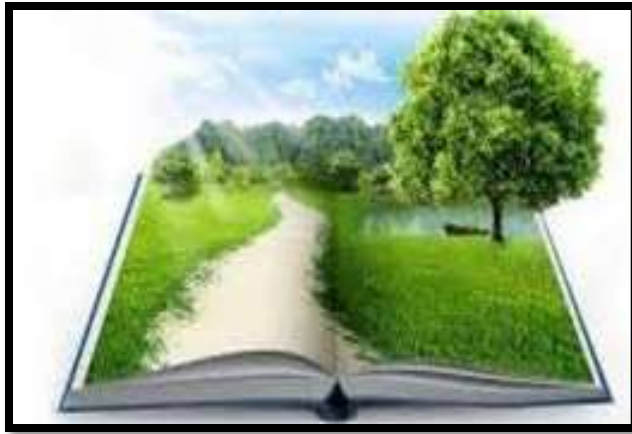


**Maratha Vidya PrasarakSamaj's  
Commerce, Management & Computer  
Science (C. M. C. S.) College  
Nashik  
(2017-18)**



**Prepared By**

***Ashwamedh*Engineers& Consultants**

**Survey No.102, Plot No.26, WadalaPathardi Road, Indira Nagar, Nashik-422009, Maharashtra, India**

(Near Guru Gobind Singh School, Near PandavNagari, / SaiMandirChowk / Samrat Sweet Turning) [.sales@ashwamedh.net](mailto:sales@ashwamedh.net) T/F:+91-253-2392225

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## **Executive Summary**

The rapid urbanization and economic development at local, regional and global level has led to several environmental and ecological crises. On this background, it becomes essential to adopt the system of the Green Campus for the institute which will lead for sustainable development.

Maratha Vidya Prasarak Samaj's Commerce, Management & Computer Science (C. M. C. S.) College Nashik is deeply concerned and unconditionally believes that there is an urgent need to address these fundamental problems and reverse the trends. Being a premier institution of higher learning, the college has initiated 'The Green Campus' program which actively promotes the various projects for the environment protection and sustainability.

The purpose of the audit is to ensure that the practices followed in the campus are in accordance with the Green Policy adopted by the institution. The methodology include: preparation and filling up of questionnaire, physical inspection of the campus, observation and review of the documentation, interviewing key persons, data analysis, measurements and recommendations. It works on the several facets of 'Green Campus' including Water Conservation, Tree Plantation, Waste

Management, Paperless Work, Alternative Energy and Mapping of Biodiversity. With this in mind, the specific objectives of the audit are to evaluate the adequacy of the management control framework of environment sustainability as well as the degree to which the departments are in compliance with the applicable regulations policies and standards. It can make a tremendous impact on students' health and learning college operational costs and the environment. The criteria, methods and recommendations used in the audit are based on the identified risks.

## **1. Introduction**

Green Audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of environmental diversity. The 'Green Audit' aims to analyze environmental practices within and outside the college campus, which will have an impact on the eco-friendly ambience. It was initiated with the motive of inspecting the work conducted within the organizations whose exercises can cause risk to the health of inhabitants and the environment. Through Green Audit, one gets a direction as how to improve the condition of environment and there are various factors that have determined the growth by carrying out Green Audit.

Green audit is assigned to the criteria 7 of NAAC, National Assessment and Accreditation Council which is a self-governing organization of India and it declares the institutions as Grade A, B or C according to the scores assigned during the accreditation.

## **2. About the College**

Nashik District Maratha Vidya Prasarak Samaj is 103 years old renowned education institute in the state of Maharashtra, established in 1914. It was one of the greatest milestones in the pre-independence history of Nashik. The well being in general and education in particular were considered the sole of human being.

The great visionaries of NDMVP Samaj rightly laid the "Well being & happiness of masses" as the motto for the samaj. The founders of the samaj were inspired and driven by the great work of Mahatma Jyotiba Phule and Rajarhi Shahu Chhatrapati of Kolhapur.

The pioneers, devoted and dedicated team of NDMVP Samaj includes the names of great social workers and educationalists as – Karmaveer Raosaheb Thorat, BahusahebHiray, AnnasahebMurkute, Ganpatdada More, Kirtiwanrao Nimbalkar, D.R.Bhosale, Vithoba Patil Jadhav.

N.D.M.V.P. Samaj manages more than 325 educational & professional institutions. The spectrum of educational institution encompasses Primary Schools, Secondary Schools, Graduate & Postgraduate Colleges, Professional & Vocational Colleges.

The students & professionals produced by the institutions of NDMVP Samaj form the real backbone of modern society.

Commerce, Management & Computer Science (CMCS) College was started by Maratha Vidya Prasarak (MVP) Samaj in September 2006. Since June 2009 the College has started functioning on its own campus. Inauguration of the new majestic and well planned college building with ground plus five floors was done on Saturday 7th April 2012 at the hands of Hon. Sharad Pawar, Minister of Agriculture, Government of India. All the 12 classrooms, 2 ICT rooms, library, study room, laboratories and the administrative section are well furnished and fully equipped. Acoustically well-equipped AC auditorium can accommodate around 375 students. Four Computer Laboratories based on Microsoft Windows as well as Linux have connected using wired and wireless LAN. The CMCS campus is Wi-Fi enabled with Internet access for all the students. College is recognized by Government of Maharashtra and affiliated to University of PUNE. (College ID: PU/NS/B.C.A./94/2006)

Presently the college is running the following University of Pune approved degree and post graduate programs:

- ❖ Bachelor of Business Administrations (Computer Application) [B. B. A. (Computer Application)]
- ❖ Bachelor of Business Administrations [B. B. A.]
- ❖ Bachelor of Science (Computer Science) [B. Sc. (Comp. Sci.)]
- ❖ Bachelor of Commerce [B.Com.]
- ❖ Masters of Science (Computer Science) [M. Sc. (Comp. Sci.)]

### **VISION:**

To aspire to be an institute to contribute in the development of our country through excellence in higher education; providing participatory teaching, learning and innovative ideas. To prepare the student socially responsible, globally competent and excellent human being and resource.

### **❖ MISSION:**

- ❖ To educate students in the field of computer, communication, managerial and entrepreneurial skills.
- ❖ To empower women student by providing opportunities of higher education and make them self-independent.
- ❖ To develop physically, emotionally, intellectually and ethically competent human resources.
- ❖ To provide education for sustainable development of society by acquiring the knowledge, skill, attitudes and values necessary to shape future.
- ❖ To create globally competent manpower for meeting the current and future demand of industry and society.
- ❖ Committed to serve for the well-being and happiness of the common masses.

### **Objective:**

- ❖ To impart quality higher education.
- ❖ To enhance the employability of students by arranging training programs in communication skills, personality development and arranging campus interviews.
- ❖ To provide good academic facilities (Laboratories, Library, Internet) on continuous basis.
- ❖ To conduct examination in fair manner.
- ❖ To maintain discipline in college campus.
- ❖ To inculcate environmental awareness, save and conserve nature.
- ❖ To provide value addition through co-curricular and extra-curricular activities.
- ❖ To ensure secure learning environment for girl students.

### **Core Values:**

- ❖ Quest for excellence
- ❖ Social and environment consciousness.
- ❖ Knowledge and skills for survival.
- ❖ Enhancing scientific temperament and technical skills.
- ❖ Equality, honesty and respect

### **Institutional Values:**

- ❖ Social and Environment Consciousness.
- ❖ Knowledge and Skills for survival.

## **3. Objectives of the Study**

The main objective of the green audit is to promote the Environment Management and Conservation in the College Campus. The purpose of the audit is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards. Green Audit mainly emphasizes the following key areas-

### **1. Saving power :**

This includes energy audit where the auditors identifies the ways to save electric, natural gas, and other forms of power that are inefficient or being wasted in the organization. This is done by recommending more efficient electric heating & cooling etc.

### **2. Saving water:**

This involves educating the employees on the ways to save, recycle & reuse precious water resources both inside & outside the premises. The basic emphasis is to reduce water consumption.

### **3. Greening the work place:**

This is achieved by designing a greener office space. This involves use of alternate power sources like solar power, reducing biological contaminants like pesticides, implementing green landscaping option & rain water harvesting.

#### **4. Driving Green:**

Vehicle driving is one of the largest contributors to both energy use & environmental pollution. The employees should be trained to make more fuel efficient driving choices, optimize fuel consumption & consider alternate fuel vehicles. Possibilities to use public transport or group travelling have also to be explored for reduced gas emissions. Periodic emission tests need to be conducted to check for efficient fuel consumption.

#### **4. Methodology**

In order to perform green audit, the methodology included different tools such as preparation of questionnaire, physical inspection of the campus, observation and review of the documentation, interviewing key persons and data analysis, measurements and recommendations. The study covered the following areas to summarize the present status of environment management in the campus:

- ❖ Water management
- ❖ Energy conservation
- ❖ Waste management
- ❖ E-waste management
- ❖ Green area management
- ❖ Environment

#### **5. Observations and Recommendations**

##### **5.1. Water Use**

This indicator addresses water consumption, water sources, irrigation, storm water, appliances and fixtures. A water audit is an on-site survey and assessment to determine the water use and hence improving the efficiency of its use.

##### **Observations**

The study observed that major sources of water is Municipal Corporation Water. Water is used for drinking purpose from RO system. Water purifying system purifies water 500 liter per hour. Water is used for toilets, gardening purpose. During the



survey, no loss of water is observed, neither by any leakages nor by over flow of water from overhead tanks. The data collected from all the departments is examined and verified. On an average the total use of water in the college is 7300 L/day, which include 4,000 L/day for domestic purposes, 3,300 L/day for gardening.

Canteen water used for drinking purpose has been analyzed as per IS 10500:2005 drinking water specification and observed it was potable.

### **Test Report**

<b>Sr. No.</b>	<b>Parameters</b>	<b>Results</b>	<b>Acceptable Limit as per IS 10500: 2012</b>	<b>Units</b>
1.	Color	1	Max. 5	Hazen Units
2.	Odour	Agreeable	Agreeable	-
3.	pH	7.19	6.5-8.5	-
4.	Turbidity	0.8	Max. 1	N.T.U.
5.	Total Dissolved Solids	148	Max. 500	mg/L
6.	Calcium (as Ca)	12	Max. 75	mg/L
7.	Chloride (as Cl)	16	Max. 250	mg/L
8.	Fluoride (as F)	<0.05	Max. 1	mg/L
9.	Iron (as Fe)	<0.06	Max. 0.3	mg/L
10.	Magnesium (as Mg)	8.0	Max. 30	mg/L
11.	Nitrate (as NO <sub>3</sub> )	8.02	Max. 45	mg/L
12.	Sulphate (as SO <sub>4</sub> )	23.13	Max. 200	mg/L
13.	Alkalinity (as CaCO <sub>3</sub> )	48	Max. 200	mg/L
14.	Total Hardness (as CaCO <sub>3</sub> )	63	Max. 200	mg/L
15.	<i>E.coli</i>	Absent	Not Detectable	/100 ml
16.	Total Coliforms	Absent	Not Detectable	/100 ml

### **Recommendations**

- ❖ In campus small scale/medium scale/ large scale reuse and recycle of water system is necessary.
- ❖ Need of monitoring, controlling overflow is essential and periodically supervision drills should be arranged. In campus small scale/medium scale/ large scale reuse and recycle of water system is necessary.
- ❖ Minimize wastage of water and use of electricity during water filtration process, if used, such as RO filtration process and ensure that the

equipments used for such usage, are regularly serviced and the wastage of water is not below the industry average for such equipment's used in similar capacity.

- ❖ Year wise water consumption report.
- ❖ Gardens should be watered by using drip/sprinkler irrigation system to minimise water use.
- ❖ The college should take actions to strengthen rain water harvesting. Rain water harvesting for separate buildings are lacking. Measurement of quantity of water obtained from the rain water harvesting should be done.

## **5.2 Energy Use and Conservation**

This indicator addresses energy consumption, energy sources, energy monitoring, lighting, appliance, natural gas and vehicles. Energy use is clearly an important aspect of campus sustainability and thus requires no explanation for its inclusion in the assessment.

### **Observations**

Energy source utilized by all the departments and common facility center is electricity only. Total energy consumption is determined as 79769 KWH/Year by major energy consuming equipment.

All the departments and common facility centers are equipped with LED lamps. Approximately 44 LED Tubes. Besides this, recently 15.36 KW photovoltaic cells are also installed in the campus as an alternate renewable source of energy. Equipment like Computers are used with power saving mode. Also, campus administration runs switch-off drill on regular basis. In all departments electricity was shut down after occupancy time as one of the practices for energy conservation. For paperless environment and energy efficient use ERP system implemented in the campus.

### **Photovoltaic Cell**



## Recommendations

- ❖ Monitor and understand the importance of different sources of college energy consumption, and set appropriate and measurable targets for a reduction certain areas of consumption and/or in the overall consumption of energy.
- ❖ Ensures that all electronic and electrical equipments such as computers, are switched off when not in use.
- ❖ Centralized controls of lighting, auditorium etc. to avoid any misuse of electricity
- ❖ Installation of LED lamps instead of CFL.
- ❖ Cleaning of tube-lights/bulbs to be done periodically, to remove dust over it.
- ❖ Shift to paperless regime wherever not required, example attendance muster replaced by biometrics, DG logbook replaced by computerised logbook, daily reports converted from paper to paper less, HOD meetings converted to paperless formats, and all such examples.
- ❖ Appreciate that it is preferable to purchase electricity from a company that invests in new sources of renewable and carbon-neutral electricity.

- ❖ If there are equipments running on standby mode, reduce the energy consumption on standby mode or minimize the running of equipment's on standby mode
- ❖ Gives preference to the most energy efficient and environmentally sound appliances available, this includes only using energy-saving light bulbs

### **5.3 Waste Generation**

This indicator addresses waste production and disposal of different wastes like paper, food, plastic, biodegradable, construction, glass, dust etc. and recycling. Furthermore, solid waste often includes wasted material resources that could otherwise be channeled into better service through recycling, repair and reuse. Solid waste generation and management is a burning issue. Unscientific handling of solid waste can create threats to everyone. The survey focused on volume, type and current management practice of solid waste generated in the campus. The different solid wastes collected as mentioned above.

### **Observations**

The total solid waste collected in the campus is 20 kg/day. Waste generated from tree droppings is a major solid waste in the campus. The waste is segregated at source by providing separate dustbins for Bio-degradable and Non Bio-degradable waste. Single sided used papers reused for writing and printing in all departments. Important and confidential reports/ papers are sent for recycling after completion of their preservation period to authorized raddi center. The institute has no vermiculture composting plant. The main purpose of this is to reduce disposable waste in the college campus

## **Recommendations**

- ❖ Reduce the absolute amount of waste that comes from college staff offices.
- ❖ Make full use of all recycling facilities provided by Nagar panchayat and private suppliers, including glass, cans, white coloured and brown paper, plastic bottles, batteries, print cartridges, cardboard and furniture.
- ❖ Provide sufficient, accessible and well-publicized collection points for recyclable waste with responsibility for recycling clearly allocated.
- ❖ Single sided papers to be used for writing and photocopy
- ❖ Important and confidential papers after their validity to be sent for pulping.
- ❖ Vermicomposting should be adopted on at least 250 sq. ft. of land.

## **5.4 E-Waste Generation**

E-waste can be described as consumer and business electronic equipment that is near or at the end of its useful life. This makes up about 5% of all municipal solid waste worldwide but is much more hazardous than other waste because electronic Components contain cadmium, lead, mercury and Polychlorinated biphenyls (PCBs) that can damage human health and the environment.

## **Observations**

E-waste generated in the campus is very less in quantity. The college has total of 106 computers and 02 printers in working condition. The cartridges of laser printers are refilled outside the college campus. Administration conducts the awareness programmers regarding E-waste Management with the help of various departments. The E- waste and defective item from computer laboratory is being stored properly. The institution has given this devices to Electronic lab for practical purpose. The institution has decided to contact approved E-waste management and disposal facility unit in order to dispose E-waste in scientific manner.

The audit team noted that the technical life time / service life of most of the electronic equipments is yet to be over, thus presently, there is limited generation of waste. However, college needs to device long term and regularized policy of the e -waste disposal.

## Recommendations

- ❖ The E-waste generally includes the tube lights, CFL, LED are stored into the scrap yard of college and stored. This waste material is yet to be disposed. The college has taken the appropriate action to disposal.
- ❖ Use reusable resources and containers and avoid unnecessary packaging where possible.
- ❖ Recycle or safely dispose of white goods, computers and electrical appliances
- ❖ Always purchase recycled resources where these are both suitable and available.

## 5.5 Green Area

This includes the plants, greenery and sustainability of the campus to ensure that the buildings conform to green standards. This also helps in ensuring that the Environmental Policy is enacted, enforced and reviewed using various environmental awareness programmes.

### Green Area of College Campus









## **Observations**

To create- green cover, eco-friendly atmosphere, pure oxygen at the college campus, plantation program is organized every year with involving all students, principal and all departments' faculty members.

Campus is located in the vicinity of approximately 34 types (species) of trees. Total 194 trees are available in the college campus. Various tree plantation programs are being organized during the month of July and August at college campus. This program helps in encouraging eco-friendly environment which provides pure oxygen within the institute and awareness among villagers. The plantation program includes plantation of various type of indigenous species of ornamental and medicinal as well as wild plant species. Under the biodiversity and ecological survey. Rain water harvesting plant is well maintained & that water is used for domestic as well as gardening purpose. College also maintained botanical garden in premises.



### **Rain Water Harvesting Storage Tank**



#### **Plantation of diversified species:**

To create-green cover, eco-friendly atmosphere, pure oxygen at the college campus, plantation program is organized every year with involving all students, principal, and all departments faculty members. In this session Van Mahotsav program was organized and about 100 ornamental, avenue, medicinal plant with rare and exotic beautiful trees was planted in botanical garden and other parts of college campus. To keep the greeneries in the campus, we regularly maintain the gardens which are looked after by staff under the guidance of garden committee members. Moreover, every year, we try to plant new trees.

### List of Plants

Sr. No.	Local Name of Plant	English Name of Plant	Scientific Name of Plant	Total No.
1.	Kaduneemb	Neem	<u>Azadirachta Indica</u>	<b>08</b>
2.	chinch	Tamarind	<u>Tamarindus indica</u>	<b>04</b>
3.	Palm tree	Palm Tree(Areca Palm)	<u>Chrysalidocarepus lutescens</u>	<b>14</b>
4.	Palm tree	Palm Tree (Bottle Palm)	<u>Chyophorbe lagenicaulis</u>	<b>16</b>
5.	Palm tree	Palm Tree ( Fan Palm)	<u>Cordyline fruticosu</u>	<b>08</b>
6.	Jambhul	Jamun(Black Beery)	<u>Syzygium cumini</u>	<b>04</b>
7.	Supari	Betel	<u>Areca catecha</u>	<b>10</b>
8.	Chafa	White Champa	<u>PlumieriaPudica/scops</u>	<b>10</b>
9.	Chafa	Pink Champa	<u>Plumieria rubra</u>	<b>04</b>
10	Silver Oak	Silver Oak	<u>Grevillea robusta</u>	<b>15</b>
11	Peru	Guava	<u>Psidium quajava</u>	<b>04</b>
12	Jaswand	Hibiscus	<u>Roso sinensis</u>	<b>10</b>
13	Chandan	Sandal	<u>Santalum album</u>	<b>05</b>
14	Ashoka	Asoca	<u>Polyalthia longifolia</u>	<b>10</b>
15	Umbar	Umbar/Cluster fig.	<u>Ficus racemosa</u>	<b>01</b>
16	Cherry	Bird Cherry	<u>Muntingia calabora</u>	<b>03</b>
17	Vad	Baneyan tree	<u>Ficus benghalensis</u>	<b>01</b>
18	Sgo palm tree	Cycas	<u>Revoluta</u>	<b>02</b>

19	Bakul	Bakul	<u>Mimusops elengi</u>	<b>01</b>
20	Badam	Alumond	<u>Prunus dulas</u>	<b>03</b>
21	Pimpal	Pepal tree	<u>Ficus religiosa</u>	<b>01</b>
22	Awla	Amla Indian goseberry	<u>Phyllanthus emblica</u>	<b>01</b>
23	X-Max tree	X-Max Tree	<u>Araucaria columnbari</u>	<b>02</b>
24	Rubeer	Rubber Plant	<u>Ficus elastica</u>	<b>01</b>
25	Bahava	Bahava	<u>Casia tistula</u>	<b>10</b>
26	Subabhul	River tamarind	<u>Leueocephalu leucaena</u>	<b>03</b>
27	Tulas	tulasi	<u>Ocimum santum</u>	<b>30</b>
28	Vilayti Chinch	Foreian Tamarnd	<u>Pithecellobium dulce</u>	<b>02</b>
29	Narial tree	Coconut tree	<u>Cocos nucifera</u>	<b>02</b>
30	sisum	seasam	<u>Dalbergia sissoo</u>	<b>03</b>
31	Sausage tree	Sausage tree	<u>Kigelia pinnata</u>	<b>03</b>
32	spathoclia	spathodia	<u>Spathodia Companwlata</u>	<b>01</b>
33	Golden duranta	Golden duranta	<u>Golden duranta</u>	<b>01</b>
34	Basant Rani	Tabubia Pink	<u>Tabubia rosa</u>	<b>01</b>

## Recommendations

- ❖ Establish a College Environmental Committee that will hold responsibility for the enactment, enforcement and review of the Environmental Policy. The Environmental Committee shall be the source of advice and guidance to staff and students on how to implement this Policy
- ❖ Review periodically the list of trees planted in the garden, allot numbers to the trees and keep records.
- ❖ Promote environmental awareness as a part of course work in various curricular areas, independent research projects and community service.
- ❖ Indoor plantation to inculcate interest in students, Bonsai can be planted in corridor to bond a relation with nature
- ❖ Create awareness of environmental sustainability and take actions to ensure environmental sustainability.
- ❖ Ensure that an audit is conducted annually and action is taken on the basis of audit report, recommendation and findings.
- ❖ Celebrate every year, 5<sup>th</sup> June as 'Environment Day' and plant trees on this day to make the campus more Green.

## 6. Environment

**6.1 Air Quality:** Air quality in the academic institute is very important for health of the students, faculty and staff of the institute. The air pollution sources in the college campus are wind storm, pollen grains, natural dust, vehicular emissions, generators, fires and laboratory fumes etc.

**Observation:** All results of Ambient Air monitoring near Main Gate & Near Canteen found within limits as per National Ambient Air Quality Standards, 2009.

### **Test Report( Near Main Gate)**

Meteorological Data / Environmental Conditions				
Average Wind Velocity: 3.0 km/h	Wind Direction: E-W	Relative Humidity (Max./Min.): 73/65 %	Temperature (Max./Min.): 26/18°C	Duration of Survey: 24 h
Parameter		Results	NAAQS 2009	Unit
Sulphur Dioxide (SO <sub>2</sub> )		<b>12</b>	80	µg/m <sup>3</sup>
Nitrogen Dioxide (NO <sub>2</sub> )		<b>18</b>	80	µg/m <sup>3</sup>
Particulate Matter (size less than 10 µm)		<b>56</b>	100	µg/m <sup>3</sup>
Particulate Matter (size less than 2.5µm)		<b>20</b>	60	µg/m <sup>3</sup>
Ozone (O <sub>3</sub> )		<b>&lt;19.6</b>	180	µg/m <sup>3</sup>
Lead (Pb)		<b>&lt;0.02</b>	1	µg/m <sup>3</sup>
Carbon Monoxide (CO)		<b>0.54</b>	4	mg/m <sup>3</sup>
Ammonia (NH <sub>3</sub> )		<b>&lt;4</b>	400	µg/m <sup>3</sup>
Benzene (C <sub>6</sub> H <sub>6</sub> )		<b>&lt;1</b>	5	µg/m <sup>3</sup>
Benzo (a) Pyrene (BaP)		<b>&lt;0.2</b>	1	ng/m <sup>3</sup>
Arsenic (As)		<b>&lt;0.3</b>	6	ng/m <sup>3</sup>
Nickel (Ni)		<b>&lt;3</b>	20	ng/m <sup>3</sup>

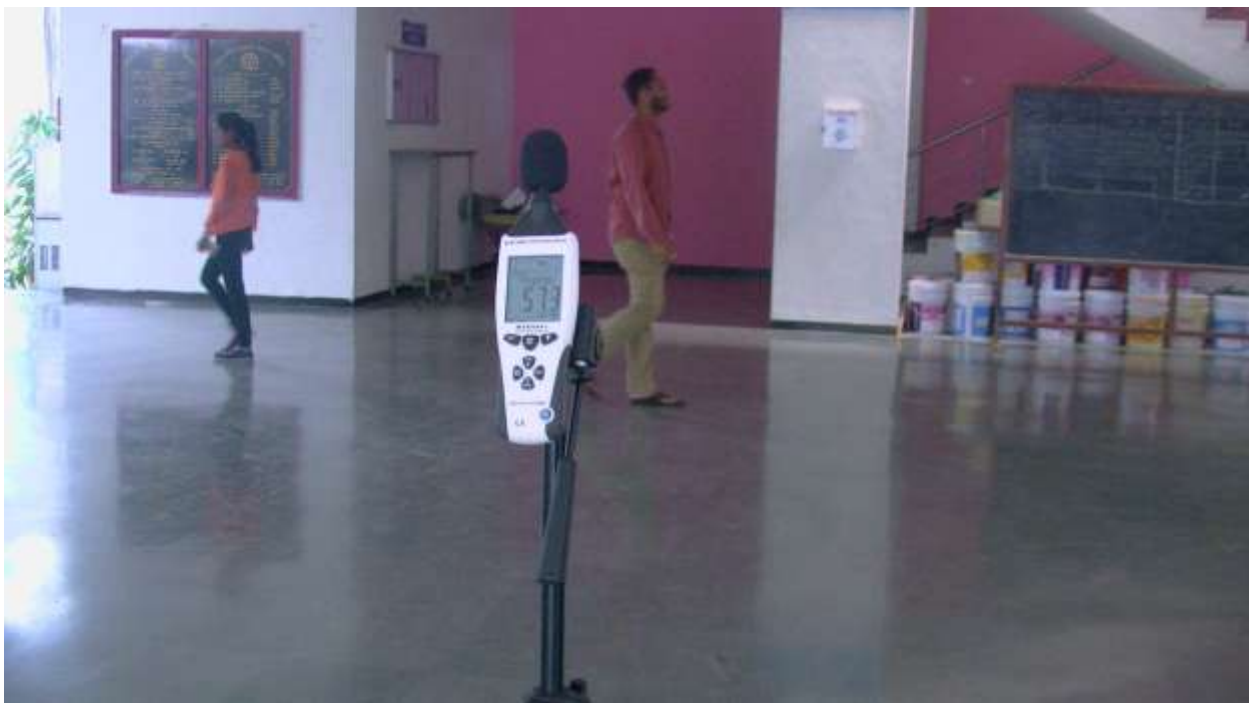
### **Test Report( Near Canteen)**

Meteorological Data / Environmental Conditions				
Average Wind Velocity: 3.0 km/h	Wind Direction: E-W	Relative Humidity (Max./Min.): 73/65 %	Temperature (Max./Min.): 26/18°C	Duration of Survey: 24 h
Parameter		Results	NAAQS 2009	Unit
Sulphur Dioxide (SO <sub>2</sub> )		<b>11</b>	80	µg/m <sup>3</sup>
Nitrogen Dioxide (NO <sub>2</sub> )		<b>17</b>	80	µg/m <sup>3</sup>
Particulate Matter (size less than 10 µm)		<b>54</b>	100	µg/m <sup>3</sup>
Particulate Matter (size less than 2.5µm)		<b>21</b>	60	µg/m <sup>3</sup>
Ozone (O <sub>3</sub> )		<b>&lt;19.6</b>	180	µg/m <sup>3</sup>
Lead (Pb)		<b>&lt;0.02</b>	1	µg/m <sup>3</sup>
Carbon Monoxide (CO)		<b>0.50</b>	4	mg/m <sup>3</sup>
Ammonia (NH <sub>3</sub> )		<b>&lt;4</b>	400	µg/m <sup>3</sup>
Benzene (C <sub>6</sub> H <sub>6</sub> )		<b>&lt;1</b>	5	µg/m <sup>3</sup>
Benzo (a) Pyrene (BaP)		<b>&lt;0.2</b>	1	ng/m <sup>3</sup>
Arsenic (As)		<b>&lt;0.3</b>	6	ng/m <sup>3</sup>
Nickel (Ni)		<b>&lt;3</b>	20	ng/m <sup>3</sup>

**6.2 Noise Environment:** Ambient noise levels measurements were carried out using Noise level meter. The Noise level survey was carried out at four locations, at outside, inside as well in classroom & first, second Floor. The major source of noise identified in the study area has been predominantly the vehicular movement and the transportation activities.

Location	Time	1	2	3	4	5	Noise Level Readings dB (A)
Outside	11.00	47	51	53	49	50	50.00
Inside( Porch)	11.30	51	50	50	48	49	49.06
In Classroom	12.00	52	52	51	51	50	51.02
Near Canteen	1.00	50	49	48	50	49	49.02
1 <sup>St</sup> Floor	2.00	48	49	48	48	49	48.04
2 <sup>nd</sup> Floor	3.00	47	47	48	48	48	47.06
<b>As per The Noise Pollution (Regulation &amp; Control) Rules, 2000 (Rules 3(1) and 4(1))</b>							
Area Code	Area Type	Limits in dB (A)weighted scale					
		Day (6 a.m. to 10 p.m.)			Night (10 p.m. to 6 a.m.)		
C	Residential	55			45		





**Observation:** All results of Noise level monitoring (Inside & Outside) found within limits as per the Noise Pollution (Regulation & Control) Rules, 2000

**6.3 Illumination Study:** The Illumination Study were carried out using Lux meter. The Illumination Study was carried out at two locations, in Classroom & Laboratory

Sr. No.	Location	Time	Lux Level Reading (LUX)				Average LUX
			1	2	3	4	
1.	Class room	12:00	238	239	240	240	239.02
2.	Laboratory	12:30	232	235	239	239	236.00
3.	1 <sup>St</sup> Floor	1.00	300	305	310	305	305.00
4.	2 <sup>nd</sup> Floor	1.30	320	330	321	318	322.02

**Observation:** All results Illumination Study (Classroom & Laboratory) found within limits as per Factory Act Rules-Section-35, Schedule B.

### 6.4 Ventilation Study:

Sr. No.	Location	Temp. (°C) (Max/Min)	Humidity (%) (Max/Min)	Local Air Velocities (m/s)					
				1	2	3	4	5	Average
1.	Class room	27/26	70/63	1.5	1.4	1.3	1.3	1.4	1.38
2.	Laboratory	26/24	78/70	1.4	1.2	1.3	1.4	1.5	1.36
3.	1 <sup>st</sup> Floor	25/26	77/69	1.5	1.0	1.2	1.6	1.2	1.28
4.	2 <sup>nd</sup> Floor	27/26	76/70	1.1	1.4	2.3	1.6	1.7	1.60
<b>Observation:</b> Air Velocity Should be at least 0.5 m/s to produce cooling effects									
<b>Remark:</b> Comfortable									

### Ventilation Study





## Photo Gallery













## **7. Acknowledgement**

We are grateful to the committee members of Commerce, Management & Computer Science (CMCS) College was started by Maratha Vidya Prasarak (MVP) Samaj, Nashik, to award this prestigious project and allowed us to enter the new era of Green Audit in the 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, a success.

Further we hope, this will boost the new generation to take care of Environment and propagate these views for the generations to come.