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Principal

Chan.

GREEN AUDIT COMMITTEE-2021

Sl. No	Committee Designation	Name of the Member	
1	Chairman	Sri. C. G. Lakshmi Prasad	
2	External Member	Dr. A Chandoji Rao	
3	Convener	Smt. A. Radhika	
4	Members (Two senior Science	Sri. P. Chakrapani Reddy	
5	Faculty)	Sri. Md. Shakeel Ahmed	
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EXECUTIVE SUMMARY

Day by Day the Pollution is significantly increasing due to the industries and factories. It is causing serious health problems to the human being and also polluting the environment. The rapid Urbanization and economic development at local, regional and global level has led to several environmental and ecological crises. On this background it becomes essential to adopt the system of the Green campus for the institute which will lead for it for sustainable development. Green audit can be a useful tool for a college to determine how and where they are using most energy or water or resources. The College can then consider and make savings. It can also be used to determine the type and volume of waste, which can be used for a recycling project or to improve waste to minimization plan.

This is the first attempt to conduct green auditing of this college campus. This audit was mainly focused on greening indicators like consumption of energy in terms of electricity, quality of water, waste management, carbon foot print of the campus etc.

The methodology included: preparation and filling up of questionnaire, observation, measurements and physical inspection of the campus. Collected data was grouped tabulated and analyzed. Finally, a report Pertaining environmental management plan with strength weakness and suggestions on the environmental issue of campus is documented.

INTRODUCTION

About College: -

Government Degree College, Atmakur (A) of Wanaparthy-District was established in 2008 in the predominately backward rural cater to needs of the innately potential rural youth deprived of Higher Education

The college is affiliated to Palamuru University, Mahaboobnagar offers six different UG courses BA(HEP), B. Sc (MPC), B. Sc (BZC), B.COM(GEN) in Telegu medium and B.COM (COMP), B.SC(MPCS) in English medium.

During the last Thirteen years of its existence despite the lack of ideal physical and infrastructural resources the college has given its best to the students and offered an opportunity to many a hidden young talent to shine and prosper. Recently college acquired 5 acres of land and building construction is taken up with the Government sanctioned Hundred lakhs under special development Funds and to the completed by the end of this year. The college is admitted into 2(f) of UGC.

Almost all the students enrolled are hails from socially under privileged segments and belongs to first generation education. Added to it this region being frequently drought prone, economically under empowered.

VISION: -

The Vision of the college is to grow in to an abode of learning to the educationally, economically and socially marginalized section of Atmakur and nearby mandals.

MISSION: -

The Mission for realizing the vision is by providing quality education with all job-oriented skills by enriching the capacity of individuals to learn and lead with integrity and wisdom, by fostering outreach programs and scientific cultural and social understanding that strengthen learning and research and by instilling human value and a sense of responsibility towards the society.

LOCATION OF THE COLLEGE



GDC, ATAMAKUR(A), WANAPARTHY DISTRICT

College Profile

Basic Details:

Name of the College:	Government Degree College, Atmakur(A)	
Address	Opp. to TSRTC Bus Stand, Atmakur, Wanaparthy Dist.	
Campus Area	4.4 Acres. (Campus is shared among Govt. Jr. College, Atmakur and Govt. High School, Atmakur)	
Built up Area	2.4 Acres	
Ventilation	Yes, The building has ventilators for natural air flow in all rooms.	

COURSES OFFERED BY THE COLLEGE

UG-COURSES		
B.Sc., (MPC) TM/EM	Maths, Physics, Chemistry	
B.Sc. (MPCs) E/M	Maths, Physics, Computer Science	
B.Sc. (BZC) TM/EM	Botany, Zoology, Chemistry	
BA (HEP)	History, Economics, Political Science	
BA (Computer applications)	History, Political Science, Computer Applications	
B. Com (Computer Applications)	Computer Applications	

The student and faculty strength of the college:

Strength	Male	Female	Total
No of students	139	135	274
No of Teaching Staff	06	03	09
No of Non-Teaching staff	03	Nil	03

Physical Structure

The available land in the campus	4.4 acres	
The built-up area of the college	1,04,544 Sq. Ft.	
No. of Class Rooms	09	
No. of Laboratories	01	
No. of Conference halls	Nil	
Library Halls	Nil	
Auditorium	Nil	
Canteen	Nil	
Any other (please specify)	The campus is shared among three institutes: Govt. Degree College, Atmakur, Govt. Jr. College, Atmakur, Govt. High School, Atmakur	

OBJECTIVES OF THE GREEN AUDIT: -

The main aim and objectives of this green audit is to assess the environmental quality and the management strategies being implemented in GDC, Atmakur.

- 1. To monitor the energy consumption pattern of the college
- 2. To assess the quality of the water in the college campus
- 3. To quantify the liquid and solid waste generation and management plants in the campus.
- 4. To assess the carbon foot print of the college.
- 5. To import environment management plans to the college
- 6. To bring the awareness among staff and students to real concerns of environment and the sustainability.

METHODOLOGY: -

In order to perform green audit, the methodology included different tools such as preparation of questionnaire physical inspection of the campus, observation, data analysis, measurements and commendations. The study covered the following areas to summarize the present status of environment management in the campus.

- 1. Water management
- 2. Energy conservation
- 3. Carbon Foot Print
- 4. Waste Management
- 5. Tree Plantation (Green Campus)

Audit for water management: -

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 facilities of raw water intake and determining the facilities for water treatment.

Sl. No	Sections	Water used/Day
1	Toilets	50Lt
2	Drinking	60Lt
3	Washing	50Lt
4	Cleaning	40Lt
5	Plants	60 Lt
Total	·	260 Lt

Basic Particulars of Water Consumption and Usage:

1.	Uses of water in the college:	Cleaning, Drinking and Washing.
2.	Sources of Water:	Bore Well for Cleaning and Washing and Mineral Water for Drinking.
3.	No. Wells in the college	One Bore Well. Managed by Govt. Junior College.
4.	No. of Motors used for pumping water from each well:	One Motor. Managed by Govt. Junior College.
5.	What is the total horse power of each motor:	Not Applicable: as the motor is not under this college management.
6.	What is the depth of each well	Not Applicable.
7.	What is the present depth of water in each well:	Not Applicable
8.	How does your college store water?	We don't store water, We fetch water on every day basis through pitichers.
9.	Quantity of water stored in your overhead water tank?	The college has no overhead water tank.
10	. Quantity of water pumped every day?	The college has no motor we fetch about 100 liters of water from borewell of Govt. Jr. College.
11.	. If there is water wastage, specify why?	There is hardly any water wastage in the college, as we fetch water on need basis.

12. How can the wastage be prevented?	Not Applicable.
13. Locate the point of entry of water and point of exit of waste water in the college:	There is one municipal tap, besides borewell, both are managed by Govt. Junior College. There is not much usage of water as to flow as drainage. In fact, there is no drainage system in the college. The little water we use for cleaning and washing is diverted to the tree pits planted around the campus.
14. Where does the waste water come from?	Mostly from cleaning and washing dishes of the staff. Students don't bring lunch boxes.
15. Where does the waste water go?	Very little amount of water is used for washing dishes during lunch break is diverted to the trees.
16. What are the uses of waste water in the college?	Waste water, which is very little, is diverted to the trees and plants.
17. What happens to the water used in your labs? Whether it gets mixed up with ground water?	There are no labs except, Computer lab at present. Only for demonstration purpose temporary labs are set up and the water used is disposed to sewage canal which flows beside the college.
18. Is there any treatment for the lab water?	No
19. Whether green chemistry methods are practiced in your labs?	Not applicable. As there is no permanent chemistry lab due to lack of rooms.
20. Write down four ways that could reduce the amount of water used in your college:	The college is using a little amount of water which cannot be reduced further.
21. Record water use from the college water meter for six months:	Not applicable.
22. Bimonthly water charges paid to water connection if any:	Not applicable.
23. No. of water coolers. Amount of water used per day?	There is one water cooler which we use hardly for two months a year during summer. We use around 25 liters a day during the consumption.
24. No. of water taps. Amount of water used per day?	There is no running water pipe line in the college and there are no taps in the college.
25. No. of bath rooms in staff rooms, common hostels. Amount of water used per day?	There are no bath rooms and common hostels. The women staff use women wash room which is managed by Government Junior College.
26. No. of toilets, Urinals. Amount of water used per day?	There are no toilets, urinals in the college. The staff uses around 50 liters of water for washing hands.
27. No. of water taps in the canteen. Amount of water used per day?	There is no canteen in the campus. Hence water usage is NIL.
28. Amount of water used per day for garden use:	There is no garden in the college. We have plants planted and the washing water is diverted to the plants. We hardly use any water

	for maintaining these plants.
29. No. of water taps in laboratories. Amount of water used per day in each lab:	There is no running water pipe line connection and also no permanent labs in the college which consume water.
30. Total Use of water in each hostel:	There is no hostel in the campus. So water usage is NIL

Table showing consumption of water in the college:

Sl. No	Sections	Water used/Day
1	Toilets	50Lt
2	Drinking	60Lt
3	washing	50Lt
4	Cleaning	40Lt
5	Plants	60 Lt
Total		260 Lt

Results of water quality

Parameters	Bore W	ellMunicipal Tap water	Standard value (BIS)
Dissolved Oxygen (mg/l)			6-8
Acidity (mg/l)			200
Alkalinity (mg/l)	Nil	Nil	200
Chloride (mg/l)	298	34	250
Hardness (Total)	226	34	200
Conductivity (µs)	2415	200	
Ph.	7.68	7.12	6.5-8.5
Total Dissolved Solids			
(ppm)	1280	106	500
Salinity (ppt)			

Total coliform		0
Fecal coliform		0

Water Quality analysis (Biological) report of college – II (with Photographic evidence)

Sl. No	Parameter/ WHO	Zooplankton (No	Methodology
	permissible level	of Samples/Sites)	
1	Protozoan (Ciliates)	NA	
2	Rotifers	NA	
3	Ostracods	NA	
4	Insect Larvae	NA	
5	Water Fleas	NA	
6	Bivalves	NA	
7	Snails	NA	
8	Mussels	NA	
9	Any Other (Specify)		

Water Quality analysis (Biological) report of college – II (with Photographic evidence):

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

Observation: -

The bore water is the main source of water. The bore water is used for cleaning, Toilets, washingetc., For drinking purpose the mineral water is used which is purchased from outside and amount is paid for it. Waste water management is not maintained in the college. There is minimum wastage of water in the college. Average of 260Liters of water is used by the college, per day.

Suggestions: -

More water recharging pits are needed. Construction of rain water harvesting tank is needed. In the campus reuse and recycle of water system is necessary.

Audit for Energy management: -

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 conservations and methods to reduce its consumption related to environmental degradation.

ENERGY AUDIT OF GDC, Atmakur

Sl. No	Electrical appliances/ Instruments	Num ber	Power W/Uni t	Total Powe r (W)	Kw	Operati on per day (hr.)	Kw/hr.	No. of working days in a month	Total consumption per month
1	Fans	5	32	160	0.160	6	0.96	25	24
2	Tube lights	4	36	144	0.144	6	0.864	25	21.6
3	Led bulbs	1	20	20	0.02	6	0.12	25	3
4	Computers	3	200	600	0.6	6	3.6	25	90
5	Printer(B/W)	1	560	560	0.56	2	1.12	25	28
6	Printer (Colour)	1	12	12	0.012	2	0.024	25	06
7	Photo copier	1	450	450	0.45	2	0.90	25	22.5
8	Speaker (Mic)	1	54	54	0.054	2	0.108	25	2.7
9	Cooler	1	190	190	0.19	3	0.57	25	14.25
Total power consumption per month							206.65		

Basic Particulars of Energy Consumption and Management:

1.	The ways that we use energy in the college:	Electricity
2.	Electricity Bill amount for the last year:	₹ 12,000/-
3.	Amount paid for LPG cylinders for last one	LPG is not used in the college. So it is NIL
	year:	
4.	Weight of firewood used per month and	NIL
	amount of money spent?	
5.	Is there any energy saving methods	We are using one LED bulb. Need to replace
	employed in the college? If yes, please	Fans and Tube lights with energy saving ones.
	specify, if no, suggest some:	
6.	How much money does your college spend	₹. 1000/- on average per month.

on energy such as electricity, gas, firewood,	
etc. in a month?	
7. How many CFL bulbs has your college	We are not using any CFL bulbs.
installed? Mention use (Hours used per day	
for how many days in a month)	
8. Energy used by each bulb per month? (For	We are not using traditional bulbs either. We
example- 60-watt bulb x 4hours x number of	are using tubelights.
bulbs = Kwh).	
9. How many LED bulbs are used in your	One LED bulb is used.
college? Mention the use (Hours used/day	6 hours a day for approximately 25 days a
for how many days in a month):	month.
10. Energy used by each bulb per month?	For LED bulb we use 3KWh
11. How many incandescent (tungsten) bulbs	We are not using tungsten bulbs in the college.
	we are not using tungsten butos in the conege.
have your college installed? Mentions use	
(Hours used/day for how many days in a	
month):	Apply Policy 21 Charles
12. Energy used by each bulb per month?	4 tube lights: 21.6 kwh.
10.77	1 LED bulb: 3 kwh.
13. How many fans are installed in your	5 fans, 6 hours per day approximately for 25
college? Mention use (Hours used/day for	days a month.
how many days in a month)	
14. Energy used by each fan per month?	4.8 kwh
15. How many air conditioners are installed in	NIL
your college?	
16. Energy used by each air conditioner per	Not applicable.
month?	
17. How many electrical equipment including	NIL
weighing balance are installed your college?	
Mention the use (Hours used/day for how	
many days in a month):	
18. Energy used by each electrical equipment	NIL
per month?	
19. How many computers are there in your	12 computers, 6 hours per day, for 25 days a
1	month.
college? Mention the use (Hours used/day	inontii.
for how many days in a month):	20.1 1
20. Energy used by each computer per month?	30 kwh.
21. How many photocopiers are installed by	1 xerox machine is used.
your college? Mention use (Hours used/day	Approximately 2 hours a day for 25 days in a
for how many days in a month):	month.
22. How many cooling apparatuses are in	NIL
installed in your college? Mention use	
(Hours used/day for how many days in a	
month):	
23. Energy used by each cooling apparatus per	Not Applicable
month? (kWh) Mention use (Hours used/day	
for how many days in a month):	
24. Energy used by each photocopier per	22.5 kwh
21. Energy used by each photocopies per	22.5 KWII

month? (Kwh) Mention the use (Hours	
used/day for how many days in a month)	
25. how many inverters your college installed?	One inverter is used for two computers and a
Mentions use (Hours used/day for how	printer.
many days in a month)	Only during power cuts approximately 10
	hours in a month.
26. Energy used by each inverter per month?	Approximately 10 kwh.
(kWh).:	
27. How many electrical equipment are used in	NIL
different labs of your college? Mention the	
use (Hours used/day for how many days in a	
month:	
28. Energy used by each equipment per month?	Not applicable.
(kWh):	
29. How many heaters are used in the canteen of	Not applicable
your college? Mention the use (Hours	
used/day for how many days in a month):	
30. Energy used by each heater per month?	Not applicable
(kWh):	
31. No of street lights in your college?	NIL
32. Energy used by each street light per month?	Not applicable.
(kWh):	
33. No of TV in the college and hostels?	NIL
34. Energy used by each TV per month? (kWh):	Not applicable
35. Any other item that uses energy (Please	Nil
write the energy used per month) Mention	
the use (Hours used/day for how many days	
in a month):	
36. Are any alternative energy	NIL
sources/nonconventional energy sources	
employed / installed in your college?	
(Photovoltaic cells for solar energy,	
windmill, energy efficient stoves, etc.)	
Specify.:	
37. Do you run "switch off" drills at college?	No
38. Are your computers and other equipment	Yes
put on power-saving mode?	
39. Does your machinery (TV, AC, Computer,	2 computers run on standby mode for 6 hours a
weighing balance, printers, etc.) run on	day.
standby mode most of the time? If yes, how	1 printer will be on standby mode for 6 hours a
many hours?	day.
	1 xerox machine will be on standby mode for 6
	hours a day.
40. What are the energy conservation methods	We have installed one LED bulb and soon
adapted by your college?	shifting to energy saving equipment.
41. How many boards displayed for saving	NIL
energy awareness?	1

42. How much ash is collected after burning fire	Nil
wood per day in the canteen?	
43. Write a note on the	We are planning to adopt to energy saving
methods/practices/adaptations by which you	equipment by shifting to LED bulbs and tube
can reduce the energy use in your college	lights and energy saving fans in near future.
campus in future	The CCE has already given us such
	instructions to send a proposal for shifting to
	energy saving equipment. The college has
	requested for permission to order such
	equipment from SETWIN for ₹. 46,712/ As
	soon as we get permission, we will replace all
	the existing tube lights and fans with energy
	efficient LED bulbs; tubes and energy efficient
	ceiling fans.

Observation: -

The college is running in the Junior college campus. The college presently has no own building. Only four rooms are given to the college. We utilize class rooms of Jr. college building for teaching purpose. Laboratories are also not there in the college. So, energy utilization is found to be less in the college. Total energy consumption is determined as 206.65 kWh/Month.

Recommendations: -

The energy efficient electric appliances like LED bulbs, fans may be increased in the college.

AUDITING FOR CARBON FOOT PRINT

 What is the total strength of students and teachers in your College? No. of Students No. of Teachers No. of Non-teaching staff Gents Ladies Total 	No. of Students :274+ No. of
2. Total Number of vehicles used by the stakeholders of the college. (per day):	14
3. No. of cycles used:	Nil
4. No. of two wheelers used (average distance travelled and quantity of fuel and amount used per day):	13 members including staff and students use two wheelers ,Average distance travelled 20 km, Average usage of fuel 13 Lt, amount Rs.1391/- per day
5. No. of cars used (average distance travelled and quantity of fuel and amount used per day):	One car, Average usage of fuel 6 Lt, amount Rs.642/-per day.
6. No. persons using common (public) transportation	average distance travelled 20 km and quantity of fuel and amount used per day): per person to and fro 20 km=1 lt Total :04 Lt and total amount is Rs.428/-
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	
8. Number of parent-teacher meetings in a year? Parents turned up (approx.):	Nil
9. Number of visitors with vehicles per day? Average:03	Average Numbers of visitors vist our college with vehicles per day is 03
10. Number of generators used per day (hours). Give the amount of fuel used per day. : Nil	No generators are available in our college.
11. Number of LPG cylinders used in the canteen (Give the amount of fuel used per day and amount spent). :	As there is no canteen in our college campus. So usage of LPG cylinders is not there in the college.
12. Quantity of kerosene used in the canteen/labs (Give the amount of fuel used per day and amount spent).:	Not applicable

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.	Not applicable
15. Average amount of taxi/auto charges paid per month by the stakeholders of the college.: Nil	Not applicable
16. Use of any other fossil fuels in the college (Give the amount of fuel used per day and amount spent). :	Not applicable
17. Suggest the methods to reduce the quantity of use of fuel used by the stakeholders/students/teachers/non-teaching staff of the college	
18. Are the Rooms in Campus are Well Ventilated? Yes /No	Rooms in the campus are well ventilated
19. Window Floor ratio of the Rooms Good/Not Enough	Window Floor ratio of the Rooms is Good

Waste Management: -

Waste management is one of the challenges that educational institutions have to face in accomplishing sustainability goals. Human activates create waste and this waste can pose risks to the environmentand to public health, so special attention should be given to the handling and management of hazardous waste generated in the college. Thus, the minimization of solid waste is essential to a sustainable environment in college. The survey focused on volume type and current management practice of solid waste generated in the campus.

The Student and faculty strength

No.of S	Students	Total	Teaching Staff		Total	Non-Teaching		Total	Total
Girls	Boys	274	Male	Female	09	Male	Female	04	287
135	139	2/4	06	03	09	03	01	04	201

Basic particulars of Waste Management:

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.

Ite	ms	Found or not found	Disturbance it creates for the college in a scale of 1 to 9
1.	Municipal dump yard	Not Found	Not applicable
2.	Garbage Heap	Not Found	Not applicable
3.	Public convenience sewer line	Found	6
4.	Stagnant water	Not Found	Not applicable
5.	Open drainage industry	Not Found	Not applicable
6.	Bus / Railway station Market / shopping complex / public halls: Bus station, Market, shopping complex	Bus stand and main road is very close to the college.	2

How the waste generated in the college is managed?

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

Waste generated in the college?

Types of waste	Particulars	Disposal Method
E-waste	Computer, Electrical & Electronic parts	Dumped in staff room
Plastic Waste	Pen, Refill, Plastic water bottles	Dispose to Municipal Garbage
Solid Waste	Paper wastes, Food wastes	Dispose to Municipal Garbage
Waste water	Washing & toilets	Directed to plants and trees
Dry Leaves	Leaves of trees	Burning

1.	Do you use recycled paper in college?	No
2.	Any waste management methods used?	Directed to plants and trees
3.	Does your college generate any waste? If so, what are they?	E waste, Dry leaves, solid waste, waste water
4.	How much quantity	Approximately 1 kg per day.
5.	Number or weight of E-waste Hazardous waste (toxic):	5 kgs per year, mostly printer cartridges 5 to 6 per year. Now we are using one ink-tank printer to minimize toxic waste.
6.	Number or weight of Solid waste:	Approximately 1 to 2 kgs per day
7.	Number or weight of Dry leaves:	Approximately 2 to 3 kgs per day
8.	Number or weight of Canteen waste:	Nil
9.	Number or weight of Liquid waste:	Approximately 15 liters per day
10.	Number or weight of Glass:	Nil
11.	Number or weight of Unused equipment:	Nil
12.	Number or weight of Medical waste if any:	Nil
13.	Number or weight of Napkins Others (Specify):	Nil

1.4		Waste water due to washing and		
14.	Is there any waste treatment system in the college?	cleaning is Directed to plants and		
		trees		
15.	Is there any treatment for toilet/urinal/sanitary napkin waste?	Soak Pits		
16.	What is the approximate quantity of waste generated	Approximate quantity of waste		
	per day? (in Kilograms) Office, Laboratories Canteen/kitchen:	generated per day in the Office, 1 to 2 kgs per day		
17.	Whether waste is polluting ground/surface water? How?	Due to lack of Laboratories in the campus so the waste is not polluting ground or surface water		
18.	Whether waste is polluting the air of the college? How?	Due to lack of Laboratories in the campus so the waste is not polluting the air of the college.		
19.	How is the waste generated in the college managed? Methods 1 Composting 2 Recycling 3 Reusing 4 Others (specify)	Mostly Municipal Waste Collection, Dry leaves are burnt.		
20.	How many separate boxes do you think you would	Dry and wet wastage baskets in three		
	need to put into a classroom to start a waste	different colours		
	segregation and recycling campaign?	different colours		
	What should be the use for each box?	 Blue dustbins are meant for disposal of plastic wrappers and non-biodegradable wastes. Yellow dustbins are meant for papers and glass bottles. Green dustbins are used for biodegradable waste, but in class room it is not necessary. 		
22.	Is there any waste wealth program practiced in the college?	No		
$\overline{23}$.	How would you spread the message of recycling to			
	others in the community? Have you taken any	No		
	initiatives? If yes, please specify.			
24.	Can you achieve zero garbage in your college? (Reduce, Recycle, Reuse, Refuse) If yes, how?	We try to achieve zero garbage in our college by implementing paper less work and no usage of plastic in the campus.		

Observation: -

The college has minimum solid waste generation. The college has no recycling unit within the campus. The municipality workers come and collect the waste in the college. Less no. of electronic appliances is utilized in the college. So, e-waste is minimal. Total solid waste generated in the college is about 3-5 kg per day. The waste generation from tree droppings is collected and burnt. Very less plastic waste is generated in the college.

Recommendations:

- ➤ Reduce the absolute amount of waste that is produced from college, staff, offices.
- ➤ Make use of recycling facilities

E-Waste management: -

E-waste is much more hazardous than other waste because electronic components contain calcium, lead, mercury and polychlorinated biphenyls (PCBS) that can damage human health and the environment.

Observations:

E-waste generated in the campus is very less in quantity. The E-waste and defective items are collected and disposed through direct selling.

Recommendations: -

- ➤ Recycle or safelydispose of waste hazardous goods such as computers and electrical appliances.
- Awareness amongst students and staff about reduction of E-waste and environmentally friendly disposal practices for e-waste.

AUDITING FOR GREEN CAMPUS MANAGEMENT: -

Green campus is a concept which stands for the efforts to establish environmentally sustainable practices in any institution. The green campus offers an institution the opportunity to take the lead in redefining its environmental culture and developing new paradigms by creating sustainable solutions to environmental, social and economic needs of the mankind. The following are the details of trees available in the campus.

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List of the Plants in the GDC, Atmakur, Wanaparthy-District

Sl. No	Common Name	Scientific Name	No.of Plants			
Medicinal	Medicinal Plants					
1	Neem	AzadirachtaIndica	06			
2	Tulsi	Ocimumsanctam	01			
3	Kalabanda	Aloe vera	02			
4	Amruthavalli	TinosperaCorditolia	02			
Trees						
5	Kanuga	PongamiaPonneta	07			
6	Munaga	Moringa Olifira	01			
7	Teak	Tectona Grandis	01			
8	Chinta	Tamarindus Indicus	02			
Tot	22					

Basic particulars of Green Campus Management:

1. Is there a garden in your college? Area?	There is no garden in our college
2. Do students spend time in the garden?	There is no garden in our college
3. List the plants in the garden, with approx. numbers of each species	List Enclosed (Table No:)
4. Suggest plants for your campus. (Trees, vegetables, herbs, etc.):	PongamiaPonneta, Tectona Grandis, Azadirachta Indica, Tulasi, Alovera, Amrutha valli
5. List the species planted by the students, with numbers.:	List Enclosed (Table No:)
6. Whether you have displayed scientific names of the	Geo Tag has done for every tree with QR code information

trees in the campus?:	
trees in the campus: .	
7. Is there any plantations in your campus? If yes specify area and type of plantation.;	There is no plantation in the campus
8. Is there any vegetable garden in your college? If yes how much area?	There is no vegetable garden in the college campus
9. Is there any medicinal garden in your college? If yes how much area?	There is no medicinal garden in the college campus
10. What are the vegetables cultivated in your vegetable garden? (Mention the quantity of harvest in each season):	NA
11. How much water is used in the vegetable garden and other gardens? (Mention the source and quantity of water used). :	NA
12. Who is in charge of gardens in your college?:	NSS coordinator is the in charge of trees and plants in the college
13. Are you using any type of recycled water in your garden?	We are not using any type of recycled of water for trees and plants
14. List the name and quantity of pesticides and fertilizers used in your gardens?	NA
15. Whether you are doing organic farming in your college? How?	NO
16. Do you have any composting pit in your college? If yes, what are you doing with the compost generated?	NO
17. What do you doing with the vegetables harvested? Do you have any student market?	NA
18. Is there any botanical garden in your campus? If yes give the details of campus flora.:	There is no botanical garden in the college campus
19. Give the number and names of the medicinal plants in your college campus.:	Neem-06, Tulasi-01, Alovera-02, Amrutha valli-02 are available in the campus
20. Any threatened plant species planted/conserved?	NO
21. Is there a nature club in your college? If yes what are their activities?:	NO
22. Is there any arboretum in your college? If yes details of the trees planted.	NO

23.Is there any fruit yielding plants in your college? If yes details of the trees planted. :	NO
24.Is there any groves in your college? If yes details of the trees planted.:	NO
25. Is there any irrigation system in your college?	NO
26. What is the type of vegetation in the surrounding area of the college?	
27. What are the nature awareness programmes conducted in the campus?	We are conducting various programmes for nature awareness like haritha haram, students are encouraged to plant sapling in the college and also in their residencies and Elocution and Essay writing competitions are conducted to create awareness about green cover.
28. What is the involvement of students in the green cover maintenance?:	Plantation
29. What is the total area of the campus under tree cover? Or under tree canopy? :0.5 Acre	Campus has only 0.5 Acre land under tree cover
30. Share your IDEAS for further improvement of green cover.: -	More plantation is to be done in the campus

Observations:

Total no of plants in the campus are 22. Tree plantation programs are being organized through NSS and Haritha Haram regularly. This program helps in encouraging ecofriendly environment which provides pure oxygen within the institute and awareness among students.

Recommendations: -Promoting environmental awareness as a part of course work

Reviews periodically the list of trees planted in the campus allot numbers to the tree and keep records.

More trees to be planted in the college.

Air quality Determination: -

Air quality Index: -

Air quality Index (AQI) :46 satisfactory air quality.

Summary:

Major air pollutants such as particulate matter PM_{10} , NO_2 , NO, CO are within the permissible limits as per NAAQS

Air quality Determination:

Air Quality Index (parameters studied/recorded/ Seasonal):

NO ₂	11.09
NO	2.44
PM2.5	13.33 ug/m ³
PM10	46.00 ug/m ³
СО	0.27 PPM
Humidity	73.9%
Barometric Pressure	1004hPa
Wind Speed	3.7m/s

Noise Level:

Measurements of Noise level in and around the college

Loudness is the strength of sensation of sound perceived by the individual. It is measured in terms of decibels. The loudest sound a person can stand without much discomfort is about 80 db. Sound beyond 80 dB can be regarded as pollutant as it harms hearing system. For international standards a noise level up to 65 dB is considered tolerate.

Measurement of Noise level in and around the GDC, Atmakur

Sl. No	Place	Measurements (Duration in Secs)	Min (dBA)	Max (dBA)	Average (dBA)
1	Class Room-1	10	56.2	71.02	63.61
2	Class Room-2	10	55.79	71.02	63.405
3	Class Room-3	10	54.81	71.02	62.915
4	Class Room-4	10	55.62	71.1	63.36
5	Class Room-5	10	55.71	71.1	63.405
6	Class Room-6	10	54.18	71.02	62.6
7	Class Room-7	10	54.63	71.02	62.825
8	Class Room-8	10	54.03	71.05	62.525
9	Class Room-9	10	53.98	71.1	62.54
10	Class Room-10	10	54.02	71.1	62.56
11	Staff Room	10	53.33	67.53	60.43
12	Office Room	10	54.3	71.02	62.66
13	Ground	10	42.83	52.89	47.86
Total A	verage (dBA)			1	61.59

Summary:

The campus is having noise standards under permissible limits and is coming under silence zone.

GOVERNMENT OF TELANGANA

MISSION BHAGIRATHA (INTRA) DEPARTMENT INTERNAL WATER QUALITY ANALYSIS LABORATORY :: JOGULAMBA GADWAL::

Report on Chemical Analysis of Water (Drinking)

Name & Address of Sender

Sample Sending by : The Principal, Govt Degree College, Atmakur.

Collected Date :24/08/2021

Received Date: 24/08/2021

Reported Date: 28/08/2021

Source of water: Bore Water, Government Degree College, Atmakur, Atmakur Mdl, Wanaparthy District.

Lab Reference No:320

Result (Physical & Chemical)		BIS:10500-20	12 Standar	rds
		Valus	Min	Max
1) Colour		Narmal	5	25
2) Odour	•	Un Objectiona	able Un Ol	bjectionable
3) Taste	1971 - 1972 - 1973 1971 - 1972 - 1972 - 1972 - 1972 - 1972 - 1972 - 1972 - 1972 - 1972 - 1972 - 1972 - 1972 - 1972 - 1972 - 1972	Agreeable	Agree	eable
4) Turbidity (J.T.U's)	1	<0.01	5	10
5) PH	•	7.68	6.5	8.5
6)Electrical Conductivity	•	2415	500	2000
(Micromhos/cm at C 7)Total Disolved Salids		1280	500	2000
(The following results expressed in millig	rams per litre)			
8)Alkalinity a) Phenolpthalein		Nil	200	600
(as CaCo3) b) Methyl Orange	inger	429	200	600
9) Total Hardness (as CaCo3)		752	300	600
a) Calcium		60	75	200
b) Megnisium		166	30	100
10) Chloride (as Cl)		298	250	1000
11)Flouride (as F)		0.82	0.5	1.5
12)Nitrate (as N)		8	45	No Relaxation
13) Sulphate (as So4)	:	119	200	400
14) Iron (as Fe)		0.27	0.3	1.0
15) Resudial Free Chlorine (R.C)	:	Nil	0.2	1.0

Note: This is only Water Quality Analysis Testing Report not permission for any other Private Bussiness Purpose.

Remarks:- The above Water Source is Chemically Un Satisfactory for human consumption, Some parametires are excess of permisiable limits i"e E.C,Total Hardness and Megnisium are excess, So it is not fit for Drinking,.

Water Quality Analysis Laboratory,
RWS&S Division Laboratory
RWS&S Division Laboratory
RWS&S, Division Conference of the Conference of the

GOVERNMENT OF TELANGANA MISSION BHAGIRATHA DEPARTMENT INTERNAL WATER QUALITY ANALYSIS LABORATORY :: JOGULAMBA GADWAL::

Report on Chemical Analysis of Water (Drinking)

Name & Address of Sender

Sample Sending by : The Principal, Govt Degree College, Atmakur.

Date collected: 24/08/2021

Date Received: 24/08/2021

Date Reported: 26/08/2021

Source of water: Filter Water, (RO Unit), Government Degree College, Atmakur, Atmakur Mdl, Wanaparthy Dist.

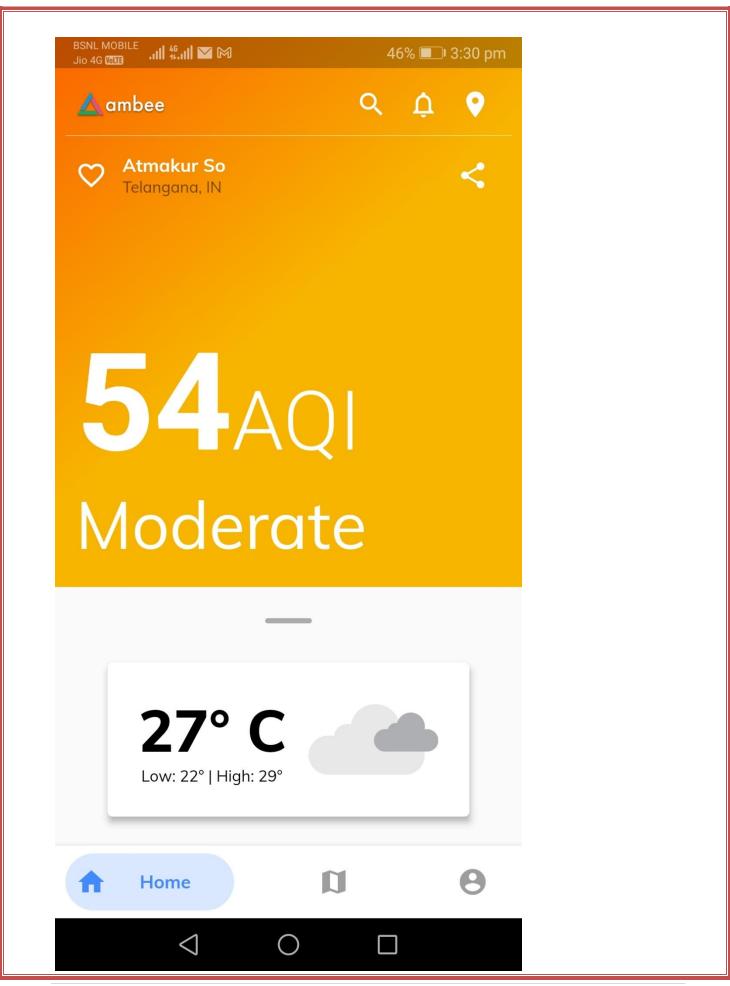
Lab reference No.321

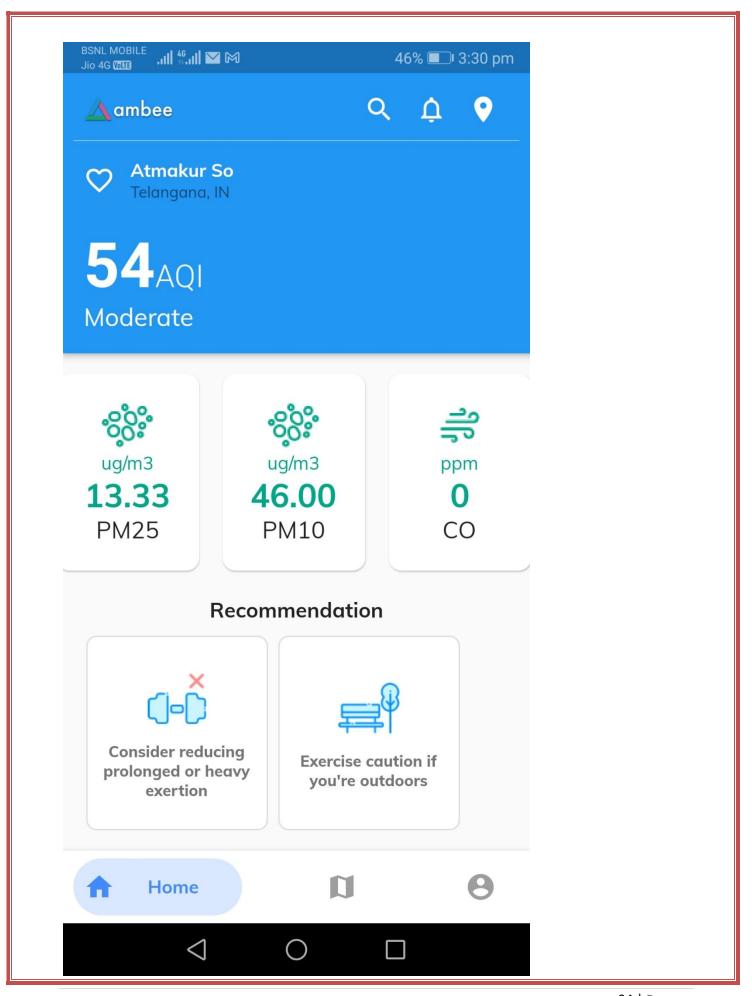
Result (Physical & Chemical)		BIS:10500-2012 St	BIS:10500-2012 Standards		
		Valus	Min	Max	
1) Colour		Narmal	5	25	
2) Odour	1.	Un Objectionable	Un Ob	jectionable	
3) Taste		Agreeable	Agree	able	
4) Turbidity (J.T.U's)		0	5	10	
5) PH		7.12	6.5	8.5	
6)Electrical Conductivity	į	200	500	2000	
(Micromhos/cm at C					
7)Total Disolved Salids		106	500	2000	
(The following results expressed in milligra	ms per litre)				
8)Alkalinity a) Phenolpthalein		Nil	200	600	
(as CaCo3) b) Methyl Orange	ran en	73	200	600	
9) Total Hardness (as CaCo3)		80	300	600	
a) Calcium	:	19	75	200	
b) Megnisium	:	15	30	100	
10) Chloride (as Cl)		34	250	1000	
11)Flouride (as F)		0.24	0.5	1.5	
12)Nitrate (as N)	•	2	45	No Relaxation	
13) Sulphate (as So4)		4.8	200	400	
14) Iron (as Fe)		0.01	0.3	1.0	
15) Resudial Free Chlorine (R.C)		Nil	0.2	1.0	
15) Resudial Free Chlorine (R.C)	•	NII	0.2	1.0	

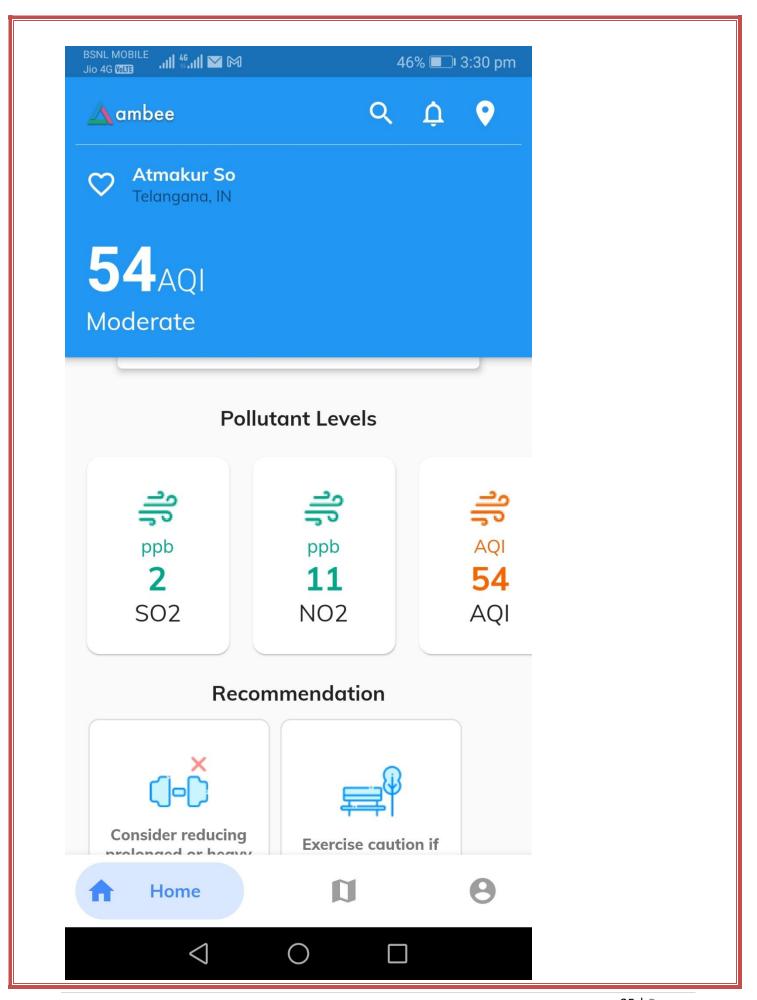
Note: This is only Water Quality Analysis Testing Report not permission for any other Private Bussiness Purpose.

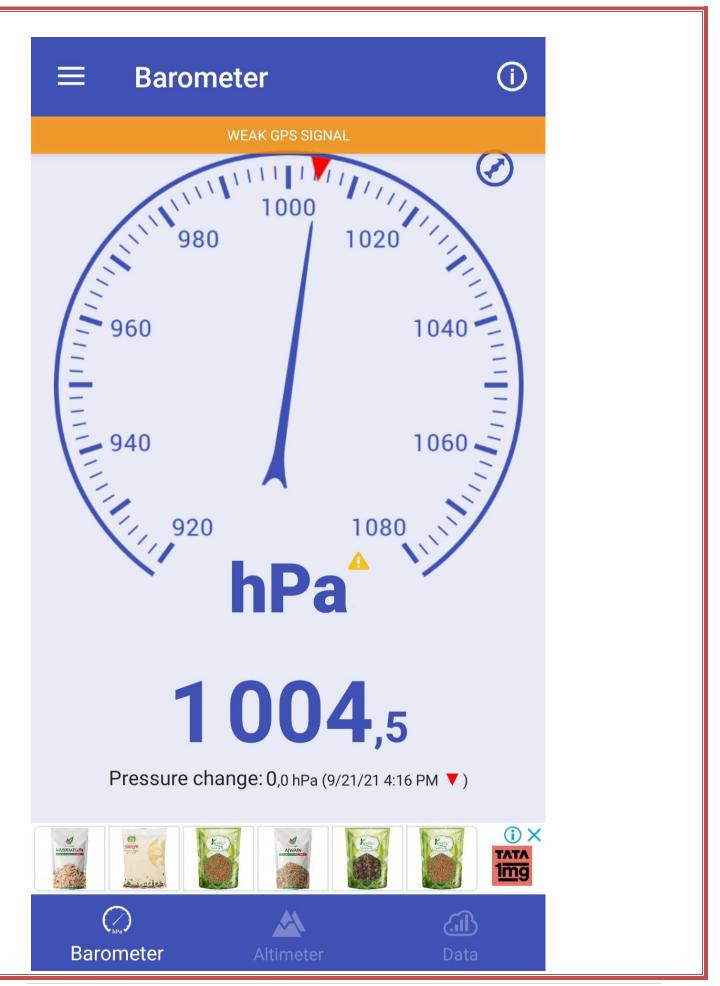
Remarks:- The above Water Source is Chemically Satisfactory for human consumption, all are parametires are low limits/ RO (Revarce Osmosis) limits, So It is also fit for drinking.

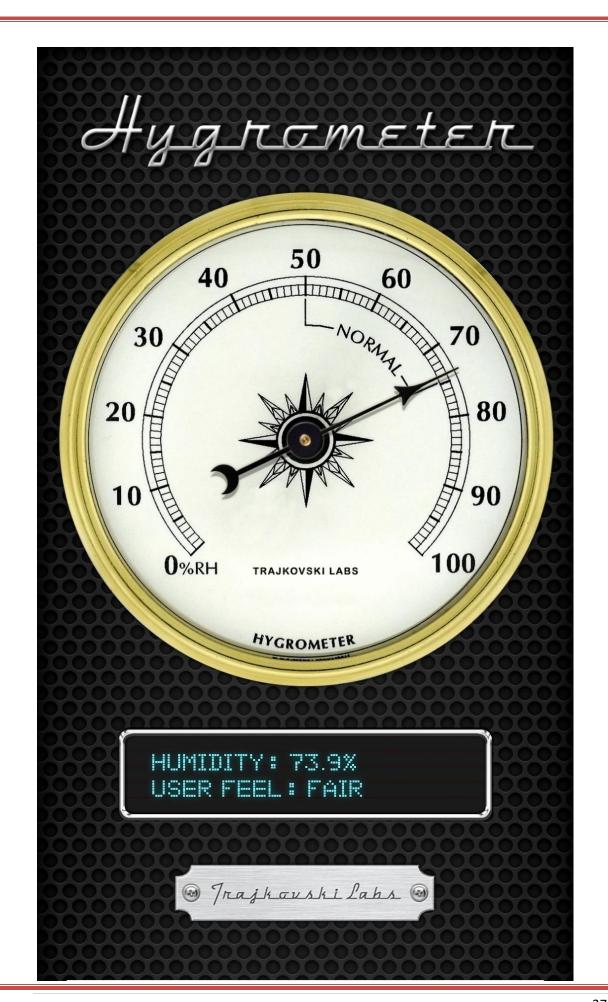
Chemist,
Water Quality Analysis Laboratory,
Mission Bhagirath Intra Division Lab,
Jogulamba Gaiwal.
Water Quality Analysis Laboratory

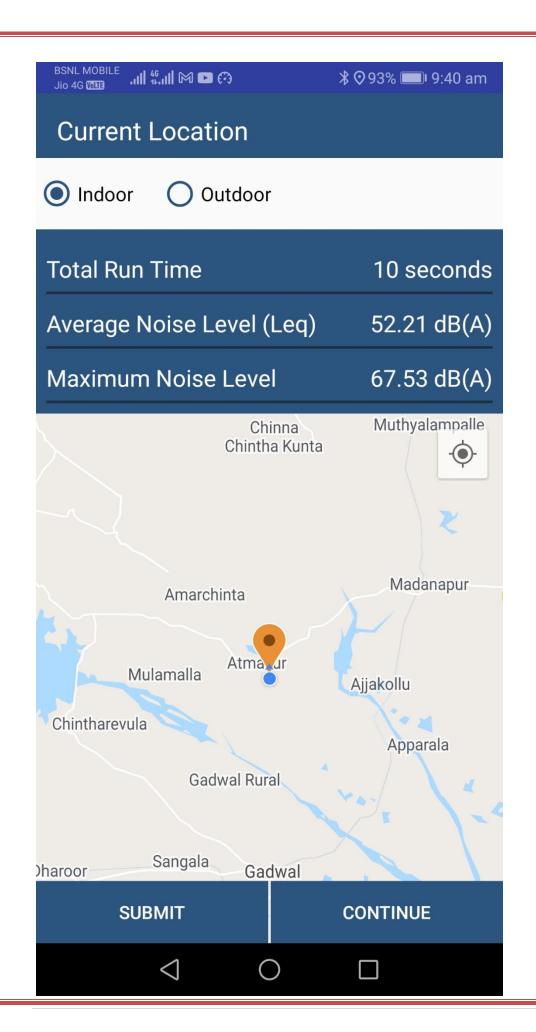


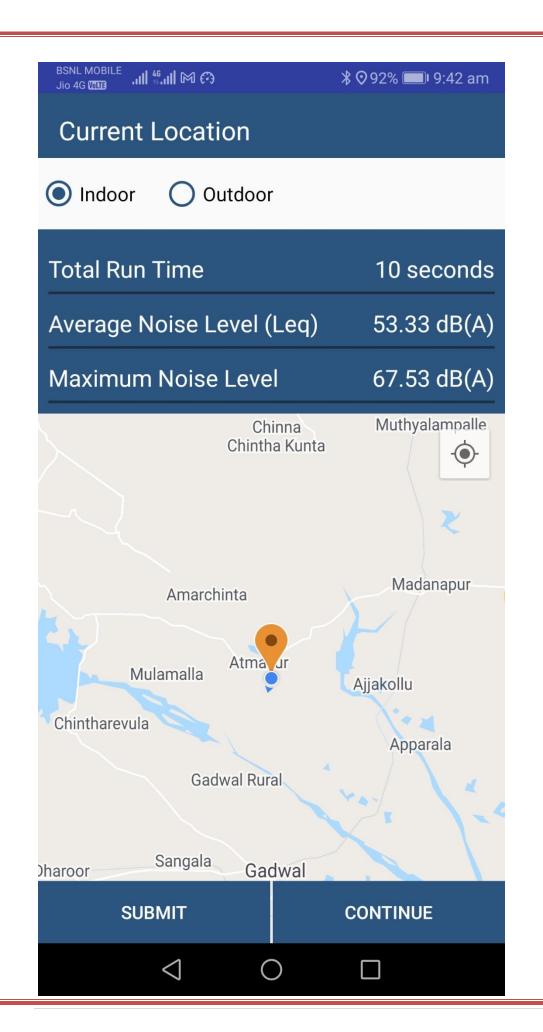


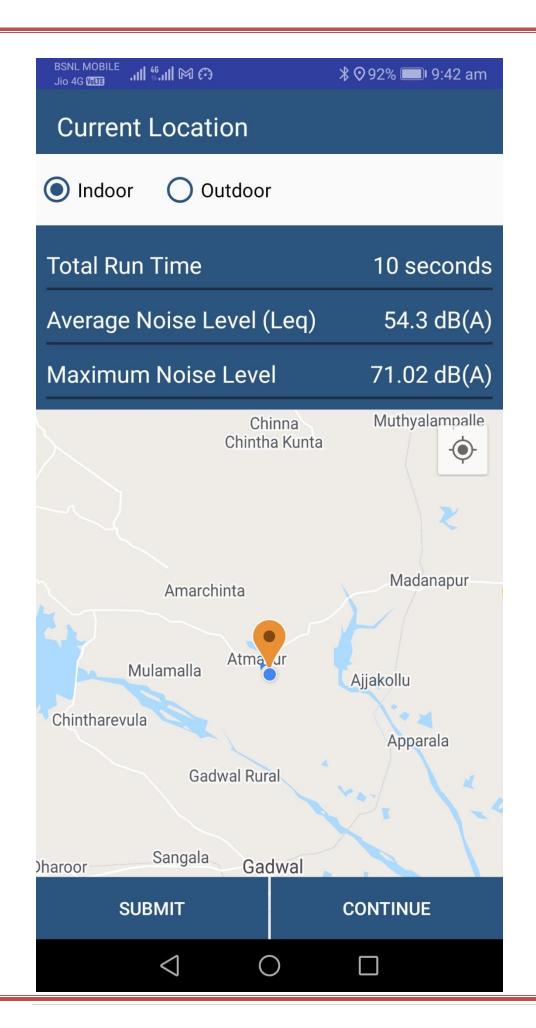


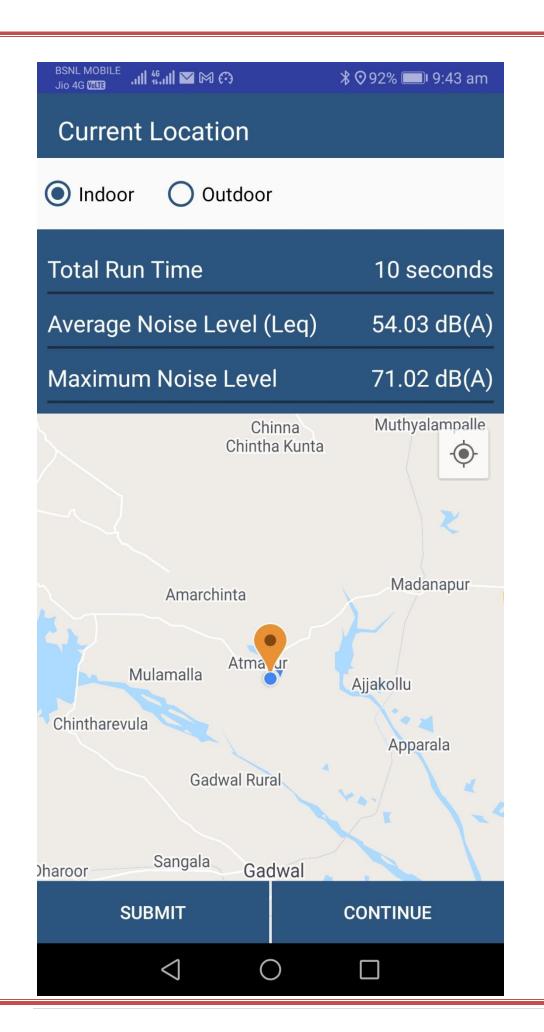


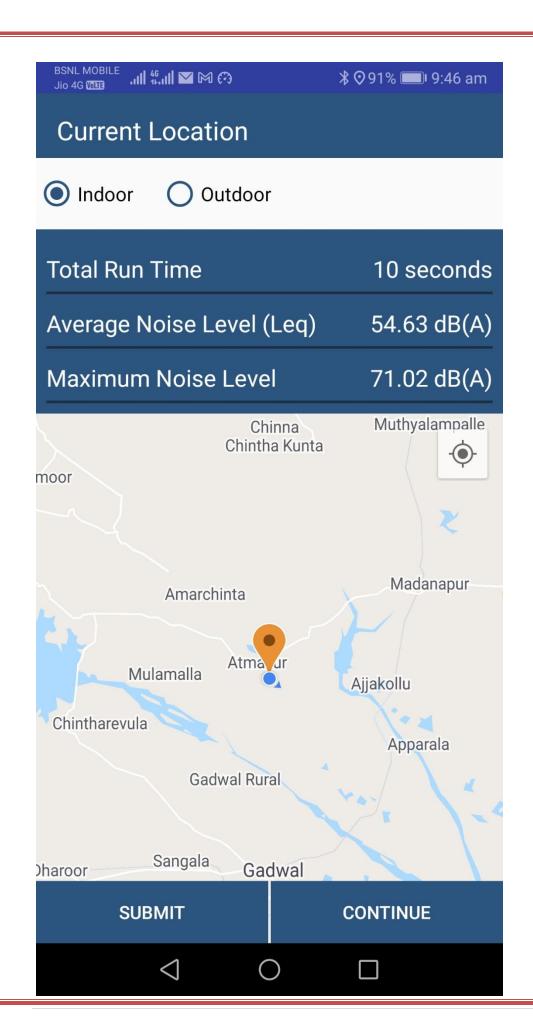


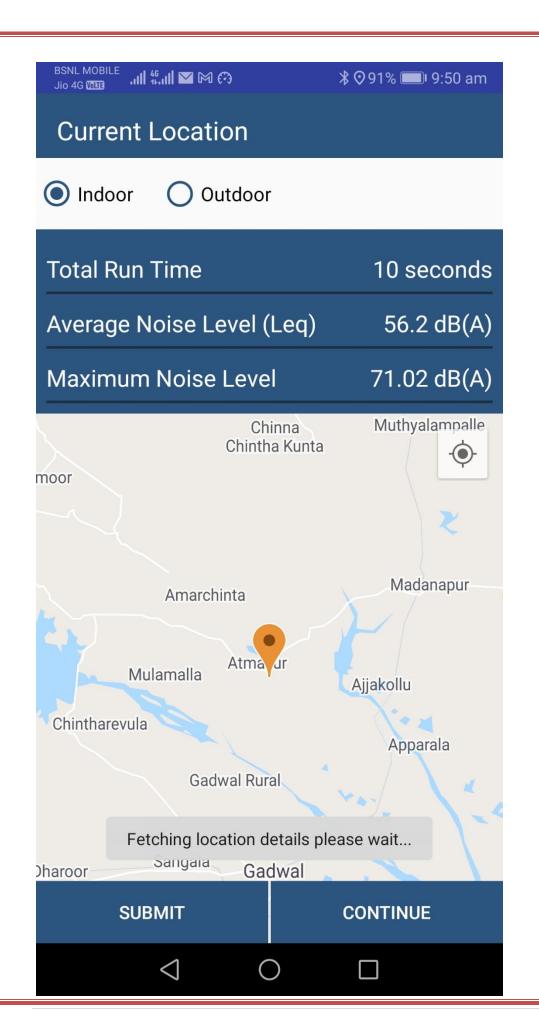


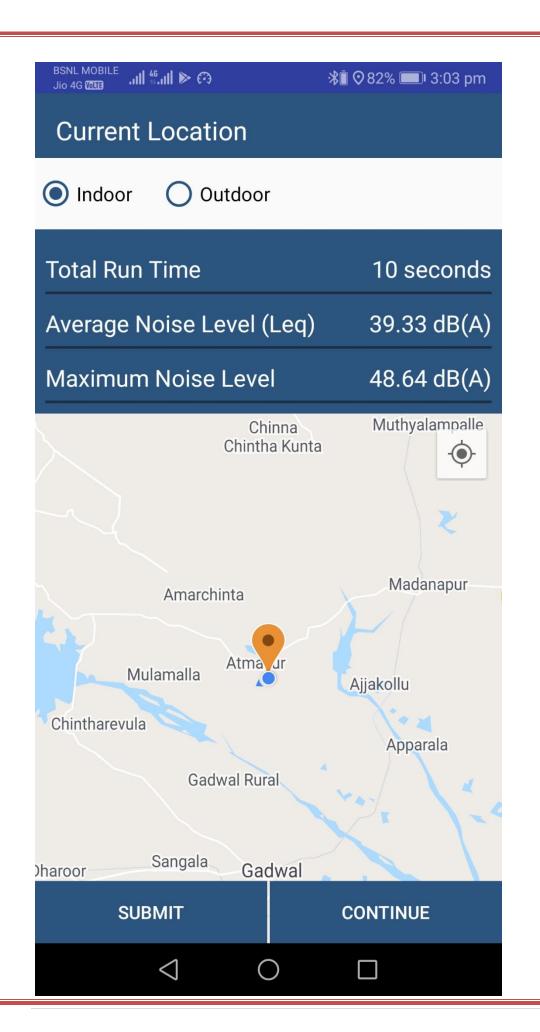


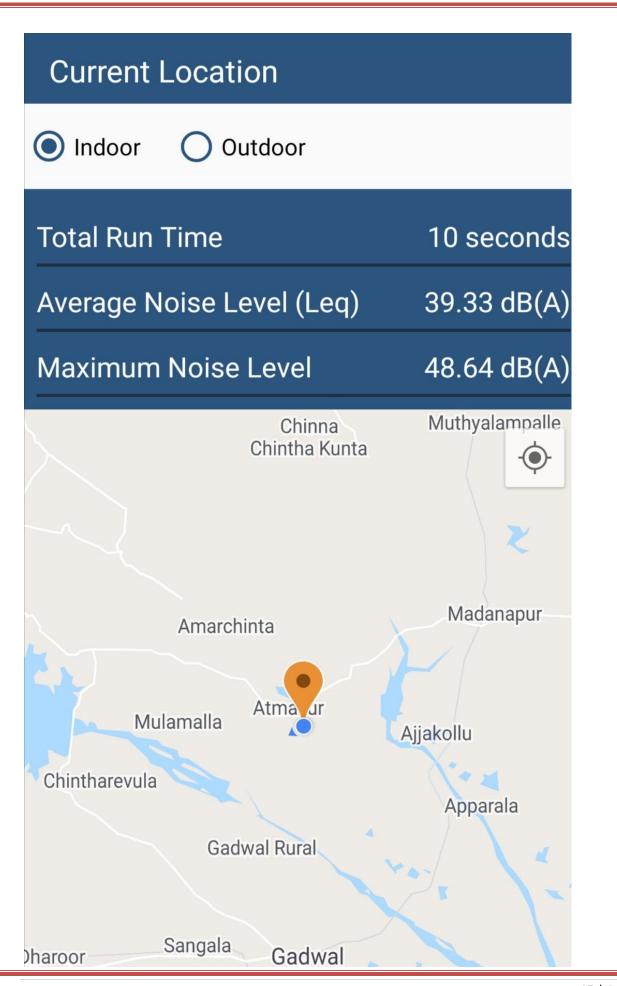


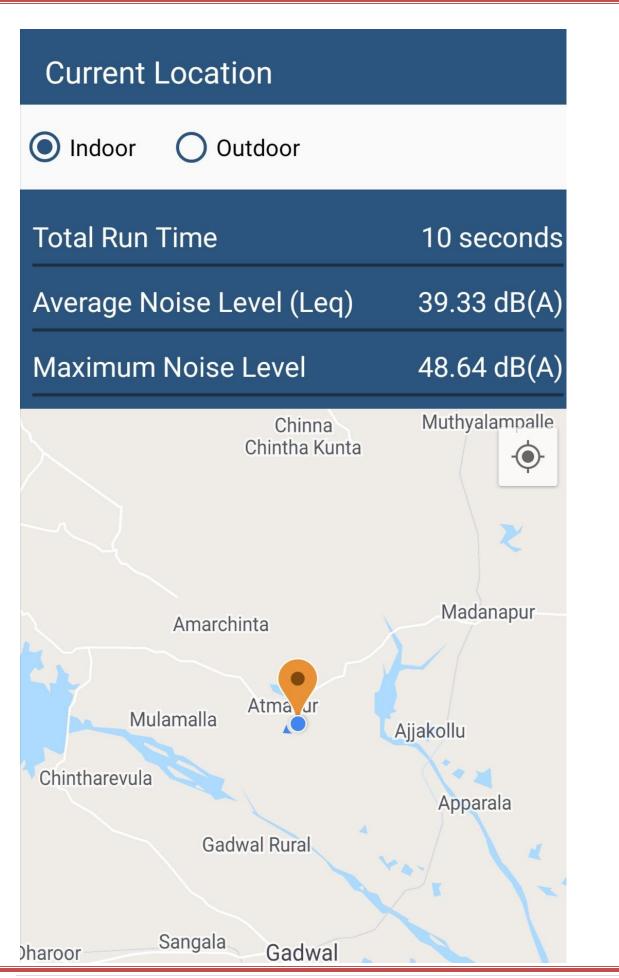




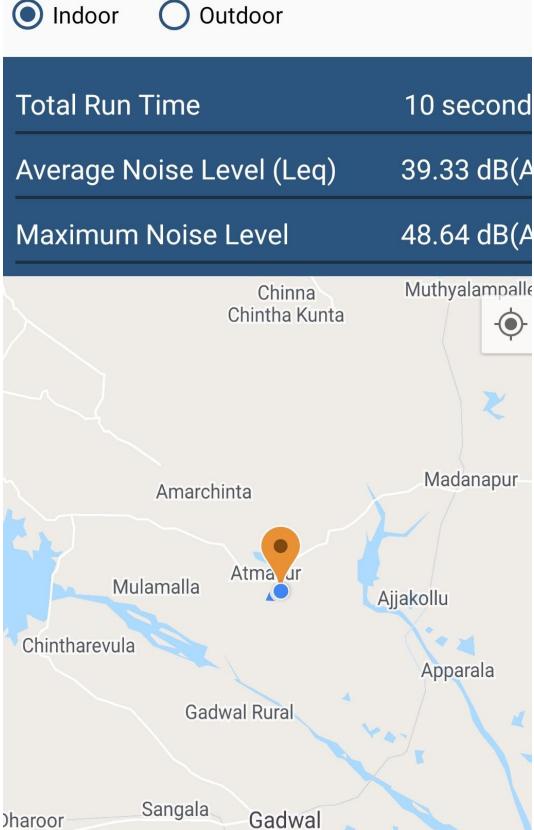


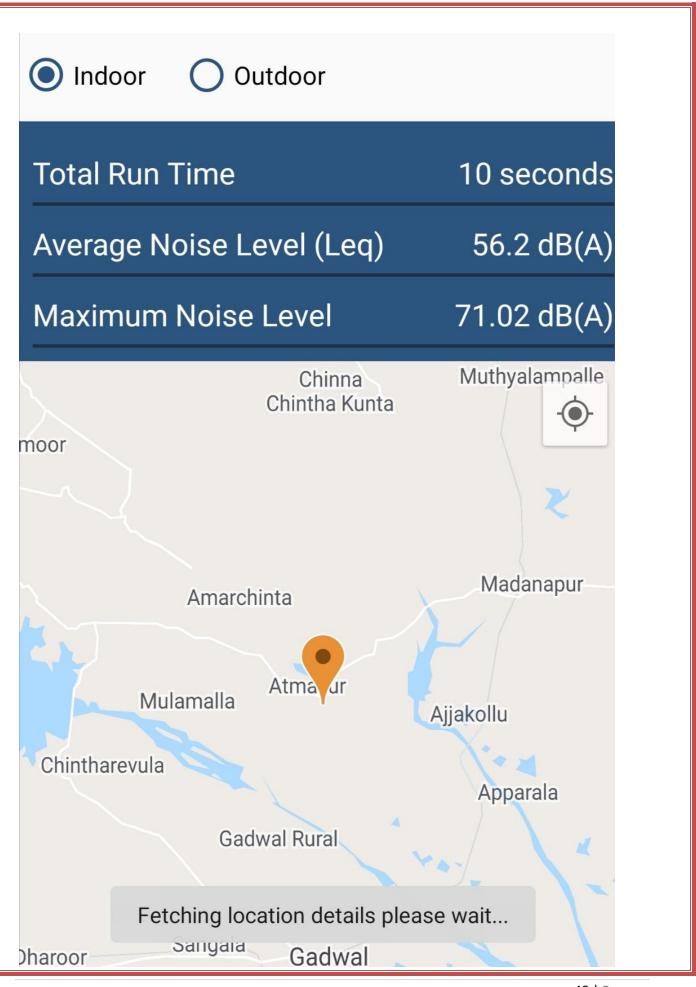






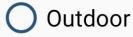
Current Location



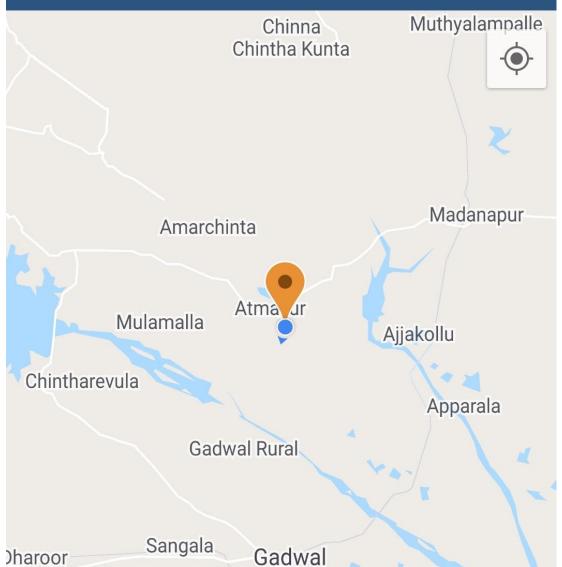








Total Run Time	10 seconds
Average Noise Level (Leq)	53.33 dB(A)
Maximum Noise Level	67.53 dB(A)



GREEN AUDIT REPORT

Dear students, you are requested to fill the following questionnaire which is used for collecting basic information regarding the Carbon Foot Print in our college campus which is required for preparing Green Audit Report.

*	Required	
1.	Email *	
2.	Name *	
Ζ.	name *	
3.	Group *	
	Check all that apply.	
	BSc	
	B.Com	
4.	Year *	
	Check all that apply.	
	II	

5.	Mode of Transportation (How will you come to the college) ? * Check all that apply. Bus Cycle Bike Car By Walk Auto
6.	Distance to the college from your residence ? *
	This content is neither created nor endorsed by Google.
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GREEN AUDIT REPORT

Dear faculty members ,you are requested to fill the following questionnaire which is used for collecting basic information regarding the Carbon Foot Print in our college campus which is required for preparing Green Audit Report.

- 1) NAME OF THE FACULTY: C.G. Lakshmi prasad (FAC)
- 2) DESIGNATION: Asst. prof of English
- 3) Place of working: Atmakur
- 4) Mode of transportation: Cay
 (From your residence to your college)
- 5) Average distance from your residence to the college: 🗝 o ៤ភា
- 6) Amount of fuel used per day: 6 Libers.

(Bank)