



Acknowledgement Receipt of the Energy Audit

Detailed Energy Audit of Government College, Phase- VI, SAS Nagar (Mohali), Punjab

Acknowledgement

R K Energy Solutions places on record its sincere thanks to the management of Punjab Energy Development Agency Chandigarh for entrusting the Energy audit of Government College, Phase- VI, SAS Nagar (Mohali), Punjab

We are thankful to all the officials of Punjab Energy Development Agency for their assistance and guidance available through their web site, circulars & workshops as well as during energy audit of this unit particularly: -

Sh. M P Singh: Director
Er. Kulbir Singh: Joint Director (EC)
Er. Money Khanna: Project Engineer

Government College, Phase- VI, SAS Nagar: We also express sincere thanks to the campus administration & staff without whose constant support; we could not have carried this audit. Special thanks are to following:

1.Mrs. Harjeet Gujral	Principal
2.Mrs. Harsh Bala	Associate Professor
3.Mrs. Manisha Mahajan	Lecturer Physics
4.Sh. Rohit Barach	Assistant Lecturer
5.Sh. Sanjay Paul	Junior Engineer PWD(B&R) Electrical Division, Punjab
6. Sh. Ravinder Singh	Technician Grade II PWD (B&R) Electrical Division, Punjab
7. Sh. Amrinder Singh	Pesco Helper PWD (B&R), Punjab and
8. Sh. Gian Singh	Senior Lab Attendant (Dept. HSc) Govt. College, Mohali

Engineers who participated in audit & report preparation

- 1) Er. R.K. Aggarwal A.E.A - 0111
- 2) Er Rakesh Kumar Sharma: EA: 10080
- 3) Er Vibhor Aggarwal: EM-300062/21
- 4) Er Varun Sharma: B (Tech), PGD industrial Safety Management

Er. R.K. Aggarwal
R K Energy Solutions
BEE's Accredited Energy Auditor- 0111

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



PUNJAB
ENERGY DEVELOPMENT
AGENCY
(A Punjab Govt Undertaking)

No. 3069
Dated 16/05/23

M/s. R.K Energy Solutions,
174 HIG Urban Estate,
Phase -1, Jalandhar-144022
Email: rkenergysolutions1@gmail.com

Subject: Work order for conducting Energy Audit of Govt. College Building, Phase-6, S.A.S Nagar (Mohali).

Please refer to your financial bid regarding the subject cited matter

We are pleased to place the work order upon you for conducting Energy Audit of Govt. College Building, Phase-6, S.A.S Nagar (Mohali) at a total cost of Rs 74,340/- (Rupees Seventy-Four Thousand Three Hundred Forty only) inclusive of all taxes. The completion period will be 45 days from the date of issue of work order

SCOPE OF WORK

The scope of the work includes a detailed study & prepare energy audit report. The report shall consist all the recommended energy efficiency measures along with the proposed costing & payback analysis. The report shall also consist photos, electricity bills and data taken through tools during the energy audit of building. The final report submission within 45 days from the date of issue of work order

TIMELINE AND DELIVERABLES

The broad timeline for this Project is as under

Project Phase	Expected completion date from the date of issue of work order
Draft Energy Audit Report submission	Within 30 days
Final Report submission as per the scope of work to the satisfaction of PEDA	Within 45 days after compilation of draft report observations and shortcomings

PAYMENT SCHEDULE

- i. 60% payment will be released on acceptance of draft report
- ii. The balance 40% payment will be released on completion of report to the satisfaction of PEDA and submission of 3 nos coloured hard copies of the final report.
- iii. Tax deductions will be made as applicable

SOLAR PASSIVE COMPLEX

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

**ENERGY DEVELOPMENT
AGENCY**
(A Punjab Govt. Undertaking)


No : 3069

Dated : 16/05/23

OTHER TERMS & CONDITIONS:

- i. The completion period for conducting energy audit will be 45 days from the date of issue of work order.
- ii. Any other tax on the material or the turnover shall be payable by the BEE Empanelled / Accredited Energy Auditors will not entertain any claim in this respect.
- iii. Unless otherwise stated, the contract shall be for the whole work as described in the scope of work. The BEE Empanelled Energy Auditors shall be bound to complete the whole work as described.
- iv. In case, the party fails to complete the work within the stipulated period, penalty will be charged @ 1% of the total value of work order every week to the maximum of 10% of work order.
- v. The scope of work can be increased or decreased by PEDA at any time.

You are requested to start the work within 3 days from the date of issue of work order. Please send the acceptance copy of this work order by return post or through email.


DIRECTOR


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

REGIONAL WATER TESTING LAB, SAS NAGAR

Water Works Complex, Phase- 2 , S.A.S NAGAR , Punjab
mdlsasnagar@gmail.com

To,

Sub Divisional Engineer
SUB DIVISION NO. 2 SAS NAGAR

No.: RWTLAS/2324/00053 Dated : 07/06/2023

Subject : Testing Reports of Water Samples.

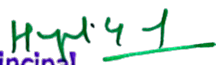
Reference: Your Letter/SRF No. Letter No.690 Dated: 22/05/2023

As per above cited subject and reference, Please find enclosed here with the report of 2 Water sample/s received on dated 31/05/2023. It is request to fill the attached feedback form and send it back to Regional Water Testing Lab, SAS Nagar

D/A : Test Report



**Authorized Signatory
For, Regional Water Testing Lab
SAS Nagar**


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

REGIONAL WATER TESTING LAB, SAS NAGAR

Water Works Complex, Phase- 2 , S.A.S NAGAR , Punjab
mdlsasnagar@gmail.com



TEST REPORT

Name & Address of Customer : Sub Divisional Engineer SUB DIVISION NO. 2 SAS NAGAR	Customer Reference No.	No : Letter No.690 Dated : 22/05/2023
	Sample Submitted by	Jaspreet JE
	Date of Sample Receipt	31/05/2023
	Analysis Starting Date	31/05/2023
	Analysis completion Date	01/06/2023

Discipline : Chemical Testing		Group: Water	
ULR No.:	TC97782300000093F	Sample Type :	Water
Test Report No.:	RWTLAS/2324/00053	Date of Issue :	07/06/2023
Registration no.:	RWTLAS/REG2324/00202	Condition of Sample :	Unsealed
Collection Point:	House Tap Water (FHTC)	Quantity/Type of Bottle:	1000 ml / Plastic Bottles
Scheme/Source:	Not Mentioned(Not Mentioned)	Location/Depth :	Govt College, Phase 6 , SAS Nagar (Tubewell) / NA
Village :	Not Mentioned	Habitation :	Not Mentioned
Block:	Not Mentioned	District :	SAS Nagar
Latitude :	Not Mentioned	Longitude:	Not Mentioned

Sr. No	Parameter	Result	As per IS-10500:2012 (2nd Rev.)		Unit	Reference Method :
			Acceptable Limit	Permissible Limit		
1	pH	8.01	6.5-8.5	No Relaxation	--	IS 3025 (Part 11-1993) Electrometric Method
2	Colour	<5	5	15	CU	IS 3025(Part 4-2021) Visual Comparison Method
3	Odour	Agreeable	Agreeable	Agreeable	--	IS 3025 (Part 5 – 2018) (Second Revision)
4	Taste	NT	Agreeable	Agreeable	--	IS 3025 (Part 8 – 1984) (RA 2017)
5	TDS	132	500	2000	mg/l	IS 3025 (Part 16-1984) Gravimetric Method
6	Turbidity	7.52	1	5	NTU	IS 3025 (Part 10-1984) Nephelometric Method
7	Alkalinity	80	200	600	mg/l	IS 3025 (Part 23-1986) Indicator Method
8	Hardness	116	200	600	mg/l	IS 3025 (Part 21- 2019) EDTA Method
9	Calcium	24.05	75	200	mg/l	IS 3025 (Part 40-1991) EDTA Titrimetric Method
10	Magnesium	13.61	30	100	mg/l	APHA (23rd Ed.2017) Method: 3500-Mg+2 B By Calculation Method
11	Chloride	14	250	1000	mg/l	IS 3025 (Part 32-1988) Argentometric Method

This Report is issued under the following terms & Condition :

1. The results apply to the sample as received only.
2. The sample will be destroyed after retention time unless otherwise specified specially.
3. This report is not to be reproduce wholly or in part and can't be used as evidence in court of law.
4. Abbreviation used (TDS = Total Dissolved Solids, mg/l = milligram per liter, BDL = Below detection limit, APHA = American Public Health Association, IS = Indian Standard, NT = Not Tested, NA = Not Applicable NTU = Nephelometric Turbidity Unit, RA = Reaffirmed), ND=Not Detected
5. * Value not available or test not performed for this parameter.
6. Temperature condition limit: 25±5°C and Humidity condition limit:50 ±20%

Mr. Manik Kataria
Sr. Chemist
Authorized Signatory
For,Regional Water Testing Lab
SAS Nagar

Manoj G. J.
Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar

----- End of the Test Report -----

REGIONAL WATER TESTING LAB, SAS NAGAR

Water Works Complex, Phase- 2 , S.A.S NAGAR , Punjab
mdlsasnagar@gmail.com

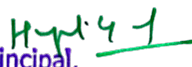


TEST REPORT

Name & Address of Customer : Sub Divisional Engineer SUB DIVISION NO. 2 SAS NAGAR	Customer Reference No.	No : Letter No.690 Dated : 22/05/2023
	Sample Submitted by	Jaspreet JE
	Date of Sample Receipt	31/05/2023
	Analysis Starting Date	31/05/2023
	Analysis completion Date	01/06/2023

Discipline : Chemical Testing		Group: Water	
ULR No.:	TC97782300000093F	Sample Type :	Treated Water
Test Report No.:	RWTLAS/2324/00053	Date of Issue :	07/06/2023
Registration no.:	RWTLAS/REG2324/00203	Condition of Sample :	Unsealed
Collection Point:	Treatment Plant (RO/CWPP/ARP/HH Purifier)	Quantity/Type of Bottle:	1000 ml / Plastic Bottles
Scheme/Source:	Not Mentioned(Not Mentioned)	Location/Depth :	Sector 57 , Mohali (Water Treatment Plant , Sector 57) / NA
Village :	Not Mentioned	Habitation :	Not Mentioned
Block:	Not Mentioned	District :	SAS Nagar
Latitude :	Not Mentioned	Longitude:	Not Mentioned

Sr. No	Parameter	Result	As per IS-10500:2012 (2nd Rev.)		Unit	Reference Method :
			Acceptable Limit	Permissible Limit		
1	pH	7.78	6.5-8.5	No Relaxation	--	IS 3025 (Part 11-1993) Electrometric Method
2	Colour	<5	5	15	CU	IS 3025(Part 4-2021) Visual Comparison Method
3	Odour	Agreeable	Agreeable	Agreeable	--	IS 3025 (Part 5 – 2018) (Second Revision)
4	Taste	NT	Agreeable	Agreeable	--	IS 3025 (Part 8 – 1984) (RA 2017)
5	TDS	254	500	2000	mg/l	IS 3025 (Part 16-1984) Gravimetric Method
6	Turbidity	4	1	5	NTU	IS 3025 (Part 10-1984) Nephelometric Method
7	Alkalinity	23.6	200	600	mg/l	IS 3025 (Part 23-1986) Indicator Method
8	Hardness	172	200	600	mg/l	IS 3025 (Part 21- 2019) EDTA Method
9	Calcium	28.86	75	200	mg/l	IS 3025 (Part 40-1991) EDTA Titrimetric Method
10	Magnesium	24.30	30	100	mg/l	APHA (23rd Ed.2017) Method: 3500-Mg+2 B By Calculation Method


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

REGIONAL WATER TESTING LAB, SAS NAGAR

Water Works Complex, Phase- 2 , S.A.S NAGAR , Punjab
mdlsasnagar@gmail.com



11	Chloride	18	250	1000	mg/l	IS 3025 (Part 32-1988) Argentometric Method
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This Report is issued under the following terms & Condition :

1. The results apply to the sample as received only.
2. The sample will be destroyed after retention time unless otherwise specified specially.
3. This report is not to be reproduce wholly or in part and can't be used as evidence in court of law.
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5. * Value not available or test not performed for this parameter.
6. Temperature condition limit: $25 \pm 5^{\circ}\text{C}$ and Humidity condition limit: $50 \pm 20\%$

Mr. Manik Kataria
Sr. Chemist
Authorized Signatory
For, Regional Water Testing Lab
SAS Nagar

----- End of the Test Report -----

Harjit G J
Principal,
SMHPSSCV, Govt. College;
Sahibzada Ajit Singh Nagar

Government College Retired Teachers' Welfare Association (Punjab)
(Regd. No. 453 of 2022-23)

Regd. Office 4021, Sector 68, Mohali. Phone-M-9876014201
(Email: pgcrtwa2022@gmail.com, Website: pgcrtwa.org)

General Secretary
Gurjant Singh, PES-I (Retd.)
#4021, Sector 68, Mohali.
M. 9876014201



President
G. S. Johal, PES-I (Retd.)
70, Sector-70, Mohali.
M. 9876168770

Reference No.19/2023

Date:30-05-2023

Letter of Appreciation

Hon'ble Smt. Harjit Gujral ji,

Government College Retired Teachers' Welfare Association (Punjab), represents D.P.I.s, Principals, Teachers and Librarians retired from Government Colleges of Punjab. Association has been working for the welfare of Retired Teachers and Higher Education including giving away of one time Scholarships to needy and meritorious students since 1990. During the year 2022-23 we gave scholarship of Rs. 2500 each to 200 students of Government Colleges including 20 students of Government College Mohali.

This Association usually organizes meetings of State General House, State Executive Body and Tricity Unit. It's a matter of great appreciation and acknowledgement that yourself as Principal and your staff not only allow us organize such meetings in your campus but also extend the required logistical support. We, the members of this association appreciate your spirit of help and facilitation which encourages us to work for fulfillment of our cause and for a long run association with Higher Education Institutions of Punjab. We are thankful to you and your staff.

With regards.

Yours Sincerely,

(GURMEL SINGH JOHAL)
PRESIDENT

(GURJANT SINGH)
GENERAL SECRETARY

Smt. Harjit Gujral, Principal,
Government College, Mohali.

Harjit G. J.
Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.



Workshop on Flower Arrangement



The Home Science Department organised a 2-day workshop on flower arrangement and decoration using best out of waste and artificial flowers from March 10, 2023 to March 11, 2023. It was indeed a wonderful initiative towards promoting environmental sustainability and

Hym 41
 Principal,
 SMHPSSCV, Govt. College,
 Sahibzada Ajit Singh Nagar.

creativity. By encouraging the use of waste material and artificial flowers in decoration, the workshop can help participants explore innovative ideas and techniques to create beautiful flower arrangements without compromising on environmental responsibility. Such workshops can promote the utilization of eco-friendly practices not only within the campus but also in the larger community. Organizing such events can help in raising awareness about the importance of recycling and reusing materials and inspire students to be proactive in environmental conservation efforts.



The Home Science Department organised a 3-day Tie-n-dye workshop in collaboration with Fevicryl. The purpose of organizing this workshop for college students was to teach them how to be creative and give new life to old, dull clothes using a fun and exciting technique. Students learnt the basic techniques of tie-dyeing, selecting the right colours and materials, and experiment with different patterns to create their own unique and vibrant designs. This workshop not only inspired students to engage in creative activities but also promoted the importance of reusing and recycling materials. Reusing old clothes through tie-dyeing can reduce the need for new clothing production and minimize waste. This workshop provided an opportunity for students to learn about sustainable fashion and make a positive impact on the environment through their creativity.

Plogging for Plastic



Plogging for Plastic is routinely practiced by college students where they engage in jogging or running while picking up litter or plastic waste in the campus. This eco-friendly activity promotes fitness and clean surroundings while raising environmental awareness among students. By combining physical exercise with environmental activism, Plogging for Plastic encourages students to adopt sustainable habits and be more conscious of their impact on the environment. It is a great way for college students to get involved in a meaningful and impactful activity that benefits both themselves and the planet.

Hept 9 y
Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

Awareness Workshop

An awareness workshop about Lifestyle for Environment was organised by the college's Department of Botany and Zoology on May 27, 2023. The main objectives behind conducting a workshop on the topic of 'lifestyle for environment' for students may include raising awareness about sustainable living practices that can help preserve the environment and improve individual well-being. It may also aim to encourage students to adopt eco-friendly lifestyle choices that can reduce the negative environmental impact of their daily activities. By providing students with information on the potential benefits and impacts of different lifestyle choices, a workshop on this topic may also promote critical thinking and responsible decision-making skills among students. This may include discussing the importance of reducing waste, conserving natural resources, and minimizing pollution.



Beyond the campus environmental initiative

The NSS Unit of the college organised a rally on the theme 'Save the Environment' on 19-10-2022 in which multiple teams led by 10 students each were allocated different villages and their objective was to educate people and farmers not to burn the stubble.

Harjit 97
Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar

(7.1.6 (IV))

The institution is actively involved in promoting environmental and energy conservation activities.

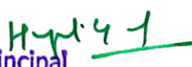
- Tree plantation drives are undertaken by the college on various occasions throughout the year. Van Mahotsav was celebrated and a plantation was done on the college campus by the Environment Committee of the college. Students of the B.Sc. Medical stream planted saplings and conducted an awareness drive by making posters based on Environment Conservation.
- The students are regularly advised to turn off the fans and lights when they leave their classrooms.
- In the joint efforts of the Red Ribbon Club and the NSS department of the college, the Professors of the Science Department potted plants under the theme “Green Village, Clean Village” in the college campus on September 29, 2021.
- In view of the pandemic of Omicron, the entire campus was repeatedly sanitized in order to maintain a covid-free zone in the college.
- The members of the Energy Conservation/Energy Audit Committee of the college ensure efficient and effective utilization of electricity in the college and ensures no electricity overuse or wastage by personally investigating different blocks of the college rotation-wise.



Harjit G J
Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar

Environmental Promotional Activities

- The institution is actively involved in promoting environment and energy conservation activities.
- Tree plantation drives are undertaken by the college on various occasions throughout the year.
- An online inter-college quiz on “Earth Day” was conducted by Science Department on April 22, 2021.
- In view of Pandemic of Covid-19, the campus was repeatedly sanitized in order to maintain “Covid-free zone” in the college.
- Van Mahotsav was celebrated by the Environmental Committee in the college in August, 2020.
- Tree plantation was done in the college campus by Botany and Zoology Department in September, 2020.


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

7.1.6 TREE PLANTATION:

— ਸਰਾਈ ਹਾਕ ਟਾਈਮਜ਼ —
— 14-07-17 —

ਐਨ.ਐਸ.ਐਸ ਦੁਆਰਾ ਸਰਕਾਰੀ ਕਾਲਜ ਵਿਖੇ ਪੌਦੇ ਲਗਾਏ



ਐਨ.ਐਸ.ਐਸ ਨਗਰ, 14 ਜੁਲਾਈ
ਜ.ਕ. ਸਰਕਾਰੀ ਕਾਲਜ, ਐਸ.ਏ.
ਐਸ. ਨਗਰ ਵਿਖੇ ਐਨ.ਐਸ.ਐਸ.
ਵੱਲੋਂ ਵਾਤਾਵਰਣ ਨੂੰ ਸਾਫ਼ ਸਵੱਛ
ਰੱਖਣ ਅਤੇ ਸੰਭਾਲਣ ਦਾ ਉਪਰਾਲਾ
ਕਰਦਿਆਂ ਵੱਡੇ ਮਨੁੱਖੀ ਹਸਤ
ਮਨੁੱਖੀਆਂ ਗਿਆ। ਇਸ ਮੌਕੇ ਕਾਲਜ
ਦੇ ਪ੍ਰਿੰਸੀਪਲ ਸ਼੍ਰੀਮਤੀ ਕਮਲ ਕੌਰ ਨੇ
ਐਨ.ਐਸ.ਐਸ. ਵੱਲੋਂ ਆਈ.ਐਸ.
ਨਾਲ ਪੌਦੇ ਲਗਾਏ। ਉਨ੍ਹਾਂ ਨੇ ਇਸ ਮੌਕੇ
ਤੇ ਵਾਤਾਵਰਣ ਦੀ ਸਾਫ਼-ਸੰਭਾਲ
ਰੱਖਣ ਲਈ ਅਤੇ ਆਪੋ ਆਪਣੇ

ਇਲਾਕਿਆਂ ਵਿੱਚ ਪੌਦੇ ਲਗਾਉਣ
ਲਈ ਸੁਨੇਹਾ ਦਿੱਤਾ।
ਕਾਲਜ ਨੂੰ ਇਹ ਪੌਦੇ ਜਿਲ੍ਹਾ
ਵਾਤਾਵਰਣ ਅਫਸਰ ਮੁਹਾਲੀ ਵੱਲੋਂ
ਮੁਹੱਈਆ ਕਰਵਾਏ ਗਏ। ਇਨ੍ਹਾਂ
ਪੌਦਿਆਂ ਵਿੱਚ ਨਿੱਮ, ਜਾਮਣ,
ਅਮਲਤਾਸ਼, ਅੰਬ ਆਦਿ ਦੇ ਪੌਦੇ
ਲਗਾਏ ਗਏ। ਇਨ੍ਹਾਂ ਦੇ ਪਾਲਣ ਪੋਸ਼ਣ
ਦੀ ਜ਼ਿੰਮੇਵਾਰੀ ਕਾਲਜ ਦੇ
ਐਨ.ਐਸ.ਐਸ. ਅਤੇ ਵਾਤਾਵਰਣ
ਸੰਭਾਲ ਕਮੇਟੀ ਨੇ ਆਪਣੇ ਜਿੰਮੇ ਲਈ।
ਇਸ ਮੌਕੇ ਤੇ ਐਨ.ਐਸ.ਐਸ.
ਵੱਲੋਂ ਆਈ.ਐਸ.ਐਸ. ਦੇ
ਵਾਈਸ ਪ੍ਰਿੰਸੀਪਲ ਡਾ. ਸਮਰਿੰਦਰ
ਸਿੰਘ, ਕਾਲਜ ਕਾਊਂਸਿਲ ਅਤੇ
ਐਨ.ਐਸ.ਐਸ. ਦੇ ਪ੍ਰੋਗਰਾਮ ਅਫਸਰ
ਪ੍ਰੋ. ਘਟਸਾਖ ਸਿੰਘ ਭੁੱਲਰ, ਪ੍ਰੋ.
ਅਰਵਿੰਦ ਕੌਰ, ਪ੍ਰੋ. ਗੁਣਜੀਤ ਕੌਰ
ਹਾਜ਼ਰ ਸਨ।

May 9 4
Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar

- ਪੰਜਾਬੀ ਵਿਥਿਉਂ ਨ-15-09-17-

ਸਿੰਧੂ ਵਲੋਂ ਰੁੱਖ ਤੇ ਕੁੱਖ ਦੀ ਰੱਖਿਆ ਦਾ ਹੋਕਾ

ਸਰਕਾਰੀ ਕਾਲਜ ਮੁਹਾਲੀ ਵਿੱਚ ਵਾਤਾਵਰਨ ਤੇ ਸਵੱਛਤਾ ਸਮਾਰੋਹ

ਮੁਹਾਲੀ, 14 ਸਤੰਬਰ (ਪੰਜਾਬੀ), 14 ਸਤੰਬਰ ਵਿੱਚ ਦੇ ਵੱਖ 4 ਸਵਿੱਚ ਸਰਕਾਰੀ ਕਾਲਜ ਵਿੱਚ ਵਾਤਾਵਰਨ ਅਤੇ ਸਵੱਛਤਾ ਸਮਾਰੋਹ ਕਰਵਾਇਆ ਗਿਆ। ਇਸ ਸਮਾਰੋਹ ਵਿੱਚ ਵਿਧਾਇਕ ਬਲਬੀਰ ਸਿੰਘ ਸਿੰਘੂ ਨੇ ਮੁੱਖ ਮਹਿਮਾਨ ਵਜੋਂ ਸਿਰਫ਼ ਕੀਤਾ।



ਵਿਧਾਇਕ ਬਲਬੀਰ ਸਿੰਘ ਸਿੰਘੂ, ਸਨਮਾਨੇ ਗਏ ਵਿਦਿਆਰਥੀਆਂ ਨਾਲ। -22 ਸਪੀ

ਵਿਧਾਇਕ ਨੇ ਆ ਰੋਸ਼ਨ ਕਰਨ ਮਗਰੋਂ ਮੱਚ ਤੋਂ ਰੁੱਖ ਤੇ ਕੁੱਖ ਦੀ ਰੱਖਿਆ ਦਾ ਹੋਕਾ ਦਿੱਤਾ। ਉਨ੍ਹਾਂ ਕਿਹਾ ਕਿ ਅਜਿਹੇ ਸਮੇਂ ਵਿੱਚ ਵਾਤਾਵਰਨ ਅਤੇ ਆਲੇ-ਦੁਆਲੇ ਨੂੰ ਸਾਫ਼ ਸ਼ੁਭਰ ਰੱਖਣ ਦੀ ਸਾਡੀ ਜ਼ਿੰਤਕ ਜ਼ਿੰਮੇਵਾਰੀ ਬਣਦੀ ਹੈ। ਜੇਕਰ

ਸਾਰੇ ਆਪਣੀ ਇਸ ਜ਼ਿੰਮੇਵਾਰੀ ਨੂੰ ਭਰੂਣ ਕਰ ਲੈਣ ਤਾਂ ਦੇਸ਼ ਨੂੰ ਹਰਿਆ-ਭਰਿਆ ਅਤੇ ਸੁੰਦਰ ਬਣਾਇਆ ਜਾ ਸਕਦਾ ਹੈ। ਉਨ੍ਹਾਂ ਲੜਕੀਆਂ ਦੇ ਹੋਸਟਲ ਦੀ ਚਾਰਦੀਵਾਰੀ ਲਈ ਪੰਜ ਲੱਖ ਰੁਪਏ ਗ਼ਰਾਣ ਵਜੋਂ ਦਿੱਤੇ। ਵਿਧਾਇਕ ਨੇ ਕਾਲਜ ਦੇ ਵੱਖ-ਵੱਖ ਪਾਠਕਾਂ ਦਾ ਨਿਰੀਖਣ ਕੀਤਾ ਅਤੇ ਇੱਕ ਨਵੇਂ ਬਣੇ ਪਾਠਕ ਕੈਂਟ ਆਉਟ ਅਤੇ ਬੈਂਚਾਂ ਦਾ ਉਦਘਾਟਨ ਕੀਤਾ। ਉਨ੍ਹਾਂ ਕਾਲਜ ਦੇ ਗਰਾਊਂਡ ਵਿੱਚ ਆਪਣੇ ਹੱਥੀਂ ਇੱਕ ਬੂਟਾ ਲਾਇਆ ਅਤੇ ਵਿਦਿਆਰਥੀਆਂ ਤੇ ਅਧਿਆਪਕਾਂ ਨੂੰ ਆਪਣੇ ਜੀਵਨ ਵਿੱਚ ਵੱਖ ਤੋਂ ਵੱਖ ਬੂਟੇ ਲਾਉਣ ਲਈ ਪ੍ਰੇਰਿਆ।

ਉਨ੍ਹਾਂ ਨੌਜਵਾਨਾਂ ਨੂੰ ਭਰੂਣ ਹੁੰਦਿਆਂ ਖਿਲਾਫ਼ ਲਾਜ਼ਮੀ ਹੋਣ ਦਾ ਸੱਦਾ ਵੀ ਦਿੱਤਾ। ਇਸ ਤੋਂ ਪਹਿਲਾਂ ਕਾਲਜ ਪ੍ਰਿੰਸੀਪਲ ਕੌਮਲ ਬਰੋੜਾ ਨੇ ਵਿਧਾਇਕ ਸ੍ਰੀ ਸਿੰਘੂ ਅਤੇ ਹੋਰਨਾਂ ਮਹਿਮਾਨਾਂ ਨੂੰ ਜੀ ਆਇਆ ਆਖਿਆ ਅਤੇ ਕਾਲਜ ਦੀਆਂ ਪ੍ਰਾਪਤੀਆਂ ਅਤੇ ਕਾਰਜਾਂ ਦੀਆਂ ਖੋਜਨਾਵਾਂ ਬਾਰੇ ਵਿਸਥਾਰ ਨਾਲ ਦੱਸਿਆ। ਵਾਤਾਵਰਨ ਨਾਲ ਸਬੰਧਤ ਕਾਲਜ ਦੇ ਵਿਦਿਆਰਥੀਆਂ ਨੇ ਗੌਰ ਅਤੇ ਨੁਕਤ ਨਾਟਕ ਪੇਸ਼ ਕੀਤਾ। ਇਸ ਮੌਕੇ ਵਿਧਾਇਕ ਦੇ ਸਿਆਸੀ ਸਲਾਹਕਾਰ ਹਰਕੇਸ਼ ਚੰਦ ਬਰਾ ਅਤੇ ਕਾਲਜ ਦਾ ਸਟਾਫ਼ ਅਤੇ ਵਿਦਿਆਰਥੀ ਵੀ ਹਾਜ਼ਰ ਸਨ। ਅਖੀਰ ਵਿੱਚ ਵਾਈਸ ਪ੍ਰਿੰਸੀਪਲ ਡਾ. ਜਸਵਿੰਦਰ ਸਿੰਘ ਨੇ ਸਾਰਿਆਂ ਦਾ ਧੰਨਵਾਦ ਕੀਤਾ।

- ਤਸਵੀਰ ਤੁਯਾਲੀ - 15-09-17 -

ਵਿਧਾਇਕ ਕਮਿੰਟੀ ਕੋ ਟੋਪੀ ਪਾਠ ਲਾਖ ਕੀ ਗ਼ਰ



ਮੁਹਾਲੀ, 14 ਸਤੰਬਰ (ਪੰਜਾਬੀ) - 6 ਮਿੰਟ ਬਾਕੀ ਕਮਿੰਟੀ ਦੇ ਮੈਂਬਰਾਂ ਦੀ ਸਲਾਹਕਾਰੀ ਟੋਪੀ ਪਾਠ ਲਾਖ ਕੀ ਗ਼ਰ। ਇਸ ਮੌਕੇ ਵਿਧਾਇਕ ਕਮਿੰਟੀ ਦੇ ਮੈਂਬਰਾਂ ਨੇ ਵਿਧਾਇਕ ਕਮਿੰਟੀ ਦੇ ਮੈਂਬਰਾਂ ਨੂੰ ਸਲਾਹਕਾਰੀ ਟੋਪੀ ਪਾਠ ਲਾਖ ਕੀ ਗ਼ਰ। ਇਸ ਮੌਕੇ ਵਿਧਾਇਕ ਕਮਿੰਟੀ ਦੇ ਮੈਂਬਰਾਂ ਨੇ ਵਿਧਾਇਕ ਕਮਿੰਟੀ ਦੇ ਮੈਂਬਰਾਂ ਨੂੰ ਸਲਾਹਕਾਰੀ ਟੋਪੀ ਪਾਠ ਲਾਖ ਕੀ ਗ਼ਰ। ਇਸ ਮੌਕੇ ਵਿਧਾਇਕ ਕਮਿੰਟੀ ਦੇ ਮੈਂਬਰਾਂ ਨੇ ਵਿਧਾਇਕ ਕਮਿੰਟੀ ਦੇ ਮੈਂਬਰਾਂ ਨੂੰ ਸਲਾਹਕਾਰੀ ਟੋਪੀ ਪਾਠ ਲਾਖ ਕੀ ਗ਼ਰ।

- ਟੋਪੀ ਸ਼ੋਏ - 15-09-17 -

ਸਰਕਾਰੀ ਕਾਲਜ, ਮੋਹਾਲੀ ਵਿੱਚ ਵਾਤਾਵਰਨ ਅਤੇ ਸਵੱਛਤਾ ਸਮਾਰੋਹ

ਮੁਹਾਲੀ, 14 ਸਤੰਬਰ (ਪੰਜਾਬੀ) - 14 ਸਤੰਬਰ (ਪੰਜਾਬੀ) ਸਰਕਾਰੀ ਕਾਲਜ, ਮੋਹਾਲੀ ਵਿੱਚ ਵਾਤਾਵਰਨ ਅਤੇ ਸਵੱਛਤਾ ਸਮਾਰੋਹ ਕਰਵਾਇਆ ਗਿਆ। ਇਸ ਸਮਾਰੋਹ ਵਿੱਚ ਵਿਧਾਇਕ ਬਲਬੀਰ ਸਿੰਘ ਸਿੰਘੂ ਨੇ ਮੁੱਖ ਮਹਿਮਾਨ ਵਜੋਂ ਸਿਰਫ਼ ਕੀਤਾ।



ਮਹਿਮਾਨ ਸਿਰਫ਼ ਕੀਤਾ। ਸਮਾਰੋਹ ਦੇ ਸ਼ੁਰੂ ਹੁੰਦਿਆਂ ਹੀ ਸ਼ੋਏ ਦੀ ਗ਼ਲ ਅਦਾ ਕਰਕੇ ਸਿੰਘੂ ਨੇ ਵਾਤਾਵਰਨ ਤੇ ਸਵੱਛਤਾ ਸਮਾਰੋਹ ਦਾ ਸੁਨੇਹਾ ਦਿੱਤਾ। ਕਾਲਜ ਦੇ ਪ੍ਰਿੰਸੀਪਲ ਸ਼੍ਰੀਮਤੀ ਕੌਮਲ ਬਰੋੜਾ

ਜੀ ਨੂੰ ਬਲਬੀਰ ਸਿੰਘ ਸਿੰਘੂ ਅਤੇ ਬਾਹਰੇ ਆਏ ਮਹਿਮਾਨਾਂ ਨੂੰ ਜੀ ਆਇਆ ਆਖਿਆ। ਵਾਤਾਵਰਨ ਤੇ ਸਵੱਛਤਾ ਸਮਾਰੋਹ ਵਿਦਿਆਰਥੀਆਂ ਵੱਲੋਂ ਗੀਤ, ਨੁਕਤ ਸਰਾਇਤਾ ਕਾਲਜ ਦੇ ਪੀ ਵੱਡਾ, ਵਿਦਿਆਰਥੀ ਭਰਾਵਾਂ ਵੱਡੇ, ਅਧਿਆਪਕ ਭਰਾਵਾਂ ਵੱਡੇ ਦੁਆਰਾ ਦਿੱਤੀ ਗਈ। ਬਲਬੀਰ ਸਿੰਘ ਸਿੰਘੂ ਨੇ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਸੰਬੋਧਨ ਕਰਦਿਆਂ ਕਿਹਾ ਕਿ ਵਾਤਾਵਰਨ ਅਤੇ ਸਾਡੇ ਆਲੇ-ਦੁਆਲੇ ਨੂੰ ਸਾਫ਼ ਸੁਭਰ ਰੱਖਣ ਦੀ ਜ਼ਿੰਮੇਵਾਰੀ ਸਾਡੀ ਸਭ ਦੀ ਬਣਦੀ ਹੈ ਜੇਕਰ ਅਸੀਂ ਆਪਣੀ ਜ਼ਿੰਮੇਵਾਰੀ ਕਾਬੂ ਕਰੀਏ ਤਾਂ ਦੇਸ਼ ਨੂੰ ਹਰਾ ਭਰਾ ਅਤੇ ਸੁੰਦਰ ਬਣਾਇਆ ਜਾ ਸਕਦਾ ਹੈ।

ਉਨ੍ਹਾਂ ਲੜਕੀਆਂ ਦੇ ਹੋਸਟਲ ਦੀ ਚਾਰਦੀਵਾਰੀ ਲਈ ਪੰਜ ਲੱਖ ਰੁਪਏ ਦੀ ਗ਼ਰੀ ਗੁਣ ਵਜੋਂ ਦਿੱਤੇ। ਇਸ ਤੋਂ ਇਲਾਵਾ ਸਿੰਘੂ ਨੇ ਕਾਲਜ ਦੇ ਵੱਖ-ਵੱਖ ਪਾਠਕਾਂ ਦਾ ਨਿਰੀਖਣ ਕੀਤਾ ਅਤੇ ਇੱਕ ਨਵੇਂ ਬਣੇ ਪਾਠਕ ਕੈਂਟ ਆਉਟ ਅਤੇ ਬੈਂਚਾਂ ਦਾ ਉਦਘਾਟਨ ਕੀਤਾ। ਇਸ ਮੌਕੇ ਕਾਲਜ ਦੇ ਸਾਰੇ ਸਟਾਫ਼ ਮੈਂਬਰ ਅਤੇ ਵਿਦਿਆਰਥੀਆਂ ਹਾਜ਼ਰ ਸਨ। ਅੰਤ ਵਿੱਚ ਵਾਈਸ ਚੀਫ਼ ਸਿੰਘ, ਵਾਈਸ ਪ੍ਰਿੰਸੀਪਲ ਨੇ ਸਭ ਦਾ ਧੰਨਵਾਦ ਕੀਤਾ।

Komal Buroy 15/9/17

- ਪੰਜਾਬੀ ਵਿਥਿਉਂ ਨ-18-07-17 -

ਐਨ.ਐਸ.ਐਸ ਵਾਲੰਟੀਅਰਾਂ ਨੇ ਪੌਦੇ ਲਾਏ

ਮੁਹਾਲੀ, 17 ਜੁਲਾਈ (ਪੰਜਾਬੀ), 17 ਜੁਲਾਈ ਐਨ.ਐਸ.ਐਸ ਨਗਰ (ਮੁਹਾਲੀ) ਵਿੱਚ ਐਨ.ਐਸ.ਐਸ ਵਾਲੰਟੀਅਰਾਂ ਵੱਲੋਂ ਵਾਤਾਵਰਨ ਦੀ ਸੁੰਦਰਤਾ ਅਤੇ ਰੁੱਖਾਂ ਦੀ ਸਾਂਭਾਲ ਲਈ ਵੱਡੇ ਮਹਾਉਤਸਵ ਮਨਾਇਆ ਗਿਆ। ਇਸ ਦਾ ਉਦਘਾਟਨ ਕਾਲਜ ਦੀ ਪ੍ਰਿੰਸੀਪਲ ਸ਼੍ਰੀਮਤੀ ਕੌਮਲ ਬਰੋੜਾ ਨੇ ਆਪਣੇ ਹੱਥੀਂ ਕਾਲਜ ਦੇ ਵਿਹੜੇ ਵਿੱਚ ਇੱਕ ਪੌਦਾ ਲਗਾ ਕੇ ਕੀਤਾ। ਉਨ੍ਹਾਂ ਨੇ ਕਾਲਜ ਦੇ ਸਮੂਹ ਸਟਾਫ਼ ਮੈਂਬਰਾਂ ਅਤੇ ਵਿਦਿਆਰਥੀਆਂ ਨੂੰ ਆਪਣੇ ਜੀਵਨ ਵਿੱਚ ਵੱਖ ਤੋਂ ਵੱਖ ਪੌਦੇ ਲਗਾਉਣ ਅਤੇ ਪਹਿਲਾਂ ਤੋਂ ਲੱਗੇ ਹੋਏ ਪੌਦਿਆਂ ਦੀ ਸਾਂਭਾਲ ਕਰਨ ਦੀ ਸਲਾਹ ਦਿੱਤੀ। ਉਨ੍ਹਾਂ ਦੱਸਿਆ ਕਿ ਜਿਹੜਾ ਵਾਤਾਵਰਨ



ਪ੍ਰਿੰਸੀਪਲ ਸ਼੍ਰੀਮਤੀ ਕੌਮਲ ਬਰੋੜਾ ਅਤੇ ਵਿਦਿਆਰਥੀ ਪੌਦੇ ਲਗਾਉਂਦੇ ਹੋਏ। -22 ਸਪੀ

ਐਨ.ਐਸ.ਐਸ ਵਾਲੰਟੀਅਰਾਂ ਨੇ ਪੌਦੇ ਲਾਏ। ਇਸ ਮੌਕੇ ਕਾਲਜ ਦੇ ਵਾਈਸ ਪ੍ਰਿੰਸੀਪਲ ਡਾ. ਜਸਵਿੰਦਰ ਸਿੰਘ, ਕਾਲਜ ਕੌਮਲ ਅਤੇ ਐਨ.ਐਸ.ਐਸ ਦੇ ਪ੍ਰੋਗਰਾਮ ਅਫ਼ਸਰ ਪ੍ਰ. ਘਟਬਾਮ ਸਿੰਘ ਵੱਲੋਂ, ਪ੍ਰ. ਅਰਵਿੰਦ ਕੌਰ, ਪ੍ਰ. ਗੁਣਜੀਤ ਕੌਰ ਵੀ ਹਾਜ਼ਰ ਸਨ।

ਅਫ਼ਸਰ ਮੁਹਾਲੀ ਵੱਲੋਂ ਕਾਲਜ ਨੂੰ ਨਿਮਾ, ਚਾਮਨ, ਅਮਲਤਾਭ ਅਤੇ ਐੱਚ ਦੇ ਪੌਦੇ ਪੂਰਵੀਆਂ ਕਰਵਾਏ ਗਏ। ਜਿਨ੍ਹਾਂ ਦੇ ਪਾਲਣ ਪੋਸ਼ਣ ਦੀ ਜ਼ਿੰਮੇਵਾਰੀ ਕਾਲਜ ਦੇ ਐਨ.ਐਸ.ਐਸ ਅਤੇ ਵਾਤਾਵਰਨ ਸੰਰਾਲ ਕਮੇਟੀ ਨੇ ਆਪਣੇ ਜਿੰਮੇ ਲਈ

- ਮਾਗਥਾਈ - 18-07-17 -

ਐੱਨ. ਐੱਸ. ਐੱਸ. ਰਾਹੀਂ ਸਰਕਾਰੀ ਕਾਲਜ ਵਿਖੇ ਪੌਦੇ ਲਗਾਏ

ਮੁਹਾਲੀ, 17 ਜੁਲਾਈ (ਪੰਜਾਬੀ) - ਸਰਕਾਰੀ ਕਾਲਜ ਮੁਹਾਲੀ ਦੇ ਵਿਹੜੇ ਵਿੱਚ ਐੱਨ. ਐੱਸ. ਐੱਸ. ਵਲੋਂ ਵਾਤਾਵਰਨ ਨੂੰ ਸੁੰਦਰਤਾ ਅਤੇ ਸਵੱਛਤਾ ਦਾ ਉਪਰਾਲਾ ਕਰਦਿਆਂ ਵੱਡੇ ਮਹਾਉਤਸਵ ਮਨਾਇਆ ਗਿਆ। ਇਸ ਮੌਕੇ ਕਾਲਜ ਦੇ ਪ੍ਰਿੰਸੀਪਲ ਕੌਮਲ ਬਰੋੜਾ ਨੇ ਐੱਨ. ਐੱਸ. ਐੱਸ. ਵਲੋਂ ਵਾਤਾਵਰਨ ਨੂੰ ਸੁੰਦਰਤਾ ਅਤੇ ਸਵੱਛਤਾ ਦਾ ਉਪਰਾਲਾ ਕਰਦਿਆਂ ਵੱਡੇ ਮਹਾਉਤਸਵ ਮਨਾਇਆ ਗਿਆ। ਇਸ ਮੌਕੇ ਕਾਲਜ ਦੇ ਪ੍ਰਿੰਸੀਪਲ ਕੌਮਲ ਬਰੋੜਾ ਨੇ ਐੱਨ. ਐੱਸ. ਐੱਸ. ਵਲੋਂ ਵਾਤਾਵਰਨ ਨੂੰ ਸੁੰਦਰਤਾ ਅਤੇ ਸਵੱਛਤਾ ਦਾ ਉਪਰਾਲਾ ਕਰਦਿਆਂ ਵੱਡੇ ਮਹਾਉਤਸਵ ਮਨਾਇਆ ਗਿਆ।

ਸਾਂਭ-ਸੰਭਾਲ ਰੱਖਣ ਅਤੇ ਆਪੋ-ਆਪਣੇ ਇਲਾਕਿਆਂ ਵਿੱਚ ਪੌਦੇ ਲਗਾਉਣ ਲਈ ਸਲਾਹ ਦਿੱਤਾ। ਕਾਲਜ ਨੂੰ ਇਹ ਪੌਦੇ ਲਗਾ ਕੇ ਵਾਤਾਵਰਨ ਅਫ਼ਸਰ ਮੁਹਾਲੀ ਵਲੋਂ ਪੂਰਵੀਆਂ ਕਰਵਾਏ ਗਏ। ਇਨ੍ਹਾਂ ਪੌਦਿਆਂ ਵਿੱਚ ਨਿੱਮ, ਜਾਮਣ, ਅਮਲਤਾਭ, ਐੱਚ ਆਦਿ ਦੇ ਪੌਦੇ ਲਗਾਏ ਗਏ। ਇਨ੍ਹਾਂ ਦੇ ਪਾਲਣ-ਪੋਸ਼ਣ ਦੀ ਜ਼ਿੰਮੇਵਾਰੀ ਕਾਲਜ ਦੇ ਐੱਨ. ਐੱਸ. ਐੱਸ. ਅਤੇ ਵਾਤਾਵਰਨ ਸੰਰਾਲ ਕਮੇਟੀ ਨੇ ਆਪਣੇ ਜਿੰਮੇ ਲਈ। ਇਸ ਮੌਕੇ ਐੱਨ. ਐੱਸ. ਐੱਸ. ਵਲੋਂ ਵਾਤਾਵਰਨ ਨੂੰ ਸੁੰਦਰਤਾ ਅਤੇ ਸਵੱਛਤਾ ਦਾ ਉਪਰਾਲਾ ਕਰਦਿਆਂ ਵੱਡੇ ਮਹਾਉਤਸਵ ਮਨਾਇਆ ਗਿਆ।



ਸਰਕਾਰੀ ਕਾਲਜ ਵਿਖੇ ਪੌਦੇ ਲਗਾਉਂਦੇ ਹੋਏ ਪ੍ਰਿੰਸੀਪਲ, ਐੱਨ. ਐੱਸ. ਐੱਸ. ਵਲੋਂ ਵਾਤਾਵਰਨ ਨੂੰ ਸੁੰਦਰਤਾ ਅਤੇ ਸਵੱਛਤਾ ਦਾ ਉਪਰਾਲਾ ਕਰਦਿਆਂ ਵੱਡੇ ਮਹਾਉਤਸਵ ਮਨਾਇਆ ਗਿਆ।

H. Y. J
Principal,
SMHPSSCV, Govt. College,
Sahibzada Ajit Singh Nagar.

To

Government College SAS Nagar

Mohali - 160056

Punjab, India

Subject: Green Audit Report.

Sir,

Please find enclosed herewith the green audit report of Government College SAS Nagar, Mohali, Punjab.



Dr. Sarbjeet Kaushal

Incharge

Testing & Consultancy Cell

Gulzar Group of Institutions, Punjab

Enclosed: As above



GULZAR GROUP OF INSTITUTIONS

Approved by AICTE, Ministry of HRD, Govt. of India, Affiliated to Punjab Technical University, JALANDHAR

☎ +91 9914 666 777

✉ info@ggi.ac.in

🌐 www.ggi.ac.in

📍 Campus: G.T. Road, Khanna, Ludhiana

GREEN AUDIT REPORT

2023

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



INTERNAL QUALITY ASSURANCE CELL



CONTENTS

Sr. No.	Titles/Topics	Page No.
1	INTRODUCTION	3
2	OBJECTIVES	3
3	METHODOLOGY	3
4	ABOUT THE COLLEGE	4
5	VISION & MISSION STATEMENT	4
6	GREEN AUDITING	7
7	LAND USE ANALYSIS	7
8	GEOGRAPHICAL LOCATION WITH CAMPUS MAP IN SCALE	8
9	TREE DIVERSITY	10
10	FAUNAL DIVERSITY	20
11	WEATHER DATA	26
12	AIR QUALITY	29
13	WATER ANALYSIS REPORT	30
14	RAIN WATER HARVESTING	31
15	NOISE LEVEL IN THE SURROUNDING	32
16	WASTE DISPOSAL	34
17	ROOF TOP SOLAR PANELS	36



INTRODUCTION:

Green Audit is a comprehensive process that involves identifying, recording, analyzing, and reporting on an institution's environmental diversity. Its primary objective is to assess how the institution's environmental practices affect the eco-friendly atmosphere of the institute and its surroundings. The Green Audit enables the college to examine its resource consumption patterns, such as energy, water, and other resources, and identify areas that need improvement. Furthermore, it cultivates environmental awareness, ethics, and values among staff and students, offering them an in-depth understanding of the impact of Green practices on the campus. Given the increasing significance of sustainability, it is imperative for educational institutions to evaluate their role in promoting a sustainable future. Hence, institutional self-evaluation becomes a necessary step towards achieving this objective. This emphasizes the crucial role of higher educational institutions in meeting environmental sustainability targets.

The rapid pace of economic and urban development has brought about numerous environmental and ecological challenges, emphasizing the importance of establishing Green Campuses in educational institutes. Implementing such a system encourages sustainable growth while significantly reducing atmospheric CO₂ levels. According to the National Assessment and Accreditation Council, New Delhi (NAAC), Higher Educational Institutions must submit annual Green Audit Reports to ensure compliance with this approach. Additionally, as part of the Corporate Social Responsibility, the institution must seek to reduce its carbon footprint to combat the potentially devastating effects of global warming.

OBJECTIVES:

The Green Audit of educational institutions has become increasingly important in recent years as a means of self-assessment in mitigating prevailing environmental issues. Our college has been making consistent efforts to maintain a clean environment since its inception. Thus, the goal of this current green audit is to identify, quantify, describe, and prioritize the framework of Environmental Sustainability in accordance with relevant regulations, policies, and standards. The main objectives of carrying out Green Audit are:

- To map the Geographical Location of the college.
- To document the floral and faunal diversity of the college.
- To record the meteorological parameter of Mohali where college is situated.
- To document the ambient environmental condition of weather, air, water and noise of the college.
- To document the waste disposal system.

METHODOLOGY:

The purpose of the green audit of S.M.H.S. Government College, S.A.S. Nagar is to ensure that the practices followed in the campus are in accordance with the Green Policy of the country. The methodology includes: collection of data, physical inspection of the campus, observation and review of the documentation and data analysis.



ABOUT THE COLLEGE:

S.M.H.S. Government College, S.A.S. Nagar was founded in May of 1984 with the goal of delivering quality education to students in the Mohali township and surrounding rural areas. The college's vision and mission are encapsulated in its motto, emblem, and song, which are prominently displayed on the college premises. The pursuit of truth and knowledge, which are essential to life, are at the heart of the college's motto "Aspire for Truth," which serves as a motivational reminder to students to strive for this truth. The soaring swan in the college emblem symbolizes the human desire for truth and the aspirations to excel in the fields of art, culture, and science. The inspiration for this emblem, has come from the words of Guru Amar Das, the third Sikh Guru:

“The God-wards in God’s love are pure like
the swans, and sublimating their ego
they abide on the shores of Lord’s sea”

The swan, a legendary water-bird known for its ability to select only the pearls, has become a symbol of purity and truth. Its significance has been woven into numerous legends. In Indian mythology, Saraswati, the goddess of knowledge and wisdom, rides on the back of a swan, as it embodies these qualities.

The ‘College song’ serves as an inspiration to the students, encouraging them to strive for knowledge and wisdom while aiming to excel in physical, moral, and intellectual fields. It motivates them to remain steadfast in upholding truth and goodness while confronting the obstacles and evils that life may bring, akin to the young martyrs Sahibzada Ajit Singh and Sahibzada Jujhar Singh, who were renowned for their bravery and sacrificed their lives in service to their beliefs. The college's main objectives are focused on providing students with a holistic education, covering academic, cultural, moral, and aesthetic facets. The college is dedicated to achieving its goals and actively working towards them with persistence and effort. The college understands the significance of a well-rounded education and is determined to continue striving towards that objective by creating an environment that encourages students to explore and learn beyond academics.

VISION & MISSION STATEMENT:

OUR VISION

The Vision of S.M.H.S. Government College, S.A.S. Nagar is to:

- Groom students to “Aspire for the Truth” as is our college motto; which inculcates values of Integrity, Patriotism and love for Global Peace.
- Empower students from every section of society to achieve Academic Excellence Cultural enrichment and employability for their all-round holistic development.
- Educate students in productive and latest technologies to enable them to face global challenges.



OUR MISSION

In order to fulfil the vision of the college in letter and spirit, IQAC prepares the Academic calendar of the college timely so that all the departments can adhere to it. The college's Emblem with the swan soaring into the expanses of the vast universe signifies individual's quest for Truth and his aspirations to scale higher and higher heights in the fields of Art, Commerce and Science. Therefore, this college aims at imparting the strength of body and mind to attain the wisdom of the swan. To do so the college follows the given measures:

- To groom leadership at various levels.
- Prepares perspective plan document, which is an important component of the college strategy deployment process.
- Has a well-defined organizational structure with effective processes developed for all its major activities.
- Has an effective feedback system involving all stakeholders.
- Has an action plan and schedule for its future development.
- Has an effective Grievance Redressed Cell.
- Considers Student Satisfaction Survey as an input factor for all policies of the college.
- Takes sustained interest in recruitment and promotion aspects of its employees.
- Adheres to the Government of India/State Government policies on recruitment (access, equity, gender sensitivity and physically disabled).
- Has an effective welfare mechanism for teaching and non-teaching staff.
- Ensures transparent use of Performance Appraisal Reports.
- Conducts programmes to enhance the competency of its faculty and non-teaching staff.
- Uses performance budgeting as a core planning activity for decision making.
- Incorporates gender sensitivity to enhance inclusiveness.
- Strictly adheres to optimal utilization of budget.
- Conducts internal and external audits regularly for better monitoring and management of finances.
- Leadership takes initiatives for mobilization of resources.
- Considers academic audit of departments and its impact as an important quality initiative.
- Has an effective quality management and enhancement systems.
- Reviews its teaching-learning process, structure, methodologies of operations, and learning outcomes at periodic intervals.
- Has an Internal Quality Assurance Cell (IQAC), which has contributed significantly to institutionalizing quality assurance, strategies and processes.
- Receives valuable feedback from the external members of the IQAC for its functioning.
- Addresses the needs of the society and students in accordance with its mission statement. Besides generation and transmission of knowledge.
- Makes provisions for imparting education in the humanities, sciences, learned professions, and such other branches of learning as it may think fit for research and advancement and dissemination of knowledge.
- Undertakes appropriate measures to
 - promote research and development in Punjabi, Hindi and English language and literature.
 - progressively adopt Punjabi, Hindi and English language as a medium of instruction and examination for as many subjects as possible.



- Promotes education among communities which are educationally backward.
- Has excellent NCC, NSS and Sports centres that promote physical well-being, sports culture, military training, and sensitization of students towards the existing and upcoming social issues.

CORE VALUES:

In keeping with the Sustainable Development Goals of the United Nations (SDGs 2030), S.M.H.S. Government College, S.A.S. Nagar has initiated several sustainable practices on campus.

The College's best practice – "The Gift of Green: Towards Building a Sustainable and Clean Campus" aims to build an environmentally sustainable campus that is plastic free, produces minimal waste, conserves energy, protects biodiversity and practices self-sustainability in areas of power, water and cleanliness through notable projects on campus:

- Energy and Water Conservation Facilities on campus such as Solar Power Plant and Rainwater Harvesting.
- Greening of the college campus by planting and nurturing trees and growing organic vegetable gardens.
- Responding to the needs of differently abled persons the campus is fitted with 3 ramps, 2 disabled-friendly washrooms and wheelchair and Braille signage. The Equal Opportunity Cell organizes training sessions for students concerning sensitivity to the differently abled.
- Our college values inclusionary practices at multiple levels. We celebrate cultural, regional, linguistic, socio- economic diversities through various student societies.
- Our college educates students about their Fundamental Rights and Duties through various programmes organized by Departments/Societies.
- Our college fosters a Code of Professional Ethics and Conduct for students, teaching and non-teaching staff and the governing body to promote the core values of the college.
- Our best practice "Campus Placements/Internships: Empowerment through Employment" empowers our students through employability, making them socially, politically and economically active citizens. Given the skewed male-female ratio in urban professional spaces, the Placement Cell and individual departments connect young women with potential employers and provide opportunities for internship, fellowship and summer training.

The Institution's distinctiveness lies in the empowerment of FIRST GENERATION LEARNERS from the lesser privileged sections of rural and urban society. The college addresses the changing needs of students and society in the most innovative, engaged, compassionate way while providing cutting edge, competitive education. Various clubs and societies play a critical role in fostering gender sensitivity, environmental awareness and human rights. The Internal Complaints Committee handles cases of sexual harassment, ragging and examination related queries. Our college offers formal in-house Counselling and guidance services for its students through professionally trained counsellors regularly on its campus.



GREEN AUDITING:

In a committed effort towards environmental conservation and sustainability, the college has embraced the 'Green Campus' model, founded on three key pillars. These include eliminating environmental footprints, improving occupants' health and performance, and ensuring all graduates display full environmental literacy. The focus is on reducing energy, CO₂ emissions, and water consumption while cultivating a conducive learning environment that fosters student health and wellbeing. Green auditing plays an important role in promoting environmental sustainability on college campus. By conducting a Green Audit, college can identify areas where it is using excessive amounts of energy or resources, and make changes to reduce its environmental impact. In addition, a Green Audit can help college comply with environmental regulations and demonstrate its commitment to sustainability to stakeholders. By incorporating sustainability into its overall mission and operations, our college helps create a more environmentally conscious culture and prepare students to become responsible global citizens.

LAND USE ANALYSIS, S.M.H.S. Government College, S.A.S. Nagar (As on May 27, 2023):

GENERAL OVERVIEW OF THE CONCEPT OF LANDUSE

Land use refers to the diverse activities which humans undertake and the benefits they derive from land. When viewed from space, land use has emerged as a pivotal aspect of human engagement with natural resources. In situations where land use is evolving rapidly, earth observations from space can provide valuable information on human activities and landscape utilization. Today, Remote Sensing and Geographic Information System (GIS) technologies are equipping us with cutting-edge tools for advanced land use mapping and planning. By collecting remotely-sensed data, we can analyze earth system functions, patterns, and changes at local, regional, and global scales, across time. This also facilitates the generation of land-use maps, where satellite imagery, in particular, has emerged as a powerful tool.

METHODOLOGY ADOPTED FOR LAND USE MAPPING:

Three types of data which are GPS points, field survey data, and Google Earth data for Geo referencing have been used in this study. Land use maps of the study area have been prepared using the above three types of data with the help of ArcGIS Pro software.

DATA PROCESSING AND ANALYSIS:

Land use map preparation is executed through the following steps:

Acquisition of data (Location: Latitude 30.737884°, Longitude 76.711928°), Geo-coding and Georeferencing of satellite imageries have been obtained by extracting the ground control points. Supervised classification was carried out with the aid of ground truth data collected during the field survey. Scanning and digitization of maps and editing of all the Georeferenced maps were done using GIS. Data manipulation and analysis and linking the spatial data with the attribute



data for creation of topology was carried out using GIS software. Creation of GIS output in the form of land use map showing various land use have been prepared.

Therefore, attempt has been made in this study to map land use for S.M.H.S. Government College, S.A.S. Nagar, with a view to detect the land consumption in the built-up land area using both remote sensing and GIS techniques.

GEOGRAPHICAL LOCATION WITH CAMPUS MAP IN SCALE:

The college has a sprawling pollution-free campus spread over 22.70 acres of land in Mohali district in Punjab, India. Mohali is an administrative and commercial hub lying south-west of Chandigarh. Mohali has developed rapidly as an IT hub of the state of Punjab. Mohali is well-connected with metros of India and also with South-Asian countries via International Airport, Mohali.

Scaled image of the college campus is shown in Photo 1. Green color in Map represents the green area. The Google aerial views of College Campus Part1 and Part 2 have been shown in Photo 2 and 3 respectively which are showing different college buildings, sports stadium, hostels and residential areas.

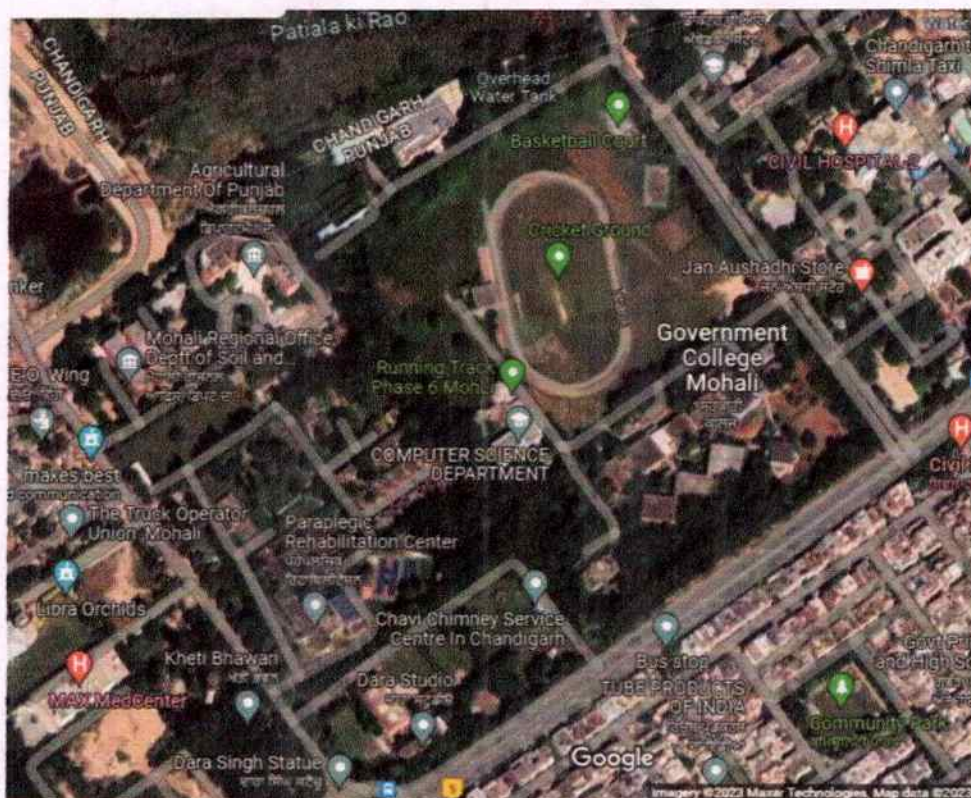


Photo 1: Aerial View of College Campus Part 1 (Source: Google Earth)





Photo 2: Aerial View of College Campus Part 2 (Source: Google Earth)



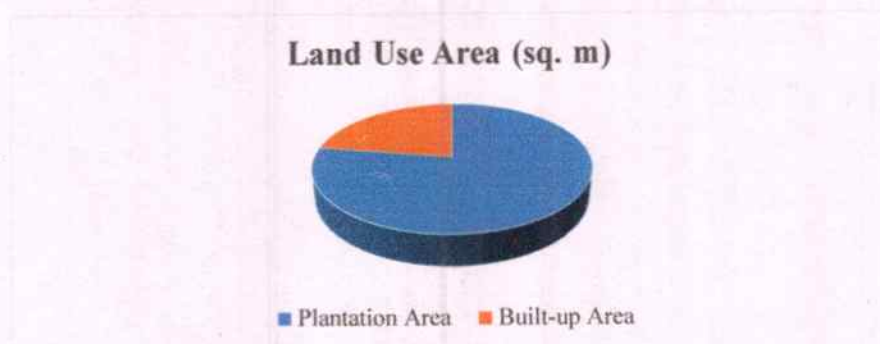
Photo 3: Plan of College campus (Source: Google Earth)



LAND USE DATA OF S.M.H.S. Government College, S.A.S. Nagar:

<i>CATEGORIES OF LAND USE</i>	<i>AREA (m²)</i>
PLANTATION AREA	71244.63
BUILT UP AREA (INCLUDE ROADS)	20619.01
TOTAL AREA	91863.64





The total area of S.M.H.S. Government College, S.A.S. Nagar is 91863.64 m² out of which the built up area (include Roads) is approx.. 22.4 % (i.e. 20619.01 m²) and plantation area is approx.. 77.5 % (i.e. 71244.63 m²).

LAND USE (BUILT UP AREA) ANALYSIS:

The built up area of 22.4 % (i.e. 20619.01 m²) consists of the following regions as stated below for land consumption in built up area of S.M.H.S. Government College, S.A.S. Nagar:

Table: Area occupied by various buildings at S.M.H.S. Government College, S.A.S. Nagar

Sr. No.	Name of Building	Number of Floors	Area (m ²)
1.	Admin Block	2	1944.96
2.	Science Block	2	750
3.	Student Centre	2	272
4.	Sabrang Hall	1	800
5.	Society Building	2	628
6.	Boys' Hostel	2	1899.87
7.	Girls' Hostel	1	
8.	Sports Ground	1	14324.18
9.	Guard Room	1	
10.			
11.			



FINDINGS:

The Land Use Analysis Report is prepared by

TREE DIVERSITY OF S.M.H.S. Government College, S.A.S. Nagar:

S.M.H.S. Government College in S.A.S. Nagar, Mohali proudly occupies a geo-position between latitude 30.73832°N and longitude 76.712214°E, spanning a breathtaking expanse of 22.70 acres. The college campus is an oasis of lush greenery, boasting an unmatched diversity of tree species that provide invaluable ecological functions. Planted over the years through various plantation programs, these towering beauties have become an integral part of the college's DNA. Beyond enhancing the quality of life for those on campus, they contribute immeasurably to our environment by providing oxygen, enhancing air quality, modulating climate, conserving water, preserving soil, and supporting wildlife. A veritable banquet for many species of birds and insects, these trees protect them from predators while providing them with food and shelter. Each species displays an endless variety of shapes, forms, textures and vibrant colours that vary with the seasons, while their strength and regal stature imbue them with a monument-like quality. As we forge emotional connections with these tree giants, we are reminded of the glorious history of our institution, which has played such an outsized role in maintaining the environment of Mohali and its surrounding areas. With a thick belt of large trees surrounding the campus, this eminent institution has also dramatically reduced noise levels and protected against dust and storms.

The college campus has approximately 400 trees in the mini-forest area and 393 numbered full-grown trees, leading to a total number of approximately 800 full-grown trees in the college campus. Following are the awe-inspiring tree species that enrich our college community and the world beyond:

Table: List of tree species of S.M.H.S. Government College, S.A.S. Nagar

S.no.	Common Name	Botanical Name	Family	No. of Trees
1	Tahli	<i>Dalbergia sisso</i>	Fabaceae	15
2	Arjun	<i>Terminalia arjuna</i>	Combretaceae	20
3	Chakrossia	<i>Chukrosia tabularis</i>	Meliaceae	15
4	Bahera	<i>Termiwalia bellirica</i>	Combretaceae	18
5	Harrar	<i>Termiwalia chebula</i>	Combretaceae	7
6	Jammun	<i>Syzygium cimini</i>	Myrtaceae	3
7	Shireen or Siris	<i>Albizia lebbeck</i>	Fabaceae	7
8	Kachnar	<i>Bauhinia variegata</i>	Fabaceae	5
9	Kikar	<i>Acacia nilotica</i>	Mimosoidae	5



10	Sukkchain	<i>Pongamia pinnate</i>	Fabaceae	18
11	Neem	<i>Azardirachta indica</i>	Meliaceae	4
12	Mango	<i>Mangifera indica</i>	Awacaddiaceae	13
13	Shehtoot	<i>Morus alba</i>	Moraceae	4
14	Bael	<i>Aegle marmelos</i>	Rutaceae	1
15	Guava	<i>Psidium guajava</i>	Myrtaceae	16
16	Sagwaan	<i>Tectona grandis</i>	Lamiaceae	25
17	Balam Kheera	<i>Kigelia africava</i>	Bignoniaceae	1
18	Moulsari	<i>Mimusops slengi</i>	Sapotaceae	2
19	Popular	<i>Polulus deltoids</i>	Salicaceae	5
20	Vilayati kikar	<i>Prosopis juliflora</i>	Fabaceae	5
21	White fig	<i>Ficus virens</i>	Moraceae	15
22	Simal	<i>Bombax ceiba</i>	Malvaceae	15
23	Dhak	<i>Butea monosperma</i>	Fabaceae	2
24	Silver Oak	<i>Grevillea robusta</i>	Proteaceae	19
25	Safeda	<i>Educalyptus globulus</i>	Myrtaceae	100
26	Marungi	<i>Syziium zeylanucum</i>	Myrtaceae	300
27	Gulmohar	<i>Delonix regia</i>	Fabaceae	4
28	Amaltas	<i>Cassia fistula</i>	Fabaceae	5
29	Toon	<i>Toona ciliate</i>	Mekiaceae	25
30	Chandni	<i>Tabernaemontana divaricate</i>	Apocynaceae	8
31	Amla	<i>Phyllanthus emblica</i>	Phyllanthaceae	4
32	Bottle Brush	<i>Callistemon viminalis</i>	Myrtaceae	7
33	Devil Tree	<i>Alstonia scholaris</i>	Apocynaceae	3
34	Orange Jasmine	<i>Murraya poniculata</i>	Rutaceae	1
35	Nimboo	<i>Citrus Limon</i>	Rutaceae	1
36	Fan Palm	<i>Washingtonia</i>	Arecaceae	3
37	Areca Palm	<i>Wishingtonia</i>	Arecaceae	9
38	White Firangi pani	<i>Plumeria</i>	Apocuanaceae	2



39	Ashoka Tree	<i>Saraca indica</i>	Fabaceae	8
40	Gulab	<i>Rose indica</i>	Rosaceae	5
41	China Rose	<i>Hibiscus rosa-sinesis</i>	Malvaceae	8
42	Raat ki Rani	<i>Cestrum nocturnum</i>	Solanaceae	3
43	Scarlet bush	<i>Hamelia</i>	Rubiaceae	1
44	Kaner	<i>Thevetia peruviana</i>	Apocynaceae	1
45	Corn plant	<i>Dracaena</i>	Asporagaceae	7
46	Kaner	<i>Nerium oleander</i>	Apocynaceae	1
47	Tecoma	<i>Tecoma stans</i>	Bignoniaceae	5
48	Jatropha	<i>Jatropha curcas</i>	Euphorbiaceae	6
49	Nimboo	<i>Citrus limon</i>	Rutaceae	1
50	Har-Shingar	<i>Nyctanthus arbor- tristis</i>	Oleaceae	1
51	Euphorbia	<i>Euphorbia</i>	Euphorbiaceae	8

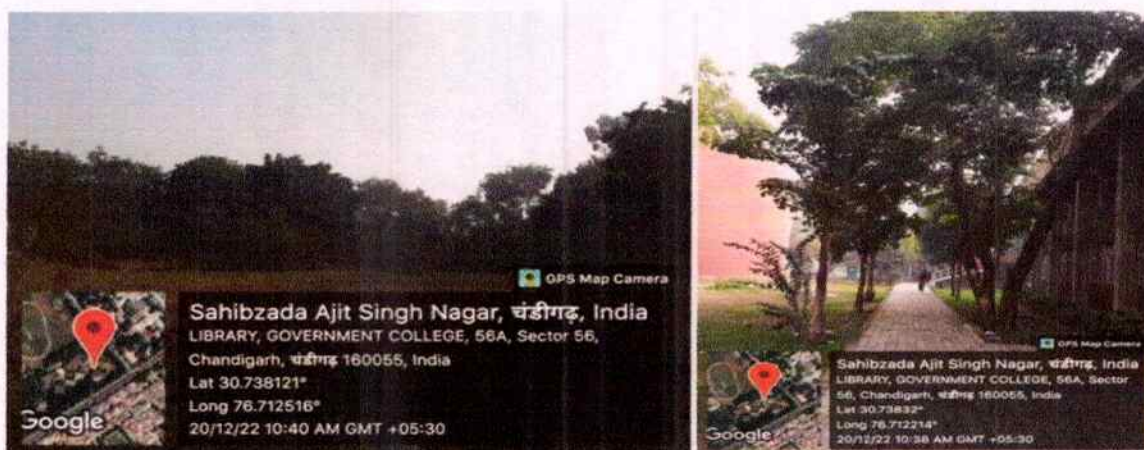


Photo 4: Canteen Area

The canteen area of the college is known for its beautiful greenery, which adds a sense of tranquility to the space. The greenery in the canteen area not only enhances the aesthetics but also provides a healthy environment for the students to relax and unwind in between their classes. The college administration takes pride in maintaining and developing this green space and encourages students to appreciate and respect the natural beauty of their surroundings. The plants and trees act as a natural air filter, absorbing pollutants and improving air quality. They also reduce noise levels and provide shade, making the canteen area a pleasant place to study, relax or socialize with friends. The greenery creates a calming and refreshing atmosphere and encourages students to take a break from their busy academic schedules, connect with nature, and de-stress.



Photo 5: Hospitality Garden

The well-manicured lawns, shrubs, and trees provide a natural backdrop to the hospitality department and create an inviting ambiance for visitors and guests. The greenery is frequently maintained and is watered regularly, ensuring that it remains healthy and vibrant all year round. The hospitality department is proud to have this natural beauty on display and believes that it adds a touch of elegance and sophistication to the guest experience.

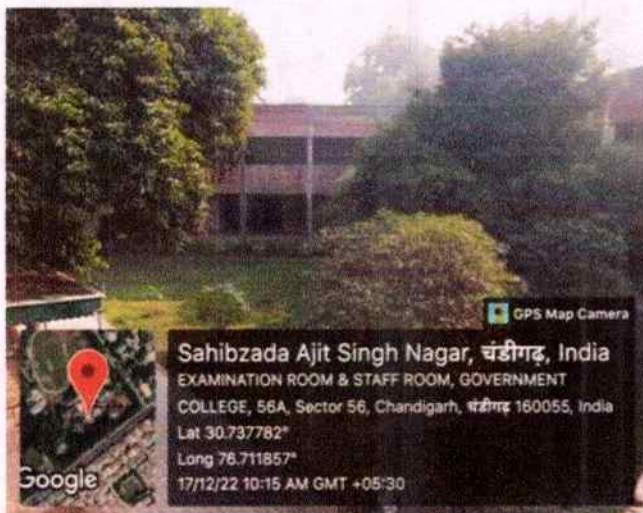


Photo 6: Molsari Garden

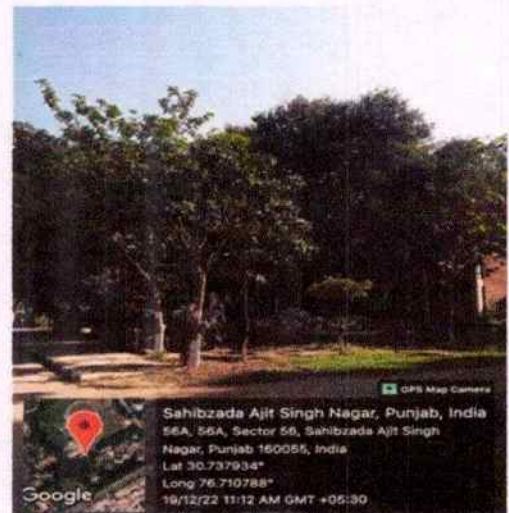


Photo 7: OSA Park



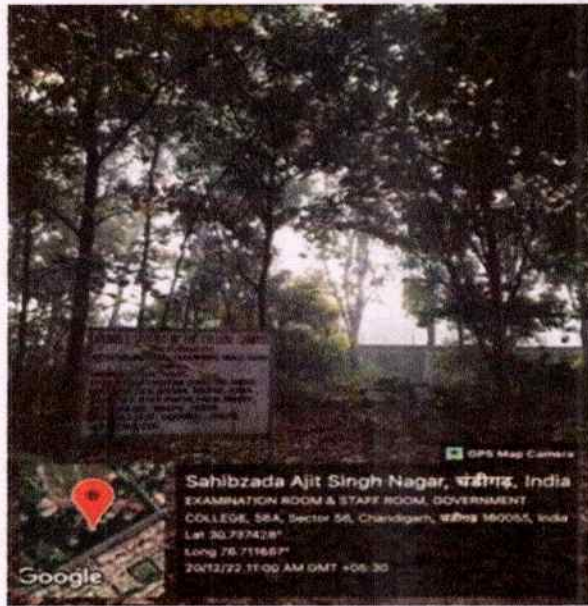


Photo 8 & 9: Biodiversity Area

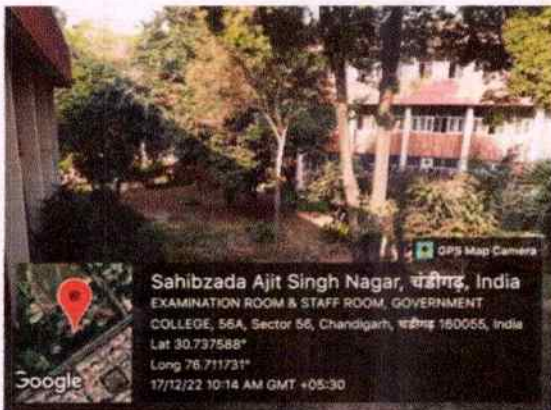


Photo 10 & 11: Botanical Garden

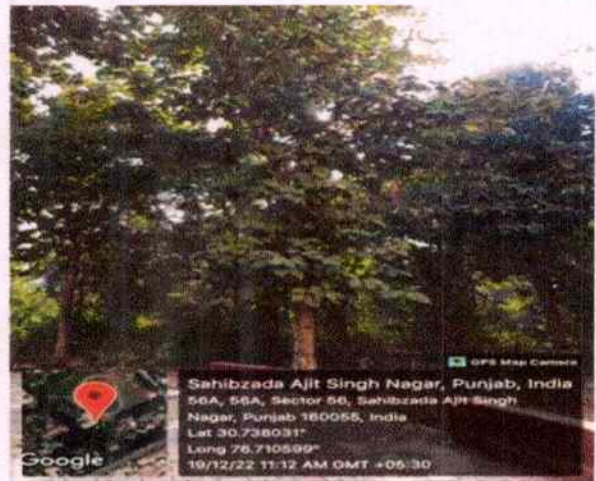


Photo 12 & 13: GCM Society Area





Photo 14 & 15: Herbal Garden

Table: Medicinal Plants in Herbal Garden

S.No.	Common Name	Botanical Name	Family
1	Curry Leaves	<i>Murraya koenigii</i>	Rutacea
2	Pathar Chatt	<i>Bryophyllum pinnata crassulaceae</i>	Combrataceae
3	Pathar Chatt	<i>Bryophyllum, Diagremonatum</i>	Combrataceae
4	Tulsi	<i>Oscimum sanctum</i>	Combrataceae
5	Basil	<i>Oscimum bassilicum</i>	Lamiaceae
6	Ashwagandha	<i>Withania somnifecae</i>	Sulanaceae
7	Lemon Grass	<i>Cymbopogon citratus</i>	Poaceae
8	Lettuce	<i>Lectuca stiva</i>	Astraceae
9	Sadabahar	<i>Vinca rosea</i>	Apocynaceae
10	Four o'Clock	<i>Mirabilis jalapa</i>	Nyctginaceae
11	Akarkara	<i>Anctylus pyrethrum</i>	Astraceae
12	Ajwain	<i>Plectrenthus ambionicus</i>	Apiaceae
13	Mint	<i>Mentha Arvensis</i>	Lamiaceae
14	Aloe vera	<i>Aloe barbandensis</i>	Asphodeliaceae
15	Datura	<i>Detura stramonium</i>	Solanaceae
16	Dada Thor	<i>Euphorbia roylena</i>	Euphorbiaceae
17	Opuntia	<i>Opuntia fiurs-indica</i>	Cactaceae
18	Agava	<i>Agave attennata</i>	Asparagus
19	Tradescantia	<i>Tradescantia sillamontana</i>	Commelinaceae

GURU NANAK BAGICHI

Along with the plantation of the aforementioned trees, an additional tribute was made to the revered Shri Guru Nanak Devji in the form of the Guru Nanak Sacred Forest. The term 'bagichi'



means 'small garden' in Punjabi. Established in October of 2019, this hallowed ground features 550 trees of 44 different varieties, planted in honor of the 550th Parkash Purab of Shri Guru Nanak Devji. This forest stands as a loving testimony to the spiritual and earthly legacy of the great Guru, embodying his teachings of reverence and harmony with the natural world. With each breath of fresh forest air, one is invited to reflect on the profound wisdom and compassion of Guru Nanak, and to take inspiration from his enduring example of service and love for all beings. The list of tree varieties are as below:

S.No.	Common Name	Botanical Name	Family	No. of Trees
1	Arjun	<i>Terminalia arjuna</i>	Combrataceae	25
2	Behda	<i>Terminalia bellerica</i>	Combrataceae	25
3	Simbal	<i>Bombax ceiba</i>	Malvaceae	25
4	Tun	<i>Toona ciliata</i>	Meliaceae	10
5	Bakain	<i>Melia azedarach</i>	Chinaberry	20
6	Banyan/bargad	<i>Ficus benghalensis</i>	Moraceae	4
7	Black siris	<i>Albezia lebbeck</i>	Fabaceae	20
8	Desi kikar	<i>Acacia nilotica</i>	Mimosoidae	25
9	Desi mango	<i>Magnifera indica</i>	Anacardiaceae	20
10	Dhak(Chichera)/palash	<i>Butea monosperma</i>	Fabaceae	40
11	Goolar	<i>Ficus racemora</i>	Moraceae	8
12	Harde/harar	<i>Terminalia</i>	Combrataceae	20
13	Jamun	<i>Syzygium cumini</i>	Myrataceae	20
14	Jand/shammi/khejri	<i>Prosopis cineraria</i>	Fabaceae	40
15	Neem	<i>Azadirachta indica</i>	Meliaceae	20
16	Peepal	<i>Ficus relogiosa</i>	Moraceae	4
17	Phulal	<i>Acacia modesta</i>	Mimosoideae	20
18	Pilkhan/ Polkhan	<i>Ficus virens</i>	Moraceae	20
19	Pajain/Papdi/Chudel Paodi	<i>Holoptelea integrifolia</i>	Ulmaceae	20
20	Reetha	<i>Sapindus mukorossi</i>	Sapindaceae	20



21	Sheesham	<i>Dalbergia sissoo</i>	Fabaceae	20
22	Suhanjana	<i>Moringa concanensis</i>	Moringaceae	20
23	White siris	<i>Albizia procure</i>	Fabaceae	20
24	Aloobukhara	<i>Prunus domestica</i>	Rosaceae	25
25	Amaltas	<i>Cassia fistula</i>	Fabaceae	40
26	Amla	<i>Phyllanthus embelica</i>	Phyllanthaceae	25
27	Bel/Bel Ptra	<i>Aegle Marmelos</i>	Rutaceae	25
28	Ber	<i>Ziziphus mauritiana</i>	Rhamnaceae	20
29	Dheu	<i>Artocarpus lakoocha</i>	Moraceae	10
30	Jhau	<i>Tamarix dioica</i>	Cupressaceae	7
31	Kachnar	<i>Bauginia malabarica</i>	Fabaceae	25
32	Khair/ katha	<i>Acacia catechu</i>	Leguminoseae- mimoseae	40
33	Lasora	<i>Cordia dichotoma</i>	Boraginaceae	24
34	Sukhchain/Karanj	<i>Pongamia pinnata</i>	Fabaceae	20
35	Tota	<i>Erythrina indica</i>	Fabaceae	10
36	Aak	<i>Caliotropis procera</i>	Apocynaceae	10
37	Anaar	<i>Punica granatum</i>	Lythraceae	15
38	Ashwagabdha	<i>Withania somnifera</i>	Solanaceae	15
39	Bansut/Basut/Adusa	<i>Justicia adhatoda</i>	Acanthaceae	15
40	Ephedra/Somlata	<i>Ephedra geardiana</i>	Ephedraceae	4
41	Galgal	<i>Citrus medica</i>	Rutaceae	10
42	Nirgundi	<i>Vital negundo</i>	Verbenaceae	18
43	Jhar ber/mallhe ber	<i>Ziziphus nummalaria</i>	Rhamnaceae	7
44	Karonda	<i>Carissa carandas</i>	Apocynaceae	10

The wide variety of trees in a college campus provide many benefits, such as providing shade, improving air quality, and reducing noise levels. The trees also create a peaceful and inviting environment for students, staff, and visitors to relax and enjoy the beauty of nature. These trees come in all shapes and sizes, some with sprawling canopies while others grow tall and slender.



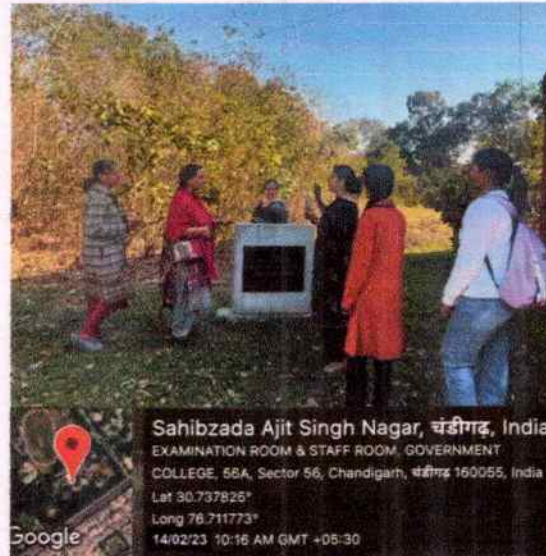


Photo 16: Guru Nanak Bagichi

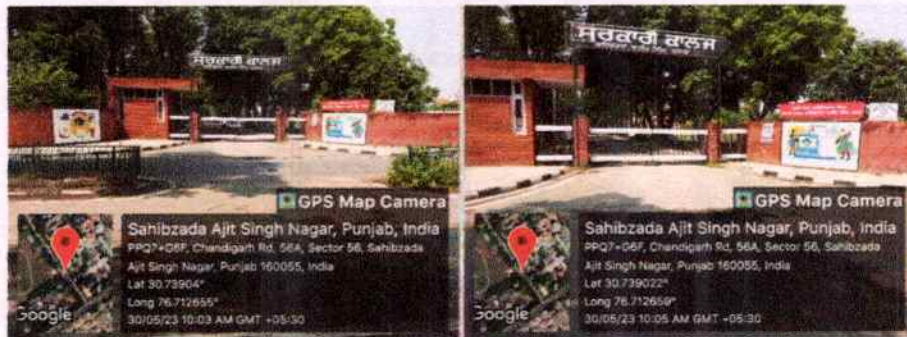


Photo 17: Main Entry of College Campus



Photo 18: View of College





Photo 19: Campus view of college



Photo 20: Green Campus



FAUNAL DIVERSITY IN S.M.H.S. Government College, S.A.S. Nagar CAMPUS:

The college is located in Mohali. Mohali – a city in the northern state of Punjab in India, experiences a subtropical continental climate, characterized by hot summers and cool winters. The city receives most of its rainfall during the monsoon season, which occurs from July to September. While the climate can be challenging for some species, the region's diverse landscape supports a range of wildlife, including mammals, birds, reptiles, and amphibians. However, climate change and urbanization are increasingly threatening the natural habitats and ecosystems in and around Mohali. To preserve faunal diversity in the area and promote sustainable growth, careful conservation efforts and ecological planning are crucial.

Table: Common and Scientific names of birds and animals

S.No.	Common Name	Scientific Name
1.	Peacock	<i>Pavo cristatus</i>
2.	Common Myna	<i>Acridotheres tristis</i>
3.	Green Parrot	<i>Psittacara holochlorus</i>
4.	Squirrel	<i>Sciuridae</i>
5.	House Sparrow	<i>Passer domesticus</i>
6.	House Crow	<i>Corvus splendens</i>
7.	Common Cuckoo	<i>Cuculus canorus</i>
8.	Various species of Snake	<i>Naja naja, Pantherophis</i>
9.	Common Woodshrike	<i>Tephrodornis pondicerianus</i>
10.	Red-Vented Bulbul	<i>Pycnonotus cafer</i>
11.	Koel	<i>Eudynamis scolopaceus</i>
12.	Little Owl	<i>Athene noctua</i>
13.	Cat	<i>Felis catus</i>
14.	House Wall Lizard	<i>Podarcis muralis</i>
15.	Pigeon	<i>Columba livia</i>
16.	Chameleon	<i>Chamaeleo chamaeleon</i>
17.	Monitor Lizard	<i>Varanus bengalensis</i>
18.	The Grey Indian Mongoose	<i>Urva edwardsii</i>
19.	Yellow Wasp	<i>Ropalidia marginata</i>
20.	Butter Fly	<i>Danaus genutia</i>



21.	Skylark	<i>Aluda gulgula</i>
22.	Garden Tiger Moth	<i>Arctia caja</i>
23.	Oleander Hawk Moth	<i>Daphnis nerii</i>
24.	Cockroaches	<i>Periplaneta americana</i>
25.	Housefly	<i>Musca domestica</i>
26.	Earthworms	<i>Lumbricus</i>
27.	Honeybees	<i>Apis indica</i>
28.	Mosquitoes	<i>Culex, Anopheles</i>
29.	Rabbit	<i>Oryctolagus cuniculus</i>

The reserved forest area contains large number of insects, centipedes, millipedes, grasshoppers, etc.



Photo 21: *Pavo cristatus*



Photo 22: *Acridotheres tristis*



Photo 23: *Psittacara holochlorus*



Photo 24: *Sciuridae*





Photo 25 : *Passer domesticus*



Photo 26 : *Corvus splendens*



Photo 27 : *Cuculus canorus*



Photo 28 : *Naja naja*



Photo 29: *Tephrodornis pondicerianus*



Photo 30: *Pycnonotus cafer*





Photo 31: *Eudynamys scolopaceus*



Photo 32: *Athene noctua*



Photo 33: *Felis catus*

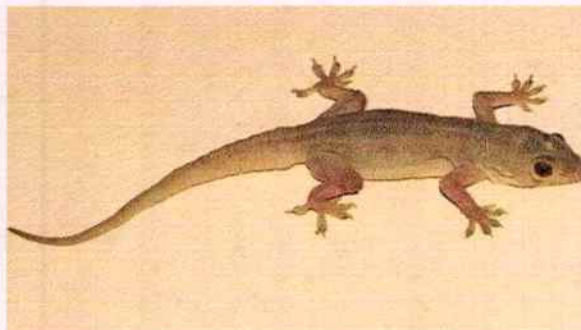


Photo 34: *Podarcis muralis*



Photo 35: *Columba livia*



Photo 36: *Chamaeleo chamaeleon*





Photo 37: *Varanus bengalensis*



Photo 38: *Urva edwardsii*



Photo 39 : *Ropalidia marginata*



Photo 40 : *Danaus genutia*



Photo 41: *Aluda gulgula*



Photo 42: *Arctia caja*





Photo 43: *Daphnis nerii*



Photo 44: *Periplaneta americana*



Photo 45: *Musca domestica*



Photo 46: *Lumbricus*



Photo 47: *Apis indica*



Photo 48: *Culex, Anopheles*



Photo 49: *Oryctolagus cuniculus*

WEATHER DATA MONTH WISE Mohali (Source: meteoblue)

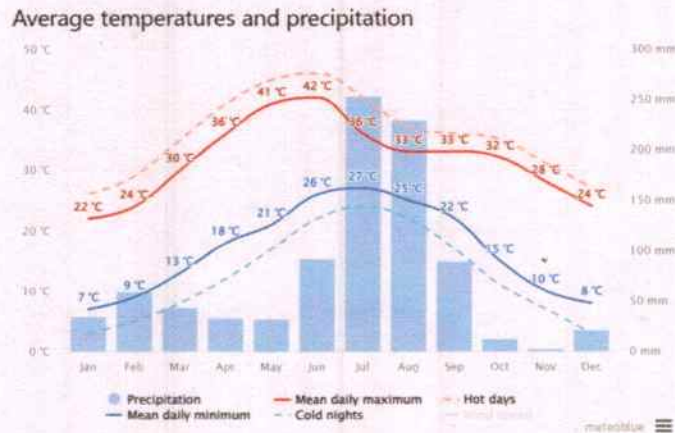


Photo 50: Average Temperature and Precipitation in Mohali

As a planned city located in the Mohali district of Punjab, India, Mohali showcases a blend of urban development and natural beauty. The city's geographical coordinates are latitude 30.7046° N, and longitude 76.7179° E. The altitude of the city ranges from 304 meters (997 feet) to 335 meters (1,099 feet) above sea level. The city is situated on the foothills of the Shiwalik Range of the Himalayas, and much of its surrounding landscape comprises undulating terrain, with sporadic hills and hillocks. The city's climate is tropical, with hot summers and mild winters, with an average temperature ranging between 25-30 degrees Celsius. Monsoon rains arrive in the city in June and July and last until September, adding to the natural beauty of the region. Despite the growing urbanization and development in recent years, Mohali has managed to retain much of its natural charm, making it an excellent destination for tourists and visitors seeking to experience the best of urban infrastructure and nature.

CLIMATE GRAPH MONTH WISE Mohali:

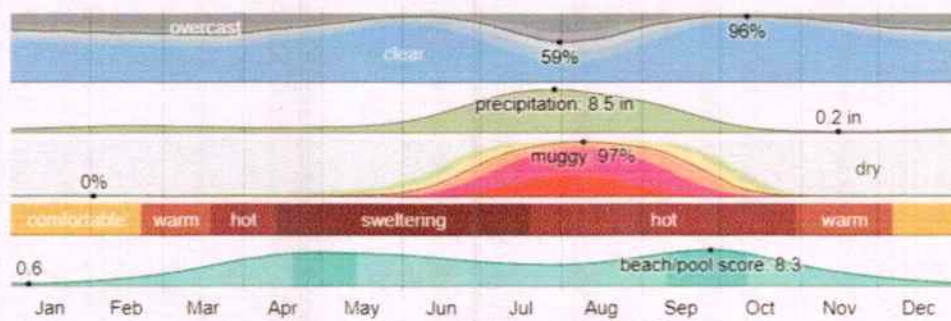


Photo 51: Annual Climate of Mohali



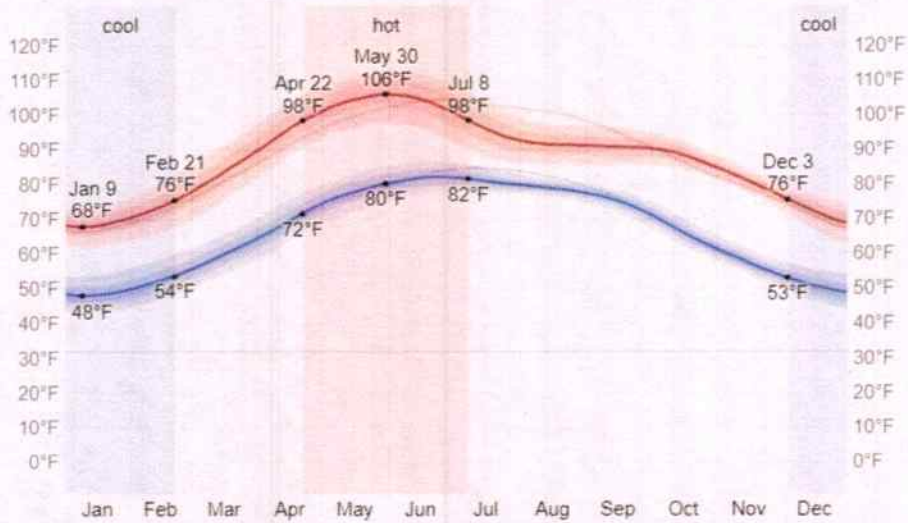


Photo 52: Average High and Low Temperatures of Mohali

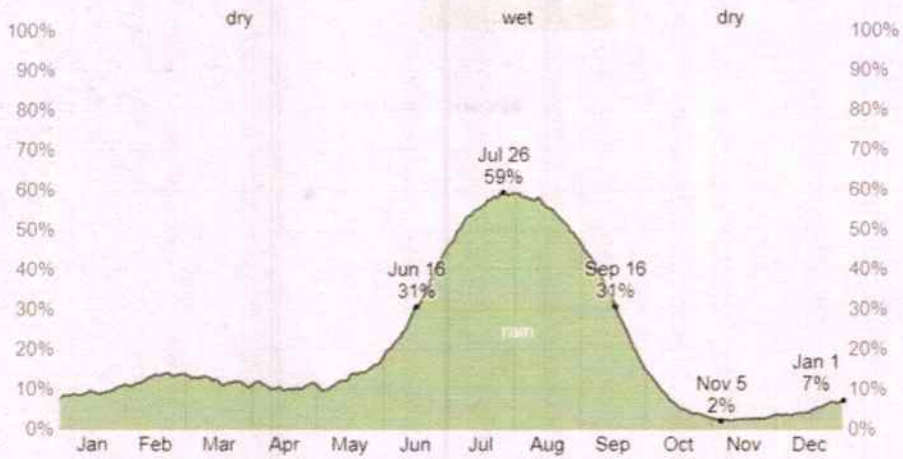


Photo 53: Daily Chance of Precipitation in Mohali

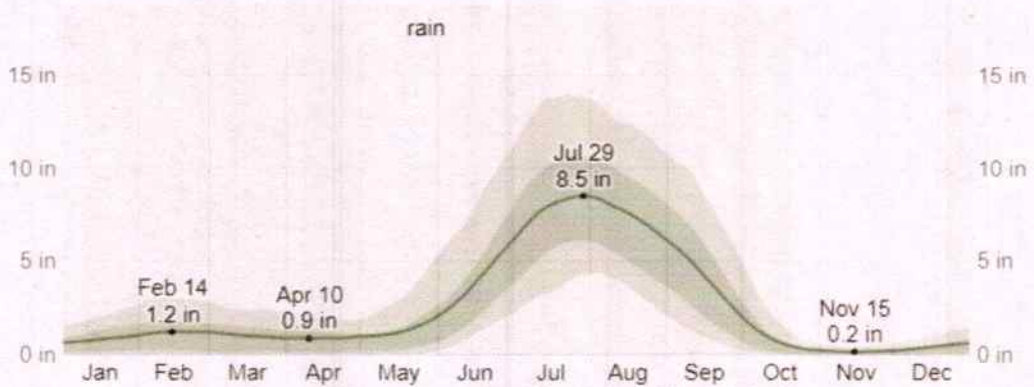


Photo 54: Average Monthly Rainfall in Mohali



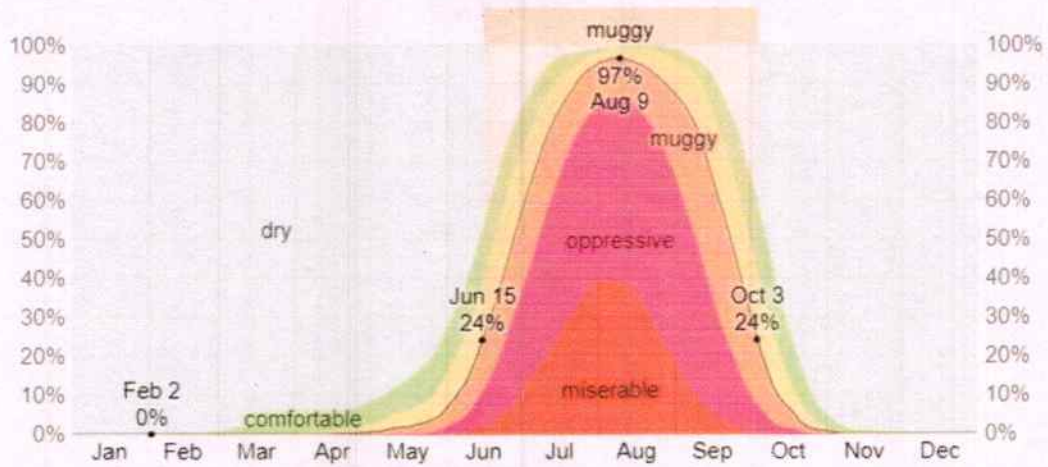
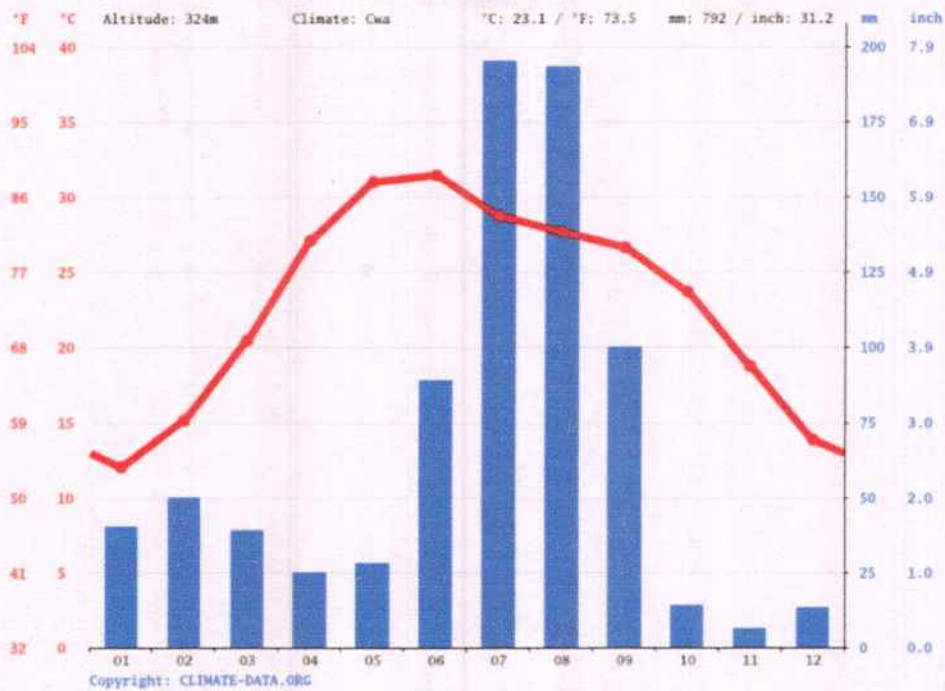


Photo 55: Humidity Comfort Levels

Source: <https://weatherspark.com/y/108786/Average-Weather-in-Mohali-India-Year-Round>

CLIMATE GRAPH // WEATHER BY MONTH MOHALI



The least amount of rainfall occurs in November. The average in this month is 6 mm | 0.2 inch. Most precipitation falls in July, with an average of 195 mm | 7.7 inch.

Photo 56 : Climatic Bar Graph of Mohali

Source: <https://en.climate-data.org/asia/india/punjab/mohali-15360/>



AIR QUALITY IN MOHALI AND S.M.H.S. Government College, S.A.S. Nagar:

The present air quality in Mohali, latest to May 27, 2023 appears to be moderate. According to the real-time air pollution data for Punjab, the current air quality index (AQI) for the state is rated as "MODERATE" level. However, it's important to note that air pollution can vary based on several factors, including seasonal changes, weather conditions, and human activities. Some studies have also noted the impact of regional contributions on air quality in cities, suggesting that certain pollutants may impact the air quality in Mohali and surrounding areas. Therefore, it's critical to continuously monitor the air quality in the city to ensure that preventive measures are taken to maintain healthy air quality levels.



Photo 57: Air Quality Index Statistics of Mohali

AIR QUALITY DETERMINATION:

Parameter	Result (Range)
NO ₂	40 µg/m ³
SO ₂	15 µg/m ³
O ₃	63 µg/m ³
PM _{2.5}	53 µg/m ³
PM ₁₀	107 µg/m ³



CO	326 µg/m ³
Humidity	54 %
Barometric Pressure	1010 mbar
Wind Speed	4 km/h
Wind Direction	From Southeast
Sun Rise	05:21 (64° Northeast)
Sun Set	19:19 (296° Northwest)
Moonrise	14:35 (92°)
Moonsset	02:12 (271°)

WATER ANALYSIS REPORT OF S.M.H.S. Government College, S.A.S. Nagar:

(Courtesy: Consultancy Cell, S.M.H.S. Government College, S.A.S. Nagar)

Water quality testing plays a crucial role in detecting contaminants in water and preventing waterborne diseases. Using or consuming dirty water can lead to severe health complications and even fatalities. Therefore, it's crucial to ensure that drinking water is free from bacteria and disease, making it safe and clean for consumption. The parameters for water quality are determined based on the intended use, with particular emphasis on water intended for human consumption or in environmental settings. As such, work in water quality is primarily centered on ensuring that drinking water is thoroughly treated, safe, and free from potential health risks.

Drinking water indicators:

The following is a list of indicators often measured by situational category:

- Alkalinity
- Colour of water
- pH value
- Taste and odour (geosmin, 2-Methylisoborneol (MIB), etc.)
- Dissolved metals and salts (sodium, chloride, potassium, calcium, manganese, magnesium)
- Microorganisms such as fecal coliform bacteria (*Escherichia coli*), *Cryptosporidium*, and *Giardia lamblia*; (see Bacteriological water analysis)
- Dissolved metals and metalloids (lead, mercury, arsenic, etc.)



- Dissolved organics: colored dissolved organic matter (CDOM), dissolved organic carbon (DOC)
- Heavy metals

RAINWATER HARVESTING SYSTEM OF S.M.H.S. Government College, S.A.S. Nagar:

To harness the benefits of rainfall and reduce runoff, a rainwater harvesting system has been implemented on the college campus. The system consists of a collection of roof surfaces that channel water into large tanks designed for percolation and groundwater replenishment. With a total storage capacity of 1.5 million liters per year, the system is capable of collecting 1.3 million liters for groundwater recharge, and 200,000 liters for routine use around campus. The installation of three large tanks, each holding up to 10,000 liters, has been instrumental in optimizing the benefits of this system. By covering 80% of the college's roof area, this project provides a sustainable source of surface water supply in addition to reducing dependence on underground water. The stored water is used for various purposes such as watering the lawns, potted plants, and kitchen gardens, and even cleaning purposes. By promoting sustainable water use, the rainwater harvesting system helps to minimize pollution and increase overall eco-friendliness. Ultimately, this approach not only increases water availability during the dry summer months but also improves the quality of underground water by diluting any salinity.

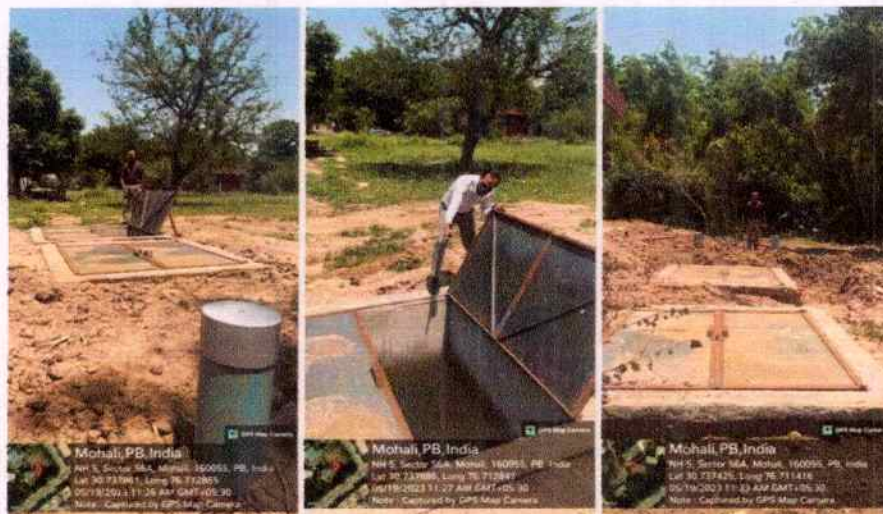


Photo 58: College's Rainwater Harvesting System





Photo 59: College's Rainwater Harvesting System

NOISE LEVEL IN THE SURROUNDING OF S.M.H.S. Government College, S.A.S. Nagar:

In populated areas, man-made sounds constantly inundate the human ear from all directions, leaving few places where one can experience relative quietude. There are two basic properties of sound:

- Loudness
- Frequency

When it comes to sound, loudness represents the strength of sensation that is perceived by an individual and is measured in Decibels (dB). For instance, the lowest just audible sound is about 10 dB, followed by a whisper at 20 dB, a library around 30 dB, and a normal conversation ranging from 35-60 dB. Heavy street traffic measures up to 70 dB, while noise from a boiler factory can reach up to 120 dB, and the take-off of a jet plane can generate about 150 dB, with a rocket engine reaching 180 dB. Typically, an individual can tolerate sounds up to 80 dB. However, sounds that exceed 80 dB can be harmful to the hearing system and are classified as pollutants. According to the World Health Organization, the safe noise level for a city is 45 dB. International standards consider a noise level of up to 65 dB as tolerable. Loudness is also expressed in Sones, where one Sone reflects the loudness of a 40 dB sound pressure measured at 1000 Hz. Finally, the frequency, measured in Hertz (Hz), is expressed as the number of vibrations per second.

MATERIALS, STUDY AREA & METHODS:

Noise level meter or noise measuring app, Noise test pro (version: 1.0.2), was used to measure the noise level. Noise test pro detects any noise, music or sound in the surroundings. It tells the maximum, minimum and average value of noise in decibels.



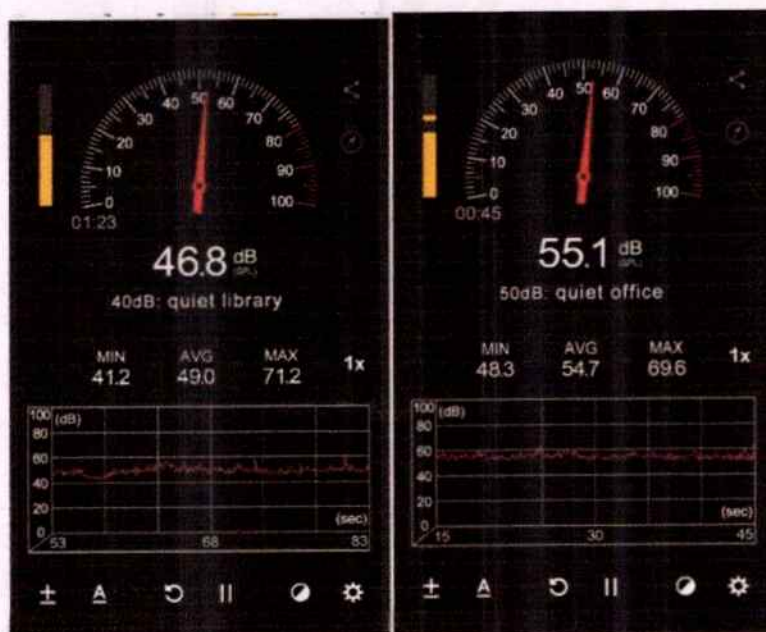


Photo 60: Noise Measurement by Noise Test Pro App

MEASUREMENT PROCEDURE:

The noise level was recorded at the different Important Locations of S.M.H.S. Government College, S.A.S. Nagar. At each spot, the measurements were taken for 60 seconds during day time (6 AM- 6 PM) and the measurements were noted down. Screen shots of the measurements of noise were taken immediately on the app at the time of 60th second of each measurement.

RESULTS:

The results of the experiments at different places have been tabulated in the following table:

Table 1: Measurements of Noise in and around S.M.H.S. Government College, S.A.S. Nagar.

<i>PLACE</i>	<i>MEASUREMENTS (Duration in Sec.)</i>	<i>MINIMUM (dBA)</i>	<i>MAXIMUM (dBA)</i>	<i>AVERAGE (dBA)</i>
GCMSIP (Inside)	60	54.4	83.0	64.1
GCMSIP (Outside)	60	44.1	79.1	51.0
Tuck Shop	60	42.6	68.5	50.5
Sabrang Hall	60	39.9	64.0	44.5
Canteen (Inside)	60	42.5	70.1	51.5
Canteen (Outside)	60	48.3	69.7	54.6
Physics Lab	60	42.7	74.4	50.9



Girls Common Room	60	49.0	67.1	53.5
Front of Principal's Office	60	53.7	69.1	60.0
Hotel Management	60	41.9	57.2	49.8
Corridors	60	51.6	62.5	56.7
Boys Hostel	60	35.0	61.2	43.5
Girls Hostel	60	41.2	71.2	49.0
Botany Deptt.	60	53.0	65.0	58.3
Commerce Deptt.	60	49.3	76.5	60.9
Corridors (1 st Floor)	60	48.5	78.4	56.9
Library	60	41.2	71.2	49.0
Office	60	48.3	69.6	54.7

Source: Data collected by Mr. Balwinder Saini, Department of Computer Science and Applications, S.M.H.S. Government College, S.A.S. Nagar. After the study, the measurements of noise have been recorded inside and outside of S.M.H.S. Government College, S.A.S. Nagar.

Inside the Campus: 35-75 dBA

Outside the Campus: 54-85 dBA

WASTE DISPOSAL OF S.M.H.S. Government College, S.A.S. Nagar:

Waste disposal refers to the process of collecting, treating, and disposing of waste materials generated by human activities in an environmentally responsible manner. Effective waste disposal practices help to safeguard public health and preserve natural ecosystems by minimizing the negative impacts of waste on the environment. This includes taking steps to minimize the amount of waste that is produced, as well as treating and disposing of waste in a way that is safe, efficient, and sustainable. At the college level, waste disposal is a critical component of maintaining a safe and healthy learning environment, and requires a coordinated effort from all members of the community.

It is imperative that we prioritize proper waste disposal practices. Our responsibility to minimize our collective impact on the environment extends beyond the boundaries of our campus and into the wider world, and for this, we endeavor to exceed all regulatory standards for waste management. Adopting an approach that is both mindful and efficient enables us to protect our natural resources for future generations, and we take this responsibility seriously. With a strategic plan for waste disposal that prioritizes sustainability and ecological



responsibility, we set an example for other institutions and make a tangible contribution to the broader cause of environmental prosperity.

As members of our college community, we recognize the urgent need to reduce our carbon footprint and safeguard our natural environment. Toward that end, we have adopted a series of environmentally-friendly practices designed to minimize waste and promote sustainability. We are committed to reducing our carbon emissions both by responsibly disposing of old products and by sourcing new ones with as minimal an environmental impact as possible. By reusing or recycling the products, we are contributing towards the conservation of natural resources, saving energy, helping to protect the environment and reducing the landfill. The waste from all around the college is separated daily as wet and dry waste in different bins which are disposed separately. Dry waste includes paper, cardboard, glass, tin cans, wrappers, etc. and on the other hand, wet waste refers to organic waste such as vegetable peels, left-over food, etc. Separation of waste is essential as the amount of waste being generated today causes immense problem. The horticultural waste like dry leaves, grass, weeds, etc. is disposed in compost pits constructed in college campus. Any biologically reusable waste generated on campus is thoughtfully transformed into organic manure for use in our college gardens. All non-biological dry solid waste produced on campus is transported to the community bin of the Mohali Municipality, in accordance with rigorous waste disposal standards. In addition, our efforts extend to initiatives such as energy conservation, waste recycling, and carbon neutrality. Through these critical measures, we remain steadfastly committed to protecting the natural world for generations to come.



Photo 61: Compost Pit for organic waste collection





Photo 62: Garbage bins for dry solid waste collection



Photo 63: Dry waste is collected and non-biological solid dry waste is sent to Municipality pit through rehiwalas

ROOF TOP SOLAR PANELS

The College has installed a 52KWp capacity Solar Power Plant for electricity generation which produces electricity and sends it to the local grid which is helpful for an electricity bill reduction. Most of the buildings are constructed considering the need for Light and ventilation which reduces the use of electricity. The air conditioners are used only in essential conditions in the laboratories and offices to reduce electricity consumption.



View of Installed Rooftop Solar Panels



Another View of Installed Rooftop Solar Panels



Clean and green campus recognitions/awards

ਪੰਜਾਬ ਸਰਕਾਰ

ਵਣ ਅਤੇ ਜੰਗਲੀ ਜੀਵ ਸੁਰੱਖਿਆ ਵਿਭਾਗ ਪੰਜਾਬ,
ਦਫ: ਵਣ ਮੰਡਲ ਅਫਸਰ, ਸਾਹਿਬਜਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ,
ਵਣ ਭਵਨ, ਸੈਕਟਰ 68, ਐਸ.ਏ.ਐਸ. ਨਗਰ।

E-mail:- dfosasnagar@gmail.com

Phone No. 0172-2298027

ਸੇਵਾ ਵਿਖੇ,

ਪ੍ਰਿੰਸੀਪਲ,
ਸ਼.ਮੇ.ਹ.ਸਿ.(ਸ਼.ਚੰ.ਵਿ) ਸਰਕਾਰੀ ਕਾਲਜ
ਸਾਹਿਬਜਾਦਾ ਅਜੀਤ ਸਿੰਘ ਨਗਰ।

ਨੰਬਰ: ਲੇਖਾ/...2023... ਮਿਤੀ ...4/7/2023.


ਵਿਸ਼ਾ: ਕਾਲਜ ਕੈਂਪਸ ਵਿਖੇ ਹਰਿਆਲੀ ਅਤੇ ਰੁੱਖਾਂ ਦੇ ਸਬੰਧ ਵਿੱਚ ਕੀਤੇ ਨਰੀਖਣ ਸਬੰਧੀ
ਸਰਟੀਫਿਕੇਟ ਜਾਰੀ ਕਰਨ ਬਾਰੇ।

ਹਵਾਲਾ: ਆਪ ਦਾ ਪੱਤਰ ਨੰ: 525 ਮਿਤੀ 03.06.2023

ਉਪਰੋਕਤ ਵਿਸ਼ੇ ਤੇ ਹਵਾਲੇ ਅਧੀਨ ਪੱਤਰ ਦੇ ਸਬੰਧ ਵਿੱਚ ਵਣ ਰੱਜ ਅਫਸਰ, ਐਸ.ਏ.ਐਸ.

ਨਗਰ ਅਧੀਨ ਕਰਮਚਾਰੀਆਂ ਵਲੋਂ ਮੌਕਾ/ਇਸਪੈਕਸ਼ਨ ਕਰਕੇ ਇਸ ਮੰਡਲ ਨੂੰ ਟੈਲੀਫੋਨ ਰਾਹੀਂ ਸੂਚਿਤ ਕੀਤਾ
ਗਿਆ ਹੈ ਕਿ ਸਬੰਧਤ ਕਾਲਜ ਵਿੱਚ ਬਹੁਤ ਵਧੀਆ ਮਿੰਨੀ ਹਰਬਲ ਪਾਰਕ ਅਤੇ ਮਿੰਨੀ ਫਾਰੈਸਟ ਬਣਾਇਆ
ਗਿਆ ਹੈ। ਇਸ ਲਈ ਨਿਮਨਹਸਤਾਖਰ ਵਲੋਂ ਆਪ ਦੇ ਕਾਲਜ ਨੂੰ Certificate of Excellence ਦਿੱਤਾ
ਜਾਂਦਾ ਹੈ।

ਸਹਿਪੱਤਰ
ਉਪਰੋਕਤ


ਵਣ ਮੰਡਲ ਅਫਸਰ,
ਐਸ.ਏ.ਐਸ. ਨਗਰ।

Certificate of Excellence

*Shaheed Major Harminderpal Singh (Shaurya Chakra) Government
College S.A.S. Nagar, Punjab*

This certificate of Excellence is awarded for initiating the novel idea of creating a Guru Nanak Sacred Forest, a mini urban forest with native Species in April 2019, a model project in the region to protect a Sustainable environment. The mini forest amalgamates the aspects of ecosystem diversity, curative diversity (a wide variety of medicinal plants) and cultural diversity (including spiritual values) successfully. The creation of the urban mini forest in the college has been of great significance towards documentation and preservation of genetic heritage. This project is in congruence with the essence of National Education Policy 2020 and is an endeavor to provide holistic and multi-disciplinary education by involving academia, youth, government and private agencies.

Dated:

Sh Kanwar Deep Singh, IFS,

Divisional forest Officer,
SAS Nagar.