal planes and Miller indices, Diamond and NaCI structure, Packing fraction for Cubic and hexagonal closed packed structure.

October: Bragg's Law, Experimental methods for crystal structure studies, laue equations, Reciprocal lattices of SC, BCC and FCC.

November: Bragg's Law in reciprocal lattice, Brillouin zones and its derivation in two dimensions, Structure factor and atomic form factor.

Condensed Matter Physics -II

January: Lattice vibrations, Concepts of phonons, Scattering of protons by phonons, Vibration of mono-atomic, di-atomic, linear chains, Density of modes.

February: Einstein and Debye models of specific heat, Free electron model of metals, Free electron, Fermi gas and Fermi energy, Band theory, Kronig-Penney Model, Metals and insulators.

March: Conductivity and its variation with temperature in semiconductors, Fermi levels in intrinsic and extrinsic semiconductors, Qualitative discussion of band gap in semiconductors, superconductivity.

April: Magnetic field effect in superconductors, BCS theory, Thermal properties of superconductors.

Electronics-I

August: Concept of current and voltage sources, p-n junction, Biasing of diode, V-A characteristics. Diode equation, Breakdown diodes: Zener breakdown and avalanche breakdown, Zener diode. Rectification: half wave, full wave rectifiers and bridge rectifiers, Qualitative analysis of Filter circuits (RC LC and π filters) Efficiency, Ripple factor, Voltage regulation, Voltage multiplier circuits.

September: Structure and working, relation between different currents in transistors, Sign conventions, Amplifying action, Different configurations of a transistor and their comparison, CB and CE characteristics.

October: Structure, Characteristics, operation of FET, JFET and MOSFET, Pinch off voltage, Enhancement and Depletion mode, Comparison of JFETs and MOSFETs, Difference in field effect transistor and junction type transistor.

November: Photo-conductive devices: Photo-conductive cell, Photodiode, Solar cell, LED, LCD.

Electronics-II

January: Thyristor, SCR, TRIAC, DIAC: Construction, Characteristics and Operation; Comparison between transistors and thyristors; Difference between SCR and TRIAC, UJT: its construction, Equivalent circuit, Characteristics and parameters, uses, Thermistor: Types, Construction, Characteristics, Uses, Advantages over other temperature sensing devices.

February: IMPATT and TRAPATT devices, PIN diode: Construction, Characteristics, Applications, Gunn effect and diodes: Mechanism, Characteristic, Negative differential

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resistivity and Domain formation, Tunnel diode: Tunnelling Phenomenon, Operation, Applications, Merits and Drawbacks.

March: Transistor biasing: Stabilization of operating point, Fixed bias, Collector to base bias, Bias circuit with emitter resistor, Voltage divider biasing circuit, CE amplifier: Working and analysis using h-parameters, Equivalent circuits, Determination of current gain, Power gain, Input impedance, FET amplifier: Voltage, Current and Power gain.

April: Feed-back in amplifiers: Types & advantage of negative feedback, Emitter follower as negative feed-back circuit.

Nuclear and Radiation Physics

August: Constituents of nucleus and their intrinsic properties, Qualitative facts about size, mass, density, energy, charge, Binding energy, angular momentum, magnetic moment and electric quadruple moments of the nucleus, Wave mechanical properties of nucleus, average binding energy and its variation with mass numbers.

September: Properties of nuclear forces, Non-existence of electrons in the nucleus and neutron-proton model, Liquid drop model and semi empirical mass formula, Conditions of nuclear stability, Fermi gas model, Nuclear shell model, Experimental evidence of magic numbers and its explanation.

October: Radioactivity, Modes of decay and successive radioactivity, Alpha emission, Electron emission, Positron emission, Electron capture, Gamma-ray emission, Internal conversion, Qualitative discussion of alpha, beta and gamma spectra, Geiger-Nuttal rule, Neutrino hypothesis of beta decay, Evidence of existence of neutrino.

November: Qualitative discussion of alpha and beta decay theories, Nuclear reactions, Reaction cross section, Conservation laws, Kinematics of nuclear reaction, Q-value and its physical significance, Compound nucleus, Possible reaction with high energy particles.

Nuclear and Particle Physics

January: Energy loss due to ionization (Bethe's formula), Energy loss of electrons, Bremsstrahlung, Interactions of gamma rays with matter, Radiation loss by fast electrons, Radiation length, Electron-positron annihilation.

February: Cyclotron, Betatron, Qualitative discussion of Synchrotron, Collider machines and linear accelerator, Ionization chamber, Proportional counter, GM counter, Scintillation counter, Solid state detectors, Elementary particles and their masses.

March: Decay modes, Classification of these particles, types of interactions, Conservation laws and quantum numbers, Concepts of isospin, Strangeness, Parity, Charge conjugation, Antiparticles, Gell-Mann method, Decay and strange particles.

April: Particle symmetry, Introduction to quarks and qualitative discussion of the quark model.

Sem V Practicals

August:

1. Measurement of reverse saturation current in p-n junction diode at various temperatures and to find the approximate value of energy gap.
2. To draw forward and reverse bias characteristics of a p-n junction diode and draw a load line.
3. Study of a diode as clipping element.

September:

1. To show the variation of resistance of a thermistor with temperature.

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2. To measure the efficiency and ripple factors for a) Half-wave (b) full wave and (C) bridge rectifier circuits.
3. To draw the characteristics of a Zener diode.

October:

1. To study the stabilization of output voltage of a power supply with Zener diode.
2. To Plot common Emitter Characteristics of a transistor (pnp or npn).
3. To draw output and mutual Characteristics of an FET and determine its parameters.

Sem VI Practicals

January:

1. To trace the B-H curves for different materials using CRO and find the magnetic parameters from these.
2. Study of a diode as clamping element.

February:

1. To Plot common base Characteristics and determine h-parameters of a given transistor.
2. To study the characteristics of a thermistor and find its parameters.
3. To study the gain of an amplifier at different frequencies and to find band width and gain bandwidth product.

March:

1. To draw the plateau of a GM counter and find its operating voltage.
2. To study the statistical fluctuations of G.M. Counter to find its standard deviation.

SHAHEED MAJOR HARMINDERPAL SINGH (SHAURYA CHAKRA) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

DEPARTMENT OF PHYSICS

UNITIZATION PLAN (2021-2022)

B.Sc. I

Mechanics-I

August: Cartesian and spherical polar co-ordinate systems, area, volume, displacement, velocity and acceleration in these systems, Solid angle, Various forces in Nature(brief introduction), Centre of mass, Equivalent one body problem.

September: Central forces, Equation of motion under central force, Equation of orbit in inverse square, Force field and turning points, Kepler laws and their derivations, Relationship of conservation laws and symmetries of space and time.

October: Inertial frame of reference, Coriolis force and its applications, Variation of acceleration due to gravity with latitude, Focault pendulum (qualitative), Elastic collision in Laboratory and C.M. system, velocities, angels and energies.

November: Cross section of elastic scattering, Rutherford scattering (qualitative).

Mechanics-II

January: Rigid body motion: Rotational motion, principal moments and axe, Euler's equations; precession and elementary gyroscope, Galilean transformation and Invariance, Non-Inertial frames, concept of stationary universal frame of reference and ether.

February: Michelson-Morley experiment and its result, Postulates of special theory of relativity, Lorentz transformations, Observer and viewer in relativity, Relativity of simultaneity.

March: Length, Time, Velocities, Relativistic Doppler effect, Variation of mass with velocity, mass-energy equivalence, rest mass in an inelastic collision.

April: Relativistic momentum and energy, their transformation, concepts of Minkowski space, four vector formulation.

Vibrations and Waves-I

August: Simple harmonic motion, energy of a Simple Harmonic Oscillation (SHO), Compound pendulum, Electrical oscillations, Transverse vibrations of a mass on a string, composition of two perpendicular SHM of same period and of period ratio 1 : 2, Anharmonic oscillations.

September: Decay of free vibrations due to damping, Differential equation of motion, types of damping, Determination of damping co-efficient-logarithmic decrement, relaxation time and Q-Factor, Electromagnetic damping (Electrical oscillator).

Physics Department

Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

October: Differential equation for forced mechanical and electrical oscillators, Transient and steady state oscillation, Displacement and velocity variation with driving force frequency, variation of phase with frequency resonance.
November: Power supplied to an oscillator and its variation with frequency, Q value of a forced oscillator and band width, Q-value as an amplification factor of low frequency response.

Vibrations and Waves-II
January: Stiffness coupled oscillators, Normal co-ordinates and normal modes of vibration, Inductance coupling of electrical oscillators, Types of waves, Wave equation (transverse) and its solution, The string as a forced oscillator, Characteristic impedance of a string, Impedance matching.
February: Reflection and transmission of energy, Reflection and Transmission Energy, Reflection and transmission of string, wave and group velocity, Standing waves on a string of fixed length, Energy of vibrating energy string, wave and group velocity.
March: Physical interpretation of Maxwell's equations, Electromagnetic waves and wave equation in a medium having finite permeability and permittivity but with conductivity $\sigma=0$, Pointing vector, Impedance of a dielectric to EM waves, EM waves in a conducting medium and skin depth, EM waves velocity in a conductor an anomalous dispersion.
April: Response of a conducting medium of EM waves, Reflection and transmission of EM waves at a boundary of two dielectric media for normal incidence, Reflection of EM waves from the surface of a conductor at normal incidence.

Electricity and Magnetism-I
August: Basic ideas of vector calculus, Gradient, Divergence, curl and their physical significance, Coulomb's law in vector form, long uniformly charged wire, Charged disc. Stokes's theorem and its applications in electrostatic field, curl $E=0$.
September: Electric field as gradient of scalar potential, Calculation of E due to a point charge and dipole from potential, Potential due to arbitrary charge distribution and multipole moments, Poisson and Laplace's equations and their solutions in Cartesian and concept of electrical images.
October: Calculation of electric potential and field due a point charge placed near an infinitely conducting sheet, Current and current density, equation of continuity, Microscopic form of Ohm's Law, ($J=\sigma E$) and conductivity, Failure of Ohm's Law.
November: Invariance of charge, E in different frames of reference, Field of a point charge moving with constant velocity, Interaction between moving charges and force between parallel currents.

Electricity and Magnetism-II
January: Behaviour of various substances in magnetic field, Definition of **M** and **H** and their relation to free and bound currents, Permeability and susceptibilities and their inter-relationship, Orbital motion of electrons and diamagnetism, Electron spin and paramagnetism, Ferromagnetism, Domain theory of Ferromagnetism, Hysteresis Loss.
February: Magnetisation curve Ferrites, Lorentz's force, Definition of B, Biot-Savart's Law and its applications to long straight wire, circular current loop and solenoid, Ampere's Circuital law and its applications, Divergence and curl of **B**, Hall effect, expression and co-efficient.
March: Vector potential, Definition and derivation of current density and its use in calculation of change in magnetic field at a current sheet, Transformation equations for **E** and **B** from one frame to another, Faraday's Law and EM induction, Displacement current, Maxwell's equations.

Member
Physics Deptt.

April: Mutual inductance and reciprocity theorem, Self-inductance L for solenoid, Coupling of Electrical circuits, Analysis of LCR series and parallel resonant circuits, Q-factor, Power consumed, Power factor.

Sem I Practicals

August:

1. To establish relationship between torque and angular acceleration using fly wheel and hence to find inertia of flywheel.
2. To study one-dimensional collision using two hanging spheres of different materials.

September:

1. Study the dependence of moment of inertia on distribution of mass (by noting time periods of oscillations) using objects of various geometrical shapes but of same mass.
2. To set up CRO for Sine and Square wave and to find their frequency and amplitude.

October:

1. To study the efficiency of an electric kettle/heater element with varying input voltages.
2. To study the working of energy meter.

Sem II Practicals

January:

1. To study the variation of time period with distance between centre of suspension and centre of gravity for a bar pendulum and to determine
   i) Radius of gyration of bar pendulum about an axis through its Centre of Gravity and perpendicular to its length.
   ii) Value of Centre of Gravity, g.
2. Determination of g by Kater's pendulum.

February:

1. Determination of unknown capacitance by flashing and quenching of neon lamp.
2. To study the resonance in series and parallel LCR circuits for different resistances and calculate Q-value.

March:

1. Determination of modulus of rigidity of material of a wire using Maxwell's needle.
2. Verify laws of electromagnetic induction.

B.Sc. II

Statistical Physics and Thermodynamics-I

August: Basic ideas of statistical physics, Scope of statistical physics, Basic ideas about probability, distribution of four distinguishable particles in two compartments of equal size. Concept of macro states, microstates, thermodynamic probability, Effects of constraints on the system.

September: Distribution of n particles in two compartments, Deviation from the state of maximum probability, equilibrium state of dynamic system, Distribution of distinguishable n particles in k compartments of unequal sizes, Phase space and its division into elementary cells, Three kinds of statistics, The basic approach in the three statistics.

October: Maxwell Boltzmann (MB) statistics applied to an ideal gas in equilibrium, Experimental verification of Maxwell Boltzmann law of distribution of molecular speeds, Need for quantum statistics-Bose-Einstein (B.E.) statistics, Derivation of Planck's law of radiation.

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November: Deduction of Wien's displacement law and Stefan's law from Planck's law, Fermi-Dirac (F.D.) statistics, Comparison of M.B., B.E. and F.D. statistics.

Statistical Physics and Thermodynamics-II

January: Statistical definition of entropy, Change of entropy of a system, Additive nature of entropy, Law of increase of entropy, Reversible and irreversible process and their examples, Work done in a reversible process, Examples of increase of entropy in natural processes, Entropy and disorder, Brief review of terms and laws of thermodynamics.

February: Carnot's cycle, Entropy changes in Carnot cycle, Applications of thermodynamics to thermoelectric effect, Change of entropy along a reversible path in a P.V. diagram, Entropy of a perfect gas, Equation of state of an ideal gas from simple statistical consideration, Heat death of the universe.

March: Derivation of Maxwell's thermodynamical relations, Cooling produced by adiabatic stretching, Adiabatic compression, Change of internal energy with volume, specific heat at constant pressure and constant volume, Expression for Cp-Cv , Change of state and Clapeyron equation.

April: Thermodynamical treatment of Joule-Thomson effect, Use of Joule-Thomson effect, liquefaction of helium, Production of very low temperature by adiabatic demagnetization.

Optics

August: Concept of coherence, Spatial and temporal coherence, Coherence time, Coherence length, Area of coherence, Conditions for observing interference fringes, Interference by wave front division and amplitude division, Michelson's interferometer—working.

September: Principle and nature of fringes, Interference in thin films, Role of interference in anti-reflection and high reflection dielectric coatings, Multiple beam interference, Fabry-Perot interferometer, Nature of fringes, Newton Rings.

October: Huygens-Fresnel theory, half-period zones, Zone plates, Distinction between Fresnel and Fraunhofer diffraction, Fraunhofer diffraction at rectangular and circular apertures, Effects of diffraction in optical imaging, resolving power of telescope, The diffraction grating, its use as a spectroscopic element and its resolving power.

November: Concept and analytical treatment of un-polarized, plane polarized and elliptically polarized light. Double refraction, Nicol prism, Sheet polarizer, Retardation plates, Production and analysis of polarized light (quarter and half wave plates).

Lasers

January: Derivation of Einstein's relations, Concept of stimulated emission and population inversion, Broadening of spectral lines, natural, collision and Doppler broadening, Line width, Line profile, Absorption and amplification of a parallel beam of light passing through a medium.

February: Threshold condition, Introduction of three level and four level laser schemes, elementary theory of optical cavity, Longitudinal and transverse modes.

March: Types of lasers, Ruby and Nd: YAG lasers, He-Ne and CO_2 lasers-construction, mode of creating population inversion and output characteristics, Semiconductor lasers.

April: Dye lasers, Q-switching, Mode locking, Applications of lasers–a general outline, Basics of holography.

Quantum Mechanics-I

August: Brief introduction to need and development of quantum mechanics, Wave-particle duality, de-Broglie hypothesis, Complementarity and uncertainty principle, Gaussian wave-

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packet, Schrodinger equation for a free particle, operator correspondence and equation for a particle subject to forces, Normalization and probability.

September: Interpretation of wave function, Super position principle, Expectation value, probability current and conservation of probability, Admissibility conditions on the wave function, Ehrenfest theorem, Fundamental postulates of wave mechanics, Eigen functions and eigen values, Operator formalism, Orthogonal systems, Expansion in eigen functions.

October: Hermitian operators, Simultaneous eigen functions, Equation of motion, Time dependent Schrodinger equation. Application to stationary states for one-dimension, Potential step, Potential barrier, Rectangular potential well, Degeneracy, Orthogonality, Linear harmonic oscillator.

November: Schrodinger equation for spherically symmetric potential, Spherical harmonics. Hydrogen atom energy levels and eigen functions. Degeneracy, Angular momentum.

Quantum Mechanics-II

January: Excitation of atom with radiation, Transition probability, Spontaneous transition, Selection rules and life time, Spectrum of hydrogen atom, Frank Hertz Experiment, Line structure, Normal Zeeman effect, Electron spin.

February: Stern Gerlach experiment, Spin orbit coupling (electron magnetic moment, total angular momentum), Hyperfine structure, Examples of one electron systems, Anomalous, Zeeman effect, Lande's-g factor (sodium D-lines).

March: Exchange symmetry of wave functions, exclusion principle, Shells, Sub shells in atoms, atomic spectra (Helium), L.S. coupling, Selection rules, Regularities in atomic spectra, Interaction energy, X-ray spectra, Mosley law, Absorption spectra, Auger effect, Molecular bonding.

April: Molecular spectra, Selection rules, Symmetric structures, Rotational, vibrational electronic level and spectra of molecules, Raman spectra.

Sem III Practicals

August:

1. Probability distribution using coloured dice coins.
2. Study the photoelectric effect and determine the value of Planck's constant.
3. To determine the refractive index of liquid using spectrometer.

September:

1. To determine the Cauchy's constants.
2. To study the refractive index of doubly refracting prism.

October:

1. To determine the wave length of a given light using bi-prism.
2. To determine the resolving power of a telescope.

Sem IV Practicals

January:

1. Study of rotation of plane of polarization with a polarimeter.
2. Set up Newton's rings to determine wave length of sodium light.

February:

1. To determine the wave length and dispersive power using plane diffraction grating (Use Hg source).
2. To determine the resolving power of a grating.
3. To determine the ionization potential of mercury.

March:

1. To measure an inaccessible height using sextant.

2. To study the absorption spectra of iodine vapours.
3. Study of variation of light intensity using photovoltaic cell/inverse square law.

B.Sc. III

Condensed Matter Physics-I

August: Crystal Structure, Symmetry operations for a two-dimensional crystal, Two dimensional Bravais lattices, Three dimensional Bravais lattices, Basic primitive cells.

September: Crystal planes and Miller indices, Diamond and NaCI structure, Packing fraction for Cubic and hexagonal closed packed structure.

October: Bragg's Law, Experimental methods for crystal structure studies, laue equations, Reciprocal lattices of SC, BCC and FCC.

November: Bragg's Law in reciprocal lattice, Brillouin zones and its derivation in two dimensions, Structure factor and atomic form factor.

Condensed Matter Physics -II

January: Lattice vibrations, Concepts of phonons, Scattering of protons by phonons, Vibration of mono-atomic, di-atomic, linear chains, Density of modes.

February: Einstein and Debye models of specific heat, Free electron model of metals, Free electron, Fermi gas and Fermi energy, Band theory, Kronig-Penney Model, Metals and insulators.

March: Conductivity and its variation with temperature in semiconductors, Fermi levels in intrinsic and extrinsic semiconductors, Qualitative discussion of band gap in semiconductors, superconductivity.

April: Magnetic field effect in superconductors, BCS theory, Thermal properties of superconductors.

Electronics-I

August: Concept of current and voltage sources, p-n junction, Biasing of diode, V-A characteristics. Diode equation, Breakdown diodes: Zener breakdown and avalanche breakdown, Zener diode. Rectification: half wave, full wave rectifiers and bridge rectifiers, Qualitative analysis of Filter circuits (RC LC and π filters) Efficiency, Ripple factor, Voltage regulation, Voltage multiplier circuits.

September: Structure and working, relation between different currents in transistors, Sign conventions, Amplifying action, Different configurations of a transistor and their comparison, CB and CE characteristics.

October: Structure, Characteristics, operation of FET, JFET and MOSFET, Pinch off voltage, Enhancement and Depletion mode, Comparison of JFETs and MOSFETs, Difference in field effect transistor and junction type transistor.

November: Photo-conductive devices: Photo-conductive cell, Photodiode, Solar cell, LED, LCD.

Electronics-II

January: Thyristor, SCR, TRIAC, DIAC: Construction, Characteristics and Operation; Comparison between transistors and thyristors; Difference between SCR and TRIAC, UJT: its construction, Equivalent circuit, Characteristics and parameters, uses, Thermistor: Types, Construction, Characteristics, Uses, Advantages over other temperature sensing devices.

February: IMPATT and TRAPATT devices, PIN diode: Construction, Characteristics, Applications, Gunn effect and diodes: Mechanism, Characteristic, Negative differential

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resistivity and Domain formation, Tunnel diode: Tunnelling Phenomenon, Operation, Applications, Merits and Drawbacks.

March: Transistor biasing: Stabilization of operating point, Fixed bias, Collector to base bias, Bias circuit with emitter resistor, Voltage divider biasing circuit, CE amplifier: Working and analysis using h-parameters, Equivalent circuits, Determination of current gain, Power gain, Input impedance, FET amplifier: Voltage, Current and Power gain.

April: Feed-back in amplifiers: Types & advantage of negative feedback, Emitter follower as negative feed-back circuit.

Nuclear and Radiation Physics

August: Constituents of nucleus and their intrinsic properties, Qualitative facts about size, mass, density, energy, charge, Binding energy, angular momentum, magnetic moment and electric quadruple moments of the nucleus, Wave mechanical properties of nucleus, average binding energy and its variation with mass numbers.

September: Properties of nuclear forces, Non-existence of electrons in the nucleus and neutron-proton model, Liquid drop model and semi empirical mass formula, Conditions of nuclear stability, Fermi gas model, Nuclear shell model, Experimental evidence of magic numbers and its explanation.

October: Radioactivity, Modes of decay and successive radioactivity, Alpha emission, Electron emission, Positron emission, Electron capture, Gamma-ray emission, Internal conversion, Qualitative discussion of alpha, beta and gamma spectra, Geiger-Nuttal rule, Neutrino hypothesis of beta decay, Evidence of existence of neutrino.

November: Qualitative discussion of alpha and beta decay theories, Nuclear reactions, Reaction cross section, Conservation laws, Kinematics of nuclear reaction, Q-value and its physical significance, Compound nucleus, Possible reaction with high energy particles.

Nuclear and Particle Physics

January: Energy loss due to ionization (Bethe's formula), Energy loss of electrons, Bremsstrahlung, Interactions of gamma rays with matter, Radiation loss by fast electrons, Radiation length, Electron-positron annihilation.

February: Cyclotron, Betatron, Qualitative discussion of Synchrotron, Collider machines and linear accelerator, Ionization chamber, Proportional counter, GM counter, Scintillation counter, Solid state detectors, Elementary particles and their masses.

March: Decay modes, Classification of these particles, types of interactions, Conservation laws and quantum numbers, Concepts of isospin, Strangeness, Parity, Charge conjugation, Antiparticles, Gell-Mann method, Decay and strange particles.

April: Particle symmetry, Introduction to quarks and qualitative discussion of the quark model.

Sem V Practicals

August:

1. Measurement of reverse saturation current in p-n junction diode at various temperatures and to find the approximate value of energy gap.
2. To draw forward and reverse bias characteristics of a p-n junction diode and draw a load line.
3. Study of a diode as clipping element.

September:

1. To show the variation of resistance of a thermistor with temperature.

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2. To measure the efficiency and ripple factors for a) Half-wave (b) full wave and (C) bridge rectifier circuits.
3. To draw the characteristics of a Zener diode.

October:

1. To study the stabilization of output voltage of a power supply with Zener diode.
2. To Plot common Emitter Characteristics of a transistor (pnp or npn).
3. To draw output and mutual Characteristics of an FET and determine its parameters.

Sem VI Practicals

January:

1. To trace the B-H curves for different materials using CRO and find the magnetic parameters from these.
2. Study of a diode as clamping element.

February:

1. To Plot common base Characteristics and determine h-parameters of a given transistor.
2. To study the characteristics of a thermistor and find its parameters.
3. To study the gain of an amplifier at different frequencies and to find band width and gain bandwidth product.

March:

1. To draw the plateau of a GM counter and find its operating voltage.
2. To study the statistical fluctuations of G.M. Counter to find its standard deviation.

SHAHEED MAJOR HARMINDERPAL SINGH (SHAURYA CHAKRA) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR

DEPARTMENT OF PHYSICS

UNITIZATION PLAN (2022-2023)

B.Sc. I

Mechanics-I

August: Cartesian and spherical polar co-ordinate systems, area, volume, displacement, velocity and acceleration in these systems, Solid angle, Various forces in Nature(brief introduction), Centre of mass, Equivalent one body problem.

September: Central forces, Equation of motion under central force, Equation of orbit in inverse square, Force field and turning points, Kepler laws and their derivations, Relationship of conservation laws and symmetries of space and time.

October: Inertial frame of reference, Coriolis force and its applications, Variation of acceleration due to gravity with latitude, Focault pendulum (qualitative), Elastic collision in Laboratory and C.M. system, velocities, angels and energies.

November: Cross section of elastic scattering, Rutherford scattering (qualitative).

Mechanics-II

January: Rigid body motion: Rotational motion, principal moments and axe, Euler's equations; precession and elementary gyroscope, Galilean transformation and Invariance, Non-Inertial frames, concept of stationary universal frame of reference and ether.

February: Michelson-Morley experiment and its result, Postulates of special theory of relativity, Lorentz transformations, Observer and viewer in relativity, Relativity of simultaneity.

March: Length, Time, Velocities, Relativistic Doppler effect, Variation of mass with velocity, mass-energy equivalence, rest mass in an inelastic collision.

April: Relativistic momentum and energy, their transformation, concepts of Minkowski space, four vector formulation.

Vibrations and Waves-I

August: Simple harmonic motion, energy of a Simple Harmonic Oscillation (SHO), Compound pendulum, Electrical oscillations, Transverse vibrations of a mass on a string, composition of two perpendicular SHM of same period and of period ratio 1 : 2, Anharmonic oscillations.

September: Decay of free vibrations due to damping, Differential equation of motion, types of damping, Determination of damping co-efficient-logarithmic decrement, relaxation time and Q-Factor, Electromagnetic damping (Electrical oscillator).

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Physics Department.

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Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

October: Differential equation for forced mechanical and electrical oscillators, Transient and steady state oscillation, Displacement and velocity variation with driving force frequency, variation of phase with frequency resonance.
November: Power supplied to an oscillator and its variation with frequency, Q value of a forced oscillator and band width, Q-value as an amplification factor of low frequency response.

Vibrations and Waves-II
January: Stiffness coupled oscillators, Normal co-ordinates and normal modes of vibration, Inductance coupling of electrical oscillators, Types of waves, Wave equation (transverse) and its solution, The string as a forced oscillator, Characteristic impedance of a string, Impedance matching.
February: Reflection and transmission of energy, Reflection and Transmission Energy, Reflection and transmission of string, wave and group velocity, Standing waves on a string of fixed length, Energy of vibrating energy string, wave and group velocity.
March: Physical interpretation of Maxwell's equations, Electromagnetic waves and wave equation in a medium having finite permeability and permittivity but with conductivity $\sigma=0$, Pointing vector, Impedance of a dielectric to EM waves, EM waves in a conducting medium and skin depth, EM waves velocity in a conductor an anomalous dispersion.
April: Response of a conducting medium of EM waves, Reflection and transmission of EM waves at a boundary of two dielectric media for normal incidence, Reflection of EM waves from the surface of a conductor at normal incidence.

Electricity and Magnetism-I
August: Basic ideas of vector calculus, Gradient, Divergence, curl and their physical significance, Coulomb's law in vector form, long uniformly charged wire, Charged disc. Stokes's theorem and its applications in electrostatic field, curl $E=0$.
September: Electric field as gradient of scalar potential, Calculation of E due to a point charge and dipole from potential, Potential due to arbitrary charge distribution and multipole moments, Poisson and Laplace's equations and their solutions in Cartesian and concept of electrical images.
October: Calculation of electric potential and field due a point charge placed near an infinitely conducting sheet, Current and current density, equation of continuity, Microscopic form of Ohm's Law, ($J=\sigma E$) and conductivity, Failure of Ohm's Law.
November: Invariance of charge, E in different frames of reference, Field of a point charge moving with constant velocity, Interaction between moving charges and force between parallel currents.

Electricity and Magnetism-II
January: Behaviour of various substances in magnetic field, Definition of **M** and **H** and their relation to free and bound currents, Permeability and susceptibilities and their inter-relationship, Orbital motion of electrons and diamagnetism, Electron spin and paramagnetism, Ferromagnetism, Domain theory of Ferromagnetism, Hysteresis Loss.
February: Magnetisation curve Ferrites, Lorentz's force, Definition of B, Biot-Savart's Law and its applications to long straight wire, circular current loop and solenoid, Ampere's Circuital law and its applications, Divergence and curl of **B**, Hall effect, expression and co-efficient.
March: Vector potential, Definition and derivation of current density and its use in calculation of change in magnetic field at a current sheet, Transformation equations for **E** and **B** from one frame to another, Faraday's Law and EM induction, Displacement current, Maxwell's equations.

Member
Physics Deptt.

April: Mutual inductance and reciprocity theorem, Self-inductance L for solenoid, Coupling of Electrical circuits, Analysis of LCR series and parallel resonant circuits, Q-factor, Power consumed, Power factor.

Sem I Practicals

August:

1. To establish relationship between torque and angular acceleration using fly wheel and hence to find inertia of flywheel.
2. To study one-dimensional collision using two hanging spheres of different materials.

September:

1. Study the dependence of moment of inertia on distribution of mass (by noting time periods of oscillations) using objects of various geometrical shapes but of same mass.
2. To set up CRO for Sine and Square wave and to find their frequency and amplitude.

October:

1. To study the efficiency of an electric kettle/heater element with varying input voltages.
2. To study the working of energy meter.

Sem II Practicals

January:

1. To study the variation of time period with distance between centre of suspension and centre of gravity for a bar pendulum and to determine
   i) Radius of gyration of bar pendulum about an axis through its Centre of Gravity and perpendicular to its length.
   ii) Value of Centre of Gravity, g.
2. Determination of g by Kater's pendulum.

February:

1. Determination of unknown capacitance by flashing and quenching of neon lamp.
2. To study the resonance in series and parallel LCR circuits for different resistances and calculate Q-value.

March:

1. Determination of modulus of rigidity of material of a wire using Maxwell's needle.
2. Verify laws of electromagnetic induction.

B.Sc. II

Statistical Physics and Thermodynamics-I

August: Basic ideas of statistical physics, Scope of statistical physics, Basic ideas about probability, distribution of four distinguishable particles in two compartments of equal size. Concept of macro states, microstates, thermodynamic probability, Effects of constraints on the system.

September: Distribution of n particles in two compartments, Deviation from the state of maximum probability, equilibrium state of dynamic system, Distribution of distinguishable n particles in k compartments of unequal sizes, Phase space and its division into elementary cells, Three kinds of statistics, The basic approach in the three statistics.

October: Maxwell Boltzmann (MB) statistics applied to an ideal gas in equilibrium, Experimental verification of Maxwell Boltzmann law of distribution of molecular speeds, Need for quantum statistics-Bose-Einstein (B.E.) statistics, Derivation of Planck's law of radiation.

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November: Deduction of Wien's displacement law and Stefan's law from Planck's law, Fermi-Dirac (F.D.) statistics, Comparison of M.B., B.E. and F.D. statistics.

Statistical Physics and Thermodynamics-II

January: Statistical definition of entropy, Change of entropy of a system, Additive nature of entropy, Law of increase of entropy, Reversible and irreversible process and their examples, Work done in a reversible process, Examples of increase of entropy in natural processes, Entropy and disorder, Brief review of terms and laws of thermodynamics.

February: Carnot's cycle, Entropy changes in Carnot cycle, Applications of thermodynamics to thermoelectric effect, Change of entropy along a reversible path in a P.V. diagram, Entropy of a perfect gas, Equation of state of an ideal gas from simple statistical consideration, Heat death of the universe.

March: Derivation of Maxwell's thermodynamical relations, Cooling produced by adiabatic stretching, Adiabatic compression, Change of internal energy with volume, specific heat at constant pressure and constant volume, Expression for Cp-Cv , Change of state and Clapeyron equation.

April: Thermodynamical treatment of Joule-Thomson effect, Use of Joule-Thomson effect, liquefaction of helium, Production of very low temperature by adiabatic demagnetization.

Optics

August: Concept of coherence, Spatial and temporal coherence, Coherence time, Coherence length, Area of coherence, Conditions for observing interference fringes, Interference by wave front division and amplitude division, Michelson's interferometer—working.

September: Principle and nature of fringes, Interference in thin films, Role of interference in anti-reflection and high reflection dielectric coatings, Multiple beam interference, Fabry-Perot interferometer, Nature of fringes, Newton Rings.

October: Huygens-Fresnel theory, half-period zones, Zone plates, Distinction between Fresnel and Fraunhofer diffraction, Fraunhofer diffraction at rectangular and circular apertures, Effects of diffraction in optical imaging, resolving power of telescope, The diffraction grating, its use as a spectroscopic element and its resolving power.

November: Concept and analytical treatment of un-polarized, plane polarized and elliptically polarized light. Double refraction, Nicol prism, Sheet polarizer, Retardation plates, Production and analysis of polarized light (quarter and half wave plates).

Lasers

January: Derivation of Einstein's relations, Concept of stimulated emission and population inversion, Broadening of spectral lines, natural, collision and Doppler broadening, Line width, Line profile, Absorption and amplification of a parallel beam of light passing through a medium.

February: Threshold condition, Introduction of three level and four level laser schemes, elementary theory of optical cavity, Longitudinal and transverse modes.

March: Types of lasers, Ruby and Nd: YAG lasers, He-Ne and CO_2 lasers-construction, mode of creating population inversion and output characteristics, Semiconductor lasers.

April: Dye lasers, Q-switching, Mode locking, Applications of lasers–a general outline, Basics of holography.

Quantum Mechanics-I

August: Brief introduction to need and development of quantum mechanics, Wave-particle duality, de-Broglie hypothesis, Complementarity and uncertainty principle, Gaussian wave-

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packet, Schrodinger equation for a free particle, operator correspondence and equation for a particle subject to forces, Normalization and probability.

September: Interpretation of wave function, Super position principle, Expectation value, probability current and conservation of probability, Admissibility conditions on the wave function, Ehrenfest theorem, Fundamental postulates of wave mechanics, Eigen functions and eigen values, Operator formalism, Orthogonal systems, Expansion in eigen functions.

October: Hermitian operators, Simultaneous eigen functions, Equation of motion, Time dependent Schrodinger equation. Application to stationary states for one-dimension, Potential step, Potential barrier, Rectangular potential well, Degeneracy, Orthogonality, Linear harmonic oscillator.

November: Schrodinger equation for spherically symmetric potential, Spherical harmonics. Hydrogen atom energy levels and eigen functions. Degeneracy, Angular momentum.

Quantum Mechanics-II

January: Excitation of atom with radiation, Transition probability, Spontaneous transition, Selection rules and life time, Spectrum of hydrogen atom, Frank Hertz Experiment, Line structure, Normal Zeeman effect, Electron spin.

February: Stern Gerlach experiment, Spin orbit coupling (electron magnetic moment, total angular momentum), Hyperfine structure, Examples of one electron systems, Anomalous, Zeeman effect, Lande's-g factor (sodium D-lines).

March: Exchange symmetry of wave functions, exclusion principle, Shells, Sub shells in atoms, atomic spectra (Helium), L.S. coupling, Selection rules, Regularities in atomic spectra, Interaction energy, X-ray spectra, Mosley law, Absorption spectra, Auger effect, Molecular bonding.

April: Molecular spectra, Selection rules, Symmetric structures, Rotational, vibrational electronic level and spectra of molecules, Raman spectra.

Sem III Practicals

August:

1. Probability distribution using coloured dice coins.
2. Study the photoelectric effect and determine the value of Planck's constant.
3. To determine the refractive index of liquid using spectrometer.

September:

1. To determine the Cauchy's constants.
2. To study the refractive index of doubly refracting prism.

October:

1. To determine the wave length of a given light using bi-prism.
2. To determine the resolving power of a telescope.

Sem IV Practicals

January:

1. Study of rotation of plane of polarization with a polarimeter.
2. Set up Newton's rings to determine wave length of sodium light.

February:

1. To determine the wave length and dispersive power using plane diffraction grating (Use Hg source).
2. To determine the resolving power of a grating.
3. To determine the ionization potential of mercury.

March:

1. To measure an inaccessible height using sextant.

2. To study the absorption spectra of iodine vapours.
3. Study of variation of light intensity using photovoltaic cell/inverse square law.

B.Sc. III

Condensed Matter Physics-I

August: Crystal Structure, Symmetry operations for a two-dimensional crystal, Two dimensional Bravais lattices, Three dimensional Bravais lattices, Basic primitive cells.

September: Crystal planes and Miller indices, Diamond and NaCI structure, Packing fraction for Cubic and hexagonal closed packed structure.

October: Bragg's Law, Experimental methods for crystal structure studies, laue equations, Reciprocal lattices of SC, BCC and FCC.

November: Bragg's Law in reciprocal lattice, Brillouin zones and its derivation in two dimensions, Structure factor and atomic form factor.

Condensed Matter Physics -II

January: Lattice vibrations, Concepts of phonons, Scattering of protons by phonons, Vibration of mono-atomic, di-atomic, linear chains, Density of modes.

February: Einstein and Debye models of specific heat, Free electron model of metals, Free electron, Fermi gas and Fermi energy, Band theory, Kronig-Penney Model, Metals and insulators.

March: Conductivity and its variation with temperature in semiconductors, Fermi levels in intrinsic and extrinsic semiconductors, Qualitative discussion of band gap in semiconductors, superconductivity.

April: Magnetic field effect in superconductors, BCS theory, Thermal properties of superconductors.

Electronics-I

August: Concept of current and voltage sources, p-n junction, Biasing of diode, V-A characteristics. Diode equation, Breakdown diodes: Zener breakdown and avalanche breakdown, Zener diode. Rectification: half wave, full wave rectifiers and bridge rectifiers, Qualitative analysis of Filter circuits (RC LC and π filters) Efficiency, Ripple factor, Voltage regulation, Voltage multiplier circuits.

September: Structure and working, relation between different currents in transistors, Sign conventions, Amplifying action, Different configurations of a transistor and their comparison, CB and CE characteristics.

October: Structure, Characteristics, operation of FET, JFET and MOSFET, Pinch off voltage, Enhancement and Depletion mode, Comparison of JFETs and MOSFETs, Difference in field effect transistor and junction type transistor.

November: Photo-conductive devices: Photo-conductive cell, Photodiode, Solar cell, LED, LCD.

Electronics-II

January: Thyristor, SCR, TRIAC, DIAC: Construction, Characteristics and Operation; Comparison between transistors and thyristors; Difference between SCR and TRIAC, UJT: its construction, Equivalent circuit, Characteristics and parameters, uses, Thermistor: Types, Construction, Characteristics, Uses, Advantages over other temperature sensing devices.

February: IMPATT and TRAPATT devices, PIN diode: Construction, Characteristics, Applications, Gunn effect and diodes: Mechanism, Characteristic, Negative differential

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resistivity and Domain formation, Tunnel diode: Tunnelling Phenomenon, Operation, Applications, Merits and Drawbacks.

March: Transistor biasing: Stabilization of operating point, Fixed bias, Collector to base bias, Bias circuit with emitter resistor, Voltage divider biasing circuit, CE amplifier: Working and analysis using h-parameters, Equivalent circuits, Determination of current gain, Power gain, Input impedance, FET amplifier: Voltage, Current and Power gain.

April: Feed-back in amplifiers: Types & advantage of negative feedback, Emitter follower as negative feed-back circuit.

Nuclear and Radiation Physics

August: Constituents of nucleus and their intrinsic properties, Qualitative facts about size, mass, density, energy, charge, Binding energy, angular momentum, magnetic moment and electric quadruple moments of the nucleus, Wave mechanical properties of nucleus, average binding energy and its variation with mass numbers.

September: Properties of nuclear forces, Non-existence of electrons in the nucleus and neutron-proton model, Liquid drop model and semi empirical mass formula, Conditions of nuclear stability, Fermi gas model, Nuclear shell model, Experimental evidence of magic numbers and its explanation.

October: Radioactivity, Modes of decay and successive radioactivity, Alpha emission, Electron emission, Positron emission, Electron capture, Gamma-ray emission, Internal conversion, Qualitative discussion of alpha, beta and gamma spectra, Geiger-Nuttal rule, Neutrino hypothesis of beta decay, Evidence of existence of neutrino.

November: Qualitative discussion of alpha and beta decay theories, Nuclear reactions, Reaction cross section, Conservation laws, Kinematics of nuclear reaction, Q-value and its physical significance, Compound nucleus, Possible reaction with high energy particles.

Nuclear and Particle Physics

January: Energy loss due to ionization (Bethe's formula), Energy loss of electrons, Bremsstrahlung, Interactions of gamma rays with matter, Radiation loss by fast electrons, Radiation length, Electron-positron annihilation.

February: Cyclotron, Betatron, Qualitative discussion of Synchrotron, Collider machines and linear accelerator, Ionization chamber, Proportional counter, GM counter, Scintillation counter, Solid state detectors, Elementary particles and their masses.

March: Decay modes, Classification of these particles, types of interactions, Conservation laws and quantum numbers, Concepts of isospin, Strangeness, Parity, Charge conjugation, Antiparticles, Gell-Mann method, Decay and strange particles.

April: Particle symmetry, Introduction to quarks and qualitative discussion of the quark model.

Sem V Practicals

August:

1. Measurement of reverse saturation current in p-n junction diode at various temperatures and to find the approximate value of energy gap.
2. To draw forward and reverse bias characteristics of a p-n junction diode and draw a load line.
3. Study of a diode as clipping element.

September:

1. To show the variation of resistance of a thermistor with temperature.

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2. To measure the efficiency and ripple factors for a) Half-wave (b) full wave and (C) bridge rectifier circuits.
3. To draw the characteristics of a Zener diode.

October:

1. To study the stabilization of output voltage of a power supply with Zener diode.
2. To Plot common Emitter Characteristics of a transistor (pnp or npn).
3. To draw output and mutual Characteristics of an FET and determine its parameters.

Sem VI Practicals

January:

1. To trace the B-H curves for different materials using CRO and find the magnetic parameters from these.
2. Study of a diode as clamping element.

February:

1. To Plot common base Characteristics and determine h-parameters of a given transistor.
2. To study the characteristics of a thermistor and find its parameters.
3. To study the gain of an amplifier at different frequencies and to find band width and gain bandwidth product.

March:

1. To draw the plateau of a GM counter and find its operating voltage.
2. To study the statistical fluctuations of G.M. Counter to find its standard deviation.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./ B.Sc. (MATHEMATICS) Part I

SESSION 2018--19(SEMESTER-I)

Faculty Title of Paper	August	September	October	November
Dr. Gurpreet Kaur Paper - I Calculus-I	ε-δ definition of the limit of a function. Basic properties of limits. Continuous functions and classification of discontinuities. Differentiability, Derivative of nth order. Leibnitz theorem, Asymptotes.	Test for concavity and convexity, Points of Inflexion, Tracing of Curves with y'and y''(Standard curves in Cartesian form without use of Grapher).	Functions of several variables: Limits, continuity and differentiability of two variables. Partial derivatives and its Linearization, Chain rule, Partial derivative with constrained variable.	Homogeneous functions, Euler theorem and its applications. Extreme value and saddle points, Lagrange multipliers, Taylor's theorem and its linear and quadratic approximation.
Dr. Gurpreet Kaur PAPER - II DIFFERENTIAL EQUATIONS	First order differential equations : Order and degree of a differential equation, Separable differential equations, Homogeneous differential equations, exact differential equations, linear differential equations and equations reducible to linear differential equations.	Higher order differential equations : Wronskian, Solution of Linear homogeneous and non-homogeneous differential equations of higher order with constant coefficients and with variable coefficients. Method of Variation of Parameters.	Higher order differelitial equations . Differential operator method. Linear non-homogeneous differential equations with variable coefricients, Euler's Cauchy method.	Series solution of Differential equation: Regular point, ordinary point, Power Series method. Frobenius method, Bessel and Legendre Equations, Legendre and Bessel functions and their properties , recurrence relations, orthogonality, Rodrigue's formula

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Mrs. Santosh PAPER-III COORDINATE GEOMETRY	Parabola: Pole and polar, pair of tangents from a point, chord of contact, equation of chord in terms of midpoints and diameter of conic, Subtangent and Subnormal and its geometrical properties.	Ellipse: Properties of ellipse, parametric representation of ellipse, tangents, normals, equation of chord joining two points on ellipse. Director circle of ellipse, chord of contact, conjugate lines and conjugate diameter, Concormal Points and its geometrical properties.	Hyperbola: Properties of hyperbola, fundamental rectangle, parametric representation of hyperbola, asymptotes of hyperbola.	Conjugate hyperbola, rectangular hyperbola, tangents and normals.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OD MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part I

SESSION 2018-19(SEMESTER-2)

Faculty Title of Paper	January	February	March	April
Dr. Gurpreet Kaur Paper - IV Algebra-I	Hermitian, Skew-Hermitian, Othogonal and Unitary matrices, .Elementary operation on matrices. Inverse of a matrix using Gauss Jordan Method. Linear independence of row and column vectors, Row rank, Colum rank and their equivalence.	Eigen values, Eigen vectors and the characteristic equation of a matrix, Properties of eigen values for special type of matrices, Diagonalization, Cayley-Hamilton theorem. Consistency of a system of linear equations.	Relations between roots and coefficients of a general polynomial, Tranformation of equation.Descartes' rule of signs, Solution of cubic equations, Biquadratic equations and their solution	De Moivre's theorem and its application, Direct and inverse circular functions, hyperbolic and logarithmic functions. Summation of series.
Dr. Gurpreet Kaur PAPER – V PARTIAL DIFFERENTIAL EQUATIONS	**Partial differential equations :** Partial differential equation of first order, Lagrange's solution, , Integral surfaces passing through a given curve, surfaces orthogonal to a given system of surfaces, Partial differential equation of first order but of any degree , Charpit's general method of solution.	Partial differential equations of second and higher order : Partial differential equations of the second order and their classification into hyperbolic, elliptic and parabolic types, canonical forms	Homogeneous and non-homogeneous partial differential equations with constant coefficients. One dimension Wave and Heat Equation.	Two dimensional Laplace equation by separation of variable method and D'Alembert's solution of wave equation.

Prof. Harjinder Singh PAPER-VI ANALYTIC GEOMETRY	The plane: General form, Normal form, Intercept form, Reduction of the general form to normal form . Equation of plane through three points, Angle between two planes, Parallel planes,Perpendicular distance of a point from the planes, Pair of the planes, Area of a triangle and Volume of a tetrahedron.	The straight line: Equation of a line in general form, Symmetric form, two point form, Reduction of the general equation to the symmetrical form, Straight line and the planes, Conditions of parallelism and perpendicularity of a line and a plane. Plane through a given line,Perpendicular distance formula for the line, Projection of a line on a given plane containing them, Condition of intersection of two lines, Shortest distance between two lines, intersection of three planes.	Sphere: General equation of a sphere, Plane section of a sphere, Intersection of two spheres,Sphere through a given circle. Intersection of a straight line and a sphere, Equation of a tangent, plane to sphere, Condition of tangency. Plane of contact, Orthogonal Spheres, Angle of intersection of two spheres, Length of tangent, Radical plane, Coaxial system of spheres.	Cone: Equation of a cone whose vertex is at origin, Equation of a cone with a given vertex and a given conic as base. Condition that general equation of second degree represent a cone, Equation of a tangent plane, Condition of tangency of a plane and a cone, Reciprocal cone, Right circular cone

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part II

SESSION 2018-19 (SEMESTER-3)

Faculty Title of Paper	August	September	October	November
Dr. Gurpreet Kaur PAPER-I: Advanced Calculus	Limit and Continuity of Functions of several variables. Differentiability of real-valued functions of two variables. Partial differentiation, Jacobians and their properties, Schwarz's & Young's theorems.	Euler's theorem on homogenous functions. Taylor's theorem for functions two variables and error estimation. Maxima and Minima, Lagrange's multiplier method.	Double and Triple Integrals, Change of order of integration in double integrals, Charge of variables.	Applications to evaluation of areas, Volume, Centre of Gravity and Moments of Inertia
Mrs Santosh PAPER-II: Analysis-I	Definition of a sequence, Bounded and Monotonic sequences, Convergent sequence, Cauchy sequences, Cauchy's Convergence Criterion, Theorems on limits of sequences. Subsequence , Sequential continuity	Definition of a series, Test's of convergence (Without proofs) Comparison tests. Cauchy's integral Ratio tests. Raabe's, Logarithmic, Gauss Test. Cauchy's root test. Alternating series. Leibnitz's test. Absolute and conditional convergence.	Definition and existence of Riemann integrals. Properties of integrals. Integrability of continuous and monotonic functions. The fundamental theorem of integral calculus. Mean value theorems of integral calculus. Functions of bounded Variation and Rectifiable Curves: Properties of Monotonic Functions, Functions of Bounded Variation, Total variation, Additive property of total variation	Total Variation on [a, x] as a function of x, functions of bounded variation expressed as the difference of increasing functions, continuous functions of bounded variation, rectifiable curves and arc length.

Mrs Santosh Paper-III: Statics	Basic notation, Newton Laws of motion, system of two forces, parallelogram law of forces, resultant of two collinear forces, resolution of forces, moment of a force	couple, theorem on moments of a couple, coplanar forces, resultant of three coplanar concurrent forces, theorem of resolved parts, resultant of two forces acting on a rigid body, Varignon's theorem, generalized theorem of moments.	Equilibrium of two concurrent forces, equilibrium condition for any number of coplanar concurrent forces, Lami's theorem, λ - μ theorem, theorems of moments, resultant of a force and a copule. Equilibrium conditions for coplanar non-concurrent forces.	Friction: Definition and nature of friction, laws of friction, Centre of gravity.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part II

SESSION2018-19(SEMESTER-4)

Faculty Title of Paper	January	February	March	April
Dr. Gurpreet Kaur PAPER-IV: Numerical methods	Bisection Method, Regula-falsi method. Secant method, Fixed – point iteration and Newton-Raphson method and convergence of Secant, Newton- Raphson method and fixed-point iteration.	Pivoting strategies, Partial Pivoting, Gauss-Elimination, Gauss Jordan and Triangularisation method, Jacobi Method, Gauss Seidel Method.	Interpolation: Finite differences, Divided differences, Newton Gregory Forward and Backward formula, Lagrange's formula, Newton's formulae, Central Differences	Stirling, Bessel's and Everett's formulae, Error in linear and quadratic interpolation.
Mrs. Santosh PAPER-V: Number theory	Concept of Point-wise and Uniform convergence of sequence of functions and series of functions with special reference to power Series. Statement of Weierstrass M-Tests for Uniform convergence of sequence of functions and of series of functions.	Simple applications. Determination of Radius of convergence of power series. Term by term integration and Term by term differentiation of power Series.	Scalar and vector fields, differentiation of vectors, velocity and acceleration. Vector differential operators: Del, Gradient, Divergence and Curl, their physical interpretations. Formulae involving Del applied to point functions and their products. Line, surface and volume integrals	Greens Theorem in the Plane Parameterized Surface, Stokes Theorem and the Divergence Theorem. Applications of Green's, Stoke's and Divergence theorem.

Prof. Harjinder Singh PAPER-VI: Dynamics	Motion of a particle with constant acceleration, acceleration of falling bodies, motion under gravity, motion of a body projected vertically upwsed, motion of a two particles connected by a string.	motion along a smooth inclined plane, constrained motion along a smooth inclined plane. Variable acceleration, Simple harmonic motion, elastic string, simple pendulum.	Projectile, Work, Power, conservative fields and potential energy, work done against gravity, potential energy of a gravitational field Relative motion, relative displacement, velocity and acceleration, motion relative to a rotating frame of reference.	. Linear momentum, angular momentum, conservation of angular momentum, impulsive forces, principle of impulse and momentum.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172 2225164 e-mail ID:principal.gcmohali

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part III

SESSION 2018-19(SEMESTER-5)

Faculty Title of Paper	August	September	October	November
Dr. Gurpreet Kaur PAPER-I Algebra-I	Group:definition and examples, subgroup counting principles Lagrange's theorem	Normal subgroups,quotient subgroups,homomorphism, fundamental theorem of homomorphism,and related theorem,cyclic groups.	Rings: definations and examples of rings ,elementary properties of rings ,sub rings , homomorphism ,ideals and quotient rings .	Field of quotient of integral domain,division rings ,Euclidean domains , principal ideals ,examples
Mrs. Santosh Paper-II: discrete mathematics -I	Sets and propositions-Cardinality, Mathematical induction, Principle of inclusion and exclusion.Computability and Formal Languages-Ordered Sets. Languages. Phrase Structure Grammars. Types of Grammars. Types of Grammars and Languages.	Permutations ,combinations,discrete probability ,relations and functions ,binary relations ,equivalance relations and partitions partial order relations. Relations and Lattices. Chains and Antichains. Pigeon Hole Principle	Graphs and Planar Graphs-Basic Terminology, Multigraphs, Weighted Graphs, Paths and Circuits. Shortest paths, Eulerian Paths and Circuits. Travelling Salesman Problem. Planar Graphs. Trees.	Definition and Examples of Finite State Machines-Equivalent Machines and Finite State Machines as Language Recognizers.

Mrs. Santosh OPTION-I Mathematical methods -I	Fourier series : Fourier series, Theorems, Dirichlet's conditions, Fourier series for even and odd functions, Half range Fourier series, Other forms of Fourier series	Definition of Laplace transform, linearity property- Piecewise continuous function. Existence of Laplace transform, Functions of exponential order and of class A. First and second shifting theorems of Laplace transform, Change of scale property	First and second shifting theorems of Laplace transform, Change of scale property- Laplace transform of derivatives, Initial value problems, Laplace transform of integrals, Multiplication by t, Division by t, Laplace transform of periodic functions and error function, Beta function and Gamma functions.	Laplace transform of periodic functions and error function, Beta function and Gamma functions. Definition of Inverse Laplace transform, Linearity property, First and second shifting theorems of inverse Laplace transform, Change of scale property, Division by p, Convolution theorem, Heaviside's expansion formula (with proofs and applications).

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part III

SESSION 2018-19(SEMESTER-6)

Faculty Title of Paper	January	February	March	April
Prof. Harjinder Singh Paper-III Algebra -II	Vector spaces, Examples, Linear Dependence, Linear Combinations. Bases and Dimension, Subspaces, Quotient spaces	. Direct Sum of vector spaces. Dimension of a direct sum. Dual of a vector space. Matrices and change of basis.	Linear transformation. Algebra of linear transformations, Matrices as linear mappings, Kernal and image, Rank and Nullity theorem, Singular and non-singular linear mappings, Isomorphism, Composition of linear mappings, Polynomials and linear operators.	Square matrices as linear operators, matrix representation of a linear operator, Change of basis, characteristic and minimal polynomial for linear operators
Prof. Harjinder Singh PAPER-IV Mathematical methods -II	Fourier series,theorems,dirichlet's conditions,fourier series for even and odd functions. Half range fourier series ,other forms of series Hankel transform: hankel integral formula,hankel transform,inverse theorem for hankel transform,hankel sine and cosinetransform and their inversion formula, linearity property of hankel transform	Fourier transform and its applications: dirichlet's condition ,fourier integral formula(without proof),fourier transform ,inverse theorem for fourier transform, fourier sine and cosine transform and their inversion formula,linearity property of fourier transforms, change of scale property	Shifting theorem,modulation theorem,convolution theorem of fourier transform,parseval's identity ,finite fourier sine transform,inversion formula for sine transform, finite fourier cosine transform,inversion formula for cosine transform	Applications to solve some model equations:one dimensional heat equation ,one dimensional wave equation.

Mrs. Santosh OPTION-III Discrete mathematics - II	Analysis of algorithms-time complexity,complexity of problems.discrete numeric functions,generating functions,recurrence relations and recrusive algorithms linear recrrence relation with constan cofficient	Homogeneoussolutions ,particular solutions ,total solution,solution bt mehod of generating functions ,Boolean algebras -lattices and algebraic structures	Distributive and complemented lattices ,Boolean lattices and Boolean algebras, Boolean functions and expensions,prepositional calculus	Design and implementation of digital networks ,switching circuits

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Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./ B.Sc. (MATHEMATICS) Part I

SESSION 2019-20(SEMESTER-I)

Faculty Title of Paper	August	September	October	November
Dr. Gurpreet Kaur Paper - I Calculus-I	ε-δ definition of the limit of a function. Basic properties of limits. Continuous functions and classification of discontinuities. Differentiability, Derivative of nth order. Leibnitz theorem, Asymptotes.	Test for concavity and convexity, Points of Inflexion, Tracing of Curves with y'and y''(Standard curves in Cartesian form without use of Grapher).	Functions of several variables: Limits, continuity and differentiability of two variables. Partial derivatives and its Linearization, Chain rule, Partial derivative with constrained variable.	Homogeneous functions, Euler theorem and its applications. Extreme value and saddle points, Lagrange multipliers, Taylor's theorem and its linear and quadratic approximation.
Mr. Jagjit singh PAPER - II DIFFERENTIAL EQUATIONS	First order differential equations : Order and degree of a differential equation, Separable differential equations, Homogeneous differential equations, exact differential equations, linear differential equations and equations reducible to linear differential equations.	Higher order differential equations : Wronskian, Solution of Linear homogeneous and non-homogeneous differential equations of higher order with constant coefficients and with variable coefficients. Method of Variation of Parameters.	Higher order differelitial equations : Differential operator method, Linear non-homogeneous differential equations with variable coefficients, Euler's Cauchy method.	Series solution of Differential equation: Regular point, ordinary point. Power Series method. Frobenius method, Bessel and Legendre Equations. Legendre and Bessel functions and their properties , recurrence relations, orthogonality, Rodrigue's formula

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Sahibzada Ajit Singh Nagar.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

Mr. Jagjit singh PAPER-III COORDINATE GEOMETRY	Parabola: Pole and polar, pair of tangents from a point, chord of contact, equation of chord in terms of midpoints and diameter of conic, Subtangent and Subnormal and its geometrical properties.	Ellipse: Properties of ellipse, parametric representation of ellipse, tangents, normals, equation of chord joining two points on ellipse. Director circle of ellipse, chord of contact, conjugate lines and conjugate diameter, Conormal Points and its geometrical properties.	Hyperbola: Properties of hyperbola, fundamental rectangle, parametric representation of hyperbola, asymptotes of hyperbola.	Conjugate hyperbola, rectangular hyperbola, tangents and normals.

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DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part I

SESSION 2019-20(SEMESTER-2)

Faculty Title of Paper	January	February	March	April
Dr. Gurpreet Kaur Paper - IV Algebra-I	Hermitian, Skew-Hermitian, Orthogonal and Unitary matrices, .Elementary operation on matrices. Inverse of a matrix using Gauss Jordan Method. Linear independence of row and column vectors, Row rank, Colum rank and their equivalence.	Eigen values, Eigen vectors and the characteristic equation of a matrix, Properties of eigen values for special type of matrices, Diagonalization, Cayley-Hamilton theorem. Consistency of a system of linear equations.	Relations between roots and coefficients of a general polynomial, Transformation of equation.Descartes' rule of signs, Solution of cubic equations, Biquadratic equations and their solution	De Moivre's theorem and its application, Direct and inverse circular functions, hyperbolic and logarithmic functions. Summation of series.
Dr. Amrit pal singh PAPER – V PARTIAL DIFFERENTIAL EQUATIONS	**Partial differential equations :** Partial differential equation of first order, Lagrange's solution, , Integral surfaces passing through a given curve, surfaces orthogonal to a given system of surfaces, Partial differential equation of first order but of any degree , Charpit's general method of solution.	Partial differential equations of second and higher order : Partial differential equations of the second order and their classification into hyperbolic, elliptic and parabolic types, canonical forms	Homogeneous and non-homogeneous partial differential equations with constant coefficients, One dimension Wave and Heat Equation.	Two dimensional Laplace equation by separation of variable method and D'Alembert's solution of wave equation.

Dr. Amrit pal singh PAPER-VI ANALYTIC GEOMETRY	The plane: General form, Normal form, Intercept form, Reduction of the general form to normal form , Equation of plane through three points, Angle between two planes, Parallel planes,Perpendicular distance of a point from the planes, Pair of the planes, Area of a triangle and Volume of a tetrahedron.	The straight line: Equation of a line in general form, Symmetric form, two point form, Reduction of the general equation to the symmetrical form, Straight line and the planes, Conditions of parallelism and perpendicularity of a line and a plane, Plane through a given line,Perpendicular distance formula for the line, Projection of a line on a given plane containing them, Condition of intersection of two lines, Shortest distance between two lines, intersection of three planes.	Sphere: General equation of a sphere, Plane section of a sphere, Intersection of two spheres,Sphere through a given circle, Intersection of a straight line and a sphere, Equation of a tangent, plane to sphere, Condition of tangency. Plane of contact, Orthogonal Spheres, Angle of intersection of two spheres, Length of tangent, Radical plane, Coaxial system of spheres.	Cone: Equation of a cone whose vertex is at origin, Equation of a cone with a given vertex and a given conic as base, Condition that general equation of second degree represent a cone, Equation of a tangent plane, Condition of tangency of a plane and a cone, Reciprocal cone, Right circular cone

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DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part II

SESSION 2019-20 (SEMESTER-3)

Faculty Title of Paper	August	September	October	November
Dr. Gurpreet Kaur PAPER-I: Advanced Calculus	Limit and Continuity of Functions of several variables. Differentiability of real-valued functions of two variables. Partial differentiation, Jacobians and their properties, Schwarz's & Young's theorems.	Euler's theorem on homogenous functions. Taylor's theorem for functions two variables and error estimation. Maxima and Minima, Lagrange's multiplier method.	Double and Triple Integrals, Change of order of integration in double integrals, Change of variables.	Applications to evaluation of areas, Volume, Centre of Gravity and Moments of Inertia
Mr Inderjeet Singh PAPER-II: Analysis-I	Definition of a sequence, Bounded and Monotonic sequences, Convergent sequence, Cauchy sequences, Cauchy's Convergence Criterion, Theorems on limits of sequences. Subsequence , Sequential continuity	Definition of a series, Test's of convergence (Without proofs) Comparison tests. Cauchy's integral Ratio tests. Raabe's, Logarithmic, Gauss Test, Cauchy's root test, Alternating series. Leibnitz's test. Absolute and conditional convergence.	Defination and existence of Riemann integrals. Properties of integrals. Integrability of continuous and monotonic functions. The fundamental theorem of integral calculus. Mean value theorems of integral calculus. Functions of bounded Variation and Rectifiable Curves: Properties of Monotonic Functions, Functions of Bounded Variation, Total variation. Additive property of total variation	Total Variation on [a, x] as a function of x, functions of bounded variation expressed as the difference of increasing functions, continuous functions of bounded variation, rectifiable curves and arc length.

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Dr. Gurpreet Kaur Paper-III: Statics	Basic notation, Newton Laws of motion, system of two forces, parallelogram law of forces, resultant of two collinear forces, resolution of forces, moment of a force	couple, theorem on moments of a couple, coplanar forces, resultant of three coplanar concurrent forces, theorem of resolved parts, resultant of two forces acting on a rigid body, Varignon's theorem, generalized theorem of moments.	Equilibrium of two concurrent forces, equilibrium condition for any number of coplanar concurrent forces, Lami's theorem, $\lambda - \mu$ theorem, theorems of moments, resultant of a force and a copule. Equilibrium conditions for coplanar non-concurrent forces.	Friction: Definition and nature of friction, laws of friction, Centre of gravity.

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DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part II

SESSION2019-20(SEMESTER-4)

Faculty Title of Paper	January	February	March	April
Dr. Gurpreet Kaur PAPER-IV: Numerical methods	Bisection Method, Regula-falsi method, Secant method. Fixed – point iteration and Newton-Raphson method and convergence of Secant, Newton- Raphson method and fixed-point iteration.	Pivoting strategies. Partial Pivoting, Gauss-Elimination, Gauss Jordan and Triangularisation method, Jacobi Method, Gauss Seidel Method.	Interpolation; Finite differences, Divided differences. Newton Gregory Forward and Backward formula, Lagrange's formula, Newton's formulae, Central Differences	Stirling, Bessel's and Everett's formulae. Error in linear and quadratic interpolation.
Mr. Inderjeet Singh PAPER-V: Number theory	Concept of Point-wise and Uniform convergence of sequence of functions and series of functions with special reference to power Series. Statement of Weierstrass M-Tests for Uniform convergence of sequence of functions and of series of functions.	Simple applications. Determination of Radius of convergence of power series. Term by term integration and Term by term differentiation of power Series.	Scalar and vector fields, differentiation of vectors, velocity and acceleration. Vector differential operators: Del, Gradient, Divergence and Curl, their physical interpretations. Formulae involving Del applied to point functions and their products. Line, surface and volume integrals	Greens Theorem in the Plane. Parameterized Surface. Stokes Theorem and the Divergence Theorem. Applications of Green's, Stoke's and Divergence theorem.

Dr. Gurpreet Kaur PAPER-VI: Dynamics	Motion of a particle with constant acceleration, acceleration of falling bodies, motion under gravity, motion of a body projected vertically upward, motion of a two particles connected by a string,	motion along a smooth inclined plane, constrained motion along a smooth inclined plane. Variable acceleration, Simple harmonic motion, elastic string, simple pendulum.	Projectile, Work, Power, conservative fields and potential energy, work done against gravity, potential energy of a gravitational field,Relative motion, relative displacement, velocity and acceleration, motion relative to a rotating frame of reference.	. Linear momentum, angular momentum, conservation of angular momentum, impulsive forces, principle of impulse and momentum.

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DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part III

SESSION 2019-20(SEMESTER-5)

Faculty Title of Paper	August	September	October	November
Mr. Jagjit singh PAPER-I Abstract algebra	**Group**: definition and examples, subgroup counting principles Lagrange's theorem	Normal subgroups,quoitent subgroups,homomorphism, fundamental theorem of homomophism,and related theorem,cyclic groups.	Rings: defination and examples of rings ,elementary properties of rings ,sub rings , homoeorphism ,ideals and quotient rings .	Field of quoitent of integral domain, division rings ,Euclidean domains , principal ideals ,examples
Mr. Jagjit singh Paper-II: discrete mathematics -I	Principles of inclusions and exclusions, computability and formal languages-ordered sets, phrase structure grammars,types of grammars and languages	Permutations ,combinations,discrete probability ,pelations and functions ,binary relations ,equivalance relations and partitions partial order relations. Relations and Lattices. Chains and Antichains. Pigeon Hole Principle	Graphs and Planar Graphs-Basic Terminology. Multigraphs. Weighted Graphs. Paths and Circuits Shortest paths. Eulerian Paths and Circuits. Travelling Salesman Problem. Planar Graphs. Trees.	Definition and Examples of Finite State Machines-Equivalent Machines and Finite State Machines as Language Recognizers.

Mr Inderjeet Singh OPTION-I Mathematical methods -1	Fourier series : Fourier series. Theorems, Dirichlet's conditions. Fourier series for even and odd functions. Half range Fourier series. Other forms of Fourier series	Definition of Laplace transform, linearity property-Piecewise continuous function. Existence of Laplace transform. Functions of exponential order and of class A. First and second shifting theorems of Laplace transform. Change of scale property	First and second shifting theorems of Laplace transform. Change of scale property-Laplace transform of derivatives. Initial value problems, Laplace transform of integrals. Multiplication by t. Division by t. Laplace transform of periodic functions and error function. Beta function and Gamma functions	Definition of Inverse Laplace transform. Linearity property. First and second shifting theorems of inverse Laplace transform. Change of scale property. Division by p. Convolution theorem. Heaviside's expansion formula (with proofs and applications).

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part III

SESSION 2019-20(SEMESTER-6)

Faculty Title of Paper	January	February	March	April
Dr. Amrit Pal Singh Paper-III Algebra -II	Vector spaces, Examples, Linear Dependence, Linear Combinations, Bases and Dimension, Subspaces, Quotient spaces	, Direct Sum of vector spaces, Dimension of a direct sum, Dual of a vector space. Matrices and change of basis.	Linear transformation, Algebra of linear transformations, Matrices as linear mappings, Kernal and image, Rank and Nullity theorem, Singular and non-singular linear mappings, Isomorphism, Composition of linear mappings, Polynomials and linear operators.	Square matrices as linear operators, matrix representation of a linear operator, Change of basis, characteristic and minimal polynomial for linear operators
Mr. Inderjeet Singh PAPER-IV Mathematical methods -II	Fourier series,theorems,dirichlet's conditions,fourier series for even and odd functions. Half range fourier series ,other forms of series Hankel transform: hankel integral formula,hankel transform,inverse theorem for hankel transform,hankel sine and cosinetransform and their inversion formula, linearity property of hankel transform	Fourier transform and its applications: dirichlet's condition ,fourier integral formula(without proof),fourier transform ,inverse theorem for fourier transform, fourier sine and cosine transform and their inversion formula,linearity property of fourier transforms, change of scale property	Shifting theorem,modulation theorem,convolution theorem of fourier transform,parseval;s identity ,finite fourier sine transform,inversion formula for sine transform, finite fourier cosine transform,inversion formula for cosine transform	Applications to solve some model equations:one dimensional heat equation ,one dimensional wave equation.

Mr. Inderjeet Singh OPTION-III Discrete mathematics - II	Analysis of algorithms-time complexity,complexity of problems.discrete numeric functions,generating functions,recurrence relations and recrusive algorithms linear recrrence relation with constan cofficient	Homogeneoussolutions ,particular solutions ,total solution,solution bt mehod of generating functions ,Boolean algebras ,lattices and algebraic structures	Distributive and complemented lattices ,Boolean lattices and Boolean algebras, Boolean functions and expensions.prepositional calculus	Design and implementation of digital networks ,switching circuits

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DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./ B.Sc. (MATHEMATICS) Part I

SESSION 2020-21(SEMESTER-1)

Faculty Title of Paper	September	October	November	December
Dr. Gurpreet Kaur Paper - I Calculus-I	ε-δ definition of the limit of a function. Basic properties of limits. Continuous functions and classification of discontinuities. Differentiability, Derivative of nth order. Leibnitz theorem, Asymptotes.	Test for concavity and convexity, Points of Inflexion, Tracing of Curves with y'and y"(Standard curves in Cartesian form without use of Grapher).	Functions of several variables: Limits, continuity and differentjability of two variables. Partial derivatives and its Linearization, Chain rule, Partial derive[ive with constrained variable.	Homogeneous functions, Euler theorem and its applications, Extreme value and saddle points, Lagrange multipliers, Taylor's theorem and its linear and quadratic approximation.
Dr. Gurpreet Kaur PAPER - II DIFFERENTIAL EQUATIONS	First order differential equations : Order and degree of a differential equation, Separable differential equations, Homogeneous differential equations, exact differential equations,linear differential equations and equations reducible to linear differential equations.	Higher order differential equations : Wronskian, Solution of Linear homogeneous and non-homogeneous differential equations of higher order with constant coefficients and with variable coefficients. Method of Variation of Parameters.	Higher order differelitial equations : Differential operator method, Linear non-homogeneous differential equations with variable coefricients, Euler's Cauchy method.	Series solution of Differential equation: Regular point, ordinary point, Power Series method. Frobenius method. Bessel and Legendre Equations, Legendre and Bessel functions and their properties , recurrence relations, orthogonality, Rodrigue's formula

Principal
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

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Dr. Amrit pal singh PAPER-III LINEAR ALGEBRA	Elementary operation on matrices, Inverse of a matrix using Gauss Jordan Method. Linear independence of row and column vectors, Row rank, Column rank and their equivalence	Eigen values. Eigen vectors and the characteristic equation of a matrix, Diagonalization' Cayley-Hamilton theorem and its use is finding inverse of a matrix, Consistency of a system of linear equations.	Vector spaces. Examples Linear dependence, Linear Combinations, Bases and dimension , Subspaces. linear transformations, Algebra of linear transformations	Matrices as linear transformations, Matrices and change of basis, Kernel and image, Rank and Nullity theorem.

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DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part I

SESSION 2020-21(SEMESTER-2)

Faculty Title of Paper	February	March	April	May
Dr. Gurpreet Kaur Paper - IV Calculus-II	Double integrals,double integral in polar form, Change of order and change of variables in double integrals, Change of variables. Triple integrals in rectangular co-ordinates , Triple integrals incylindrical and spherical co-ordinates.	Applications to evaluation of areas, Volume, Centre of Gravity and Moments of Inertia	Vector in plane,cartesian co-ordinates and vectors in space, dot and cross products, lines and planes in space,line integrals , vector fields ,worl circulations , path independence.	Potential functions and conservative fields , Greens theorem in the Plane ,surface area and surface integrals, Stoke's theorem and Divergence theorem.
Dr. Gurpreet Kaur PAPER – V PARTIAL DIFFERENTIAL EQUATIONS	**Partial differential equations** : Partial differential equation of first order, Lagrange's solution, , Integral surfaces passing through a given curve, surfaces orthogonal to a given system of surfaces, Partial differential equation of first order but of any degree , Charpit's general method of solution.	Partial differential equations of second and higher order : Partial differential equations of the second order and their classification into hyperbolic elliptic and parabolic types, canonical forms	Homogeneous and non-homogeneous partial differential equations with constant coefficients. One dimension Wave and Heat Equation.	Two dimensional Laplace equation by separation of variable method and D'Alembert's solution of wave equation.

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Dr. Amrit pal singh **PAPER-VI ANALYTIC GEOMETRY**	**General equation of second degree:**conic section ,centre of conic section,principal axes and eccentricity of a conic section , axis ,latus rectum ,vertex and focus of a parabola ,tracing of cones. **Polar equation of a conic** : tracing of the conic ,chord joining two points ,tangents , normal,director circle and asymptotes.	**Introduction of oblique axes** :distance between two lines ,equation of line ,angle between two lines,length of perpendicalar ,angle between the pair of lines , oblique axesfrom rectangular axes, invarients,equation of circle ,parabola ,ellipse,hyperbola	Sphere:Section of a sphere by plane, Sphere throagh a given circle, Intersection of a straight line and a sphere,tangent line and tangent plane to sphere, Angle of intersection of two spheres and condition of orthogonality	Cone:General equation of second degree represent a cone, its interception eith a plane and with a line ,enveloping cone, Right circular cone. Cylinder: enveloping cylinder , Right circular cylinder.

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DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part II

SESSION 2020-21 (SEMESTER-3)

Faculty Title of Paper	August	September	October	November
Dr. Gurpreet Kaur PAPER-I: Advanced Calculus	Limit and Continuity of Functions of several variables. Differentiability of real-valued functions of two variables. Partial differentiation, Jacobians and their properties, Schwarz's & Young's theorems.	Euler's theorem on homogenous functions. Taylor's theorem for functions two variables and error estimation. Maxima and Minima, Lagrange's multiplier method.	Double and Triple Integrals. Change of order of integration in double integrals. Change of variables.	Applications to evaluation of areas, Volume, Centre of Gravity and Moments of Inertia
Mr Inderjeet Singh PAPER-II: Analysis-I	Definition of a sequence. Bounded and Monotonic sequences, Convergent sequence. Cauchy sequences, Cauchy's Convergence Criterion. Theorems on limits of sequences. Subsequence , Sequential continuity	Definition of a series, Test's of convergence (Without proofs) Comparison tests. Cauchy's integral Ratio tests. Raabe's, Logarithmic, Gauss Test, Cauchy's root test, Alternating series. Leibnitz's test. Absolute and conditional convergence.	Definition and existence of Riemann integrals. Properties of integrals. Integrability of continuous and monotonic functions. The fundamental theorem of integral calculus. Mean value theorems of integral calculus. Functions of bounded Variation and Rectifiable Curves. Properties of Monotonic Functions, Functions of Bounded Variation, Total variation, Additive property of total variation	Total Variation on [a, x] as a function of x, functions of bounded variation expressed as the difference of increasing functions, continuous functions of bounded variation, rectifiable curves and arc length.

Dr. Gurpreet Kaur Paper-III: Statics	Basic notation, Newton Laws of motion, system of two forces, parallelogram law of forces, resultant of two collinear forces, resolution of forces, moment of a force	couple, theorem on moments of a couple, coplanar forces, resultant of three coplanar concurrent forces, theorem of resolved parts, resultant of two forces acting on a rigid body, Varignon's theorem, generalized theorem of moments.	Equilibrium of two concurrent forces, equilibrium condition for any number of coplanar concurrent forces, Lami's theorem, $\lambda - \mu$ theorem, theorems of moments, resultant of a force and a copule. Equilibrium conditions for coplanar non-concurrent forces.	Friction: Definition and nature of friction, laws of friction, Centre of gravity.

DEPARTMENT OD MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part II

SESSION2020-21(SEMESTER-4)

Faculty Title of Paper	February	March	April	May
Mr Inderjeet Singh Paper-IV: : Numerical Methods	Bisection Method, Regula-falsi method, Sectant method, Fixed – point iteration and Newton-Raphson method and convergence of Secant, Newton-Raphson method and fixed-point iteration.	Pivoting strategies, Partial Pivoting, Gauss-Elimination, Gauss Jordan and Triangularisation method. Jacobi Method, Gauss Seidel Method.	Interpolation: Finite differences, Divided differences, Newton Gregory Forward and Backward formula, Lagrange's formula, Newton's formulae.	Central Differences, Stirling, Bessel's and Everett's formulae, Error in linear and quadratic interpolation.
Dr. Gurpreet Kaur PAPER-V: Analysis -II	Concept of Point-wise and Uniform convergence of sequence of functions and series of functions with special reference to power Series. Statement of Weierstrass M-Tests for Uniform convergence of sequence of functions and of series of functions.	Simple applications. Determination of Radius of convergence of power series. Term by term integration and Term by term differentiation of power Series.	Scalar and vector fields, differentiation of vectors, velocity and acceleration. Vector differential operators: Del, Gradient, Divergence and Curl, their physical interpretations. Formulae involving Del applied to point functions and their products. Line, surface and volume integrals	Greens Theorem in the Plane Parameterized Surface, Stokes Theorem and the Divergence Theorem. Applications of Green's, Stoke's and Divergence theorem.

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Dr. Gurpreet Kaur PAPER-VI: : DYNAMICS	Motion of a particle with constant acceleration, acceleration of falling bodies, motion under gravity, motion of a body projected vertically upward, motion of a two particles connected by a string.	motion along a smooth inclined plane, constrained motion along a smooth inclined plane. Variable acceleration, Simple harmonic motion, elastic string, simple pendulum.	Projectile, Work, Power, conservative fields and potential energy, work done against gravity, potential energy of a gravitational field.Relative motion, relative displacement, velocity and acceleration, motion relative to a rotating frame of reference.	Linear momentum, angular momentum, conservation of angular momentum, impulsive forces, principle of impulse and momentum.

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DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A. B.Sc. (MATHEMATICS) Part III

SESSION 2020-21(SEMESTER-5)

Faculty Title of Paper	September	October	November	December
Dr. Gurpreet Kaur PAPER-I Algebra-I	**Group**:definition and examples, subgroup counting principles Lagrange's theorem	Normal subgroups,quoitent subgroups,homomorphism, fundamental theorem of homomophism,and related theorem,cyclic groups.	Rings: definations and examples of rings ,elementary properties of rings ,sub rings , homomorphism ,ideals and quotient rings.	Field of quotient of integral domain,division rings ,Euclidean domains, principal ideals ,examples
Mr Inderjeet Singh Paper-II: discrete mathematics -I	Principles of inclusions and exclusions,computability and formal languages-ordered sets,phrase structure grammars,types of grammars and languages	Permutations ,combinations,discrete probability ,pelations and functions ,binary relations ,equivalance relations and partitions partial order relations. Relations and Lattices. Chains and Antichains Pigeon Hole Principle	Graphs and Planar Graphs-Basic Terminology, Multigsaphs, Weighted Graphs. Paths and Circuits. Shortest paths, Eulerian Paths and Circuits. Travelling Salesman Problem. Planar Graphs. Trees.	Definition and Examples of Finite State Machines-Equivalent Machines and Finite State Machines as Language Recognizers.

Mr Inderjeet Singh OPTION-I Mathematical methods -1	Fourier series : Fourier series, Theorems, Dirichlet's conditions, Fourier series for even and odd functions, Half range Fourier series, Other forms of Fourier series	Definition of Laplace transform, linearity property- Piecewise continuous function.Existence of Laplace transform, Functions of exponential order and of class A. First and second shifting theorems of Laplace transform, Change of scale property	First and second shifting theorems of Laplace transform, Change of scale property- Laplace transform of derivatives, Initial value problems, Laplace transform of integrals,Multiplication by t, Division by t, Laplace transform of periodic functions and error function, Beta function and Gamma functions	Definition of Inverse Laplace transform, Linearity property, First and second shifting theorems of inverse Laplace transform, Change of scale property, Division by p, Convolution theorem, Heaviside's expansion formula (with proofs and applications)

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DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part III

SESSION 2020-21(SEMESTER-6)

Faculty Title of Paper	February	March	April	May
Dr. Gurpreet Kaur Paper-III Algebra -II	Vector spaces, Examples. Linear Dependence, Linear Combinations, Bases and Dimension, Subspaces, Quotient spaces	, Direct Sum of vector spaces, Dimension of a direct sum, Dual of a vector space. Matrices and change of basis.	Linear transformation, Algebra of linear transformations, Matrices as linear mappings, Kernal and image, Rank and Nullity theorem, Singular and non-singular linear mappings, Isomorphism, Composition of linear mappings, Polynomials and linear operators.	Square matrices as linear operators, matrix representation of a linear operator, Change of basis, characteristic and minimal polynomial for linear operators
Mr Inderjeet Singh PAPER-IV Mathematical methods -II	Fourier series,theorems,dirichlet's conditions,fourier series for even and odd functions. Half range fourier series ,other forms of series Hankel transform: hankel integral formula,hankel transform,inverse theorem for hankel transform,hankel sine and cosinetransform and their inversion formula, linearity property of hankel transform	Fourier transform and its applications: dirichlet's condition ,fourier integral formula(without proof),fourier transform ,inverse theorem for fourier transform, fourier sine and cosine transform and their inversion formula,linearity property of fourier transforms, change of scale property	Shifting theorem,modulation theorem,convolution theorem of fourier transform,parseval;s identity ,finite fourier sine transform,inversion formula for sine transform, finite fourier cosine transform,inversion formula for cosine transform	Applications to solve some model equations:one dimensional heat equation ,one dimensional wave equation.

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Mr Inderjeet Singh OPTION-III discrete mathematics - II	Analysis of algorithms-time complexity,complexity of problems,discrete numeric functions,generating functions,recurrence relations and recrusive algorithms linear recrrence relation with constan cofficient	Homogeneoussolutions ,particular solutions ,total solution,solution bt mehod of generating functions ,Boolean algebras -lattices and algebraic structures	Distributive and complemented lattices ,Boolean lattices and Boolean algebras. Boolean functions and expersions,prepositional calculus	Design and implementation of digital networks ,switching circuits

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DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./ B.Sc. (MATHEMATICS) Part I

SESSION 2021-22(SEMESTER-I)

Faculty Title of Paper	September	October	November	December
Dr. Amrit Pal Singh Paper - I Calculus-I	ε-δ definition of the limit of a function. Basic properties of limits. Continuous functions and classification of discontinuities. Differentiability, Derivative of nth order. Leibnitz theorem, Asymptotes.	Test for concavity and convexity, Points of Inflexion, Tracing of Curves with y'and y''(Standard curves in Cartesian form without use of Grapher).	Functions of several variables: Limits, continuity and differentiability of two variables. Partial derivatives and its Linearization, Chain rule, Partial derivative with constrained variable.	Homogeneous functions, Euler theorem and its applications, Extreme value and saddle points, Lagrange multipliers, Taylor's theorem and its linear and quadratic approximation.
Mr. Inderjeet Singh PAPER - II DIFFERENTIAL EQUATIONS	First order differential equations : Order and degree of a differential equation, Separable differential equations, Homogeneous differential equations, exact differential equations,linear differential equations and equations reducible to linear differential equations.	Higher order differential equations : Wronskian, Solution of Linear homogeneous and non-homogeneous differential equations of higher order with constant coefficients and with variable coefficients, Method of Variation of Parameters.	Higher order differential equations : Differential operator method, Linear non-homogeneous differential equations with variable coefficients, Euler's Cauchy method.	Series solution of Differential equation: Regular point, ordinary point, Power Series method. Frobenius method, Bessel and Legendre Equations, Legendre and Bessel functions and their properties , recurrence relations, orthogonality, Rodrigue's formula

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Sahibzada Ajit Singh Nagar.

Dr. Amrit pal singh PAPER-III LINEAR ALGEBRA	Elementary operation on matrices, Inverse of a matrix using Gauss Jordan Method. Linear independence of row and column vectors, Row rank, Column rank and their equivalence	Eigen values. Eigen vectors and the characteristic equation of a matrix, Diagonalization Cayley-Hamilton theorem and its use in finding inverse of a matrix, Consistency of a system of linear equations.	Vector spaces. Examples Linear dependence, Linear Combinations. Bases and dimension , Subspaces. linear transformations, Algebra of linear transformations	Matrices as linear transformations. Matrices and change of basis. Kernel and image, Rank and Nullity theorem.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part I

SESSION 2021-22(SEMESTER-2)

Faculty Title of Paper	February	March	April	May
Dr. Amrit Pal Singh Paper - IV Calculus-II	Double integrals,double integral in polar form, Change of order and change of variables in double integrals, Change of variables. Triple integrals in rectangular co-ordinates , Triple integrals incylindrical and spherical co-ordinates	Applications to evaluation of areas, Volume, Centre of Gravity and Moments of Inertia	Vector in plane,cartesian co-ordinates and vectors in space, dot and cross products, lines and planes in space,line integrals , vector fields ,work circulations , path independence.	Potential functions and conservative fields , Greens theorem in the Plane ,surface area and surface integrals, Stoke's theorem and Divergence theorem.
Mr. Inderjeet Singh PAPER – V PARTIAL DIFFERENTIAL EQUATIONS	**Partial differential equations :** Partial differential equation of first order, Lagrange's solution, , Integral surfaces passing through a given curve, surfaces orthogonal to a given system of surfaces, Partial differential equation of first order but of any	Partial differential equations of second and higher order : Partial differential equations of the second order and their classification into hyperbolic, elliptic and parabolic types, canonical forms	Homogeneous and non-homogeneous partial differential equations with constant coefficients. One dimension Wave and Heat Equation.	Two dimensional Laplace equation by separation of variable method and D'Alembert's solution of wave equation.

	degree . Charpit's general method of solution.			
Dr. Amrit pal singh **PAPER-VI ANALYTIC GEOMETRY**	**General equation of second degree:**conic section ,centre of conic section,principal axes and eccentricity of a conic section , axis ,latus rectum ,vertex and focus of a parabola ,tracing of cones. **Polar equation of a conic** : tracing of the conic ,chord joining two points ,tangents , normal,director circle and asymptotes.	**Introduction of oblique axes** :distance between two lines ,equation of line ,angle between two lines,length of perpendicular ,angle between the pair of lines , oblique axesfrom rectangular axes, invarients,equation of circle ,parabola ,ellipse,hyperbola	Sphere:Section of a sphere by plane, Sphere through a given circle, Intersection of a straight line and a sphere,tangent line and tangent plane to sphere, Angle of intersection of two spheres and condition of orthogonality	Cone:General equation of second degree represent a cone, its interception with a plane and with a line ,enveloping cone, Right circular cone. Cylinder: enveloping cylinder , Right circular cylinder.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.Sc. (MATHEMATICS) Part II

SESSION 2021-22(SEMESTER-3)

Faculty Title of Paper	September	October	November	December
Mr Inderjeet Singh PAPER-I: ANALYSIS	Definition of a sequence, Bounded and Monotonic sequences, Convergent sequence, Cauchy sequences, Cauchy's Convergence Criterion, Theorems on limits of sequences. Subsequence , Sequential continuity, Definition of a series, Test's of convergence (Without proofs) Comparison tests. Cauchy's integral Ratio tests. Raabe's, Logarithmic, Gauss Test, Cauchy's root test, Alternating series. Leibniz's test.	Absolute and conditional convergence, Statement of Weierstrass M-Tests for Uniform convergence of sequence of functions and of series of functions. Simple applications. Determination of Radius of convergence of power series. Term by term integration and Term by term differentiation of power Series.	Partition ,Upper and lower sums, Upper and lower integrals, Riemann integrability, Condition of existence of Riemann integrability of continuous functions and of monotone functions ,Algebra of integrable functions	Definition ,Statements of their conditions of existence ,Test of the convergence of improper integral ,Beta and Gamma functions and their convergence , Abel's and Dirichlet's tests
Prof. Harjinder singh PAPER-II: Linear Programming	Formation of LPP, Graphical method , theory of Simplex method,standard form of LPP, Feasible solution ,basic feasible solution , optimality condition,unbounded solution ,alternative optimal solution ,correspondance between BSF and extreme points ,simplex method , simplex algorithm,	Simplex method , simplex algorithm, Simplex Tableau , simplex method case of degeneracy, Big-M method ,infeasible solution, alternative solution ,solution of LPPfor unrestricted variable.	Formation of transportation problem , Concept of solutions ,Fesible solutions .Finding initial basic feasible solution by north ews corner method , matrix method , minima method ,Vogel` approximation method	Optimal solutions using MODI method Maximization, Minimization, unbalanced with restricted assignment problem., algorithm, Hungarian method.

Mr Inderjeet Singh Paper-III: MECHANICS	Basic notation, Newton Laws of motion, system of two forces, parallelogram law of forces, resultant of two collinear forces, resolution of forces, moment of a force,	Couple.Theorem on moments of a couple, coplanar forces, resultant of three coplanar concurrent forces, theorem of resolved parts, resultant of two forces acting on a rigid body, Varignon's theorem, generalized theorem of moment, Equilibrium of two concurrent forces, equilibrium condition for any number of coplanar concurrent forces, Lami's theorem. $\lambda - \mu$ theorem, theorems of moments, resultant of a force and a copule. Equilibrium conditions for coplanar non-concurrent forces.	Motion of a particle with constant acceleration, acceleration of falling bodies, motion under gravity, motion of a body projected vertically upward, motion of a two particles connected by a string, motion along a smooth inclined plane, constrained motion along a smooth inclined plane. Variable acceleration, Simple harmonic motion, elastic string, simple pendulum.	Simple harmonic motion, elastic string, simple pendulum., Projectile.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part II

SESSION2021-22(SEMESTER-4)

Faculty Title of Paper	February	March	April	May
Mr. Inderjeet Singh Paper-IV: Analysis -II	Functions of bounded Variation and Rectifiable Curves: Properties of Monotonic Functions, Functions of Bounded Variation, Total variation, Additive property of total variation, Total Variation on [a, x] as a function of x, functions of bounded variation expressed as the difference of increasing functions, continuous functions of bounded variation	rectifiable curves and arc length,Additive and continuity property of arc lengths , equivalance of paths and change of parameter.	The riemann-stieltjes integrals:definition ,elementary properties , integration by parts ,change of variable, reduction to Riemann integral, step functions as integrators,reduction of Riemann's conditions, comparison theorem, integration of bounded variation.	mean value theorems for Riemann- stieltjes integrals, fundamental theorem of integral calcus, mean value theorem for Riemann integrals
Mr. Inderjeet Singh PAPER-V: Numerical methods	Measure of errors: relative, absolute and percentage errors, types of erroers ,inherent error, round off erroe and truncation error, Bisection Method, Regula-falsi method, Sectant method, Fixed – point iteration and Newton-Raphson method and convergence of Secant, Newton- Raphson method and fixed-point iteration.	Linear system of equations : Gauss-Elimination, pivoting element, Pivoting strategies, Partial and complete pivoting , Gauss Jordan and Triangularisation method, Jacobi Method, Gauss Seidel Method	Interpolation: Finite differences, Divided differences, Newton Gregory Forward and Backward formula, Lagrange's formula, Newton's formulae, Central Differences	Stirling, Bessel's and Everett's formulae, Error in linear and quadratic interpolation.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

Prof. Harjinder singh PAPER-VI: Number theory	Divisibility , greatest commun divisor , fundamental theorem of arithmetic , congurances	Residue classes and reduced residue classes, euler-fermat theorem, wilson's theorem, linear congurunces , Chinese remainder theorem	An application to cryptography , primitive roots , indices , quadratic residues,legendre symbols, euler;s certerion ,gauss lemma	Quadratic recitrocity law, jacobi symbol, arithmetic functions u(n),d(n) ,mobious inversion formula.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part III

SESSION 2021-22(SEMESTER-5)

Faculty Title of Paper	September	October	November	December
Mr. Inderjeet Singh PAPER-I Algebra-I	Group:definition and examples, subgroup counting principles Lagrange's theorem	Normal subgroups,quotient subgroups,homomorphism, fundamental theorem of homomophism,and related theorem,cyclic groups.	Rings: definations and examples of rings ,elementary properties of rings ,sub rings , homomorphism ,ideals and quotient rings .	Field of quotient of integral domain,division rings ,Euclidean domains , principal ideals ,examples
Mr. Inderjeet Singh Paper-II: discrete mathematics -I	Principles of inclusions and exclusions,computability and formal languages-ordered sets,phrase structure grammars,types of grammars and languages	Permutations ,combinations,discrete probability ,pelations and functions ,binary relations ,equivalance relations and partitions partial order relations. Relations and Lattices. Chains and Antichains. Pigeon Hole Principle	Graphs and Planar Graphs-Basic Terminology, Multigraphs, Weighted Graphs. Paths and Circuits Shortest paths, Eulerian Paths and Circuits. Travelling Salesman Problem. Planar Graphs. Trees.	Definition and Examples of Finite State Machines-Equivalent Machines and Finite State Machines as Language Recognizers.

Prof. Harjinder Singh OPTION-1 Mathematical methods -1	Fourier series : Fourier series, Theorems, Dirichlet's conditions, Fourier series for even and odd functions, Half range Fourier series, Other forms of Fourier series	Definition of Laplace transform, linearity property- Piecewise continuous function. Existence of Laplace transform, Functions of exponential order and of class A. First and second shifting theorems of Laplace transform, Change of scale property	. First and second shifting theorems of Laplace transform, Change of scale property- Laplace transform of derivatives, Initial value problems, Laplace transform of integrals, Multiplication by L Division by L	Laplace transform of periodic functions and error function, Beta function and Gamma functions Definition of Inverse Laplace

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID-principal.gcmohali@gmail.com

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part III

SESSION 2021-22(SEMESTER-6)

Faculty Title of Paper	February	March	April	May
Prof. Harjinder Singh Paper-III Algebra -II	Vector spaces, Examples, Linear Dependence, Linear Combinations, Bases and Dimension, Subspaces, Quotient spaces	Direct Sum of vector spaces, Dimension of a direct sum, Dual of a vector space. Matrices and change of basis.	Linear transformation, Algebra of linear transformations, Matrices as linear mappings, Kernal and image, Rank and Nullity theorem, Singular and non-singular linear mappings, Isomorphism, Composition of linear mappings, Polynomials and linear operators.	Square matrices as linear operators, matrix representation of a linear operator, Change of basis, characteristic and minimal polynomial for linear operators
Mr. Inderjeet Singh PAPER-IV Mathematical methods -II	Fourier transforms : Drichlet's conditions, Fourier integral formula (without proof),Fourier transform, Inverse Theorem for Fourier transform, Fourier sine and cosinetransforms and their inversion formulae.	Linearity property of Fourier transforms,Change of scale property, Shifting theorem, Modulation theorem, Convolution theorem of Fourier transforms, Parseval's identity, Finite Fourier sine transform, Inversion formula for sine transform, Finite Fourier cosine Transform, Inversion formula for cosine transform.	Applications of Laplace and Fourier transforms: Applications of Laplace transforms to the solution of ordinary differential equations with constant coefficients and variable coefficients, Simultaneous ordinary differential equations	Second order Partial differential equations (Heat, wave and laplace).

Mr Inderjeet Singh OPTION-III discrete mathematics - II	Analysis of algorithms time complexity,complexity of problems,discrete numeric functions,generating functions,recurrence relations and recrusive algorithms linear recrrence relation with constan cofficient	Homogeneoussolutions particular solutions ,total solution,solution bi method of generating functions Boolean algebras lattices and algebraic structures	Distributive and complemented lattices ,Boolean lattices and Boolean algebras, Boolean functions and expensions,prepositional calculus	Design and implementation of digital networks ,switching circuits

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part I

SESSION 2022-23(SEMESTER-1)

Faculty Title of Paper	September	October	November	December
Dr. Jyotindra Thakur Paper - I Calculus-I	ε -δ definition of the limit of a function, Basic properties of limits, Continuous functions and classification of discontinuities, Differentiability, Derivative of nth order, Leibnitz theorem, Asymptotes.	Test for concavity and convexity, Points of Inflexion, Tracing of Curves with y'and y''(Standard curves in Cartesian form without use of Grapher).	Functions of several variables: Limits, continuity and differentiability of two variables, Partial derivatives and its Linearization, Chain rule, Partial derivative with constrained variable.	Homogeneous functions, Euler theorem and its applications, Extreme value and saddle points, Lagrange multipliers, Taylor's theorem and its linear and quadratic approximation.
Dr. Jyotindra Thakur PAPER - II DIFFERENTIAL EQUATIONS	First order differential equations : Order and degree of a differential equation, Separable differential equations, Homogeneous differential equations, exact differential equations,linear differential equations and equations reducible to linear differential equations.	Higher order differential equations : Wronskian, Solution of Linear homogeneous and non-homogeneous differential equations of higher order with constant coefficients and with variable coefficients, Method of Variation of Parameters.	Higher order differelitial equations : Differential operator method, Linear non-homogeneous differential equations with variable coefridents, Euler's Cauchy method.	Series solution of Differential equation: Regular point, ordinary point, Power Series method, Frobenius method, Bessel and Legendre Equations, Legendre and Bessel functions and their properties , recurrence relations, orthogonality, Rodrigue's formula

Dr. Amrit pal singh **PAPER-III** **LINEAR ALGEBRA**	Elementary operation on matrices, Inverse of a matrix using Gauss Jordan Method. Linear independence of row and column vectors, Row rank, Column rank and their equivalence	Eigen values. Eigen vectors and the characteristic equation of a matrix, Diagonalization' Cayley Hamilton theorem and its use in finding inverse of a matrix, Consistency of a system of linear equations.	Vector spaces. Examples Linear dependence, Linear Combinations, Bases and dimension , Subspaces. linear transformations. Algebra of linear transformations	Matrices as linear transformations, Matrices and charge of basis, Kernel and image, Rank and Nullity theorem.

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Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part I

SESSION 2022-23(SEMESTER-2)

Faculty Title of Paper	February	March	April	May
Dr. Jyotindra Thakur Paper - IV Calculus-II	Double integrals,double integral in polar form. Change of order and change of variables in double integrals, Change of variables. Triple integrals in rectangular co-ordinates , Triple integrals incylindrical and spherical co-ordinates.	Applications to evaluation of areas, Volume, Centre of Gravity and Moments of Inertia	Vector in plane,cartesian co-ordinates and vectors in space, dot and cross products, lines and planes in space,line integrals , vector fields ,work circulations , path independence.	Potential functions and conservative fields , Greens theorem in the Plane ,surface area and surface integrals, Stoke's theorem and Divergence theorem.
Dr. Jyotindra Thakur PAPER – V PARTIAL DIFFERENTIAL EQUATIONS	**Partial differential equation** : Partial differential equation of first order, Lagrange's solution, , Integral surfaces passing through a given curve, surfaces orthogonal to a given system of surfaces, Partial differential equation of first order but of any degree , Charpit's general method of solution.	Partial differential equations of second and higher order : Partial differential equations of the second order and their classification into hyperbolic, elliptic and parabolic types, canonical forms	Homogeneous and non-homogeneous partial differential equations with constant coefficients. One dimension Wave and Heat Equation.	Two dimensional Laplace equation by separation of variable method and D'Alembert's solution of wave equation.

Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

Dr. Amrit pal singh PAPER-VI ANALYTIC GEOMETRY	**General equation of second degree**:conic section ,centre of conic section,principal axes and eccentricity of a conic section , axis ,latus rectum ,vertex and focus of a parabola ,tracing of cones. **Polar equation of a conic** : tracing of the conic ,chord joining two points ,tangents , normal,director circle and asymptotes.	**Introduction of oblique axes** :distance between two lines ,equation of line ,angle between two lines,length of perpendicular ,angle between the pair of lines , oblique axesfrom rectangular axes, invarients,equation of circle ,parabola ,ellipse,hyperbola	Sphere:Section of a sphere by plane, Sphere through a given circle, Intersection of a straight line and a sphere,tangent line and tangent plane to sphere, Angle of intersection of two spheres and condition of orthogonality	Cone:General equation of second degree represent a cone, its interception eith a plane and with a line ,enveloping cone, Right circular cone. Cylinder: enveloping cylinder , Right circular cylinder.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./ B.Sc. (MATHEMATICS) Part II

SESSION 2022-23(SEMESTER-3)

Faculty Title of Paper	September	October	November	December
Dr Jyotindra Thakur PAPER-I: ANALYSIS	Definition of a sequence, Bounded and Monotonic sequences, Convergent sequence, Cauchy sequences, Cauchy's Convergence Criterion, Theorems on limits of sequences. Subsequence, Sequential continuity, Definition of a series. Test's of convergence (Without proofs) Comparison tests. Cauchy's integral Ratio tests. Raabe's, Logarithmic, Gauss Test, Cauchy's root test, Alternating series. Leibnitz's test.	Absolute and conditional convergence. Statement of Weierstrass M-Tests for Uniform convergence of sequence of functions and of series of functions. Simple applications. Determination of Radius of convergence of power series. Term by term integration and Term by term differentiation of power Series.	Partition ,Upper and lower sums. Upper and lower integrals, Riemann integrability, Condition of existence of Riemann integrability of continuous functions and of monotone functions ,Algebra of integrable functions	Definition ,Statements of their conditions of existence ,Test of the convergence of improper integral ,Beta and Gamma functions and their convergence , Abel's and Dirichlet's tests
Prof. Harjinder singh PAPER-II: Linear Programming	Formation of LPP, Graphical method , theory of Simplex method,standard form of LPP, Feasible solution ,basic feasible solution,optimality condition, unbounded solution ,alternative optimal solution ,correspondance between BSF and extreme points ,simplex method , simplex algorithm,	Simplex method , simplex algorithm, Simplex Tableau , simplex method case of degeneracy, Big-M method ,infeasible solution, alternative solution ,solution of LPPfor unrestricted variable.	Formation of transportation problem , Concept of solutions ,Fesible solutions ,Finding initial basic feasible solution by north ewst corner method , matrix method , minima method ,Vogel' approximation method	Optimal solutions using MODI method Maximization, Minimization, unbalanced with restricted assignment problem , algorithm,,Hungarian method.

Mr Inderjeet Singh Paper-III: MECHANICS	Basic notation, Newton Laws of motion, system of two forces, parallelogram law of forces, resultant of two collinear forces, resolution of forces, moment of a force,	Couple,Theorem on moments of a couple, coplanar forces, resultant of three coplanar concurrent forces, theorem of resolved parts, resultant of two forces acting on a rigid body, Varignon's theorem, generalized theorem of moment, Equilibrium of two concurrent forces, equilibrium condition for any number of coplanar concurrent forces, Lami's theorem, $\lambda - \mu$ theorem, theorems of moments, resultant of a force and a copule, Equilibrium conditions for coplanar non-concurrent forces.	Motion of a particle with constant acceleration, acceleration of falling bodies, motion under gravity, motion of a body projected vertically upward, motion of a two particles connected by a string, motion along a smooth inclined plane, constrained motion along a smooth inclined plane, Variable acceleration, Simple harmonic motion, elastic string, simple pendulum.	Simple harmonic motion, elastic string, simple pendulum., Projectile.

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Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part II

SESSION2022-23(SEMESTER-4)

Faculty Title of Paper	February	March	April	May
Mr Inderjeet Singh Paper-IV: Analysis -II	Functions of bounded Variation and Rectifiable Curves: Properties of Monotonic Functions, Functions of Bounded Variation, Total variation, Additive property of total variation, Total Variation on [a, x] as a function of x, functions of bounded variation expressed as the difference of increasing functions, continuous functions of bounded variation	rectifiable curves and arc length,Additive and continuity property of arc lengths , equivalance of paths and change of parameter.	The riemann-stieltjes integrals:definition ,elementary properties , integration by parts ,change of variable, reduction to Riemann integral, step functions as integrators,reduction of Riemann's conditions, comparison theorem, integration of bounded variation.	mean value theorems for Riemann- stieltjes integrals, fundamental theorem of integral calcus, mean value theorem for Riemann integrals
Dr Jyotindra Thakur PAPER-V: Numerical methods	Measure of errors: relative, absolute and percentage errors, types of erroers ,inherent error, round off erroe and truncation error, Bisection Method, Regula-falsi method, Sectant method, Fixed – point iteration and Newton-Raphson method and convergence of Secant, Newton- Raphson method and fixed-point iteration.	Linear system of equations : Gauss-Elimination, pivoting element, Pivoting strategies, Partial and complete pivoting , Gauss Jordan and Triangularisation method, Jacobi Method, Gauss Seidel Method	Interpolation: Finite differences, Divided differences, Newton Gregory Forward and Backward formula, Lagrange's formula, Newton's formulae, Central Differences	Stirling, Bessel's and Everett's formulae, Error in linear and quadratic interpolation.

Prof. Harjinder singh PAPER-VI: Number theory	Divisibility , greatest comman divisor , fundamental theorem of arithmetic , congurances	Residue classes and reduced residue classes, euler-fermat theorem, wilson's theorem, linear congurances , Chinese remainder theorem	An application to cryptography , primitive roots , indices , quadratic residues,legendre symbols, euler;s criterion ,gauss lemma	Quadratic recitrocity law, jacobi symbol, arithmetic functions u(n),d(n) ,mobious inversion formula.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.Sc. (MATHEMATICS) Part III

SESSION 2022-23(SEMESTER-5)

Faculty Title of Paper	September	October	November	December
Dr Jyotindra Thakur **PAPER-I** **Abstract algebra**	**Group:**definition and examples, subgroup counting principles Lagrange's theorem	Normal subgroups,quoitent subgroups,homomorphism, fundamental theorem of homomophism,and related theorem,cyclic groups.	Rings: definations and examples of rings ,elementary properties of rings ,sub rings , homomorphism ,ideals and quotient rings .	Field of quoitent of integral domain,division rings ,Euclidean domains , principal ideals ,examples
Mr Inderjeet Singh **Paper-II: Mathematical methods -1**	Defination of laplace transform,linearity property ,piecewise continuous function , existance of laplace transform. functions of class a, fiest and second shifting theorems of laplace transform,change of scale property,laplace transform of derivatives.	Initial value problems ,laplace transform of integrals,multiplication by t,division by t,laplace transform of periodic functions and error function ,beta function and gamma function ,definition of inverse laplace transform , linearity property , first and second shifting of inverse laplace transform,,change of scale property , division by p.	Convolution theorem,heavside's expansion formula (with proofs and applications),applications of laplace transform of the solution of ordinary differential equations with constant cofficients and variable cofficients.	Simultaneous ordinary differential equations ,second order partial differential equations(heat equations,wave equations and laplace equations)

Mr Inderjeet Singh OPTION-I discrete mathematics -I	Principles of inclusions and exclusions,computability and formal languages-ordered sets,phrase structure grammars,types of grammars and languages	Permutations ,combinations,discrete probability ,relations and functions ,binary relations ,equivalance relations and partitions partial order relations.	Chains and antichains ,pigeon hole principle,graphs and planar graphs -basic terminology,multigraphs, weighted graphs .	Paths and circuit ,shortest paths ,eulerian paths and circuits, travlling salesman problem ,planar graphs trees.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of B.A./B.Sc. (MATHEMATICS) Part III

SESSION 2022-23(SEMESTER-6)

Faculty Title of Paper	February	March	April	May
Mr Inderjeet Singh Paper-III Optimization tecniques	inventory, costs involed in inventory,variables in inventory mobels,characteristicsof inventory systems and classifications, concept of economic ordering (EOQ), EOQ models with no shortage,economic lot size system with uniform demand,economic lot size with different rates od demand in different cycles ,economic lot size with finite of replenishment.	EOQ models with shortages :EOQ with constant rates of demand, scheduling time constant and schudling time variable,production lot size demand with shortages..	Introduction to jobs sequencing n jobs on two machines , n jobs on three machines,two jobs on m machines,n jobs on m machines	Applications to solve some model equations:one dimensional heat equation ,one dimensional wave equation.
Dr Jyotindra Thakur PAPER-IV Mathematical methods -II	Fourier serics,theorems,dirichlet's conditions,fourier series for even and odd functions. Half range fourier series ,other forms of series Hankel transform: hankel integral formula,hankel transform,inverse theorem for hankel transform,hankel sine and cosinetransform and their inversion formula, linearity property of hankel transform	Fourier transform and its applications: dirichlet's condition ,fourier integral formula(without proof),fourier transform ,inverse theorem for fourier transform, fourier sine and cosine transform and their inversion formula,linearity property of fourier transforms, change of scale property	Shifting theorem,modulation theorem,convolution theorem of fourier transform,parseval;s identity ,finite fourier sine transform,inversion formula for sine transform, finite fourier cosine transform,inversion formula for cosine transform	Applications to solve some model equations:one dimensional heat equation ,one dimensional wave equation.

Mr Inderjeet Singh OPTION-III discrete mathematics – II	Analysis of algorithms-time complexity;complexity of problems;discrete numeric functions;generating functions;recurrence relations and recursive algorithms linear recurrence relation with constan coefficients	Homogeneoussolutions ;particular solution ;total solution;solution by method of generating functions ;Boolean algebras lattices and algebraic structures	Distributive and complemented lattices ;Boolean lattices and Boolean algebras Boolean functions and expression;propositional calculus	Design and implementation of digital networks ;switching circuits

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OD MATHEMATICS

Month-wise Schedule of M.Sc. (MATHEMATICS) Part I

SESSION 2019-20(SEMESTER-1)

Faculty Title of Paper	August	September	October	November
Mr. Jagjit Singh MM-401 Algebra-I	Review of groups. Normal and subnormal series, Solvable groups, Nilpotent groups, Composition Series, Jordan-Holder theorem for groups. Group action, Stabilizer, orbit.	Class equation and its applications permutation groups, cyclic decomposition, conjugacy classes in permutation groups. Alternating group A_n, Simplicity of A_n. Structure theory of groups, Fundamental theorem of finitely generated abelian groups, Invariants of a finite abelian group.	Groups of Automorphisms of cyclic groups. homomorphism between two cyclic groups, Sylow's theorems, Groups of order p2, pq. Review of rings and homomorphism of rings, Ideals, Algebra of Ideals, Maximal and prime ideals.	Ideal in Quotient rings. Field of Quotients of integral Domain. Matrix Rings and their ideals. Rings of Endomorphisms of Abelian Groups.

Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

Mr. Inderjeet Singh **MM-402** **Mathematical Analysis**	Functional of several variables; Linear transformations. Derivatives in an open subset of Rn , Chain Rule, Partial derivatives, Interchange of the order of differentiation, Derivatives of higher orders, Taylor's theorem Inverse function theorem, Implicit function theorem. Algebras, σ-algebra, their properties,.	General measurable spaces, measure spaces, properties of measure, Complete measure, Lebesgue outer measure and its properties, measurable sets and Lebesque measure, A non measurable set. Measurable function w.r.t. general measure. Borel and Lebesgue measurability.	Integration of non-negative measurable functions, Fatou's lemma, Monotone convergence theorem, Lebesgue convergence theorem, The general integral, Integration of series, Riemann and lebesgue integrals	Differentiation; Vitalis Lemma, The Dini derivatives, Functions of bounded variation, Differentiation of an Integral, Absolute Continuity, Convex Fuentions and Jensen's inequality

Prof. Harjinder Singh MM-403 Topology-1	Cardinals: Equipotent sets, Countable and Uncountable sets, Cardinal Numbers and their Arithmetic, Bernstein's Theorem and the Continumm Hypothesis. Topological Spaces: Definition and examples, Euclidean spaces as topological spaces, Basis for a given topology, Topologizing of Sets; Sub-bas Elementary Concepts: Closure, Interior, Frontier and Dense Sets. Topologizing with pre-assigned elementary operations. Relativization, Subspaces is, Equivalent Basis.	Maps and Product Spaces: Continuous Maps, Restriction of Domain and Range, Characterization of Continuity, Continuity at a point, Piecewise definition of Maps and Neighborhood finite families. Open Maps and Closed Maps, Homeomorphisms and Embeddings. Cartesian Product Topology, Elementary Concepts in Product Spaces, Continuity of Maps in Product Spaces and Slices in Cartesian Products.	Connectedness: Connectedness and its characterizations. Continuous image of connected sets. Connectedness of Product Spaces. Applications to Euclidean spaces. Components. Local Connectedness and Components. Product Compactness and Countability: Compactness and Countable Compactness, Local Compactness, One-point Compactification, T−0, T1, and T2 spaces. T2 spaces and Sequences and Hausdorfness of One-Point Compactification.	Axioms of Countablity and Separability, Equivalence of Second axiom, Separable and Lindelof in Metric Spaces. Equivalence of Compact and Countably Compact Sets in Metric Spaces

Dr. Gurpreet Kaur MM-404 Differential Geometry	Theory of Space Curves: Curves in the planes and in space, arc length, reparametrization, curvature, Serret-Frenet formulae, osculating circles, evolutes and involutes of curves, space curves, torsion, Serret-Frenet formulae. Theory of Surfaces, smooth surfaces, tangents, normals and orientability, quadric surfaces, the first and the second fundamental forms, Euler's theorem, Rodrigue's formula.	Gaussian Curvature, Gauss map and Geodesics: The Gaussian and mean curvatures, the pseudosphere, flat surfaces, surfaces of constant mean curvature, Gaussian curvature of compact surfaces, the Gauss map, Geodesics, geodesic equations, geodesics of surfaces of revolution, geodesics as shortest paths, geodesic	coordinates.Minimal Surfaces and Gauss's Remarkable Theorem: Plateau's problem, examples of minimal surfaces, Gauss map of a minimal surface, minimal surfaces and holomorphic functions,	Gauss's Remarkable Theorem, isometries of surfaces, The Codazzi-Mainardi Equations, compact surface of constant Gaussian curvature

Prof. Harjinder Singh MM-407 **Linear Programming**	Linear programming problems (LPPs); Examples, Mathematical formulation, Graphical solution, Solution by Simplex method, artificial variables,Big-M method and two phase simplex method. Duality in linear programming, Concept, Mathematical formulation, fundamental properties of duality, dualim and simplex method and dual simplex method	. Sensitivity Analysis Discrete changes in the cost vector, requirement vector and Co-efficient matrix, Transportation problem : initial basic feasible solution and Optimal solutions using MODI method (for balanced cases only), Assignment problem; solution of balanced and unbalanced	assignment problems, maximization case in as Sequencing Problems; General Assumptions, Processing n jobs through m machines. Replacement decisions, O.R methodology of solving replacement problems,	Replacement of items that deteriorates with time without and with change in the money value.signmem problem.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of M.Sc. (MATHEMATICS) Part I

SESSION 2019-20(SEMESTER-2)

Faculty Title of Paper	February	March	April	May
Dr. Amrit Pal Singh MM-501 Algebra-II	Unique Factorization Domains, Principal Ideal Domains, Euclidean Domains, Polynomial Rings over UFD, Rings of Fractions.	Modules: Definition and Examples, Submodules, Direct sum of submodules, Free modules, Difference between modules and vector spaces, Quotient modules, Homomorphism, Simple modules, Modules over PID.	Modules with chain conditions: Artinian Modules, Noetherian Modules, Artinian Implies Noetherian in Rings, Composition series of a module, Length of a module, Hilbert Basis Theorem..	Cohen Theorem, Radical ideal, Nil Radical, Jacobson Radical, Radical of an Artinian ring, Nil Radical and Jacobson Radical of Polynomial Rings R[x], R commutative.

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Prof. Harjinder Singh **MM-502** **Topology-II**	Higher Separation Axioms: Regular, Completely Regular, Normal and Completely Normal Spaces. Metric Spaces as Completely Normal T2 Spaces. Urysohns Lemma and The Tietze Extension Theorem. Products : Products of first countable, Regular, T2 and Completely Regular Spaces.	Non invariance of normality under products. Embedding of Tichonov spaces into parallelotope and the Stone Cech Compactification. Filters : Filter and filter base, convergence and clustering, filter characterization of closure, continuity and filter convergence, ultrafilters, filter characterization of compactness and the Tychonoff Theorem.	Identification Topology: Identification Topology, Identification Map, Subspaces, General Theorem, Transgression, Transitivity Spaces with Equivalance Relation, Quotient Spaces. Categories and Functors: Categories: Definition and Examples, The Arrow Category, Congruence in a Category, Quotient Category, Functors, Duality, Contravariance and Duality.	Homotopy as Congruence in Top, The Category hTop, homotopy equivalence, nullhomotopy, convexity, contractibility and cones, the path componem functor, invariance of path componens under homotopy type.
Dr. Gurpreet Kaur **MM-503** **Differential Equations -I**	Existence of solution of ODE of first order, initial value problem, Ascoli's Lemma, Gronwall's inequality, Cauchy Peano Existence Theorem, Uniqueness of Solutions. Method of successive approximations, Existence and Uniqueness Theorem.	System of differential equations, nth order differestial equation, Existence and Uniqueness of solutions, dependence of solutions on initial conditions and parameters. Linear system of equations (homogeneous & non homogeneous). Superposition principle, Fundamental set of solutions, Fundamental Matrix, Wronskian.	Abel Liouville formula, Reduction of order, Adjoint systems and self adjoint systems of second order, Floquet Theory. Linear 2nd order equations, preliminaries, Sturm's separation theorem, Sturm's fundamental comparison theorem.	Sturm Liouville boundary value problem, Characteristic values & Characteristic functions, Orthogonality of Characteristic functions, Expansion of a function in a series of orthonormal functions.

Prof. Harjinder Singh **MM-504** **Complex Analysis**	Function of complex variable, Analytic function, Cauchy-Riemann equations, Harmonic function and Harmonic conjugates, Branches of multivalued functions with reference to arg z, log z .	Conformal Mapping. Complex Integration, Cauchy's theorem, Cauchy Goursat theorem Cauchy integral formula, Morera's theorem, Liouville's theorem, Fundamental theorem of Algebra, Maximum Modulus Principle. Schwarz lemma.	Taylor's theorem. Laurent series in an annulus. Singularities, Meromorphic function. Cauchy's theorem on residues. Application to evaluation of definite integrals. Principle of analytic continuation. General definition of an analytic function. Analytic continuation by power series method, Natural boundary, Harmonic functions on a disc, Schwarz Reflection principle, Mittag-Leffler's theorem .	Natural boundary. Harmonic functions on a disc, Schwarz Reflection principle, Mittag-Leffler's theorem .

Mr. Inderjeet Singh **MM-503** **Functional Analysis**	Normed Linear spaces, Banach spaces, Examples of Banach spaces and subspaces, Continuity of Linear maps, Equivalent norms, Normed spaces of bounded linear maps, Bounded Linear functional, Hahn-Banach theorem in Linear Spaces and its applications.	Normed Linear spaces, Banach spaces, Examples of Banach spaces and subspaces, Continuity of Linear maps, Equivalent norms, Normed spaces of bounded linear maps, Bounded Linear functional, Hahn-Banach theorem in Linear Spaces and its applications..	The conjugate of an operator, Dual spaces of lp and C [a,b], Reflexivity, Hilbert spaces, examples, Orthogonality, Orthonormal sets, Bessel's inequality, Parseval's theorem, The conjugate space of a Hilbert spaces, Adjoint operators, Self-adjoint operators, Normal and unitary operators, Projection operators	Spectrum of an operator, Spectral Theorem, Banach Fixed Point Theorem, Brower's Fixed Point Theorem, Schauder Fixed Point Theorem, Picards Theorem, Applications of Fixed point theorem in differential equations and integral equations

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID principal.gcmohali@gmail.com

DEPARTMENT OD MATHEMATICS

Month-wise Schedule of M.Sc. (MATHEMATICS) Part I

SESSION 2020-21(SEMESTER-I)

Faculty Title of Paper	September	October	November	December
Dr. Amrit Pal Singh MM-401 Algebra-I	Review of groups. Normal and subnormal series, Solvable groups, Nilpotent groups, Composition Series, Jordan-Holder theorem for groups. Group action, Stabilizer, orbit	Class equation and its applications permutation groups, cyclic decomposition,, conjugacy classes in permutation groups. Alternating group A_n, Simplicity of A_n. Structure theory of groups, Fundamental theorem of finitely generated abelian groups, Invariants of a finite abelian group.	Groups of Automorphisms of cyclic groups, homomorphism between two cyclic groups, Sylow's theorems, Groups of order $p2$, pq. Review of rings and homomorphism of rings, Ideals, Algebra of Ideals, Maximal and prime ideals,	Ideal in Quotient rings, Field of Quotients of integral Domain, Matrix Rings and their ideals; Rings of Endomorphisms of Abelian Groups.

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Sahibzada Ajit Singh Nagar.

Mr. Inderjeet Singh **MM-402** **Mathematical Analysis**	Functional of several variables: Linear transformations. Derivatives in an open subset of Rn , Chain Rule. Partial derivatives. Interchange of the order of differentiation. Derivatives of higher orders. Taylor's theorem Inverse function theorem. Implicit function theorem. Algebras, σ-algebra, their properties.	General measurable spaces, measure spaces, properties of measure. Complete measure, Lebesgue outer measure and its properties, measurable sets and Lebesque measure. A non measurable set. Measurable function w.r.t. general measure. Borel and Lebesgue measurability.	Integration of non-negative measurable functions, Fatou's lemma. Monotone convergence theorem. Lebesgue convergence theorem. The general integral. Integration of series. Riemann and lebesgue integrals.	Differentiation: Vitalis Lemma. The Dini derivatives. Functions of bounded variation. Differentiation of an Integral. Absolute Continuity. Convex Fuentions and Jensen's inequality.

Mr. Inderjeet Singh **MM-402** **Mathematical Analysis**	Functional of several variables: Linear transformations, Derivatives in an open subset of Rn , Chain Rule, Partial derivatives, Interchange of the order of differentiation, Derivatives of higher orders, Tayloc's theorem Inverse function theorem, Implicit function theorem, Algebras, σ-algebra, their properties,,	General measurable spaces, measure spaces, properties of measure, Complete measure, Lebesgue outer measure and its properties, measurable sets and Lebesque measure, A non measurable set. Measurable function w.r.t. general measure. Borel and Lebesgue measurability.	Integration of non-negative measurable functions, Fatou's lemma, Monotone convergence theorem, Lebesgue convergence theorem, The general integral, Integration of series, Riemann and lebesgue integrals	Differentiation: Vitalis Lemma, The Dini derivatives, Functions of bounded variation, Differentiation of an Integral, Absolute Continuity, Convex Fucntions and Jensen's inequality

Prof Harjinder Singh MM-403 Topology-I	Cardinals: Equipotent sets, Countable and Uncountable sets, Cardinal Numbers and their Arithmetic, Bernstein's Theorem and the Continuumm Hypothesis. Topological Spaces: Definition and examples, Euclidean spaces as topological spaces, Basis for a given topology, Topologizing of Sets; Sub-bas Elementary Concepts: Closure, Interior, Frontier and Dense Sets, Topologizing with pre-assigned elementary operations. Relativization, Subspaces is, Equivalent Basis.	Maps and Product Spaces: Continuous Maps, Restriction of Domain and Range. Characterization of Continuity, Continuity at a point, Piecewise definition of Maps and Neighborhood finite families. Open Maps and Closed Maps, Homeomorphisms and Embeddings. Cartesian Product Topology, Elementary Concepts in Product Spaces, Continuity of Maps in Product Spaces and Slices in Cartesian Products.	Connectedness: Connectedness and its characterizations, Continuous image of connected sets, Connectedness of Product Spaces, Applications to Euclidean spaces. Components, Local Connectedness and Components, Product Compactness and Countability: Compactness and Countable Compactness, Local Compactness, One-point Compactification, T-0, T1, and T2 spaces, T2 spaces and Sequences and Hausdorfness of One-Point Compactification.	Axioms of Countablity and Separability, Equivalence of Second axiom, Separable and Lindelof in Metric Spaces, Equivalence of Compact and Countably Compact Sets in Metric Spaces

Dr. Gurpreet Kaur MM-404 Differential Geometry	Theory of Space Curves: Curves in the planes and in space, arc length, reparametrization, curvature, Serret-Frenet formulae, osculating circles, evolutes and involutes of curves, space curves, torsion, Serret-Frenet formulae. Theory of Surfaces, smooth surfaces, tangents, normals and orientability, quadric surfaces, the first and the second fundamental forms, Euler's theorem, Rodrigue's formula.	Gaussian Curvature, Gauss map and Geodesics: The Gaussian and mean curvatures, the pseudosphere, flat surfaces, surfaces of constant mean curvature. Gaussian curvature of compact surfaces, the Gauss map, Geodesics, geodesic equations, geodesics of surfaces of revolution, geodesics as shortest paths, geodesic	coordinates.Minimal Surfaces and Gauss's Remarkable Theorem: Plateau's problem, examples of minimal surfaces, Gauss map of a minimal surface, minimal surfaces and holomorphic functions,	Gauss's Remarkable Theorem, isometries of surfaces, The Codazzi-Mainardi Equations, compact surface of constant Gaussian curvature

Prof Harjinder Singh MM-407 **Linear Programming**	Linear programming problems (LPPs): Examples, Mathematical formulation, Graphical solution, Solution by Simplex method, artificial variables,Big-M method and two phase simplex method.: Duality in linear programming: Concept, Mathematical formulation, fundamental properties of duality, duality and simplex method and dual simplex method	Sensitivity Analysis: Discrete changes in the cost vector, requirement vector and Co-efficient matrix, Transportation problem : initial basic feasible solution and Optimal solutions using MODI method (for balanced cases only). Assignment problem; solution of balanced and unbalanced	assignment problems, maximization case in as Sequencing Problems; General Assumptions, Processing n jobs through m machines. Replacement decisions; O.R methodology of solving replacement problems.	Replacement of items that deteriorates with time without and with change in the money value.signment problem.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OD MATHEMATICS

Month-wise Schedule of M.Sc. (MATHEMATICS) Part I

SESSION 2020-21(SEMESTER-2)

Faculty Title of Paper	Februray	March	April	May
Dr. Amrit Pal Singh MM-501 Algebra-II	Unique Factorization Domains, Principal Ideal Domains, Euclidean Domains, Polynomial Rings over UFD, Rings of Fractions.	Modules: Definition and Examples, Submodules, Direct sum of submodules, Free modules, Differeece between modules and vector spaces, Quotient modules, Homomorphism, Simple modules, Modules over PID.	Modules with chain conditions: Artinian Modules, Noetherian Modules, Artinian Implies Noetherian in Rings, Composition series of a module, Length of a module, Hilbert Basis Theorem.	Cohen Theorem, **Radical** Ideal, Nil Radical, Jacobson Radical, Radical of an Artinian ring, Nil Radical and **Jacobson** Radical of **Polynomial** Rings R[x], R commutative.

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Prof. Harjinder Singh **MM-502** **Topology-II**	Higher Separation Axioms: Regular, Completely Regular, Normal and Completely Normal Spaces. Metric Spaces as Completely Normal T2 Spaces. Urysohns Lemma and The Tietze Extension Theorem. Products : Products of first countable, Regular, T2 and Completely Regular Spaces.	Non invariance of normality under products. Embedding of Tichonov spaces into parallelotope and the Stone Cech Compactification. Filters : Filter and filter base, convergence and clustering, filter characterization of closure, continuity and filter convergence, ultrafilters, filter characterization of compactness and the Tychonoff Theorem.	Identification Topology: Identification Topology, Identification Map, Subspaces, General Theorem, Transgression, Transitivity Spaces with Equivalance Relation, Quotient Spaces. Categories and Functors: Categories: Definition and Examples, The Arrow Category, Congruence in a Category, Quotient Category, Functors, Duality, Contravariance and Duality.	Homotopy as Congruence in Top, The Categoey hTop, homotopy equivalence, nullhomotopy, convexity, contractibility and cones, the path component functor, invariance of path components under homotopy type.
Mr. Inderjeet Singh **MM-503** **Differential Equations -I**	Existence of solution of ODE of first order, initial value problem, Ascoli's Lemma, Gronwall's inequality, Cauchy Peano Existence Theorem, Uniqueness of Solutions. Method of successive approximations, Existence and Uniqueness Theorem.	System of differential equations, nth order differential equation, Existence and Uniqueness of solutions, dependence of solutions on initial conditions and parameters. Linear system of equations (homogeneous & non homogeneous). Superposition principle, Fundamental set of solutions, Fundamental Matrix, Wronskian.	Abel Liouville formula, Reduction of order, Adjoint systems and self adjoint systems of second order, Floquet Theory. Linear 2nd order equations, preliminaries, Sturm's separation theorem, Sturm's fundamental comparison theorem.	Sturm Liouville boundary value problem, Characteristic values & Characteristic functions, Orthogonality of Characteristic functions, Expansion of a function in a series of orthonormal functions.

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Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

Prof Harjinder Singh **MM-504** **Complex Analysis**	Function of complex variable, Analytic function, Cauchy-Riemann equations, Harmonic function and Harmonic conjugates, Branches of multivalued functions with reference to arg z, log z .	Conformal Mapping. Complex Integration, Cauchy's theorem, Cauchy Goursat theorem Cauchy integral formula, Morera's theorem, Liouville's theorem, Fundamental theorem of Algebra, Maximum Modulus Principle. Schwarz lemma.	Taylor's theorem. Laurent series in an annulus. Singularities, Meromorphic function. Cauchy's theorem on residues. Application to evaluation of definite integrals. Principle of analytic continuation, General definition of an analytic function. Analytic continuation by power series method, Natural boundary, Harmonic functions on a disc, Schwarz Reflection principle, Mittag-Leffler's theorem .	Natural boundary, Harmonic functions on a disc, Schwarz Reflection principle, Mittag-Leffler's theorem .
Mr. Inderjeet Singh **MM-503** **Functional Analysis**	Normed Linear spaces, Banach spaces, Examples of Banach spaces and subspaces. Continuity of Linear maps, Equivalent norms. Normed spaces of bounded linear maps. Bounded Linear functional. Hahn-Banach theorem in Linear Spaces and its applications.	Normed Linear spaces, Banach spaces, Examples of Banach spaces and subspaces. Continuity of Linear maps, Equivalent norms. Normed spaces of bounded linear maps. Bounded Linear functional. Hahn-Banach theorem in Linear Spaces and its applications..	The conjugate of an operator. Dual spaces of lp and C [a,b]. Reflexivity. Hilbert spaces, examples, Orthogonality, Orthonormal sets. Bessel's inequality, Parseval's theorem. The conjugate space of a Hilbert spaces. Adjoint operators, Self-adjoint operators, Normal and unitary operators. Projection operators	Spectrum of an operator, Spectral Theorem. Banach Fixed Point Theorem, Brower's Fixed Point Theorem Schauder Fixed Point Theorem, Picards Theorem. Applications of Fixed point theorem in differential equations and integral equations

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Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OD MATHEMATICS

Month-wise Schedule of M.Sc. (MATHEMATICS) Part II

SESSION 2020-21(SEMESTER-3)

Faculty Title of Paper	September	October	November	December
Dr. Amrit pal singh MM- 602 FIELD THEORY	fields, examples, Algebraic and transcendental elements, Irreducible polynomials, Gauss lemma, Eisenstein's criterion, Adjunction of roots, Kronecker's theorem, algebraic extensions, algebraically closed fields.	Splitting fields, Normal extensions, multiple roots, finite fields, Separable extensions, perfect fields, primitive elements, Lagrange's theorem on primitive elements.	Automorphism groups and fixed fields, Galois extensions, Fundamental theorem of Galois theory, Fundamental theorem of algebra, Roots of unity and cyclotomic polynomials. Cyclic extension, Polynomials solvable by radicals.	Symmetric functions, cyclotomic extension, quintic equation and solvability by radicals, Ruler and Compass construction.
Mr. Inderjeet Singh MM 603 Differential Equations –II	Existance and uniqueness of solutions of first order differential equations for complex systems.	Maximum and minimum solution. Caratheodory theorem. Continuation of solution. Uniqueness of solutions and Successive approximations. Variation of Solutions.	Partial Differential Equations: Occurrence and elementary solution of Laplace equation. Family of equipoicntial surface. Interior and exterior Dirichlet boundary value problem for Laplace equation	Separation of Variables. Axial symmetry, Kelvin's inversion theorem. Green's function for Laplace equation. Dirichlet's problem for semi-infinite space and for a sphere. Copson's Theorem (Statement only)

Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

Dr. Gurpreet Kaur MM - 607 Classical Mechanics	Basic Principles: Mechanics of a Particle and a System of Particles, Constraints , Generalized Coordinates, Holonomic and Non-Holonomic Constraints. D'Alemberts Principle and Lagrange's Equations, Velocity Dependent Potentials and the Dissipation Function, Simple Applications of the Lagrangian formulation. Variational Principles and Lagrange's Equations: Hamilton's Principle, Derivation of Lagrange's Equations from Hamilton's Principle, Extension of Hamilton's Principle to Non-Holonomic Systems	Conservation Theorems and Symmetry Properties: Cyclic Coordinates, Canonical Momentum and its Conservation, The Generalized Force, and Angular Momentum Conservation Theorem. The Two-Body Central Force Problem: Reduction to the Equivalent One-Body Problem, The Equation of Motion, The Equivalent One Dimensional Problem and the Classification of Orbits, The Virial Theorem, Conditions for Closed Orbits, Bertrand's Theorem.	The Kepler Problem: Inverse Square Law of Force, The Motion in Time in the Kepler Problem, Kepler's Laws, Kepler's Equation, The Laplace-Runge-Lenz Vector. Scattering in a Central Force Field: Cross Section of Scattering, Rutherford Scattering Cross Section, Total Scattering Cross Section, Transformation of the Scattering Problem to Laboratory Coordinates	The Kepler Problem: Inverse Square Law of Force, The Motion in Time in the Kepler Problem, Kepler's Laws, Kepler's Equation, The Laplace-Runge-Lenz Vector. Scattering in a Central Force Field: Cross Section of Scattering, Rutherford Scattering Cross Section, Total Scattering Cross Section, Transformation of the Scattering Problem to Laboratory Coordinates

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Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

Prof. Harjinder Singh **MM- 609** **OPTIMIZATION TECH -I**	**Introduction:** Definition of operation research, models in operation research, general methods for solving O.R. models, Elementary theory of convex sets. **Linear Programming Problems:** Definition of LPP, examples of LPPs, mathematical formulation of the mathematical programming problems, Graphical solution of the problem. Simplex method, Big M method, Two Phase method, problem of degeneracy.	**Duality in linear programming:** Concept of duality, fundamental properties of duality, duality theorems, complementary slackness theorem, duality and simplex method, dual simplex method. **Sensitivity Analysis:** Discrete changes in the cost vector, requirement vector and co-efficient matrix, addition of a new variable, deletion of a variable, addition of new constraint, deletion of a constraint. **Integer Programming:** Introduction, Gomory's all-IPP method, Gomory's mixed-integer method, Branch and Bound method.	**Transportation Problem:** Introduction, mathematical formulation of the problem, initial basic feasible solution using North West Corner Method, Least Cost Method and Vogel's Approximation Method, Optimal solution using MODI method, degeneracy in transportation problems, some exceptional cases in transportation problem	**Assignment Problems:** Introduction, mathematical formulation of an assignment problem, assignment algorithm, unbalanced assignment problems, Travelling Salesman problem. **Games & Strategies:** Definition & characteristics of Games. Two person zero sum games, Maximin-minimax principle, Games without saddle points, Mixed Strategies, Graphical method for solving and games, Concept of Dominance, Reducing the game problem to LPP, Limitations

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Dr. Amrit pal singh **MM- 610 FUZZY SETS AND APPLICATIONS**	**Classical Sets and Fuzzy Sets:** Overview of Classical Sets, Membership Function, a-cuts, Properties of a-cuts, Decomposition Theorems, Extension Principle. **Operations on Fuzzy Sets:** Compliment, Intersections, Unions, Combinations of operations. Aggregation Operations.	**Fuzzy Arithmetic:** Fuzzy Numbers, Linguistic Variables, Arithmetic Operations on intervals and Numbers, Lattice of Fuzzy Numbers. Fuzzy Equations. **Fuzzy Relations:** Crisp and Fuzzy Relations, Projections and Cylindric Extensions, Binary	Fuzzy Relations, Binary Relations on single set, Equivalence, Compatibility and Ordering Relations, Morphisms, Fuzzy Relation Equations. **Possibility Theory:** Fuzzy Measures, Evidence and Possibility Theory, Possibility versus Probability Theory.	**Fuzzy Logic:** Classical Logic, Multivalued Logics, Fuzzy Propositions, Fuzzy Qualifiers, Linguistic Hedges. **Uncertainty based Information:** Information and Uncertainty, Nonspecificity of Fuzzy and Crisp sets, Fuzziness of Fuzzy Sets. Applications of Fuzzy Logic.

DEPARTMENT OD MATHEMATICS

Month-wise Schedule of M.Sc. (MATHEMATICS) Part II

SESSION 2020-21(SEMESTER-4)

Faculty Title of Paper	February	March	April	May
Prof. Harjinder Singh MM- 705 OPTIMIZATION TECH -II	Quadratic Programming: Wolfe's Modified Simplex Method, Beale's method for Quadratic Programming, Separable, Convex programming. Linear Complimentary Problem : Lemke's Complementary Pivoting Algorithm, Solution of Quadratic programming, Problems using Linear Complementary method.	Separable Programming: Introduction, Reduction of Separable Programming to Linear programming Problem, Separable Programming Algorithm Goal Programming: Introduction, formulation of linear Goal Programming, Graphical & Simplex Method for Goal Programming. Geometric Programming: Introduction, constrained & unconstrained Geometric Programming Problem, Complementary Geometric programming.	Fractionl Programming : Introduction, Mathematical formulation of Linear fractional programming problem, Method due to Charnes and Cooper, Problems of Fractional Programming .Dynamic Programming: Introduction, nature of Dynamic Programming (DP), Solution of Discrete DPP, Application of DP in Linear Programming. Decision Theory: Introduction & components of Decision Theory, EMV, EOL, Decision making under uncertainty, Decision making under utilities, Decision making under Risk.	: Introduction, Advantages & Simulation disadvantages, Event – type, Monte-Carlo simulation, Application to Inventory, Queueing, Capital Budgeting, Financial Planning, Maintenance, Job Sequencing, Networks.

Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

Dr. Amrit pal singh **MM- 708 FLUID MECHANICS**	Equations of Fluid Mechanics : Real and continuous fluids, differentiation following the motion, equation of continuity, Stream function, Stream lines, Pressure, Euler's equation of motion. Bernoulli's theorem Steady irrotational non-viscous compressible flow. Vorticity, circulation.	Kelvin's theorem on constancy of circulation. Kinetic energy. Three dimensional problems : Laplace's equation. Three dimensional sources and dipoles. Spherical obstacle in a uniform Steam . Application of complex variable method : Conjugate functions in plane, complex potential ,am Moving sphere, images.	Incompressible flow in two dimensions, uniform stream. Source and sink. Vortex. Two dimensional dipole. Superposition. Joukowski's transformation. Milne Thomson circle theorem. Blasius theorem. Drag and lift. Source and vortex filaments, vortex pair, rows of vortices. Karman cortex street. Viscous flow : Navier Stokes equations.	Dissipation of energy. Diffusion of vorticity in an incompressible fluid, condition of no slip. Steady flow between two parallel infinite flat plates, steady flow through a straight circular pipe (Poiseuille Flow).

Prof. Harjinder Singh **MM- 711** **OPTIMIZATION TECH -II**	Queueing Problems: Characteristics of queueing system. Distribution in queueing systems. Poission arrivals and exponential Service time. Transient and steady state. Probabilistic Queueing Models (Model I (M/M/1)(∞/FCFS), Model II A (Ge Model II B(M/M/1):(∞/SIRO), Model III (M/M/1) : (N/FCFS) , Model-IV (M/M/S):(∞/FCFS), Model V (M/M/S); (N/FCFS), Model VI A(M/ Ek/1):(∞/FCFS),Model VIB(M/ Ek/1):(1/ FCFS), Measures and their solutions	Inventory Models: Introduction, Costs involved in inventory problems, variables in inventory problems, classification of inventory models, deterministic inventory model, (DIM), Basic economic order quantity, (EOQ) Models with no shortages: Model I(a), I(b), I(c), DIM with shortages: Model II(a), II(b), II(c). Multi item deterministic inventory models: Models III(a), III(b) III(c). Introduction to stochastic inventory models. Reference: Sharma, S.D. Operation Research, Kedar Nath and Co., Meerut	Replacement & Maintenance Problems: Replacement policy when money value changes & does not change with time. Group replacement of item that fails suddenly, the general renewal process. Network Analysis: Introduction to Networks. Minimal Spanning Tree problem, shortest path problems, Dijkastra's algorithm, Floyd's Algorithm, Maximum Flow problem	Project Management: Critical Path method, critical path computations, optimal Scheduling by CPM, Project Cost Analysis, PERT, Distinction between CPM and PERT

Mr. Inderjeet Singh **MM-716** **MATHEMATICAL METHODS**	Linear integral equations of first and second kind, Abel's problem, Relation between linear differential equation and Volterra's equation, Non linear and Singular equations, Solution by successive substitutions, Volterra's equation iterated and reciprocal functions, Volterra's solution of Fredholm's equation, Fredholm's equation as limit of finite system of linear equations.	Hadamard's theorem, convergence proof, Fredholm's two fundamental relations, Fredholm's solution of integral equation when $D(\lambda)\neq 0$, Fredholm's solution of Dirichlet's problem and Neumann's problem, Lemmas on iterations of symmetric kernel, Schwarz's inequality and its applications.	Simple variational problems, Necessary condition for an extremum, Euler's equation, End point problem, Variational derivative, Invariance of Euler's equation, Fixed end point problem for n-unknown functions, Variational problem in parametric form, Functionals depending on higher order derivatives, Euler Lagrange equation, First integral of Euler-Lagrange equation, Geodesics.	The brachistochrone, Minimum surface of revolution, Brachistochrone from a given curve to a fixed point, Snell's law, Fermat's principle and calculus of variations.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

Dr. Amrit pal singh **MM-717 ANALYTIC NUMBER THEORY**	Arithmetical functions: Mobius function, Euler's totient function, Mangoldt function, Liouville's function, The divisor functions, Relation connecting φ and μ, product formula for $\varphi(n)$, Dirichlet product of arithmetical functions, Dirichlet inverses and Mobius inversion formula, Multiplicative functions, Dirichlet multiplication, The inverse of a completely multiplicative function, Generalized convolutions.	Averages of arithmetical functions: The big oh notation, Asymptotic equality of functions, Euler's summation formula, Elementary asymptotic formulas, Average order of $d(n)$, $\varphi(n)$, $\sigma_\alpha(n)$, $\mu(n)$ and $\Lambda(n)$, The Partial sums of a Dirichlet product, applications to $\mu(n)$ and $\Lambda(n)$, Legendre's identity.	Some elementary theorems on the distribution of prime numbers: Chebyshev's functions $\psi(x)$ &$\theta(x)$, Relation connecting $\theta(x)$ and $\Pi(x)$, Abel's identity, equivalent forms of Prime number theorem, inequalities for $\Pi(n)$ and P_n, Shapiro's Tauberian theorem, applications of Shapiro's theorem, Asymptotic formula for the partial sums $\sum_{p\leq x}\frac{1}{p}$. Elementary properties of groups, Characters of finite abelian groups, The character group, Orthogonality relations for characters.	, Dirichlet characters, Dirichlet's theorem for primes of the form 4n-1 and 4n+1, Dirichlet's theorem in primes on Arithmetical progression, Distribution of primes in Arithmetical progression.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OD MATHEMATICS

Month-wise Schedule of M.Sc. (MATHEMATICS) Part I

SESSION 2021-22(SEMESTER-1)

Faculty Title of Paper	October	November	December	January
Dr. DB Rishi MATM1101T Algebra-I	Review of groups, Normal and subnormal series, Solvable groups, Nilpotent groups, Composition Series, Jordan-Holder theorem for groups. Group action, Stabilizer, orbit.	Class equation and its applications permutation groups, cyclic decomposition., conjugacy classes in permutation groups. Alternating group A_n, Simplicity of A_n. Structure theory of groups, Fundamental theorem of finitely generated abelian groups, Invariants of a finite abelian group.	Groups of Automorphisms of cyclic groups, homomorphism between two cyclic groups, Sylow's theorems, Groups of order p2, pq. Review of rings and homomorphism of rings, Ideals, Algebra of Ideals, Maximal and prime ideals,	Ideal in Quotient rings, Field of Quotients of integral Domain, Matrix Rings and their ideals, Rings of Endomorphisms of Abelian Groups.

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SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

Mr. Inderjeet Singh **MM-402** **Mathematical Analysis**	Functional of several variables: Linear transformations, Derivatives in an open subset of Rn , Chain Rule, Partial derivatives, Interchange of the order of differentiation, Derivatives of higher orders, Taylor's theorem Inverse function theorem, Implicit function theorem. Algebras, σ-algebra, their properties.	General measurable spaces, measure spaces, properties of measure, Complete measure, Lebesgue outer measure and its properties, measurable sets and Lebesque measure, A non measurable set. Measurable function w.r.t. general measure. Borel and Lebesgue measurability.	Integration of non-negative measurable functions, Fatou's lemma, Monotone convergence theorem, Lebesgue convergence theorem, The general integral, Integration of series, Riemann and lebesgue integrals	Differentiation; Vitalis Lemma, The Dini derivatives, Functions of bounded variation, Differentiation of an Integral, Absolute Continuity, Convex Fucntions and Jensen's inequality

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

Prof. Harjinder Singh MM-403 Topology-I	Cardinals: Equipotent sets, Countable and Uncountable sets, Cardinal Numbers and their Arithmetic, Bernstein's Theorem and the Continumm Hypothesis. Topological Spaces: Definition and examples, Euclidean spaces as topological spaces, Basis for a given topology, Topologizing of Sets; Sub-bas Elementary Concepts: Closure, Interior, Frontier and Dense Sets, Topologizing with pre-assigned elementary operations. Relativization, Subspaces is, Equivalent Basis.	Maps and Product Spaces: Continuous Maps, Restriction of Domain and Range, Characterization of Continuity, Continuity at a point, Piecewise definition of Maps and Neighborhood finite families. Open Maps and Closed Maps, Homeomorphisms and Embeddings. Cartesian Product Topology, Elementary Concepts in Product Spaces, Continuity of Maps in Product Spaces and Slices in Cartesian Products.	Connectedness: Connectedness and its characterizations, Continuous image of connected sets, Connectedness of Product Spaces, Applications to Euclidean spaces. Components, Local Connectedness and Components, Product Compactness and Countability: Compactness and Countable Compactness, Local Compactness, One-point Compactification, T-0, T1, and T2 spaces, T2 spaces and Sequences and Hausdorfness of One-Point Compactification.	Axioms of Countablity and Separability, Equivalence of Second axiom, Separable and Lindelof in Metric Spaces. Equivalesce of Compact and Countably Compact Sets in Metric Spaces

Dr. Amrit Pal Singh MATM1104T Differential Geometry	Theory of Space Curves: Curves in the planes and in space, arc length, reparametrization, curvature, Serret-Frenet formulae. osculating circles, evolutes and involutes of curves, space curves, torsion, Serret-Frenet formulae. Theory of Surfaces, smooth surfaces, tangents, normals and orientability, quadric surfaces, the first and the second fundamental forms, Euler's theorem. Rodrigue's formula.	Gaussian Curvature, Gauss map and Geodesics: The Gaussian and mean curvatures, the pseudosphere, flat surfaces, surfaces of constant mean curvature. Gaussian curvature of compact surfaces, the Gauss map. Geodesics, geodesic equations, geodesics of surfaces of revolution, geodesics as shortest paths, geodesic	coordinates.Minimal Surfaces and Gauss's Remarkable Theorem: Plateau's problem, examples of minimal surfaces, Gauss map of a minimal surface, minimal surfaces and holomorphic functions.	Gauss's Remarkable Theorem, isometries of surfaces, The Codazzi-Mainardi Equations, compact surface of constant Gaussian curvature

Prof. Harjinder Singh MM-407 **Linear Programming**	Linear programming problems (LPPs), Examples, Mathematical formulation, Graphical solution, Solution by Simplex method, artificial variables,Big-M method and two phase simplex method.; Duality in linear programming: Concept, Mathematical formulation, fundamental properties of duality, duality and simplex method and dual simplex method	Sensitivity Analysis Discrete changes in the cost vector, requirement vector and Co-efficient matrix. Transportation problem : initial basic feasible solution and Optimal solutions using MODI method (for balanced cases only). Assignment problem; solution of balanced and unbalanced	assignment problems, maximization case in as Sequencing Problems, General Assumptions, Processing n jobs through m machines. Replacement decisions; O.R methodology of solving replacement problems.	Replacement of items that deteriorates with time without and with change in the money value.signment problem.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OD MATHEMATICS
Month-wise Schedule of M.Sc. (MATHEMATICS) Part I

SESSION 2021-22(SEMESTER-2)

Faculty Title of Paper	March	March	May	June
Dr. Amrit Pal Singh MATM1201T Algebra-II	Unique Factorization Domains, Principal Ideal Domains, Euclidean Domains, Polynomial Rings over UFD, Rings of Fractions.	Modules: Definition and Examples, Submodules, Direct sum of submodules, Free modules, Difference between modules and vector spaces, Quotient modules, Homomorphism, Simple modules, Modules over PID.	Modules with chain conditions: Artinian Modules, Noetherian Modules, Artinian Implies Noetherian in Rings, Composition series of a module, Length of a module, Hilbert Basis Theorem..	Cohen Theorem, Radical Ideal, Nil Radical, Jacobson Radical, Radical of an Artinian ring, Nil Radical and Jacobson Radical of Polynomial Rings R[x], R commutative.

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Prof Harjinder Singh **MATM1202T** **Topology-II**	Higher Separation Axioms: Regular, Completely Regular, Normal and Completely Normal Spaces. Metric Spaces as Completely Normal T2 Spaces. Urysohns Lemma and The Tietze Extension Theorem. Products : Products of first countable, Regular, T2 and Completely Regular Spaces.	Non invariance of normality under products. Embedding of Tichonov spaces into parallelotope and the Stone Cech Compactification. Filters : Filter and filter base, convergence and clustering, filter characterization of closure, continuity and filter convergence, ultrafilters, filter characterization of compactness and the Tychonoff Theorem.	Identification Topology: Identification Topology, Identification Map, Subspaces, General Theorem, Transgression, Transitivity Spaces with Equivalance Relation, Quotient Spaces. Categories and Functors: Categories: Definition and Examples, The Arrow Category, Congruence in a Category, Quotient Category, Functors, Duality, Contravariance and Duality,	Homotopy as Congruence in Top, The Category hTop, homotopy equivalence, nullhomotopy, convexity, contractibility and cones, the path component functor, invariance of path components under homotopy type.
Mr. Inderjeet Singh **MATM1203T** **Differential Equations -I**	Existence of solution of ODE of first order, initial value problem, Ascoli's Lemma, Gronwall's inequality, Cauchy Peano Existence Theorem, Uniqueness of Solutions, Method of successive approximations, Existence and Uniqueness Theorem.	System of differential equations, nth order differential equation, Existence and Uniqueness of solutions, dependence of solutions on initial conditions and parameters. Linear system of equations (homogeneous & non homogeneous). Superposition principle, Fundamental set of solutions, Fundamental Matrix, Wronskian.	Abel Liouville formula, Reduction of order, Adjoint systems and self adjoint systems of second order, Floquet Theory, Linear 2nd order equations, preliminaries, Sturm's separation theorem, Sturm's fundamental comparison theorem,	Sturm Liouville boundary value problem, Characteristic values & Characteristic functions, Orthogonality of Characteristic functions, Expansion of a function in a series of orthonormal functions.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225154 e-mail ID:principal.gcmohali@gmail.com

Prof Harjinder Singh **MATM1204T** **Complex Analysis**	Function of complex variable, Analytic function, Cauchy-Riemann equations, Harmonic function and Harmonic conjugates, Branches of multivalued functions with reference to arg z, log z .	Conformal Mapping. Complex Integration, Cauchy's theorem, Cauchy Goursat theorem Cauchy integral formula, Morera's theorem, Liouville's theorem, Fundamental theorem of Algebra, Maximum Modulus Principle. Schwarz lemma.	Taylor's theorem. Laurent series in an annulus. Singularities, Meromorphic function. Cauchy's theorem on residues. Application to evaluation of definite integrals. Principle of analytic continuation, General definition of an analytic function. Analytic continuation by power series method, Natural boundary. Harmonic functions on a disc. Schwarz Reflection principle. Mittag-Leffler's theorem .	Natural boundary. Harmonic functions on a disc. Schwarz Reflection principle. Mittag-Leffler's theorem .

Dr. Amrit Pal Singh MATM1207T Classical Mechanics	Basic Principles: Mechanics of a Particle and a System of Particles, Constraints, Generalized Coordinates, Holonomic and Non-Holonomic Constraints. D'Alembert's Principle and Lagrange's Equations, Velocity Dependent Potentials and the Dissipation Function, Simple Applications of the Lagrangian formulation. Variational Principles and Lagrange's Equations: Hamilton's Principle, Derivation of Lagrange's Equations from Hamilton's Principle, Extension of Hamilton's Principle to Non-Holonomic Systems.	Conservation Theorems and Symmetry Properties: Cyclic Coordinates, Canonical Momentum and its Conservation, The Generalized Force, and Angular Momentum Conservation Theorem. The Two-Body Central Force Problem: Reduction to the Equivalent One-Body Problem, The Equation of Motion, The Equivalent One-Dimensional Problem and the Classification of Orbits, The Virial Theorem, Conditions for Closed Orbits, Bertrand's Theorem.	The Kepler Problem: Inverse Square Law of Force, The Motion in Time in the Kepler Problem, Kepler's Laws, Kepler's Equation, The Laplace-Runge-Lenz Vector. Scattering in a Central Force Field: Cross Section of Scattering, Rutherford Scattering Cross Section, Total Scattering Cross Section, Transformation of the Scattering Problem to Laboratory Coordinates.	The Kepler Problem: Inverse Square Law of Force, The Motion in Time in the Kepler Problem, Kepler's Laws, Kepler's Equation, The Laplace-Runge-Lenz Vector. Scattering in a Central Force Field: Cross Section of Scattering, Rutherford Scattering Cross Section, Total Scattering Cross Section, Transformation of the Scattering Problem to Laboratory Coordinates.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal gcmohali@gmail.com

DEPARTMENT OD MATHEMATICS

Month-wise Schedule of M.Sc. (MATHEMATICS) Part II

SESSION 2021-22(SEMESTER-3)

Faculty Title of Paper	September	October	November	December
Dr. Amrit pal singh MM- 602 FIELD THEORY	fields, examples, Algebraic and transcendental elements, Irreducible polynomials, Gauss lemma, Eisenstein's criterion, Adjunction of roots, Kronecker's theorem, algebraic exxensions, algebraically closed fields.	Splitting fields, Normal extensions, multiple roots, finite fields, Separable extensions, perfect fields, primiive elements, Lagrange's theorem on primitive elements.	Automorphism groups and fixed fields, Galois extensions, Fundamental theorem of Galois theory, Fundamental theorem of algebra, Roots of unity and cyclotomic polynomials, Cyclic extension, Polynomials solvable by radicals,	Symmetric functions, cyclotomic extension, quintic equation and solvability by radicals, Ruler and Compass construction.
Mr. Inderjeet Singh MM 603 Differential Equations –II	Existance and uniqueness of solutions of first order differential equations for complex systems.	Maximum and minimum solution. Caratheodory theorem. Continuation of solution. Uniqueness of solutions and Successive approximations. Variation of Solutions.	Partial Differential Equations: Occurrence and elementary solution of Laplace equation. Family of equipotential surface. Interior and exterior Dirichlet boundary value problem for Laplace equation	Separation of Variables. Axial symmetry, Kelvin's inversion theorem. Green's function for Laplace equation. Dirichlet's problem for semi-infinite space and for a sphere. Copson's Theorem (Statement only)

Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

Dr. Amritpal singh MM - 607 Classical Mechanics	Basic Principles: Mechanics of a Particle and a System of Particles, Constraints, Generalized Coordinates, Holonomic and Non-Holonomic Constraints. D'Alemberts Principle and Lagrange's Equations, Velocity Dependent Potentials and the Dissipation Function, Simple Applications of the Lagrangian formulation.Variational Principles and Lagrange's Equations: Hamilton's Principle, Derivation of Lagrange's Equations from Hamilton's Principle, Extension of Hamilton's Principle to Non-Holonomic Systems	Conservation Theorems and Symmetry Properties: Cyclic Coordinates, Canonical Momentum and its Conservation, The Generalized Force, and Angular Momentum Conservation Theorem. The Two-Body Central Force Problem: Reduction to the Equivalent One-Body Problem, The Equation of Motion, The Equivalent One Dimensional Problem and the Classification of Orbits, The Virial Theorem, Conditions for Closed Orbits, Bertrand's Theorem.	The Kepler Problem: Inverse Square Law of Force, The Motion in Time in the Kepler Problem, Kepler's Laws, Kepler's Equation, The Laplace-Runge-Lenz Vector. Scattering in a Central Force Field: Cross Section of Scattering, Rutherford Scattering Cross Section, Total Scattering Cross Section, Transformation of the Scattering Problem to Laboratory Coordinates	The Kepler Problem: Inverse Square Law of Force, The Motion in Time in the Kepler Problem, Kepler's Laws, Kepler's Equation, The Laplace-Runge-Lenz Vector. Scattering in a Central Force Field: Cross Section of Scattering, Rutherford Scattering Cross Section, Total Scattering Cross Section, Transformation of the Scattering Problem to Laboratory Coordinates

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

Prof. Harjinder Singh **MM- 609** **OPTIMIZATION TECH -I**	**Introduction:** Definition of operation research, models in operation research, general methods for solving O.R. models, Elementary theory of convex sets. **Linear Programming Problems:** Definition of LPP, examples of LPPs, mathematical formulation of the mathematical programming problems, Graphical solution of the problem. Simplex method, Big M method, Two Phase method, problem of degeneracy.	**Duality in linear programming:** Concept of duality, fundamental propeties of duality, duality theorems, complementary slackness theorem, duality and simplex method, dual simplex method. **Seasitivity Analysis:** Discrete changes in the cost vector, requirement vector and co-efficient matrix, addition of a new variable, deletion of a variable, addition of new constraint, deletion of a constraint. **Integer Programming:** Introduction, Gomory's all-IPP method, Gomory's mixed-integer method, Branch and Bound method.	**Transportation Problem:** Introduction, mathematical formulation of the problem, initial basic feasible solution using North West Corner Method, Least Cost Method and Vogel's Approximation Method, Optimal solution using MODI method, degeneracy in transportation problems, some exceptional cases in transportation problem	**Assignment Problems:** Introduction, mathematical formulation of an assignment problem, assignment algorithm, unbalanced assignment problems, Travelling Salesman problem. **Games & Strategies**: Definition & characteristics of Games. Two person zero sum games, Maximin-minimax principle, Games without saddle points, Mixed Strategies, Graphical method for solving and games, Concept of Dominance, Reducing the game problem to LPP, Limitations.

Dr. Amrit pal singh MM- 610 FUZZY SETS AND APPLICATIONS	**Classical Sets and Fuzzy Sets:** Overview of Classical Sets, Membership Function, a-cuts, Properties of a-cuts, Decomposition Theorems, Extension Principle. **Operations on Fuzzy Sets:** Compliment, Intersections, Unions, Combinations of operations, Aggregation Operations.	**Fuzzy Arithmetic:** Fuzzy Numbers, Linguistic Variables, Arithmetic Operations on intervals and Numbers, Lattice of Fuzzy Numbers, Fuzzy Equations. **Fuzzy Relations:** Crisp and Fuzzy Relations, Projections and Cylindric Extensions, Binary	Fuzzy Relations, Binary Relations on single set, Equivalence, Compatibility and Ordering Relations, Morphisms, Fuzzy Relation Equations. **Possibility Theory:** Fuzzy Measures, Evidence and Possibility Theory, Possibility versus Probability Theory.	**Fuzzy Logic:** Classical Logic, Multivalued Logics, Fuzzy Propositions, Fuzzy Qualifiers, Linguistic Hedges. **Uncertainty based Information:** Information and Uncertainty, Nonspecificity of Fuzzy and Crisp sets, Fuzziness of Fuzzy Sets. Applications of Fuzzy Logic.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2215164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OD MATHEMATICS
Month-wise Schedule of M.Sc. (MATHEMATICS) Part II

SESSION 2021-22(SEMESTER-4)

Faculty Title of Paper	February	March	April	May
Dr. D B Rishi MM-702 THEORY OF LINEAR OPERATORS	Spectral theory in normed linear spaces, resolvant set and spectrum. Spectral properties of bounded linear operator. Properties of resolvant and spectrum. Spectral mapping theorem for polynomials, spectral radius of bounded linear operator on a complex Banach space.	Elementary theory of Banach algebras. Resolvant set and spectrum. Invertible elements, Resolvant equation. General properties of compact linear operators. Spectral properties of compact linear operators on normed space. Behaviour of compact linear operators with respect to solvability of operator equations linear operators.	Fredholm type theorems. Fredholm alternative theorems. Spectral properties of bounded self-adjoint linear operators on a complex Hilbert space. Positive operators. Monotone sequence theorem for bounded self-adjoint operators on a complex Hilbert spaceSquare roots of positive operators. Spectral family of a bounded self-adjoint linear operator and its properties. Spectral theorem.	Square roots of positive operators. Spectral family of a bounded self-adjoint linear operator and its properties. Spectral theorem

Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

Prof. Harjinder Singh **MM- 705 OPTIMIZATION TECH .II**	Quadratic Programming: Wolfe's Modified Simplex Method, Beale's method for Quadratic Programming, Separable, Convex programming. Linear Complimentary Problem : Lemke's Complementary Pivoting Algorithm, Solution of Quadratic programming, Problems using Linear Complementary method.	Separable Programming Introduction, Reduction of Separable Programming to Linear programming Problem, Separable Programming Algorithm Goal Programming Introduction, formulation of linear Goal Programming, Graphical & Simplex Method for Goal Programming. Geometric Programming: Introduction, constrained & unconstrained Geometric Programming Problem, Complementary Geometric programming.	Fractional Programming : Introduction, Mathematical formulation of Linear fractional programming problem, Method due to Charnes and Cooper, Problems of Fractional Programming .Dynamic Programming: Introduction, nature of Dynamic Programming (DP), Solution of DiscreteDPP, Application of DP in Linear Programming. Decision Theory: Introduction & components of Decision Theory, EMV,EOL, Decision making under uncertainty, Decision making under utilities, Decision making under Risk.	: Introduction, Advantages & Simulation disadvantages, Event – type, Monte-Carlo simulation, Application to Inventory, Queueing, Capital Budgeting, Financial Planning, Maintenance, JobSequencing, Networks.
Dr. Amrit pal singh **MM- 708 FLUID MECHANICS**	Equations of Fluid Mechanics : Real and continuous fluids, differentiation following the motion, equation of continuity, Stream function, Stream lines, Pressure, Euler's equation of motion. Bernoulli's theorem Steady irrotational non-viscous compressible flow, Vorticity, circulation,	Kelvin's theorem on constancy of circulation, Kinetic energy, Three dimensional problems : Laplace's equation. Three dimensional sources and dipoles. Spherical obstacle in a uniform Steam . Application of complex variable method : Conjugate functions in plane, complex potential ,am Moving sphere, images.	Incompressible flow in two dimensions, uniform stream, Source and sink, Vortex, Two dimensional dipole, Superposition. Joukowski's transformation. Milne Thomson circle theorem, Blasius theorem, Drag and lift. Source and vortex filaments, vortex pair, rows of vortices. Karman cortex street. Viscous flow : Navier Stokes equations,	Dissipation of energy. Diffusion of vorticity in an incompressible fluid, condition of no slip. Steady flow between two parallel infinite flat plates, steady flow through a straight circular pipe (Poiseuille Flow).

Mr. Inderjeet Singh MM-716 MATHEMATICAL METHODS	Linear integral equations of first and second kind, Abel's problem, Relation between linear differential equation and Volterra's equation, Non linear and Singular equations, Solution by successive substitutions, Volterra's equation iterated and reciprocal functions, Volterra's solution of Fredholm's equation, Fredholm's equation as limit of finite system of linear equations,	Hadamard's theorem, convergence proof, Fredholm's two fundamental relations, Fredholm's solution of integral equation when $D(\lambda)\neq 0$, Fredholm's solution of Dirichlet's problem and Neumann's problem, Lemmas on iterations of symmetric kernel, Schwarz's inequality and its applications.	Simple variational problems, Necessary condition for an extremum, Euler's equation, End point problem, Variational derivative, Invariance of Euler's equation, Fixed end point problem for n-unknown functions, Variational problem in parametric form, Functionals depending on higher order derivatives, Euler Lagrange equation, First integral of Euler-Lagrange equation, Geodesics,	The brachistochrone, Minimum surface of revolution, Brachistochrone from a given curve to a fixed point, Snell's law, Fermat's principle and calculus of variations.

Dr. Amrit pal singh **MM- 717 ANALYTIC NUMBER THEORY**	Arithmetical functions: Mobius function, Euler's totient function, Mangoldt function, Liouville's function, The divisor functions. Relation connecting φ and μ, product formula for $\varphi(n)$, Dirichlet product of arithmetical functions, Dirichlet inverses and Mobius inversion formula, Multiplicative functions, Dirichlet multiplication, The inverse of a completely multiplicative function, Generalized convolutions.	Averages of arithmetical functions: The big oh notation, Asymptotic equality of functions, Euler's summation formula, Elementary asymptotic formulas, Average order of $d(n)$, $\varphi(n)$, $\sigma_\alpha(n)$, $\mu(n)$ and $\Lambda(n)$, The Partial sums of a Dirichlet product, applications to $\mu(n)$ and $\Lambda(n)$, Legendre's identity.	Some elementary theorems on the distribution of prime numbers: Chebyshev's functions $\psi(x)$ &$\theta(x)$, Relation connecting $\theta(x)$ and $\Pi(x)$, Abel's identity, equivalent forms of Prime number theorem, inequalities for $\Pi(n)$ and P_n , Shapiro's Tauberian theorem, applications of Shapiro's theorem, Asymptotic formula for the partial sums $\sum_{p\leq x}\frac{1}{p}$. Elementary properties of groups , Characters of finite abelian groups, The character group, Orthogonality relations for characters.	. Dirichlet characters. Dirichlet's theorem for primes of the form 4n-1 and 4n+1. Dirichlet's theorem in primes on Arithmetical progression. Distribution of primes in Arithmetical progression.

SHAHEED MAJOR HARMINDERPAL SINGH (S.C.V.) GOVERNMENT COLLEGE, SAHIBZADA AJIT SINGH NAGAR
Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of M.Sc. (MATHEMATICS) Part I

SESSION 2022-23(SEMESTER-1)

Faculty Title of Paper	October	November	December
Dr. DB Rishi MATM1101T Algebra-I	Review of groups, Normal and subnormal series, Solvable groups, Nilpotent groups, Composition Series, Jordan-Holder theorem for groups. Group action, Stabilizer, orbit.	Class equation and its applications permutation groups, cyclic decomposition, conjugacy classes in permutation groups, Alternating group A_n, Simplicity of A_n. Structure theory of groups. Fundamental theorem of finitely generated abelian groups, Invariants of a finite abelian group.	Groups of Automorphisms of cyclic groups, homomorphism between two cyclic groups, Sylow's theorems, Groups of order p^2, pq. Review of rings and homomorphism of rings, Ideals, Algebra of Ideals, Maximal and prime ideals, Ideal in Quotient rings, Field of Quotients of integral Domain, Matrix Rings and their ideals; Rings of Endomorphisms of Abelian Groups.

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Mr. Inderjeet Singh **MATM1102T** **Mathematical Analysis**	Functional of several variables: Linear transformations, Derivatives in an open subset of R^n, Chain Rule, Partial derivatives, Interchange of the order of differentiation, Derivatives of higher orders, Tuylar's theorem Inverse function theorem, Implicit function theorem. Algebras, σ-algebra, their properties.,	General measurable spaces, measure spaces, properties of measure, Complete measure, Lebesgue outer measure and its properties, measurable sets and Lebesque measure, A non measurable set. Measurable function w.r.t. general measure. Borel and Lebesgue measurability Integration of non-negative measurable functions, Fatou's lemma, Monotone convergence theorem, Lebesgue convergence theorem, The general integral, Integration of series, Riemann and lebesgue integrals	Differentiation; Vitalis Lemma, The Dini derivatives, Functions of bounded variation, Differentiation of an Integral, Absolute Continuity, Convex Fucations and Jensen's inequality.

Dr. DB Rishi MATM1103T Topology-I	Cardinals: Equipotent sets, Countable and Uncountable sets, Cardinal Numbers and their Arithmetic, Bernstein's Theorem and the Continumm Hypothesis. Topological Spaces: Definition and examples, Euclidean spaces as topological spaces, Basis for a given topology, Topologizing of Sets; Sub-bas Elementary Concepts: Closure, Interior, Frontier and Dense Sets, Topologizing with pre-assigned elementary operations. Relativization, Subspaces is, Equivalent Basis.	. Path Connectedness, Maps and Product Spaces:. Continuous Maps. Restriction of Domain and Range, Characterization of Continuity, Continuity at a point, Piecewise definition of Maps and Neighborhood finite families. Open Maps and Closed Maps, Homeomorphisms and Embeddings. Cartesian Product Topology, Elementary Concepts in Product Spaces, Continuity of Maps in Product Spaces and Slices in Cartesian Products. Connectedness: Connectedness and its characterizations, Continuous image of connected sets, Connectedness of Product Spaces, Applications to Euclidean spaces. Components, Local Connectedness and Components, Product of Locally Connected Spaces	. Compactness and Countability: Compactness and Countable Compactness, Local Compactness, One-point Compactification, T-0, T1, and T2 spaces, T2 spaces and Sequences and Hausdorfness of One-Point Compactification. Axioms of Countablity and Separability, Equivalence of Second axiom, Separable and Lindelof in Metric Spaces. Equivalence of Compact and Countably Compact Sets in Metric Spaces

Dr. Amrit Pal Singh MATM1104T Differential Geometry	Theory of Space Curves: Curves in the planes and in space, arc length, reparametrization, curvature, Serret-Frenet formulae, osculating circles, evolutes and involutes of curves, space curves, torsion, Serret-Frenet formulae. Theory of Surfaces, smooth surfaces, tangents, normals and orientability, quadric surfaces, the first and the second fundamental forms, Euler's theorem, Rodrigue's formula.	Gaussian Curvature, Gauss map and Geodesics: The Gaussian and mean curvatures, the pseudosphere, flat surfaces, surfaces of constant mean curvature. Gaussian curvature of compact surfaces, the Gauss map, Geodesics, geodesic equations, geodesics of surfaces of revolution, geodesics as shortest paths, geodesic	coordinates.Minimal Surfaces and Gauss's Remarkable Theorem: Plateau's problem, examples of minimal surfaces, Gauss map of a minimal surface, minimal surfaces and holomorphic functions, Gauss's Remarkable Theorem, isometries of surfaces, The Codazzi-Mainardi Equations, compact surface of constant Gaussian curvature
Prof Harjinder Singh MATM1107T Linear Programming	Linear programming problems (LPPs); Examples. Mathematical formulation, Graphical solution. Solution by Simplex method, artificial variables,Big-M method and two phase simplex method. Duality in linear programming: Concept, Mathematical formulation, fundamental properties of duality, duality and simplex method and dual simplex method	. Sensitivity Analysis Discrete changes in the cost vector, requirement vector and Co-efficient matrix, Transportation problem ; initial basic feasible solution and Optimal solutions using MODI method (for balanced cases only), Assignment problem; solution of balanced and unbalanced	assignment problems, maximization case in as Sequencing Problems: General Assumptions, Processing n jobs through m machines. Replacement decisions: O.R methodology of solving replacement problems, Replacement of items that deteriorates with time without and with change in the money value signment problem.

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Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OF MATHEMATICS

Month-wise Schedule of M.Sc. (MATHEMATICS) Part I

SESSION 2022-23(SEMESTER-2)

Faculty Title of Paper	February	March	April	May
Mr. Prakash Chandra Joshi MATM1201T Algebra-II	Unique Factorization Domains, Principal Ideal Domains, Euclidean Domains, Polynomial Rings over UFD, Rings of Fractions.	Modules: Definition and Examples, Submodules, Direct sum of submodules, Free modules, Difference between modules and vector spaces, Quotient modules, Homomorphism, Simple modules, Modules over PID.	Modules with chain conditions: Artinian Modules, Noetherian Modules, Artinian Implies Noetherian in Rings, Composition series of a module, Length of a module, Hilbert Basis Theorem..	Cohen Theorem, Radical Ideal, Nil Radical, Jacobson Radical, Radical of an Artinian ring, Nil Radical and Jacobson Radical of Polynomial Rings R[x], R commutative.

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Dr. DB Rishi **MATM12021** **Topology-II**	Higher Separation Axioms: Regular, Completely Regular, Normal and Completely Normal Spaces. Metric Spaces as Completely Normal T2 Spaces. Urysohns Lemma and The Tietze Extension Theorem. Products : Products of first countable, Regular, T2 and Completely Regular Spaces.	Non invariance of normality under products. Embedding of Tichonov spaces into parallelotope and the Stone Cech Compactification. Filters : Filter and filter base, convergence and clustering, filter characterization of closure, continuity and filter convergence, ultrafilters, filter characterization of compactness and the Tychonoff Theorem.	Identification Topology: Identification Topology, Identification Map, Subspaces, General Theorem, Transgression, Transitivity Spaces with Equivalance Relation, Quotient Spaces. Categories and Functors: Categories: Definition and Examples, The Arrow Category, Congruence in a Category, Quotient Category, Functors, Duality, Contravariance and Duality.	Homotopy as Congruence in Top. The Category hTop. homotopy equivalence, nullhomotopy, convexity, contractibility and cones, the path component functor, invariance of path components under homotopy type.

Mr. Inderjeet Singh **MATM1203T** **Differential Equations -I**	Existence of solution of ODE of first order, initial value problem, Ascoli's Lemma, Gronwall's inequality, Cauchy Peano Exisience Theorem, Uniqueness of Solutions. Method of successive approximations, Existence and Uniqueness Theorem.	System of differential equations, nth order differential equation, Existence and Uniqueness of solutions, dependence of solutions on initial conditions and parameters. Linear system of equations (homogeneous & non homogeneous). Superposition principle, Fundamental set of solutions, Fundamental Matrix, Wronskian.	Abel Liouville formula, Reduction of order, Adjoint systems and self adjoint systems of second order, Floquet Theory. Linear 2nd order equations, preliminaries, Sturm's separation theorem, Sturm's fundamental comparison theorem,	Sturm Liouville boundary value problem, Characteristic values & Characteristic functions, Orthogonality of Characteristic functions, Expansion of a function in a series of orthonormal functions.

Prof. Harjinder Singh **MATM1204T** **Complex Analysis**	Function of complex variable. Analytic function. Cauchy-Riemann equations. Harmonic function and Harmonic conjugates. Branches of multivalued functions with reference to arg z, log z.	Conformal Mapping. Complex Integration. Cauchy's theorem. Cauchy Goursat theorem Cauchy integral formula. Morera's theorem. Liouville's theorem. Fundamental theorem of Algebra. Maximum Modulus Principle. Schwarz lemma.	Taylor's theorem. Laurent series in an annulus. Singularities. Meromorphic function. Cauchy's theorem on residues. Application to evaluation of definite integrals. Principle of analytic continuation. General definition of an analytic function. Analytic continuation by power series method. Natural boundary. Harmonic functions on a disc. Schwarz Reflection principle. Mittag-Leffler's theorem.	Natural boundary. Harmonic functions on a disc. Schwarz Reflection principle. Mittag-Leffler's theorem.

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Dr. Amrit Pal Singh MATM1207T Classical Mechanics	Basic Principles: Mechanics of a Particle and a System of Particles, Constraints , Generalized Coordinates, Holonomic and Non-Holonomic Constraints, D'Alemberts Principle and Lagrange's Equations, Velocity Dependent Potentials and the Dissipation Function, Simple Applications of the Lagrangian formulation. Variational Principles and Lagrange's Equations: Hamilton's Principle, Derivation of Lagrange's Equations from Hamilton's Principle, Extension of Hamilton's Principle to Non-Holonomic Systems.	Conservation Theorems and Symmetry Properties: Cyclic Coordinates, Canonical Momentum and its Conservation, The Generalized Force, and Angular Momentum Conservation Theorem. The Two-Body Central Force Problem: Reduction to the Equivalent One-Body Problem, The Equation of Motion, The Equivalent One Dimensional Problem and the Classification of Orbits, The Virial Theorem, Conditions for Closed Orbits, Bertrand's Theorem.	The Kepler Problem: Inverse Square Law of Force, The Motion in Time in the Kepler Problem, Kepler's Laws, Kepler's Equation, The Laplace-Runge-Lenz Vector. Scattering in a Central Force Field: Cross Section of Scattering, Rutherford Scattering Cross Section, Total Scattering Cross Section, Transformation of the Scattering Problem to Laboratory Coordinates.	The Kepler Problem: Inverse Square Law of Force, The Motion in Time in the Kepler Problem, Kepler's Laws, Kepler's Equation, The Laplace-Runge-Lenz Vector. Scattering in a Central Force Field: Cross Section of Scattering, Rutherford Scattering Cross Section, Total Scattering Cross Section, Transformation of the Scattering Problem to Laboratory Coordinates.

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DEPARTMENT OF MATHEMATICS

Month wise Schedule of M.Sc. (MATHEMATICS) Part II

SESSION 2022-23(SEMESTER-3)

Faculty / Title of Paper	September	October	November	December
Dr Amrit pal singh MM-602 FIELD THEORY	fields, examples. Algebraic and transcendental elements, irreducible polynomials, Gauss lemma, Eisenstein's criterion. Adjunction of roots, Kronecker's theorem, algebraic extensions, algebraically closed fields.	Splitting fields, Normal extensions, multiple roots, finite fields, Separable extensions, perfect fields, primitive elements, Lagrange's theorem on primitive elements.	Galois group and fixed fields, Galois extensions, Fundamental theorem of Galois theory, Fundamental theorem of algebra, Roots of unity and cyclotomic polynomials, Cyclic extension, Polynomials solvable by radicals.	Symmetric functions, cyclotomic extension, quintic equation and solvability by radicals, Ruler and Compass construction.
Mr Inderjeet Singh MM 603 Differential Equations -II	Existance and uniqueness of solutions of first order differential equations for complex systems.	Maximum and minimum solutions, Caratheodory theorem, Continuation of solution, Uniqueness of solutions and Successive approximations, Variation of Solutions.	Partial Differential Equations, Occurrence and elementary solution of Laplace equation, Family of equipotential surface, Interior and exterior Dirichlet boundary value problem for Laplace equation.	Separation of Variables, Axial symmetry, Kelvin's inversion theorem, Green's function for Laplace equation, Dirichlet's problem for semi-infinite space and for a sphere, Gauss's Theorem (Statement only).

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Prof. Harjinder Singh MM- 609 OPTIMIZATION TECH.	**Introduction:** Definition of operation research, models in operation research, general methods for solving O.R. models, Elementary theory of convex sets. **Linear Programming Problems:** Definition of LPP, examples of LPPs, mathematical formulation of the mathematical programming problems, Graphical solution of the problem. Simplex method, Big M method, Two Phase method, problem of degeneracy.	**Duality in linear programming:** Concept of duality, fundamental properties of duality, duality theorems, complementary slackness theorem, duality and simplex method, dual simplex method. **Sensitivity Analysis:** Discrete changes in the cost vector, requirement vector and co-efficient matrix, addition of a new variable, deletion of a variable, addition of new constraint, deletion of a constraint. **Integer Programming:** Introduction, Gomory's all-IPP method, Gomory's mixed-integer method, Branch and Bound method.	**Transportation Problem:** Introduction, mathematical formulation of the problem, initial basic feasible solution using North West Corner Method, Least Cost Method and Vogel's Approximation Method, Optimal solution using MODI method, degeneracy in transportation problems, some exceptional cases in transportation problem	**Assignment Problems:** Introduction, mathematical formulation of an assignment problem, assignment algorithm, unbalanced assignment problems, Travelling Salesman problem. **Games & Strategies:** Definition & characteristics of Games. Two person zero sum games, Maximin-minimax principle, Games without saddle points, Mixed Strategies, Graphical method for solving and games, Concept of Dominance, Reducing the game problem to LPP, Limitations.

Dr. Amrit pal singh **MM- 610 FUZZY SETS AND APPLICATIONS**	**Classical Sets and Fuzzy Sets:** Overview of Classical Sets, Membership Function, a-cuts, Properties of a-cuts, Decomposition Theorems, Extension Principle. **Operations on Fuzzy Sets:** Compliment, Intersections, Unions, Combinations of operations, Aggregation Operations.	**Fuzzy Arithmetic:** Fuzzy Numbers, Linguistic Variables, Arithmetic Operations on intervals and Numbers, Lattice of Fuzzy Numbers, Fuzzy Equations. **Fuzzy Relations:** Crisp and Fuzzy Relations, Projections and Cylindric Extensions, Binary	Fuzzy Relations, Binary Relations on single set, Equivalence, Compatibility and Ordering Relations, Morphisms, Fuzzy Relation Equations. **Possibility Theory:** Fuzzy Measures, Evidence and Possibility Theory, Possibility versus Probability Theory.	**Fuzzy Logic:** Classical Logic, Multivalued Logics, Fuzzy Propositions, Fuzzy Qualifiers, Linguistic Hedges. **Uncertainty based Information:** Information and Uncertainty, Nonspecificity of Fuzzy and Crisp sets, Fuzziness of Fuzzy Sets, Applications of Fuzzy Logic.
Dr. D B Rishi **MM 612: FUNCTIONAL ANALYSIS**	Normed Linear spaces, Banach spaces, Examples of Banach spaces and subspaces. Continuity of Linear maps, Equivalent norms. Normed spaces of bounded linear maps. Bounded Linear functional. Hahn-Banach theorem in Linear Spaces and its applications.	Hahn-Banach theorem in normed linear spaces and its applications. Uniform boundedness principle, Open mapping theorem, Projections on Banach spaces, Closed graph theorem.	The conjugate of an operator. Dual spaces of lp and C [a,b], Reflexivity. Hilbert spaces, examples, Orthogonality, Orthonormal sets, Besse's inequality, Parseval's theorem. The conjugate space of a Hilbert spaces. Adjoint operators, Self-adjoint operators, Normal and unitary operators. Projection operators	Spectrum of an operator, Spectral Theorem, Banach Fixed Point Theorem, Brower's Fixed Point Theorem, Schauder Fixed Point Theorem, Picards Theorem, Applications of Fixed point theorem in differential equations and integral equations.

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Phase-6, Sahibzada Ajit Singh Nagar-160055 Phone No. 0172-2225164 e-mail ID:principal.gcmohali@gmail.com

DEPARTMENT OD MATHEMATICS

Month-wise Schedule of M.Sc. (MATHEMATICS) Part II

SESSION 2022-23(SEMESTER-4)

Faculty Title of Paper	February	March	April	May
Dr. D B Rishi MM-702 THEORY OF LINEAR OPERATORS	Spectral theory in normed linear spaces, resolvant set and spectrum. Spectral properties of bounded linear operator. Properties of resolvant and spectrum. Spectral mapping theorem for polynomials, spectral radius of bounded linear operator on a complex Banach space.	Elementary theory of Banach algebras. Resolvant set and spectrum. Invertible elements, Resolvant equation. General properties of compact linear operators, Spectral properties of compact linear operators on normed space. Behaviour of compact linear operators with respect to solvability of operator equations linear operators.	Fredholm type theorems. Fredholm alternative theorems. Spectral properties of bounded self-adjoint linear operators on a complex Hilbert space. Positive operators. Monotone sequence theorem for bounded self-adjoint operators on a complex Hilbert spaceSquare roots of positive operators. Spectral family of a bounded self-adjoint linear operator and its properties, Spectral theorem.	Square roots of positive operators. Spectral family of a bounded self-adjoint linear operator and its properties. Spectral theorem.

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Prof. Harjinder Singh **MM- 705 OPTIMIZATION TECH -II**	Quadratic Programming: Wolfe's Modified Simplex Method, Beale's method for Quadratic Programming, Separable, Convex programming. Linear Complimentary Problem : Lemke's Complementary Pivoting Algorithm, Solution of Quadratic programming, Problems using Linear Complementary method.	Separable Programming: Introduction, Reduction of Separable Programming to Linear programming Problem, Separable Programming Algorithm Goal Programming: Introduction, formulation of linear Goal Programming, Graphical & Simplex Method for Goal Programming. Geometric Programming: Introduction, constrained & unconstrained Geometric Programming Problem, Complementary Geometric programming.	Fractional Programming : Introduction, Mathematical formulation of Linear fractional programming problem, Method due to Charnes and Cooper, Problems of Fractional Programming Dynamic Programming: Introduction, nature of Dynamic Programming (DP), Solution of DiscreteDPP, Application of DP in Linear Programming. Decision Theory: Introduction & components of Decision Theory, EMV,EOL, Decision making under uncertainty, Decision making under utilities, Decision making under Risk.	: Introduction, Advantages & Simulation disadvantages, Event – type, Monte-Carlo simulation, Application to Inventory, Queueing, Capital Budgeting, Financial Planning, Maintenance, JobSequencing, Networks.
Dr. Amrit pal singh **MM- 708 FLUID MECHANICS**	Equations of Fluid Mechanics : Real and continuous fluids, differentiation following the motion,equation of continuity, Stream function, Stream lines, Pressure, Euler's equation of motion, Bernoulli's theorem Steady irrotational non-viscous compressible flow. Vorticity, circulation,	Kelvin's theorem on constancy of circulation, Kinetic energy. Three dimensional problems : Laplace's equation, Three dimensional sources and dipoles, Spherical obstacle in a uniform Steam . Application of complex variable method : Conjugate functions in plane, complex potential ,an Moving sphere, images.	Incompressible flow in two dimensions, uniform stream, Source and sink, Vortex, Two dimensional dipole, Superposition, Joukowski's transformation. Milne Thomson circle theorem, Blasius theorem, Drag and lift. Source and vortex filaments, vortex pair, rows of vortices, Karman cortex street. Viscous flow : Navier Stokes equations.	Dissipation of energy. Diffusion of vorticity in an incompressible fluid, condition of no slip, Steady flow between two parallel infinite flat plates, steady flow through a straight circular pipe (Poiseuille Flow).

Mr. Inderjeet Singh **MM-716** **MATHEMATICAL METHODS**	Linear integral equations of first and second kind, Abel's problem, Relation between linear differential equation and Volterra's equation, Non linear and Singular equations, Solution by successive substitutions, Volterra's equation iterated and reciprocal functions, Volterra's solution of Fredholm's equation. Fredholm's equation as limit of finite system of linear equations,	Hadamard's theorem, convergence proof, Fredholm's two fundamental relations, Fredholm's solution of integral equation when $D(\lambda)\neq 0$, Fredholm's solution of Dirichlet's problem and Neumann's problem, Lemmas on iterations of symmetric kernel, Schwarz's inequality and its applications.	Simple variational problems, Necessary condition for an extremum, Euler's equation, End point problem, Variational derivative, Invariance of Euler's equation, Fixed end point problem for n-unknown functions, Variational problem in parametric form, Functionals depending on higher order derivatives. Euler Lagrange equation, First integral of Euler-Lagrange equation, Geodesics,	The brachistochrone, Minimum surface of revolution, Brachistochrone from a given curve to a fixed point, Snell's law, Fermat's principle and calculus of variations.

ਫੇਜ਼-6, ਸਾਹਿਬਜ਼ਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ (ਮੋਹਾਲੀ)-160056 Phone No. 0172-2225164 e-mail ID: principal.gcmohali@gmail.com

ਪਬਲਿਕ ਅਡਮਿਨਿਸਟ੍ਰੇਸ਼ਨ ਵਿਭਾਗ

PAPER: ADMINISTRATION THEORY (B.A Sem. I)

Learning Outcomes	
1.	Awareness about the evolution and growth of the discipline of Public Administration.
2.	Learning of basic principles and approaches of Public Administration.
3.	Theoretical clarity of basic concepts and dynamics (both ecological and others) relating to Public organizations.

Month wise Unitization Plan		
Session	**Month**	**Topics form the Syllabus**
July 2022	August	Meaning, Nature & Scope of Public Administration; Public and Private Administration (differences & similarities); Public Administration as Science or Art; Relationship of Public Administration with other Social Sciences- Political Science, Economics
	September	Relationship of Public Administration History & Sociology New Public Administration & New Public Management; Organization: Meaning, Bases, Formal & Informal Organization.
	October	Chief Executive; Line & Staff Agencies; ➢ Mid Semester Test & Assignments
	November	Principles of Organization- Hierarchy, Centralization, Decentralization, Coordination, Communication; Legislative & Judicial Control over Administration; Delegated Legislation (meaning, reasons for its growth, merits, demerits and safeguards).
	December & January	Revision/Preparation of Exams

Note: Dates may vary as per the instruction received for beginning of classes and conduct of examinations by the University.

ਰੋਹਿਤ ਬਰਾਚ (ਸਹਾਇਕ ਪ੍ਰੋਫੈਸਰ)

ਪਬਲਿਕ ਐਡਮਨਿਸਟਰੇਸ਼ਨ ਵਿਭਾਗ

ਪਬਲਿਕ ਅਡਮਿਨਿਸਟ੍ਰੇਸ਼ਨ ਵਿਭਾਗ

PAPER: PERSONNEL ADMINISTRATION IN INDIA (B.A. Sem. III)

Learning Outcomes	
1.	Conceptual clarity regarding Public Personnel Administration, its issues, career systems and other dimensions covering various aspects of personnel administration.
2.	Detailed understanding of the Public personnel system of the Indian Republic.
3.	Theoretical clarity of basic concepts and dynamics relating to Public organizations.

Month wise Unitization Plan		
Session	**Month**	**Topics form the Syllabus**
July 2022	August	Personnel Administration: Meaning, Nature and Scope; Civil Services in India: Meaning, Features & Role; Classification: Meaning, Advantages and Disadvantages.
	September	Classification of Civil Services in India; Recruitment: Meaning, Methods; Merits & demerits, Recruitment of Civil Services in India.
	October	Union & State Public Service Commissions: Composition and Functions; ➢ Mid Semester Test & Assignments
	November	Training: Meaning, Types; Training System in India; Promotion: Meaning and Principles; Employer-Employee Relations: Joint Consultation Machinery, Conduct and Discipline, Morale; Corruption: Causes and remedies.
	December & January	Revision/Preparation of Exams

Note: Dates may vary as per the instruction received for beginning of classes and conduct of examinations by the University.

ਰੋਹਿਤ ਬਰਾਚ (ਸਹਾਇਕ ਪ੍ਰੋਫੈਸਰ)

ਪਬਲਿਕ ਐਡਮਨਿਸਟਰੇਸ਼ਨ ਵਿਭਾਗ

ਪਬਲਿਕ ਅਡਮਿਨਿਸਟ੍ਰੇਸ਼ਨ ਵਿਭਾਗ

PAPER: LOCAL GOVERNMENT IN INDIA (WITH SPECIAL REFERENCE TO PUNJAB) (B.A Sem. V)

Learning Outcomes	
1.	Acquiring the theoretical knowledge and understanding of the evolution and growth of local governance in India with special reference to Punjab.
2.	Gaining insights about composition, resources, role and functions, of Local Government Institutions.
3.	Understanding role and relationships of local government institutions with other institutions.

Session	Month	Topics from the Syllabus
July 2022	August	Local Government: Meaning and Significance; Evolution of Local Government in India Since 1882; Deputy Commissioner: Appointment, Functions and Role in Local Government.
	September	Panchayati Raj: Concept and Significance; The 73rd Constitutional Amendment Act; Gram Sabha: Composition and Functions; Gram Panchayat, Panchayat Samiti and Zila Parishad: Composition, Functions, source of Finance.
	October	Panchayat Secretery & Block &Development Panchayat Officer (B.D.P.O). Urbanisation- Meaning and Concept; Problems of Urbanisation in Punjab. ➢ Mid Semester Test & Assignments
	November	The 74th Constitutional Amendment; Types of Municipalties; Municipal council: Structure, Functions, Sources of Finance, President and Executive Officer; Municipal Corporation: Structure, Functions, Sources of Finance, Mayor and Commissioner; State Control over local bodies; State Control over local bodies; District Planning Committee.
	December & January	Revision/Preparation of Exams

Note: Dates may vary as per the instruction received for beginning of classes and conduct of examinations by the University.

ਰੋਹਿਤ ਬਰਾਚ (ਸਹਾਇਕ ਪ੍ਰੋਫੈਸਰ)

ਪਬਲਿਕ ਐਡਮਨਿਸਟਰੇਸ਼ਨ ਵਿਭਾਗ

ਪਬਲਿਕ ਅਡਮਿਨਿਸਟ੍ਰੇਸ਼ਨ ਵਿਭਾਗ

PAPER: INDIAN ADMINISTRATION (B.A Sem. II)

Learning Outcomes	
1.	Knowledge about the evolution and growth of Indian Administration.
2.	Familiarity with the constitutional framework on which Indian Administration is based.
3.	Grasping the role of Union Executive and Executive at the state level.
4.	Delineating the constitutional provisions and dynamics of union-state relationships.

Month wise Unitization Plan		
Session	**Month**	**Topics form the Syllabus**
January 2022	January	Features of Indian Administration, Union Executive: The President, The Prime Minister and The Council of Ministers.
	February	The Parliament: Compositions and Functions, Legislative and Administrative Relations between the Union and the States.
	March	State Executive: The Governor, The Chief Minister, The Chief Secretary; ➢ Assignment, Presentations and Mid Semester Test
	April	State Legislature composition and Functions; Judiciary: Supreme Court of India- Organization and Functions, High Court- Organization and Functions.
	May	Revision/Preparation of Exams

Note: Dates may vary as per the instruction received for beginning of classes and conduct of examinations by the University.

ਰੋਹਿਤ ਬਰਾਚ (ਸਹਾਇਕ ਪ੍ਰੋਫੈਸਰ)

ਪਬਲਿਕ ਐਡਮਨਿਸਟਰੇਸ਼ਨ ਵਿਭਾਗ

ਸ਼ਹੀਦ ਮੇਜਰ ਹਰਮਿੰਦਰਪਾਲ ਸਿੰਘ (ਸ਼ੈ.ਚੱ.ਵਿ.) ਸਰਕਾਰੀ ਕਾਲਜ, ਸਾਹਿਬਜ਼ਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ।
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ਫੇਜ਼-6, ਸਾਹਿਬਜ਼ਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ (ਮੋਹਾਲੀ)-160056 Phone No. 0172-2225164 e-mail ID: principal.gcmohali@gmail.com

ਪਬਲਿਕ ਅਡਮਿਨਿਸਟ੍ਰੇਸ਼ਨ ਵਿਭਾਗ

PAPER: FINANCIAL ADMINISTRATION (B.A Sem. IV)

Learning Outcomes	
1.	Knowledge of various aspects of Public Financial Administration in the Indian context.
2.	Understanding the process of Public budgeting, and financial resource mobilization strategies in the Indian context.
3.	Comprehending the system and dynamics of Indian fiscal federalism.
4.	Deep understanding of the role of Finance Commission and Comptroller and Auditor-General of India.

Month wise Unitization Plan		
Session	**Month**	**Topics form the Syllabus**
January 2022	January	Meaning and Significance of Financial Administration. Budget: Meaning & Types (Performance and Zero Base Budgeting)
	February	Budget as a Tool of Administration; Principles of Budget Making; Preparation of Budget; Enactment and Execution of the Budget.
	March	Finance Commission: Composition & Functions; Union Ministry of Finance: Organization and Functions; ➢ Assignment, Presentations and Mid Semester Test
	April	Parliamentary Control over Finance; Comptroller and Auditor-General of India: Appointment, Powers and Functions; Financial Relations between the Union and the States.
	May	Revision/Preparation of Exams

Note: Dates may vary as per the instruction received for beginning of classes and conduct of examinations by the University.

ਰੋਹਿਤ ਬਰਾਚ (ਸਹਾਇਕ ਪ੍ਰੋਫੈਸਰ)

ਪਬਲਿਕ ਐਡਮਨਿਸਟਰੇਸ਼ਨ ਵਿਭਾਗ

ਫੇਜ਼-6, ਸਾਹਿਬਜ਼ਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ (ਮੋਹਾਲੀ)-160056 Phone No. 0172-2225164 e-mail ID: principal.gcmohali@gmail.com

ਪਬਲਿਕ ਅਡਮਿਨਿਸਟ੍ਰੇਸ਼ਨ ਵਿਭਾਗ

PAPER: DEVELOPMENT ADMINISTRATION IN INDIA (WITH SPECIAL REFERENCE TO PUNJAB) (B.A Sem. VI)

Learning Outcomes	
1.	Developing a basic intellectual understanding of development and sustainable development.
2.	Will be equipped with the knowledge and conceptual clarity of meaning, approaches and models of Comparative Public Administration.
3.	Understanding India as a Welfare State and rationale behind various steps taken uplift the marginal section of the society.
4.	Understanding the significance of planning in development and the role and reach of NITI Aayog in Indian Federalism.

Month wise Unitization Plan		
Session	**Month**	**Topics form the Syllabus**
January 2022	January	Development Administration: Meaning, Nature, Scope & Significance; India as a Welfare and Socialist State; Features of Developed & Developing Countries.
	February	Comparative Public Administration: Meaning, Nature and Scope; Planning in Indias: Meaning &Objectives; Planning Machinery: NITI Aayog, National Development Council & State Planning Board.
	March	Public Enterprise: Meaning& Forms (Department, Corporation & Company). Parliamentary Control over Public Enterprises; ➢ Assignment, Presentations and Mid Semester Test
	April	Welfare of Scheduled Castes, Backward Classes in Punjab. Central Social Advisory Welfare Board and State Social Welfare Advisory Board of Punjab, Punjab State Women Commission: Composition and Functions.
	May	Revision/Preparation of Exams

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ਰੋਹਿਤ ਬਰਾਚ (ਸਹਾਇਕ ਪ੍ਰੋਫੈਸਰ)

ਪਬਲਿਕ ਐਡਮਨਿਸਟਰੇਸ਼ਨ ਵਿਭਾਗ