GREEN AUDIT REPORT

Certificate

This is to certify that **GOVERNMENT DEGREE COLLEGE, NARSAPUR** has successfully under gone Green Audit on 24/02/2023 under my supervision and it is verified and forwarded to CCE for favorable certification.

Date : **24/02/2023**

PRINCIPAL
Govt. Degree College
Medak - 502 110, T.S.

Place : **Narsapur**

GREEN AUDIT REPORT

CERTIFICATE

This is to certify that Government Degreee College,has successfully undergone Green Audit on 24/02/2023 under the supervision of chairman, Dr.P.Damodar,Principal, GDC Narsapur,External memberand special invitee Sri.M.Ganapathi,Principal GDC Medak..

Date: 24/02/2023

Place: Narsapur

Dr.P.Damodar

Principal

GDC Narsapur,Medak District

PRINCIPAL
Govt. Degree College
NARSAPUR, Dist. Medak

COMMISSIONERATE OF COLLEGIATE EDUCATION,TELANGANA :: HYDERABAD

PROFORMA FOR GREEN AUDIT

College Profile

Name of the College: Govt.Degree College,Narsapur,Medak District

Address: VILLAGE - PEDDACHINTA KUNTA, NARSAPUR, MEDAK DIST.

Contact Info: Principal Dr.P. DAMODAR

Phone No. 08458-9440228076 9440228076

Mail Id: gdcnarsapur11@g mail.com

Campus Area: 7.33 Acres

Built-up Area:3329.33 Acres

Is the building has ventilators for natural air flow in all rooms: Yes

The student and staff (teaching and non-teaching) strength in the college:

Strength	Male	Female	Total
No. of Students	117	145	262
No. of Teaching Staff	8	5	13
No. of Non-Teaching staff	5	1	6

Physical Structure

The available land of the college: 7.33 acres and ----------Guntas.
The built-up area of the college:3329.33 Acres.

No. of Class Rooms	06 Classrooms,5 Open Air Classrooms
No. of Laboratories	05
No. of Conference halls	01
Library Halls	01
Auditorium	01

Canteen	NO CANTEEN
Any other (please specify)	-----

Objectives :	1. To examine the current practices, which can impact on environment such as of resource utilization, waste management etc. 2. To identify and analyze significant environmental issues. 3. Establish and implement Environment Management in various departments. 4. Continuous assessment for betterment in performance in green
Prepared by:	College level Green Audit Committee: Chairman- Dr.P.Damodar, Principal External Member: Sri.M.Ganapathi,Principal Vice-Chairman : Mrs.B.Rukmini Devi, IQAC coordinator Convenor: Mr.L.Narender - Lecturer in Chemistry Members: 1. Mr.V.Hemanth Kumar - Lecturer in Mathematics 2.Mrs.Ch.Haritha - Lecturer in Zoology 3.S.Mahendarreddy – Lecturer in Computer Science Student Volunteers: 1.S.Sanjay II Yar B.Sc BZC E/M 2.M.Vijay II Year B.Sc BZC T/M 3.P.Naresh Goud B.Sc BZC T/M 4.G.Nishanth B.Sc BZC T/M 5. K.Pavan I Yar B.Sc BZC E/M Internal Green Audit Committee: Water Audit: 1. Mr.L.Narender - Lecturer in Chemistry 2.Green Campus Audit: 1. Mrs.B.Rukmini Devi, Asst.Professor of Botany, IQAC coordinator 3.Energy Audit : 1. Mrs.B.Rukmini Devi, Asst.Professor of Botany, IQAC coordinator

	2. Mr.V.Hemanth Kumar - Lecturer in Mathematics 3.Water Quality Analysis (Biological) ,Faunal Diversity Study: Mrs.Ch.Haritha - Lecturer in Zoology
Approved by:	Sri.M.Ganapathi Principal GDC Medak (ID College) Medak District

INTRODUCTION :

Government Degree College Narsapur is a co-education institution for undergraduate studies. It is affiliated to Osmania University and possesses recognition under 2(f) of UGC Act 1956; it has applied for 12(b) in 2018. The college has ISO 9001: 2015 quality certification.

This degree college was established on 27th July 2008 by the Government of Andhra Pradesh for the catering to the need of higher education in remote areas of the state. First, this college was accommodated in the 2 rooms of the Government Junior college building at Narsapur town in Medak District. At that time it had four different group combinations under three degree courses and the total student strength was 88.

In the academic year 2017-18, the college was shifted to a new building at Pedda Chintakunta village, Narsapur mandal, Medak district on 25th November 2017. This new building is constructed on a bit of 7.33 acres of land,which is surrounded by village agricultural lands on one side and forest area on the other side.The college building is single floored i.e. ground floor. It contains a seminar hall, an AV room, a computer lab, three class rooms and yet to complete four classrooms. Seminar hall and AV room have been equipped with ICT facilities for taking digital classes and using them as class rooms also. These rooms have also been provided with Internet connection for acquiring up to date knowledge. These rooms are fully furnished.

A library with more than 1000 academic books is available for students. Sports material to play cricket, volleyball, shuttle, chess and carroms are available for extra-curricular activities. The college also has its own green cover developed under the Haritha Haram Programme.

The college has fifteen (13) teaching staff members, one faculty for each subject. Along with faculty, there are eight (8) non-teaching staff members working presently. Now the college is offering six group combinations - B.A. (HEP), B.Com. (Computer Applications), B. Sc. (BZC), B. Sc. (MPC), B. Sc. (MPCS) and B.Sc. (MCCS) programs and the total student strength has been increased to 262.This also is a recognized study center for Dr.B.R. Ambedkar Open University.

Vision:

To provide quality education to the socially, economically backward people and under privileged sections of this part of Telangana region.

Mission:

1.To facilitate intellectual stimulation and create meritorious students as well as disseminate knowledge to meet challenges of competitive globalized environment.
2.To provide affordable and skill oriented education with the help of ICT.
3.To make education accessible to rural backward students.
4.To encourage students to discover knowledge on their own.
5.To encourage students to participate in extracurricular activities.
6.To help the teachers to update their knowledge and skills.

GREEN AUDIT

INTRODUCTION:

The green audit aims to analyze environmental practices within and outside the college campus, which will have an impact on the eco-friendly atmosphere. Green audit can be defined as systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of Institution. Through which transformation, development and enhancement of quality of environment improves.

NEED FOR GREEN AUDITING

Green auditing is the process of identifying and determining whether institutions practices are eco-friendly and sustainable. Traditionally, we are good and efficient users of natural resources. But over the period of time excess use of resources like energy, water, are become habitual for everyone especially, in common areas. Now, it is necessary to check whether our processes are consuming more than required resources?

Whether we are handling resources carefully? Green audit regulates all such practices and gives an efficient way of natural resource utilization. In the era of climate change and resource depletion it is necessary to verify the processes and convert it in to green and clean one. Green audit provides an approach for it. It also increases overall consciousness among the people working in institutions towards an environment.

GOALS OF GREEN AUDIT

College has conducted a green audit with specific goals as:

1. Identification and documentation of green practices followed by the college.
2. Analyze and suggest solution for problems identified.
3. Assess facility of different types of waste management.
4. Increase environmental awareness throughout campus
5. Motivates staff for optimized sustainable use of available resources.
6. The long-term goal of the environmental audit program is to collect baseline data of environmental parameters and resolve environmental issue before they become problem.

OBJECTIVES OF GREEN AUDIT

1. To examine the current practices, which can impact on environment such as of resource utilization, waste management etc.
2. To identify and analyze significant environmental issues.
3. 4. Establish and implement Environment Management in various departments.
5. Continuous assessment for betterment in performance in green

BENEFITS OF GREEN AUDIT TO EDUCATIONAL INSTITUTIONS

There are many advantages of green audit to an Educational Institute:
1. It would help to protect the environment in and around the campus.
2. Recognize the cost saving methods through waste minimization and energy conservation.
3. Empower the organization to frame a better environmental performance.
4. It portrays good image of institution through its clean and green campus.

Finally, it will help to built positive impression for through green initiatives the upcoming NAAC visit.

SCOPE:

The broad aims/benefits of the eco-auditing system would be
- Environmental education through systematic environmental management approach
- Improving environmental standards
- Benchmarking for environmental protection initiatives
- Sustainable use of natural resource in the campus.
- Financial savings through a reduction in resource use
- Curriculum enrichment through practical experience
- Development of personal and social responsibility for the College campus and its environment
- Enhancement of College profile
- Developing an environmental ethics in young people.

AUDITING FOR GREEN CAMPUS MANAGEMENT

1. Is there a garden in your college? Area?
   Yes. Garden is there in our college. Area One Acre.

2. Do students spend time in the garden?

   Yes. Students will spend some time for gardening work.

3. List the plants in the garden, with approx. number of each species.

Sl.No.	Name of the Plant & Medicinal properties	No. of Plants
1.	Kanuga / Karanji-Pongamia glabra -Fabaceae-controls Rheumatism, skin diseases	15
2.	Indian Almond /Badam-Terminalia catappa-Combretaceae-used to treat indigestion, hepatitis	10
3.	Raavi Chettu (Peepal Tree)-Ficus religiosa-Moraceae-Anti bacterial, anti diabetic	5
4.	Ashoka-Saraca indica Fabaceae-Used in treatment of Urino genital disorders	10
5.	Karivepaku Chettu- Murayakoenigii-Rutaceae-highly aromatic so used in cooking to add flavor to curries, rice dishes &medicinally used to treat dysentery, inflammation	3
6.	Sannajaji / Lemon scented jasmine-Jasminum officinale-Oleaceae-aromatic-used in hepatits, dysentery	2
7.	Akshintala Poola –Lantana camara-Verbinaceae-	10
8.	Aloe /Kalabanda-Liliaceae(Asphodelaceae)-used in cosmetics	20
9.	Marigold / Banthi-Tagetes petula-Asteraceae-Aromatic-used to treat intestinal problems	25
10.	Kanakambaram-Crossandra infundibuliformis-Acanthaceae-wound healing, relieves fever, head ache	30
11.	Mango tree (Mamidi chettu)-Mangifera indica-	10

	Anacardiaceae-fruits edible-bark used in diabetes	
12.	Jama chettu /Psidium Guava-Myrtaceae-fruits edible-used in gastroenteritis.	10
13.	Eucalyptus grandis/ Nilagiri chettu-Myrtaceae-essential oil used in nasal congestion, repellant	15
14.	Tamarindus indica / Chintha chettu-fabaceae-fruit contains vitamin C, a rich source of antioxidants	10
15.	Nalla thumma / Acacia Arabica-Mimosaceae-useful in diarrhea,dysentery, also used as tooth powder	5
16.	Eetha chettu / Wild date tree-Phoenix sylvestris-Arecaceae- Aphrodisiac	2
17.	Moduga / Flame of the forest-Butea monosperma-Fabaceae-seeds used to treat parasitic disorders	40
18.	Pomegranate / Danimma-Punica granatum-Punicaceae-fruit edible-rich in Antioxidants	15
19.	Neredu /Jambalona-Syzizium jambolanum-Myrtaceae-seeds used to treat Diabetes	10
20.	Sithaphalam / Custard Apple-Annona squamosa-Annonaceae-fruits edible- improve appetite- seeds insecticidal.	15
21.	Neem tree / Vepa-Melia Azadirachta –-Meliaceae - Anti viral, antiseptic-controls skin disorders	10
22.	Mandaram / China Rose-Hibiscus rosa sinensis-Malvaceae-used in preparations of hair dye	5
23.	Gulmohar tree / Seema sankesula-Delonix regia-Caesalpinaceae-anti bacterial,antifungal, anti inflammatory	5
24.	Seema chintha-Inga dulce-Mimosaceae-used in respiratory& skin diseases	5
25.	Gundu malle / Arabian Jasmine-Jasminum sambac-Oleaceae-Aromatic plant	6
26.	-Nerium odorum-Ganneru-Apocynaceae-poisonous plant	15
27.	Pachha Sunkesula / konda chintha-Peltophorum pterocarpum-Fabaceae-controls skin disorders	10
28.	Widalia chinensis (Creeping oxeyes)-Asteraceae-used in treatment of bites & stings	25
29.	Indian Rosewood-Dalbergia sissoo-Fabaceae-used in skin diseases	10

4. Suggest plants for your campus. (Trees, Vegetables, Herbs, etc.)
   Herbs, medicinal plants and fruit yielding trees.

5. List the species planted by the students, with numbers.

Sl.No.	Name of the Plant	No.of Saplings Planted	Academic Year	Group and Year
1.	Dalbergia sisso	25	2018-2019	II Year B.A
2.	Azadirachta indica	20	2018-2019	III Year B.A
3.	Delonix	20	2018-2019	II Year B.Com
4.	Ficus religiosa (Raavi)	15	2018-2019	III Year B.Com
5.	Pongamia pinnata	20	2018-2019	II Year B.Sc
6.	Sygigium	15	2018-2019	II Year B.Sc
7.	Jammi	10	2018-2019	III Year B.Sc
8.	Tecoma stans	10	2019-2020	III Year B.Sc
9.	Caesalpinia bonducella	25	2019-2020	II Year B.Sc
10.	Eucalyptus longifolia	15	2019-2020	II Year B.A.
11.	Peltophorum	5	2019-2020	III Year B.A

	pterocarpum			
12.	Nerium odorum	10	2019-2020	II Year B.Com
13.	Alstonia scholaris	15	2019-2020	III Year B.Com
14.	Tamarindus	150	2020-2021	II Year B.Sc
15.	Azadirachta indica	110	2020-2021	III Year B.Sc
16.	Semecarpus anacardium	50	2020-2021	II Year B.Com
17.	Albizia lebbeck	250	2020-2021	II & III Year B.A., B.Com & B.Sc
18.	Butea monosperma	25	2021-2022	III Year B.A
19.	Tamarindus indica	130	2021-2022	III Year B.A., B.Com, B.Sc
20.	Calotropis procera	15	2021-2022	II Year B.A
21.	Albizia lebbeck	20	2021-2022	II Year B.Com
22.	Tectona grandis	5	2021-2022	III Year B.Com
23.	Mangifera indica	50	2021-2022	III Year B.Sc
24.	Sterculia foetida	35	2021-2022	III Year B.Sc
25.	Psidium gujava	45	2021-2022	II Year B.Sc
26.	Holoptelia integrifolia	3	2021-2022	II Year B.A

27.	Bombax ceiba	2	2021-2022	II Year B.A
28.	Tecoma stans	10	2021-2022	II Year B.A
29.	Hibiscus rosa sinensis	15	2021-2022	II Year B.A
30.	Morus alba	10	2021-2022	III Year B.Sc
31.	Semecarpus anacardium	25	2021-2022	II Year B.Sc
32.	Diaspyros melanoxylon	10	2021-2022	III Year B.Sc
33.	Thespesia populnia	25	2021-2022	II Year B.Sc
34.	Dalbergia latifolia	25	2021-2022	II Year B.Sc
35.	Aloe vera	10	2021-2022	II Year B.Com
36.	Madhuca indica	10	2021-2022	II Year B.Com
37.	Saraca indica	4	2021-2022	III Year B.Com
38.	Senna auriculata	3	2021-2022	III Year B.Com
39.	Ficus religiosa	50	2021-2022	II Year B.A., B.Com,B.Sc
40.	Ficus bengalensis	25	2021-2022	III Year B.Com
41.	Azadirachta indica	60	2021-2022	II Year B.A., B.Com,B.Sc
42.	Hibiscus rosa sinensis	10	2022 -2023	II Year B.Com

43.	Psidium gujava	20	2022 -2023	II Year B.A
44.	Sygigium	08	2022 -2023	III Year B.Com
45.	Punica granatum	10	2022 -2023	III Year B.A
50.	Rosa damascena	5	2022 -2023	II Year B.Sc
51.	Carica papaya	5	2022 -2023	II Year B.Sc
52.	Euphorbia tirucalli	2	2022 -2023	II Year B.Sc
53.	Terminalia arjuna	5	2022 -2023	III Year B.Sc
54.	Agave americana	5	2022 -2023	III Year B.Sc

6. Whether you have displayed scientific names of the trees in the campus?
   Yes .Plants are tagged with QR codes. These QR codes will provide complete information of those plants.

7. Is there any plantations in your campus? If yes specify area and type of plantation. Yes. Every year as part of Haritha Haram program plantation programmes will be conducted.

8. Is there any vegetable garden in your college? If yes how much area?
At present we do not have any vegetable garden , Earlier we tried to start vegetable garden but monkeys damaged the plants. Because of this reason vegetable garden was not developed.

9. Is there any medicinal garden in your college? If yes how much area?
   We are having medicinal plants in our college campus but well established medicinal garden is not there at present. We are planning to establish very soon.

10. What are the vegetables cultivated in your vegetable garden? (Mention the quantity of harvest in each season)

We are not cultivating any vegetables at present.

11. Is there any medicinal garden in your college? If yes how much area?

We are having medicinal plants in our college campus but well established medicinal garden is not there at present. We are planning to establish very soon.

12. What are the vegetables cultivated in your vegetable garden? (Mention the quantity of harvest in each season)

Experimental point of view We have cultivated trigonella foenungracum-menthi and Allium cepa- ulli,tomato,brinjal etc but

We are not cultivating any vegetables at present.

13. How much water is used in the vegetable garden and other gardens? (Mention the source and quantity of water used).

1000 Litres water is used for watering the plants in our college campus.

14. Who is in charge of gardens in your college?

Mrs.B.Rukmini Devi, Asst.Professor of Botany

15. Are you using any type of recycled water in your garden?

No.

16. List the name and quantity of Pesticides and Fertilizers used in your gardens?

Not using any pesticides and chemical fertilizers in our college.

17. Whether you are doing Organic Farming in your college? How?

Not doing Organic forming. But we will use compost for plants growth.

18. Do you have any composting pit in your college? If yes, what are you doing with the compost generated?

Yes we are having composting pit in our college.we will supply the compost produced in our college to the plats growing in our college campus.

19. What do you doing with the vegetables harvested? Do you have any student market?

No

20. Is there any botanical garden in your campus? If yes give the details of campus flora.

21. Give the number and names of the medicinal plants in your college campus.

Already mentioned

22. Any threatened plant species planted/conserved?

23. Is there a nature club in your college? If yes what are their activities?
Eco club is there in our college. Awareness programs conducted by this eco club on important days like Holi, Water Day, Earth Day. Forest Day ,World Environment Day, Ganesh Chaturdhi and Diwali etc.,Some activities also conducted for students on these days.

24. Is there any arboretum in your college? If yes details of the trees planted

No.

25. Is there any fruit yielding plants in your college? If yes details of the trees planted.

Yes .We have fruit yielding plants in our college campus.

26. Is there any groves in your college? If yes, details of the trees planted.

No.

27. Is there any irrigation system in your college?

No.

28. What is the type of vegetation in the surrounding area of the college?
Rice, Jowar, Cotton, Guava, Mango, Leafy vegetables. Type of soil is Black soil.

29. What are the nature awareness programmes conducted in the campus?

Holi, Water Day, Earth Day. Forest Day ,World Environment Day, Ganesh Chaturdhi,Ozone Day and Diwali etc.,

30. What is the involvement of students in the green cover maintenance?

Every year students are participating actively in plantation programs like Haritha Haram and they will do watering to the plants.

31. What is the total area of the campus under tree cover? or under tree canopy?

1 acre

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

To plant many saplings

To develop medicinal plants garden

To establish vegetable garden etc

Water Quality Analysis (Biological) Report of the college – III (with Photographic evidence):

S.No	Phytoplanktons	Scientific Name and number	Methodology
1	Diatoms (Bacillariophyceae)	Nil	Slide method
2	Dinoflagellates (Dinophyceae)	Nil	Slide method
3	Coccolithophores (Prymnesiophyceae)	Nil	Slide method
4	Green algae (Chlorophyceae)	Nil	Slide method
5	Cyanobacteria (earlier Blue-green algae)	Nil	Slide method
6	Others (specify)	Nil	Slide method

ENERGY AUDIT

Room No. / name	Electrical Device/Items	Number	Power	usage time (hour/day)
Conference Hall	Tube lights Fans	12 12	1.44 K.Watts 4.32 K.Watts	6 hours
Zoology Dept.	Tube lights Fans Computer Printer	2 2 1 1	0.24 K.Watts 0.72 K.Watts 1.5 K.Watts 0.18 K.Watts	6hours
Botany Dept.	Tube lights Fans	4 4	0.48 K.Watts 1.44 K.Watts	6 hours
Physics Dept.	Tube lights Fans Computer Printer	2 2 1 1	0.24 K.Watts 0.72 K.Watts 1.5 K.Watts 0.18 K.Watts	6 hours
Chemistry Dept.	Tube lights Fans Projector	4 4 1	0.48 K.Watts 1.44 K.Watts 3.36 K.Watts	6 hours
Computer Science Dept.	Tube lights Fans Computers	6 6 28	0.72 K.Watts 2.16 K.Watts 42 K.Watts	6hours
Mathematics Dept.	Tube lights Fans	6 6	0.72 K.Watts 2.16 K.Watts	6 hours
History,Economics & Political Science	Tube lights Fans	6 6	0.72 K.Watts 2.16 K.Watts	6 hours

Staff Room	Tube lights Fans	1 2	0.12 K.Watts 0.72 K.Watts	6 hours
Principal's Chamber	Tube lights Fans Computer	4 3 1	0.48 K.Watts 1.08 K.Watts 1.5 K.Watts	6 hours
Office Room	Tube lights Fans Xerox Machine Computers	3 2 1 3	0.36 K.Watts 0.72 K.Watts 1.3 K.Watts 4.5 K.Watts	6 hours

2. Waste management

Approximate quantity of waste generated per day (in kg)

Office				
Approx.	Biodegradable	Non -Biodegradable	Hazardous	Others
<1Kg	Waste Papers	Nil	Nil	Nil
2-10Kg	Nil	Nil	Nil	Nil
>10Kg	Nil	Nil	Nil	Nil

Laboratories				
Approx.	Biodegradable	Non - Biodegradable	Hazardous	Others

<1Kg	Plant material used in the Botany lab is less than one Kilo.	Less than one kilo	Nil	Nil
2-10Kg	Nil	Nil	Nil	Nil
>10Kg	Nil	Nil	Nil	Nil

Canteen/kitchen – NO CANTEEN /NO KITCHEN				
Approx.	Biodegradable	Non - biodegradable	Hazardous	Others
<1Kg	Nil	Nil	Nil	Nil
2-10Kg	Nil	Nil	Nil	Nil
>10Kg	Nil	Nil	Nil	Nil

3. How the waste generated in the college is managed?

A)Composting/ Vermicomposting	Yes. Compost will be produced.	Remark Composting pit is there.
B)Recycling	No Recycling of papers and water.	No.
C)Reusing	Water which is used for hand wash is directed to Plants growing in the campus.	--
D)Other ways	No	No.

4. Waste generated in the college?

E-waste		No E-Waste in the college campus.
Hazardous waste		No Hazardous waste is generated in the college campus.
Solid waste		Paper waste and dry leaves
Dry leaves		15 Kgs dry leaves waste produced by the plants.
Canteen waste		No Canteen .So there is no waste generated in the college campus by canteen.
Liquid waste		Used water,sewage water from wash basins and washrooms will be directed to underground drainage..
Glass		Broken glassware .
Unused Equipment		No
Napkins		Sanitary Napkins will be collected by Grama Panchayati Scavengers and they will dispose in the dumping yard.

Others (specify)		No

Do you use recycled paper in college?	N O
Any waste management methods used?	Yes Compost is produced by using dry leaves waste

GREEN INITIATIVES OF GDC NARSAPUR

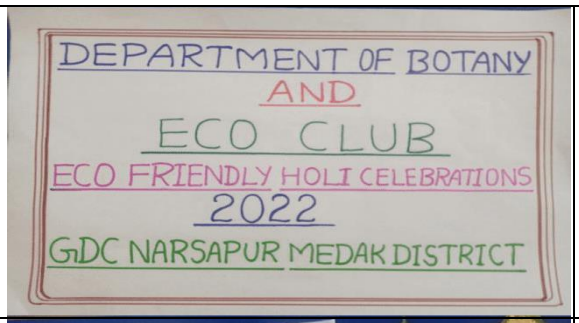
ECO FRIENDLY HOLI CELEBRATIONS 2022

department of Botany and Eco Club of Government Degree College Narsapur, Medak District have taken initiative to create awareness on eco friendly Holi celebrations..As a part of this celebrations on 19/03/2022 Mrs.B.Rukmini Devi Incharge Department of Botany and Convenor of Eco Club has decided to explain and demonstrate the natural colours preparation by using flowers, flour, leaves. Mrs. B.Rukmini Devi Incharge Department of Botany and Convenor of Eco Club succeeded in this attempt and demonstrated well about this eco friendly colours preparation. All the first year students of B.Sc life Sciences participated in this natural colours preparation activity with so much of enthusiasm .At the end they have exhibited all those natural colours prepared to the Principal, other Staff members and students of the College. On this occasion Mrs.B.Rukmini Devi explained about the plants and their Scientific names which are used in this natural colours preparation.

On this occasion Principal Dr.P.Damodar appreciated the efforts of Mrs.B.Rukmini Devi and students those who have involved in this natural colours preparation. Principal sir explained the medicinal values of some of the plants used in this natural colours preparation..Students explained about do' s and don't s during this eco friendly Holi celebrations..

At the end Staff and Students of other departments congratulated Botany department ,Eco Club for creating awareness on eco friendly Holi celebrations by exhibiting natural colours..Controller of Examinations Mr.A.Simha Reddy,senior faculty Mr.L.Narender, Mr. V.Hemanth Kumar Chary, Mr.S.Mahender Reddy also visited this exhibition.

To prepare this natural colours we have used Phalas flowers, Bougainvillea ,Marigold flowers, Beetroot ,Carrots, Coriander,Tomatoes, Turmeric, Lawsonia (Mehendi) leaves etc.

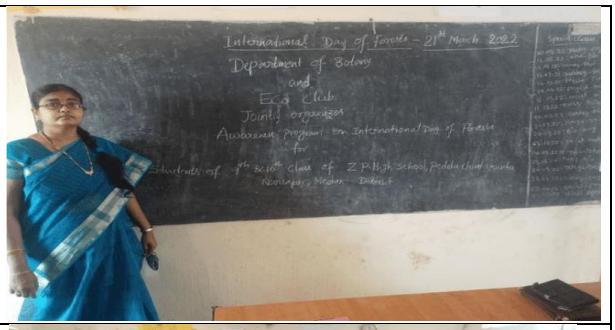


FOREST DAY CELEBRATIOMNS 2022

The United Nations observes March 21 as the International Day of Forests, commemorating the green cover around the world and reiterating its importance. Forest sustainable management and their use of resources are key to combating climate change and contributing to the prosperity and well-being of current and future generations. Forests also play a crucial role in poverty alleviation and in the achievement of the Sustainable Development Goals (SDGs).

Theme of the International Day of Forests for 2022 is "Forests and sustainable production and consumption".Government Degree College Narsapur has celebrated International Day of Forests on 21st March 2022. Department of Botany and Eco Club has organized an Awareness Program as a part of extension service for the students (9th and 10th class) of Z.P.High School located at Pedda Chintakunta village .

In this extension service Mrs.B.Rukmini Devi- Incharge, Department of Botany, Convenor of Eco Club visited Z.P.High School located at Pedda Chintakunta village along with the students of B.Sc.,BZC 1st and 2nd year. There we have created awareness about History, theme and significance of International Day of Forests for the School students. B.Sc.,BZC 1st and 2nd year Students have explained about famous environmentalists and their contributions, the initiatives taken by the Government of Telangana by conducting programs like Haritha Haram etc to the students of Z.P.High School located at Pedda Chintakunta village.



WORLD WATER DAY 2022 CELEBRATIONS

World Water Day is observed on March 22 .Every year we celebrate the 'World Water Day' on 22nd March to raise awareness about the importance of water and educate people to conserve it. Theme for World Water Day 2022 is Groundwater-Making the invisible visible. Groundwater is invisible, but its impact is visible everywhere.

The aim of the programme was to aware the students about the water crisis around the world. Surveys reveal that 80% of all waste water is not reused. If water were reused, the shortage of water could be reduced to some extent.

Eco Club and NSS Unit of Government Degree College Narsapur, Medak District celebrated World Water Day on the 22nd March 2022 in our seminar hall. This programme was presided by Principal Dr.P.Damodar sir. Principal sir explained about the importance of water and its conservation strategies.

Convenor of Eco Club Mrs.B.Rukmini Devi addressed the students and explained about history behind the celebration of World Water Day, theme of World Water Day 2022, and measures to be taken by every individual to conserve water resources.

Senior Faculty of Chemistry Department Mr.L.Narender, NSS Programme Officer Mr.V.Hemanth Kumar,Computer Science faculty Mr.S.Mahender Reddy also participated in this programme.

World Meteorological Day 2022

World Meteorological Day is celebrated to commemorate the coming into existence of the World Meteorological Organization on March 23, 1950.Since 1961, the day has been celebrated with a different theme each year. For 2022, the theme is "early warning and early action" and it emphasises the critical necessity of hydro meteorological and climate information for disaster risk reduction.

The importance of National Meteorological and Hydrological Services to society's safety and well-being is highlighted on World Meteorological Day. This day is commemorated to emphasise the importance of individuals and their actions in preserving the Earth's atmosphere.

The World Meteorological Organisation (WMO), which is an intergovernmental organisation, was founded on this day. World Meteorological Day is observed all around the world as a reminder of the vital role that meteorologists play in safeguarding public safety and well-being.

Eco Club of Government Degree College Narsapur, Medak District celebrated World Meteorological Day on 23rd March 2022 in Seminar hall. On this occasion Mrs.B.Rukmini Devi Convenor of Eco Club addressed the students and created awareness about World Meteorological Day celebrations, its origin, significance and theme of World Meteorological Day this year..

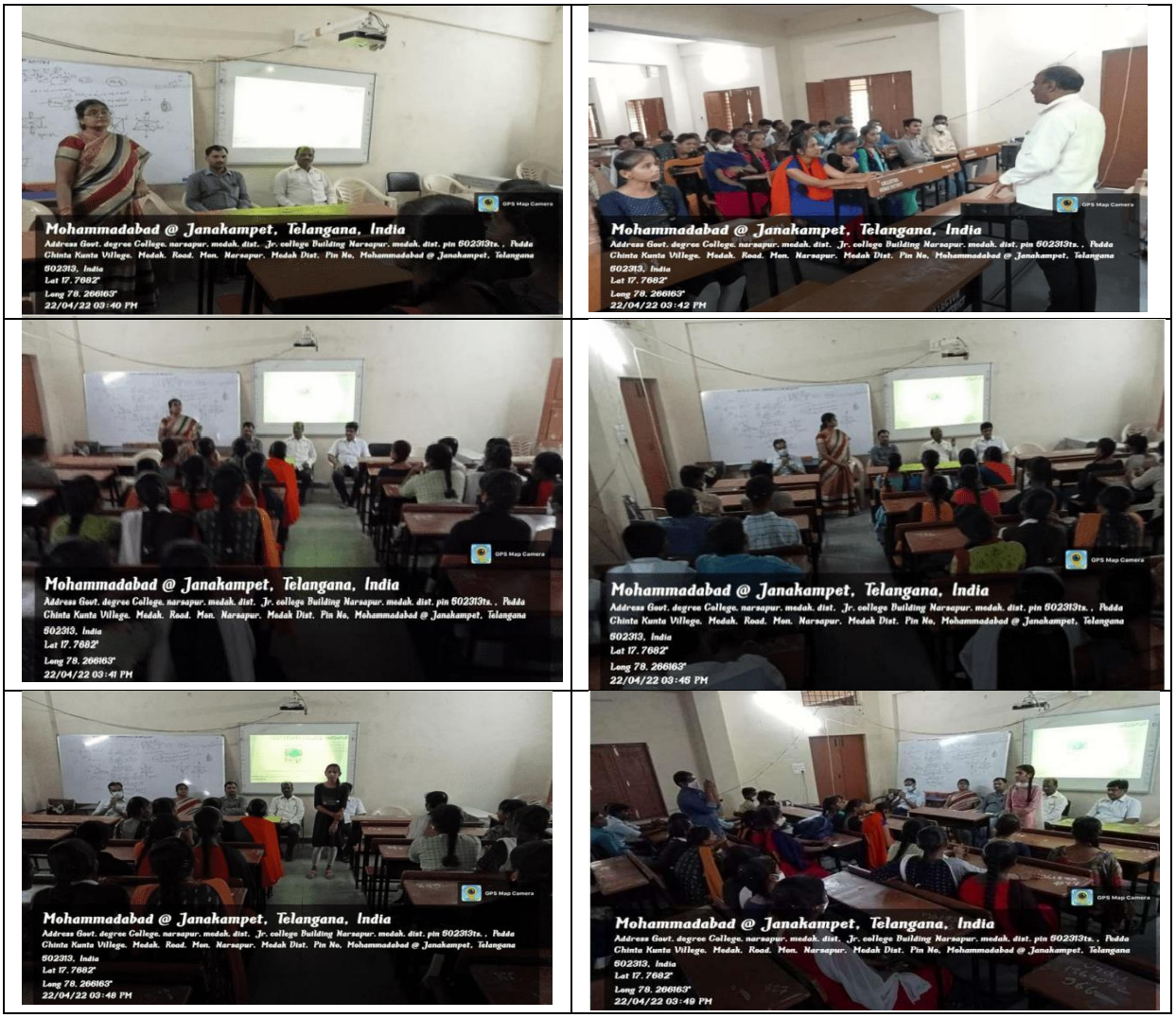
EARTH DAY CELEBRATIONS 2022

Department of Botany and Eco Club of Government Degree College Narsapur have celebrated Earth day on 22nd April 2022.

On this occasion Mrs. B.Rukmini Devi Convenor of Eco Club, Incharge of Botany department conducted an Awareness Program on Earth Day celebrations-History, Importance and theme of this year. Principal Dr.P.Damodar sir addressed the students and given message about conservation of our mother earth.

The Earth Day 2022 theme is 'Invest In Our Planet'. On this Occasion students have shared their views in relation to conservation of our planet earth. Students from B.Sc BZC E/M P.Nagarani, V.Priyanka created awareness about Earth Day in their own words

At the end students from 1st,2nd and 3rd years have taken pledge in online mode which was collected by EPTRI. Principal Dr.P.Damodar sir, Students and Staff of Government Degree College Narsapur took pledge in online mode and received e- certificates from EPTRI.



Domestic Workshop to create Awareness on Environmental Issues

Sri.K.V.S.Narayana Raju ,External Faculty in Ministry of Petroleum, Government of India Petroleum Conservation Research Association, Southern Region has visited Govt. Degree College Narsapur on the invitation of Principal Dr.P. Damodar sir to conduct a domestic Workshop for girl students .

Eco Club and departments of Botany, Chemistry have organized this domestic Workshop On 23rd April 2022 to create environmental awareness especially for girl students.

In this workshop Mr.K.V.S.Narayana Raju has explained many things like Global warming, reasons behind the formation of scars in Ozone layer, renewable, non renewable energy resources etc.

In this workshop Mr.K.V.S.Narayana Raju explained about measures to be taken by the girl students while using LPG at home for cooking, while driving vehicles to conserve non renewable energy resources, using electrical and electronics appliances ,to prevent emission of greenhouse gases to protect our planet earth from global warming and its harmful effects .

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WORLD ENVIRONMENT DAY CELEBRATIONS 2022

As per the instructions of Commissioner of Collegiate Education Hyderabad, Telangana Essay writing Painting, and Video making Competitions were conducted by Eco Club - Government Degree College Narsapur on 28th May 2022 as a part of World Environmental Day celebrations.

EPTRI in collaboration with the Commissionerate of Collegiate Education Hyderabad Telangana and Telangana State Pollution Control board is conducting competitions for students from GDCs to mark the Celebration of World Environment Day which falls on 05 June 2022.

Before Conducting competitions a small briefing has been given to the participants about World Environment Day, its history, significance , theme of World Environment Day 2022. After that clear instructions given about the competitions as per the guidelines of EPTRI.

Different themes have been given to the students for the Competitions.They are as follows: 1.Painting competition theme : Only one Earth

2. Essay writing Competitions theme: Switching to Hydrogen from Fossil fuels -Why is it beneficial for the World.

3. Living Sustainably in harmony with Nature.

Students from all the three years of B.A., B.Com., and B.Sc. were participated in these comparisons with so much of interest and enthusiasm.

At the end these competitions were adjudicated by the following jury members:

1.Mr.L.Narender - Lecturer in Chemistry

2.Mrs.B.Rukmini Devi-Asst.professor of Botany

3.Mr.V.Hemanth Kumar Chary-Lecturer in Maths

4.Mrs. G.Aparna - Lecturer in Commerce

The following students won prizes in these competitions:

1.G.Sudha Rani I Year B.A. - 1st Prize in Painting

2.K.Supriya III Year B.A. - 2nd Prize in Essay Writing

3.Shaik.Shadulla IYear B.Sc BZC - 2nd Prize in Video Making


Mohammadabad @ Janakampet
Telangana
India
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95°F
2022-05-28(Sat) 02:56(pm)


WE HAVE ONLY ONE EARTH


THERE ONLY ONE EARTH


91/4, Indira Nagar, Gachibowli, Hyderabad, Telangana 500032, India
Hyderabad
Telangana
India
36°C
97°F
2022-06-04(Sat) 15:48


"World Environment Day Celebrations"
Workshop on Green Energy Transition


91/4, Indira Nagar, Gachibowli, Hyderabad, Telangana 500032, India
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Telangana
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Eco club

Eco-club play an important role in creating environmental awareness among the future generation. It is a platform where we get knowledge about environment and it also enables the students to be sensitive towards environmental concern to tackle environmental problems.

Objectives:

1. It educates the students about their environment.
2. To create a clean and green consciousness among students through the various innovative methods.

3. To mobilize students towards scientific enquiry into environmental problems.

4. To involve them in efforts to preserve environment.

5. To promote ethos of conservation of water by minimizing the use of water.

6. To motivate students how to imbibe habits and life style for minimum waste generation.

Eco- club promotes the participation of students in nature learning and improving their environment, students can organize themselves to learn more and also take actions to improve their immediate environment.

Activities under Eco club includes

1. Eco club organizes, rallies and marches human chains at public places with a vision to spread environmental awareness.
2. Eco club will take up activities like tree plantation, Cleanliness drives both within and outside of the college campus. Case studies will also be considered in near future for the usage of eco-friendly products and energy conservation
3. Eco club will also promote Eco-Friendly practices like non-chemical pest management and use of renewable energy for meeting local needs

Composition of the Eco club:
Smt.B.Rukmini Devi – Convenor

Eco club conducted Awareness programs on Eco friendly Holi celebrations,International forest Day, World Water Day,World Matereological Day ,Earth Day,World Environmental Day,Eco friendly Ganesh Chaturdhi celebrations and Eco friendly Diwali celebrations etc.Every year Eco club will conduct Haritha Haaram program .On important days competitions like Essay writing,Elocution,Painting and quizzes also to create awareness among students.

Eco club Activities

SEED BALLS MAKING

As part of World Environmental Day Celebrations 2022 students of B.Sc BZC 1st year prepared seed balls by using various seeds. After preparing these seed balls they dried these balls. While travelling in buses they will throw these balls on both sides of the roads to spread

the greenery. They have created awareness to other students about seed balls making growing plants by throwing seed balls.

REUSE OF PLASTIC BOTTLES TO GROW LEAFY VEGETAABLES

Re-use of plastic bottles & plantation of flowering plants in an organic way. Plastic bottles can make fantastic hanging planters for your kitchen window or garden. By recycling your plastic bottles, you can begin to grow a wider variety of plants or flowers that will add a touch of colour to your home. Plastic water bottles may provide an inexpensive and re-usable alternative for growing flowering containers with the two-fold advantage of reducing waste and extending the life of these products.

Objectives:

To use plastic beverage bottles as flowering plantation containers for growing flowering plants in an organic way .

Uses:

Use of these bottles as nursery containers will reduce consumption of plastic and provide a commendable alternative for waste management. Transforming the bottle into a cheap, accessible, and effective flowering container is a very effective way to save our environment.

The outcome of this activity: This activity will help to educate people in developing countries on how to appropriately modify and use discarded water and beverage bottles as flowering containers for seedling propagation. In the future we hope to increase awareness of the advantages of using plastic bottles over polybag systems to produce quality seedlings for reforestation and restoration efforts in developing countries and worldwide.

II B.Sc BZC students started using empty water bottles and beverages bottles to grow herbs and leafy vegetables .They have created awareness about this reuse of plastic bottles to

the students of B.A., B.Com. Principal sir Dr.P.Damodar appreciated the students and Smt.B.Rukmini Devi ,Incharge of Botany Dept.for creating awareness about reuse of plastic bottles.





TAGGING OF PLANTS WITH QR CODES

Department of Botany GDC Narsapur prepared QR Codes as an innovative green practice .Principal Dr. P.Damodar sir addressed the students and staff and explained about these QR codes. Principal sir, Staff and students tagged the plants with these QR codes. Instead of placing display boards / name boards to the plants we have prepared QR codes. This QR codes will provide information about scientific name, common name, family, uses etc. By scanning these QR codes anyone can get information about the plants. Principal Dr.P.Damodar sir appreciated Mrs.B.Rukmini Devi ,Incharge of Botany Department and students of life sciences for preparing these QR codes

Vermicompost Preparation

Compost is commonly prepared by decomposing plant and food waste and recycling organic materials. Vermicomposting is the scientific method of making compost by using earthworms. Earthworms feed on the organic waste materials and give out excreta in the form of vermicasts that are rich in nitrates and minerals such as Phosphorus, magnesium, calcium and Potassium. These are used as fertilizers and enhance soil quality and add nutrients to the soil.

Importance

- Vermicompost **helps to improve soil structure, texture, porosity, water holding capacity, drainage, aeration and reduce erosion**.
- It improves plant growth by enabling the growth of new shoots and leaves, thereby increasing productivity.
- It helps to neutralize the pH of the soil.

Procedure

- Preparation of a compost pit of required measurements-6 feet length, 6 feet wide, 6 feet depth.

- The pit is filled with dried leaves, twigs collected from college campus.
- Cow dung slurry is prepared and sprinkled on the heap of dried leaves and twigs for quick decomposition.
- 2-3 inches soil layer is added above it.
- Fine bedding is prepared by adding partially decomposed cow dung , dried leaves and other biodegradable wastes collected from the college canteen. It is distributed evenly on the soil layer.
- Both bio wastes and cow dung are added continuously up to a depth
- The earthworm species are released over the mixture.
- Water is sprinkled on a regular basis to maintain the moisture content of the compost
- A frequent check is done to avoid the compost from overheating. Proper moisture and temperature are maintained.

Advantages of Vermicomposting:

- Develops roots of the plants
- Improves the Physical structure of the soil
- Vermicomposting increases the fertility and water-resistance of the soil.
- Helps in germination, plant growth and crop yield
- Nurtures soil with plant growth hormones such as auxins, gibberellic acid etc.


Haritha Haaram Plantation 2022

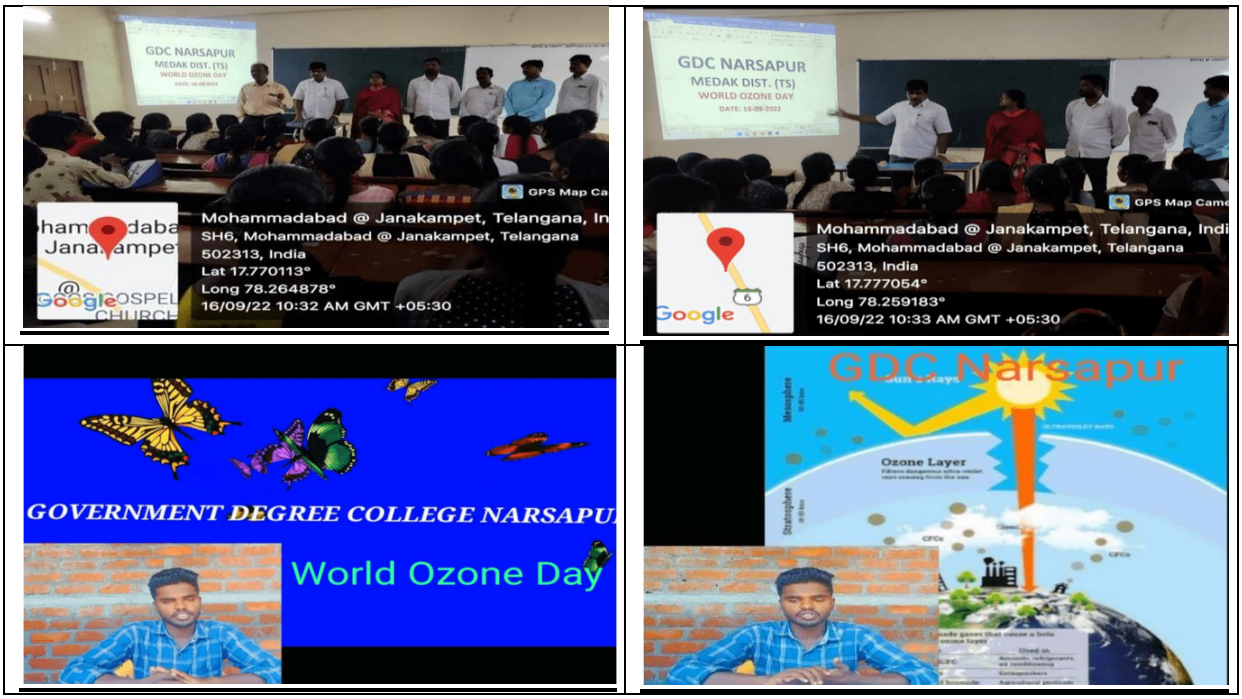
Haritha Haaram is a large scale plantation program initiated by government of Telangana to enhance green cover. on this occasion every year large no.of saplings planted in and around the college campus to improve greenery.Students and staff will involve actively in this plantation program.After plantation students will nurture these plants. On 10th August 2022 Haritha Haram program was conducted by Eco Club and NSS Unit .Principal Dr.P.Damodar sir,and RDO sir planted saplings and inaugurated the program. Later staff and students planted saplings in the college campus.






Ozone Day Celebrations 2022

Dept. Of Chemistry GDC Narsapur has conducted awareness programme on world Ozone Day on 16th September 2022.Principal Dr.P.Damodar sir inaugurated this program and addressed the students. Sri. L. Narender , Incharge of Chemistry dept. Explained about the importance of Ozone layer.Students from various groups have participated in video making competition which was conducted by Commissionerate of Collegiate Education in collaboration with EPTRI. IQAC Coordinator,Eco Club Convenor Smt.B.Rukmini Devi, TASK Coodinator Sri.S.Mahender Reddy ,Non teaching staff and students attended this program.



Awareness Program on Eco Friendly Ganesh Chaturdhi celebrations

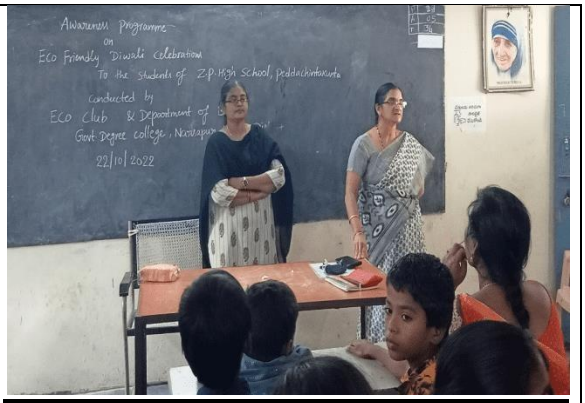
An awareness program conducted on the importance,and medicinal values of 21 types of leaves used in Ganesh pooja.Pricipal Dr.P.Damodar sir addressed the students and explained about medicinal value of this 21 types of leaves.Later on 21 types of patri plants exhibited in the botany laboratory.Students prepared herbarium of these plant specimens.This program was conducted on 30th August 2022.

Awareness Program on Eco Friendly Diwali celebrations

Eco club and Dept.of Botany, GDC Narsapur has conducted an awareness program on eco friendly Diwali celebrations . This program was conducted on 22nd October 2022.Students of 1st year BZC,BZCS,BCCS prepared posters on eco friendly Diwali celebrations.Principal Dr.P.Damodar Sir addressed the students and explained about importance of celebrating Diwali in an eco friendly manner.By showing these posters they created awareness on the importance of Eco friendly Diwali celebrations.Eco club convenor Smt.B.Rukmini Devi organised this program. Students of I Year & II Year BZC actively involved in this program..

Out reach Program on Eco Friendly Diwali celebrations

Eco club and Dept.of Botany has conducted an outreach program on eco friendly Diwali celebrations at Z.P.High School Peddachintakunta village.Students of 1st year BZC,BZCS,BCCS prepared posters on eco friendly Diwali celebrations.By showing these posters to the high school students awareness created on the importance of Eco friendly Diwali celebrations.Eco club convenor Smt.B.Rukmini Devi organised this program.Students of I Year & II Year BZC actively involved in this program. This program was conducted on 22nd October 2022.



Painting Competitions on Eco Friendly Diwali celebrations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Mohammadabad @ Janakampet
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HAPPY DIWALI
Say NO To CRACKERS
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Mohammadabad @ Janakampet
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India
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Mohammadabad @ Janakampet
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India
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2022-10-22(Sat) 03:41(pm)


BAGGING FREE CAMPUS
PLASTIC FREE ZONE
Mohammadabad @ Janakampet
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AUDITING FOR WATER MANAGEMENT

1. List out uses of water in your college.

Ans: 1. Drinking 2. Gardening 3. Washrooms 4. Laboratories 5. Cleaning

2. What are the sources of water in your college?

Ans: 1. Mission Bhagiratha water 2. Bore well water

3. How many wells are there in your college?

Ans: One Bore well

4. No. of motors used for pumping water from each well?

Ans: We are using one motor for each bore well

5. What is the total horsepower of each motor?

Ans: 1.5 HP

6. What is the depth of each well?

Ans: 400 feet

7. What is the present depth of water in each well?

Ans: 150 feet approximately.

8. How does your college store water?

Ans: Water from the Mission Bhagiratha and Bore well is stored in four overhead water tanks

9. Quantity of water stored in your overhead water tank? (In liters)

Ans: 9000 Liters capacity (2 X 3000 liters, 1 X 2000 liters and 1 X 1000 liters)

10. Quantity of water pumped every day? (In liters)

Ans: 4000 Liters

11. If there is water wastage, specify why.

Ans: Some quantity of water comes from overhead tanks, washbasins and water taps. This water is used for gardening and trees.

12. How can the wastage be prevented / stopped?

Ans: Regular maintenance of water taps and timely powering off of overhead tanks.

13. Locate the point of entry of water and point of exit of waste water in your College.

Ans: Point of entry – Nil, Point of Exit – Tap water and Overhead tanks to trees & Garden

14. Where does wastewater come from?

Ans: Tap waters, Washbasins and Overhead tanks

15. Where does the waste water go?

Ans: From taps, overhead tanks to trees and garden, from washbasins and labs go to drainage.

16. What are the uses of waste water in your college?

Ans: The waste water from taps and overhead tanks is used for watering the garden. The waste water from labs enters the drainage.

17. What happens to the water used in your labs? Whether it gets mixed with ground water?

Ans: Nil (The used water from labs directly enters into drainage and that does not get mixed with ground water)

18. Is there any treatment for the lab water?

Ans: Nil (We have no treatment for the lab water. It is dilution to maximum extent)

19. Whether green chemistry methods are practiced in your labs?

Ans: No.

20. Write down four ways that could reduce the amount of water used in your college.

Ans**:**

a) Regular checkup toilets and labs for leaky taps and fixing them immediately.
b) Fitting efficient automatic flush controls at washrooms
c) Conducting awareness programs to students and staff on water conservation in the college
d) Waste water can be diverted to trees and garden

21. Record water use from the college water meter for six months.

Ans: Water meter is not available

22. Bimonthly water charges paid to water connections if any

Ans: Nil.

23. No. of water coolers. Amount of water used per day? (in liters)

Ans: 1 water cooler with 100 liters capacity each

24. No. of water taps. Amount of water used per day?

Ans: 60 Taps. Approximately 3000 liters water is being used per day.

25. No. of bath rooms in staff rooms, common, hostels. Amount of water used per day?

Ans: Total 10 bathrooms in all staff room and common. The amount of water used per day is approximately 2000 liters

26. No. of toilets, urinals. Amount of water used per day?

Ans: Total 13 toilets, urinals. The amount of water used per day is approximately 2000 liters

27. No. of water taps in the canteen. Amount of water used per day?

Ans: Nil (No canteen)

28. Amount of water used per day for garden use.

Ans: 1000 liters of water used for garden.

29. No. of water taps in laboratories. Amount of water used per day in each lab?

Ans: We have no special labs (Classroom with Lab). Daily 500 liters of water used in the labs.

30. Total use of water in each hostel?

Ans: Nil (No hostel)

31. At the end of the period, compile a table to show how many liters of water have been used in the college for each purpose.

Ans:

S. No.	Purpose	Quantity of water used per day in liters
1	Washrooms	2000
2	Labs	500
3	Trees and Gardening	1000
4	Drinking	500
	Total	**4000**

32. Is there any water used for agricultural purposes?

Ans: No.

33. Does your college harvest rain water?

Ans: Yes

34. If yes, how many rain water harvesting units are there? (Approx. amount)

Ans: Three

35. How many of the taps are leaky? Amount of water lost per day?

Ans: Nil.

36. Are there signs reminding people to turn off the water? Yes / No

Ans: Yes

37. Is there any waterless toilets?

Ans: No.

38. How many water fountains are there?

Ans: Nil

39. How many water fountains are leaky?

Ans: Nil

40. Is drip irrigation used to water plants outside? YES/NO

Ans: No

41. How often is the garden watered?

Ans: Daily – Through pipe

42. Quantity of water used to watering the ground?
Ans: 1000 Liters for gardening.

43. Quantity of water used for bus cleaning? (Liters per day)

Ans: Nil. (There is no college bus)

44. Amount of water for other uses? (Items not mentioned above)

Ans: Nil

45. Area of the college land without tree/building canopy.

Ans: 3 Acres land

46. Is there any water management plan in the college?

Ans: Yes. Rainwater harvesting pits (recharge pits) are available. Waste water is diverted to recharge pits, trees, and gardening.

47. Are there any water saving techniques followed in your college? What are they?
Ans:

a) Regular checkup of taps for leakages and replacing damaged taps with new taps
b) Placing signs to remind the students and staff to turn off the water.

48. Please share Some IDEA for how your college could save more water.

Ans:

a) Conducting awareness programs for students and staff.

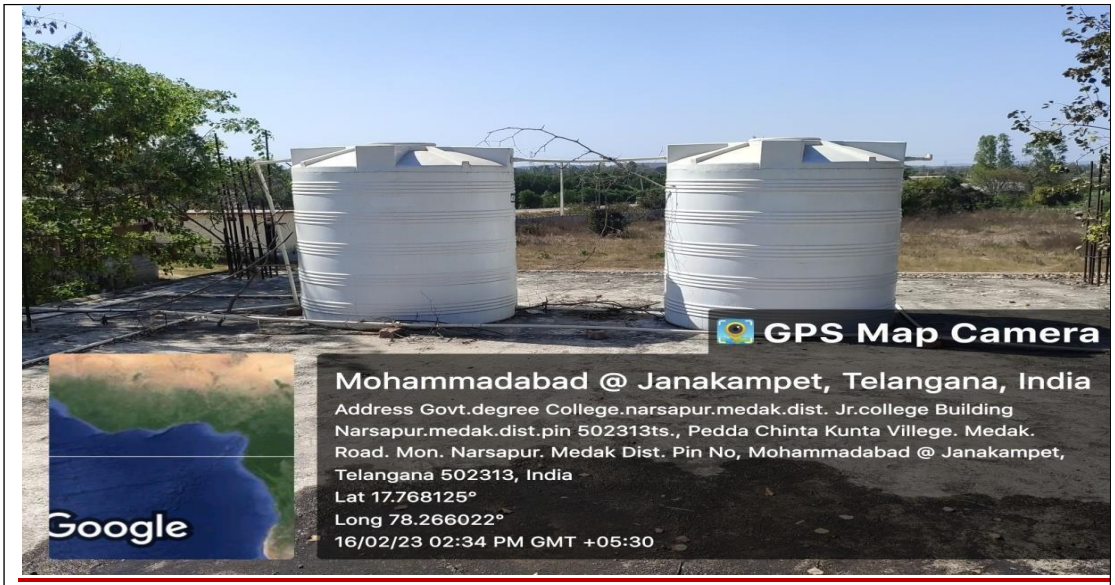
b) Installing a drip system saves more water

c) Installation of aerators (alarms) to overhead tanks that save about 10% of water.

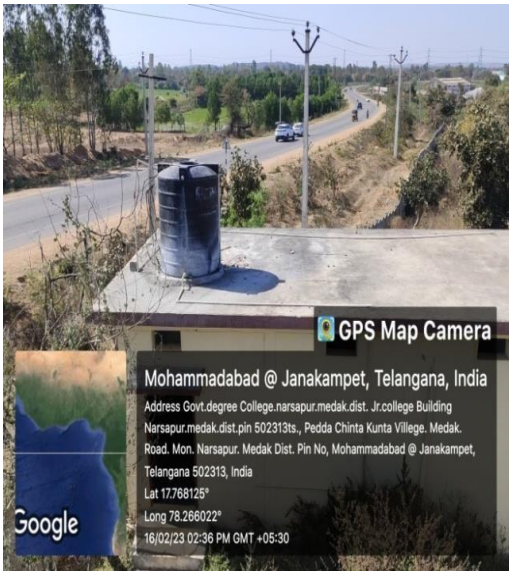
d) Automatic flush controls in washrooms

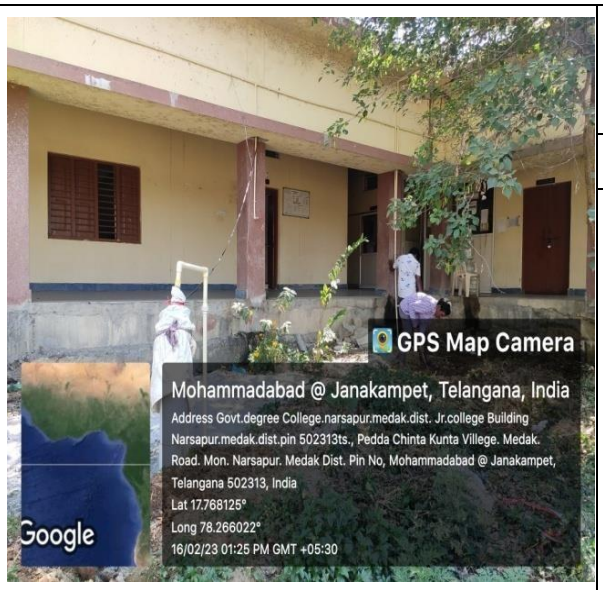
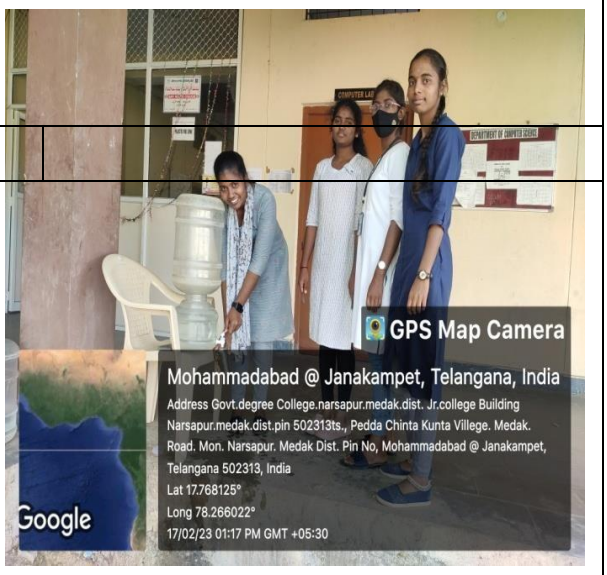
WATER MANAGEMENT AT OUR CAMPUS

A) Overhead water tanks 2 X 3000 liters:



B) Overhead water tanks: 1 X 2000 liter & 1 X 1000 liter



Bore well	Mineral water
	
	
	

Water Management

The main source of water in the College is Mission Bhagiratha and Bore well. There is one bore well present in the campus. This bore well is recharged with water soaking pits and rainwater. A total quantity of 4000 liters of water is pumped out from the bore well and Mission Bhagiratha water every day for different activities in the college**.**

Sl lNo	**PARAMETERS**	**Response**	Remarks
1	Source of water	Mission Bhagiratha and Bore Well	
2	No of Wells	1 Bore well	
3	No of motors used	1	
4	Horse power – Motor	1.5 HP	
5	Depth of well –Total	450 feet	Total depth of bore well
6	Water level	150 feet	
7	Number of water tanks	4	
8	Capacity of tank	Total 9000 liters, (2X3000 L 1X2000 L and 1X1000 L)	
9	Quantity of water pumped every day	4000 Liters / day	
10	Any water wastage/why?	Yes, (Overhead tanks and tap waters)	
11	Water usage for gardening	1000 Liters / day	
12	Waste water sources	Overhead tanks and tap waters	
13	Use of waste water	Trees and Gardening	
14	Faith of wastewater from labs	No	
15	Whether wastewater from labs mixed withground water	No	
16	Any treatment for lab water	No	
17	Whether any green chemistry methodpracticed 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	Nil (Immediately replaced with new taps)	
22	Amount of water lost per day	No	
23	Any water management plan used?	Yes (Harvesting pits)	
24	Any water saving techniques followed?	Regular checkup of taps	
25	Are there any water signs reminding people to turn off the water	Yes	

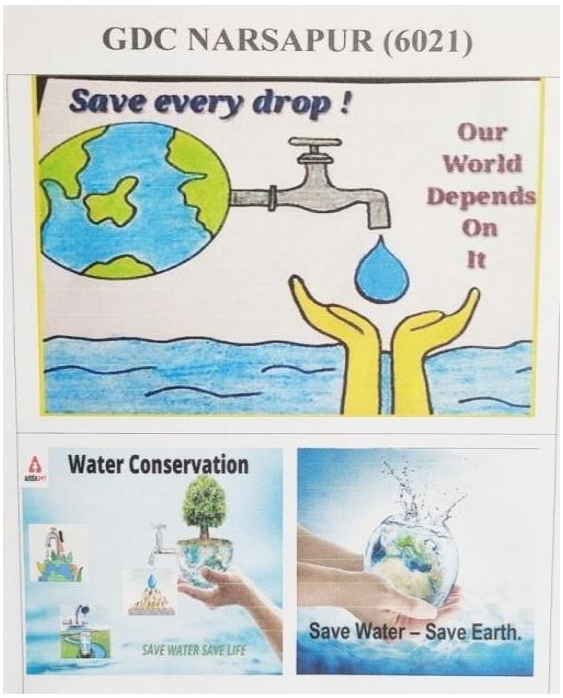
GREEN AUDIT REPORT

Water Quality assessment

Mission Bhagiratha water and Bore Well water are the only sources of water in the college. The water is pumped into overhead tanks using submersible motor pumps. Water will be supplied from the tanks for all the needs of the college (Drinking, Gardening, Washrooms, Laboratories and Cleaning). Water samples from two different locations on the campus of the college were collected and analyzed for their quality parameters. The samples were collected, and analyzed for various physio-chemical parameters with the help of the 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, fluoride, nitrites, iron, sulphate, total hardness, and pH. The results are shown in the table below.

Parameters	Normal ranges		Mission Bhagiratha Water	Bore well Water
	From	To		
PH	6.5	8.5	7.0	7.5
TDS mg/lit	500	2000	80 mg/lit	245 mg/lit
Alkalinity (mg/l)	200	600	150 ppm	260 ppm
Hardness (Total)	300	600	160	340
Chloride (mg/l)	250	1000	180	370
Fluoride ppm	1.0	1.5	0.52	0.72
Nitrites (mg/l)	45	-	5.7	8.6
Iron (mg/l)	0.3	-	0.23	0.35
Sulphate (mg/l)	200	400	25.18	45.21

GDC NARSAPUR (6021)



Auditing for Energy Management

1. List ways that you use energy in your college. (Electricity, electric stove, kettle, microwave, LPG, firewood, Petrol, diesel and others).
Electric energy is used.
2. Electricity bill amount for the last year
Rs.52000 /-
3. Amount paid for LPG cylinders for last one year
Rs.1800/-
4. Weight of firewood used per month and amount of money spent? Also mention the amount spent for petrol/diesel/ others for generators?
No firewood is used. No generators are used.
5. Are there any energy saving methods employed in your college? If yes, please specify. If no, suggest some.
☆Turn off electrical equipments when not in use
☆ Use energy efficient light-emitting diode (LED) bulbs instead of incandescent and CFL bulbs
☆Maintain appliances and replace old appliances
☆Use computers and electronic equipments in power saving mode.
6. How much money does your college spend on energy such as electricity, gas, firewood, etc. in a month.
Not spending money on firewood.
7. How many CFL bulbs has your college installed? Mention use (Hours used/day for how many days in a month)
2 CFL Bulbs ,12 hours per day,30 days. Total energy consumption/ month is 10.08 K.W
8. Energy used by each bulb per month? (for example- 60 watt bulb x 4hours x number of bulbs = kwh).
Per one bulb Total energy consumption/ month is 5.04K.W
9. How many LED bulbs are used in your college? Mention the use (Hours used/day for how many days in a month)
We are using 50 LED tube lights.50x20 watts=1000 watts / 01 Kilo Watt. Daily we are using for five ours.Per a month 25 days we are using .Hence 1 Kilo Watt x 5 hours=5 kilo watts x 25 days=125 Kilo watts per month.
10. Energy used by each bulb per month? (kwh).
1x20=20/1000=0.02 kilo watts/one day.0.02 x 25 days =0.5 Kilo watts.
11. How many incandescent (tungsten) bulbs have your college installed? Mentions use (Hours used/day for how many days in a month)
No incandescent bulbs in our college.
12. Energy used by each bulb per month? (kwh).
Not using incandescent (tungsten) bulbs in our college.
13. How many fans are installed in your college? Mention use (Hours used/day for how many days in a month)
49 Fans we are using.49x60=2940 watts/1000=2.94 kilo watts x6 hours=17.64 per day.25 days we are using in a month.hence 441 kilo watts energy consumed per one month.

14. Energy used by each fan per month? (kwh)
1 x 60=60/1000=0.06 kilo watts x 6 hours=0.36 kilo watts per day x25 days =9 kilo watts per month.
15. How many air conditioners are installed in your college? Mention use (Hours used/day, for how many days in a month)
No Air conditiners we are using.
16. Energy used by each air conditioner per month? (kwh).
No Air conditines are there in the college.
17. How many electrical equipments including weighing balance are installed your college? Mention the use (Hours used/day for how many days in a month)
Not there.
18. Energy used by each electrical equipment per month? (kwh).
No electric weighing balances.
19. How many computers are there in your college? Mention the use (Hours used/day for how many days in a month)
32 x 250=8000 watts / 1000=8 kilo watts x6 hours=48 kilo watts per day x 25 days =1200 kilo watts energy consumed per month.
20. Energy used by each computer per month? (kwh)
37.5 kilo watts
21.How many photocopiers are installed by your college? Mention use (Hours used/day for how many days in a month).
Only one photo copier is there.1x650=650/1000=0.65 kilo watts x 2 hours =1.3 kilo watts per day x 25 days =32.5 kilo watts per month.
22. How many cooling apparatus are in installed in your college?
No cooling apparatus is installed in our college.
Mention use(Hours used/day for how many days in a month)
No cooling apparatus is installed in our college
23. Energy used by each cooling apparatus per month? (kwh)
Mention use (Hours used/day for how many days in a month)
No cooling apparatus is installed in our college
24. Energy used by each photocopier per month? (kwh) Mention the use (Hours used/day for how many days in a month)how many inverters your college installed? Mention use (Hours used/day for how many days in a month)
Only one photo copier is there.1x650=650/1000=0.65 kilo watts x 2 hours =1.3 kilo watts per day x 25 days =32.5 kilo watts per month.
25. Energy used by each inverter per month? (kwh)

26. How many electrical equipment are used in different labs of your college?
Mention the use (Hours used/day for how many days in a month)
Only 2 centrifuges and one hot air oven is there.
Centrifuge 2x850=1700=1.7 kilo watts x 1 hour=1.7 kilo watts x 12 days= 20.4 kilo watts per month.
1 Hot air oven x 1500=1.5 k.w x1 hour=1.5kilo watts per day. no.of days used in a month is 8 days =12 kilo watts per month.

27. Energy used by each equipment per month? (kwh)
Per one Centrifuge 10.2 kilo watts per month.
Per one Hot air oven 12 kilo watts per month

28. How many heaters are used in the canteen of your college ?
No heaters we are using.
Mention the use (Hours used/day for how many days in a month)
No heaters we are using
29.Energy used by each heater per month? (kwh)
No heaters we are using
30. No of street lights in your college?
No street lights
31. Energy used by each street light per month? (kwh)
No street lights
32. No of TV in your college and hostels?
One T.V. is there but it is under repair.
33. Energy used by each TV per month? (kwh)
One T.V. is there but it is under repair.
34. Any other item that uses energy (Please write the energy used per month) Mention the use (Hours used/day for how many days in a month)
CCTV s we are having.No. of CCTVs – 6x 10=60 /1000=0.06 kilo watts x 24 hours per day=1.44 kilo watts per day x 30 days = 43.2 kilo watts per month electricity consumption per month.
35. Are any alternative energy sources/nonconventional energy sources employed / installed in your college? (photovoltaic cells for solar energy, windmill, energy efficient stoves, etc.,) Specify.
No photovoltaic cells for solar energy, windmill, energy efficient stoves, etc. in our college.
36. Do you run “switch off” drills at college?
Yes.
37. Are your computers and other equipment put on power-saving mode?
Yes.
38. Does your machinery (TV, AC, Computer, weighing balance, printers, etc.) run on standby mode most of the time? If yes, how many hours?
Yes.
39. What are the energy conservation methods adapted by your college?
☆Turn off electrical equipments when not in use
☆ Use energy efficient light-emitting diode (LED) bulbs instead of incandescent and CFL bulbs
☆Maintain appliances and replace old appliances
☆Use computers and electronic equipments in power saving mode.
40. How many boards displayed for saving energy awareness?
05 boards.
41. How much ash is collected after burning fire wood per day in the canteen?
No ash production .
42.Write a note on the methods/practices/adaptations by which you can reduce the energy use in your college campus in future.

● Turning off electrical equipments when not in use
●Use energy efficient light-emitting diode (LED) bulbs instead of incandescent and CFL bulbs
● Maintain appliances and replace old appliances.
● Use computers and electronic equipments in power saving mode.
● planning to generate Solar energy in future.

Auditing for Waste Management

1.What is the total strength of students, teachers and Non teaching staff in your College?
No. of Students - 262
No. of Teachers - 13
No. Non teaching staff - 6
Teaching staff :
Gents -8
Ladies -5
Total -13
Non teaching staff:
Gents -5
Ladies-1
Which of the following are available in your College?
Give area occupied - Yes
Garden area - Yes
Garbage dump (number) - 2
Play ground area - Yes
Laboratory -Yes
Kitchen & Canteen - No
Toilets (number) – 10 toilets are there.
Car/scooter shed area - Yes
Number of classrooms-06 classrooms +05 open air classrooms.
Office rooms -1
Others (specify)
Labs-5
Library-1
Conference Hall-1
Principal Chamber-1
Staff Rooms-1
• Which of the following are found near your college?
Mark the level of disturbance it creates for the college in a scale of 1 to 9.
Municipal dump yard - No
Garbage heap - No
Public convenience, Sewer line - No
Stagnant water - No
Open drainage - No
Industry – (Mention the type) - No
Bus / Railway station - No

Market / Shopping complex / Public halls - No

WASTE :

Does your college generate any waste?
If so, what are they?
Yes, our College generates waste- dry leaves, paper waste
How much quantity?
Around 150 Kgs every month
Number or weight
E-waste - 2 kgs per year
Hazardous waste (toxic – less than one kg.
, Solid waste - 3 kgs per day
Dry leaves - 5 kgs per day
Canteen waste - No
Liquid waste - water used in laboratories
Glass - Yes (glassware breakages in labs)
Unused equipment - No
Medical waste if any - No
Napkins Others (Specify) - - Yes
Is there any waste treatment system in the college?
Yes
• Is there any treatment for toilet/urinal/sanitary napkin waste?
No
1 What is the approximate quantity of waste generated per day? (in Kilograms)
2kgs per day

Table

Office :
Approx Bio degradable Non-Bio degradable Hazardous Others
< 1 kg.
2 - 10 kg.
> 10 kg.
Laboratories :
Approx Bio degradable Non-Bio degradable Hazardous Others
< 1 kg.
2 - 10 kg.
> 10 kg.
Canteen/kitchen
Approx Bio degradable Non-Bio degradable Hazardous Others
< 1 kg.
2 - 10 kg.
> 10 kg.

☆ Why waste is a problem?
Yes waste s a problem because it is unhygienic for health and it is harmful,Hazardous…
☆Whether waste is polluting ground/surface water? How?
No
☆Whether waste is polluting the air of the college? How?
No
☆ How is the waste generated in the college managed? Methods 1 Composting, 2. Recycling, 3. Reusing, 4. Others (specify)
Yes we are using the waste generated in the college by composting,Recycle and reuse methods.
☆ How many separate boxes do you think you would need to put into a classroom to start a waste segregation and recycling campaign?
We have two separate dust bins one is for dry waste and the 2nd one is for wet waste.
What should be the use for each box? (Develop a colour code with reasons)
We use blue color for Dry waste, Green colorl for wet waste.
Do you use recycled paper in College?
Yes we use Recycled paper in our college.
8 Is there any waste wealth program practiced in the college?
Yes we prepare compost by using dry leaves, we use waste used plastic bottles to grow herb kind of leafy vegetables..
How would you spread the message of recycling to others in the community?
By conducting Awareness Program rallies to the near by communities.By displaying posters,slogans we can spread the message about recycling.
Have you taken any initiatives? If yes, please specify.
We have conducted awareness program on Eco Friendly Diwali celebrations to the nearby school students as an outreach program.
Can you achieve zero garbage in your college? (Reduce ,Recycle, Reuse, Refuse) If yes, how?
Yes, we can achieve this by reducing the the amount of waste generated in the college, by reusing and recycling the waste.By reusing dry leaves we are preparing compost .we are reusing waste papers,used water bottles and cool drinks bottles to grow herbs.

Auditing for Carbon Footprint

1. What is the total strength of students and teachers in your College?
No. of Students -262
No. of Teachers - 13
Gents - 8
Ladies - 5
Total -13
No. of Non teaching staff -6
Gents - 5
Ladies - 1

Total - 6

2. Total Number of vehicles used by the stakeholders of the college.(per day)

12

3. No. of cycles used - 4

4. No. of two wheelers used (average distance travelled and quantity of fuel and amount used per day)

10 two wheelers, Average distance 40 km,fuel used - 2 Litres per day

5. No. of cars used (average distance travelled and quantity of fuel and amount used per day)

02 cars ,Average distance 200 Km,amount of fuel used is 10 Litres per day

6. No. persons using common (public) transportation (average distance travelled and quantity of fuel and amount used per day)

Common public transport - 265, Average distance- 40 Km, Amount of fuel used per day 530 litres.

7. No. of persons using college conveyance by the students, non teaching staff and teachers (average distance travelled and quantity of fuel and amount used per day)

No college conveyance

8. Number of parent-teacher meetings in an year? Parents turned up (approx.)

Yearly one parent teacher meeting is conducting.

9. Number of visitors with vehicles per day?

5- 7 vehicles per day

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

No generators used.

11. Number of LPG cylinders used in the canteen (Give the amount of fuel used per day and amount spent).

No Canteen

12. Quantity of kerosene used in the canteen/labs (Give the amount of fuel used per day and amount spent).

No Canteen

13. Amount of taxi/auto charges paid and the amount of fuel used per month for the transportation of vegetables and other materials to canteen.

14. Amount of taxi/auto charges paid per month for the transportation of office goods to the college.

500 to 1000 Rupees

15. Average amount of taxi/auto charges paid per month by the stakeholders of the college.

No

16. Use of any other fossil fuels in the college (Give the amount of fuel used per day and amount spent).

No

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

1. Using public transportation instead of using own vehicles.

2. Following car ,bike pooling practice .
3. Preventing entry of private vehicles into the college campus.
18.Are the Rooms in Campus are Well Ventilated?
Yes
19. Window Floor ratio of the Rooms Good/Not Enough ?
Good

Carbon Footprint - Sample Report

Petrol used by two wheelers/day-
10 two wheelers
Average distance 40 Km
To and fro 2 litres per one person
Total fuel = 10×2 litres = 20 litres per day
1 litre Petrol is 109 Rupees hence 20 ×109=2180 Rupees per day Expenditure On fuel for two wheelers.
Fuel used by four wheelers (2 Persons)
No.of cars- 2
Average distance-200Km. (To and fro)
Fuel used for two cars 20 litres (To and fro) per day.
Fuel cost 109 Rupees per litre.
Hence 20 litres ×109 Rupees =2180 Rupees

Travelling by commonTransportation / Public transportation = 265 persons
Average distance-40 Km
Fuel used - 2 litres
Total fossil fuel use is 265 ×2 litres per day
=530 litres.
Codt of one litre fuel is 98
530×98=51940 Rupees Expenditure.

Total fuel cost per day for transportation = 56,300 Rupees.

Cost of Stakeholders transportation per month (56300×25 days)= 14,07,500.

Water Quality Analysis (Biological) Report of the college – III (with Photographic evidence):

S.No	Phytoplanktons	Scientific Name and number	Methodology
1	Diatoms (Bacillariophyceae)	Nil	Microscopic slide preparation
2	Dinoflagellates (Dinophyceae)	Nil	Microscopic slide preparation
3	Coccolithophores (Prymnesiophyceae)	Nil	Microscopic slide preparation
4	Green algae (Chlorophyceae)	Nil	Microscopic slide preparation
5	Cyanobacteria (earlier Blue-green algae)	Nil	Microscopic slide preparation
6	Others (specify)	Nil	Microscopic slide preparation

ENERGY AUDIT

Room No. / name	Electrical Device/Items	Number	Power	usage time (hour/day)
Conference Hall	LED Tube lights Fans	12 12	1.44 K.Watts 4.32 K.Watts	6 hours
Zoology Dept.	LED Tube lights Fans Computer Printer	2 2 1 1	0.24 K.Watts 0.72 K.Watts 1.5 K.Watts 0.18 K.Watts	6hours 3 hours
Botany Dept.	LED Tube lights Fans	4 4	0.48 K.Watts 1.44 K.Watts	6 hours
Physics Dept.	LED Tube lights Fans Computer Printer	2 2 1 1	0.24 K.Watts 0.72 K.Watts 1.5 K.Watts 0.18 K.Watts	6 hours 3 hours
Chemistry Dept.	LED Tube lights Fans Projector	4 4 2	0.48 K.Watts 1.44 K.Watts 3.36 K.Watts	6 hours
Computer Science Dept.	LED Tube lights Fans Computers	6 6 28	0.72 K.Watts 2.16 K.Watts 42 K.Watts	6hours
Mathematics Dept.	LED Tube lights Fans	6 6	0.72 K.Watts 2.16 K.Watts	6 hours

History,Economics & Political Science Depts.	LED Tube lights Fans	6 6	0.72 K.Watts 2.16 K.Watts	6 hours
Staff Room	LED Tube lights Fans	1 2	0.12 K.Watts 0.72 K.Watts	6 hours
Principal's Chamber	LED Tube lights Fans Computer	4 3 1	0.48 K.Watts 1.08 K.Watts 1.5 K.Watts	6 hours
Office Room	LED Tube lights Fans Xerox Machine Computers	3 2 1 3	0.36 K.Watts 0.72 K.Watts 1.3 K.Watts 4.5 K.Watts	6 hours 2 hours

2. Waste management

Approximate quantity of waste generated per day (in kg)

Office				
Approx.	Biodegradable	Non -Biodegradable	Hazardous	Others
<1Kg	Waste Papers	Nil	Nil	Nil
2-10Kg	Nil	Nil	Nil	Nil
>10Kg	Nil	Nil	Nil	Nil

Laboratories				
Approx.	Biodegradable	Non - Biodegradable	Hazardous	Others

<1Kg	Plant material used in the Botany lab is less than one Kilo.	Less than one kilo	Nil	Nil
2-10Kg	Nil	Nil	Nil	Nil
>10Kg	Nil	Nil	Nil	Nil

Canteen/kitchen – NO CANTEEN /NO KITCHEN				
Approx.	Biodegradable	Non - biodegradable	Hazardous	Others
<1Kg	Nil	Nil	Nil	Nil
2-10Kg	Nil	Nil	Nil	Nil
>10Kg	Nil	Nil	Nil	Nil

3. How the waste generated in the college is managed?

A)Composting/ Vermicomposting	Yes. Compost will be produced.	Remark Composting pit is there.
B)Recycling	No Recycling of papers and water.	No.
C)Reusing	Water which is used for hand wash is directed to Plants growing in the campus.	--
D)Other ways	No	No.

4. Waste generated in the college?

E-waste		No E-Waste in the college campus.
Hazardous waste		No Hazardous waste is generated in the college campus.
Solid waste		Paper waste and dry leaves
Dry leaves		15 Kgs dry leaves waste produced by the plants.
Canteen waste		No Canteen .So there is no waste generated in the college campus by canteen.
Liquid waste		Used water, sewage water from wash basins and washrooms will be directed to underground drainage..
Glass		Broken glassware .
Unused Equipment		No
Napkins		Sanitary Napkins will be collected by Grama Panchayati Scavengers and they will dispose in the dumping yard.
Others (specify)		No

Do you use recycled paper in college?	N O
Any waste management methods used?	Yes Compost is produced by using dry leaves waste