



Pankaj Shaikshanik and Samajik Sanstha's
PANKAJ KALA MAHAVIDYALAYA
Borole Nagar, Yawal Road Tal-Chopda, Dist - Jalgaon (Maharashtra)
Ph. No. : +02586-222514
Fax No.: +02586-223334
E-mail: pankajcollege@gmail.com
Website: www.pankajcollege.co.in



Pankaj Shaikshanik and Samajik Sanstha's
PANKAJ KALA MAHAVIDYALAYA,
(CHOPDA)



Environment (Green) & Energy Audit Report

(2021-22)

SRUSHTI EHS Consultant Services

(Registered under MSME, Gov. of India)

Reg. Office: Plot No. 1, 287/2, Dhake Nagar, Jalgaon-425001 (Maharashtra)

E-mail: info.srushtiehs@gmail.com

Contact No.: (+91) 86240 66531, (+91) 7385805247



A
Environment (Green) & Energy Audit
Report

of



PANKAJ SHAIKSHANIK AND SAMAJIK SANSTHA'S

PANKAJ KALA MAHAVIDYALAYA,
CHOPDA

Address: Borole Nagar, Yawal Road, Tal-Chopda, Dist - Jalgaon

For the year

2021 - 22

Submitted by,

SRUSHTI EHS Consultant Services

(Registered under MSME, Gov. of India)

Reg. Office: Plot No. 1, 287/2, Dhake Nagar, Jalgaon-425001 (Maharashtra)

E-mail: info.srushtiehs@gmail.com

Contact No.: (+91) 86240 66531, (+91) 7385805247

Pankaj Kala Mahavidyalaya, Tal.: Chopda, Dist.: Jalgaon, State: Maharashtra

1

Index

Sr. No.	Contents	Page Nos.
1	Certificate	03
2	Preamble	04
3	About the Pankaj Shaikshanik & Samajik Sanstha, Chopda	05
4	About Pankaj Kala Mahavidyalaya, Chopda	06
5	About SRUSHTI EHS Consultant Services	08
6	Audit Team	09
7	Executive Summary	10
8	Statement of Assurance	11
9	Methodology of Audit	11
10	Summary of Findings	11
11	Audit framework and detailed findings	12
12	Good Practices	25
13	Recommendations	26
14	Declaration	27



SRUSHTI

EHS Consultant Services



CERTIFICATE

Environment (Green) & Energy Audit

This is to certify that **Pankaj Shaikshanik and Samajik Sanstha's, Pankaj Kala Mahavidyalaya, Taluka: Chopda, Dist.: Jalgaon (Maharashtra)** has satisfactorily handled the **Environmental (Green) & Energy Audit** for the college covering all the details in accordance with the required norms for the year 2021 - 22.

The audit shall assist them to develop measures to save the environment and its individual units.


Dr. Kiran P. Pawar

(Director)
DIRECTOR
SRUSHTI EHS CONSULTANT
JALGAON



Corp. Office: Plot No. 1, Gat No. 287/2, Dhake Nagar, Jalgaon – 425001. Contact No.: (+91) 86240 66531 / 73858 05247
E Mail: info.srushtiehs@gmail.com

Preamble

The rapid environmental degradation at local, regional and global level is real, which is leading us to global “Environmental Poverty”. Stabilization of human population, adoption of environmentally sound and sustainable technologies, reforestation, and ecological restoration are crucial elements in creating an equitable and sustainable future for all humankind in harmony with nature. Thus, academic leaders must initiate and support mobilization of internal and external resources and knowledge so that their institute responds to environmental challenges.

Pankaj Kala Mahavidyalaya, Chopda is deeply concerned and unconditionally believes that there is an urgent need to address these fundamental problems and reserves the trends. We deeply subscribe to the fact that humans should be steward of Mother Nature and that we all have a profound responsibility to protect the earth’s resources in perpetuity. Being a premier institute of higher learning, Pankaj Kala Mahavidyalaya, Chopda has resolved to play a major role in the education, research, policy formation, and information exchange necessary for a sustained environmental campaign.

The current environmental audit represents the first stage in our efforts to build environmental sustainability on the campus. The audit was conducted by a Dr. Kiran P. Pawar (Director, SRUSHTI EHS Consultant Service, Jalgaon). SRUSHTI EHS Services have conduct this audit not only for the institution itself, but just as importantly to be role model institution for others to emulate and bring the environmental concerns and related mitigating measures to center stage of campus life in the village of Chopda, District – Jalgaon, the state of Maharashtra and extend locally, regionally and beyond.

The overall goals of this audit were:

- To introduce students to real concern of environment and its sustainability using the Pankaj Kala Mahavidyalaya, Chopda Campus as a study site.
- To analyze the pattern and extent of resources use on the campus.
- To make the college a more environmentally sustainable institution of higher learning
- To bring out a status report on environmental compliance.

About the Pankaj Shaikshanik & Samajik Sanstha, Chopda



Pankaj Shaikshanik & Samajik Sanstha is established in 1991 by Hon'ble Dadasaheb Dr. Suresh Borole. The Sanstha runs six branches of the education. They are Pankaj Primary School, Pankaj Secondary and Higher Secondary School, Pankaj English Medium School, Pankaj Balsanskar Kendra, Pankaj Global Public School and Pankaj Kala Mahavidyalaya, Chopda. Pankaj Kala Mahavidyalaya is established in the year 2000 to provide higher education to the students of rural and tribal area. It has seen many steps of development. We are starting and entering the steps of stability of achieving all round progress of the college. In 22 year of the life, the college achieved many milestones.

Education is the key to create a society, which is dynamic and productive, offering opportunity and fairness to all. It is one of the most essential indications of human development that the treasure that lies within all of us. In the coming times, knowledge and skills will be the keys to success. Successful institutions do not just happen. They are effective because all those who work in them have a commitment to make them succeed. Leadership, teamwork and sound management structures all go together to move such institutions forward at a time of rapid, frequent and seemingly never-ending changes.

Good Professors, using most effective methods and instrument with lofty practicable vision can transform this dream into reality. We must sure that they are aware of the latest trends used in education and to carry out this responsibility to the best of their ability.

At Pankaj Kala Mahavidyalaya, we are striving to give shapes to the above vision with the help of a dedicated team leaders, administrators, academic planners and competent Professors.

About Pankaj Kala Mahavidyalaya, Chopda

Pankaj Kala Mahavidyalaya is established in the year 2000 by Hon'ble Dadasaheb Dr. Suresh Borole. Our college has been rooted deeply in the spirit of Oneness of God and Universal Brotherhood. The college runs two UG programmes i.e. B.A and B.Sc. Therefore, the portal of college has always been kept open for all eligible students from all parts of the country and the world irrespective of caste, creed and religion. Cultural and spiritual unity is encouraged and developed in the day-to-day life within the campus.



The college maintains high standards of excellence in the academic sphere and in the infrastructure intended to implement the educational programme. Individual attention, well-fitted study hours with periodical examination prepare students for all the challenges of highly competitive educational field and for future life In addition to the university curriculum which is expected to provide a broad foundation of general education, a diversified programme of campus activities

such as social, cultural, religious are encouraged to develop the individual talent and personal relationship.

Students are trained and equipped so as to be able to transmit their talents to the betterment of society. Quality of the highest order in every sphere is always the aim of our Institution.



The College has set the vision -

“To inculcate values and life skills among rural and tribal youth empowering them for social commitment.”

Mission: “To bring the rural and tribal students in the mainstream and make them responsible citizens through the qualitative higher education.”

The College aspires "*To be a distinguished Institution which provides high quality education*". It wants to provide such courses which will be uniquely valued by industry and provide a firm basis for its students to build challenging careers in their professional life.

The College has set the objectives -

- To impart quality based higher education for the rural and tribal students.
- To make the students knowledgeable and responsible citizens.
- To provide platform to the students for overall development through sports, extension and co-curricular activities.
- To sustain the economically weaker students in higher education by creating helpful situation.
- To motivate the faculty for academic excellence and research.
- To undertake activities for empowering girl students.
- To undertake various activities for the creation of eco-friendly generations.
- To enable students to face the challenges of upcoming times.

About SRUSHTI EHS Consultant Services...



We, **SRUSHTI EHS Consulting Services**, are register under **Ministry of Micro, Small & Medium Enterprises (MSME), Govt. of India, ISO 9001:2015 certified firm.**



We are pioneer in Khandesh region for providing the Environmental and Engineering solutions, Consulting services in the field of Environment, Health & Safety. We are work only for Quality Assurance up to Client Satisfaction. We provide Sustainable Environmental solutions that meet specific client's need by employing/partnering with highly educated & experienced team members as they will assist with in-depth Research, Proactive Strategy, Operative Implementation, and long term support to fulfill all of our client's needs. We are maintain high standard of professional behavior & will comply with Regional, State & National regulations as well as guidelines.

We are experienced and expertise to conduct the “**Green Audit**” (**Environmental Audit**) of **Educational Institutes, Colleges, & Universities (as per NAAC Criterion VII)**. With this, we develop “**Green Practices**” at client's site. We are also arrange Environmental activities, Environmental Awareness Champaign on special occasions like World Ozone day, Environment Day, etc.

Apart from these, we are expert in following consulting services:

- **Green Audit/Environmental Audit**
- **Energy Audit**
- **Water Audit (Water Conservation & Management, Rain Water Harvesting)**
- **Gender Audit**
- **Fire Safety Audit** (As per NBC-2016, mandatory for Schools, Colleges, Hospitals, Commercial Shops/Complex, Residential & Commercial Buildings, Industries, etc.)
- **Air Quality Monitoring** (Ambient Air Quality & Workplace Air Quality)
- **Water Quality Monitoring** (Drinking water, Waste water, Ground water)
- **Solid Waste Management**
- **Noise Monitoring & Mapping**
- **Illumination Monitoring**
- **Carbon Foot Printing & Pollution Load Assessment**
- **Workplace Hygiene Monitoring**
- **Training & Hand on Demo** (Environmental equipment's, Fire Safety equipment's, Handling of Hazardous/Flammable Chemical, Gas Cylinder, Waste Material, etc.)
- **Training on Defensive Driving & Material Handling Equipment's (MHE)**

Audit Team

External Audit Member

Sr. No.	Name of Auditors	Designation
1	Dr. Kiran P. Pawar	Director, SRUSHTI EHS Consultant Service, Jalgaon

Internal Audit Team Members

Sr. No.	Name of Auditors	Designation
1	Dr. Rajendra R. Attarde	Principal, Pankaj Kala Mahavidyalaya, Chopda
2	Dr. Nandini P. Wagh	Assistant Professor, Dept. of Geography, Pankaj Kala Mahavidyalaya, Chopda
3	Mr. Ajay D. Patil	Assistant Professor, Dept. of Geography, Pankaj Kala Mahavidyalaya, Chopda
4	Mr. Sanjay S. Patil	Assistant Professor, Dept. of Defense & Strategic Studies, Pankaj Kala Mahavidyalaya, Chopda

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.

Pankaj Kala Mahavidyalaya, Chopda is intensely concerned and totally believes that there is an urgent need to address these basic problems and reverse the trends. Being a leading institution of higher learning, the college has initiated 'The Green Campus' program two years back that actively promote the various projects for the environment protection and sustainability. The purpose of the audit was to ensure that the practices followed in the campus are in accordance with the Green Policy adopted by the institution. With this in mind, the specific objectives of the audit were to evaluate the adequacy of the management control framework of Environment Sustainability as well as the degree to which the Departments comply with the applicable regulations, policies and standards.

Pankaj Kala Mahavidyalaya, Chopda and "Environment Committee" to perform various activities in the field of Green Campus. College is adopting zero waste discharge facility to manage the solid, liquid and e-waste.

Solid waste management: Around 10 kg/ day food and other waste is generated in the form of biodegradable solid waste from the canteen. It is daily dispatched to solid waste collection vehicle of Municipal Corporation. With regard to green waste generated on campus, which includes grass clippings, leaf litter, and other landscaping related refuse is being treated for composts.

Liquid waste management: The College has designed the outflow of the liquid waste in such a way as to prevent contamination in the campus. A properly constructed leakage proof sewer system is used for drainage.

e-waste management: All electronic gadgets are periodically repaired for efficient utilization and replaced under buy back scheme of supplier. Hence, minimum e-waste is generated in the campus. The remaining non-working computers, monitors and printers are discarded and scrapped on a systematic basis. If some parts are useful, in other systems they are kept aside for future use.

College is concern about water conservation, so the college authority save the runoff of rain water from the terrace of the buildings constructed in the college campus by Rain water harvesting structures. Rooftop of main building is used to collect the rainwater, which is used by department of chemistry for regular practical sessions. The runoff from the unpaved area is intercepted at certain locations by collection trenches. This runoff eventually facilitates groundwater recharge.

Colleges willingly accepted the green practices and strictly follow them. The college conducts campaign for students and faculty to understand the importance of environmental protection and be mindful about saving energy. The authority frequently appeals to the students and faculty to maintain the tradition of no vehicle day on Saturday. To understand the plant biodiversity of the campus, the college has been conducting census of tree, herbs and shrubs every five years since 2015. As per recent survey (2021), the college campus has rich plant biodiversity having 13 no's big tree species and 06 no's small plants species.

Statement of Assurance

The audit has been conducted in accordance with the standard procedures for the professional practice of internal auditing.

In our professional judgement, sufficient and appropriate audit procedures were completed and evidence gathered to support the accuracy of the conclusions reached and contained in this report. The conclusions are based on a comparison of the situations, as they existed at the time of the audit with the established area.

Methodology of Audit

In order to meet its objectives, this audit combined physical inspection with review of relevant documentation and interactions with departmental staff members and students.

- **Review of the Documentation:** For the purpose of this audit, Green audit framework was reviewed.
- **Interviews:** Interviews were conducted with the principal, departmental faculties and students.
- **Physical Inspection:** The audit team was conduct physical observation in the college campus to inspect the green practices.

Summary of Findings

The main findings of the audit show that, all the department staff and students are aware about the needed for environmental protection at a general level. It was also observed that a number of best practices such as maintaining the collection of waste separately, introduce rain water harvesting to new building structures, implementing plastic free campus etc. are followed in the college premises.

Audit framework and detailed findings

The following audit framework is used for conducting Green Audit in 2021-22. The frame work also lists the finding and also observations for every criterion.

Criteria- 1 (A): Waste Generation and Management

Objective: Maximize the waste recycled and minimize the quantity of non-recycled refuse.

Activity: Segregation of waste

Audit Observation: Waste Material is segregated as per category like Paper, Cardboard, Scrap Wood, Scrap Metal, Plastic scrap, glass, laboratory rags etc. Each waste is stored at departmental level and periodically sending to other purposes.

Type of waste	Audit Observation
Paper Waste	<ul style="list-style-type: none"> • One side rough paper is used for the printing of Notices, Time Tables etc. in each department. • Email and Mobile media communication is used for minimize the use of paper.
Scrap Material	<ul style="list-style-type: none"> • Plastic bottles, caps and other waste material are stored separately at departmental level and handover to Chopda Nagarparishad system as a scrap material
Glass Waste	<ul style="list-style-type: none"> • Empty chemical glass bottles are sending as a scrap material
Construction Waste	<ul style="list-style-type: none"> • Construction waste is use for land filling and landscaping within the college premises.
Electrical Waste	<ul style="list-style-type: none"> • Electrical waste like damaged electrical board, switches, cut wires are collect by electrician and replace this with new one and remaining wastage is sold as scrap. • Electrical waste related to computer, key boards, and mouse is collect by Computer science department for repairing and replaces the damaged one and remaining wastage is sold as scrap.

Criteria- 1 (B): Waste Generation and Management



Dustbins provided by Chopda Nagarparishad

Objective: Collection of waste.

Activity: Students as well as faculties of different department concern about waste collection. They do not throw the paper waste in the surrounding premises of college campus.

Audit Observation: Proper dustbins are provided to each department. In addition, plastic dustbins are install at various location in the college campus for collection of waste including administration office, college canteen, near garden etc. The stored waste is collected by Chopda Nagarparishad on every day.

Criteria- 1 (C): Waste Generation and Management

Objective: Plastic free Campus.

Activity: Motivate students about harm of plastic carry bags and items to convince them for no use of plastic in college premises.

Audit Observation: To aware all students as well as faculties of different department about “No Use of Plastic” in college campus, awareness boards are display at various location in the college campus.



Dustbins provided at campus



Bio Compost Tank at campus

Criteria- 1 (D): Waste Generation and Management

Objective: Management of Garden Waste.

Activity: Bio Composting & Installation of Vermicompost bins

Audit Observation: The collected wastes from garden, debris, leaf litter are collect dumped into vermicomposting bins to prepare the compost manure from the waste. Eisenia Foetida species of earthworm is used for the process.



Water Harvesting Area



Bore well Charging

Criteria- 2 (A): Water conservation

Objective: Water conservation.

Activity: Rain Water Harvesting

Audit Observation: Surface & roof water harvesting facility is provided to main building, & college campus ground. Due to this facility, bore well charged naturally and ground water table may increase.

Water Audit
(Academic Year 2021-22)

Water User Profile:

Water User Includes students, staff, visitors etc.

- a. Total number of water users : Approx. 1000
- b. Number of Employee: (31 + 11) 42
- c. Number of students : 425
- d. Number of visitors (daily Average) : 5 to 7 Approximately
- e. Average working days: 06 per week
- f. Office timings: 07:30 AM to 5:00 PM
- g. Rain water harvesting system availability : Yes
- h. Is rain water harvesting system working? Yes
- i. Daily water supply (liters) :

Assessment of water requirement

Sr. No.	Site	Total no. of Sources	Measurement of water Uses (Daily)				
			Rate of Discharge (Liter/min)	Average Duration of Use (min)	Average Quantity per use (liter)	No. of Uses (No.)	Total Daily Use (liter)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	Urinals/Bathroom	12	01	2.00	2.00	1000	2000
2.	Laboratory	06	05	05	25	100	2500
3.	Other (Drinking purpose with RO)	01	0.50	10	05	500	2500
TOTAL							7,000

Water Source & Storage:

Water from tube-well & Nagarparishad is directly pumped to the overhead tank

Criteria- 2 (B): Water conservation

Objective: Water Saving.

Activity: Water Audit

Audit Observation:

- The storage (overhead/underground tank) checked periodically for any leakage.
- The departmental Tap was checked periodically to prevent from any leakage.
- The leakage Tap replace by new one.

Criteria- 3 (A): Energy Consumption (Electrical Energy)

Objective: To save the electrical energy.

Activity: Planning of installation of “Solar Panels” at main building.

Audit Observation: College management having positive approach for the installation of Solar panels to save the electrical energy by using natural resource. The environmental committee is in planning phase for the same.



Lighting System at campus

Criteria- 3 (B): Energy Consumption (Electrical Energy)

Objective: To save the electrical energy.

Activity: Planning for Installation of LED light at administration.

Audit Observation: College management have in planning phase to install the LED lights at office area. It will conserve the electrical energy instead of tube lights.



Natural Lighting System at Chemistry & Botany Laboratory

Criteria- 3 (C): Energy Consumption (Electrical Energy)

Objective: To save the electrical energy.

Activity: Conservation of Electrical Energy at Departmental Level

Audit Observation:

- All laboratory having panel boards MCB switch to control the electrical supply within the department. The responsibility is given to non-teaching staff to “Switch-off” this switch without any ignorance to avoid the wastage of electrical energy.
- Maximum area of the college building having the sunlight throughout the day. It reduce the burden on electricity. Natural light (Sun light) is use at the practical labs, classroom, admin office, etc.
- Signboards like “Switch off the fans / light when not in use” are displayed in the departments.
- The water pumps are regularly maintained for minimum consumption of electricity.
- Solar panel system is in progress for entire college campus.
- Power saver lights, five star rating AC systems, LCD monitors, Branded fans are used to minimize the consumption.



Celebration of "No Vehicle Day" at College Campus



Parking Area at a day of "No Vehicle Day"

Criteria- 4: Energy Consumption (Transportation)

Objective: To save the fuel energy.

Activity: Motivate to students and faculties for reduce the use of vehicles in college campus.

Audit Observation: Every Saturdays of each month is declared as a "No vehicle day" by college authority to minimize the use of personal vehicles with in the college campus. To motivate and aware the students regarding minimum use of vehicles "Cycle Day" programme is arranged by college facility.

Criteria- 5: Energy Consumption (LPG Cylinder)

Objective: To save the LPG energy.

Activity: Conserve the LPG at departmental Level

Audit Observation:

- The gas burners, tubes are checked periodically to prevent the leakages of gas.
- Slow flame is adjusted during the practical work to minimize the excess use of gas.
- The practical is listed as per use and non use of LPG
- The empty cylinder are stored centrally and labeled as “EMPTY”
- The use and requirements of each department about LPG is monitored by controlling sheet and send to office.

Criteria- 6: Air Quality of the Campus

Objective: To assess the air quality of Campus.

Activity: The status of ambient air pollution will be monitored by using High Volume Sampler (Envirotech APM 460 BL Respirable Dust Sampler-RDS). SPM samples were collected with the help of high volume sampler on cup for 24 hr. with air flow rate of 1- 1.5 m³ min⁻¹. The difference in initial and final weights of the cup and filter paper was give the total quantity of SPM collected over the 24 hr period. Measurement of SO₂ (µg m⁻³) in the ambient air will be analyzed by the West- Gaeke method (1956) and NO₂ (µg m⁻³) gas by the modified method of Jacob and Hochheisher (1958).



RDS Sampler

Audit Observation:



Google Earth Image of College Campus with Monitoring Locations

Location Code	Locations	Parameters		
		SOx	NOx	SPM
S-1	Main Gate	28.76	66.14	204.4
S-2	Left Side of the college	27.81	66.11	178.9
S-3	Right Side of the college	28.32	65.87	184.3
S-4	Back side of the college	28.19	66.23	171.4
NAAQS Limits		80	80	200

Status of Ambient Air Quality within the premises of College

Criteria- 7: Monitoring and Assessment of Noise

Objective: To measure the ambient as well as workplace noise within the college campus.

Activity: To measure the Noise Quality by Noise Level Meter.

Audit Observation:

Noise has been recognized as ambient air pollutant. Standards in this regards are laid down under Environment (protection) rules, 1986.

Sr. No.	Category of Zone	Permissible Limits dB (A) Leq	
		Day Time	Night Time
1	Industrial Zone	75	70
2	Commercial Zone	65	55
3	Residential Zone	55	45
4	Silence Zone	50	40

Permissible Limit of Noise in Different Zones

- The permissible limits are count as per the zones. The noise monitoring generally carried out at day time and at night time.
- The day timing is considered as morning 06:00 am to night 10:00 pm and the night timing consider as night 10:00 pm to morning 06:00 am.
- As per the observations are recorded the day time and night time standards are used for the comparisons.
- Zone assortment may be carried out by Municipal Authority of that particular locations or city.
- Hospitals, **Educational Institutes**, Governmental offices, Session courts and Police Stations include in "Silent Zone"
- So "Silent Zones" standards (Day Time only) used for the comparisons.

Sr. No.	Locations	Noise Level in dB (A)		MPCB Limits
		Day Time	Night Time	Silent Zone
1	Main Entrance	77.5	NA	Day Time 50 dB Night Time 40dB
2	Central Point of Ground	73.8	NA	
3	Entrance Main Building	66.3	NA	
4	Principal's Cabin	52.1	NA	
5	Ladies Staff room	44.8	NA	
6	Library	42.2	NA	
7	Library (Reading Room)	40.7	NA	
8	Botany Laboratory	49.9	NA	
9	Physics Laboratory	51.2	NA	

10	Chemistry Laboratory	53.1	NA
11	Geography Laboratory	47.5	NA
12	Computer Science Laboratory	46.8	NA
13	Backside of college	55.3	NA
Classrooms			
14	Class Room No. 1	52.9	NA
15	Class Room No. 3	52.7	NA
16	Class Room No. 5	51.2	NA
17	Class Room No. 7	52.3	NA
18	Class Room No. 10	49.7	NA

Observation of Noise Level Monitoring (A)

Except Main gate, center point of ground and main entrance of building, all other observations are within the prescribed limits of Environment (protection) rules, 1986. Due to nearby areas the noise level high at Main gate and Centre point of ground.

Criteria- 7: Green Campus with Botanical Garden



Botanical Garden

Objective: To increase the Green Cover with different tree/plant species within the college campus in the form of botanical garden.

Activity: Develop & maintained the botanical garden. Tree plantation in and near by area of college.

Audit Observation: College & staff members are take the efforts to develop & maintained the botanical garden with in the college premises. Total 33 plant species with different family's are present in botanical garden. The details are shown in the table below. To understand the plant biodiversity of the campus, the college has been conducting census of tree, herbs and shrubs every five years. College staffs & students are very much aware about the importance of trees.

Sr. No.	Botanical Name	Family	Common Name
1.	<i>Dypsis lutescens</i>	<i>Arecaceae</i>	Areca palm
2.	<i>Phyllanthus emblica</i> Linn.	<i>Phyllanthaceae</i>	Amla
3.	<i>Hymenocallis littoralis</i>	<i>Amaryllidaceae</i>	Amar Lily, Spider Lily
4.	<i>Madhuca longifolia</i>	<i>Sapotaceae</i>	Mahu
5.	<i>Ficus elastic</i> Roxb.	<i>Moraceae</i>	Rubber plant
7.	<i>Aucuba japonica</i>	<i>Garryaceae</i>	Japanese laurel
8.	<i>Euphorbia milii</i> Des Moul.	<i>Euphorbiaceae</i>	Crown of thorne
9.	<i>Pterocarpus santalinus</i> L. F.	<i>Fabaceae</i>	Rakt Chandan
10.	<i>Murraya paniculata</i>	<i>Rutaceae</i>	Pandhari
11.	<i>Livistona chinensis</i> (Jacq.) R.Br. ex Mart.	<i>Arecaceae</i>	Fan Palm
12.	<i>Dracaena trifasciata</i>	<i>Asparagaceae,</i>	Snake Plant
13.	<i>Thuja occidentalis</i>	<i>Cupressaceae</i>	Vidya
14.	<i>Tradescantia spathacea</i>	<i>Commelinaceae</i>	Rheo plant
15.	<i>Santalum album</i> L.	<i>Santalaceae</i>	Safed Chandan
16.	<i>Ixora coccinea</i>	<i>Rubiaceae</i>	Coffe/Madder
17.	<i>Cycas</i> sp.	<i>Cycadaceae</i>	Sagopalm
18.	<i>Kalanchoe pinnata</i> (Lam.) Pers.	<i>Crassulaceae</i>	Panfuti
19.	<i>Aloe vera</i> (L.) Burm.f.	<i>Asphodelaceae</i>	Korfal
20.	<i>Colocasia</i> Sp.	<i>Araceae</i>	Aaluche Paan
21.	<i>Nerium oleander</i> L.	<i>Apocynaceae</i>	kanher
22.	<i>Hibiscus rosa-sinensis</i> L.	<i>Malvaceae</i>	Jasvand
23.	<i>Araucaria heterophylla</i>	<i>Araucariaceae</i>	Christmas tree
24.	<i>Ficus carica</i>	<i>Moraceae</i>	Anjeer
25.	<i>Ficus retusa</i>	<i>Moraceae</i>	Kāmarūp
26.	<i>Cymbopogon citratus</i>	<i>Gramineae</i>	Gauti chaha
27.	<i>Hibiscus</i> Sp.	<i>Malvaceae</i>	Jasvanda
28.	<i>Mammillaria</i> Sp.	<i>Cactaceae</i>	cactus
29.	<i>Cordyline rubra</i> Otto & A.Dietr.	<i>Asparagaceae</i>	Palm lily
30.	<i>Cordyline</i> Sp.	<i>Asparagaceae</i>	Palm lily
31.	<i>Echinopsis chamaecereus</i>	<i>Cactaceae</i>	Peanut Cactus
32.	<i>Cissus quadrangularis</i> L.	<i>Vitaceae</i>	Kandvel
33.	<i>Codiaeum variegatum</i> L.	<i>Euphorbiaceae</i>	croton

Plant Species available in the Botanical Garden

Good Practices conducted by the College

- College celebrates “World Environment Day” on 5th June every year.
- The Environment Committee every year has been managed a programme on tree plantation and their nurturing to aware the students and the nearby society about the maintenance of the environment. The result is that we have a beautiful green campus.
- World Ozone Day is celebrated each year on 16th September to spread the awareness among the students about the depletion of the ozone layer and to take certain steps for the solution of the problem.
- College management, Members of Environment Committee believe that, our environment is becoming increasingly contaminated because of the technological development. To aware the people and students about it, Earth Day is celebrated on 22 April every year.
- College provides Fire Extinguishers at suitable distance at college main building, corridors and at science laboratories to tackle the fire emergency.
- The college has been taken initiative to make pollution free campus from the year 2016-17. The college started “No Vehicle Day” to reduce the air pollution and noise pollution.
- The college also prohibited mobile ban in the college campus. The mobiles of official persons are also kept on silent mode in the college campus.
- The college also invited guest to give lecture on pollution.
- For F.Y.B.A, university has started Environmental Studies to aware the students to conserve of environment.
- The college has also kept dustbins at different places. The separate store room is created to keep all the deadstock material of the college.
- The college planted trees around the campus are to reduce pollution.
- The college also organizes Fire Cracker less campaign in the city.
- The wastages are not burns and it is composed in the earth.
- The roof water harvesting is connected to the two well.

Recommendations

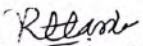
Following the audit, several recommendations were made to the college authority by external audit team.

Sr. No.	Criteria	Recommendations
1	Paper Use	Use email & WhatsApp communication for Internal/departmental notices to minimize the use of paper
2	Lighting (Energy)	Use LED light instead of regular tube light to conserve the electricity.
3	Vehicles	Monitoring the PUC of every vehicle within the campus at least once in a year to minimize the vehicular pollution load.
4	Fire Training	It is recommended that, firefighting training must be provided to lab assistants of science laboratories & official persons from admin block from external competent agency.

Declaration

I agree with all the recommendations and observations mentioned in this report.

Original signed with college seal by,


Dr. Rajendra R. Attarde
(Principal)

PRINCIPAL
Pankaj Kala Mahavidyalaya
Chopda-425107, Dist. Jalgaon

