Shri S.K. Shah and Shrikrishna O.M. Arts College, Modasa

Green Auditing Report



Shri S.K. Shah and Shrikrishna O.M. Arts College, Modasa

Managed By: The M. L. Gandhi Higher Education Society College Campus, Dhansura Road, Modasa-383315, Gujarat



A Green Auditing Report Committee

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DATA COLLECTION – PHOTOGRAPHY

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- 2. GODHA KOMALBEN KALABHAI
- 3. FANESA DIVYA VIKRAMBHAI
- 4. PANDYA ANJALIBAHEN MAHENDRABHAI





GREEN AUDIT

Certificate

This is to certify that a "Green Audit" for Shri S.K. Shah and Shrikrishna O.M. Arts College, Modasa has been conducted in August-September 2021 to assess the green initiatives planning and efforts implemented in the college campus like Green campus management, Plantation, Rain water harvesting, Conservation of Energy.

This Green Audit is also aimed to assess the impact of green initiatives for maintenance of Eco-friendly Campus.

Place: College Campus, Modasa

Date: 23th October 2021

Dr. P.R. Sinh Coordinator Shri S.K.Shah & Shrikrishna O.M. Arts College, Modasa (Aravalli)

> Dr. D.H. Joshi Principal



Concept



The term 'Green audit' means differently to different people. Terms like 'assessment', 'survey' and 'review' are also used to describe similar activities. Furthermore, some organizations/Institutions believe that an 'environmental audit' addresses only environmental matters, whereas others use the term to mean an audit of health, safety and environment-related matters. Although there is no universal definition of Green Audit, many leading companies/institutions follow the basic philosophy and approach summarized by the broad definition adopted by the International Chambers of Commerce (ICC) in its publication of Environmental Auditing (1989).

The ICC defines Environmental Auditing as:

"A management tool comprising a systematic, documented, periodic and objective evaluation of how well environmental organization, management and equipment are performing with the aim of safe guarding the environment and natural resources in its operations/projects."

The outcome of Green Audit should be established with concrete evidence that the measures undertaken and facilities in the institution under green auditing.

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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 analyse 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 of carrying out Green Audit.

*** ABOUT US COLLEGE**

The M. L. Gandhi Higher Education Society was started Shri S.K. Shah and SHrikrishna O.M. Arts College, Modasa in 1960. It was at that time only Arts College in the whole district of Aravalli, where majority of population is schedule tribe, schedule cast and a few economically backward communities. It was one of the best of its kind in Aravalli District. Our College has excellent infrastructure and congenital environment, which provides students a platform to exhibit their potentiality in the field of higher education. In the competitive environment of higher education, the institute has maintained its repute firmly. The institute boasts of big classrooms, well-equipped laboratories, prosperous library, huge sports campus, well designed and maintained botanical garden, biodiversity and highly qualified & well experienced faculty members. Besides education our students won so many championships in sports as well as cultural competitions such as drama, music and dance. The results of University examinations were excellent even 100%.

The taluka of Modasa is situated on 23⁰ 28'N latitude and 73⁰ 18'E longitude on the bank of river Mazum. The region of Modasa is flat and consists of mostaly sandy plains, although north and north eastern parts near Modasa are covered by the range of Aravalli hills. The total area of the taluka is 862.16 sq.km, total forest area is 6583.51 and total population is 2, 22,791.

*** COLLEGE DETAILS:**

- > ESTABLISHED IN 1960
- > GRANT-IN-AID ONLY ONE ARTS COLLEGE IN ARVALLI DISTRICT AND AFFILIATED WITH THE HEMCHANDRACHARYA NORTH GUJARAT UNIVERSITY, PATAN:
- > IMPARTS EDUCATION UP TO B.A. LEVEL:

MAIN SUBJECTS: SANSKRIT, ENGLISH, GUJARATI, HINDI, PSYCHOLOGY, ECONOMICS, HOME SCIENCE (SEM V-VI)

- > M.A. LEVEL: SANSKRIT, ENGLISH, GUJARATI, HIINDI,
- > PH. D. LEVEL: SANSKRIT, GUJARATI
- ➤ AWARDED "B+" GRADE BY NAAC IN 2007. (1ST CYCLE)

♦ VISION AND OUR GOAL

VISION

THE TRUE KNOWLEDGE EMANCIPATES, EMPOWERS AND ELEVATES.

OUR GOAL

TO PROVIDE STUDENTS WITH AN ENVIRONMENT FOR THE ALL-ROUND DEVELOPMENT OF THEIR MENTAL, PHYSICAL, AESTHETIC, SOCIAL, AND SPIRITUAL POTENTIALS, TOGETHER WITH THE ATTITUDES OF INTEGRITY, HARD-WORK, HONESTY, FAIRNESS AND TOLERANCE, SO THAT THEY GIVE OF THEIR VERY BEST. EXCELLENCE IN THESE FIELDS IS TO BE INTERPRETED IN TERMS OF PUTTING THE SKILLS DEVELOPED IN EACH AT THE SERVICE OF THE SOCIALLY DISCRIMINATED GROUPS IN OUR COUNTRY WITH A VIEW TO SETTING UP A SOCIETY WHERE ALL HAVE EQUAL OPPORTUNITY AS CHILDREN OF GOD.

*** OBJECTIVES**

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. The main objectives of carrying out Green Audit are:

- To introduce and aware students to real concerns of environment and its Sustainability.
- > To secure the environment and cut down the threats posed to human health by analyzing the pattern and extent of resource use of the campus.
- > To establish a baseline data to assess future sustainability by avoiding the interruptions in environment that are more difficult to handle and their corrections requiring high cost.
- To bring out a status report on environmental compliance

♦ PHYSICAL INFRASTRUCTURE IN COLLEGE CAMPUS:

- > AN OUTSTANDING CAMPUS: 18.29 ACRES CAMPUS AREA
- > TOTAL BUILT UP AREA: 3000 SQ. MT.
- > GREEN CAMPUS
- > BOTANICAL GARDEN
- > 14 COLLEGES + 01 ENGLISH MEDIUM SCHOOL

♦ CAMPUS INFRASTRUCTURE AND LAYOUT



CAMPUS INFRASTRUCTURE:

- ➤ Pleasant, eco friendly environment.
- ➤ Big, spacious and well furnished class-rooms

Laboratories:

The College has well equipped and well managed laboratories for General Science, Foot and Nutrition and Clothing and Textile. Generally, all the required equipment's for each subject are available in good functioning condition.

> Library:

A well-maintained and spacious library having the latest reference and text books on different subjects. Audio-visual e-lecture facility available. The library also provides some magazines & articles related to their fields and help the students to update on the courses, examination and competitive examination. Poor Boys Library scheme is also available.

- Audio-visual Seminar hall with smart board, LED display-LCD projector, internet facilities and DTH facilities.
- > U. G. C. Network Resource Centre with internet facilities.

Hostels:

There are two hostels in the college campus. These hostels are maintained by the management directly. The hostels have spacious and airy rooms. The hostels are situated in a very educational and eco-friendly environment in the college campus itself. There are large playgrounds adjoining the hostels and hence the students residing in the hostels get ample space for recreational activities. As the hostels are in the internal parts of the college campus, complete safety of the students is assured. The students can avail the hostel facility at a very nominal rate per term. The management has appointed enough staff for the maintenance of the hostels. There are 2 rectors, 1 Lady Superintendent (Resident), 1 clerk, 2 sweepers, a kitchen contractor and several servants for the mess.

Canteen:

The College has a well-furnished Canteen within the campus. The canteen is the most preferred place for every students and much time is spent around here. In addition to satisfying one's hunger and thirst, lot of serious discussion on topics of current interest happen here. Many are found here revising their interpersonal and communicative skills over a cup of tea. The Canteen offers delicious delicacies of different types to the taste of all.

> Auditorium Hall:

The Hall having capacity of 1200 students with facilities of stage, green room, change room.

> Sports Campus:

Well equipped and maintained huge sports campus, which includes several grounds for different games like Cricket, Hockey, Valley Ball, Basket Ball, Kho-Kho and Tennis Court.

- > DELL (Digital Equiped Language Lab)
- **Lab and classroom contain A.V facility**
- **➤** Mike system
- > CCTV cameras
- > Dr. babasaheb ambedkar open university Study Center
- > IGNOU Study Center
- Museum and Art Gallery
- > Ramanlal Soni Research Center
- > Other Facilities: Common Xerox Center, Canteen, Telephone Booth and SBI ATM.

> SEMINAR HALL

The college has a seminar hall, equipped with audio-visual facilities for the smooth conduct of seminars, conferences and other activities.

> CONFERENCE ROOM

There is a conference room aimed at providing space for the policy making bodies of the college.

> MULTI-PURPOSE ROOM

The multi-purpose administrative room, which has the offices of the Assistant Director, Vice Principal, the Coordinators of IQAC, Academics and space for executive meetings and presentations.

> LANGUAGE LAB

There is a language lab in the college which facilitates the students to fine tune their communication skills. It also doubles up as the venue for Add-On Courses. like Graphic Designing and Animation as well as for training programs in SPSS.

> COMPUTER LABS

There are two well-equipped computer labs.

> BOTANICAL GARDEN

Botanical Garden: Well designed & maintained botanical garden in campus.

2. PRE AUDIT STAGE:-

♦ SCOPE AND GOALS OF GREEN AUDIT

A clean and healthy environment aids in effective learning and provides a conductive learning environment. There are various efforts around the world to address environmental education issues. Green Audit is the most efficient and ecological way to manage environmental problems. It is a kind of professional care which is the responsibility of each individual who is the part of economical, financial, social, environmental factor. It is necessary to conduct green audit in college campus because students become aware of the green audit, its advantages to save the planet and they become good citizen. Thus Green audit becomes necessary at the college level.

BENEFITS OF GREEN AUDIT

- ➤ More efficient resource management
- > To provide basis for improved sustainability
- To create a green campus
- ➤ To enable waste management through reduction of waste generation, solid- waste and water recycling
- To create plastic free campus and evolve health consciousness
- Recognize the cost saving methods through waste minimizing and managing
- ➤ Point out the prevailing and forthcoming complications
- Authenticate conformity with the implemented laws
- Empower the organizations to frame a better environmental performance
- Enhance the alertness for environmental guidelines and duties
- ➤ Impart environmental education through systematic environmental management approach and improving environmental standards
- > Benchmarking for environmental protection initiatives
- Financial savings through a reduction in resource use
- Development of ownership, personal and social responsibility for the college and itsenvironment
- > Enhancement of college profile
- > Developing an environmental ethic and value systems in youngsters
- ➤ Green auditing should become a valuable tool in the management and monitoring of environmental and sustainable development programs of the college

* METHODOLOGY

In preliminary data collection phase, exhaustive data collection was performed using

different tools such as observation, survey communicating with responsible persons and

measurements.

Following steps were taken for data collection:

> The team went to each department, centers, Library, canteen etc.

> Data about the general information was collected by observation and interview.

The power consumption of appliances was recorded by taking an average value in some

cases.

SURVEY FORM

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 summarise the present status of

environment management in the campus:

Water management

Energy Conservation

Waste management

Green area management

Audit of carbon footprint

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A) AUDIT OF WATER MANAGEMENT

- 1. List uses of water in your college.
- 2. What are the sources of water in your college?
- 3. How does your college store water?
- 4. If there is water wastage, specify why.
- 5. How can the wastage be prevented / stopped?
- 6. What are the uses of waste water in your college?
- 7. What happens to the water used in your labs? Whether it gets mixed with ground water?
- 8. Number of water coolers?
- 9. Number of water taps?
- 10. Number of bath rooms in staff rooms, common, hostels?
- 11. Number of toilet, urinals?
- 12. Does your college harvest rain water?
- 13. Is there any water management plan in the college?
- 14. Are there any water saving techniques followed in your college? What are they?
- 15. Please share Some IDEA for how your college could save more water.





B) AUDIT OF ENERGY MANAGEMENT

- 1. List the usage of energy in your college. (Electricity, electric stove, kettle, microwave, LPG, firewood, Petrol, diesel and others).
- 2. Electricity bill
- 3. Is there generator facility in the college?
- 4. How many CFL bulbs has your college installed?
- 5. How many tube lights, fans are installed in your college?
- 6. How many air conditioners are installed in your college?
- 7. How many electrical equipments including weighing balance are installed your college? Mention the use (Hours used/day for how many days in a month)
- 8. How many TV, CCTV and computers are there in your college?

C) AUDIT OF WASTE MANAGEMENT

- Which of the following are found near your college?
 Municipal dump yard, Garbage heap, Public convenience, Sewer line, Stagnant water,
 Open drainage, Bus / Railway station, Market / Shopping complex / Public halls
- 2. Does your college generate any waste? (E-waste, Hazardous waste (toxic), Solid waste, Dry leaves, Canteen waste, Liquid waste, Glass, Unused equipment, Medical waste if any, Napkins, Others (Specify))
- 3. Is there any waste treatment system in the college?
- 4. How is the waste generated in the college managed, by composting or recycling or reusing or by other methods?
- 5. Do you use recycled paper in College?

D) AUDIT OF GREEN CAMPUS MANAGEMENT

- 1. Is there a garden in your college?
- 2. Do students spend time in the garden?
- 3. List the numbers of each plants species in the garden.

- 4. List the species planted by the students, with numbers.
- 5. Whether you have displayed scientific names of the trees in the campus?
- 6. Is there any plantation in your campus? If yes specify area and type of plantation.
- 7. Is there any medicinal garden in your college? If yes how much area?
- 8. Who is in charge of gardens in your college?
- 9. Are you using any type of recycled water in your garden?
- 10. Do you have any composting pit in your college?
- 11. What do you doing with the vegetables harvested?
- 12. Is there any botanical garden in your campus? If yes give details of campus flora.
- 13. Give the number and names of the medicinal plants in your college campus.
- 14. Any threatened plant species planted/conserved?
- 15. Is there a nature club in your college? If yes what are their activities?
- 16. What is the type of vegetation in the surrounding area of the college?
- 17. Is there any nature awareness program conducted in the campus?
- 18. What is the involvement of students in the green cover maintenance?
- 19. What is the total area of the campus under tree cover? Or under tree canopy?
- 20. Share your ideas for further improvement of green cover.

E) AUDIT OF CARBON FOOTPRINT

- 1. Total Number of vehicles used by the students of the college.
- 2. Mention the usage of cycles, two wheelers and cars.
- 3. Number of persons using common transportation
- 4. Number of parent-teacher meetings in a year?
- 5. Number of visitors with vehicles per day?
- 6. Number of generators used per day (hours). Give the amount of fuel used per day.
- 7. Suggest the methods to reduce the quantity of use of fuel used by the students / teachernon teaching staff of the college.

3. POST AUDIT STAGE:-

The base of any green audit is that its findings are supported by documents and verifiable information. The audit process seeks, on a sampled basis, to track past actions, activities, events, and procedures to ensure that they are carried out according to systems requirements and in the correct manner. Green audits form a part of a process. Although they are individual events, the real value of green audits is the fact that they are carried out, at defined intervals, and their results can illustrate improvement or change over time. Although green audits are carried out using policies, procedures, documented systems and objectives as a test, there is always an element of subjectivity in an audit. The essence of any green audit is to find out how well the environmental management and environmental equipment are performing. Each of these components is crucial in ensuring that the campus environmental performance meets the goals set in its green policy. The individual functioning and the success of integration will all play a role in the degree of success or failure of the campus environmental performance

♦ KEY FINDINGS AND OBSERVATIONS

A) WATER

- Main water uses in the campus: gardening, recreation, toilet, laboratory, cleaning, canteen, drinking, hostel, washing, office uses.
- Rain water harvesting and bore wale are main sources water in the campus.
- > Storage water: ground water storage, wet lands, ponds and tanks.
- Water wastage mainly during urinals and toilets.
- ➤ Water wastage can be prevented by: wisely flush, washing vehicles, long showers and in the kitchen.
- Water is used in many different ways such as distilled and deionized water in laboratory
- ➤ Water coolers: Yes
- ➤ Water taps: Yes
- ➤ Bathrooms and toilets in staff rooms, common, hostels: Yes
- ➤ Water management plan: Pressure system, Two Well and Tube well.
- ➤ Reasons for water wastage: leakages from taps, over use of water and overflow of water from motors

B) ENERGY

➤ Usage of energy through electricity, microwave.

No generators: 01No CFL bulbs: 71

> Total number of tube lights: 179

> Total number of fans : 183

> Total number of computers : 125

> Total number of air conditioners : 02

Total number of TV: 03
 Total number of rooms: 21
 Total number of staff room: 02

➤ Total Refrigerator : 01

C) WASTE

- Following all are far from the college area: Municipal dump yard, Garbage heap, Public convenience, Sewer line, Stagnant water, Open drainage, Public halls
- ➤ College generates e-waste, Solid waste, dry leaves, canteen waste, liquid waste, glass and unused equipment.
- ➤ There is a composting system to reduce canteen waste and electronic waste such as computers, electrical parts reduced by selling of it.
- > Plastic waste dispose by selling
- ➤ Solid waste as food waste, damage furniture, paper waste send to municipal waste collection centre.
- ➤ No treatment for laboratory wastes
- ➤ Waste water treatment plant is under the pipeline condition to treat the lab and other waste water.
- ➤ Glassware waste as broken glass wares from the laboratory send to municipal waste collection centers

D) GREEN CAMPUS

- ➤ Garden area inside the college –Yes
- > Total number of plant species identified 384
- ➤ Total campus area 18.29 ACRES
- > Treated water from waste water treatment is used in pouring the plants of garden.
- The college has one composting pit inside the campus.
- ➤ There is a Nature Club in the campus. Awareness program, plastic free zone, Ozone Day celebration, World Environment Day and other activities are held in the college.

Celebration of World Sparrow Day

The house sparrow, a charming bird that thrives around human settlements, is witnessing a sharp decline in various parts of the country. Unfortunately, this issue has transcended political and national boundaries, affecting numerous countries worldwide. Consequently, the decline of the sparrow population has become a matter of deep concern and is being actively discussed by academicians, social workers, researchers, and the general public.

Given this alarming trend, there is a growing sentiment that the government should implement appropriate measures to protect the environment, including safeguarding the sparrows. Nonetheless, the responsibility to care for our environment does not rest solely on the government. Since we all equally share and benefit from the various components and amenities of the environment, it is incumbent upon every student and citizen to contribute to its welfare.

In an effort to play our part in this important cause, the 'NSS Unit' of Shri S.K. Shah and Shrikrishna O.M. Arts College will celebrate "World Sparrow Day" on March 20th. This event aims to raise awareness about the plight of the house sparrow and encourage collective action to ensure its conservation.

Save Water Day Celebration

On March 20, Shri S.K. Shah and Shrikrishna O.M. Arts College celebrated Save Water Day with great enthusiasm and dedication. The event aimed to raise awareness about the importance of water conservation and to encourage sustainable practices among students, faculty, and the local community.

Event Highlights:

Awareness Rally: Following the inauguration, students participated in an awareness rally around the college campus and nearby areas. They carried banners and placards with slogans like "Save Water, Save Life," "Every Drop Counts," and "Conserve Water, Conserve Future." The rally aimed to spread the message of water conservation to the wider community.

Expert Talks and Workshops: Several sessions were organized where experts shared their knowledge and experiences related to water conservation techniques. Workshops on rainwater harvesting, greywater recycling, and efficient water use in households and agriculture were conducted. These sessions provided practical insights and motivated participants to adopt water-saving measures.

Competitions: To engage students creatively, various competitions were held, including poster making, essay writing, and slogan writing, all centered around the theme of water conservation. The participants showcased their talent and expressed their views on the importance of saving water.

Plantation Drive: A tree plantation drive was also organized as part of the celebration. Students and faculty members planted saplings around the campus, symbolizing the commitment to nurturing the environment. Trees play a significant role in maintaining the water cycle, and this activity underscored the interconnection between trees and water conservation.

Pledge Ceremony: Towards the end of the day, a pledge ceremony was conducted where everyone present took an oath to conserve water in their daily lives. The pledge highlighted personal responsibility and the collective effort needed to address water scarcity issues.

Environment Day

Celebrating Environment Day on June 5th at Shri S.K. Shah and Shrikrishna O.M. Arts College was an enriching experience marked by various insightful activities and initiatives. The event aimed to raise awareness about environmental conservation and sustainability among students and faculty.

The day started with a report highlighting current environmental issues and their impact on our planet. Students actively participated in discussions, presentations, and workshops focused on practical solutions and individual contributions towards a greener future.

Various campaigns were launched, including tree-planting drives, waste management workshops, and awareness sessions on reducing plastic usage. These activities not only educated but also inspired everyone to take proactive steps towards preserving our environment.

Guest speakers and experts shared their knowledge, emphasizing the importance of collective responsibility in tackling environmental challenges. The college community pledged to continue these efforts beyond the event, ensuring a lasting impact on campus and in the wider community.

Overall, the celebration of Environment Day at Shri S.K. Shah and Shrikrishna O.M. Arts College fostered a sense of environmental consciousness and commitment to sustainable practices, reinforcing the college's dedication to nurturing responsible global citizens.











































PLANTS FOUND IN THE CAMPUS:

SR	BOTANICAL NAME	FAMILY	V.N.
NO			
1	Annona squamosa L.		Sitaphal
2	Annona reticulata L.		Ramphal
3	Artabotrys hexapetalus (L.f.)Bhandari.	Annonaceae	Lilo Champo
4	Polyalthia longifolia (Sonn.)Thw.		Asopalav
5	Cissampelos pareira L.		Venivel
6	Cocculus hirsutus (L.) Diels		Vevdi
7	Cocculus villosus DC.		Vevdi
8	Tinospora cordifolia (Willd.)Hook.&. Thoms.	Menispermaceae	Gudajvel
9	Argemone mexicana L.	Papaveraceae	Darudi
10	Brassica campestris L. Var.Sarson	Brassicaceae	Sarsav
11	Brassica juncea (L.) Czern &Coss.		Rai
12	Cadaba fruticosa (L.) Druce.		Teliohemkand
13	Capparis decidua (Forsk.)Edgew.		Kerado
14	Capparis sepiaria L.		Kanther
15	Capparis spinosa L.	Capparaceae	Kantalo kanther
16	Capparis horrida L.		Govind fal
17	Cleome gynandra L.		Ghandhatu
18	Cleome viscosa L.		Pilitilvan
19	Crateva nurvala Buch.		Vayvarno

20	Hybanthus enneaspermus (L.)F.Muell.	Violaceae	
21	Polygala chinensis L.	Polygalaceae	Pilibhonysan
22	Polygala erioptera DC.		Bhonyasn
23	Polycarpaea corymbosa (L.)Lam.	Caryophyllaceae	
24	Portulaca grandiflora HK.f.		Chini gulab
25	Portulaca oleracea L.	Portulacaceae	Motiluni
26	Portulaca tuberosa Roxb.	i ortulacaecae	Dholi luni
27	Portulaca quadrifida L.		Ziniluni
28	Bergia capensis L.	Elatinaceae	Jaljambro
29	Bergia suffruticosa (Del.)Fenzl.		Gandharo okhrad
30	Abelmoschus esculentus (L.)Moench.		Bhinda
31	Abutilon indicum (L.) Sw.		Khapat, Kanski
32	Abutilon fruticosum Guill. Perr.		Zini khapat
33	Gossypium herbaceum L.		Kapas
34	Gossypium arboreum L. var. Neglectum L.	Malvaceae	Deshi kapas
35	Gossypium herbaceum L. var. Acerifolium (Guill & Perr.) Che.		Kapas
36	Hibiscus rosa-sinensis L.		Jasud
37	Hibiscus lobatus (Murr.)O.Ktze.		Tali
38	Pavonia odorata Willd.		Sugandh Bala

39	Sida cordata (Burm.f) Borss.		Bhoyabala
40	Sida acuta Burm.f.		Bala
41	Sida cordifolia L.		Bala
42	Sida ovata Forsk.		Bala
43	Sida retusa L.	-	Bala
44	Sida rhombifolia L.	-	Bala
45	Sida spinosa L.		Bala
46	Thespesia populnea (L.)Soland.		Paras piplo
47	Adansonia digitata L.	Bombacaceae	Rukhdo
48	Bombax ceiba L.	_	Shimlo
49	Dombeya acutangula L.		Bhadraksh
50	Guazuma ulmifolia Lam.		Khoto rudraksh
51	Pterospermum acerifolium Willd.	-	Kanak champo
52	Waltheria indica L.	_	
32	waiineria inaica L.	Sterculiaceae	
53	Corchorus aestuans L.		Chhunchh
54	Corchorus capsularis L.	_	Bor chhunchh
55	Corchorus olitorius L.		Nani chhunchh
56	Corchorus depressus (L.)Stocks.		Bahuphali
		Tiliaceae	
57	Corchorus trilocularis L.		Tridhari chhunchh
58	Grewia villosa Willd.		Parekhado
59	Grewia hirsuta Vahl, Symb.		Khad dhamni
60	Triumfetta rhomboidea Jacq.		Zipti

61	Triumfetta pentandra A.		Zipti
62	Triumfetta rotundifolia Lam.		Zipto
63	Tribulus terrestris L.	Zygophyllaceae	Gokhru
64	Oxalis corniculata L.	Oxalidaceae	Navari
65	Impatiens balsmina L.	Balsaminaceae	Tanmaniyoo
66	Aegle marmelos (L.) Corr.		Bili
67	Citrus limon (L.) Burm.		Limbu
68	Limonia acidissima L.	Rutaceae	Kotha
69	Murraya koenigii (L.) Spr.		Mitho limdo
70	Murraya paniculata (L.) Jacq.		Kamini
71	Ailanthes excelsa Roxb.	Simaroubaceae	Moto arduso
72	Balanites aegyptiaca (L.) Del.	Balanitaceae	Ingoriyo
73	Azadirachta indica A.Juss.	Meliaceae	Limdo
74	Melia azedarach L.	Wichaccae	Bakam limdo
75	Zizyphus nummularia (Burm.f.)W.&A.	Rhamnaceae	Chanibor
76	Ampelocissus latifolia (Roxb.)Planch.	XV.	Jangli draksh
77	Cayratia carnosa (Lam.)Gagnep.	Vitaceae	Khat khatumbo
78	Cardiospermum halicacabum L.		Kagdolio
79	Dodonaea viscosa (L.) Jacq.	Sapindaceae	Jakhami
80	Sapindus laurifolius Vahl.Symb.		Aritha
81	Lannea coromandelica (Houtt.)		Moyno

	Merrill.		
82	Mangifera indica L.	Anacardiaceae	Ambo
83	Moringa oleifera L.	Moringaceae	Sargavo
84	Abrus precatorius L.		Chanothi
85	Alysicarpus monilifer (L.) DC.		Samervo
86	Alysicarpus longifolius (Rottl.Ex. Spreng.) W. & A.		Moto samervo
87	Alysicarpus bupleurifolius (L.)DC.		Khad samervo
88	Alysicarpus scarious (Rottl. Ex.Spreng.) Grah. A.Socki.		Ruchhalo samervo
89	Arachis hypogaea L.		Magfali
90	Butea monosperma (Lam.)Taub.		Khakhro / Kesudo
91	Cajanus cajan (L.) Millsp.		Tuver
92	Clitoria ternatea L.	Fabaceae	Garni
93	Crotolaria orixensis Willd.		Tripani, fatakiyo
94	Crotolaria burshia Buch. Ham.		Kharsani
95	Crotolaria retusa L.		Gughro
96	Crotolaria juncea L.		Shun
97	Dalbergia latifolia Roxb.		Sisam
98	Dalbergia sissoo Roxb.		Moto sisam
99	Derris indica (L.) Bennet. Syn.(Pongamia pinnata Pierre.)		Karanj
100	Dolichos falcatus L.		Valor
101	Indigofera cordifolia Heyne.		Gali

102	Indigofera linifolia Banker.		Bethi gali
103	Indigofera linnaei Ali.		Fatakiya / Bhoyan gali
104	Indigofera tinctoria L.		Gali
105	Medicago sativa L.		Lachko
106	Melilotus alba L.		Jangali methi
107	Mucana prurita HK.f.		Kuvech
108	Pisum sativum L.		Vatana
109	Rhyncosia minima (L.) DC.		Nanikamalvel
110	Sesbania grandiflora (L.)Poiret.		Agathio
111	Sesbania sesban (L.) Merr. Sub. Sp. sesban var. SesbanGill.		Shevari
112	Tephrosia purpurea (L.) Pers.		Sarpankho
113	Trigonella foenum- graecum L.		Methi
114	Zornia gibbosa Span.		Samarapani
115	Bauhinia acuminata L.		Kanchan
116	Bauhinia purpurea L.		Dev kanchanar
117	Caesalpinia bonducella Fleming.		Sagargota
118	Caesalpinia crista L.	Caesalpiniaceae	Karkas
119	Caesalpinia pulcherrima (L.)Svt.Obs.		Galtoro
120	Cassia auriculata L.		Aval
121	Cassia fistula L.		Garmalo

122	Cassia occidentalis L.		Kasundro
123	Cassia tora L.		Kuvandio
124	Cassia pumila Lam.	_	Bethi chimed
125	Delonix elata (L.) Gamble.	_	Sandsro
126	Delonix regia (Boj.) Raf.	_	Gulmohar
127	Parkinsonia aculeata L.	_	Rambaval
128	Peltophorum pterocarpum (DC.) Baker.		Tamrafali
129	Tamarindus indica L.	Caesalpiniaceae	Amli
130	Acacia auriculiformis A.Cunn.		Australian baval
131	Acacia nilotica (L.) Del.	_	Baval
132	Albizia lebbeck (L.) Bth.	_	Siris
133	Mimosa hamata Willd.		Kaibaval
134	Mimosa pudica L.	-	Lajamani
135	Parkia biglandulosa W. & A.	Mimosaceae	Chanduphal
136	Pitchecellobium dulce (Roxb.)Bth.	_	Gorasamli
137	Prosopis chilensis (Molina)Stun.		Gando baval
138	Samanea saman (Jacq.) Merrill.	_	Rato sarasdo
139	Rosa indica L.	Rosaceae	Gulab
140	Rosa alba L.	Rosaceae	Indian white rose
141	Kalanchoe laciniata DC.	Crsaaulaceae	
142	Kalanchoe pinnata (Lam.) Pers.	Cisaauiaceae	Panphuti
143	Anogeissus latifolia (Roxb.)Wall.	Combretaceae	Dhav

144	Combretum coccineum Lam.		Madhvel
145	Quisqualis indica L.		Madhumalti
146	Terminalia arjuna (Roxb.) W.& A.		Arjunsadad
147	Terminalia catappa L.	-	Badam
148	Callistemon lanceolatus DC.		Bottle brush
149	Eucalyptus citriodora HK.f.	– Myrtaceae	Neelgiri
150	Psidium guajava L.		Jamfal
151	Syzygium cumini (L.) Skeels.		Jambu
152	Ammannia baccifera L.		Jalagio
153	Ammannia multiflora Roxb.Hort.	Lythraceae	Zinoagio
154	Lawsonia inermis L.		Mendhi
155	Ludwigia parviflora Roxb.	Onagraceae	
156	Ludwigia perennis L.	_ Shagraceae	Panlavang
157	Passiflora edulis Sims.	Passifloraceae	Krishna kamal
158	Passiflora foetida L.		٠.
159	Carica papaya L.	Caricaceae	Papaya
160	Citrullus colocynthis (L.)Schrad.		Kadva indravarna
161	Coccinia grandis (L.) Voigt.Hort.	- Cucurbitaceae	Tindora
162	Ctenolepis cerasiformis (Stocks.) HK.f.		Ankhfutamani
163	Momordica charantia L.		Karela
164	Momordica dioica Roxb.		Kankoda

165	Mukia maderaspatana (L.)M.Roem.		Chanak chibhadi
166	Trichosanthes cucumerina L.		Jangli parval
167	Opuntia elatior Mill.	Cactaceae	Fafdo thor
168	Mollugo pentaphylla L.	Molluginaceae	
169	Mollugo nudicaulis Lam.		
170	Trianthema portulacastrum L.	Aizoaceae	Satodo
171	Coriandrum sativum L.	Apiaceae	Kothmir
172	Alangium salvifolium (L.f.)Wang.	Alangiaceae	Ankol
173	Anthocephalus indicus A.Rich.		Kadamba
174	Borreria stricta (L.f.) Schum.		Ganthiyu
175	Gardenia jasminoides L.		Gandharaj
176	Hamelia patens Jacq.		
177	Ixora arborea Roxb.	Rubiaceae	Naveri
178	Ixora coccinea L.	Rubiaceae	Rati nevari
179	Mitragyna parvifolia (Roxb.)Korth.		Kadamb
180	Oldenlandia corymbosa L.		Pitpapdo
181	Xeromphis spinosa (Thunb.)Keay.		Mindhal
182	Acanthospermum hispidum DC.		
183	Artemisia maritima L.	Asteraceae	Kirmani
184	Bidens biternata (Loar.) Merr.B.		Kokadi
185	Blumea eriantha DC.		Kapuriyo kalhar

186	Blumea lacera (Burm.f.) DC.		Kapuriyo
187	Chrysanthemum indicum L.		Guldaoudi
188	Echinops echinatus Roxb.		Utkanto
189	Eclipta prostrata (L.) L.Mant.		Bhangro
190	Grangea maderaspatana (L.)Poir.		Zinki mundi
191	Helianthus annus L.		Suryamukhi
192	Launaea procumbens (Roxb.) R. & R.		Moti bhopatri
193	Launaea sarmentosa (Willd.)Alst.		Nani bhopatri
194	Parthenium hysterophorus L.		
195	Sphaeranthus indicus L.		Gorakhmundi
196	Tagetes erecta L.		Galgota
197	Tridax procumbens L.		Pardesi bhangro
198	Vernonia anthelmintia (L.)Willd.		Kaligiri
199	Vernonia cinerea (L.) Less.		Shadevi
200	Xanthium strumarium L.		Gokhru
201	Plumbago zeylanica L.	Plumbaginaceae	Safed chitrak
202	Anagallis arvensis L. Var.Coerulea L.	Primulaceae	
203	Madhuca indica J.F.		Mahudo
204	Manilkara hexandra (Roxb.)Dab.	Sapotaceae	Rayana
205	Manilkara zapota (L.) Van.		Chikoo

206	Mimusops elengi L.		Bakul
207	Jasminum flexile Vahl. Symb.	Oleaceae	Jui
208	Jasminum multiflorum (Burm.f.) Andr.		Bat mogro
209	Nyctanthes arbortristis L.		Parijatak
210	Alstonia scholaris (L.) R.Br.		Saptaparni
211	Carissa congesta Wt. Icon. T.		Karamda
212	Catharanthus pusillus (Murr.)G.Don.		Morali
213	Catharanthus roseus (L.) G.Don.		Barmasi
214	Ervatamia divaricata (L.)Burkill.	Apocynaceae	Taggar
215	Nerium indicum Mill.		Lal Karen
216	Plumeria rubra L.		Khad champo
217	Plumeria acutifolia Poir.		Champo
218	Rouvolfia tetraphylla L.		Sarpagandha
219	Thevetia peruviana (Pers.)Merill.		Pili karen
220	Calotropis gigantea (L.) R.Br.		Moto akdo
221	Calotropis procera (Ait.) R.Br.		Nano akdo
222	Dregea volubilis (L.f.) Bth.	Acalomiadassas	Moti dodi
223	Pergularia daemia (Forsk.)Chiov.	Asclepiadaceae	Chamar dudheli
224	Tylophora indica (Burm.f.)Merill.		Damvel
225	Cryptostegia grandiflora R.Br.	Periplocaceae	Rubber vel

226	Hemidesmus indicus (L.) R.Br.		Dudhi
227	Enicostema hyssopifolium (Willd.) Verdoon.	Gentianaceae	Kadavinai
228	Cordia dichotoma Forst. F.Prodr.	Ehretiaceae	Vadgundo
229	Cordia gharf (Forsk.)E.&A.		Nana gunda
230	Cordia sebestena L.		Gunda
231	Coldenia procumbens L.	Boraginaceae	Okhrad
232	Heliotropium indicum L.		Hathi sundho
233	Heliotropium ovalifolium Forsk.		Nani hathi sundhi
234	Trichodesma amplexicaule Roth.		Undhafati
235	Convolvulus microphyllus (Roth.) Sieb.		Dholi sahankhvali
236	Evolvulus alsinoides (L.) L.		Kali shankhavali
237	Ipomoea obscura (L.) Ker-Gawl.		Vad fudardi
238	Ipomoea pes-tigridis L.	Convolvulaceae	Vagpadi
239	Ipomoea quamoclit L.		Kamini
240	Ipomoea eriocarpa R.Br.		Bodi fudardi
241	Ipomoea fistulosa Mart.		Besharmi
242	Merremia gangetica (L.)Cufod.		Underkani
243	Cuscuta chinensis Lam.	Cuscutaceae	Amarvel
244	Cuscuta reflexa Roxb.	Cuscutaceae	Amarvel
245	Capsicum annum Roxb.	Solanaceae	Marchi

246	Cestrum diurnum L.		Din ka raja
247	Cestrum nocturnum L.		Rat ni rani
248	Datura innoxa Mill.		Kalo dhanturo
249	Datura metel L.		Dhanturo
250	Physalis minima L.		Popti
251	Solanum indicum L.		Ubhi ringni
252	Solanum melongena L.		Ringan
253	Solanum nigrum L.		Piludi
254	Solanum surattense Burm.f.		Bho ringni
255	Withania somnifera (L.) Dunal.		Ashvagandha
256	Lindernia ciliata (Colsm.)Pennell.		Bhit chalti
257	Lindernia oppositifolia		Nani bhit chalti
231	(Retz.)Mukerjee.	Scrophulariaceae	Ivani bint charti
258	Striga angustifolia (D.Don).Saldhana.		Dholo agio
			_
259	Striga gesneroides (Willd.)Vatke.		Rato agio
260	Bignonia unguis Cati Rehd.		Nakhvel
261	Millingtonia hortensis L.	Bignoniaceae	Desi buch
262	Tecoma stans (L.) H.B. & K.		Pili limbdi
263	Pedalium murex L.	Pedaliaceae	Ubhi gokharu
264	Sesamum laciniatam Klein		Vagadau tal
265	Martynia annum L.	Martyniaceae	Vinchhudo
266	Adhatoda vasica (L.) Nees.	Acanthaceae	Arduso
267	Blepharis repens (Vahl.) Roth.		Zinkuuntingon

268	Hygrophila auriculata		Kantashelio
	(Schum.) Heine.		
269	Justicia procumbens L.		
270	Lapidagathis trinervis Wall.		Harancharo
271	Peristrophe bicalyculata		Kalianghedi
	(Retz.) Nees.		
272	Rungia pectinata (L.) Nees.		Khadselio
273	Ruellia tuberosa L.		Fatakado
274	Thunbergia erecta (Bth.)T.Anders.		Mohan
275	Clerodendrum inerme (L.)Gaertn.		Vad Mendi
276	Clerodendrum multiflorum		Arni
	(Burm.f.) O.Ktze.		
277	Duranta repens L.	Verbenaceae	Damyanti
278	Gmelina arborea Roxb.		Saven
279	Lantana camara L.		Indradhanu
280	Phyla nodiflora (L.) Greene.		Ratvelio
281	Tectona grandis L.		Sag
282	Vitex negundo L.	Verbenaceae	Nagod
283	Leucas aspera (Willd.) Spr.		Kubi
284	Leucas cephalotes (Roxb. Ex.Roth.) Spr.		Dosino kubo
285	Leucas urticaefolia R.Br.	Lamiaceae	Kubo
286	Mentha piperita L.		Vilayati Fudina
287	Mentha spicata L.		Fudino

288	Moschosma polystachyum (L.)Bth.		Avachi Bavchi
289	Ocimum gratissimum L.		Ramtulsi
290	Ocimum sanctum L.		Tulsi
291	Ocimum basilicum L.		Damro
292	Boerhavia chinensis (L.) Druce		Satodi
293	Boerhavia diffusa L.		Satodi
294	Boerhavia verticillata Poir.		Punarnava
295	Bougainvillea glabra DC.	Nyctaginaceae	Boganvel
296	Bougainvillea spectabilis Willd.		cc
297	Mirabilis jalapa L.		Gulbas
298	Achyranthes aspera L.		Anghedi
299	Aerva sanguinolenta (L.) Bl.Bljdr.		Gorakh ganjo
300	Amaranthus lividus L.		Tandaljo
301	Amaranthus spinosus L.	Amaranthaceae	Katalo dhimdo
302	Amaranthus viridis L.		Dhimdo
303	Celosia argentea L.		Lapadi
304	Digera muricata (L.) Mant.		Kanegro
305	Gomphrena globosa L.		Batau
306	Chenopodium album L.	Chenopodiaceae	Chilni bhagi
307	Basella rubra L.	Basellaceae	Poi
308	Antigonon leptopus H. & Arn.	Polygonaceae	Ice cream
309	Polygonum glabrum Willd.	2 32/30/10000	Okharad

310	Dendrophthoe falcata (L.f.)Etting.	Loranthaceae	Vando
311	Santalum album L.	Santalaceae	Chandan
312	Acalypha wilkesiana		
313	A. hispida		Ranchalo dudro
314	Acalypha indica L.		Vaichikanto
315	Breynia retusa (Dennst.) Alst.		Kamboi
316	Chrozophora prostrata Dalz.		Betho okhrad
317	Croton bonplandianum Baill.		Croton
318	Drypetes roxburghii (Wall.)Hurus.		Putranjivi
319	Emblica officinalis Gaertn.		Amla
320	Euphorbia dracunculoides Lam.		Ubhi dudheli
321	Euphorbia hirta L.	Euphorbiaceae	Nagla dudheli
322	Euphorbia milli Ch.		
323	Euphorbia neriifolia L.		Thor
324	Euphorbia pulcherrima L.		Lalpatti
325	Euphorbia heterophylla L.		Nani lalpatti
326	Jatropha curcus L.		Ratanjot
327	Jatropha podagrica Hook.		
328	Jatropha gossypifolia L.		Lal erandi
329	Phyllanthus fraternus Webster.		Bhonyamli
330	Phyllanthus virgatus J.G. Forst.		Moti Bhoi amli
331	Ricinus communis L.		Erand

332	Holoptelia integrifolia (Roxb.)Planch.		Kanjo
		Ulmaceae	
333	Pilea microphylla (L.) Liebm.		Chanapatti
334	Ficus asperrima Roxb.		Bhoi umbro
335	Ficus bengalensis L.		Vad
336	Ficus racemosa L.		Umaro
337	Ficus hispida L.f.	Moraceae	Dedhumaro
338	Ficus elastica L.		Rubber plant
339	Ficus carica L.		Anjir
340	Ficus tsiela Roxb.		Pipli
341	Morus alba L.		Shetur
342	Casuarina equisetifolia L.	Casuarinaceae	Sharu
343	Zingiber officinale Rosc.	Zingiberaceae	Aadu
344	Musa paradisiaca L.	Musaceae	Kela
345	Canna indica L.	Cannaceae	Kena
346	Crinum asiaticum L.	Amaryllidaceae	Nagdaman
347	Pancratium triflorum Roxb.		
348	Agave americana L.		Ramban
349	Polianthes tuberosa L.	Agavaceae	Gulchhadi
350	Yucca gloriosa L.		Yucca
351	Aloe barbadensis Mill.		Kunvarpatho
352	Asparagus racemosus Willd.	Liliacae	Satavari
353	Gloriosa superba L.		Kankasani
354	Urginea indica (Roxb.) Kanth.		Jangli Dungli

355	Zephyranthes rosius				
356	Commelina bengalensis L.		Motu sismuliu		
357	Commelina diffusa Burm.f.	Commelinaceae	Nanu sismuliu		
358	Tradescntia zebrena Hort.				
359	Areca catechu L.		Supari		
360	Caryota urens L.		Shiv jata		
361	Cocos nucifera L.	Arecaceae	Nariel		
362	Phoenix sylvestris (L.) Roxb.		Khajuri		
363	Roystonea regia (H.B. & K.) F.		Bottle pam		
364	Pandanus odoratissimus L.f.	Pandanaceae	Kevro		
365	Alocasia indica Schott.				
366	Colocasia esculenta (L.) Schot.	Araceae	Alavi		
367	Pothos scandens L.		Money plant		
368	Lemna paucicostata Hegelm.				
369	Wolffia microscopia (Griff.)Kurz.	Lamnaceae			
370	Cyperus triceps (Rottb.) Endl.				
372	Cyperus rotundus L.	Cymaragaga	Moth, Chido		
373	Scripus kysoor Roxb.	Cyperaceae			
374	Scleria stocksiana L.				
375	Aristida adscensionis L.		Lapdu		
376	Andropogon annulatus Forsk.		Jhinjavo		
377	Bothriochla pertusa (L.) A.Camus.	Poaceae	Jinjvo		
378	Cenchrus biflorus Roxb.		Motu Dharamnu		

379	Cenchrus ciliaris L.	Jhino dhamramnu
380	Chloris virgata Sw.	
381	Cynodon dactylon Pers.	Dharo
382	Eleusine indica (L.) Gaertn.	Ukdo
383	Setaria glauca Beauv.	Ziptagrass
384	Setaria tomentosa (Roxb.)Kunth.	Kutra grass

> Total 384 plant species were collected in college campus.









CARBON FOOTPRINT

- Number of persons using cycles 200
- ➤ Number of persons using cars 43
- \triangleright Number of persons uses two wheelers 305
- ➤ Number of persons using other transportations 1500
- Expenditure for transportation per person per day (approx.)—Rs.20/-
- Parent-teacher meetings done in a year.

♦ LIST OF ECO FRIENDLY ACTIVITIES

- Planting and caring of trees in and around the campus.
- Timely disposal of wastes from the campus.
- Celebration of important days like World Environment Day, Ozone Day, with great importance.
- Management has decided to adopt green protocol
- > Distribution of medicinal plant saplings among students
- Preparation and distribution of sapling during the monsoon season among the students.
- ➤ Bio Medical Waste is biggest challenge for Green environment, Address to this problem our Institute had taken inisetive district wise which collobration of Gemmi Govt.of Gujarat.

MAJOR AUDIT OBSERVATIONS

- > The environmental awareness initiatives are substantial.
- > Installation of solar panels is adequate.
- ➤ The training in vegetable cultivation and composting are adequate.
- ➤ Gardens inside the college premises are found well maintained.
- ➤ Use of notice boards and signs are adequate to reduce over exploitation of natural resources.
- Programs on green initiatives have to be increased. Campus should have stringent actions for plastic free zone.
- Rain water harvesting systems, solar power generation, environmental education programs have to be strengthened.

*** WATER AUDIT**

- ➤ There is enough water consumption monitoring system in the college campus.
- The college has waste water treatment plant should maintain and function well.
- The waste water from canteen and kitchens are used for gardening.
- The college has to take actions to strengthen rain water harvesting. Measurement of quantity of water from the rain water harvesting should be done.
- Automatic switching system should install for pump sets used for overhead tank filling.
- Per day use of water should not be done in over wastage of water.
- Display boards against the misuse of water use are lacking.

*** ENERGY AUDIT**

- ➤ The communication process for awareness in relation to energy conservation is found inadequate.
- Assessment of electrical load calculation is yet to be done by the college.
- > Objectives for reducing energy, water and fuel consumption should be done.
- ➤ The older generation and non energy efficient equipments should be replace with new energy efficient equipments.
- Regular monitoring of equipments and immediate rectification of any problems should be done as safety precaution in the campus.

ENERGY AUDIT

TUBELIG HT		WAT	TAGE	FAN		WATTA	GE	re R	WAT	ГАG E	BUL B	WATT	TAG E	ER 3	'GE	'A R)	'GE
REG	LED	REG	LED	REG.	EXHAUST	REGULAR AND EXHAUST	рТО	COMPUTE R	CFL	REG.	CFL	REG.	CFL	REFRIGER ATOR	WATTAGE	A.C(5 STAR)	WATTAGE
0	179	0	20	183	0	0	0	125	65	0	71	0	9	1	250	2	450
3	0	120	0	2	0	106	0	0	0	0	0	0	0	0	0	0	0
1	1	40	20	2	1	186	0	0	0	2	1	50	0	0	0	0	0
6	1	240	20	9	0	477	0	0	0	3	1	45	15	0	0	0	0
2	0	80	0	1	0	53	0	1	65	0	0	0	0	0	0	0	0
2	0	80	0	4	0	212	0	4	260	0	0	0	0	0	0	0	0
1	0	40	0	1	0	53	0	1	65	0	0	0	0	0	0	0	0
11	2	440	40	6	0	318	0	0	0	0	0	0	0	1	295	0	0
1	1	40	20	1	1	133	0	2	130	0	0	0	0	0	0	0	0
9	1	360	20	7	1	451	0	0	0	0	0	0	0	0	0	0	0
3	0	120	0	2	0	106	0	1	65	0	0	0	0	0	0	0	0
0	0	0	0	2	0	106	0	0	0	0	0	0	0	0	0	0	0
3	0	120	20	3	1	239	0	1	65	0	0	0	0	1	295	0	0
5	1	200	20	3	1	239	0	0	0	0	0	0	0	0	0	0	0
1	0	40	0	1	1	133	0	0	0	0	0	0	0	0	0	0	0
2	0	80	0	2	1	186	0	0	0	0	0	0	0	0	0	0	0
1	0	40	0	5	0	265	0	0	0	0	0	0	0	0	0	0	0
4	0	160	0	4	2	372	0	0	0	0	0	0	0	0	0	0	0
0	1	0	20	1	0	53	0	1	65	0	0	0	0	0	0	0	0
1	1	40	20	2	0	106	0	1	65	0	0	0	0	0	0	0	0
4	3	160	60	1	3	293	0	0	0	0	0	0	0	0	0	0	0
5	4	200	80	1	3	293	0	0	0	0	0	0	0	0	0	0	0
6	1	240	20	0	3	240	0	0	0	0	0	0	0	0	0	0	0
1	0	40	0	0	0	0	0	0	0	0	0	0	0	1	295	0	0
1	0	40	0	1	0	53	0	0	0	1	0	15	0	0	0	0	0
2	0	80	0	1	1	133	0	0	0	1	0	15	0	0	0	0	0
2	0	80	0	1	1	133	0	0	0	0	0	0	0	0	0	0	0
1	0	40	0	1	0	53	0	0	0	0	0	0	0	0	0	0	0
8	0	320	0	2	0	106	0	0	0	0	0	0	0	0	0	0	0
4	0	160	0	4	3	452	0	0	0	0	0	0	0	0	0	0	0
1	0	40	0	2	0	106	0	0	0	0	0	0	0	0	0	0	0
1	1	40	20	2	0	106	0	0	0	0	0	0	0	0	0	0	0
4	1	160	20	7	2	531	0	0	0	0	0	0	0	0	0	0	0
4	5	160	100	5	0	265	0	0	0	0	0	0	0	0	0	0	0
0	0	0	100	9	0	477	0	0	0	0	0	0	0	0	0	0	0
0	0		0	0	0	122	0	0 17	110	0	0		0	0	0	0	0
3	2	120		1	0	133	0	4 4	_	0	0	0	0	0			0
4	2	160	40	4	U	212	U	4	200	0	U	U	U	U	0	0	0

1	2	40	40	2	0	106	0	3	195	0	0	0	0	0	0	1	137 5
0	4	0	80	3	0	159	0	1	65	0	0	0	0	0	0	1	137 5
3	0	120	0	2	0	106	0	0	0	0	0	0	0	0	0	0	0
5	3	200	60	10	0	530	0	0	0	0	0	0	0	0	0	0	0
5	0	200	0	7	0	371	0	0	0	0	0	0	0	0	0	0	0
4	2	160	40	8	0	424	0	0	0	0	0	0	0	0	0	0	0
9	1	360	20	12	0	636	0	6	390	0	0	0	0	0	0	0	0
0	10	0	200	8	0	424	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	169	0	0	0	0	0	0	0	0
0	4	0	80	6	0	318	0	26	0	0	0	0	0	0	0	0	0
1	0	40	0	2	0	106	0	0	0	0	0	0	0	0	0	0	0
1	0	40	0	0	0	0	0	0	0	2	0	30	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
136	236	5440	1180	343	25	10560	0	194	2039	6	73	155	24	4	1135	4	3200
		•	•	•	•		•		•			•		•	•	•	

WASTE AUDIT

- ➤ Solid waste management systems should be maintained.
- ➤ The college has proper communication with the local body for regular collection of solid waste from the campus.
- ➤ Implementation of sustainable projects to attain set environmental goals should to be place.
- Waste bins in the class rooms, veranda, canteen and campus are inadequate.
- ➤ Biogas plant should be established.
- > Proper composting systems should be established.
- > Green chemistry labs should be introduced.

GREEN CAMPUS AUDIT

- Regular planting of trees in the campus should be done.
- Display boards to identify plants.
- There are fruit trees in the college to attract birds.
- Registry for flora and fauna on the campus is lacking.

AUDIT OF CARBON FOOT PRINT

Encourage students and faculties to use cycles.

4. CONCLUSION AND RECOMMENDATION:-

♦ PREPARATION OF ACTION PLAN

Policies referring to college management and approaches towards the use of resources need to be considered. The college should have a green policy/environmental policy for its sustainable development. The environmental policy formulated by the management of the college should be implemented meticulously. The college should have a policy on awareness training programs and college also should have a procurement policy (the college's policy for purchasing materials).

♦ FOLLOW UP ACTION AND PLANS

Green Audits are exercises which generate considerable quantities of valuable management information. The time, effort and cost involved in this exercise are often considerable and in order to be able to justify this expenditure. It is important to ensure that the findings and recommendations of the audit are considered at the correct level within the campus and that action plans and implementation programs result from the findings. Audit follow up is part of the wider process of continuous improvement. Without follow-up, the audit becomes an isolated event which soon becomes forgotten in the pressures of management priorities and the passing of time.

ENVIRONMENTAL EDUCATION

The following environmental education program may be implemented in the college before the next green auditing:-

- Training programs in solid waste management, liquid waste management, setting up of medicinal plant nursery, water management, vegetable cultivation, tree planting, energy management, landscape management, pollution monitoring methods, and rain water harvesting methods.
- ➤ Increase the number of display boards on environmental awareness such as save water, save electricity, no wastage of food/water, no smoking, switch off light and fan after use, plastic free campus etc.
- > Activate and raise the environmental clubs.
- > Set up model rainwater harvesting system, rainwater pits, vegetable garden, medicinal plant garden, paddy fields etc. for providing proper training to the students.
- ➤ Conduct exhibition of recyclable waste products.
- > Implement chemical treatment system for waste water from the laboratories.
- ➤ Awareness on carbon consumption.
- > Students and Staff members may be made totally aware of pollution caused by use of vehicles.
- The carbon consumption awareness programs on carbon emission at individual as well as social level will help to avoid air and noise pollution in the campus due to vehicles.

RECOMMENDATIONS

The green audit assists in the process of testing performance in the environmental arena and is fast becoming an indispensable aid to decision making in a college. The green audit reports assist in the process of attaining an eco friendly approach to the sustainable development of the college. Hope that the results presented in the green auditing report will serve as a guide for educating the college community on the existing environment related practices and resource usage at the college as well as spawn new activities and innovative practices. A few recommendations are added to curb the menace of waste management using eco-friendly and scientific techniques. This may lead to the prosperous future in context of green campus and thus sustainable environment and community development. It has been shown frequently that the practical suggestions, alternatives, and observations that have resulted from audits have added positive value to management of the campus. An outside view, perspective and opinion often help staffs who have been too close to problems or methods to see the value of alternative approaches. A green audit report is a very powerful and valuable communications tool to use when working with various students who need to be convinced that things are running smoothly and systems and procedures are coping with natural changes and modifications that occur.

COMMON RECOMMENDATIONS

- Adopt an environmental policy for the college.
- Establish a purchase policy for environmental friendly materials.
- ➤ Introduce UGC Environmental course to all students.
- ➤ Conduct more seminars and group discussions on environmental education.
- > Students and staff can be permitted to solve local environmental problems.
- Renovation of cooking system in the canteen to save gas.
- Establish water, waste and energy management systems.

CRITERIA WISE RECOMMENDATIONS WATER

- Remove damaged taps and install sensitive taps is possible.
- Establish rain water harvesting systems for each building.
- ➤ Maintain the water treatment systems.
- Awareness programs on water conservation to be conducted.
- Install display boards to control over exploitation of water.

ENERGY

- > Employment of more solar panels and other renewable energy sources.
- Conduct more save energy awareness programs for students and staff.
- ➤ Replace computers and TVs with LED monitors.
- ➤ More energy efficient fans should be replaced.
- > Observe a power saving day every year.
- Automatic power switch off systems may be introduced.

WASTE

- Establish a functional bio gas plant.
- A model solid waste treatment system to be established.
- Practice of waste segregation to be initiated.
- Establish a plastic free campus.
- Avoid paper plates and cups for all functions in the college.

GREEN CAMPUS

- > Grow potted plants at both verandah and class rooms.
- Create automatic drip irrigation system during summerholidays.
- Not just celebrating environment day but making it a daily habit.
- ➤ Beautify the college building with indoor plants.
- ➤ Providing funds to the Nature Club for making campus greener.
- Encouraging students not just through words, but through action for making the campus greener.
- ➤ Conducting competitions among departments for making students, teaching-non teaching staffs more interested in making the campus greener.

CARBON FOOTPRINT

- ➤ Increase a system of car pooling among the staff to reduce the number of four wheelers coming to the college.
- Introduce college bus services to the students and staff members.
- ➤ Encourage students and staff member to use cycles.
- Establish a more efficient cooking system to save gas.
- > Discourage the students using two wheelers for their commutation.