



OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: hegtdcano@mp.gov.in

9893076404

**GOVERNMENT TULSI COLLEGE, ANUPPUR
DISTRICT – ANUPPUR (M.P.)**

GREEN AUDIT REPORT

2022-23



Govt. Tulsi College Jaithari Road Anuppur (M.P.) , Pin No.: 484224,

www.gtcanuppur.ac.in

Page 1 of 16



OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: hegtdcano@mp.gov.in

9893076404

GREEN AUDIT REPORT

2022-23

Serial No	Particulars
1	Committee/ Members of Green Audit
2	Introduction To Green Audit at Government Tulsi College Anuppur
3	Pre-Audit Activity
4	Green Audit Process / Outcomes
5	Action Plans and Recommendations
6	Annexures

GREEN AUDIT COMMITTEE-:

- External auditor
 1. Dr. Manoj Kujur, Assistant Professor- Botany, Govt. Nehru PG College, Burhar Dist- Shahdol (MP)
 2. Dr. RS Napit, Assistant Professor- Botany, Govt. Nehru PG College, Burhar Dist- Shahdol (MP)
 3. Dr. Ashish Patel, Assistant Professor- Botany, Govt. College, Pushprajgarh Dist- Anuppur (MP)
- Internal auditor
 1. Dr. P. S. Malaiya, HOD- Botany Department Govt. Tulsi College, Anuppur Dist- Anuppur (MP)
 2. Dr. Shaily Agrawal, Assistant Professor- Botany Department Govt. Tulsi College, Anuppur Dist- Anuppur (MP)
 3. Dr. Rekha Verma, Assistant Professor- Botany Department Govt. Tulsi College, Anuppur Dist- Anuppur (MP)
 4. Sanjeev Kumar Dwivedi, Assistant Professor- Botany Department Govt. Tulsi College, Anuppur Dist- Anuppur (MP)
 5. Pragya Tiwari, Assistant Professor- Botany Department Govt. Tulsi College, Anuppur Dist- Anuppur (MP)
 6. Chhaya Saiyyam, Assistant Professor- Botany Department Govt. Tulsi College, Anuppur Dist- Anuppur (MP)



OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: hegtcdcano@mp.gov.in

9893076404

GREEN AUDIT REPORT

2022-23

Serial No	Particulars
1	Committee/ Members of Green Audit
2	Introduction To Green Audit at Government Tulsi College Anuppur
3	Pre-Audit Activity
4	Green Audit Process / Outcomes
5	Action Plans and Recommendations
6	Annexures

GREEN AUDIT COMMITTEE-:

- External auditor
 1. . Dr. Manoj Kujur, Assistant Professor- Botany, Govt. Nehru PG College, Burhar Dist- Shahdol (MP)
 2. Dr. RS Napit, Assistant Professor- Botany, Govt. Nehru PG College, Burhar Dist- Shahdol (MP)
 3. Dr. Ashish Patel, Assistant Professor- Botany, Govt. College, Pushprajgarh Dist- Anuppur (MP)

- Internal auditor
 1. Dr. P. S. Malaiya, HOD- Botany Department Govt. Tulsi College, Anuppur Dist- Anuppur (MP)
 2. Dr. Shaily Agrawal, Assistant Professor- Botany Department Govt. Tulsi College, Anuppur Dist- Anuppur (MP)
 3. Dr. Rekha Verma, Assistant Professor- Botany Department Govt. Tulsi College, Anuppur Dist- Anuppur (MP)
 4. Sanjeev Kumar Dwivedi, Assistant Professor- Botany Department Govt. Tulsi College, Anuppur Dist- Anuppur (MP)
 5. Pragya Tiwari, Assistant Professor- Botany Department Govt. Tulsi College, Anuppur Dist- Anuppur (MP)
 6. Chhaya Saiyyam, Assistant Professor- Botany Department Govt. Tulsi College, Anuppur Dist- Anuppur (MP)



OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: hegtcdcano@mp.gov.in

9893076404

MEMBERS OF ECO-CLUB IN COLLEGE

- Faculty in-charge-Eco-club College
 1. Dr. P. S. Malaiya, HOD- Botany Department Govt. Tulsi College, Anuppur Dist- Anuppur (MP)
 2. Dr. Shaily Agrawal, Asst. Professor - Botany Department Govt. Tulsi College, Anuppur Dist- Anuppur (MP)
 3. Sanjeev Kumar Dwivedi, Assistant Professor- Botany Department Govt. Tulsi College, Anuppur Dist- Anuppur (MP)

- Student Co-ordinators-Eco-club College
 1. Aanchal Tripathi
 2. Aaysha Siddiqui
 3. Arti Napit
 4. Asma Devi
 5. Bushra Parween
 6. Fatima
 7. Ashish Singh Rathour
 8. Afiya Ansari
 9. Anamika Mishra
 10. Anjali Jaiswal
 11. Annpurna Dubey
 12. Arju Shukla
 13. Chanda Patel
 14. Ganesh Prasad Kewat
 15. Kaushal Singh
 16. Kaushilya Bai
 17. Khushboo Sahu
 18. Kiran Singh
 19. Leelawati Kewat
 20. Mahesh Prasad
 21. Mamta Devi



OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: hegtdcano@mp.gov.in

9893076404

Report

The green audit aims to analyse environmental practices within and outside the college campuses, 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 college environment. It was initiated with the motive of inspecting the effort within the institutions whose exercises can cause threat to the health of inhabitants and the environment. Through the green audit, a direction as how to improve the structure of environment and there are include several factors that have determined the growth of carried out the green audit

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 institution towards an environment.

Objectives:

The Green Audit process focussed on a few points to be closely focussed on, which are as follows:

1. To provide a healthy environment in campus
2. To enhance awareness towards environmental guidelines and responsibilities.
3. To identify cost saving methods through minimizing and effectively managing waste
- 4 To Setup goal, vision, and mission for green practices in campus



OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: hegtcdcano@mp.gov.in

9893076404

Benefits and Scope of Green Audit to Educational Institutions

There are many advantages of green audit to an Educational Institute:

- It would help to protect the environment in and around the campus.
- Recognize the cost saving methods through waste minimization and energy conservation.
- Empower the organization to frame a better environmental performance.
- It portrays good image of institution through its clean and green campus approach
- Environmental education through systematic environmental management
- 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 ethic and value systems in young people

Green Audit Process:

Green Audit process at government tulsi College of Commerce was conducted in three phases:

- a) Pre-audit activity
- b) Audit
- c) Action Plans and Recommendations

Pre-Audit Activity

The Eco-club at Government Tulsi College of Commerce strives to bring in quality in its initiative to connect to mother nature. In its persuasion towards its goal, the club's committee members conducted several Activity related Environments, plantation, water conservation, cleanliness. And aware to all student of college. And celebrate all environment days and activity,



OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: hegtcdcano@mp.gov.in

9893076404

Green Audit Process / Outcomes

In line with the guidance and support provided, the Green Audit Process was conducted by the external committee member and dedicated team of Botany department.

The steps and outcomes of the Audit are mentioned below:

- Plantation
- Electricity Consumption
- Water Consumption
- Solid waste Management

Plantation

The tree plantation program is organized by the college from time to time through campaigns inside the college. Along with this, students and their parents are encouraged to plant trees in their surrounding areas and public messages are issued through various social platforms, print media, social media, newspapers, e-blocks, etc.

DETAILS OF TREES AND PLANTS IN CAMPUS

Sl. No.	Sl. No. Particulars Units	Sl. No. Particulars Units
1.	Total plants	140
2.	Plants medicinal	55
3	Plants non- medicinal	85
4	Botanical Garden	01
5	No of flowers pot Gamla	165

Plants medicinal

S.no	Local Name	Botanical Name	Family Name
1	Ashok	<i>Polyalthia Longi Folia</i>	Annonaceae
2	Mango	<i>Mangifera. Indica</i>	Anocardiaceae
3	Mango	<i>Mangifera. Indica</i>	Anocardiaceae
4	Neem	<i>Azadirachta indica.</i>	Meliaceae
5	Amla	<i>Phyllanthus emblica</i>	Phyllanthaceac
6	Amrood	<i>Pasidium guajava</i>	myrtaceae
7	Amla	<i>Phyllanthus emblica</i>	Phyllanthaceac
8	Amla	<i>Phyllanthus emblica</i>	Phyllanthaceac
9	Amla	<i>Phyllanthus emblica</i>	Phyllanthaceac
10	Amrood	<i>Pasidium guajava</i>	myrtaceae
11	Amrood	<i>Pasidium guajava</i>	myrtaceae



OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: hegtcdcano@mp.gov.in

9893076404

Green Audit Process / Outcomes

In line with the guidance and support provided, the Green Audit Process was conducted by the external committee member and dedicated team of Botany department.

The steps and outcomes of the Audit are mentioned below:

- Plantation
- Electricity Consumption
- Water Consumption
- Solid waste Management

Plantation

The tree plantation program is organized by the college from time to time through campaigns inside the college. Along with this, students and their parents are encouraged to plant trees in their surrounding areas and public messages are issued through various social platforms, print media, social media, newspapers, e-blocks, etc.

DETAILS OF TREES AND PLANTS IN CAMPUS

Sl. No.	Sl. No. Particulars Units	Sl. No. Particulars Units
1.	Total plants	140
2.	Plants medicinal	55
3	Plants non- medicinal	85
4	Botanical Garden	01
5	No of flowers pot Gamla	165

Plants medicinal

S.no	Local Name	Botanical Name	Family Name
1	Ashok	<i>Polyalthia Longi Folia</i>	Annonaceae
2	Mango	<i>Mangifera. Indica</i>	Anocardiaceae
3	Mango	<i>Mangifera. Indica</i>	Anocardiaceae
4	Neem	<i>Azadirachta indica.</i>	Meliaceae
5	Amla	<i>Phyllanthus emblica</i>	Phyllanthaceac
6	Amrood	<i>Pasidium guajava</i>	myrtaceae
7	Amla	<i>Phyllanthus emblica</i>	Phyllanthaceac
8	Amla	<i>Phyllanthus emblica</i>	Phyllanthaceac
9	Amla	<i>Phyllanthus emblica</i>	Phyllanthaceac
10	Amrood	<i>Pasidium guajava</i>	myrtaceae
11	Amrood	<i>Pasidium guajava</i>	myrtaceae



OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: hegtcano@mp.gov.in

9893076404

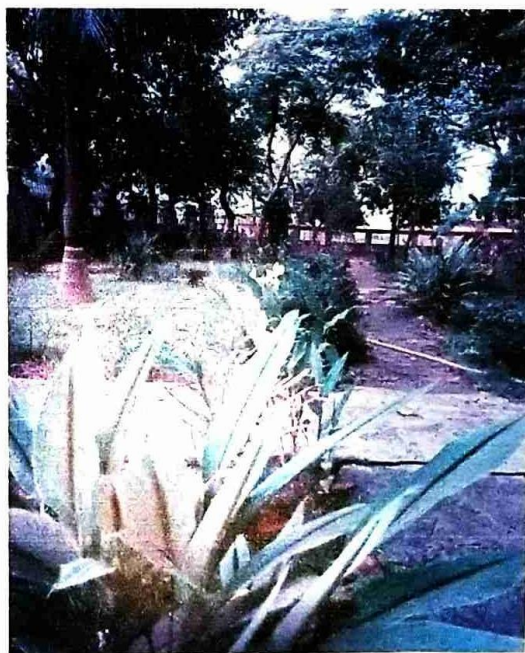
VIEWS_OF_GREENERY.....



Front View of the College



Medicinal Plants – Gulmohar



Medicinal Plants – Gulbakaawali



OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: hegtdcano@mp.gov.in

9893076404



Front View of the College



Gamalas inside the campus



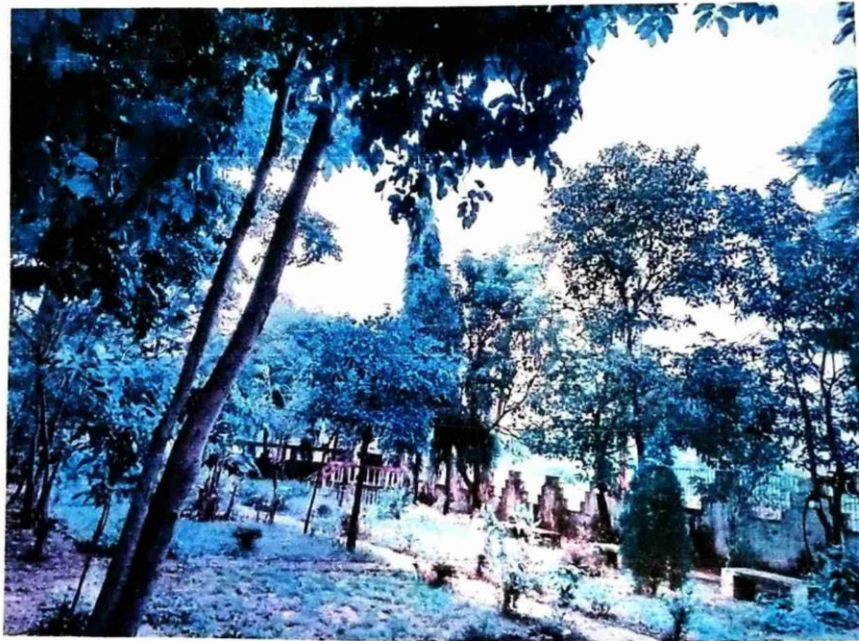
OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: hegtdcano@mp.gov.in

9893076404



Botanical Garden



OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: hegtcno@mp.gov.in

9893076404

Dustbins.....



Electricity Consumption

Continuous and effective efforts and results of the college in the direction of energy and environment conservation through energy-saving efforts :-

- The college building is constructed in such a way that the college courtyard, the internal corridors, and the windows of the teaching rooms are open. Due to the open courtyard, open corridors, and open windows, natural sunlight reaches the college even in dense viability in the month of fog. That is why we do not need fossil fuel-based generators for lighting the college even during power cuts.
- The college has an electricity connection, a major portion of which comes from thermal power. Keeping in mind the bad effects of thermal power, the college has minimized the consumption of electricity.
- An energy conservation policy has been implemented in the college.
- AC and generators are not used in the college.
- The college uses energy-saving equipment including LED Bulbs, sensor-based power devices (sanitizer machine), and Copper wiring.
- In the field of clean and renewable energy, the college is trying to install subsidized solar panels through MoU.
- Energy Audit Report is enclosed here.



OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: hegtcno@mp.gov.in

9893076404

WASTE MANAGEMENT

In our college campus waste management system work as following process per day : first the sweeper of college clean the campus then they collect all type wastage and then they segregate /segment and then they put Sukha kachra in Nadep and Geela kachra in another part of Nadep. After few days the wastage which was not decompose the Nagarpalika kachra Van collect all wastage from NADAP in College and another part of wastage which was decompose our sweeper collect all decompose waste and they use in our college Garden as JAIVIK KHAD .

Segregation of waste: Waste segregation starts at the classroom itself. Each classroom is equipped with two dust bins - one for the biodegradable and the other for non - biodegradable substances





OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: hegtcno@mp.gov.in

9893076404

WATER MANAGEMENT

Water conservation is a key activity as water availability effects on the development of the campus as well as on all area of development such as farming, industries, etc. Keeping this view water conservation activity is carried out.

SOURCES OF WATER

- Bore water

Rainwater Harvesting : The rainwater harvesting strengthens the water supply to the campus lakes as well as enhance water level of wells in the campus through ground water recharging process

SUMMARY

Green Audit is one of the important tools to check the balance of natural resources and its judicial use. Green auditing is the process of identifying and determining whether institutional practices are eco-friendly and sustainable. It is a process of regular identification, quantification, documenting, reporting and monitoring of environmentally important components in a specified area. The main objective to carry out green audit is to check the green practices followed by GTC and to conduct a well-defined audit report to understand whether the GTC is on the track of sustainable development.

CONCLUSION

From the green audit following are the conclusions, which can be taken for improvement in the campus.

- 1) All departments generate paper waste. Especially, academic building is using more one paper for printing and writing is good practices.
- 2) Food waste generated in campus is mostly from is collected from dining areas. The food waste is diverted to nearby farm.




OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: hegtdcano@mp.gov.in

 9893076404

- 3) E- waste are segregated, handled and disposed properly in an eco-friendly manner.
- 4) Reducing the use of one-time use plastic bottles, cups, folders, pens, bouquets, decorative items will be useful to solve the problem of plastic pollution to some extent.
- 5) Wear Mask Signages are provided in the facility.
- 6) Rainwater is collected from rooftop to recharge the ground water level table.

Other Healthy Practices

- Recycling answer Scripts: Books made out of these recycled materials are distributed to children studying in college.
- Printing on used one sided paper: In order to minimize paper waste, reduce the carbon footprint and the cutting of trees to produce paper, the college used one sided paper for all their printing needs.
- Rain water Harvesting: The college saves a substantial amount of water through Rain Water Harvesting and the water saved is used to water the flora in the campus.
- Outreach Programs: In order to create awareness on cleanliness, pollution minimization and recycling - the college has tied up with many private and semi-private organizations, NCC and NSS to conduct awareness drives and outreach programs. These activities in turn sensitize the students to problems affecting the society and planet as a whole. The purpose of the drive was to spread awareness about the harmful effects of plastic.
- Responsible management of hazardous waste: Any hazardous waste materials that are produced in the campus are disposed of, in a safe and responsible manner. The cleaning staffs are kept well-informed about the disposal process. Steps taken in this regard helps the institution respond to the environmental needs effectively.



OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: hegtcmano@mp.gov.in

9893076404

RECOMMENDATIONS

Following are some of the key recommendations for improving campus environment:

- 1) An environmental policy document has to be prepared with all the recommendations and current practice carried by audit team.
- 2) A frequent visit should be conducted to ensure that the generated waste is measured, monitored and recorded regularly and information should be made available to administration.
- 3) The solid waste should be reused or recycled at maximum possible places.

ACTION PLANS

1. Encourage student participation: It was found that student body, which is a solid in-house source, should be tapped for collecting the data and efficiently evaluating them, which will in turn provide a platform for them to come closer to the environment.

2. Analysis by experts: It was also found that having a professional touch for this activity would mean a lot in terms of providing a strong routing, evaluation and analysis of the data collected, owing to tested methodologies being put to rightful use, making the process an effective one.

3. External experts to be contacted for continuous monitoring: In light, of the several meeting and multiple informal collaborations with various organizations, one of the outcomes was to have a formal collaboration with an external agency which is actively involved in Green Audit Processes. This collaboration would be effective in acquiring better ideas, directions, and support for conducting, evaluating and continuously monitoring the process.

4. Enhance use of alternative energy and energy saving devices in the Institution: Recommendations have been forwarded to management for approval to enhance the use of alternative energy and energy saving devices in the Institution.



OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: hegtcmano@mp.gov.in

9893076404

PPS Energy Solutions

PPS Energy Solutions Pvt. Ltd.
Regd. Off: B-403, Bharti Vihar, S.No-78, Bharti Vidyapith Campus, Katraj, Pune – 411046 Ph:+91-20-2523 2858, 6400 0643

Date: 11th January 2023

Certificate of Energy Audit

This is to certify that M/S. PPS Energy Solutions Pvt. Ltd., Pune has conducted Energy Audit at Govt. Tulsi College Anuppur in January 2023 for knowing existing electrical energy consumption, Identification of energy conservation and saving opportunities for environmental protection. This Energy Audit is also carried out to assess impact of Installed renewable energy applications and submitted the Report.

For PPS Energy Solutions Pvt. Ltd, Pune

Ravi



Dr. Ravi. G. Deshmukh
Director, PPS Energy Solutions Pvt. Ltd, Pune
Accredited Energy Auditor (AEA – 0243)
Bureau of Energy Efficiency Govt. of India

[Signature]
PRINCIPAL
Govt. Tulsi College Anuppur
D'stt. Anuppur (M.P.)



OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: hegtldcano@mp.gov.in


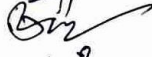

9893076404

Conclusion Thus, suitable actions were taken for the suggestions given, to promote healthy environment and sustainability.

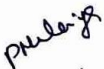




ANNEXURE

1. Permission Letter
2. List of Audit team (Internal and External)
3. Appointment Letter
4. Energy audit report

• **External auditor**

1. Dr. Manoj Kujur 
2. Dr. R. S. Napit 
3. Dr. Ashish Patel 

• **Internal auditor**

1. Dr. P.S. Malaiya 
2. Dr. Shaily Agrawal 
3. Dr. Rekha Verma 
4. Sanjeev Kumar Dwivedi 
5. Pragya Tiwari 
6. Chhaya Saiyyam



Dr. J.K. Sant
Principal

Govt. Tulsi College Anuppur (M.P.)



OFFICE, PRINCIPAL GOVERNMENT TULSI COLLEGE, ANUPPUR

Affiliated to Awadhesh Pratap Singh University Rewa (MP)

Registered Under Section 2 (F) & 12 (B) of UGC Act

E-mail: hegtdcano@mp.gov.in

9893076404



Office of the Principal, Government Tulsi College Anuppur
(M.P.)



e-mail: hegtdcano@mp.gov.in

9893076404

Ref.No-.....

Anuppur, Date.....

Certificate
(2022-23)

This is to certify that **green audit** has been conducted by the following members along with these three external members, the report which is attached herewith.

Principal

- Dr. J.K. Sant

IQAC Co - ordinator

- Dr. Amit Bhushan Dwivedi
Dr. Devendra Singh Bagri

Head, Department of Botany

- Dr. P.S. Malaiya

External Expert

- 1. Dr. Manoj Kujur
2. Dr. R.S Napit
3. Dr. Ashish Patel

Green Audit Internal Committee

- 1. Dr. Shaily Agarwal
2. Miss. Pragya Tiwari
3. Mr. Sanjeev Kumar Dwivedi
4. Dr. Rekha Verma
5. Miss. Chhaya Shaiyam