

7.1.6 - Quality audits on environment and energy are regularly undertaken by the institution

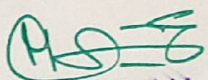
7.1.6.1. The institutional environment and energy initiatives are confirmed through the following

- Green audit
- Energy audit
- Environment audit
- Clean and green campus recognitions / awards
- Beyond the campus environmental promotion activities

A. Any 4 or all of the above

Green audit report



  
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7.1.6.1

GOVT. DEGREE COLLEGE, MEDAK  
OSMANIA UNIVERSITY, TELANGANA STATE



GREEN AUDIT REPORT  
**2021**



***Prepared by***  
**Green Audit Committee,**  
**GOVT. DEGREE COLLEGE, MEDAK.**  
**OSMANIA UNIVERSITY-HYDERABAD,**  
**TELANGANA STATE.**

A handwritten signature in green ink, appearing to be the name of the Principal.

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## Green Audit Committee

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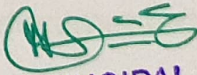
  
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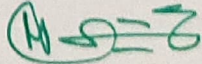
  
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## Summary

The environment gives us countless benefits that we cannot repay our entire life. It is everybody's responsibility to protect the environment. The concept of Eco campus is implemented in many educational institutions of many countries all over the world. A clean environment is essential for the existence of all living beings. Reducing the pollution and the minimization plans for educational institutions are mandatory to maintain cleanliness of the campus. Green Audit is essential to find out the environmental performance of the educational institutions and to analyze the possible solutions for converting educational campus as eco friendly campus. The first attempt of Green Audit of Government Degree College campus Medak.

This Audit mainly focused on greening indicators like consumption of energy in terms of electricity, fossil fuel, water utility, soil quality, vegetation, waste management practices, carbon foot print of the campus etc. the information and the data was collected by frequent visits by the Green Audit Team and Questionnaire survey among the staff and the students of the college. The data was analyzed and made a report pertaining environmental management plan with strength, weakness and suggestion on the environment issues of the campus are documented



  
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## **INTRODUCTION**

### **About college**

Govt. Degree College (Co-Edu.), Medak is one of the pioneer institutions for higher education. Established in 1984 as a co-education Govt. Degree College on a 15 acre lush green serene campus. Providing quality higher education in three U.G Programmes – BA, B.Com and B.Sc at present for more than 1600 students. The institution at present is run under the efficient stewardship of His Excellency Dr. A. Sudhaker, Principal.

The fundamental aim of the college is to impart sound learning to young men and women under circumstances congenial to their all-round development. It encourages the students to aim at excellence not only in academic pursuits, but also in every aspect of human Endeavour to achieve perfection.

The students are always guided and prompted to strive for academic excellence so that in course of time they may take up suitable careers for the betterment of their lives and also of their families and society. They are motivated to take part in various co-curricular activities of the college especially the extension programmes, JIGNASA – Student projects, NCC, NSS, Yuvatharangam etc. provide them with a rare social consciousness that motivates them to reach out to their fellowmen.

### **Vision Statement of the College**

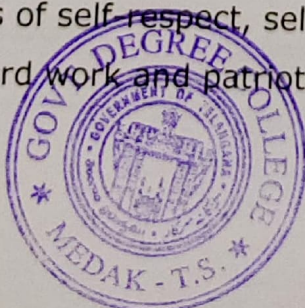
***“The perfect graduate nobly planned”***

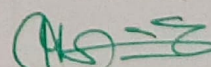
To create self-reliant and liberated with traditional cultural values and moral integrity, who will be agents of social transformation in their families and society

### **Mission Statement of the College**

***“To equip our students with deep knowledge and globally acceptable skills.”***

To develop values of self-respect, self confidence, different skills, tolerance, discipline, hard work and patriotism.



  
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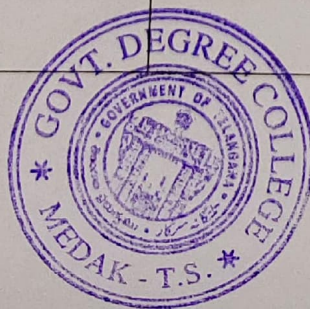
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Location of Govt. Degree College, MEDAK-Housing Board Colony

### U G Courses offered by the college

	<b>B.A. E/M &amp; T/M</b>	<b>B.COM E/M &amp; T/M</b>	<b>B. Sc. E/M &amp; T/M</b>
<b>Courses</b>	HISTORY ECONOMICS POLITICAL SCIENCE PUBLIC ADMINISTRATION PSYCOLOGY	COMPUTERS	BOTANY ZOOLOGY CHEMISTRY PHYSICS MATHEMATICS COMPUTER SCIENCE



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The student and faculty strength of the college is listed below:

No of students	<b>1548</b>
No of teachers	<b>34</b>
No of Non-teaching staffs	<b>22</b>
Gents	<b>642</b>
Ladies	<b>962</b>
Total	<b>1604</b>

### Physical Structure

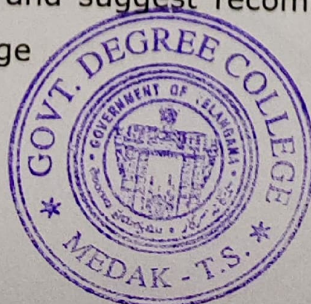
The college is located in about 15 acres of land. The built-up area of the college is 7.9 acres.

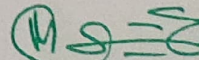
Departments	<b>16</b>
Laboratories	<b>7</b>
Conference halls	<b>1</b>
Libraries	<b>1 main library+ department libraries</b>
Auditorium	<b>1</b>
Canteens	<b>1</b>

### OBJECTIVES OF GREEN AUDIT

The main aim objectives of this green audit is to assess the environmental quality and the management strategies being implemented in the College. The specific objectives are:

1. To assess the quality of the water and soil on the college campus
2. To monitor the energy consumption pattern of the college
3. To quantify the liquid and solid waste generation and management plans in the campus.
4. To assess the carbon foot print and to reduce the Carbon Footprint of the college
5. To impart environment management plans to the college
6. Providing a database for corrective actions and future plans.
7. To assess whether extracurricular activities of the Institution support the collection, recovery, reuse, reduction and recycling of solid wastes.
8. To identify the gap areas and suggest recommendations to improve the Green Campus status of the College



  
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## **AREAS OF GREEN AUDITING**

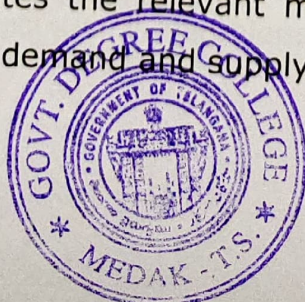
The real value of green audit is the fact that they are carried out, at defined intervals, and their results can illustrate improvement or change over a period of time. Eco-campus concept mainly focuses on the efficient use of energy and water; minimize waste generation or pollution and also economic efficiency.

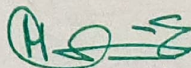
All these indicators are assessed in the process of "Green Auditing of this educational institute". Eco-campus focuses on the reduction of contribution to emissions, procure a cost effective and secure supply of energy, encourage and enhance energy use conservation, promotes personal action, reduce the institute's energy and water consumption, reduce wastes to landfill, 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.

### **Auditing for Water Management**

Water is a natural resource and a primary need for all living organisms. The Bio planet is covered with 71% of water. 97% of the earth's water is found in the oceans. Only 3% of the earth's water is fresh that is available for human. The majority of fresh water actually found under ground as soil moisture and in aquifers. Ground water can feed the streams, which is why a river can keep flowing even when there has been no precipitation. Humans can use both ground and surface water.

Ground water depletion and water contamination are taking place at an alarming rate. Hence it is essential to examine the quality and usage of water in the college. Water auditing is conducted for the evaluation of facilities of raw water intake and determining the facilities for water treatment and reuse. The concerned auditor investigates the relevant method that can be adopted and implemented to balance the demand and supply of water.



  
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## **Auditing for Energy Management**

Energy is essential for any activity. Energy is defined as the ability to do work. Energy conservation is an important aspect of campus sustainability which is also linked with carbon foot print of the campus. Energy auditing deals with the conservation and methods to reduce its consumption related to environmental degradation. It is therefore essential for any environmentally responsible institution examine its energy use practices

## **Auditing for Waste Management**

Waste audit is a method for analyzing an organization's waste streams.

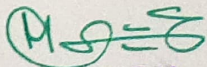
Human activities create waste, and it is the way these wastes are handled, stored, collected and disposed of, which can pose risks to the environment and to public health. Pollution from waste is aesthetically unpleasing and results in large amounts of litter in our communities which can cause health problems.

Solid waste can be divided into three categories: bio-degradable, non-biodegradable and hazardous waste.

1. Bio-degradable wastes include food wastes, leaves, wastes from canteen, wastes from toilets etc.
2. Non-biodegradable wastes include that is usually thrown away in homes and schools such as plastic, metals, tins, glass bottles etc.
3. Hazardous waste is waste that is likely to be a threat to health or the environment like cleaning chemicals, acids, crude oils etc.

Unscientific management of these wastes such as dumping in pits or burning them may cause harmful discharge of contaminants into soil and water supplies, and produce greenhouse gases contributing to global climate change respectively. Special attention should be given to the handling and management of hazardous waste generated in the college. Bio-degradable waste can be effectively utilized for energy generation purposes through anaerobic digestion or can be converted to fertilizer by composting technology. Non-biodegradable waste can be utilized through recycling 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.



  
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**Auditing for Green Campus Management**

Plants play an important ecological role within the urban environment, as well as support improved public health and provide aesthetic benefits to cities. For example, in one year, a single mature tree will absorb up to 48 pounds of carbon dioxide (CO<sub>2</sub>) from the atmosphere, and release it as oxygen. The amount of oxygen released by the trees of the campus is good for the (stake holders) people in the college campus. So while you are busy studying and working on earning those good grades, all the plants in college campus are also working hard to make the air cleaner for us.

**Auditing for Carbon Footprint**

Burning of fossil fuels like diesel, petrol, CNG has an impact on the environment through the emission of greenhouse gases into the atmosphere. The most common greenhouse gases are carbon dioxide (CO<sub>2</sub>), methane, water vapor, nitrous oxide, chlorofluorocarbons (CFC) 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. Vehicular emission is the main source of carbon emission in the campus, hence to assess the method of transportation that is practiced in the college is important.



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## **METHODOLOGY ADOPTED**

The methodology adopted to conduct the Green Audit of the Institution had the following components

### **Onsite Visit**

More than 15 field visits were conducted by the Green Audit Team . The key focus of the visit was on assessing the status of the green cover of the Institution, their waste management practices and energy conservation strategies etc. The sample collection (water, soil) was carried out during the visits. The water samples from three motor pumps and soil samples from three different places of the campus were collected. The sample collection, preservation, and analysis were done in the scientific manner as prescribed by the standard procedures.

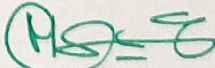
### **Group Discussion**

Based on the observations during the onsite visit of campus, discussions were held to identify environmental issues at institutional level and its surroundings by the Green Audit Team.

### **Energy, waste management and Carbon foot print analysis Survey**

The audit team with the help of teachers and students assessed the energy consumption pattern and waste generation, disposal and treatment facilities of the college. The monitoring was conducted with a detailed questionnaire survey method.

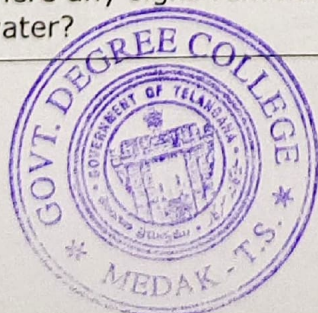


  
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# Survey forms

## 1. Water management

SL NO	PARAMETERS	Response	Remarks
1	Source of water		
2	No of Wells		
3	No of motors used		
4	Horse power – Motor		
5	Depth of well -Total		
6	Water level		
7	Number of water tanks		
8	Capacity of tank		
9	Quantity of water pumped every day		
10	Any water wastage/why?		
11	Water usage for gardening		
12	Waste water sources		
13	Use of waste water		
14	Faith of waste water from labs		
15	Whether waste water from labs mixed with ground water		
16	Any treatment for lab water		
17	Whether any green chemistry method practiced in labs		
18	No of water coolers		
19	Rain water harvest available?		
20	No of units and amount of water harvested		
21	Any leaky taps		
22	Amount of water lost per day		
23	Any water management plan used ?		
24	Any water saving techniques followed ?		
25	Are there any signs reminding peoples to turn off the water?		



  
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## 2. Energy audit

Room No. / name	Electrical device/ items	Number	Power	usage time (hr/day)

Item: Bulbs (CFL, incandescent, LED); A/c, fan, computer, instruments

## 3. Waste management

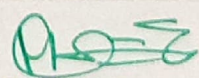
Approximate quantity of waste generated per day(inkg)

<b>Office</b>				
Approx	Biodegradable	Non - biodegradable	Hazardous	Others
<1Kg				
2-10Kg				
>10Kg				

<b>Laboratories</b>				
Approx	Biodegradable	Non - biodegradable	Hazardous	Others
<1Kg				
2-10Kg				
>10Kg				

<b>Canteen/kitchen</b>				
Approx	Biodegradable	Non - biodegradable	Hazardous	Others
<1Kg				
2-10Kg				
>10Kg				



  
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#### 4. Total strength of students ,teachers, and Non teaching staffs

No of Students	
No of Teachers	
No of Non teaching staffs	
Gents	
Ladies	
Total	

#### 5. How the waste generated in the college is managed?

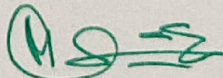
A)Composting/ Vermicomposting	Yes/ No	Remark
B)Recycling		
C)Reusing		
D)Other ways		

#### 6. Waste generated in the college?

E-waste	
Hazardous waste	
Solid waste	
Dry leaves	
Canteen waste	
Liquid waste	
Glass	
Unused equipment	
Napkins	
Others (specify)	

<b>Do you use recycled paper in college ?</b>	
<b>Any waste management methods used ?</b>	



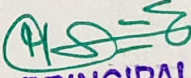
  
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## **7. Carbon foot print analysis**

**A carbon foot print is the total amount of green gases (including Carbon dioxide, Methane) that are generated by our actions**

- 1 Total number of vehicles used by the stakeholders of the college.(per day)
- 2 No of cycles used
- 3 No of two wheelers used (average distance travelled and quantity od fuel and amount used per day)
- 4 No of cars used (average distance travelled and quantity od fuel and amount used per day)
- 5 No of persons using public transportation
- 6 No of persons using college conveyance
- 7 No of generators used per day
- 8 Amount of fuel used
- 9 Number of LPG cylinders used in canteen/labs
- 10 Use of any other fossil fuels in the college
- 11 Any suggestion to reduce the use of fuel



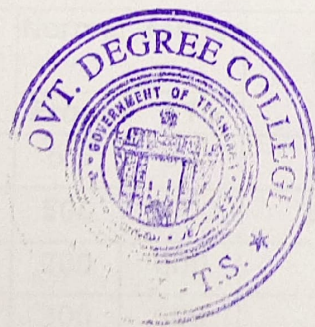
  
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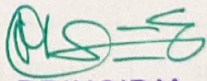


### AUDIT STAGE

Green auditing in GDC, Medak, began with the assessment of the status of the green cover of the Institution followed by waste management practices and energy conservation strategies etc. The team monitored different facilities at the college, determined different types of appliances and utilities (lights, fans taps, toilets, apparatus, refrigerators etc.) as well as measuring the usage per item (Watts indicated on the appliance or measuring water from a tap) and identifying the relevant consumption patterns (such as how often an appliance is used) and their impacts. The staff and learners were interviewed to get details of usage, frequency or general characteristics of certain appliances.

Data collection was done in the sectors such as Energy, Waste, Greening, Carbon footprint and Water use. College records and documents were verified several times to clarify the data received through survey and discussions. The environment samples including water, soil were from various location of the campus were collected and analyzed at **Department of Rural Water Supply and Sanitation Engineers Lab., Medak Division, Telangana State.**



  
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## GREEN AUDIT REPORT

### Water Quality assessment

Ground Water is the only source of water in the college. The water is pumped out from the three bore wells with the help of submersible motor pumps in to over head tanks. Water will be supplied from the tanks for all the needs of the college including water filter (RO) plant for drinking purpose.

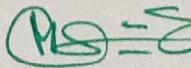
Water samples from three different locations on the campus of the college were collected and analyzed for its quality parameters. The samples were collected, and analyzed for various physio-chemical parameters with the help of **Department of Rural Water Supply and Sanitation Engineers Lab., Medak Division, Telangana State.**

The major parameters analyzed include total dissolved solids (TDS), salinity or alkalinity, chloride, fluorides, nitrites, iron, sulphate, total hardness and pH. The results are presented in the Table 1

Parameters	Normal ranges		Bore Well water 1	Bore Well water 2	Bore well water 3
	From	To			
Ph	6.5	8.5	7.4	6.72	7.06
TDS mg/lit	500	2000	180 mg/lit	176 mg/lit	168 mg/lit
Alkalinity (mg/l)	200	600	190ppm	220ppm	210ppm
Hardness (Total)	300	600	220	235	230
Chloride (mg/l)	250	1000	280	285	270
Fluoride ppm	1.0	1.5	0.52	0.56	0.52
Nitrites (mg/l)	45	-	5.7	5.6	5.6
Iron (mg/l)	0.3	-	0.23	0.27	0.21
Sulphate (mg/l)	200	400	25.18	21.41	27.21

Table 1. Results of water quality

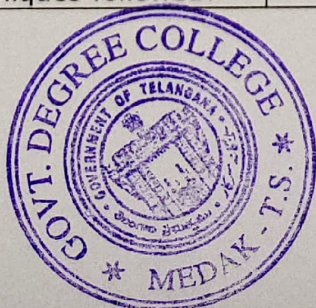


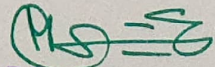
  
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## Water Management

The main source of water in the College is ground water. There are three bore wells present in the campus. These bore wells are recharged with water soaking pits and rainwater. A total quantity of 13000 Ltrs of water is pumped out from the bore wells every day for the regular activities in the college. Wastage of water from the lab is reduced by adopting microscale analysis. An average of 1,89,,000 L of water is used by the College per month.

SL NO	PARAMETERS	Response	Remarks
1	Source of water	3 Bore Wells	
2	No of Wells	-	
3	No of motors used	3	
4	Horse power – Motor	1HP-3	
5	Depth of well -Total	-	
6	Water level	300 ft	Depth of the bore well
7	Number of water tanks	4	
8	Capacity of tank	1000 L -3 & 10000 L-1	
9	Quantity of water pumped every day	7000 L/day	
10	Any water wastage/why?	Yes (leakage, RO plant)	
11	Water usage for gardening	1000L/day	
12	Waste water sources	Lab, canteen	
13	Use of waste water	-	
14	Faith of wastewater from labs	-	
15	Whether wastewater from labs mixed with ground water	No	
16	Any treatment for lab water	No	
17	Whether any green chemistry method practiced in labs	No	
18	No. of water coolers	No	
19	Rain water harvest available	Yes	
20	No of units and amount of water harvested	03	
21	Any leaky taps	-	
22	Amount of water lost per day	-	
23	Any water management plan used?	Yes (Harvesting pits)	
24	Any water saving techniques followed?	-	



  
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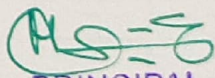
### Soil Quality assessment

Soil samples were collected from four different locations of the campus and analyzed for the basic parameters. The results are tabulated and presented in table 3.

Parameter	Location 1 (fruit garden)	Location 2 (ground)	Location 3 (Teak plantation)	Location 4 (Botanical garden)
pH	7.1	7.3	7.2	7.1
Total Nitrogen (mg/kg)	2.5	2.7	2.2	2.0
Total organic carbon (%)	1.2	1.4	1.2	1.3
Phosphate (mg/kg)	0.2	0.6	0.1	0.5

**Table 3: Soil components – GDC Medak**



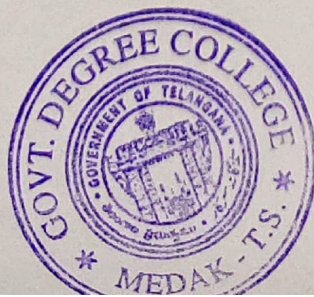
  
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## Energy Audit Report

The college has consumed an average of 254.07 kW/hr (4890.015 kW/Month) electricity in a month and the one year electricity bill amount was 2,02,857/-.

Sl No	Electrical appliances/instruments	Number	Power (W)/unit	Total power (W)	kW	Operation /day	kW/hr	No of days in month	Total consumption per month
1	CFL	-	-	-	-	-	-	-	-
2	TUBE	82	38	3116	3.116	4	12.464	25	311.6
4	LED BULB	62	9	558	0.558	4	2.232	25	55.8
5	LED TUBE	-	-	-	-	-	-	-	-
6	PROJECTOR	8	280	2240	2.24	1	2.24	25	56
7	SPEAKERS	4	10	40	0.04	1	0.04	25	1
8	FAN	63	60	3780	3.78	4	1.512	20	30.24
9	COMPUTER	102	250	25500	25.5	4	102	20	2040
10	LAPTOPS	2	50	100	0.1	4	0.4	5	2
11	PRINTERS	10	60	600	0.6	1	0.6	20	12
12	PHOTOSTAT MACHINE	10	650	6500	6.5	2	13	15	195
13	SCANNER	2	50	100	0.1	0.5	0.05	10	0.5
14	UPS	5	1000	5000	5	12	60	20	1200
15	INDUCTION	-	-	-	-	-	-	-	-
16	A/C	5	7000	35000	35	1	35	15	525
17	REFRIGERATOR	3	150	450	0.45	24	10.8	30	324
18	TABLE FAN	-	-	-	-	-	-	-	-
19	MIXER GRINDER	-	-	-	-	-	-	-	-
20	OVEN	3	1500	4500	4.5	2	9	10	90
22	CENTRIFUGE	2	850	1700	1.7	0.25	0.425	8	3.4
23	AUTOCLAVE	1	1700	1700	1.7	1	1.7	4	6.8
24	ULTRASOUND	1	700	700	0.7	0.25	0.175	5	0.875
25	LAMINAR FLOW	1	600	600	0.6	1	0.6	5	3
26	EXHAUST FAN	4	32	128	0.128	4	0.512	25	12.8
27	IRON BOX	-	-	-	-	-	-	-	-
28	SEWING MACHINE	-	-	-	-	-	-	-	-
29	COLOUR BULB	-	-	-	-	-	-	-	-
30	INCUBATOR	2	40	80	0.08	4	0.32	25	8
31	DISTILLATION UNIT	1	1000	1000	1	1	1	12	12
32	SANITARY NAPKIN INCINERATOR	-	-	-	-	-	-	-	-

**Table 4**

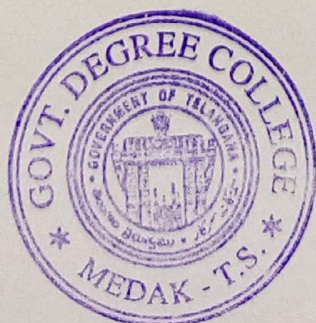


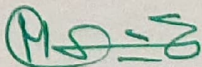
*(Signature)*  
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MEDAK - 502 110

## Faunal diversity in college campus (with photographic evidence)

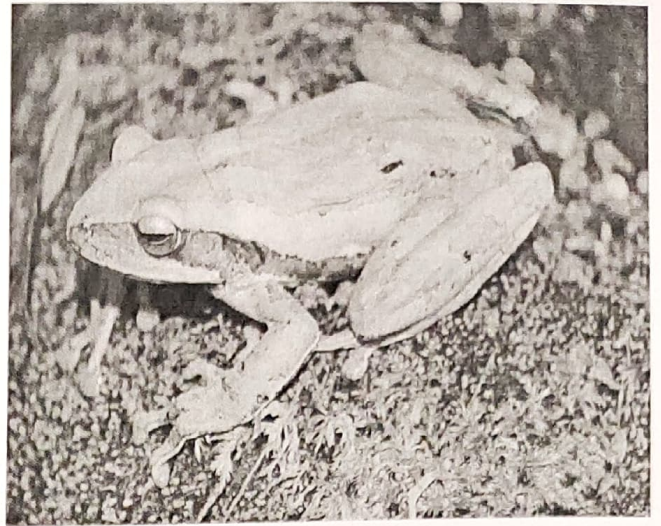
Faunal group	Scientific name	Number (if enumera tion is done)	Seasonality
Spiders	1) Neoscona, 2) Hersilia, 3) Leucauge	- - -	September/October
Moths & Butterflies	1) Blue crow, 2) Common Mormon 3) Curetis Acuta	- - -	October/November
Dragon Flies	1) Common Hawker 2) Damsel flies	- -	May/September
Annelidas	Pheretima posthuma	-	December
Arthropoda	1) Mantodea 2) Grasshopper 3) Red ant 4) House fly	- - - -	Summer
Amphibians	1) Duttaphrynus melanostictus 2) Polypedetes maculatus	- -	September
Reptales	1) Naja Naja 2) King Cobra 3) Krait 4) calotes versicolor	- - - -	April - October
Birds	1) Ashy Prinia 2) Acridotheres tristis 2) Spotted owlet 3) Little egret 4) Pavo cristatus	- - - - -	Spring
Mammals	1) Lepus nigricollis 2) Rhesus mulatta 3) Indian Pariah	- - -	October-February October-December Winter



  
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Neoscona



Polypedetes maculatus



Grasshopper



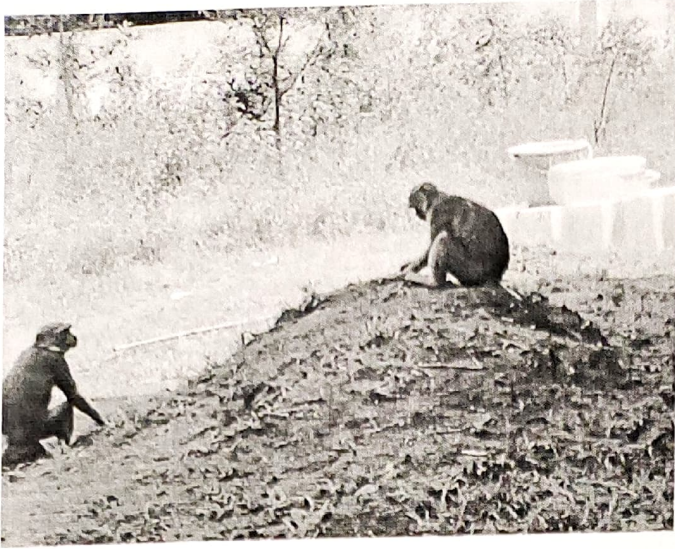
Blue crow



Principal

Govt. Degree College  
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Common Hawker



Lepus nigricollis



Rhesus mulatta



Indian Pariah



Acridotheres tristis



Principal

Govt. Degree College

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**Waste management**

Waste management process plays an important role in keeping the campus eco friendly. Different types of wastes are generated in the college like e-wastes, solid, chemicals, glass ware etc. It is a challenging task to collect and manage the different types of wastes. The details of different types of wastes generated and the disposal method adopted by the college as listed below.

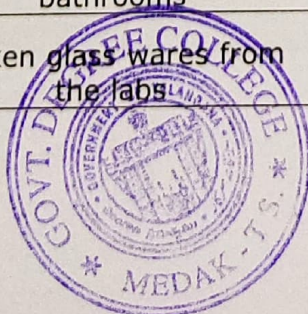
**Total number of stakeholders in the college: 1604**

Total number of building (Class rooms, canteen, office, auditorium, library etc): **33**

<b>No. of Class Rooms</b>	<b>18</b>
<b>No. of Laboratories</b>	<b>11</b>
<b>No. of Conference halls</b>	<b>1</b>
<b>Library Halls</b>	<b>1</b>
<b>Auditorium</b>	<b>1</b>
<b>Canteens</b>	<b>1</b>

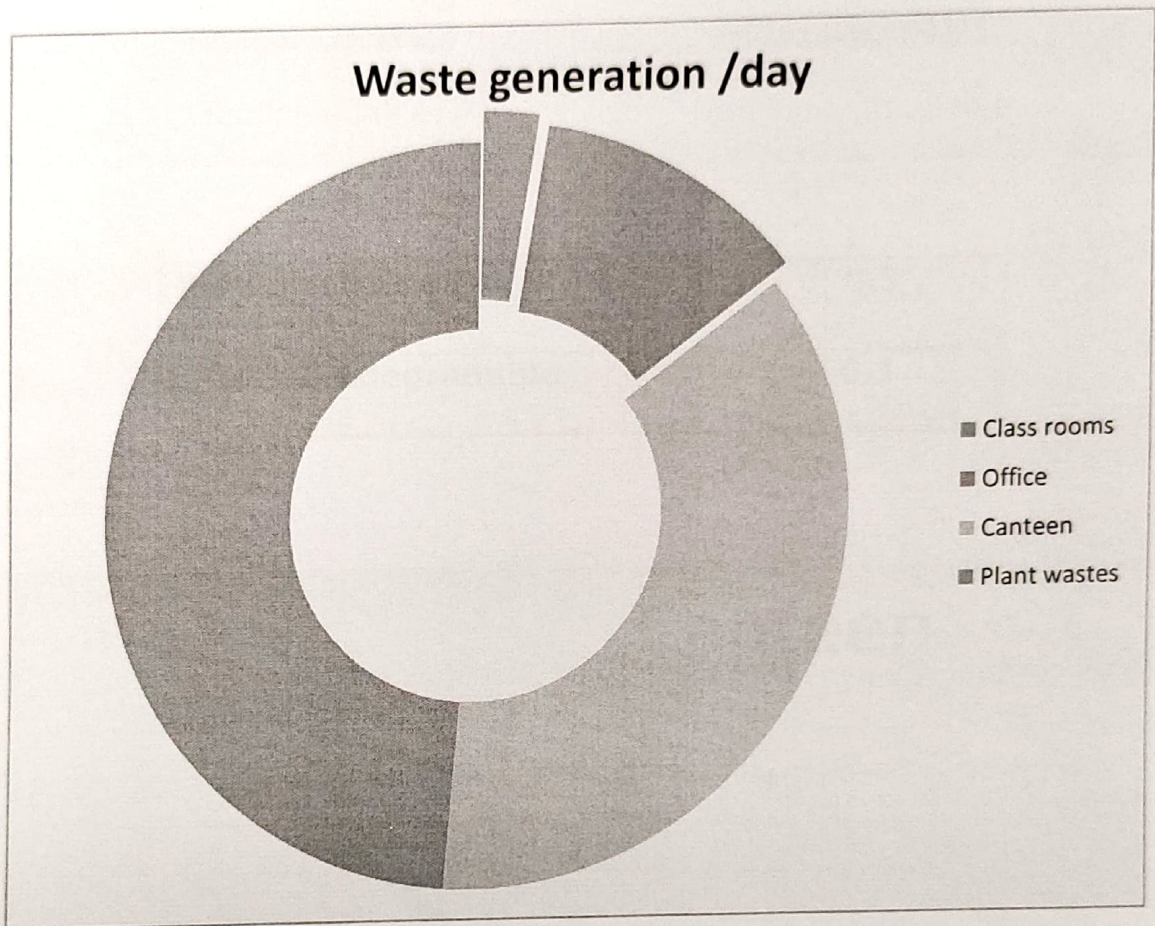
**Table 5. Different types of waste generated in the college and their disposal**

Types of waste	Particulars	Disposal method
E-Waste	Computers, electrical and electronic parts	Direct selling
Plastic waste	Pen, Refill, Plastic water bottles and other plastic containers, wrappers etc	Direct selling
Solid wastes	Damaged furniture, paper waste, paper plates, food wastes	Reuse after maintenance energy conversion, manure
Chemical wastes	Laboratory waste	Neutralise with water
Waste water	Washing, urinals, bathrooms	Soak pits
Glass waste	Broken glass wares from the labs	Direct selling



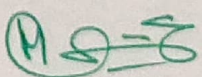
*(Signature)*  
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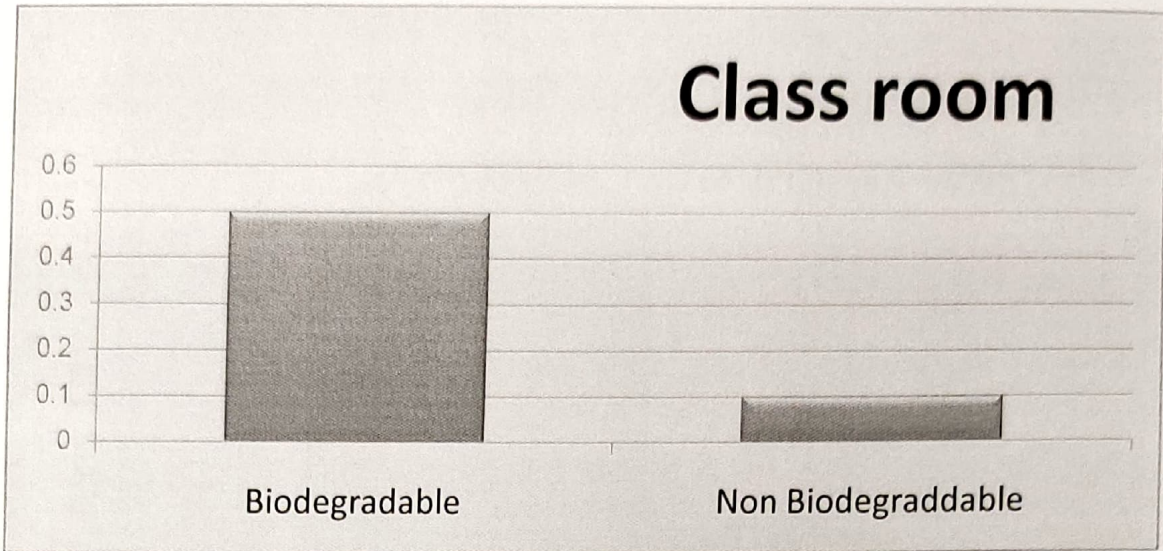
**Fig. 2 Per day waste generation in class rooms, offices and canteen**



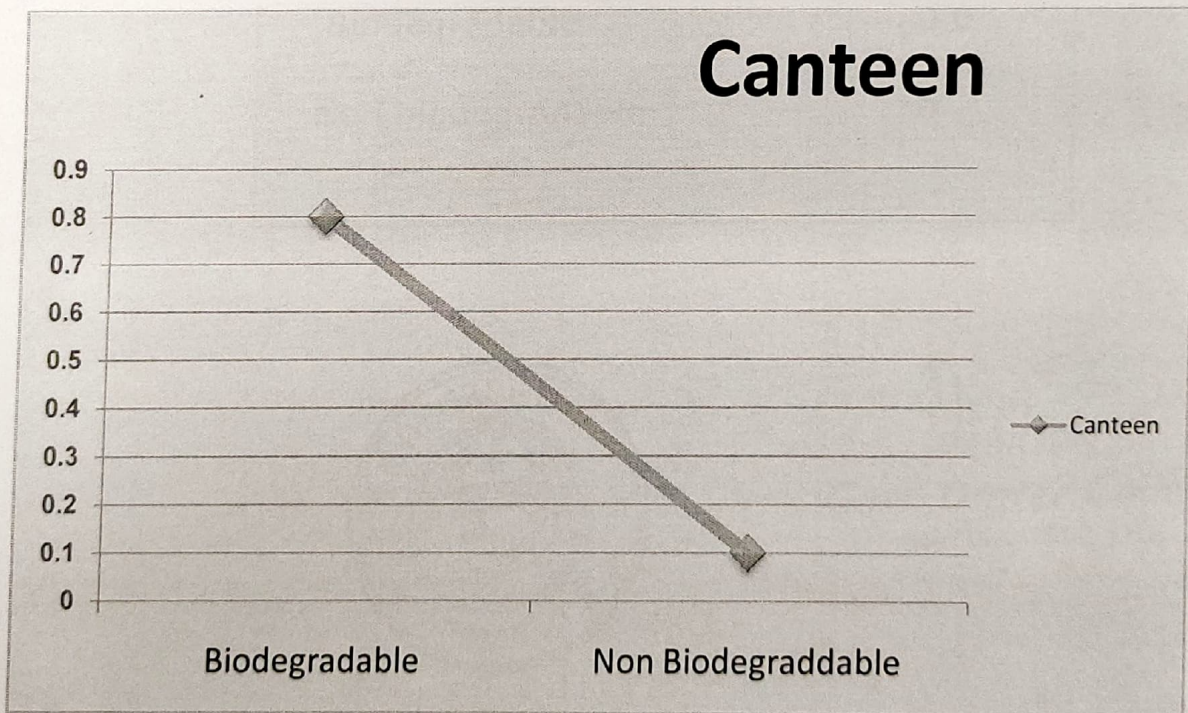
<b>Class room</b>	<b>0.1</b>
<b>Office</b>	<b>0.5</b>
<b>Canteen</b>	<b>1.5</b>
<b>Plants wastes</b>	<b>2.0</b>



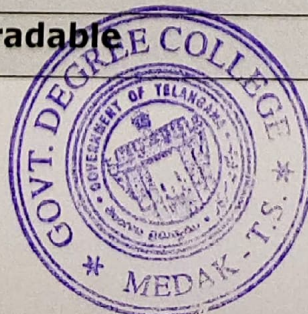
  
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**MEDAK - 502 110**

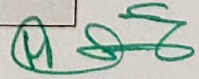


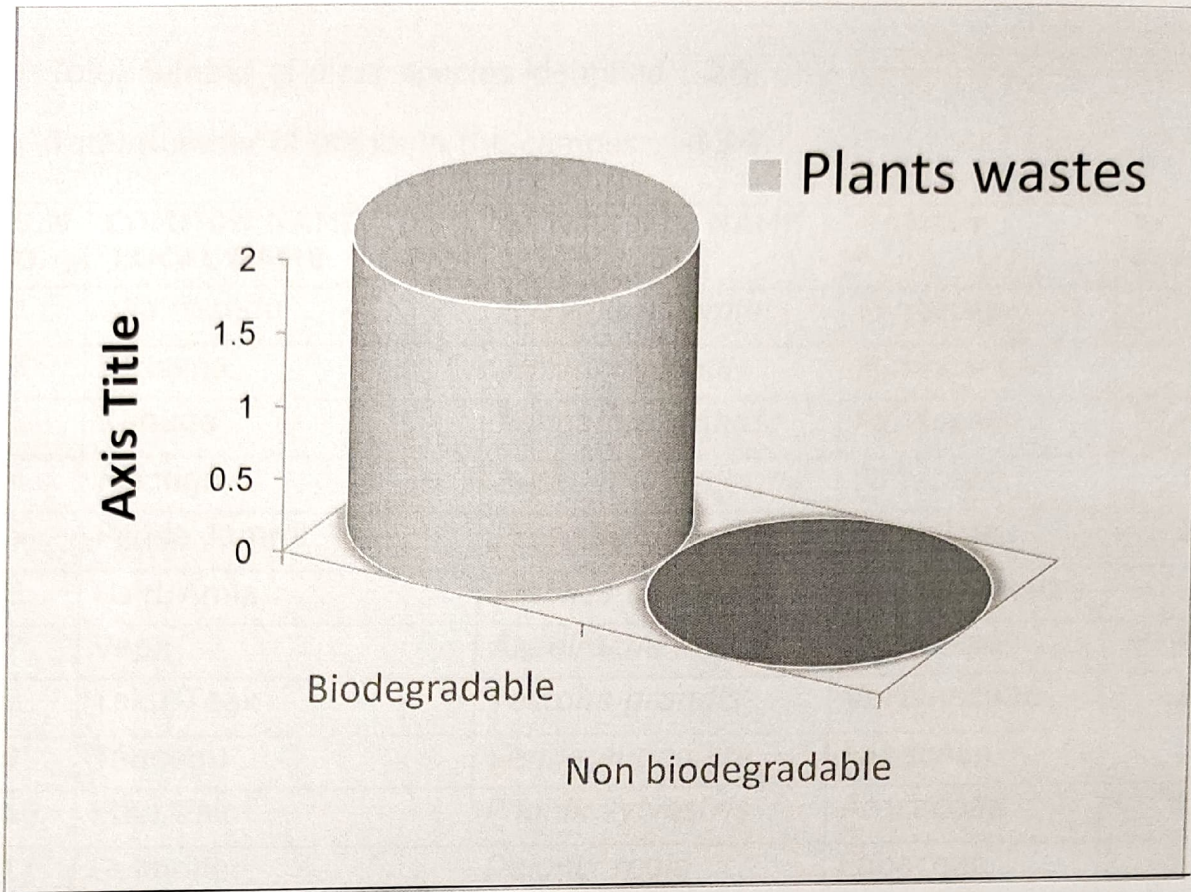
<b>Biodegradable</b>	<b>0.5</b>
<b>Non biodegradable</b>	<b>0.1</b>



<b>Biodegradable</b>	<b>0.8</b>
<b>Non biodegradable</b>	<b>0.1</b>



  
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<b>Biodegradable</b>	<b>2.0</b>
<b>Non biodegradable</b>	<b>0</b>



*MSS*

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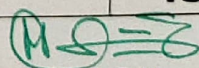
## Green Campus

Total number of plant species identified : **26**

Total Number of plants in the campus : **434**

S.N O.	COMMON NAME/ LOCAL NAME	SCIENTIFIC NAME	FAMILY	NO. OF PLANTS
1	Alla neredu	<i>Syzygium cumini</i>	Myrtaceae	25
2	Dirisena	<i>Albizia lebbek</i>	Mimosaceae	06
3	Kanuga	<i>Pongamia pinnata</i>	Fabaceae	42
4	Moduga	<i>Butea monosperma</i>	Fabaceae	20
5	Pedda Jammi	<i>Prosopis cineraria</i>	Fabaceae	25
6	Usiri/Amla	<i>Emblica officinalis</i>	Euphorbiaceae	25
7	Vepa	<i>Azadiracha indica</i>	Meliaceae	40
8	Teku/Teak	<i>Tectona grandis</i>	Verbinaceae	20
9	Tangedu	<i>Senna auriculata</i>	Fabaceae	10
10	Etha/Palm	<i>Phonix sylvestris</i>	Arecaceae	02
11	Gulmohar	<i>Delonix regia</i>	Fabaceae	10
12	Eucalyptus/Neelagiri	<i>Eucalyptus globulus</i>	Myrtaceae	15
13	Karivepaku	<i>Murraya koenigii</i>	Rutaceae	10
14	Muluga/Drum stick	<i>Humulus lupulus</i>	Moringaceae	15
15	Pala kodisa	<i>Wrightia tinctoria</i>	Apocynaceae	10
16	Medi	<i>Ficus glomerata</i>	Moraceae	04
17	Ravi	<i>Ficus religiosa</i>	Moraceae	08
18	Badam/Almond	<i>Prunus dulcis</i>	Rasaceae	10
19	Seetha phal	<i>Annona squamosa</i>	Annonaceae	06
20	Mamidi/Mango/Aam	<i>Mangifera indica</i>	Anacardiaceae	22
21	Veduru/Bamboo	<i>Bamusa arundinacea</i>	Poaceae	46
22	Jama	<i>Psidium guava</i>	Myrtaceae	25
23	Nimma	<i>Citrus limon</i>	Rutaceae	18
24	Danimma	<i>Punica granatum</i>	Punicaceae	05
25	Kobbari/Copra/Coconut	<i>Cocos nucifera</i>	Arecaceae	05
26	Naramamidi	<i>Polyalthia longifolia</i>	Annonaceae	10
<b>Total No. of plants</b>				<b>434</b>



  
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ALLA NEREDU (Black Plum,  
Jamun)  
Scientific name : *Syzygium cumini*  
Family : Myrtaceae  
JULY/2016



2021/6/23 14:47

Common name : **KANUGA**  
Scientific name :  
*Pongamia pinnata*  
Family : Fabaceae  
JULY/2016



2021/6/23 15:14

Common name :  
**DIRISENA**  
Scientific name :  
*Anogessus*  
*latifolia*  
Family : Asparagaceae  
JULY/2016



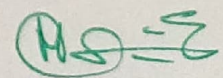
2021/6/23 15:57

Common name : **MODUGA**  
Scientific name : *Butea*  
*monosperma/Butea frondosa*  
Family : Fabaceae  
JULY/2016



2021/6/23 16:14

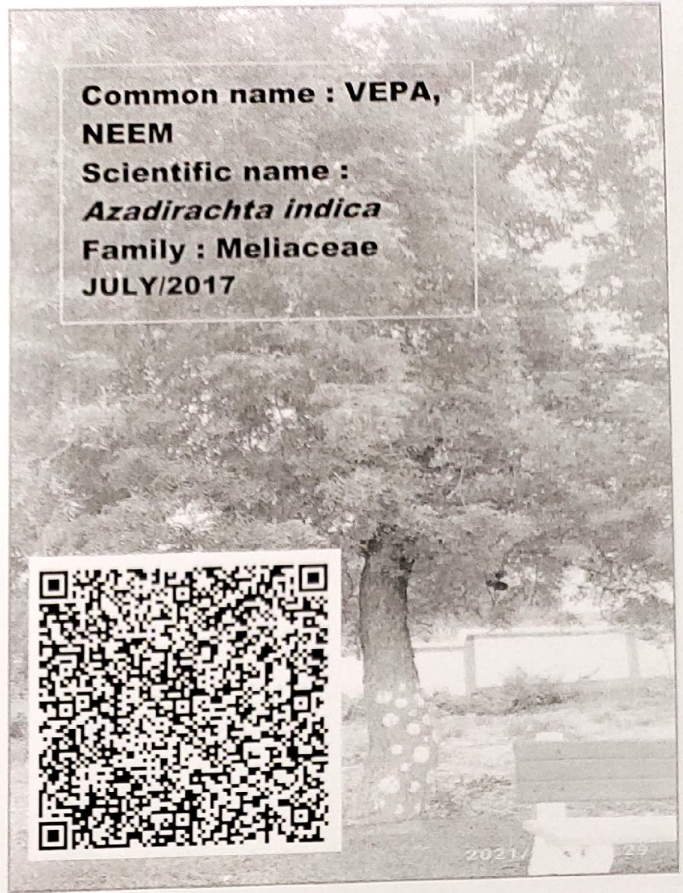


  
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Common name :  
**ADDAKU**  
Scientific name :  
*Bauhinia variegata*  
Family : Fabaceae  
JULY/2017



Common name : **VEPA, NEEM**  
Scientific name :  
*Azadirachta indica*  
Family : Meliaceae  
JULY/2017



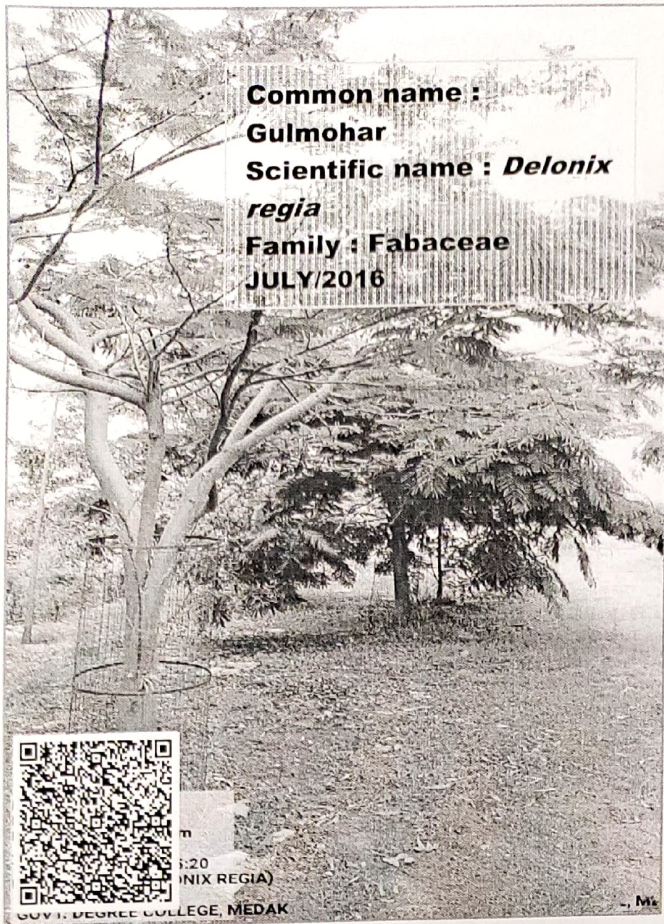
Common name : **TEKU**  
Scientific name :  
*Tectona grandis*  
Family : Verbanaceae  
JULY/2018



Common name : **Usiri, Amla**  
Scientific name :  
*Phyllanthus emblica*  
Family : Phyllanthaceae  
JULY/2017



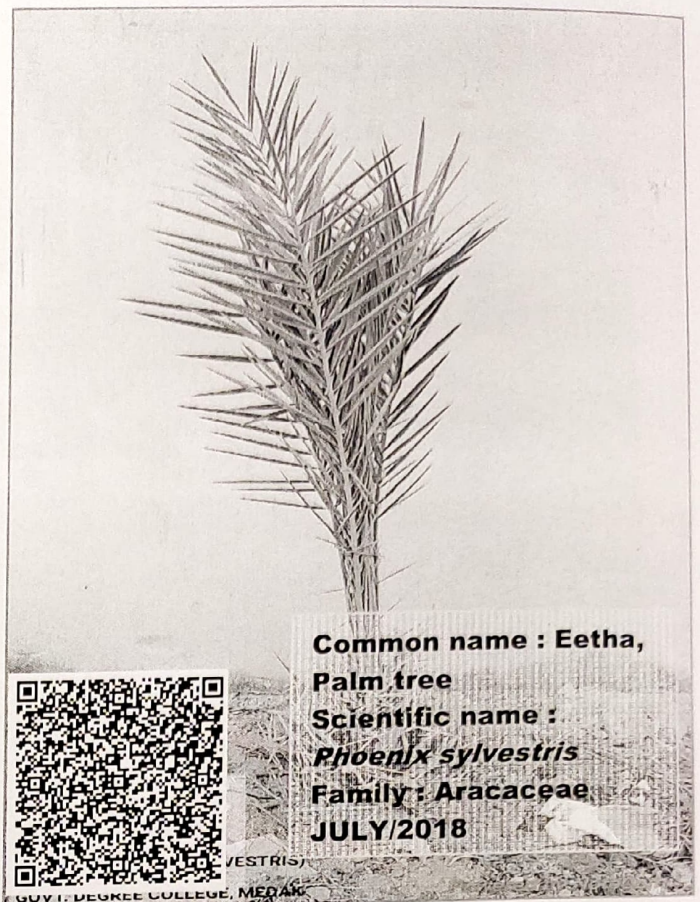
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**Common name :**  
**Gulmohar**  
**Scientific name : *Delonix regia***  
**Family : Fabaceae**  
**JULY/2016**



1:20  
(NIX REGIA)  
GOVT. DEGREE COLLEGE, MEDAK



**Common name : Eetha,  
Palm tree**  
**Scientific name :  
*Phoenix sylvestris***  
**Family : Aracaceae**  
**JULY/2018**



/ESTRIS)  
GOVT. DEGREE COLLEGE, MEDAK



**Common name : Neelagin,  
Eucalyptus**  
**Scientific name : *Eucalyptus globulus***  
**Family : Myrtaceae**  
**JULY/2018**

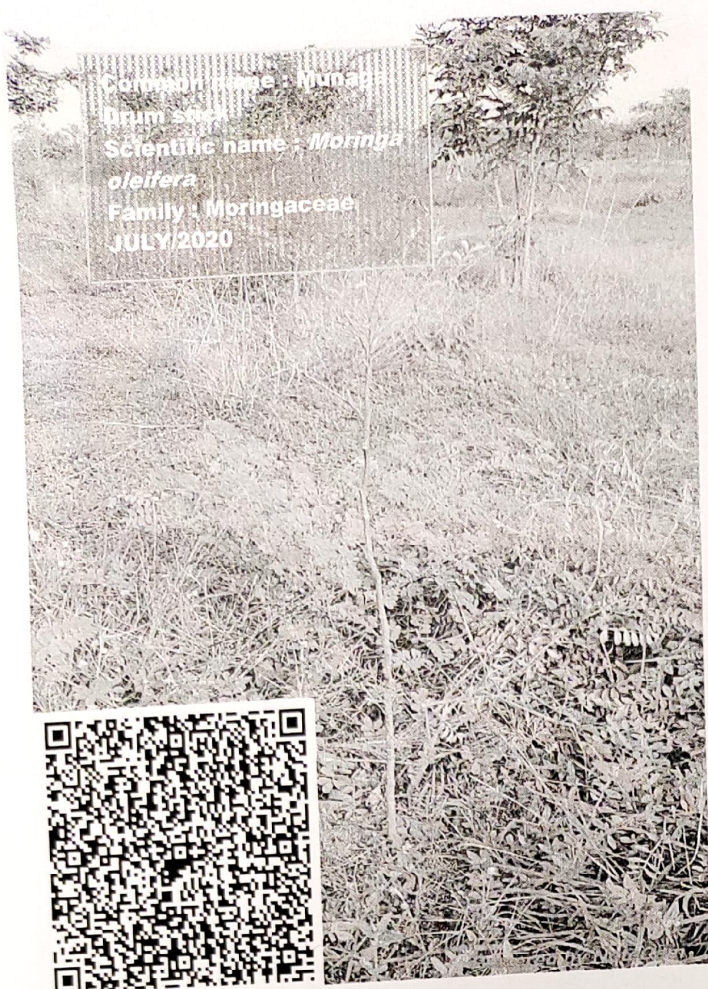


**Common name :  
Karivepaku, Curry leaves**  
**Scientific name : *Murraya koenigii***  
**Family : Rutaceae**  
**JULY/2018**



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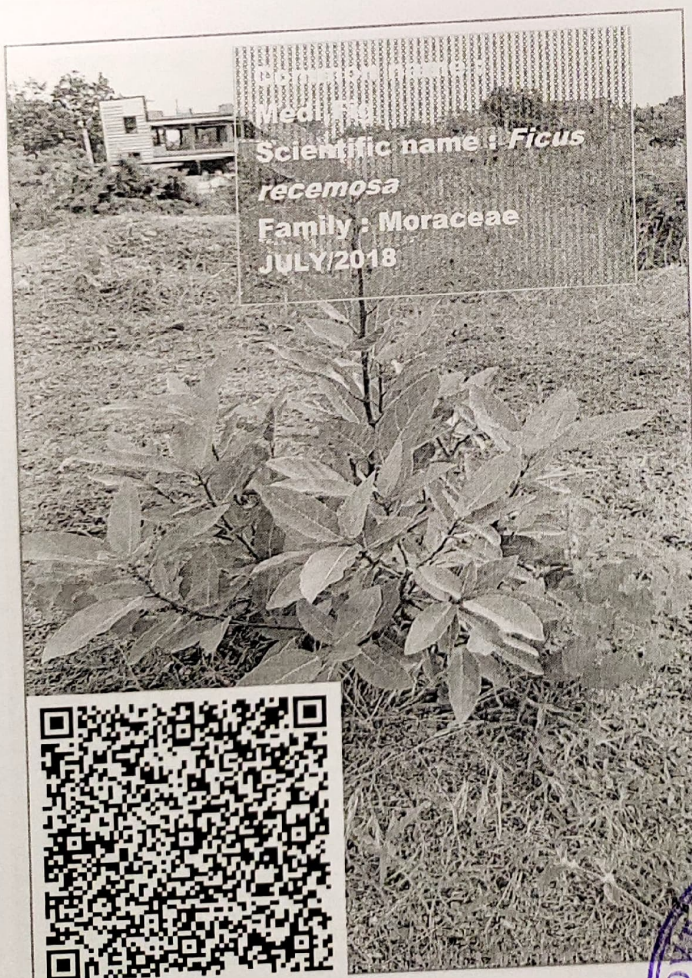




Common name : Munag  
Drum stick  
Scientific name : *Moringa oleifera*  
Family : Moringaceae  
JULY/2020



Common name :  
Palakodisha  
Scientific name : *Wrightia tinctoria*  
Family : Apocynaceae  
JULY/2018




Common name :  
Medi fig  
Scientific name : *Ficus racemosa*  
Family : Moraceae  
JULY/2018



Common name : Raavi  
Scientific name : *Ficus religiosa*  
Family : Moraceae  
JULY/2019



  
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Common name : Seethaphalam,  
Custard apple  
Scientific name : *Annona squamosa*  
Family : Annonaceae  
JULY/2019



Common name : Mamidi, Mango  
Scientific name : *Mangifera indica*  
Family : Anacardiaceae  
JULY/2020



Common name : Jama, Guava  
Scientific name : *Psidium guajava*  
Family : Myrtaceae  
JULY/2019

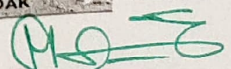


Common name : Vedaru, Bamboo  
Scientific name : *Bambusa arundinacea*  
Family : Poaceae  
JULY/2016



Latitude: 18.070542  
Longitude: 78.281549  
Elevation: 486.0513 m  
Accuracy: 40.7 m  
Time: 24-06-2021 15:28  
Note: వేడారు (BAMBUSA ARUNDINACEA)  
Family: POACEAE  
GOVT. DEGREE COLLEGE, MEDAK



  
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Common name : Nimma, Lemon  
Scientific name : *Citrus  
lemon/Citrus aurantium*  
Family : Rutaceae  
JULY/2017



ITIFOLIA)  
MEDAK



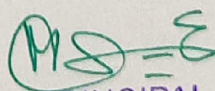
*Asif*  
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## Carbon Foot Print Analysis

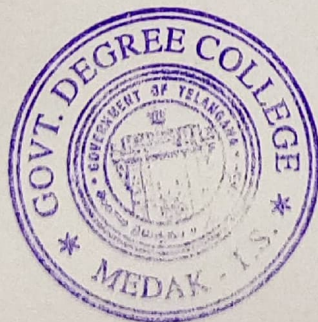
1. Total number of vehicles used by the stakeholders of the college :  
10
2. Number of cycles used 5
3. No: of two wheelers used 6  
Average distance travelled: 10 km  
Average quantity of fuel used : 1/2 Ltr
4. No: of cars used : 4  
Average distance travelled : 25km  
21 km = 20 km  
Average quantity of fuel used : 1 Ltr
5. No: of persons using public transportation : 1200
6. No: of persons using college conveyance : ----
7. Amount of fuel used : 10 Ltr
8. No: of LPG cylinders used in canteen/ Labs : 08
9. Use of any other fossil fuels in the college : -
10. Any suggestion to reduce the use of fuel :-----

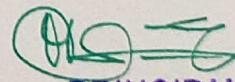


  
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## SUGGESTIONS AND RECOMMENDATIONS

- Conservation of water by proper utilization of water resources.
- Regular check up of cracks, leakage of pipes and tanks.
- Conservation of electricity and to plan for solar energy as an alternative.
- The bio wastes can also be subjected to aerobic composting by setting-up of few composting yards in the campus reducing the usage of fossil fuels.
- Increase the number of plants on the campus to make it as green and clean campus.
- Rain water from the roof of the college building into the rain water harvesting pits.
- Try to avoid the use of plastic in the campus, and to encourage the use of biodegradable materials as alternatives. Try to achieve the goal of plastic free campus



  
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# GREEN AUDIT

6.5.3

5.5.2021

## The Green Audit Committee

As per the instructions of proceedings of the Commissioner of Collegiate Education, Telangana State, Hyderabad the Green Audit Committee is formed with a group of Lecturers, students headed by the Principal of the College, GDC Medak.

Green Audit includes Water Audit, Energy audit, Environmental audit, e-waste audit, Trees & Plants audit, Carbon foot print audit etc.

A Proactive and enlightened Green Audit helps to keep the environment on the Campus, Pollution free neat and clean.

## College Level Audit Committee:

Chairman:

Dr. A. Sudhakar, Principal GDC Medak

External Member:

Dr. P. Damodar, Principal GDC Narsapur

Convenor:

Dr. T. Dinaker

Members

: 1

A. Simha Reddy

2

Dr. J. Vaswanadham

3

A. Venu Gopal Rao

Student Volunteers: 1. G. Ram Prasad

2. Siddi Ram Reddy

3. B. Sushma

4. G. N. Bhavani

5. G. Shekar



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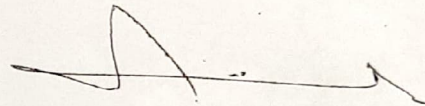
# GREEN AUDIT REPORT

## CERTIFICATE

This is to certify that GOVERNMENT DEGREE COLLEGE, MEDAK has successfully under gone Green Audit on 17.09.2021 under my supervision and it is verified and forwarded to CCE for favorable certification.

Date: 17.09.2021

Place: MEDAK.



External member for Green Audit

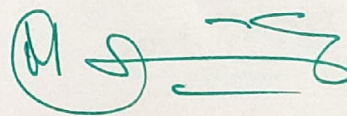
Dr. A. Damodar

Principal, GDC, Narsapur

**PRINCIPAL**

**Govt. Degree College**

Narsapur, Medak-502 313



**PRINCIPAL**

**Govt. Degree College**

MEDAK - 502 110

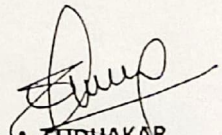
# GREENAUDITREPORT

## CERTIFICATE

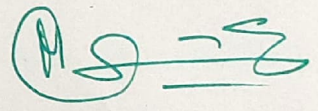
This is to certify that GOVERNMENT DEGREE COLLEGE, MEDAK has successfully under gone Green Audit on 17.09.2021 under the supervision of Chairman, Dr. A. Sudhakar, Principal, GDC MEDAK, External member and Special invitee Dr. A. Damodar, Principal, GDC, Narsapur and the Internal Audit members,

Date: 17-09-2021

Place: MEDAK.

  
Dr. A. SUDHAKAR  
PRINCIPAL  
Govt. Degree College  
Medak - 502 110, T.S.  
GDC, MEDAK



  
PRINCIPAL  
Govt. Degree College  
MEDAK - 502 110