



Estd.: 1989

Janseva Shikshan Mandal's

**Shantarambhou Gholap Arts, Science and
Gotirambhou Pawar Commerce College, Shive**

Tal:-Murbad Dist:- Thane 421 4001

(Affiliated to University of Mumbai)

GREEN AUDIT REPORT

(Academic Year 2019-20)

Name of the Institute :- JansevaShikshanMandal'sShantarambhouGholap Arts, Science and GotirambhouPawar Commerce College, ShivleTal:- MurbadDist:- Thane 421 401.

Green Audit Perform by :- PrasannaSitaramParalkar (M.Sc. Agri. in Horticulture) Horticulturist B/03 Matruchaya Co.Hsg.Society, Malshej Road, Murbad Dist:- Thane and Team

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Acknowledgement:

We are grateful to the institution to award this prestigious project and allow us enter the new era of Green Audit in College Campus.

Further we sincerely thank the college staff for providing us necessary facilities and co-operation during the audit. This helped us in making the audit successful.

GREEN AUDIT COMMITTEE 2019-20

Sr. No.	Name	Designation
1.	Mr. Prasanna S. Paralkar M.Sc. Horticulture	Chairman, Green Audit Expert
2.	Mr. Pravin V. Vishe B.A	Expert
3.	Mrs. Apurva A. Chunade M.Sc. Botany	Expert
4.	Prof. Priya Bhagat M.Sc. Chemistry	Member
5.	Prof. Deepak Tupare M.Sc. Chemistry	Member
6.	Prof. Nitin Choudhary M.Sc. Physics	Member
7.	Prof. Aniket D. Marathe M.Sc. Zoology	Member
8.	Mr. Nilesh Vishe	Student
9.	Mr. Manish Yashwantrao	Student

INTRODUCTION TO INSTITUTION:

Shantarambhau Gholap Arts, Science and Gotirambhau Pawar Commerce College Shivle, permanently affiliated to the University of Mumbai, was established in 1989. It is multi-faculty college and offers 11UG (8 Grantable, 3 Non-grantable/ self- financed) and 8 PG Self -financed /Non- grantable programs. UGC has also given 2(f), 12(B) status to the college on 13th April 2000. The college was awarded “Best College” Award in Rural category by the University of Mumbai in the academic year 2008-09. The college has also ISO certification 9001:2015. First cycle of NAAC Accreditation was done in 2003 with B+ grade and Second cycle Accreditation was done in 2011 with B grade (2.80 CGPA). The College conducts certificate courses / Value added courses to enrich students with different branches of knowledge. The college has MoUs with various agencies to provide students training for the recruitment of Police and also coaching for Competitive examinations. As the college is located in Rural and Hilly area, various outreach and community oriented programs have been conducted by the college. The college has adequate infrastructure facilities to provide quality education to our students.

Location:

The college is located in rural and hilly area of Murbad Tehshil of Thane District in Maharashtra. All the students are from rural and poor families of the Tehshil.

Management: The College is run by Janseva Shikshan Mandal Murbad (JSM) which runs 14 educational institutes including the college. It has done a commendable and remarkable work in the field of education to uplift the poor society of the area. Honorable Gotirambhau Pawar, the President of JSM, with other members is doing hard work to provide quality and need based /skill based education to the poor people of society.

Vision

Our Vision: To make the society strong through Higher education by combining efforts of the teachers, students and community---“Prajwalita Dnyanmaya Pradipa”.

Mission

Our Mission: To create healthy educational atmosphere to enable students to develop them as intellectual, responsible and ever-ready for personal growth

Green Audit Report 2017

-18 Introduction:- Green audit is assigned to with an intention to upgrade the environmental condition in and around the institute. The S.G. Arts, Science & G.P. Pawar Commerce College Shivle, herein appointed committee to serve the purpose. Observations The

Land:-The college possesses a land of around 5 acres which belongs to the trust, namely Janseva Shiklshan Mandal Murbad. The land is mainly having very light soil called 'Murum' and rocky at some places. The topography of the land is quite susceptible for erosion.

Building:- The college has several buildings namely, Main building, Commerce building, Library, Ladies hostel, Gymkhana, NSS office, Staff quarters etc.

Landscape:- Apart from buildings the college has developed lush-green lawns measuring 6200 sq.ft. and a carpet has near the central library.

Staff & student strength:- The college has 45 teaching and 38 Non-teaching staff. In 2019-20 there were 1933 students learning in various classes and faculties.

Flora and Fauna:- The college has planted several plants in the vicinity so as to improve the environment and to provide fresh atmosphere. The list of plants is attached in the annexure. Due to pleasant atmosphere considerable fauna is also observed and its list is also attached as annexure.

Water Audit:- As college comprises 2016 staff and students and several number of plants, great quantity of water is required daily. Approximately 30000 litres of water is necessary to suffice the needs. The main source of water is borewell. The water quality is satisfactory. The water was tested by the department of Chemistry of the college. The test report is attached as annexure. Waste disposal Audit:-As there is great consumption of water per day, waste water is developed at toilets and laboratories. The toilet waste water (sewage) is normally taken to the drainage lines and septic tanks. Laboratory waste water is diluted first and then released in drainages. E-waste is disposed by handing it over to concerned people. Energy Audit:-The entire area buildings are provided with electrical energy. In the academic year of 2017-18 total consumption of electricity was much higher. The building consists of 87% traditional lighting devices like tube lights & bulbs etc. Only 13% lighting devices are in LED form. The college central library has a central dome covered with fibre glass and thereby great quantity of sun-light is available through it. This saves lot of electrical energy.

Environment Quality Audit: - As the college is situated in natural pollution free area, the environment is basically pollution free and cool. The department of physics has carried out sound audit of the area and its report is attached herewith.

Health Audit: - The college has great number of plants including large trees so as to keep the organizers regular health camps & vaccination programs. Also the college has made MOU with Dr. Pankaj Patil and Dr.Charushila Dalvi to visit the college regularly and to deal with the health problems of the students.

Renewable Energy Audit - The College unfortunately does not have any renewable energy plant like solar energy, yet.

Water Analysis Report

Place: Shivle College Campus

Water Source: Borewell Water

Season: Summer Season (15th March 2021 – 30th March 2021)

Water amount Collected: 1 litre

Methods Used:

1. Colour : Whatmann filter paper testing
2. Hardness of water : Titrimetric Analysis using complexometric method
3. Conductance : Using digital conductometer
4. pH : digital pHmeter
5. Alkalinity : Titrimetric Analysis Using Acid–Base Neutralization titration Method
6. Salinity : Titrimetric Analysis using Mohr's Method
7. Turbidity : Turbidometric Precipitation Titration method
8. Total Dissolved Solid (TDS) : Whatmann filter paper testing
9. Total Suspended Solid (TSS) : Whatmann filter paper testing

Sr No.	Properties	Shivle College Water sample values	WHO values	IS : 10500 values
1	Colour	colourless	unobjectionable	unobjectionable
2	Hardness of water	130 ppm	300	300
3	Conductance	248 μ S	NO guidelines	200 μ S - 800 μ S
4	pH	7.8	6.2 to 8.2	6.5 to 8.5
5	Alkalinity	35.4ppm	200 ppm	200 ppm
6	Salinity of water sample	0.586 ppm	5mg/dm ³	250 ppm
7	Turbidity	0.566 ppm	1.5 NTU	200 ppm
8	TDS	0.23 mg/dm ³	300mg/dm ³	500 mg/dm ³
9	TSS	0.021 mg/dm ³	300mg/dm ³	500 mg/dm ³

Conclusion :

The drinking water Parameters have been checked and tested by using standard procedure Methods in Certified Chemistry Lab of Department of Chemistry, and Results are found to be excellent as on the basis of remarks given by IS : 10500 values. The sampled water is found to be potable one.

Analyzed By :

1. Prof. Priya Pankaj Bhagat (M.Sc. Chemistry, NET)
2. Prof. Deepak Ambadas Tupare (M.Sc. Chemistry, NET)

Noise Analysis Report

- ❖ **Aim:** The aim of this study is to determine the noise level inside the S. G. Arts, Science. and G. P. Commerce. College, Shivle, campus area.
- ❖ **Settings and Design:** Different locations were selected for measuring noise levels during this study; like inside college campus area for different location, canteen and bus stop from the distance near about 10m to 15m.
- ❖ **Materials and Methods:** Levels of the college campus noise pollution were measured at two different dates like 16- Dec-2019 and 17-Jan-2020 of the academic year 2019-2020; during study days, final exams and the recess periods.
- ❖ **Statistical Analysis Used:** Results of this research were statistically and graphically analyzed by Environment (Protection) Rules, 1986.
- ❖ **Results:**

Average noise level between different two days: 62db. (approx.)

Levels of noise of the college campus were slightly higher than standard sound limit at all periods. Inside the campus, levels of noise were the highest at locations that are characterized by the high traffic movement. In addition, the highest level of noise was recorded during the studying period, while the lowest level was obtained during the recession period.

- ❖ **Conclusion:** Both levels of noise of two different dates of the college campus were nearly the same or very slightly higher than their guideline values. These high noise levels require effective environmental control strategies and increasing awareness between all college staff members and students in campus.

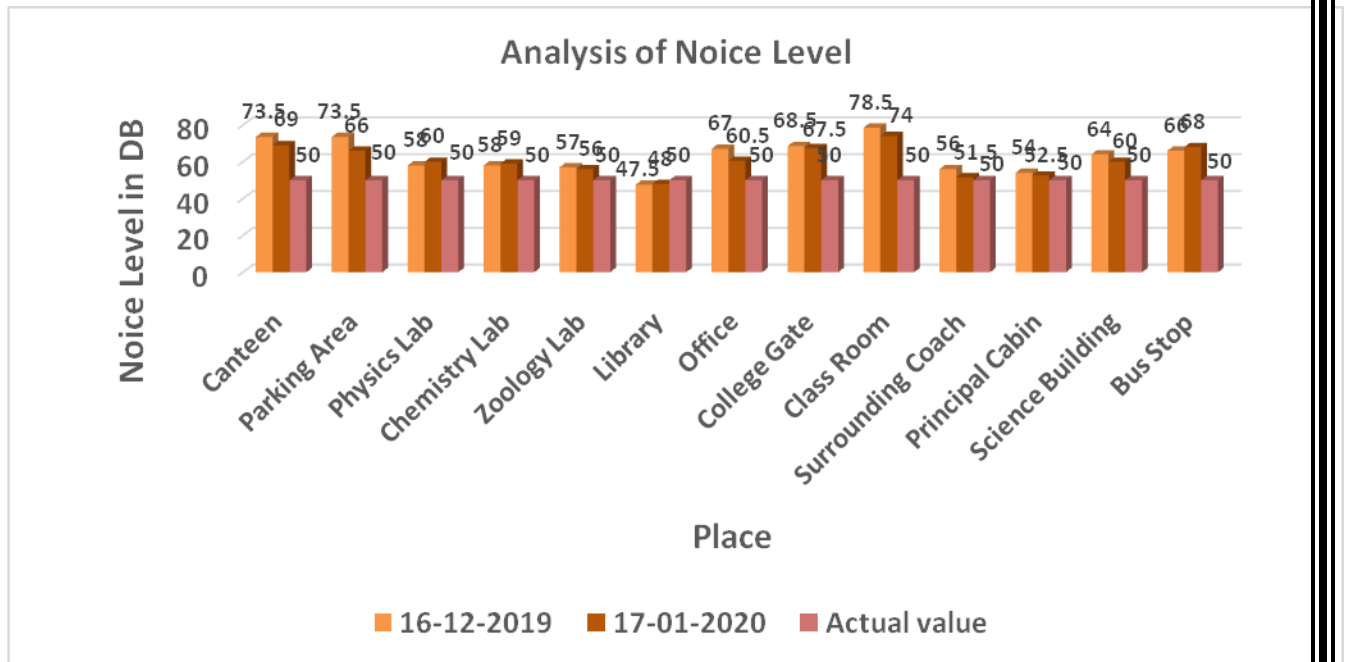
➤ Observation table to measured sound level in SantarambhauGholap Art's, Science andGotirambhauPawar Commerce College, Shivle, Tal- Murbad.

Date			16-Dec-19			17-Jan-20			Actual Value	
Sr.No	Place	Time	Maximum Value db	Minimum Value db	Mean value db	Maximum Value db	Minimum Value db	Mean value db		
1	Canteen	09:15	77	70	73.5	73	65	69	50	
2	Parking Area	09:30	77	70	73.5	68	64	66	85	
3	Physics Lab	10:00	60	56	58	62	58	60	50	
4	Chemistry Lab	10:30	62	54	58	62	56	59	50	
5	Zoology Lab	10:45	58	56	57	60	52	56	50	
6	Library	11:15	50	45	47.5	54	42	48	50	
7	Office	11:30	70	64	67	64	57	60.5	50	
8	College Gate	12:15	72	65	68.5	74	61	67.5	50	
9	Class Room	12:50	82	75	78.5	80	68	74	80	
10	Surrounding Coach	13:05	58	54	56	57	46	51.5	50	
11	Principal Cabin	13:30	55	53	54	58	47	52.5	50	
12	Science Building	12:00	68	60	64	64	56	60	50	
13	Bus Stop	14:50	76	56	66	76	60	68	85	
			Mean Value			63.2	Mean Value		60.9	

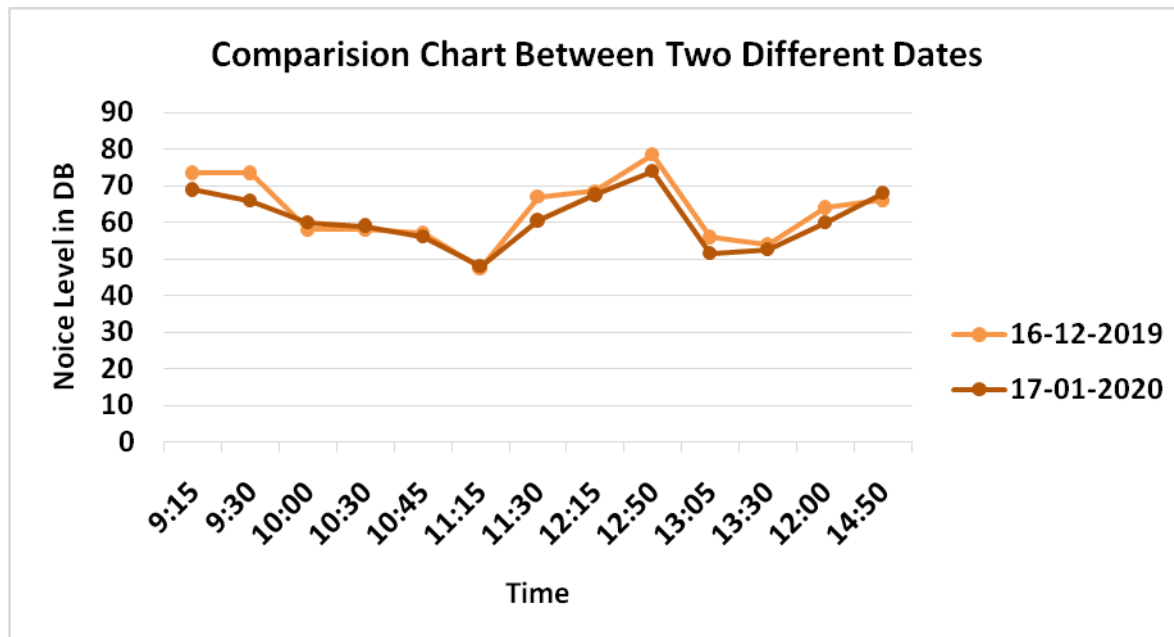
➤ Standard values of Noise Level According to their Area by Environment(Protection) Rules,1986 as given below

Code	Area	Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

➤ Comparison between Observed Value and Measured Value in db Unit



➤ Graph for Place versus Observed Sound Level



Suggestions

- 1) More plantation may be done to cover the entire open land and to save soil erosion.
- 2) The college should have a rain water harvesting system to have water for plants and general cleaning
- 3) The college should switch over to LED lamps, as early as possible, to save electrical energy
- 4) The college should have solar system to replace the traditional electrical energy
- 5) The college should arrange scientific waste disposal system, particularly for hazardous chemicals from laboratories
- 6) Percolation pits may be dug to drain out waste water.
- 7) Composting pits should be dug for decomposable natural waste.
- 8) Grass mulching should be used to trees to reduce their water demand.
- 9) Environmental education programs should be arranged both for the students and the society

Place: - Shivle