

Shri Kesharchand Gulabchand Munot Newaskar Sarvajanik. K.G.College of Arts and Commerce, Ahmednagar.

# **GREEN AUDIT (ENVIROMENTAL)**

Academic Year: 2022-2023

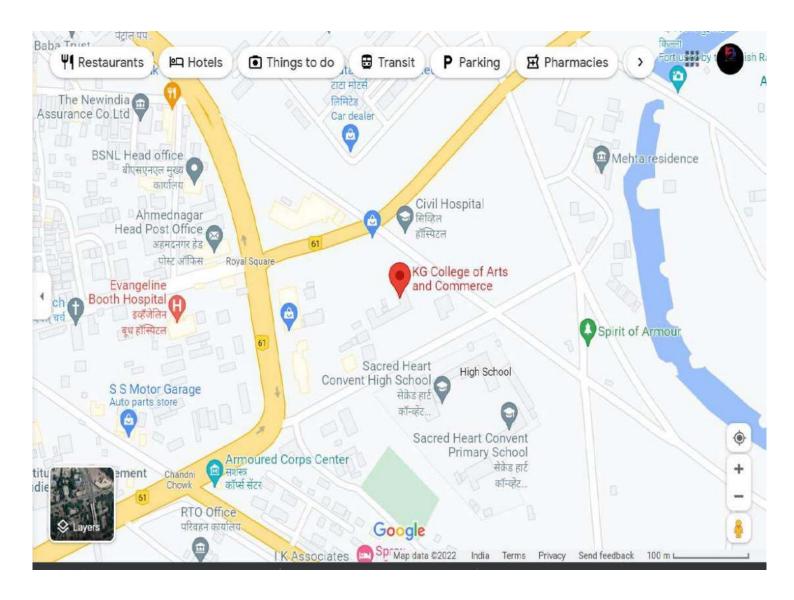


Total Campus Area and College Building Spread Area

Campus Area 60000 sq ft

Built up Area 25000 sq ft

#### **MAP VIEW**



K G College is located 19:05N latitude and 74:44E longitude on the Pune-Aurangabad State Highway. K G College is 120 km from Pune as well as Aurangabad. The college has a strategic location in city and is easily accessible from all parts through public transport system.

#### **ACKNOWLEDGEMENT**

Green Audit Report of **K.G.College of Arts and Commerce** has been prepared by UAS based on visits to the college campus, checking records and interactions with faculty, non-teaching staff and students. No intrusive study was conducted during the audit.

The audit was conducted on 07<sup>th</sup> October 2022

The green audit report presents green initiatives taken up by the institution, and provides suggestions and recommendations to improve environmental sustainability.

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#### **INTRODUCTION**

K G College of Arts and Commerce, Ahmednagar affiliated to Savitribai Phule Pune University. It is respected to be one of the best evening college in Ahmednagar. It was established in 2007. It is an Arts and Commerce College offers under graduate programs.

This makes K.G. College a complete college in both regular as well as professional courses in the Commerce stream with a total strength of over 246 students.

The college offers add on certificate programmes approved by the University of Pune as well as value-based certificate programmes and life skill enhancement courses. This helps learners to equip themselves with adequate skills towards employability and entrepreneurship.

The college organizes numerous activities and provides a wide platform to all its learners to explore their potential and talents in various arenas. Thus, we ensure holistic growth of learners.

#### **VISION**

#### Improving Lives, Through Learning.

Education to the minority section of the society belonging to the society, educationally and economically weaker sections.

To educate is to empower.

K G College will foster a positive learning and working environment and provide support services for student's success.

#### **MISSION**

K G College promotes excellence in Life Long Learning, focused on student's success and community development.

#### **COLLEGE GOALS**

Academic Excellence

Sharpening of leadership skills

Inculcating the right values

Sensitization about problems in the country

Emphasis on liberal, secular and open-minded education

Promoting a culture of research and exploration at all levels

Providing platforms to enhance employability skills through work and earn.

Creating instruments of team building.

Catering to diverse strata of society.

#### **OBJECTIVE OF AUDIT**

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.

#### **ENVIROMENTAL AUDIT**

The environment audit aims to analyse environmental practices within and outside the college campuses, which will have an impact on the eco-friendly atmosphere. Environment audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of university environment.

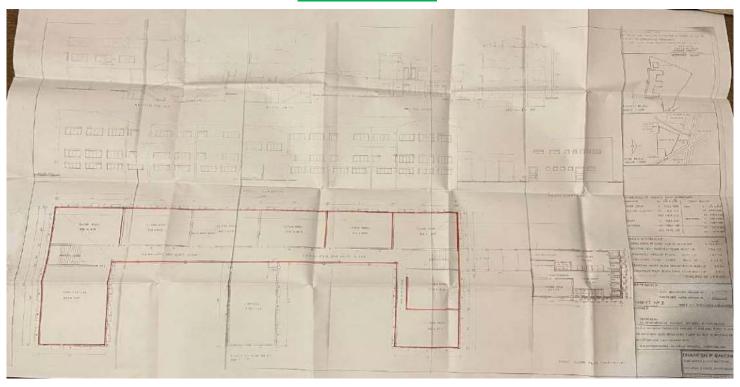
The purpose of an environmental audit is to assess the nature and extent of the risk of harm to human health or the environment. This may be from contaminated land, waste, pollution or any activity. Recommend measures to manage the risk of harm to human health or the environment.

Contribution of college's team is equally important in this venture. Team of technical experts from UAS is grateful to all the personnel of **K G College of Arts and Commerce** for their kind cooperation, furnishing required data, analysis report and support offered during our visit.

### **LIST OF INSTRUMENTS USED**

Lux meter.
TDS meter.
Co2 meter.
Air quality measure meter
Sound DR meter

### **INFRASTRUCTURE**



### **College and School Building Area Floor wise**

Ground			
Floor			
1)	School Principal and Office	27'6" * 20'.6"	564
	Staff		
2)	School Science Hall	27'6" * 21'.6"	591
3)	School Class Rooms	20 * 20 * 8	3200
4)	School Teacher Staff Room	20 * 20 * 1	400
5)	School Common Hall	27'6" * 42'	1155
6)	School Corridor	150′ * 7 * 1	1050
		16 * 5 * 2	160
		13 * 4 * 2	104
			7224
1 <sup>st</sup> Floor			
1)	Trustee and Principal Office	27'6" * 20'6"	564
2)	Library	23'6" * 20'6"	482
3)	College Office and Staff	21'3" * 20.3"	430
4)	College Staff Rooms	20' * 10'	200

5)	College Class Rooms	30' * 20' * 3	1800
6)	College Class Rooms	20' * 20' * 4	1600
7)	College Lab	27'6" * 21'3" * 1	584
		6' * 20'	120
8)	College Corridor	150′ * 7 * 1	1050
		22' * 4'	88
		13' * 4' * 2	104
			7022
2 <sup>nd</sup> Floor			
1)	Computer Lab	42' * 27'6"	1155
2)	Class Room	30' * 20' * 2	1200
3)	Class Room	27'6" * 20'6" * 1	564
4)	Class Room	23'6" * 20'6"	482
5)	AUDITORIUM	96' * 28'	2688
6)	Corridor	60' * 7 * 1	420
		22' * 4 * 1	88
		13' * 4' * 2	104
7)	Class Room	20' * 20' * 1	400
			7102
8)	Total Stair Case	16' * 5' * 4	320
		16' * 5' * 4	320
		26'.6" * 20'	530
			1170

Sr. No.		
1)	Ground Floor	7224 sq ft
2)	I <sup>st</sup> Floor	7022 sq ft
3)	II <sup>nd</sup> Floor	7102 sq ft
4)	Total Stair Case	1170 sq ft
		22518 sq ft
5)	Toilet Block	2132 sq ft
6)	Toilet Corridor	360 sq ft
		25000 sq ft

7)	Building Ground coverage building	7250 sq ft
8)	Ground Coverage Stair Case	850 sq ft
		8100 sq ft
9)	Toilet Block	1066 sq ft
		9166 sq ft say 9200 sq ft

### **COURSE OFFERED BY COLLEGE**

### **Under Graduate Courses**

- B. Com
- B.A
- BBA (CA)

### **LIST OF HODs & SENIOR MOST STAFF MEMBER**

Teacher Name	Qualification	Department
Prof.Dr.Swati Munot	MA./MBA./PhD	Principle
Prof.Dr. Varsha Kirtane	MA. /PhD	Arts
Prof.Dr.Prashant Khoptikar	MCom./PhD	Commerce
Prof.Snehal Borawake	M.Sc(Computer. Science)	B.B.A(C.A)

### **Teacher List Department wise**

Teacher Name	Qualification	Designation	Department
Prof.Dr.Swati Munot Santosh	MA MassReletation./MBA./PhD	Principle	Commerce/ Management
Prof.Dr.Prashant Khoptikar	MCom./PhD	HOD	Commerce
Prof. Patil Virendra Shantaram	M.Com./ SET/NET	Professor	Commerce
Prof. Sanghavi Seema Bhawarlal	MBA(Management)	Asst. Professor	Commerce
Prof. Bhunia Ankita Dilip	M.Com.	Asst. Professor	Commerce
Prof.Dr.Varsha Kirtane Sitakant	MA/ Marathi.PhD	HOD	Arts

Prof.Anandmani Tripathi	MA./M phil./Net(Hindi)	Asst. Professor	Arts
Shriprakashmani			
Prof. Chavan Savita Ghanshyam	MA./SET./Net(Marathi)	Asst. Professor	Arts
Mrs. Patwekar Amruta Bhalchandra.	MA. (Politics)	Asst. Professor	Arts
Prof. Borawake Snehal Dilip	M.Sc. (Computer. Science)	HOD	B.B.A(C.A)
Prof. Tak Mayuri Radheshyam	M.Sc. (Computer. Science)	Asst. Professor	B.B.A(C.A)

# Non-Teaching List

Name	Qualification	Designation
Mr. Santosh Munot	B.com	Office Superintend
Mrs. Amruta Mulay	MA /M.Lib/BCA	Head Clerk
Mrs. Harshali Raskar	M.Lib	Librarian
Mr.Manoj Mhankale	MA	Peon
Mrs. Savita Kedare	10 <sup>th</sup>	Peon

### **STUDENT STRENGTH**

#### COMMERCE

NO.	Class	Total	Category		Open	
			Girls	Boys	Girls	Boys
1	F.Y.B.Com	40	08	15	01	16
2	S.Y.B.Com	33	04	12	02	15
3	T.Y.B.Com	65	08	29	06	22
	Total	138	20	56	09	53

# Commerce - Boys

No	Class	OBC	SC	ST	SBC	NT	Minority	Open
1	F.Y.B.Com	04	02	00	04	02	03	16
2	S.Y.B.Com	03	03	00	03	03	00	15
3	T.Y.B.Com	06	01	00	11	02	09	22
	Total Stu	13	06	00	18	07	12	53
	109							

### **Commerce - Girls**

No	Class	OBC	SC	ST	SBC	NT	Minority	Open
1	F.Y.B.Com	04	01	00	02	01	00	01
2	S.Y.B.Com	00	00	00	01	01	02	02
3	T.Y.B.Com	02	02	00	01	01	02	06

	Total Stu 29	06	03	00	04	03	04	09
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### ARTS

NO.	Class	Total	OI	3C	S	С		ST	N	1T	S	ВС	OF	PEN	Min	ority
			G	В	G	В	G	В	G	В	G	В	G	В	G	В
1	F.Y.B.A.	14	00	03	02	03	00	01	00	02	00	01	00	02	00	00
2	S.Y.B.A.	24	00	07	01	03	00	00	00	03	00	01	02	07	00	00
3	T.Y.B.A.	51	03	05	02	09	00	03	01	03	02	02	07	13	00	01

# B.B.A. (C.A.)

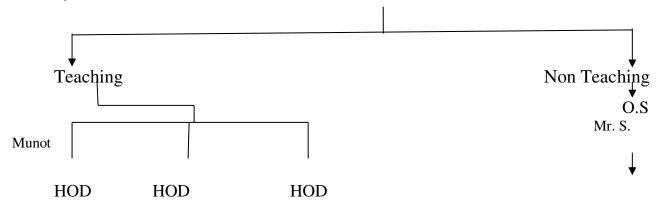
NO.	Class	Total	OE	3C	S	С	0,	ST	N	ΙT	S	ВС	OF	PEN	Min	ority
			G	В	G	В	G	В	G	В	G	В	G	В	G	В
1	F.Y.B.B.A.	03	00	01	00	00	00	00	00	00	00	00	00	02	00	00
2	S.Y.B.B.A.	06	00	02	01	00	00	00	00	00	00	00	00	03	00	00
3	T.Y.B.B.A.	10	02	02	00	00	00	00	00	01	01	00	00	04	00	00

#### **ORGANOGRAM**

Trustee Director (Mr. Kishor Munot)

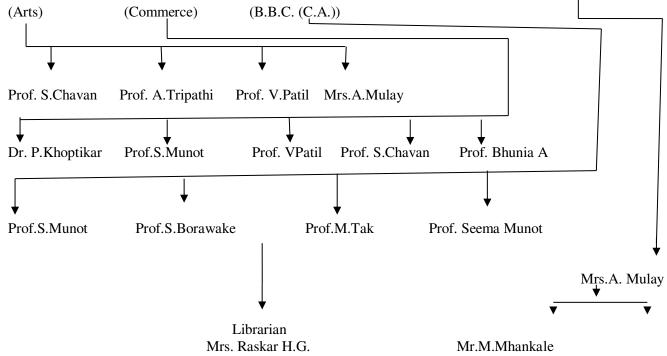
Campus Director / Acting Principal (Dr. Swati Munot)

(Academic Administration / Teaching/Liasoning/Uni.Gov. Work /Legalities/ISO/Env. Mg. System )



Clerk.

Dr. V. KirtaneDr. P. KhoptikarProf. S. BorawakeMrs.A.Mulay



#### **TARGET AREAS OF GREEN AUDITING**

Green audit forms part of the resource management process. Although they are individual events, the real value of green audit is the fact that they are carried out, at defined intervals, and their results can illustrate improvement or change over time. The college has adopted the 'Green Campus' system for environmental conservation and sustainability. There are three main pillars i.e. zero environmental footprint, positive impact on occupant health and performance and 100% graduates demonstrating environmental literacy. The goal is to reduce CO2 emission, energy and water use, while creating an atmosphere where students can learn and be healthy. Eco Campus concept mainly focuses on the efficient use of energy and water; minimize waste generation or pollution and economic efficiency. All these indicators are assessed in the process of "Green Auditing of educational campuses. Eco Campus focuses on the reduction of contribution to emissions, procure a cost effective and secure supply of energy, encourage and enhance energy use conservation, promote personal action, reduce the campus's energy and water consumption and integrate environmental considerations into all contracts and services considered to have significant environmental impacts. Target areas included in this green auditing are water, energy, waste, green campus and carbon footprint.

# TDS LEVEL OF WATER

#### **INTRODUCTION**

The water we drink contains essential salts and minerals like calcium, potassium and magnesium, besides hydrogen and oxygen.

These minerals make up the acceptable levels of TDS (Total Dissolved Solids). Besides, these minerals, the source water contains heavy impurities like arsenic, antimony, lead, iron, etc. It also includes carbonates, fluorides, sulphides and other salts picked along the way. These contaminates enhance the TDS levels to unacceptable levels.

BIS (Bureau of Indian Standards) determines the TDS acceptability levels in drinking water. In India, drinking water can contain TDS up to 500 ppm. BIS has constituted the following table that could clarify the matters further.

TDS level (PPM)	Reasons for acceptability or non-acceptance					
less than 50	Unacceptable	The water with these TDS level does not contain the minerals required for healthy growth				
50 - 150	Acceptable	Such TDS levels are usually due to minor industrial contamination				
150 - 250	Acceptable	BIS considers water with this TDS levels as the healthiest of all because it is excellent for cardiovascular health				
250 - 350	Acceptable	Many areas in India depends on groundwater or bore wells for their water requirements. This water contains essential minerals hence is in acceptance range				
350 - 500	Fair	The maximum TDS levels acceptable for human consumption is 500				
above 500 - 1200	Not Acceptable	BIS does not recommend ant TS level above 500 as fit for human consumption. However, water with TDS levels up to 1200 can be subjected to purification using Reverse Osmosis (RO) technology to eliminate TDS and bring it down to acceptable levels				



**Drinking water -V- Acceptable (TDS – 105)** 

#### WATER TAP REDUCER

College has conventional water tap system in the area like bathrooms, toilets, etc.

Conventional water tap system consumes or requires more water for the purpose of washings, cleanings etc.

The college takes appropriate measures to save and conserve water. Regular maintenance of water taps tanks is done by the institute in order to avoid wastages due to tank leakages or any other allied reasons. The institute does maintenance checks on timely basis to check for leaks if any. If at all any leaks are found, the same are repaired on priority basis.

We did not come across any leaking faucets in the washroom or near water filters. We did not come across any water conservation faucets in the washroom. Also, dual flushing system wasn't found in the college.



College has currently conventional tap



Use of reducer tap water recommended

### **RAIN WATER HARVESTING- COLLEGE PREMISES**

College has implemented rain water harvesting in the buildings. College has very large rooftop space where large amount of rain water is drained to stock pit during rainy Season

Using rain water harvesting either recharge the bore well or collecting at underground watertank.

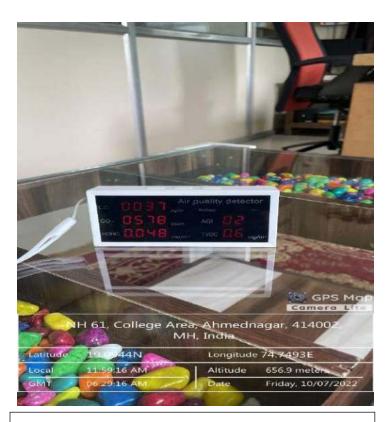


#### **AIR QUALITY**

Indoor air is considered to be healthy when the air does not contain contamination in harmful concentrations and is acceptable when the majority of people feel satisfied. A human being breathes about 12,000 litres of air every day and is vital for our health. Exposure to hazardous airborne agents present in indoor space causes adverse effects such as respiratory and cardiovascular diseases, allergy and irritation of the respiratory tract and possibly leads to cancer.

Main source of indoor air pollutants are from outdoor air, household cooking (especially cooking with biomass or frying), tobacco smoking, polluted ambient air, cleaning agents, resuspension of dust during the cleaning activities, construction materials and paints, copy machines and printers as well as other human activities. Ambient air pollutant sources are vehicle emissions, thermal power plants, biomass burnings, construction work, unattended debris, open sewage pipes, fossil fuel-based power generation and various industrial processes etc.

Threshold values for indoor air quality parameters							
Parameters		Classification					
	Class A	Class A Class B Class C					
Level	Aspirational	Acceptable	Marginally acceptable				
CO2	350	500	700	ppm			
НСНО		0.001 to 0.01					
TVOC	0.3	0.4	0.5	μg/m3			
Occupational satisfaction	90	80	-	%			



TRUSTEE ROOM READING
{CO2 - 0578, HCHO - 0.048, TVOC - 0.6}



PRINICIPAL ROOM READING
{CO2 - 0519, HCHO - 0.019, TVOC - 0.2}



<u>LIBRARY READING</u> {CO2 - 0515, HCHO - 0.018, TVOC - 0.2}



<u>STAFFROOM READING</u> {CO2 - 0560, HCHO - 0.040, TVOC - 0.5}

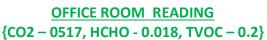




<u>CORRIDOR</u> {CO2 - 0519, HCHO - 0.019, TVOC - 0.2}

CLASSROOM READING
{CO2 - 0524, HCHO - 0.022, TVOC - 0.2}







<u>IT ROOM READING</u> {CO2 - 0523, HCHO - 0.021, TVOC - 0.2}

Location	CO2	нсно	TVOC	Level
Location	ppm	μg/m3	μg/m3	
TRUSTEE ROOM	578	0.048	0.6	Acceptable
PRINCIPAL ROOM	519	0.019	0.2	Acceptable
LIBRARY ROOM	515	0.018	0.2	Acceptable
STAFF ROOM	560	0.040	0.5	Acceptable
CORRIDOR	519	0.019	0.2	Acceptable
CLASSROOM	524	0.022	0.2	Acceptable
OFFICE ROOM	517	0.021	0.2	Acceptable
IT ROOM	523	0.036	0.4	Acceptable

## **SOUND COMFORT/QUALITY**

Noise is unwanted sound. Ambient noise is all encompassing noise associated with any given environment and is usually a composite of sounds from many sources near and far. Any abnormal sound which irritates human being is called as noise pollution.

Noise is one of the undesirable products of technological civilization. Admits this civilization wherever we go, noise surrounds us. The roar of traffic, the passage of trains and aeroplanes, the bustle of crowds and the working of industry and the public utilities deafens our ears. Even home is invaded by noise. The noise from whatever source it comes from is undoubtedly, physiologically as well as psychologically harmful.

Invading environment in dangerous proportions, it is an invisible but insidious form of pollutant Noise as a potentially harmful pollutant is being recognized as a great nuisance these days affecting the quality of the particularly, in urban areas.

The Environment (Protection) Act, 1986, under Sec. 6 has mentioned "Rules to regulate environment (Protection) Act, 1986, under Sec. 6 has mentioned "Rules to regulate environmental pollution". This section has explained the maximum allowable limits of concentrations of various environmental pollutants (including noise) for different areas.

	Air quality standards in respect of Noise						
Area code	Category of Area/ Zone	Limit	ts/Levels				
		Day Time	Night Time				
Α	Industrial area	75	70				
В	Commercial area	65	55				
С	Residential area	55	45				
D	Silence zone	50	40				











	Noise	11
Location	dB	Limits/Levels
PRINCIPAL ROOM	51.4	within permissible limits
LIBRARY	81.8	within permissible limits
EXAM ROOM	55.1	within permissible limits
CORIDOOR	60.9	within permissible limits
CLASSROOM	55.8	within permissible limits

### DAY LIGHT ILLUMINATION/COMFORT

Light has significant impact on many body functions, including the nervous system, circadian rhythms, pituitary gland, endocrine system, pineal gland and alertness as these are affected by different wavelengths of light.

Variations over time in lighting conditions, in terms of intensity, illumination levels, distribution, ambient lighting and color temperature, can stimulate alertness and well-being of people.

All the corridors receive good daylight due to the large windows.

Corridors are wide with good ceiling height.

Classrooms also have high ceilings with wide doors and large windows.

Windows are kept open to receive sunlight.

Washrooms are provided with exhaust fans to disperse heat, fumes and odours.

	Threshold IL luminance level						
Building type	Type of space	IL luminance					
		Lux					
	Classrooms	500					
	Corridors	100					
Schools	Teachers rooms	300					
	Libraries	500					
	Offices	300					









Landing	LUX	Limite (Laurela
Location	lumens	Limits/Levels
PRINCIPAL ROOM	120	Not within permissible limits
CLASS ROOM	656	within permissible limits
STAFF ROOM	440	within permissible limits
IR COMPUTER ROOM	347	within permissible limits

<sup>\*</sup> values are measured in daylights and given standard values of lux are with lightings Classroom is measured with lightings.

#### **HEALTH AND SAFETY MANAGEMENT**

Regular cleaning of college campus and toilets is done by the cleaning staff. This involves dusting, floor cleaning and toilets cleanings.

Garden and parking area is also kept clean by staffs.

Cleaning equipment and washing liquids are provided to the cleaning staff.

There are good number of fire extinguishers placed at every floor but no sand bucket are placed in college campus building for fire safety purpose. Fire extinguisher is serviced early and maintained properly.

No wiring, loose connections is been observed in college, that may lead to short circuits as well as from electrical safety it is dangerous.

#### **AUDITING FOR WASTE MANAGEMENT**

Pollution from waste is aesthetically unpleasing and results in large amounts of litter in our communities which can cause health problems. Plastic bags and discarded ropes and strings can be very dangerous to birds and other animals. This indicator addresses waste production and disposal, plastic waste, food waste, and recycling. Solid waste can be divided into two categories: general waste and hazardous waste. General wastes include what is usually thrown away in homes and in schools such as garbage, paper, tins and glass bottles. Hazardous waste is waste that is likely to be a threat to health or the environment like cleaning chemicals and patrol. Unscientific landfills may

contain harmful contaminants that leach into soil and water supplies and produce greenhouse gasses contributing to global climate change. Furthermore, solid waste often includes wasted materials resources that could otherwise be channelled into better service through repair, and reuse. Thus, the minimization of solid waste is essential to a sustainable college. The auditor diagnoses the prevailing waste disposal policies and suggests the best way to combat the problems. It is therefore essential that any environmentally responsible institution examine its waste processing.

The main findings of the audit show that, in general, all the departments and students are aware about the need for environmental protection at a general level. It was also observed that a number of best practices such as maintaining garden, planting trees etc. are followed in the campus. However, on detailed review, it was observed that, as the college has implemented Green Campus Policy.

#### **OBSERVATION**

### Which of the following are available in your college Campus area?

Classrooms - Yes
Office rooms - yes
Auditorium - Yes
Library - Yes
Computer Lab - Yes
Exam & Printing room - Yes
Store room - Yes
Toilets - Yes
Number of Playgrounds - Yes
Car/scooter shed area - Yes

#### Which of the following are found near your college campus?

Municipal dump yard - No Garbage heap - No Public convenience - No Sewer line - No Stagnant water- No Open drainage - No
Industry - No
Bus/Railway Station - yes
Market/ shopping complex/ public halls - yes
Waste - No

### Does your college campus generate any waste?

Hazardous waste (toxic) – No Toxic is generated in college
Solid waste – Yes
Dry leaves - Yes
Canteen waste – Is properly collected in a wet dustbin and disposed off every morning.
Liquid waste – No
Glass - Yes
Unused equipment's - No
Medical waste any – No
Napkins – yes (vending machine for Napkins are provided in girls washroom)

### Is there any waste treatment system in the college campus?

Separate dustbins for wet and dry waste, separate disposal of sanitary napkins Burning Backup are some of the practices followed by the institute.

### Is there any treatment for toilet/urinals/sanitary napkin waste?

Every girl's washroom has a separate bin for disposal of sanitary napkins. We use separate bins to collect used sanitary napkins and Burning Backup is Practiced.

### Do you use recycled paper in college?

As far as possible we try to keep our affairs paperless. However, whenever needed, we try to reuse papers as and when possible.

Can you achieve Zero Garbage in your college? (Reduce, Recycle, Reuse, Refuse) if yes, how?

Use durable reusable items instead of disposable such as washable cups, plates and cutlery.

Go paperless whenever possible.

Reduce or remove trash can liners where feasible.

We have given instructions to our teaching and non-teaching staffs also regarding reduce, recycle and reuse.

Instead of printing hard copies of your documents save them to your hard drive or email them to yourself to save paper.

Make your printer environmentally friendly. Change your printer settings to make double sided pages.

Use small point fonts when possible.

Pay your bills e-billing programs, when possible, to save papers.

Use paperclips (over staples) when possible.

Reuse envelopes with metal clasps and reuse file folders by sticking a new label over the previous one.

#### **E- WASTE MANAGEMENT**

Electronic waste or e-waste describes discarded electrical or electronic devices. Used electronics which are destined for reuse, resale, salvage, recycling, or disposal are also considered e-waste. Informal processing of e-waste in developing countries can lead to adverse human health effects and environmental pollution.

Electronic scrap components, such as CPUs, contain potentially harmful components such as lead, cadmium, beryllium, or brominates flame retardants. Recycling and disposal of e-waste may involve significant risk to health of workers and communities in developed countries and great care must be taken to avoid unsafe exposure in recycling operations and leaking of materials such as heavy metals from landfills and incinerator ashes.

K G College is digitalized to some extent. The generation of E-waste is not large. As per college there is hardly any E waste in college.

#### **SOLID WASTE MANAGEMENT**

Wet waste and dry waste segregation is practiced in the premises. separate bins are provided for wet biodegradable and dry recyclable waste.

Combined waste is directly handed over to ANMC

There is signage on the food wastage or segregation of wet and dry waste. In other areas like classrooms, it is mostly paper waste and plastic wrappers.

#### **AUDITING FOR CARBON FOOTPRINTS**

Commutation of stakeholders has an impact on the environment through the emission of greenhouse gases into the atmosphere consequent to burning of fossil fuels such as petrol. The most common greenhouse gases are carbon dioxide, water vapor, methane, nitrous oxide and ozone of all the greenhouse gases, carbon dioxide is the most prominent greenhouse gas, comprising 402 ppm of the Earth's atmosphere. The release of carbon dioxide gas into the Earth's atmosphere through human activities is commonly known as carbon emissions.

An important aspect of doing an audit is to be able to measure your impact so that we can determine better ways to manage the impact. In addition to the water, waste, energy and biodiversity audits we can also determine what our carbon footprints are, based on the amount of carbon emissions created. One aspect is to consider the distance and method travelled between home and college every day. It undertakes the measure of bulk of carbon dioxide equivalents exhaled by the organization through which the carbon accountings are done. It is necessary to know how much the organization is contributing towards sustainable development. It is therefore essential that any environmentally responsible institution examine its carbon footprints.

Total number of vehicles used by the stakeholders of the college campus. (per day)

Approximately 2 cars.

Number of two wheelers used inside the college campus NONE.

Number of visitors with vehicles per day.

Visitors Vehicles are permitted to park inside the college campus.

(1-2 Vehicles)

Number of generators used per day (hours) Give the amount of fuel used per day.

Generator is hardly used as there is hardly any power cut.

Use of any other fossil fuels in the college (give the amount of fuel used per day and amount spend)

NO

Suggest the methods to reduce the quantity of use of fuel used by stakeholders /students/teachers/non-teaching staff of the college campus.

Drive only when needed: - The best way to reduce the fuel consumption is to simply drive your vehicle less. Drive your vehicle only when you really need to. If you only need to travel a few blocks, consider walking or even riding a bicycle. Not only will you save money at the pump, the exercise will certainly do you some good.

At K G campus, the college authorities try to conduct carbon consumption awareness programs on carbon emission, which help individuals as well as social level to avoid air and noise pollution in the campus due to vehicles

#### **NO VEHICLE DAY INITIATIVE**

Though there is hardly 1-2 vehicles parked inside the campus which contributes the CO2 emission due to burning of petrol or diesel in the vehicles.

However, College is Practicing "**No Vehicle Day**" once in week. Which helps in reducing CO2 emission reduction due to fuel burning.

#### **AUDITING FOR GREEN CAMPUS MANAGEMENT.**

Unfortunately, biodiversity is facing serious threats from habitat loss, pollution, over consumption and invasive species. Species are disappearing at an alarming rate and each loss affects nature's delicate balance and our quality of life. Without this variability in the living world, ecological systems and functions would break down, with detrimental consequences for all forms of life, including human beings. Newly planted and existing trees decrease the amount of carbon dioxide in the atmosphere. Trees play an important ecological role

within the urban environment, as well as support improved public health and provide aesthetic benefits to cities. In one year, a single mature tree will absorb up to 48 pounds of carbon dioxide from the atmosphere, and release it as oxygen. The amount of oxygen that a single tree produces is enough to provide one day's supply of oxygen for people. So while you are busy studying and working on earning those good grades all the trees on campus are also working hard to make the air cleaner for us. Trees in our campus impact our mental health as well; students have shown that trees greatly reduce stress, which is a huge deal considering many students are under some amount of stress.

#### **OBSERVATION**

### Is there a garden on your college campus?

Yes, Green Zone is practiced and implemented.

Have you displayed scientific names of the trees on campus? No

Is there any vegetable garden on your college campus? If yes, how much area is covered?

No, we did not get to see any vegetable garden in the campus.

Is there any medicinal garden on your college campus? If yes, how much area is covered?

Yes. PLEASE MENTION AREA

List the name and quantity of pesticides and fertilizers used in your college garden.

The college does not use any kind of pesticides in the college garden.

Are you using organic farming on your college campus? No.

Do you have any compositing kits on your college campus? If yes, what are you doing with the compost generated?

Started Practicing, Once Compost is generated on good quantity will distribute the same to Local Nursery and few will be used with in college campus.

Any threatened plant species planted/conserved? No.

Is there any nature club in your college campus?

Are there any fruit yielding plants in your college campus? If yes, Details of the trees planted.

No.

Are there any groves in your college campus? No.

Is there any irrigation system in your college campus? No.

What is the nature awareness program conducted on campus? Nature Awareness Programs are conducted in the college.

### What is the involvement of students in the green cover maintenance?

Students plant plants in the college premises as well as beyond the campus under the plantation drive.

### Share your ideas for further improvement of green cover.

Nature awareness programs are conducted in the Gurukul campus which is aimed at creating greater awareness, understanding and empathy of students with and for the environment. Through these initiatives it is hoped that every student who goes through academic years will get at least one opportunity during three years to save plant diversity in some or the other way. The nature experience for students and teachers has huge potential to trigger their sensitivity towards nature appreciation and conservation, leading to positive environmental actions at different levels.

Environmental awareness programs were conducted in the Gurukul Campus. The institute organized lectures for this purpose. Plantation drives are conducted by the NSS department as well.

### List of Medicinal saplings suggested in College Campus

Thuja

Cycas

Hibiscus

Tradescantia

Periwinkle

Clitoria

Oscimum

Murraya koenigii (Curry tree)

### **SUGGESTED NORMAL PLANTS (IF LOCATION PERMITS)**

Gulmohar/Flame trees

Bel

Cycus

**Rubber plants** 

Xmas trees

Shatavari (Asparagus)

Owa (celery)

Turmeric

Aloevara

Rui

Ixora

Adusla

Gokarna

Rose

# **GREEN CAMPUS AREA**



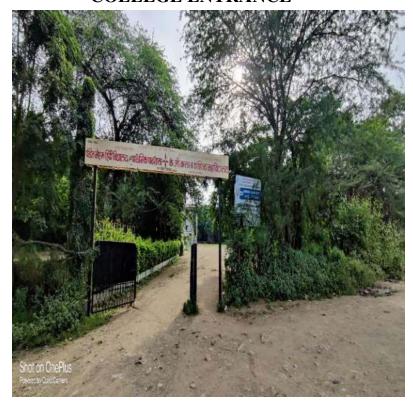






# **COLLEGE VISUALS**

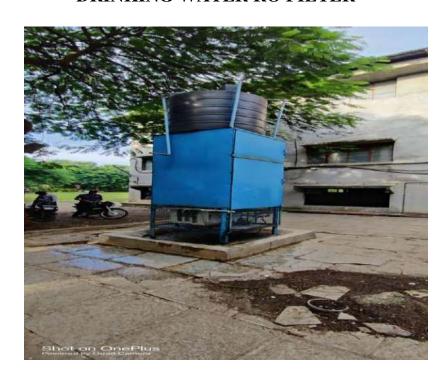
# COLLEGE ENTRANCE



**BUILDING PHOTO** 



# DRINKING WATER RO FILTER



PRINCIPAL OFFICE



# **CLASSROOM / CONFERENCE ROOM**



IT LAB



# LIBRARY



# **CCTV**



**PLAYGROUND** 



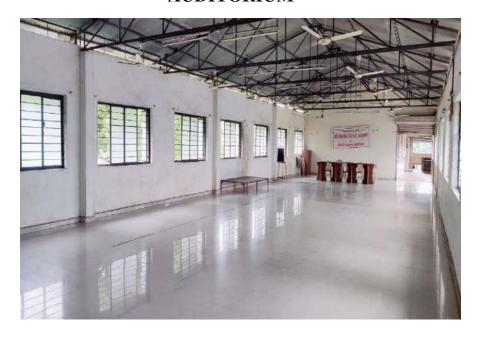
MEDICAL KIT



FIRE EXTINGUISHER



# **AUDITORIUM**



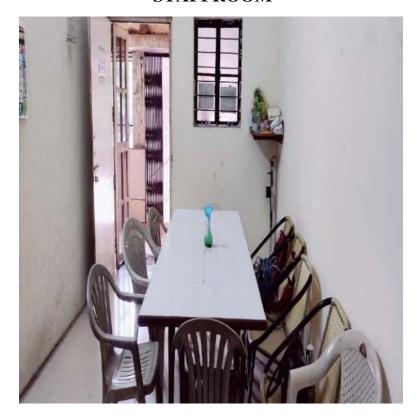
**COLLEGE ADMIN OFFICE** 



WASHROOM M/F



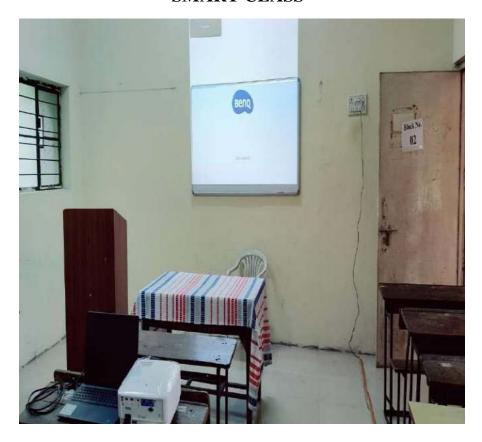
# **STAFFROOM**



# **INVERTER**



### **SMART CLASS**



### **DECLARATION**

I AGREE WITH ALL THE OBSERVATION AND RECOMMENDATION MENTIONED IN THIS REPORT

SIGNATURE OF PRINICPAL WITH SEAL.