ENVIRONMENT AUDIT REPORT

Estd. 1969

NIRMALA COLLEGE, RANCHI

Affiliated to Ranchi University

A College with Potential for Excellence (CPE)

Accredited by NAAC with Grade 'A'

Abhinav Gram Foundation: Eco-Services

An ISO : 9001 / 17020 Certified Institution

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1.0 ACKNOWLEDGEMENT

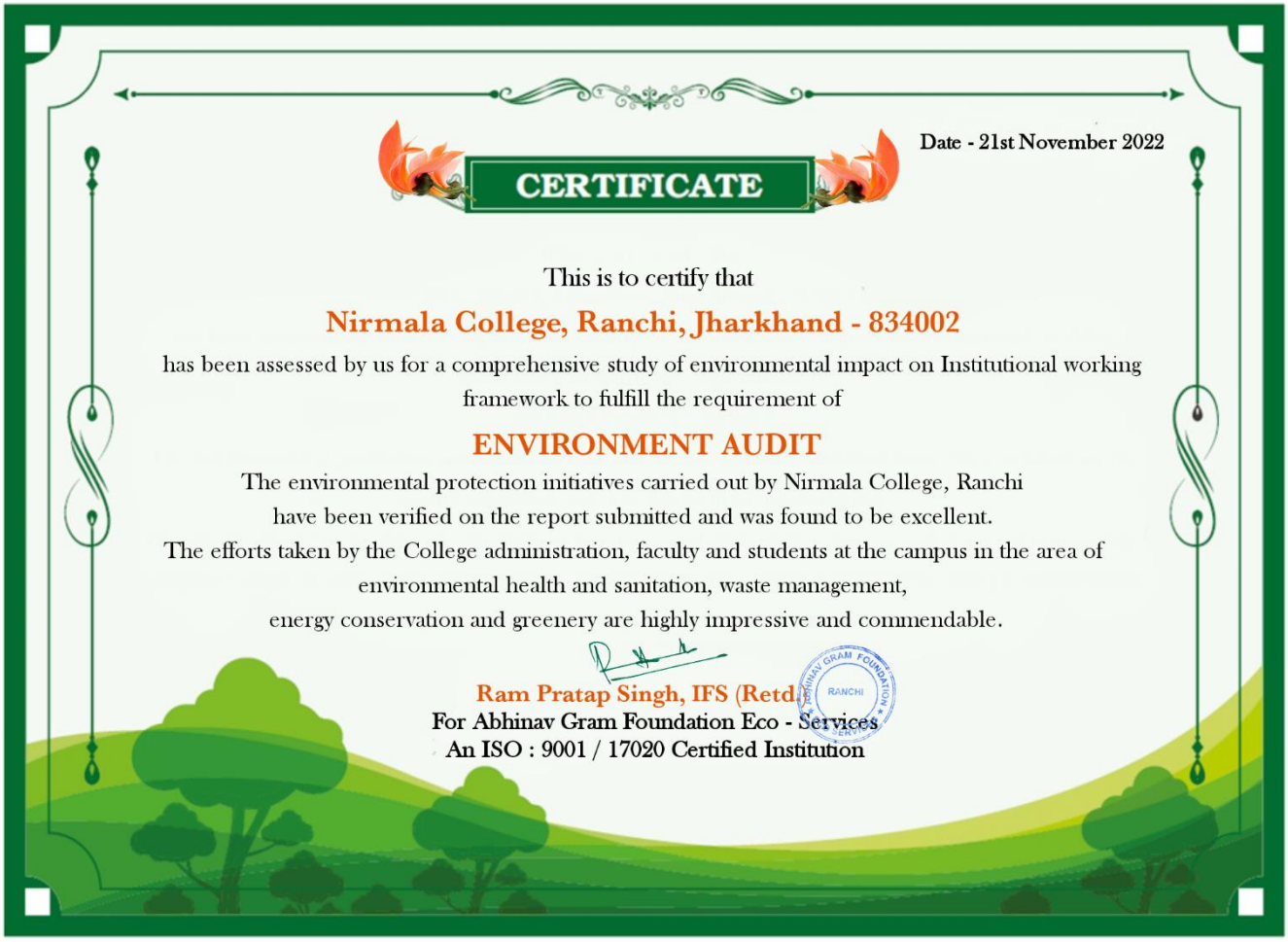
Abhinav Gram Foundation – Eco-Services Green Audit Team thanks the management of **Nirmala College, Ranchi** for assigning this important Green Audit (Environmental Audit) work. We appreciate the cooperation of our team in the completion of the study.

Our special thanks are due to:

- Principal & Chairperson IQAC – Dr. Sr. Jyoti
- Vice Principal & member IQAC – Dr. Sr. Shobha
- Assistant Professor (Zoology) & Coordinator IQAC – Dr. Emma R. Seraphim
- Assistant Professor (H.O.D. of Geography) & Coordinator NAAC– Dr. Debjani Roy
- Assistant Professor (H.O.D. of Chemistry) & Member IQAC – Dr. Sreerupa Roy
- Assistant Professor (Botany) & member IQAC – Dr. Indu Kumari
- Teaching and Supporting Staff of Nirmala College, Ranchi

For giving us the necessary inputs to carry out this very vital exercise of Green Audit (Environment Audit). We are also thankful to other staff members who were actively involved while collecting the data and conducting field measurements.

2.0 CERTIFICATE



Certificate issued to Nirmala College, Ranchi after Audit

3.0 DISCLAIMER

Abhinav Gram Foundation – Eco-Services Green Audit Team has prepared this report for **Nirmala College, Ranchi** based on input data submitted by the representatives of the College complemented with the best judgment capacity of the expert team.

It is further informed that the conclusions arrive following best estimates and no representation, warranty or undertaking, express or implied is made and no responsibility is accepted by Audit Team in this report or for any direct or consequential loss arising from any use of the information, statements or forecasts in the report.

If you wish to distribute copies of this report external to your organization, then all pages must be included.

Abhinav Gram Foundation – Eco-Services, its staff, and agents shall keep confidential all information relating to your organization and shall not disclose any such information to any third party, except that in the public domain or required by law or relevant accreditation bodies. Abhinav Gram Foundation – Eco-Services staff, agents, and accreditation bodies have signed individual confidentiality undertakings and will only receive confidential information on a 'need to know basis.

Report by: (Ram Pratap Singh), IFS Retd.
Lead Auditor
Abhinav Gram Foundation - Eco Services
An ISO : 9001 / 17020 Certified Institution

4.0 CONTEXT

We are committed as a component of Corporate Social Responsibility of the Higher Edifying Institutions to ascertain that they contribute towards the minimization of ecumenical warming through Carbon Footprint abbreviation measures.

Nirmala College, Ranchi management decided to conduct an external Green Evaluation by a competent Green Auditor along with a Green Audit Assessment Team headed by Dr. Sr. Jyoti, Chairperson & Principal, **Nirmala College, Ranchi, Jharkhand.**

Green Audit or Environment Audit focuses on the Green Campus, **Waste Management**, **Water Management**, **Air Pollution**, **Sound Pollution**, **Energy Management & Carbon Footprint,** etc. being implemented by the College Management. The concept, structure, objectives, methodology, tools of analysis, and objectives of the audit are mentioned below.

5.0 CONCEPT

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

The ICC defines Environmental Auditing as:

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

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

6.0 INTRODUCTION

A Nation's growth starts from its educational institutions, where ecology is taught as a prime factor of development associated with the environment. Educational institutions nowadays are becoming more sensitive to environmental factors and more concepts are being introduced to make them eco-friendly. To preserve the environment within the campus, various viewpoints are applied by the several educational Colleges to solve their environmental problems such as promotion of energy savings, recycling waste, water reduction, water harvesting, etc. The activities pursued by Colleges can also create a variety of adverse environmental impacts.

Environmental auditing is a process whereby an organization's environmental performance is tested against its environmental policies and objectives. The green audit is defined as an official examination of the effects a College has on the environment. As a part of such practice, an internal environmental audit (Green Audit) is conducted to evaluate the actual scenario at the campus.

A green audit can be a useful tool for Colleges to determine how and where they are using the most energy or water or resources; the College can then consider how to implement changes 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 a waste minimization plan. Green auditing and the implementation of mitigation measures is a win-win situation for all the Colleges, the learners, and the planet. It can also create health consciousness and promote environmental awareness, values, and ethics. It provides staff and students better understanding of the Green impact on campus.

Green auditing promotes financial savings through the reduction of resource use. It gives an opportunity for the development of ownership and personal and social responsibility for the students and teachers. Thus it is imperative that the College evaluate its own contributions toward a sustainable future. As environmental sustainability is becoming an increasingly important issue for the nation, the role of higher educational institutions in relation to environmental sustainability is more prevalent.

A clean and healthy environment aids effective learning and provides a conducive learning environment. There are various efforts around the world to address environmental education issues.

Environmental Management Systems (EMS) are very popular in the industrial sector, but the general belief is that EMS is something pertaining to industries only. Other parts of the world have started adopting compatible environmental management systems either voluntarily or by promoting standards by external certification. International environmental standards do not suit the existing Indian educational system. Hence, Abhinav Gram Foundation – Eco-Services has developed a compatible system by developing locally-applicable techniques.

A very simple indigenized system has been devised to monitor the environmental performance of educational institutions. It comes with a series of questions to be answered on a regular basis. Environmental conditions may be monitored from angles that are relevant to Indian requirements, without stress on legal issues or compliance.

This innovative scheme is user-friendly and totally voluntary. The environmental monitoring system helps the institution set environmental examples for the community and educate young learners. It can be adapted to urban and / or rural situations.

7.0 OVERVIEW OF THE COLLEGE

Nirmala College, Ranchi, affiliated to Ranchi University, is a Christian Minority Institution founded by the Society of Sisters of Charity of Jesus and Mary(SCJM). Established in 1969, the Post Graduate College offers opportunities for higher learning to empower young women of all communities. The college is located in Ranchi, the capital of the state of Jharkhand. Awarded the status of College with Potential for Excellence (CPE) by UGC and accredited by NAAC with Grade 'A', the institution is constantly ascending towards the actualization of its goal to be a Centre of Excellence.

(**Fig 1- Nirmala College, Front Building**)

The Congregation of the Sisters of Charity of Jesus and Mary was founded by Rev. Fr. Peter Joseph Triest in Belgium in 1803. Established in India in Dalhousie in 1901, the SCJM is missioned to reveal that God is love. The educational apostolate of SCJM, therefore, aims at creating a human society free from prejudices, superstitions, and discriminations based on sex, religion, caste, and economic status leading to the concern of one another, especially the underprivileged. With this view, the Archbishop, Pius Kerketta invited SCJM Sisters for establishing a Women's College in Ranchi as there was a steady increase in the number of local girls seeking a college education. With the support of Sr. Mechtilda, consent was given for the opening of a women's college by SCJM. The foundation stone was blessed by the Archbishop and the Vice-Chancellor, Mr. Markham on 5th January 1968, Archbishop Pius Kerketta stated that the country needed pure and well-preserved young women, the future builders of our destinies and that the college was a promising step in this direction. The Archbishop proposed "Nirmala", the Immaculate for the name of Institution. Thus the name of the institution became "NIRMALA COLLEGE". Initially, a quadrangle was set up for the college which would accommodate blocks for faculties, library, and lecture halls, along with the Hostel for 450 boarders. Today the college has upgraded its infrastructure.

VISION & MISSION

Nirmala College Ranchi is established with the primary purpose of providing young women of this area the opportunity of higher learning offered in a spirit and atmosphere of simplicity, sincerity, concern, and faith. Nirmala College strives to attain the following objectives:

- To offer students a milieu conducive to their integral development in which they will find respect for desirable personal and social values of life,
- To train students to become capable and responsible citizens,
- To foster and promote the ideas of unity in diversity, harmony, peace, and justice among students who hail from all sections of Indian Society,
- To strive for academic excellence and ensure the fullest development of the individual personality,
- To satisfy all applicable requirements of stakeholders,
- To continually improve the overall management system in the institute.
- To ensure management of the local ecosystem in accordance with the Institutional Policy on Environmental Consciousness and Sustainability.

Nirmala College is situated in the urban locality in the city of Ranchi (23020'06" N Latitude and 85018'52" E Longitude). The College has a pollution-free campus area spread over 6.10 acres of land in the heart of the city of Ranchi. The built-up area constitutes 30% of the institution's land area, while the remaining 70% is the green area.

(Fig 2 - Top view of Nirmala College)

Present status

Nirmala College, Ranchi is a PG college accredited by NAAC with Grade 'A'. It is a College with the Potential for Excellence awarded by UGC. The College is a recognised Social Entrepreneurship, Swachhta Rural Engagement Cell (SESREC) Institution, certified by

Mahatma Gandhi National Council of Rural Education (MGNCRE), Ministry of Education, Govt. of India. The College had received the Best Missionary Institution Award, Infrastructure grant under Component – 7 of MHRD-Rashtriya Uchhatar Shiksha Abhiyan and became the first college in Jharkhand to be awarded with a Project by the Department of Biotechnology, Ministry of Science & Technology, Govt. of India under the Star College Scheme for strengthening of Undergraduate Science. The institution has Research Projects under UGC-STRIDE, and Indian Association for Women's Studies in collaboration with Brunel University, UK to promote research and innovation. The College also has active NSS and NCC units.

The College has a qualified and dedicated faculty, good infrastructure, well equipped laboratories, sports facilities, hostel, canteen, medical assistance, barrier-free environment for Divyangjan, a Wi-Fi enabled campus, ICT-enabled classrooms and laboratories, uninterrupted power supply, and an enriched automated library with free access to e-journals and e-books under the UGC-INFLIBNET N-LIST programme. The College regularly conducts Skill development and career counselling programmes for students, seminars, workshops, conferences, and faculty enrichment programmes, and orientation programmes for non-teaching staff. The college has signed several MoUs with National and International organizations to achieve academic excellence. The institution continues to empower young women through training in Netball and Self-Defense. The College has received numerous awards in District & State Level Sports Championships and had also won the overall Championship in Ranchi University Inter College Youth Festival. What remains unchanged since its establishment till date is the institution's relentless effort to educate and empower underprivileged women, focusing on their holistic development and preparing them to face the challenges of the dynamic world.

Fig 3 - A glance of Nirmala College Campus

1. **Undergraduate Honours Courses (Approved by Ranchi University, Ranchi)**

Faculty of Arts

1. B.A. Economics
2. B.A. English
3. B.A. Geography
4. B.A. Hindi
5. B.A. History
6. B.A. Philosophy
7. B.A. Political Science
8. B.A. Psychology

Faculty of Science

9. B.Sc. Botany
10. B.Sc. Chemistry
11. B.Sc. Mathematics
12. B.Sc. Physics
13. B.Sc. Zoology

Faculty of Commerce

14. B. Com (Accounts)

2. **Undergraduate Vocational Courses(Approved by Ranchi University, Ranchi)**
    1. Bachelor of Computer Application (B.C.A.)
    2. Information Technology (I.T.)
    3. Bachelor of Business Administration (BBA)
    4. Fashion Designing (F.D.)
3. **Postgraduate Courses (Approved by Ranchi University, Ranchi)**
    1. M.A. Economics
    2. M.A. Geography
    3. M.A. Hindi
    4. M.A. History
    5. M.A. Political Science
    6. M.Com
4. **Add-on Courses (UGC Approved)**
    1. First Year: Certificate in Computer Application
    2. Second Year: Diploma in Computer Application
    3. Third Year: Advanced Diploma in Computer Application

5. **Short Term courses (Value-added Courses)**

   DCA in Basic Computer Learning (Duration: 90 days) – in association with NSL Comp., Jharkhand

1. Certificate in Tally Pro – Financial Accounting using Tally ERP.9 with GST(Duration: 120 - 180 Hrs./3-4 Months)– in association with Surya Technologies
2. Certificate in Computer Hardware and Networking (Duration – 30 hrs.) – in association with Lifetech Software (Under MSME, Govt. of India)

6. **Spoken Tutorial Programme – IIT Bombay (under NMEICT, MHRD, Govt. of India)**
   1. Certificate course in LibreOffice Suite
   2. Certificate course in Java
   3. Certificate course in C
   4. Certificate course in C++
   5. Certificate Course in Basics of IT
7. **SWAYAM-NPTEL Local Chapter: Online Certification Courses (UGC Approved)**
   1. Industrial Inorganic chemistry
   2. Medicinal Chemistry

(**Fig 4 - Ashok Trees inside the campus of Nirmala College**)

Environmental Consciousness and sustainability Policy of Nirmala College

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NIRMALA COLLEGE

Ranchi - 834002
Accredited by NAAC with Grade 'A'
A College with Potential for Excellence
(Affiliated to Ranchi University, Ranchi)
Website : www.nirmalacollegeranchi.com
E-mail : nirmala_college@yahoo.co.in
: nirmala.college@rediffmail.com

Policy on Environmental Consciousness and Sustainability

Article 48A and 51(g) of the Indian Constitution gives mandate to a clean and green environment which is reflected in India's National Environment Policy with the key objectives of conservation of critical environmental resources, intragenerationand intergeneration equity and integration of environmental concern in economic and social development, environmental governance and enhancement of resources for environmental conservation. The policy recognizes that maintaining a healthy environment is not the state's responsibility alone but that of every citizen thus encouraging individual and institutional participation. Management of Nirmala College acknowledges its responsibility towards protection and enhancement of local and global environment along with sustainable development. Institution also recognizes its social responsibility of providing a barrier free environment to all its stakeholders. Therefore, environmental development and sustainability policy is made by the management which is subject to amendment as per needs.

Objectives

1. To systematically identify, monitor, quantify, record, report and analyze the components of environmental diversity of the institution.
2. Increasing awareness towards protecting environment
3. To keep the campus and surroundings green and clean.
4. To protect the local flora & fauna and work towards sustainable development
5. To provide a barrier free environment for Divyangjan.
6. To develop innovative practices for environmental management and conservation
7. To ensure safe and environment friendly waste management and negligible waste production.
8. To ensure optimal and efficient use of resources

Statuary body for the policy execution

Statuary body for the policy execution has following members:

1. Principal of the Institution --- Chairperson
2. Four faculty members nominated by the Principal of the Institution.
3. Two non-teaching staff appointed by the Principal of the Institution.

Policy:

Nirmala College, Ranchi is committed to keep environment clean and to provide a barrier free environment to its stakeholders. For this the Institution ensures following measures:

1. Institution will manage organic degradable waste by using it to make Compost in the Compost pit while Non-degradable and Inorganic degradable wastes will be handed over to municipality for Recycling. Institution is committed to phase out single use plastic in its Campus.
2. Institution will ensure active recharge Pits and Tanks for rain water harvesting and will keep a check on wastage of water by sensitizing students about Water Conservation.
3. Institution will have Plantation drive and awareness programmes on Commemorative days of Earth and Environment Days to keep campus green. Guest visitors will be honoured with plant saplings.
4. Institution will ensure disabled friendly, barrier free environment by providing support systems like Wheel chair, Scribe for writing exams, infrastructural support like Ramp etc.
5. Institutional Infrastructure promoting ample sunlight to its Classroom and Laboratories is the means to save energy. Use of energy saving equipment/ devices and switching off of equipment and lab apparatus after use will be another means of energy conservation. Paperless mode of administrative communication to be encouraged.
6. Institution will promote awareness activities like hosting seminars, webinars, workshops and tours etc. for environment protection.
7. The Statutory body will meet biannually and submit its report to the Chairperson.
8. Institution will conduct Green Audit annually and report will be submitted to Chairperson, IQAC.

05.07.2021
Principal
Nirmala College
Ranchi

Nirmala College, Ranchi

8.0 OBJECTIVES AND SCOPE

The Broad aims / objectives of the eco – auditing would be

- Environmental education through a systematic environmental management approach
- Improving the environmental standard
- Benchmarking for environmental protection initiatives
- Sustainable use of natural resources in the college campus
- Financial savings through a reduction in resource use
- Curriculum enrichment through practical experience
- Development of ownership, personal and social responsibility for the College campus and its neighboring environment
- Enhancement of College profile
- Developing environmental ethics and value systems among youth.

9.0 AUDIT PARTICIPANTS

On behalf of the College:

Name	Position/Department
Dr. Sr. Jyoti	**Principal & Chairperson IQAC**
Dr. Sr. Shobha	**Vice Principal & Member IQAC**
Dr. Emma R. Seraphim	**Assistant Professor (Zoology) & Coordinator IQAC**
Dr. Debjani Roy	**Assistant Professor (Geography) & Coordinator NAAC**
Dr. Sreerupa Roy	**Assistant Professor (Chemistry) & Member IQAC**
Dr. Indu Kumari	**Assistant Professor (Botany) & Member IQAC**

On behalf of Abhinav Gram Foundation – Eco-Services

Name	Position	Qualification
Ram Pratap Singh	Lead Auditor	IFS Retd., M.Sc.-Life Sciences, AIFC-FRI, Dehradun
Er. Dilip Shrivastava	Co- Auditor	B.Tech., FIE, PHF
Er. Pramod Kumar	Co- Auditor	B.Tech., MBA (IIT Dhanbad)
Pranav Kr. Singh	Co- Auditor	B.Tech., MBA

Fig 5 - 1st Green Audit meeting between College and Green Auditors

10.0 EXECUTIVE SUMMARY

An environmental audit is a snapshot in time, in which one assesses campus performance in complying with applicable environmental laws and regulations. Though a helpful benchmark, the audit almost immediately becomes outdated unless there is some mechanism in place to continue the effort of monitoring environmental compliance.

Nirmala College, Ranchi have already done an internal green assessment and annual reports published for continual improvements; QS Programme and doing their bid towards environmental protection and environmental awareness on the local and global front. The audit criterion is environmental cognizance, waste minimization and management, biodiversity conservation, water conservation, energy conservation, and environmental legislative compliance by the campus. A questionnaire is used during the audit. This audit report contains observations and recommendations for the improvement of environmental consciousness.

11.0 AREAS OF IMPROVEMENT

- Water meters should be installed and maintained.
- Stack height of DG set should be as per DG Rules.
- Storage of chemicals like; paints, gums resins, oils, lubricants, acids, etc. in designated places and safety/warning signs should be displayed.
- Internal system by IQAC should be more active and keep regular inspections to ensure environmental activities on the campus.
- Although the college campus is highly green and eco-friendly but is still scope for creating vertical gardens.
- College can declare their campus as no plastic zone and advise everyone to adhere.
- College can advise their faculty and students to use public transport systems or E-vehicles as far as practicable to reduce pollution.

12.0 ENVIRONMENTAL AUDIT - QUESTIONNAIRE

The areas of eco / environmental / green auditing to be followed by participating institutions are as follows :

12.1.1 Waste Minimization and Recycling

12.1.2 Greening the campus

12.1.3 Energy Conservation

12.1.4 Water Conservation

12.1.5 Clean Air

12.1.6 Noise Monitoring Measures

12.1.7 Animal Welfare

12.1.8 Environmental Policy

12.1.9 General Practices

Has any Environmental Audit been conducted earlier?

Yes, an internal Green Audit was conducted for the year 2021-2022 by the ECO Club of the college in association with the Association of Indian Conservationists of Nature (AICON, Regd. No.- IN-JH20771924294925R).

Now, the external audit for the environment has been awarded to Abhinav Gram Foundation – Eco-Services, Ranchi for a systematic way of monitoring the environmental eminence initiative, taken by Nirmala College for environmental protection.

What is the total permanent population of the College? (2021-2022)

	Male	Female	Total
Students	0	3053	**3053**
Teachers	06	60	**66**
Non-Teaching Staff	14	31	**45**
Sub Total	20	3144	**3164**
Approximate Number of Visitors (Per day)			**250**
What is the total number of working days on your campus in a year?			**223**

Where is the campus located?

Nirmala College is located 3.2 km from Ranchi Railway Station in the center of the city, near world - famous Consultancy, Design & Engineering, A Govt. of India Enterprise MECON Ltd. The Latitude and Longitude of the Campus are 23.335512N and 85.314957E respectively.

Google Map Location - https://goo.gl/maps/oZKKNQZqdmtzU9Mo7

Which of the following are available in your college?

1	Garden area	Available
2	Playground	Available
3	Kitchen	Available
4	Toilets	Available
5	Garbage Or Waste Store Yard	Available
6	Laboratory	Available
7	Canteen	Available
8	Hostel Facility (numbers)	Available
9	Guest House	Not Available

Which of the following are found near your college?

1	Municipal dump yard	Available
2	Garbage heap	No Garbage heaps
3	Public convenience	Yes
4	Sewer line	NA
5	Stagnant water	No stagnant water
6	Open Drainage	No
7	Industry – (Mention the type)	No industry is located within 3 km of college campus, however, Tupudana industrial area is approx. 5 km
8	Bus / Railway station	Govt. Bus stand is 2.5 km, Railway station 3.2 km, Hatia Railway Station 5 km, Airport is 3km away
9	Public halls	Yes, Mecon Community Hall

12.1 WASTE MINIMIZATION AND RECYCLING

<table>
<tr><td>1.</td><td>Does your College generate any waste?
If so, what are they?</td><td colspan="4">Yes, Solid waste, kitchen waste, stationary waste, toiletry waste, Horticulture Waste, etc.</td></tr>
<tr><td>2.</td><td>What is the approximate amount of waste generated per day? (in Kilograms/month) (approx.)</td><td>Bio Degradable</td><td>Non-Biodegradable</td><td>Hazardous</td><td>others</td></tr>
<tr><td></td><td></td><td>50kg</td><td>12kg</td><td>2kg</td><td><10kg</td></tr>
<tr><td>3.</td><td>How is the waste generated in the college managed? By
1 Composting
2 Recycling
3 Reusing
4 Others (specify)</td><td colspan="4">2 composting pits are there on campus, Reuse of one side printed Paper for internal communication. Sewage water is discharged to soak pits near toilets. Domestic Waste is given to Municipal Corporation. Two types of Waste bins are provided at the campus for biodegradable and non-biodegradable waste. Horticulture waste is also given to Municipal Corporation.</td></tr>
<tr><td>4.</td><td>Do you use recycled paper in college?</td><td colspan="4">No</td></tr>
<tr><td>5.</td><td>Do you use reused paper in college?</td><td colspan="4">Yes</td></tr>
<tr><td>6.</td><td>How would you spread the message of recycling to others in the community? Have you taken any initiatives? If yes, please specify.</td><td colspan="4">Yes, NSS & Eco club carries out numerous activities. Recycling campaigns, e-waste management, Anti- plastic campaigns, Vriksharopan (Tree Plantation, sustainable goal awareness program.</td></tr>
<tr><td>7.</td><td>Can you achieve zero garbage in your College? If yes, how?</td><td colspan="4">Yes, all bio-degradable waste may be converted to compost. Also, many non-degradable materials may also be reused.</td></tr>
</table>

12.2 GREENING THE CAMPUS

8.	**Is there a garden in your College?**	Yes, 6 gardens	
9.	Do students spend time in the garden?	Yes	
10.	Total number of Plants on Campus	Plant type	Approx. number
		Trees	36 species(134)
		Shrubs	39 species(613)
		Grass Cover	70% (17229 sqm2)
11.	Suggest plants for your campus. (Trees, vegetables, herbs, etc.)	Sarpgandha (Rauwolfia serpentina) Ashwagandha (Withania somnifera) Eliaichi (Elettaria cardamomum) Lemon grass(Cymbopogon citratus) Harjode (Cisuss qudriangularis)	
12.	Does the College campus have any Horticulture Department ?	No	
	Number of Staff working in Horticulture Department	2 gardeners have been appointed by the management to maintain the gardens and campus greenery.	
13.	Number of Tree Plantation Drives organized by College per annum. (If Any)	Yes, 3-4 times regular tree plantation drives are organized annually under which, more than 100 plants are planted in an academic year	
14.	Number of Trees Planted in Last FY.	100	
	Survival Rate	80%	
15.	Plant Distribution Program for Students and Community	Yes, seedlings are collected from forest department nurseries on subsidized rates and are distributed to visiting guests and communities at various green occasions.	
16	Plant Ownership Program	No	

12.3 ENERGY

17.	List a few ways that you use energy in your College. (Electricity, LPG, firewood, others). Using this list, try to think of ways that you could use less energy every day.	Electricity, LPG, Solar Energy. Electricity is saved by the use of LED bulbs for illumination. Alternate source of energy i.e. Solar Panel Installed. More such projects are underway in other departments as well.
18.	Are there any energy-saving methods employed in your College? If yes, please specify. If no, suggest some	Yes, Natural lights & natural ventilation ensure energy savings during class hours. Good practices like 'Switch off' drills are encouraged. Energy-saving star-rated electrical equipment is used. Renewable energy source solar energy is used.
19.	How many CFL/LED bulbs have your College installed?	90 % of Total Conventional bulbs are replaced by LED Lights.
20.	Are any alternative energy sources employed / installed in your College? (photovoltaic cells for solar energy, windmill, energy efficient stoves, etc.,) Specify.	Yes, solar water heaters are used in staff quarters. Solar panels are installed on rooftop of academic buildings.
21.	Do you run "switch off" drills at College?	Yes
22.	Are your computers and other equipment put on power-saving mode?	Yes, In Practice
23.	Does your machinery (TV, AC, Computer, weighing balance, printers, etc.) run on standby modes most of the time? If yes, how many hours?	Yes (4 Hours approx.)

The table shows the power consumption detail for last year

The above graph does not exhibit much variation in terms of units consumed. The average units consumed in the year 2021 is 2276 units. There is a monthly variation too depending on the season and the effect of the Pandemic that forced the electricity bill to escalate in June 2021 when the meter reading was done by the electricity department. June 2021 thus had a cumulative bill for the months of April, May, and June.

Year	Month	Units Consumed	Amount paid
2022	July	1244	8167
	June	500	4800
	May	2398	19402
	April	1865	34498
	March	1700	16320
	February	1346	10674
	January	3078	21372
2021	December	5	1923
	November	1138	9408
	October	3037	21335
	September	628	5888
	August	1437	11161
	July	996	8260
	June	6996	51,514
	May	NA	NA
	April	NA	NA
	March	507	5129
	February	7836	19724
	January	182	3074
2020	December	2770	18847

Table 1 - Electricity Consumption Analysis

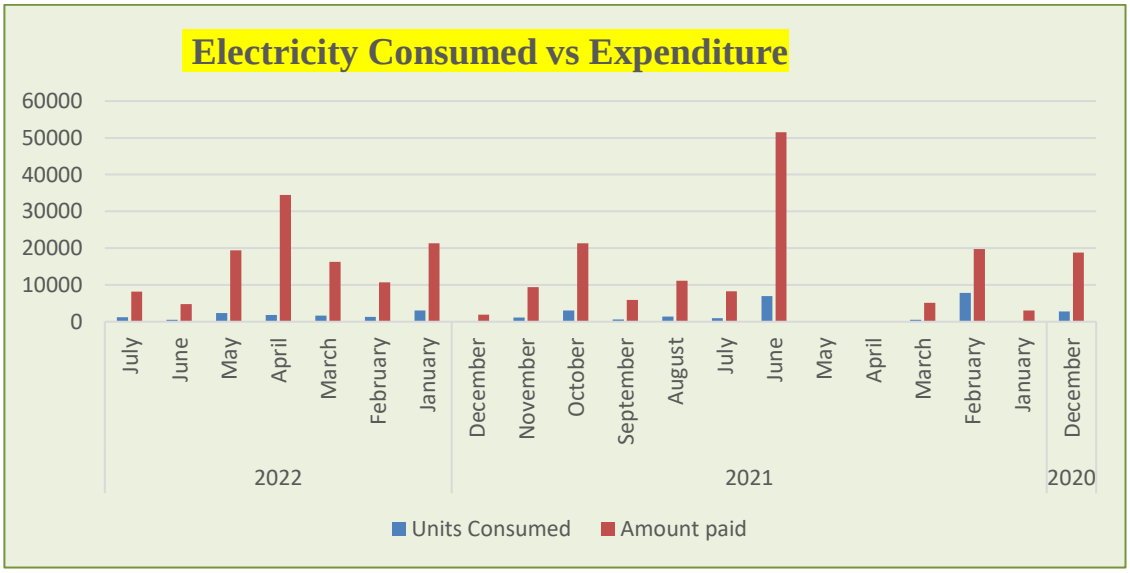
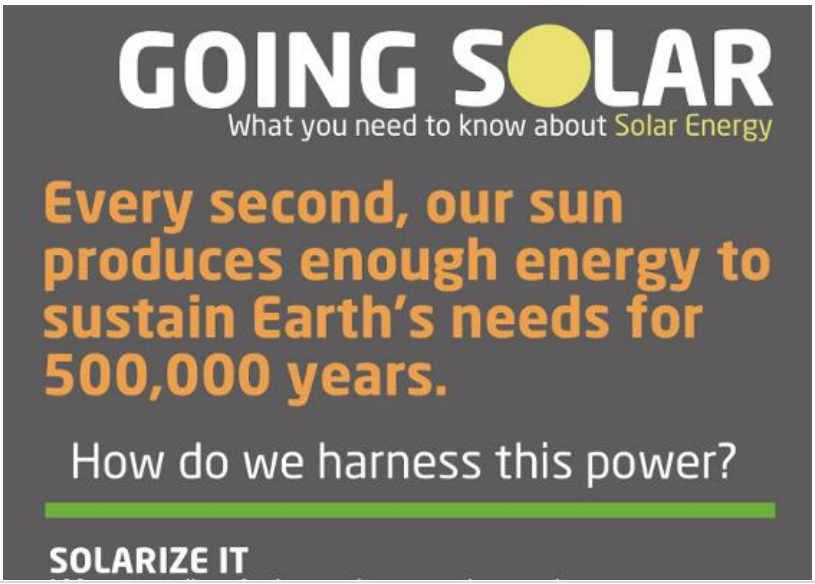


Fig 6 - Solar Panel installed at administrative block, Nirmala College, Ranchi
(Pic. Courtesy: Mr. R.P. Singh, Lead Auditor)

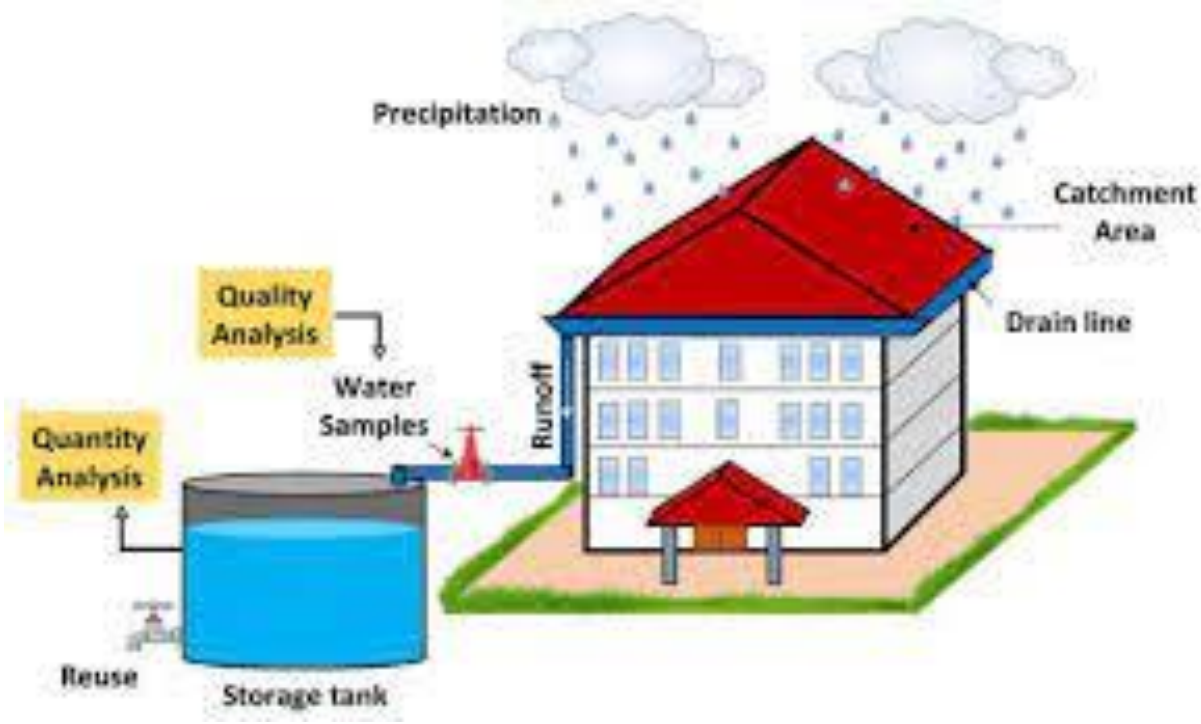
Fig 7 - Solar Heater installed at Staff quarters, Nirmala College



12.4 WATER CONSERVATION

24.	The list of uses of water in your College	Basic uses of water in the campus are; Drinking, Gardening, academic use in the laboratory, sanitizing & Toilets, and Others. And total consumption is 500 KL/month
25.	How does your College store water? Are there any water-saving techniques followed in your College?	Water is supplied through borewell and distributed using overhead tanks. We avoid overflow of water through control valves provided in the water supply system. Taps are closed when not in use.
26.	If there is water wastage, specify why and How can the wastage be prevented / stopped?	Water leakages are immediately attended to by authorized plumbers of the College to conserve water.
27.	Locate the point of entry of water and point of exit of wastewater in your College.	Entry- Groundwater through borewells. Exit- RWH systems are connected to recharge pits and rest of waste water flows through the drainage system.
28.	Write down a few ways that could reduce the amount of water used in your College	By Following ways: 1. Closing the taps after usage 2. Kitchen waste water is stored for reuse in irrigating the kitchen garden. 3. Water Conservation awareness for new students
29.	Record water use from the College water meter for six months (record at the same time of each day). At the end of the period, compile a table to show how many litres of water have been used.	Data is provided in table 6 & 7. Daily water demand • Academic building – 12-14 L • Hostel – 70-80 L

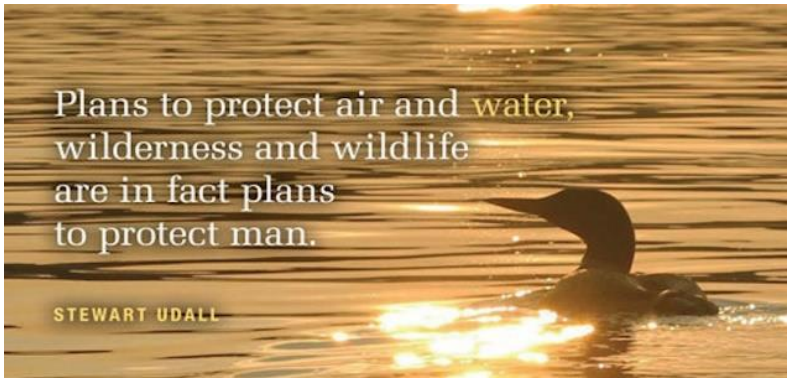
30.	Does your College harvest rainwater?	Yes, rainwater harvesting systems are available
31.	Is there any water recycling system?	Yes, Kitchen wastewater is stored & reused in gardening. RO waste water is stored & used in cleaning and gardening. Rainwater harvesting recharges ground aquifer.



(Symbolic rainwater harvesting system)

12.5 CLEAN AIR

32	**Are the Rooms in Campus are well ventilated?**	**Yes**				
33	Window Floor ratio of the Rooms	**Excellent (1:8)**				
34	Provide details of College-owned motorized vehicles?	Buses	Cars	Vans	Other	Total
	No. of vehicles	0	02	01	02	05
	No. of vehicles more than five years old	--	--	--	--	--
	No. of Air-conditioned vehicles	--	--	--	--	--
	PUC done	--	YES	YES	YES	YES
35	Specify the type of fuel used by your College vehicles:	Total				
	Diesel	03				
	Petrol	01				
	CNG	--				
	LPG	--				
	Electric	--				
36	Air Quality Monitoring Program (If Any)	No monitoring is being done				
37	Do students suffer from respiratory ailments? (If Any)	Such health problem not reported so far.				
38	Details of Genset	Yes, 03 Number of Genset. Kirloskar brand, green power (160 kVA) with an adequate stack height				

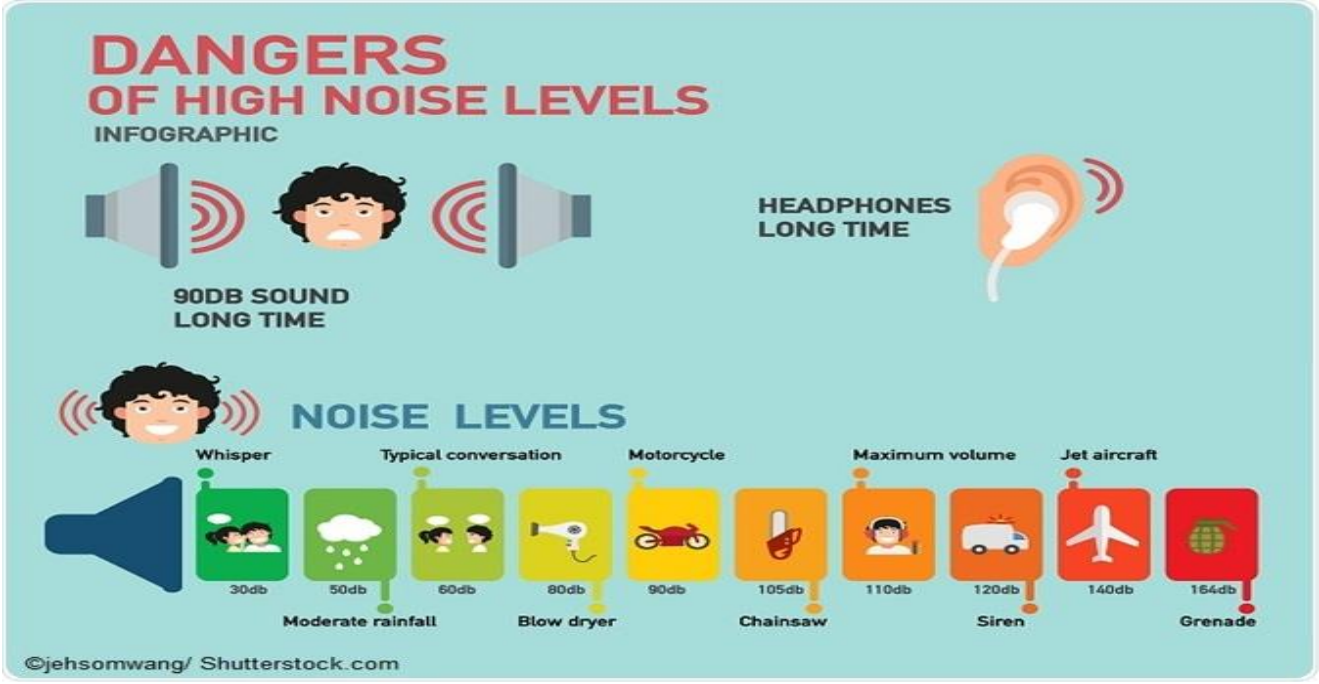


12.6 Noise Monitoring Measures

39	**Campus Noise Level / Noise Pollution**	The location of college is away from the main road hence transportation sound does not pose a problem to the campus. College is situated besides R&D Center of SAIL in Shyamli Colony which is highly green campus. Below is the campus noise level measured data.

Fig No.	Location	Time	Average intensity (dB)	Max intensity (dB)
1	Classroom corridor	During Classes	39.0	48.3
2	Lounge & administrative area	During Classes	43.3	46.4
3	Corridor, Lounge & administrative area	Class Transition	55.5	63.2
4	Campus Driveway	Class Transition	50.5	56.8

(**Table 2 - of Campus Noise Level)**



12.7 ANIMAL WELFARE

40	List the animals (wild and domestic) found on the campus (dogs, cats, squirrels, birds, insects, etc.)	More than 500 Birds are found in the campus. Approx. 5 cats, snakes, rats, squirrels, lizards and others including butterflies, insects, bees, earthworms, *etc*. are there in campus.(Campus fauna data in table 5)
41	How many dogs in your area have undergone Animal Birth Control - Anti Rabies (ABC - AR)?	NA
42	Does your College have a Biodiversity Program or a KARUNA CLUB?	Our college has an ECO club that carries out several awareness and sensitization activities related to the environment & biodiversity like the recently held Save Bird, Save Cheetah awareness drives.

12.8 ENVIRONMENTAL LEGISLATIVE COMPLIANCE

43	Are you aware of any environmental Laws pertaining to different aspects of environmental management?	Yes
44	Does your College have any rules to protect the environment? List possible rules you could include.	The college has banned single use plastic. The environment policy of the college includes awareness, and environmental conservation efforts through NSS & ECO club and various departments All undergraduates and post graduates are studying the paper of Environmental Sciences, prescribed by the UGC course.
45	Does Environmental Ambient Air Quality Monitoring conducted by the College?	College do not have air monitoring system but forest dept. head quarter which is 500 mts from college has air quality monitoring system(reading attached in annexure)

46	Does Water and Wastewater Quality monitoring conducted by the College?	Yes
47	Does stack monitoring of DG sets conducted by the College	Yes, continuous monitoring is done under AMC for DG.
48	Is any warning notice, letter issued by state government bodies?	No
49	Does any Hazardous waste generated by the College?	No
50	Does any Bio medical waste generated by the College? If yes explain its category and disposal method	No

(**Fig 8 - Tree Plantation in Campus)**

12.9 GENERAL

51	Are you aware of any environmental Laws pertaining to different aspects of environmental management?	Yes
52	Does your College have any rules to protect the environment? List possible rules you could include.	Yes, there are some rules like banned single use plastic. Their Environmental Policy includes awareness and environmental conservation.
53	Is housekeeping schedule maintained in your College campus?	Yes, working girls are appointed to keep the college clean.
54	Are students and faculties aware of environmental cleanliness ways? If Yes Explain	Yes, periodically pollution reduction, plantation, energy conservation awareness campaigns are carried out by NSS & ECO club of the College
55	Are Important Days Like World Environment Day, Earth Day, and Ozone Day etc. are celebrated in campus?	Yes, with NSS & ECO Club
56	Does College participate in National and Local Environmental Protection movement?	Yes, Swachh Bharat Abhiyan by students of the College.
57	Do College have any Recognition / certification for environment friendliness?	No
58	Do College use renewable energy?	Yes, Solar Energy
59	Does Institution conduct a Green / environmental audit of its campus?	Yes.
60	Has the institution been audited / accredited by any other agency such as NABL, NABET, TQPM, NAAC etc.?	Yes, Accredited by NAAC with Grade 'A'

13.0 BEST PRACTICES / INITIATIVES FOR THE ENVIRONMENT

A	Renewable Energy **Solar panel installed at Niramala College campus** **A clean source of energy is utilized at campus. Installed on rooftop of academic building & solar water heaters are used daily in staff quarters.** **Efforts towards** Carbon Neutrality.	
B	**Biodiversity Conservation**	Flora and fauna conservation (Conservation of Flora and fauna done on campus through plantation drive, maintenance of green & herbal garden, inhouse nursery, lectures series on plant disease & its control measures, science exhibition on organing & medicinal plants. Provision of bird feeder and bird bath, inhouse cats are treated with love and compassion, good soil texture helps to thrive micro and mesofauna, green canopy of trees in the campus provides abode to birds, rodents and insects)
C	**Tree Plantation Drives**	Yes, periodically 3-4 plantation drives are conducted by students, and faculty annually. The college is maintaining a small nursery of horticultural plants in front of the administrative building. Guests are honored by green saplings.
d	**Ground Water Recharge**	10 rain water harvesting recharge pits have been constructed in college campus to conserve and recharge ground water reserves. Due to this practice water level in borewell is always respectable.
E	**Pollution Reduction**	The campus is no horn zone. It is a polythene-free zone. Composite pits for biodegradable waste, installation of dustbins, regular plantation drives & awareness activities is initiated by students.

F	**E-Waste Management**	E-waste management is being done as per norms.
G	**Solid Waste Management**	Lifting of garbage from campus everyday day by Municipal Corporation. Compost pits are used to recycle biodegradable waste generated on the campus.
H	**Adoption of Village / society**	College with NSS has adopted 2 slum areas 1. Sai Gram Bhusur Kocha 2. Bariktoli Niche Kocha where regular awareness campaign for green environment, no plastic pollution, cleanliness drive under swachh bharat abhiyan and social awareness campaigns are carried out regularly by students and faculties.
I	**Water Conservation**	The college is re-using Kitchen wastewater & RO waste water for cleaning and gardening purpose.

(Fig 9 & 10 - Tree Protection Awareness Program on Campus)

14.0 GREEN AREA OF NIRMALA COLLEGE, RANCHI

1. Geographical location mapping of campus by GPS:

Nirmala College is situated in an urban locality in the city of Ranchi. At an altitude of 651 m above the mean sea level, Ranchi is the capital of Jharkhand and lies towards the southern part of the Chotanagpur plateau, the eastern section of the Deccan plateau. With its hilly topography, dense tropical forests, and spectacular waterfalls, Ranchi is an important centre of research related to different aspects of the environment and ethnicity. The College has a pollution-free campus area spread over 6.10 acres of land in the heart of the city of Ranchi.

Table 3. Distribution of College Campus Land area

.No.	Particulars	Area (in sq. m)
1	Total built up area	7454.1651
2	Total green area	17229.3919
3	Total Campus area	24683.557

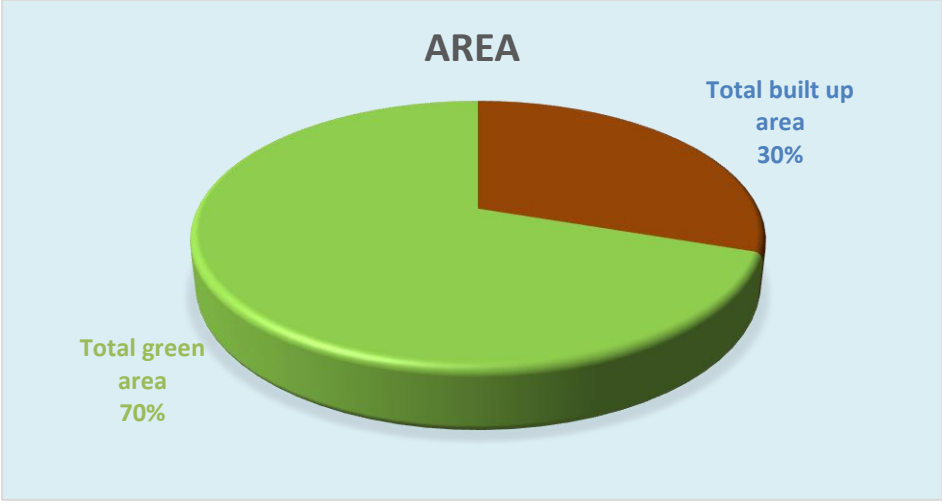
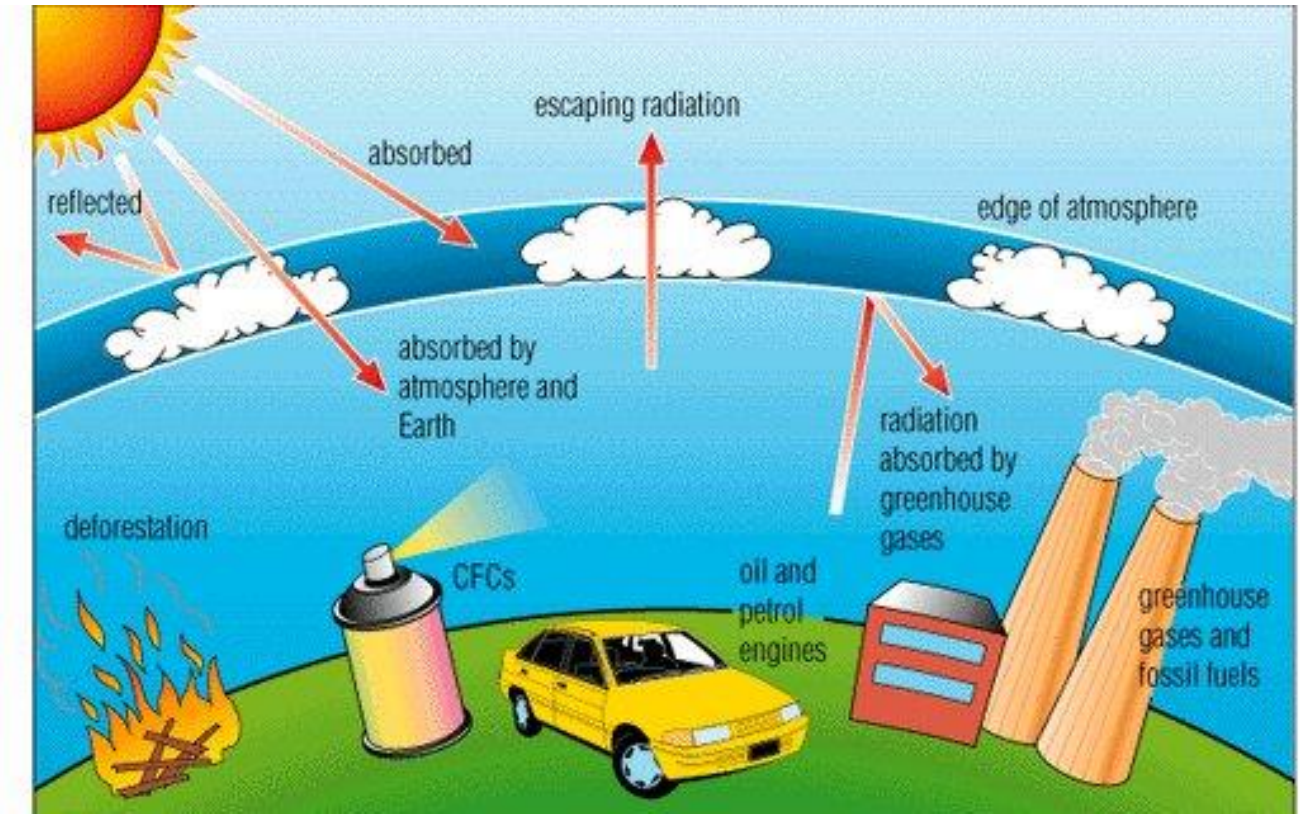


Fig 11: Distribution of the College Campus area

(**Fig 12 - GPS Satellite map of Nirmala College**)

15.0 RECOMMENDATIONS

- Environmental Monitoring i.e. (Ambient Air Quality Monitoring, Stack Monitoring of DG sets, and Water monitoring) need to be conducted by Competent authorities, an approved laboratory with a frequency of six months.
- Reduction in the use of paperwork by going digital.
- Water Meter should be installed at each borewell of the campus for proper monitoring of water consumption.
- Increase in Environmental promotional activities for spreading awareness at campus and its neighboring localities.
- As practically feasible, avoid the use of personal vehicles, single-use plastics, water wastage, energy wastage, and burning of bio-mass inside the campus.
- Student canteen should ensure the health and safety of students and faculty by keeping it clean & in waste management.
- Since the land area of the college is impressive and the number of buildings is sufficient, vertical gardening/multilayer plantation should be promoted more on campus to make it more green.



(Green Tips)

16.0 CONCLUSIONS

This audit involved extensive consultation with the campus team, and interactions with key personnel Sri Ram Pratap Singh Retd. IFS Officer & Lead Auditor of the foundation on a wide range of issues related to Environmental aspects. Nirmala College has its Eco Club/AICON(Association of Indian Conservationists of Nature) for spreading awareness regarding environmental issues. The audit has identified several observations for making the campus more environmental friendly. The recommendations are also mentioned with observations for the campus team to initiate actions.

The audit team opines that the overall site is well maintained from an environmental perspective. There are no major observations but a few things that need to be initiated urgently are maintenance of waste management records on a monthly inventory basis and periodic inspection of buildings, housekeeping, and environment policy. The audit team feels that the College campus has highly green and environment friendly.

(Comparison of Good and Bad Environment)

17.0 REFERENCE

- The Environment [Protection] Act – 1986 (Amended 1991) & Rules-1986 (Amended 2010)
- The Petroleum Act: 1934 – The Petroleum Rules: 2002
- The Central Motor Vehicle Act: 1988 (Amended 2011) and The Central Motor Vehicle
- Rules:1989 (Amended in 2005)
- Energy Conservation Act 2010.
- The Water [Prevention & Control Of Pollution] Act – 1974 (Amended 1988) & the Water (Prevention & Control of Pollution) Rules – 1975
- The Air [Prevention & Control Of Pollution] Act –1981 (Amended 1987) The Air (Prevention & Control of Pollution) Rules – 1982
- The Gas Cylinders Rules – 2016 (Replaces the Gas Cylinder Rules – 1981
- E-waste management rules 2016
- Electrical Act 2003 (Amended 2001) / Rules 1956 (Amended 2006)
- The Hazardous Waste (Management and Handling and Trans-boundary Movement) Rules, 2008 (Amended 2016)
- The Noise Pollution Regulation & Control rules, 2000 (Amended 2010)
- The Batteries (Management and Handling) rules, 2001 (Amended 2010)
- Relevant Indian Standard Code practices
- Internal Records of the Campus

Fig 13 - View of the Nirmala College , Library

Nirmala College Ranchi Campus

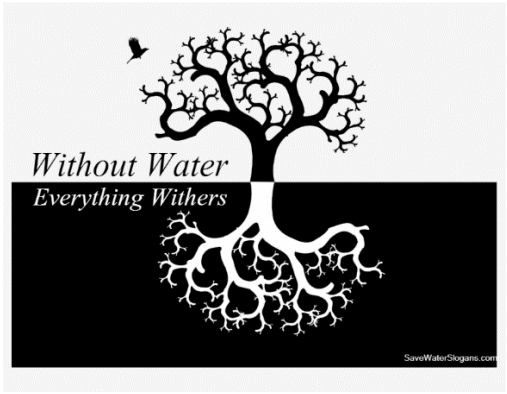


Fig 14 & 15 - Campus, Nirmala College

Administrative Building

Convent and Garden area between the Administrative building

Vertical Gardening on campus near Auditorium

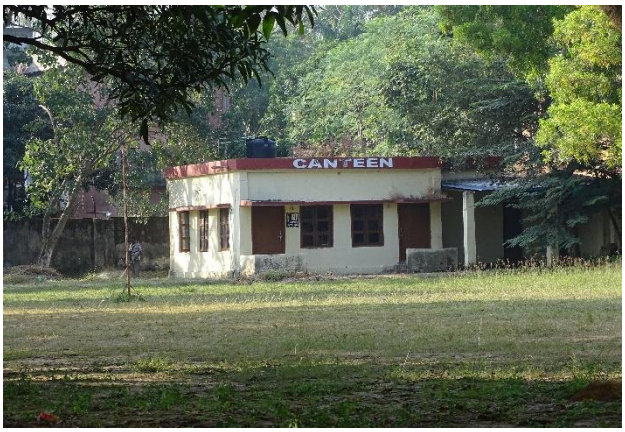
Auditorium

Botany Lab

Physics Lab

Zoology Lab

Library



Canteen

Health Councelling Room

Hostel Dinning

Classroom

Tree Plantation by Srimati Droupadi Murmu(President of India) **Plantation by NCR Principal Dr. Sr. Jyoti**

Regular Plantation Drive by Students & Faculty of the college

Swachh Abhiyan initiative was taken by College students on regular basis

Environmental Exhibitions at College

Regular Health Camp driven by College students

Regular meetings of faculty on environmental occasions

TABLE 4: CAMPUS FLORA DIVERSITY

TREES					
S. NO.	**BOTANICAL NAME**	**COMMON NAME**	**FAMILY**	**TYPE**	**Qty**
1	*Saracaashoka*	Sita ashok	Fabaceae	Tree	05
2	*Mangifera indica*	Mango	Anacardiaceae	Tree	15
3	*Eucalyptus globules*	Nilgiritaila	Myrtaceae	Tree	01
4	*Acacia salicina*	Native willow	Fabaceae	Tree	03
5	*Schleicheraoleosa*	Kusum	Sapindaceae	Tree	01
6	*Sapindusmukorssi*	Reetha	Sapindaceae	Tree	01
7	*Adina cordifolia*	Karam	Rubiaceae	Tree	01
8	*Jacaranda mimosifolia*	Neel mohar	Bignoniaceae	Tree	01
9	*Azadirachta indica*	Neem	Meliaceae	Tree	01
10	*Pongamia pinnata*	Karanj	fabaceae	Tree	01
11	*Carica papaya*	Papaya	Caricaceae	Tree	02
12	*Litchi shinensis*	Litchi	Sapindaceae	Tree	02
13	*Eucalyptus nicholii*	Willow peppermint	Fabaceae	Tree	10
14	*Melia azadirachta*	Bakain	Meliaceae	Tree	03
15	*Ficus religiosa*	Peepal	Moraceae	Tree	05
16	*Murrayakoenigii*	Curry leaves	Rutaceae	Tree	09
17	*Terminalia catappa*	Kath badam	Combretaceae	Tree	01
18	*Syzygiumcumini*	Jamun/black berry	Myrtaceae	Tree	01
19	*Tamarindus indica*	Tamarind	Fabaceae	Tree	01
20	*Cassia javanica*	Pinkshower	Fabaceae	Tree	01
21	*Tectona grandis*	Teak	verbenaceae	Tree	04
22	*Phyllanthus emblica*	Amla	Euphorbiaceae	Tree	01
23	*Plumeria rubra*	Pagoda tree	Apocynaceae	Tree	01
24	*Delbergia sissoo*	Sheeshum	Fabaceae	Tree	04
25	*Gmelina arborea*	Gamhar	Verbinaceae	Tree	01
26	*Dracontomelondao*	Argus pheasant tree	Anacardiceae	Tree	02
27	*Thevetia peruviana*	Yellow kaner	Apocynaceae	Tree	04
28	*Phyllanthus acidus*	Star gooseberry	Euphoirbiaceae	Tree	01
29	*Acacia nilotica*	Babul	Fabaceae	Tree	01
30	*Cycas revoluta*	Cycas	Cycadaceae	Tree	02
31	*Polyalthia longifolia*	False ashoka	Annonaceae	Tree	24
32	*Cocus nucifera*	Coconut	Palmeae	Tree	03
33	*Moringa oleifera*	Drumstick tree	Moringaceae	Tree	O5
34	*Plumeria pudica*	Bridal bouquet	Apocynaceae	Tree	13
35	*Aegle marmelos*	Wood apple	Rutaceae	Tree	01
36.	*Accacianilotica*	Fabaceae	Babul	Tree	02
SHRUBS					
S. NO.	**BOTANICAL NAME**	**COMMON NAME**	**FAMILY**	**TYPE**	**Qty**
1	*Pepromiaobtusifolia*	Baby rubber plant	Piperaceae	Shrub	22
2	*Dracaena reflexa*	Song of India	Asparagaceae	Shrub	11
3	*Cordyline fruticosa*	Ti plant	Asparagaceae	Shrub	11
4	*Corton*	Variegated laurel	Euphorbiaceae	Shrub	02
5	*Cordyline terminalis*	Ti Plants	Asparagaceae	Shrub	O3
6	*Chrysanthemum*	Guldaudi	Asteraceae	Shrub	84
7	*Platycladusorientalis*	Morpankhi	Cupressaceae	Shrub	26
8	*Euphorbia milli*	Christ thorn	Euphorbiaceae	Shrub	22
9	*Tabernemontanadivaricata*	Chandni	Apocynaceae	Shrub	02
10	*Durantaerecta*	Sky flower	Verbenaceae	Shrub	75
11	*Zephyranthesminuta*	Rain Lily	Commelinaceae	Shrub	21
12	*Tradescantia spathacea*	Boat lily	Commelinaceae	Shrub	07

13	*Artemisia vulgaris*	Mugwort	Asteraceae	Shrub	05
14	*Euphorbia pulcherima*	Painted leaf	Euphorbiaceae	Shrub	07
15	*Jatropha podogarica*	Gout plant	Euphorbiaceae	Shrub	02
16	*Tracheliumsps*	Blue throt wort	Campanulacea	Shrub	
17	*Plumeria rubra*	Chameli	Apocynaceae	Shrub	03
18	*Selenicereushamatus*	Queen of the night	Cactaceae	Shrub	
19	*Parthenium hysterophorous*	Carrot grass	Asteraceae	Shrub	25
20	*Galphemiathryallis*	Thryallis golden shower	Malpighiaceae	Shrub	75
21	*Euphorbia viguieri*	Viguier's spurge	Euphorbiaceae	Shrub	06
22	*Furcraeafoetida*	Mauritius hemp	Asparagaceae	Shrub	04
23	*Thuja occedentalis*	Northern white cedar	Cupressaceae	Shrub	01
24	*Rauvolfia serpentine*	Sarpgandha	Apocynaceae	Shrub	01
25	*Areca palm*	Bamboo palm	Aracaceae	Shrub	64
26	*Ixora coccinea*	Scarlet jungle flame	Rubiaceae	Shrub	05
27	*Dracena fragrans*	Striped dracena	Asparagaceae	Shrub	20
28	*Dracenatrifasciata*	Snake plant	Asparagaceae	Shrub	40
29	*Adenium obesum*	Desert rose	Apocynaceae	Shrub	19
30	*Araucaria heterophylla*	Monkey puzzle tree	Araucariaceae	Shrub	04
31	*Rosa indica*	Rose	Rosaceae	Shrub	02
32	*Hibiscus rosa sinensis*	China rose	Malvaceae	Shrub	01
33	*Jasminum officinale*	jasmine	Oleaceae	Shrub	01
34	*Vernonia amygadalina*	Bitter leaf	Asteraceae	Shrub	01
35	*Baugainvellia glabra*	Paper flower	Nictaginaceae	Shrub	10
36	*Coffea arabica*	Coffee	Rubiaceae	Shrub	02
37	*Justicia gendarussa*	Willow leaved justicia	Acanthaceae	Shrub	15
38	*Euodia ridleyi*	Evodia	Rutaceae	Shrub	09
39	*Euphorbia pulcherima*	Poisettia	Euphorbiaceae	Shrub	05
HERBS					
S. NO.	**BOTANICAL NAME**	**COMMON NAME**	**FAMILY**	**TYPE**	**Qty**
1	*Emelia fosbergii*	Weed	Asteraceae	Herb	15
2	*Euphorbia hirta*	Dudhi grass	Euphorbiaceae	Herb	10
3	*Solidago muitiradiata*	Goldenrod	Asteraceae	Herb	10
4	*Oxalis stricta*	Yellow woodsorrel	Oxalidaceae	Herb	200
5	*Scilla peruviana*	Portuguese squill	Asperagaceae	Herb	17
6	*Tagetuserecta*	Marigold	Asteraceae	Herb	47
7	*Calyptocarpusvialis*	Straggler daisy	Asteraceae	Herb	200
8	*Aglonemasps.*	Chinees evergreen	Aracaceae	Herb	08
9	*Pentas lanceolata*	Egyptian starcluster	Rubiaceae	Herb	26
10	*Cynodondactylon*	Durva grass	Poaceae	Herb	
11	*Prichardiapacifica*	Pichutia palm	Aracaceae	Herb	10
12	*Ageratum conyzoides*	Goat weed	Asteraceae	Herb	20
13	*Acalypha australis*	Assian copper leaf	Euphorbiaceae	Herb	20
14	*Mimosa pudica*	Touch –me- not	Mimosaceae	Herb	05
15	*Dieffenbachia seguine*	Dumbcane	Aracaceae	Herb	27
16	*Trifolium*	Clover	Fabaceae	Herb	16
17	*Chlorophytum bichetii*	Bichetii grass	Asparaceae	Herb	25
18	*Thunbergia laurifolia*	Blue trumpet	Acanthaceae	Herb	08
19	*Carexcherokeensis*	Cherokee sedge	Cyperaceae	Herb	07
20	*Sphangneticolatrilobata*	Yellow creeping daisy	Asteraceae	Herb	15

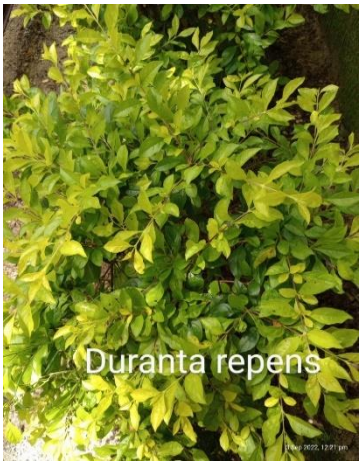
21	*Cuphea hyssopifolia*	Mexican heather	Lytheraceae	Herb	05
22	*Carexsiderostica*	Creeping broad leaf sedge	Cyperaceae	Herb	08
23	*Coleus scutellarioides*	Coleus	Lamiaceae	Herb	11
24	*Ocimum sanctum*	Tulsi	Lamiaceae	Herb	03
25	*Asparagus racemosus*	Stavar	Asparagaceae	Herb	01
26	*Centratherum punctatum*	Brazilian button	Asteraceae	Herb	10
27	*Lilium bulbiferum*	Orange lily	Liliaceae	Herb	06
28	*Mentha arvensis*	Mint	Lamiaceae	Herb	08
29	*Caladium bicolor*	Heart of Jesus	Araceae	Herb	04
30	*Aloe vera*	Ghritkumari	Liliaceae	Herb	15
31	*Dendrobium nobile*	Orchid	Orchidaceae	Herb	04
32	*Syngonium podophyllum*	Arrowhead plant	Araceae	Herb	66
33	*Spathiphyllumwallisii*	Peace lily	Araceae	Herb	
34	*Chlorophytum comosum*	Spider plant	Asparagaceae	Herb	65
35	*Philodendron erubescence*	Blushing philodendron	Araceae	Herb	16
36	*Thaumatophyllumxanadu*	Winterbourne	Araceae	Herb	25
37	*Pentas lanceolata*	Egiptian star cluster	Rubiaceae	Herb	01
38	*Schefflera arboricola*	Umbrella plant	Araliaceae	Herb	36
39	*Portulaca grandiflora*	Moss rose	Portulacaceaea	Herb	02
40	*Epimodium alpinum*	Goat weed	Berberidaceae	Herb	15
41	*Pennisetum purpureum*	Elephant grass	Poaceae	Herb	64
42	*Thunbergia fragrance*	White lady	Acanthaceae	Herb	08
43	*Allium pardoxum*	Few flowered garlic	Amaryllidaceae	Herb	06
44	*Curculigoorchioides*	Golden eye grass	Hypoxidaceae	Herb	06
45	*Impatiens balsamia*	Garden balsam	Balsamaceae	Herb	02
46	*Andrographis paniculata*	Chiretta	Acanthaceae	Herb	20
47	*Bigoniamaculata*	Polka dot bigonia	Bignoniaceae	Herb	05
48	*Bigoniacucullata*	Wax bigonia	Bignoniaceae	Herb	05
49	*Bigoniapalmata*	Pamate begonia	Bignoniaceae	Herb	03
50	*Tradescantia spathacia*	Spider wort	Commelinaceae	Herb	30
51	*Zingiber officinal*	Ginger	Zingiberaceae	Herb	06
52	*Anthurium andraeanum*	Flamingo flower	Araceae	Herb	14

– Campus Flora Diversity: Some Common Species

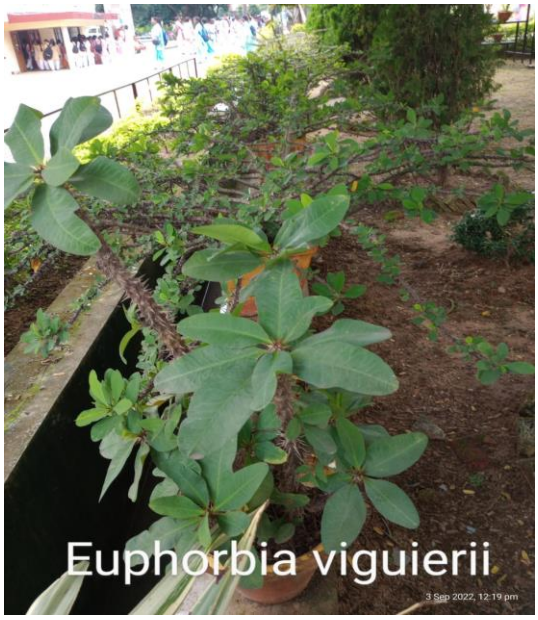
Images of some common species of plant preserved in the Nirmala College Campus are shown in following pages.

Common name – Gold Shower

Indian Snakeroot



Golden Dewdrop



Common name - Viguier's Spurge

Common name - Crape Jasmine

Common name – Baby rubberplant

Common name – Ti plant

Common name - fragrant dracaena

Common name – Yellow creeping daisy

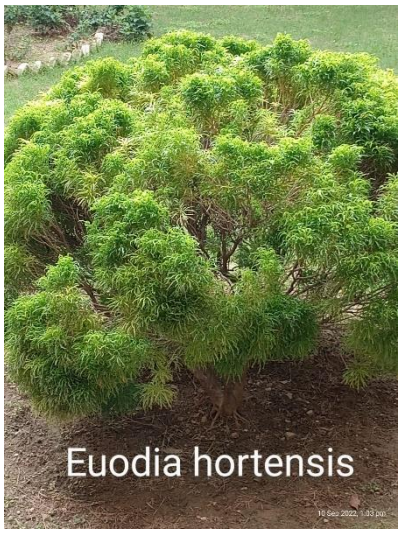
Common name – Sedges

Mexican heather

Brazilian button flower

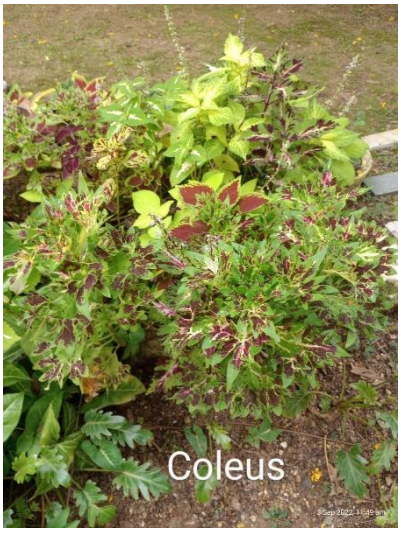
Common name – Peace lilly

Ming Aralia



Lacy Lady Aralia

Common name - Blushing Philodendron

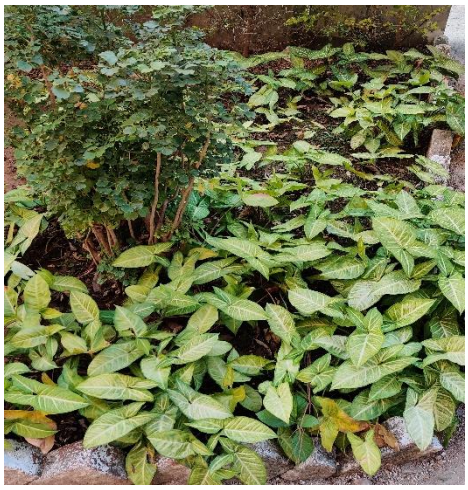


Britannica

Giant False Agave

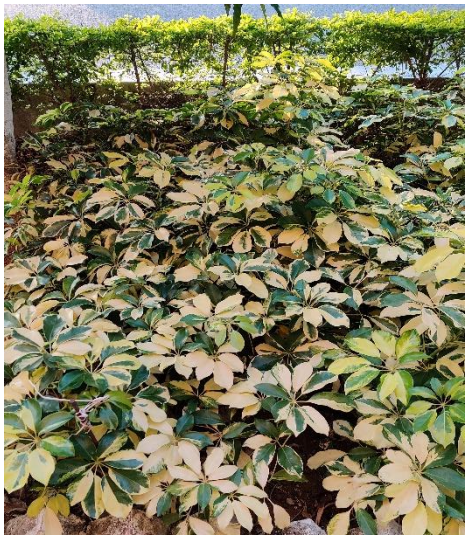
Beautiful Nursery of Nirmala College

Common name - Japanese sedge



Common name – Asian Jasmine

Common name – Peace Lilly



Common name – Dwarf Umbrella plant

Common name - Blushing Philodendron

Common name – Japanese sledge

Table 5: CAMPUS FAUNA DIVERSITY

Table 5.1 LIST OF BIRDS

S.NO.	COMMON NAME	SCIENTIFIC NAME
1	Common Cuckoo	*Cuculuscanorus*
2	House Sparrow	*Passer domesticus*
3	House Crow	*Corvus splendens*
4	Common Myna	*Acridotheres tristis*
5	Spotted dove	*Spilopelia chinensis*
6	Common Domestic Pigeon	*Columba livia domestica*
7	Hoopoe	*Upupa epops*
8	Mourning Dove	*Zenaida macroura*
9	Common Tailor bird	*Orthotomussutorius*
10	Wag Tail	*Motacilla*
11	Barn owl	*Tyto alba*
12	Parrot	*Psittaculakrameri*
13	Black Drongo	*Dicrurusmacrocercus*
14	Red Vented Bulbul	*Pycnonotuscafer*
15	Woodpecker	*Dinopiumbenghalense*

Table 5.2 LIST OF MAMMALS, REPTILES AND AMPHIBIA		
S.No.	**Common Name**	**Scientific Name**
1	common Chameleon	*Chamaeleochamaeleon*
2	Squirrel	*Funambulus palmarum*
3	Rat	*Golundaellioti*
4	House lizard	*Hemidactylus frenatus*
5	Garden lizard	*Calotes versicolor*
6	Viper	*Daboia russelii*
7	Cobra	*Najanaja*
8	Rat Snake	*Pantherophisobsoletus*
9	Common frog	*Rana temporaria*
10	Common toad	*Bufo bufo*
11	Keeled Indian Mabuya	*Eutropiscarinata*

Table 5.3 LIST OF INSECTS

S.NO.	COMMON NAME	SCIENTIFIC NAME
1	Red ant	*Myrmica rubra*
2	Black ant	*Lasiusniger*

3	Dragon fly	*Anax indicus*
4	Seven spotted Lady bug	*Coccinellaseptempunctata*
5	Common crow butterfly	*Euploea core*
6	Scarlet Skimmer	*Crocothemisservilia*
7	Lime swallowtail	*Papiliodemoleus*
8	Meal worm beetle	*Tenebrio sp*
9	Red flour beetle	*Triboliumcastaneun*
10	Grasshopper	*Locusts migratoria*
11	Plain Tiger Butterfly	*Danaus chrysippus*
12	Footman Moth	*Nepitaconferta*
13	Common house spider	*Achaearaneatepidariorum*
14	Brown Cockroach	*Periplanetabrunnea*

- Campus Fauna Diversity: Some Common Species

Images of some common animal species found in the Nirmala College Campus are shown in following pages.

Common Name - Thick billed flowercatcher
Scientific Name – Diceum agile

Common Name – House sparrow
Scientific Name – passer domesticus

Common Name - Jungle barber
Scientific Name - Turdoides striata

Common Name – Black Dongo
Scientific Name – Dicrurus macrocercus

Common Name - Indian Cockoo
Scientific Name – Cuculus canorus

Common Name – Spotted dove
Scientific Name – Streptopelia chinensis

Common Name - House Crow
Scientific Name – Corvus splendens

Common Name – Common Myna
Scientific Name – Acridotheres tristis

Common Name - Rose ringed parakeet
Scientific Name – Psittacula krameri

Common Name - Sunbird
Scientific Name – Nectarinia asiatica

Common Name - Asian koel
Scientific Name – Eudynamys scolopacea

Common Name – Blue Rock Pegion
Scientific Name – Columba livia

Common Name - Tree squirrels
Scientific Name – Sciurus Linnaeusa

Common Name – Indian Rat
Scientific Name – Bandicota bengalensis

Common Name - Indian Lizard
Scientific Name – Varanus bengalensis

Common Name – Butterfly
Scientific Name – Lepidoptera

Flowering Plants used in waste of coconut shells "Best from Waste"

Common Name – Snake Plant in Coconut Shell
Scientific Name – Sansevieria trifasciata

Layered Plantation – Plantation under trees roots followed by college in campus

Drinking Pot from waste clay bucket for birds and other pet animals in the Campus

"Save birds, Save Yourself"

Avian fauna of Nirmala College Campus

ANNEXURE-II

Students Initiatives for different Environmental & Social Causes, NIRMALA COLLEGE

छात्राओं ने दिया पर्यावरण संरक्षण का संदेश

निर्मला कॉलेज में युवा महोत्सव, छात्राओं ने विभिन्न प्रतियोगिताओं में दिखाई प्रतिभा

निर्मला कॉलेज में युवा महोत्सव के दौरान माइम शो का प्रदर्शन करती छात्राएं • जागरण

निर्मला कालेज में एड्स जागरूकता कार्यक्रम

रांची. निर्मला कॉलेज एनएसएस के तत्वावधान में शुक्रवार को विश्व एड्स दिवस पर कॉलेज में एडस जागरूकता अभियान चलाया गया. एनएसएस स्वयंसेवकों ने एचआइवी कैसे फैलता है थीम पर पोस्टर लगाया और अपने दोस्तों व परिवार के लोगों को एसएमएस द्वारा संदेश भी भेजा. छात्राओं ने कॉलेज की शिक्षिकाओं, कर्मचारियों व अन्य छात्राओं को लाल रिबन भी लगाया. राजनीतिशास्त्र विभाग की शिक्षिका डॉ सिस्टर सुषमा ने एड्स के बारे में जानकारी दी. इस मौके पर डॉ रंजू कुमारी, डॉ मनीषा कुमारी, डॉ सुकन्या और डॉ सोनी परवीन आदि मौजूद थीं.

निर्मला कॉलेज में यूथ फेस्टिवल: छात्राओं ने कला में पर्यावरण और मानवीय संबद्धता दिखाई

क्लासिकल डांस, लाइट वोकल, स्किट, रंगोली, पेंटिंग, भाषण, वाद-विवाद सहित कई प्रतियोगिताएं हुईं

हिन्दुस्तान 18

सामाजिक बुराइयों को दूर करने आगे आएं युवा

निर्मला कॉलेज में शुक्रवार को हुए कार्यक्रम से छात्राओं का आत्मविश्वास बढ़ाया गया।

निर्मला कॉलेज में रांची विवि इंटर कॉलेज युवा महोत्सव का दूसरा दिन, विद्यार्थियों ने दिखाया प्रतिभा

आतंकवाद, दहेज प्रथा व प्रदूषण पर दिया संदेश

निर्मला कॉलेज एनएसएस का विशेष शिविर

रांची. निर्मला कॉलेज की एनएसएस यूनिट दो और तीन के विशेष शिविर का उदघाटन शनिवार को संयुक्त रूप से किया गया. प्राचार्या डॉ सिस्टर ज्योति ने शिविर की शुरुआत की. 23 मार्च तक बारिक टोली स्थित ऊंचा बस्ती और नीचा कोचा में शिविर लगाया जायेगा. इसमें सामान्य स्वास्थ्य और मानसिक स्वास्थ्य के संबंध में जागरूकता फैलायी जायेगी. संचालन एनएसएस प्रोग्राम ऑफिसर डॉ मनीषा कुमारी ने किया. एनएसएस प्रोग्राम ऑफिसर डॉ रंजू ने सात दिनों के कार्यक्रम के बारे में बताया.

छात्राओं ने दी स्वच्छता सर्वेक्षण रिपोर्ट

प्रभात खबर — रांची, बुधवार 07.03.2018 — 21

निर्मला कॉलेज एनएसएस का सात दिवसीय स्पेशल कैंप संपन्न

ग्रामीणों को स्वच्छता व स्वास्थ्य के प्रति किया गया जागरूक

कार्यक्रम में शामिल एनएसएस वोलेंटियर्स.

निर्मला कॉलेज में शनिवार को आयोजित कार्यक्रम में शिक्षिकाएं-छात्राएं।

निर्मला कॉलेज में मना वन महोत्सव

रांची। निर्मला कॉलेज की एनएसएस इकाई एक, दो और तीन की ओर से शनिवार को वन महोत्सव का आयोजन किया गया। एनएसएस कार्यक्रम पदाधिकारी सिस्टर सुषमा ने वन के महत्व पर चर्चा करते हुए छात्राओं से पर्यावरण संरक्षण में योगदान देने की अपील की। प्राचार्या डॉ सिस्टर ज्योति ने औषधीय पौधे लगाकर वन महोत्सव की शुरुआत की। छात्राओं ने पौधे लगाए और उनके संरक्षण करने व हरियाली बचाने का संकल्प लिया। मौके पर वन महोत्सव पर आधारित पेंटिंग प्रतियोगिता का भी आयोजन किया गया, इसमें बड़ी संख्या में छात्राओं ने हिस्सा लिया।

युगांतर भारती का पर्यावरण मेला. निबंध व चित्रांकन प्रतियोगिता के विजेता बच्चों को किया गया पुरस्कृत

इच्छाशक्ति से ही होगी पर्यावरण की रक्षा : नीरा

लाइफ रिपोर्टर @ रांची

शिक्षा मंत्री डॉ नीरा यादव ने कहा कि इच्छाशक्ति से ही पर्यावरण को सुरक्षित रखा जा सकता है. राज्य के सभी जिला शिक्षा पदाधिकारियों को सभी सरकारी विद्यालयों में पौधरोपण कराने का निर्देश दिया गया है. हर पौधे के सामने उसे लगाने वाले बच्चे-बच्चों के नाम का बोर्ड लगाया जायेगा. इससे बच्चों में पौधों के प्रति प्यार और देखरेख की भावना पैदा होगी. इसके साथ ही नवगठित विनोद बिहारी महतो विवि में पर्यावरण का अलग विभाग खोला गया है. श्रीमती यादव बुधवार को आड्रे हाउस में युगांतर भारती द्वारा आयोजित पर्यावरण मेला में राज्य भर के स्कूली बच्चों के बीच आयोजित निबंध और चित्रांकन प्रतियोगिता के विजेताओं के बीच पुरस्कार वितरण कार्यक्रम में बोल रही थीं.

डॉ यादव ने कहा कि पौधरोपण भी जंगल का विकल्प नहीं हो सकता. पेड़ लगाकर हमें मानसिक संतुष्टि भले मिल जाये, लेकिन जंगल की जैव विविधता की भरपाई वह नहीं कर सकता. कार्यक्रम की अध्यक्षता करते हुए दामोदर बचाओ आंदोलन के अध्यक्ष एवं मंत्री सरयू राय ने कहा कि धरती को बचाने के लिए, लोगों को अपनी आदतों में सुधार करना होगा. पर्यावरण की सोच हर व्यक्ति की सोच होनी चाहिए. धरती के प्रति कर्तव्य का निर्वाह करना हम सभी का फर्ज बनता है. कार्यक्रम को नदी विशेषज्ञ डॉक्टर दिनेश मिश्र ने भी संबोधित किया. समारोह में शिक्षा विभाग के प्रधान सचिव एपी सिंह, उच्च शिक्षा विभाग के सचिव अजय कुमार सिंह, खाद्य आपूर्ति सचिव डॉ अमिताभ कौशल एवं रांची विश्वविद्यालय के कुलपति डॉ रमेश पांडेय भी मौजूद थे.

बच्चों को सम्मानित करते मंत्री नीरा यादव व सरयू राय.

विजेताओं को किया गया पुरस्कृत

मौके पर 144 बच्चों को पुरस्कृत किया गया. इसमें 72 चित्रांकन और 72 निबंध प्रतियोगिता के विजेता शामिल हैं. चित्रांकन प्रतियोगिता का विषय पृथ्वी, पर्यावरण और प्रकृति था.वहीं निबंध प्रतियोगिता का विषय झारखंड की विलुप्त होती नदियां व उनका संरक्षण था.

विजेताओं को मिला नकद इनाम : निबंध और चित्रांकन प्रतियोगिता के विजेताओं को नकद इनाम, मोमेंटो व मेडल दिया गया. इनमें स्टेट और डिस्ट्रिक लेबल के प्रथम तीन बच्चों को पुरस्कृत किया गया. स्टेट लेबल का प्रथम पुरस्कार 10,000 व मेडल, द्वितीय पुरस्कार 7500 व मेडल और तृतीय पुरस्कार 5000 व मेडल दिया गया. वहीं डिस्ट्रिक लेबल पर 1000, 750 और 500 रुपये के नकद इनाम दिये गये.

स्टेट लेबल निबंध प्रतियोगिता के विजेता

प्रथम: नीरीन नूर, उर्सुलाइन गर्ल्स हाइस्कूल लोहरदगा
द्वितीय: प्रियंका कुमारी, राजकीय उत्क्रमित उवि कोडरमा
तृतीय: फारहीन निशा, एन विद्या निकेतन हाइस्कूल चतरा

निबंध प्रतियोगिता में रांची जिला के विजेता

प्रथम: वेदांत, टेंडर हर्ट स्कूल
द्वितीय: आकाश कुमार, डीपीएस रांची
तृतीय: राजश्री राजेश कुमार, जेवीएम

राज्य स्तरीय चित्रांकन प्रतियोगिता के विजेता

प्रथम: वागिशा दयाल, डीएवी पब्लिक स्कूल चतरा
द्वितीय: सीतामनी कुमारी, कस्तूरबा स्कूल लातेहार व परि हेम्ब्रम, कस्तूरबा विद्यालय, दुमका
तृतीय: बुदन पान, एसएस हाइस्कूल खूंटी और मीनू मोनिका मुर्मू, कस्तूरबा विद्यालय, दुमका

निबंध प्रतियोगिता में कॉलेज के विजेता

प्रथम: गायत्री कुमारी, डोरंडा कॉलेज
द्वितीय: गरीबा, निर्मला कॉलेज
तृतीय: अनु कुमारी, मारवाड़ी कॉलेज

चित्रांकन प्रतियोगिता में कॉलेज के विजेता

प्रथम: आयशा अहमद, मारवाड़ी कॉलेज
द्वितीय: हेमलता कुमारी, मारवाड़ी कॉलेज
तृतीय: अन्विता चौधरी, मारवाड़ी कॉलेज व विभा, नि

आज के कार्यक्रम : गुरुवार को शाम चार बजे से में सॉलिड वेस्ट मैनेजमेंट पर कार्यशाला होगी. इस में दामोदर उदगम स्थल खोजने वाले सात लोगों को स जायेगा. पर्यावरण संरक्षण पुरस्कार समारोह भी हो सांस्कृतिक कार्यक्रम का आयोजन होगा. इसमें उ के बच्चे 10–12 मिनट का कार्यक्रम पेश करेंगे.

निर्मला कॉलेज में पादप विज्ञान प्रदर्शनी

रांची। निर्मला कॉलेज बॉटनी विभाग की ओर से सोमवार को पादप विज्ञान प्रदर्शनी का आयोजन किया गया। इसमें बीएससी पार्ट-1, पार्ट-2 और पार्ट-3 की सभी छात्राओं ने हिस्सा लिया। प्रदर्शनी में 51 मॉडल प्रदर्शित किए गए। प्राचार्या डॉ सिस्टर ज्योति ने छात्राओं के बनाए मॉडल की सराहना की। मौके पर उप प्राचार्या सिस्टर शोभा, विभागाध्यक्ष रश्मि पीटर्स, डॉ अनुभूति सिंह, डॉ इंदू कुमारी, डॉ नीतू रानी समेत अन्य शिक्षिकाएं मौजूद थीं।

निर्मला कॉलेज के बॉटनी विभाग में सोमवार को लगी प्रदर्शनी में छात्राएं।

निर्मला कॉलेज में बुधवार को स्वच्छता अभियान चलातीं छात्राएं। • हिन्दुस्तान

निर्मला कॉलेज में चला स्वच्छता अभियान

रांची। निर्मला कॉलेज की एनएसएस इकाई एक, दो और तीन की ओर से राष्ट्रीय स्वच्छता पखवाड़ा के तहत बुधवार को कॉलेज परिसर में स्वच्छता अभियान चलाया गया। एनएसएस स्वयंसेवकों ने कॉलेज परिसर की साफ-सफाई की। अभियान कॉलेज की एनएसएस कार्यक्रम पदाधिकारी डॉ सिस्टर सुषमा एक्का, डॉ रंजु कुमारी और डॉ मनीषा कुमारी की देखरेख में चला। छात्राओं का उत्साहवर्द्धन करने के लिए मौके पर प्राचार्या डॉ सिस्टर ज्योति मौजूद थीं।

निर्मला कॉलेज में जैव विविधता और पर्यटन पर सेमिनार

रांची. निर्मला कॉलेज के भूगोल विभाग द्वारा शनिवार को जैव विविधता व पर्यटन विषय पर सेमिनार आयोजित हुआ. प्राचार्या डॉ सिस्टर ज्योति व सिस्टर सुपीरीयर लिडविन मेरी विशेष रूप से उपस्थित थीं. इस दौरान यूजी व पीजी विभाग के 23 छात्राओं ने विचार रखा. इसमें जीजी जार्ज व कीर्ति अलोका को प्रथम पुरस्कार मिला. द्वितीय पाली में सिस्टर प्रिसिला मेमोरियल लेक्चर का आयोजन हुआ. इसमें डॉ मंजरी चटर्जी (बीआइटी मेसरा) ने विचार रखे. इस अवसर पर सरिता सुंडी को बेस्टर ऑल राउंड के लिए केएन रॉय मेमोरियल अवार्ड दिया गया. सुशीला कुमारी को स्नातक स्तर पर सर्वाधिक अंक प्राप्त करने के लिए सिस्टर प्रिसिला मेमोरियल अवार्ड दिया गया. इस कार्यक्रम में डॉ डी रॉय, ज्योत्स्ना एक्का, डॉ पी जोहरा, डॉ सनविता, सिस्टर सुमन अपर्णा उरांव आदि उपस्थित थीं.

निर्मला कॉलेज में जागरुकता कार्यक्रम

रांची। निर्मला कॉलेज की तीनों एनएसएस इकाइयों की ओर से बुधवार को रक्तदान पर जागरुकता कार्यक्रम का आयोजन किया गया। इसमें संस्था लाइफ सेवर के निदेशक अतुल गेरा ने छात्राओं को रक्तदान के विभिन्न पहलुओं पर विस्तार से जानकारी दी। उन्होंने बताया कि रक्तदान से दूसरों की जिंदगी बचाने के साथ खुद को भी स्वस्थ रख सकते हैं। साथ ही, उन्होंने विवाह के बाद गर्भधारण के समय थैलेसिमिया की जांच अनिवार्य रूप से कराने की सलाह दी। कार्यक्रम का संचालन एनएसएस कार्यक्रम पदाधिकारी डॉ सिस्टर सुषमा, डॉ रंजु कुमारी, डॉ मनीषा कुमारी ने किया।

निर्मला कॉलेज में वन महोत्सव की शुरुआत करतीं प्राचार्या डॉ सिस्टर ज्योति।

निर्मला कॉलेज में वन महोत्सव शुरू

रांची। निर्मला कॉलेज की एनएसएस इकाई की ओर से सात दिवसीय वन महोत्सव की शुरुआत रविवार को हुई। एनएसएस कार्यक्रम पदाधिकारी डॉ सुषमा ने वन महोत्सव से जुड़े तथ्यों को उजागर किया। उन्होंने बताया कि वन संरक्षण व उसकी सुरक्षा आज के युग में और भी बढ़ गई है और हम सबको उसकी रक्षा करनी होगी। कॉलेज की प्राचार्य डॉ सिस्टर ज्योति ने कहा कि हमें वर्ष में सिर्फ एक दिन नहीं, बल्कि हर रोज़ पौधों और पर्यावरण की सुरक्षा करनी ज़रूरी है।

छात्राओं ने फेस शील्ड मास्क बनाया

रांची. निर्मला कॉलेज की एनएसएस छात्राओं ने होम मेड फेस शील्ड मास्क तैयार किया है. बीएससी आइटी सेमेस्टर वन की छात्रा रूपा कुमारी और बीकॉम सेमेस्टर वन की रुचि कुमारी ने कोविड-19 से बचाव के लिए सस्ता और आसानी से उपलब्ध सामान से फेस शील्ड मास्क तैयार किया है. इन छात्राओं ने डॉ सिस्टर सुषमा किरण एक्का के माध्यम से प्राचार्या डॉ सिस्टर ज्योति किस्पोट्टा को शील्ड मास्क सौंपा. इसे जरूरतमंद लोगों में बांटा जायेगा.

निर्मला कॉलेज में स्वच्छता पखवाड़ा

रांची. निर्मला कॉलेज एनएसएस इकाई एक, दो और तीन के संयुक्त तत्वावधान में स्वच्छता पखवाड़ा चलाया जा रहा है. सोमवार को सभी छात्राओं व शिक्षिकाओं ने स्वच्छता की शपथ ली. प्राचार्या डॉ सिस्टर ज्योति ने स्वच्छता का महत्व बताते हुए छात्राओं को जागरूक किया. उन्होंने कहा कि हम जहां भी रहते हैं, वहां स्वच्छता बनाये रखना हमारी नैतिक जिम्मेदारी है. डॉ सिस्टर सुषमा, डॉ रंजू कुमारी और डॉ मनीषा कुमारी ने हर वर्ष सौ घंटे या हर सप्ताह दो घंटे श्रमदान कर देश और समाज को स्वच्छ रखने का संकल्प दिलाया.

छात्राओं ने पेड़ों को बचाने का लिया संकल्प

रांची. निर्मला कॉलेज में एनएसएस की इकाई एक, दो व तीन द्वारा वन महोत्सव की शुरुआत की गयी. मंगलवार को छात्राओं को पेड़ों के महत्व के बारे में बताया गया. छात्राओं ने मानव श्रृंखला बना कर पौधरोपण किया व वृक्ष बचाने का संकल्प लिया. इस अवसर पर प्राचार्या डॉ सिस्टर ज्योति, एनएसएस कार्यक्रम पदाधिकारी डॉ सिस्टर सुषमा, डॉ रंजू कुमारी, मनीषा कुमारी व एनएसएस के वोलेंटियर्स मौजूद थे. महोत्सव का समापन 15 जुलाई को होगा.

र्मला कॉलेज की एनएसएस की तीनों ईकाइयों की ओर से आयोजित वन महोत्सव की शुरुआत मंगलवार को हुई। उद्घाटन सत्र छात्राओं को पर्यावरण संरक्षण के लिए पेड़ों के महत्व के बारे में बताया गया। मौके पर छात्राओं ने मानव श्रृंखला बनाकर पेड़ों ी बचाने का संकल्प लिया। कार्यक्रम कॉलेज के एनएसएस कार्यक्रम पदाधिकारी डॉ सिस्टर सुषमा, डॉ रंजू कुमारी व डॉ मनीषा मारी की देखरेख में संपन्न हुआ। महोत्सव का समापन 15 जुलाई को होगा। • हिन्दुस्तान

निर्मला कॉलेज में बुधवार को स्वच्छता अभियान चलातीं छात्राएं। • हिन्दुस्तान

निर्मला कॉलेज में चला स्वच्छता अभियान

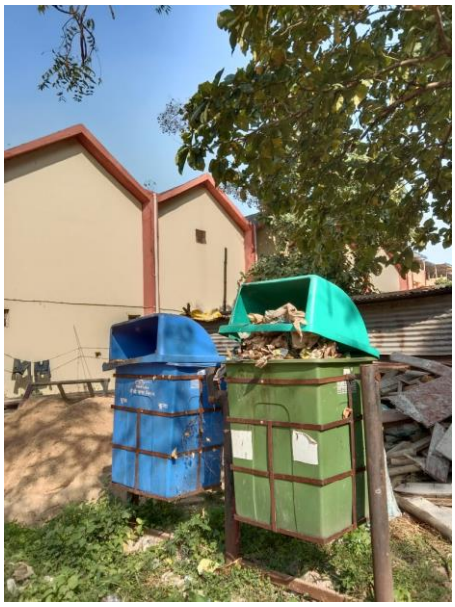
रांची। निर्मला कॉलेज की एनएसएस इकाई एक, दो और तीन की ओर से राष्ट्रीय स्वच्छता पखवाड़ा के तहत बुधवार को कॉलेज परिसर में स्वच्छता अभियान चलाया गया। एनएसएस स्वयंसेवकों ने कॉलेज परिसर की साफ-सफाई की। अभियान कॉलेज की एनएसएस कार्यक्रम पदाधिकारी डॉ सिस्टर सुषमा एक्का, डॉ रंजु कुमारी और डॉ मनीषा कुमारी की देखरेख में चला। छात्राओं का उत्साहवर्द्धन करने के लिए मौके पर प्राचार्या डॉ सिस्टर ज्योति मौजूद थीं।

निर्मला कॉलेज में पौधरोपण

रांची (प्र.सं.)। विश्व पर्यावरण दिवस पर बुधवार को निर्मला कॉलेज परिसर में पौधरोपण किया गया। शिक्षिकाओं और छात्राओं ने कॉलेज परिसर में अमलतास और खजूर के पौधे लगाए। मौके पर उप प्राचार्या सिस्टर शोभा, सिस्टर सुपीरियर लिडविन मेरी समेत सभी शिक्षिकाएं, कर्मचारी व बड़ी संख्या में छात्राएं मौजूद थीं। इस अवसर पर पौधे लगाने और उनका संरक्षण करने का संकल्प लिया गया।

AIR, WATER, SOLAR, DGS, GRABAGE, ETC

Silent and ECO DG sets



Dustbins at every checkpoints on Campus

RO Drinking water on Campus

Sanitary pad incinerator

Rain Water Harvesting Pipelines & recharge Pits

Ramps pathways for Divyangjan

Environmental Awareness Boards in most of the areas on campus

Table 6 - Water usage pattern in College

S.No.	Location	Fixtures	Quantity/No.	Type of the tap (plastic/brass etc)	Condition (poor moderate/ good)	Average number of people Usage per day	Average time per head per day	Average amount of water releasing per minute	Leaking or not	If leaking average amount of Water loss per minute
1	Academic Building									
		Wash basins tap	27	Brass	Good	2800-3000	6-8 min	7-8 lit/min	no	no
		Toilet tap	24	Brass	Good	2800-3000	8-10 min	6-7 lit /min	no	no
		Toilet flush	6	Brass	Good	20-25	2-4 min	3-5 lit/min	no	no
		Shower	no	no	No	no	no	no	no	no
		Hand faucet	1	Brass	Good	1	2-3 min	3-4 lit/min	no	no
		Others								
		Lab Wash basins tap	129	Brass	Good	300-400	1-2 hr	3-4 lit/min		
		Aqua guard	4	Brass	Good	2500-2700	2-4 min	3-4 lit/min		
2	Hostel									
		Kitchen taps	9	Brass	Good	350-400	7-8hr	7-8 lit/min	no	no
		Wash basins tap	74	Brass	Good	350-400	2-3 hr	6-7 lit/min	no	no
		Toilet tap	33	Brass	Good	350-400	30-40min	6-7 lit/min	no	no
		Toilet flush	4	Brass	Good	3-4	30-40min	3-5lit/min	no	no
		Shower	78	Brass	Good	350-400	30-50min	12 lit/min	no	no
		Hand faucet	0	Brass	Good	0	0	0	no	no
		Others								
		Hostel Garden					6-7hr	3-4 lit/min		
		Hand pump	2	In Case of Emergency						
		Well	1	In Case of Emergency						
3	Playground/ Garden/ Exterior	Gardening/ Irrigation Taps	1	Brass	Good		7-8hr	3-4 lit/min	no	no
		Students' Common Area Taps	6	Brass	Good	200-400	2-3min	3-4lit /min	no	no
		Others							no	no
		Toilet Tap	2	Brass	Good	200-300	2-3 min	6-7 lit/min		
		Washbasin	2	Brass	Good	200-300	2-3 min	7-8 lit/min		
4	Canteen	Kitchen taps	1	Brass	Good	900-1000	5-6 hrs	7-8 lit/min	no	no
		Wash basins tap	3	Brass	Good	900-1000	2-4 min	7-8 lit /min	no	no
		Others								
		Hand pump								

Table 7 - Consolidated statement of average daily water consumption

S.No.	Location	Fixtures	Measurement of Water use (per day)					
			Rate of Discharge (Litre/min)	Duration of use (minutes)	Average Quantity per use (Litre)	No. of uses	Total Daily use (Litres)	Per capita daily use (in litre)
1	Academic Building							
		Wash basins tap	7-8 lit/min	540min	2-3 lit	2800-3000	14000- 15000	4-6 lit
		Toilet tap	6-7 lit /min	540 min	3-4 lit	2800-3000	8000-9000	2-4 lit
		Toilet flush	3-5 lit/min	540 min	3-5 lit	50-70	400-500	6-10lit
		Shower	no	no	no	no	no	no
		Hand faucet	3-3 lit/min	360 min	1-2 lit	2-3	11-12	3-6 lit
		Others						
		Lab Wash basins tap	3-4 Lit/min	60-120 min	3-4 lit	300-400	2000-3000	6-8 lit
		Aqua guard	3-4 lit/min	540 min	1-2 lit	2500-2700	7000-8000	2-4 lit
2	Hostel	Kitchen taps	7-8 lit/min	480 min	5-8 lit	350-400	6000-7000	12-20lit
		Wash basins tap	6-7 lit/min	180 min	3-4 lit	350-400	5000-6000	12-16 lit
		Toilet tap	6-7 lit/min	180 min	3-5 lit	350-400	3000-4000	6-10lit
		Toilet flush	3-5lit/min	3-5 min	3-5 lit	3-4	56	12-20 lit
		Shower	12 lit/min	180min	50-60 lit	350-400	20000-22000	50-60lit
		Hand faucet	0		0	0	0	0
		Others						
		Hostel Garden	3-4 lit/min	360-420min	-	-	1300-1400	
		Hand pump	In case of emergency					-
		Well	In case of emergency					
3	Playground/ Garden/ Exterior	Gardening/ Irrigation Taps	3-4 lit/min	420-480min	-		1500-2000	-
		Students' Common Area Taps	3-4lit /min	540 min	2-3lit	100-200	700-800	4-6 lit
		Others						
		Toilet Tap	6-7 lit/min	360 min	3-4lit	200-300	1000	3-5 lit
		Wash basin tap	7-8 lit/min	360 min	2-3 lit	200-300	1000	3-5 lit
4	Canteen	Kitchen taps	7-8 lit/min	540 min	2-3 lit	900-1000	2000-3000	2-3 lit
		Wash basins tap	7-8 lit /min	480 min	2-3 lit	900-1000	2000-3000	2-3 lit
		Others						
		Hand pump	In case of Emergency					

Table 8 - Equipment/Instruments/Appliances usage pattern

S. NO	LOCATION	FANS				BULBS					EQUIPMENTS					WINDOW		SKY LIGHT		
		No	Power rating In Watts	Av. use, hr/day	Total In KW	Type CFL/BULB/TL/ LED	No	Power rating In watts	Av. Use hr/day	Total In KW	Name	No	Power rating In Watts	Av. Use hr/day	Total In KW	No	Size In cm	Dark	Average	Good
1	Rooms (33)	182	75	6	81.9	TL LED	105 15	40 20	6 6	25.2 1.8	PROJECTORS	05	600	1	3.0	108			Av	
2	Library (01)	12	75	5	4.5	TL CFL & LED	18 03	40 20	6 6	4.3 0.36	AC PC	01 13	900 200	3 5	2.7 13	20	164 x 100		Av	
3	Office (12)	16	75	6	7.2	TL	20	40	6	4.8	AC PC XEROX	01 13 02	2000 200 250	4 6 3	8.0 15.6 1.5	15				Good
4	Corridor (24)	-	-	-		CFL	75	20	6	9	-	-	-	-	-					Good
5	Toilets (25)	NIL	-	-		CFL	10	20	6	1.2	-	-	-	-	-	15	164 x100		Av	
6	Audi. (01)	17 Big 04 Ceiling 06 Small	100 75 45	1 1 1.5	1.7 0.3 0.4	LEDS TL FANCY MERCURY	62 09 13 15	20 40 150 1000	2 2 1.5 2	2.4 0.7 2.9 30	SPEAKERS	08	600	2	9.6	05 03 06	130 x 105 150x 105 150x 135			Good
7	Hostel	132	75	6	59.4	TLs	158	40	6	37.9	GEYSERS	02	2000	1	4.0	134	164x 100 cm		Av	
8	Entrance	-	-	-	-	LED	02	20	8	0.32	LED CCTV cam.	01 01	80 50	6 24	0.48 12.0					

S. NO	LOCATION	FANS				BULBS					EQUIPMENTS					WINDOW		SKY LIGHT		
		No	Power rating In Watts	Av. use, hr/day	Total In KW	Type CFL/BULB/ TL/LED	No	Power rating In watts	Av. Use hr/day	Total In KW	Name	No	Power rating In Watts	Av. Use hr/day	Total In KW	No	Size In cm	Dark	Average	Good
8.	Botany	12	75	6	5.4	TL	05	40	6	1.2	Printer Comp. Projec. Servo Refrig. Ac Incubator Autoclave Laminar Airflow	01 01 01 01 01 01 01 01 01	50 200 300 50 200 2000 300 3000 450	1 3 1 4 5 1 1 1 1	0.05 0.6 0.3 0.2 1.0 2.0 0.3 3.0 0,45	20	160 x 100 cm			Good
9.	Zoology	12	75	6	5.4	TL	05	40	6	1.2	Projector Comp. Refrig. Inverter Aquaguard Incubator Slide Warming Table Cyclo Mixer Digital Colorimeter Centrifuge	01 05 01 01 01 04 01 01 01 01	350 110 130 1000 45 300 200 100 200 100 120	1 3 5 3 6 2 2 2 2 2	0.35 1.6 0.65 3.0 0.3 2.4 0.4 0.2 0.4 0.2	22	160 x 100 cm			Good
10.	Physics	18	75	6	8.1	TL	16	40	2	1.2	Function Gener. Sodium lamp Mercury lamp Computer Projector Invertor Hotplate CRO Laser Devices Other ETB Boards	01 10 05 01 01 01 01 01 02 10	10 55 110 350 1000 500 40 80 20 10	1 2 1 2 3 3 1 1 1 1	0.01 1.1 0.6 0.7 3.0 1.5 0.04 0.08 0.04 0.01	18	160 x 100 cm			Good

11	**Chemistry**	06	75	6	2.7	TL BULBS	07 02	40 100	5	1.4	Oven Hot Plate Centrifuge Machine Conductivity Meter Projector Computer Electronic balance Distillation plant pH meter Printer	01 01 02 03 01 01 01 01 01 01	1000 500 100 110 100 350 10 1500 1.5 50	1 1 1 1 3 3 1 1 1 2	1.0 0.5 0.2 0.33 0.3 1.05 0,01 1.5 0,001 0.1					Good
12	**Geography**	07	75	6	3.1	TL	03	40	5	0.4	Printer Comp. Inverter Projector	01 01 01 01	50 350 500 1000	2 4 5 2	0.1 1.4 2.5 2.0					Good
13	**BCA**	07	75	4	2.1	TL CFL	02 01	40 12	4 4	0.3	AC Projector Computer UPS	02 01 25 02	2000 1000 350 420	1 2 4 4	4.0 2.0 35.0 3.6					Good
14	**IT**	06	75	6	2.7	TL CFL	02 01	40 12	3 3	0.2 0.3	Computer UPS Printer AC	25 02 01 02	350 420 50 2000	2 4 2 1	1.8 3.3 0.1 4.0				Average	
15	**FD**	06	75	4	1.8	TL	02	40	4	0.3	computer	01	350	3	1.05				Average	
16	**Psychology**	08	75	4	2.4	TL LED	02 01	40 20	4 4	0.3 0.08	Projector	01	1000	2	2.0				Average	
17	**Others:** **Seminar halls** **Water filters**	07			1.0	LED	50	20	4	4,0	Sound system Projectors Aquaguards	03 02 03	100 1000 43	4 2 7	1.2 4.0 0.9					

Table 9 - Outdoor lights usage pattern

S. No	Location	Light source				Other		
		Type	No.	Power	total	Type	Power	No
1.	**Front of college**	LEDs Vapour Lamps Colorful	04 05 04	40 600 20	0.16 3000 0.80			
2.	**Ground**	--------	-----					
3.	**Backyard**	Vapour Lamp LED	01 02	600 40	0.6 0.08			
4.	**OTHERS**	LED	02	40	0.08	Fan Pc Printer	75 350 110	01 02 01

Campus Noise Level measurement in decibel

Water Sample Report, Nirmala College, Ranchi

YUGANTAR BHARATI
ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

Accredited by: - NABL accredited testing laboratory vide certificate Number TC-4032
Jharkhand State Pollution Control Board (JSPCB)
Certified by : - ISO 9001:2015 & ISO 45001:2018

TC-4032

Test Certificate

ULR (Unique Lab Report) No.				T	C	4	0	3	2	2	2	0	0	0	0	0	1	8	9	5	F	

Discipline	Chemical	Group	Water	Sample Description	Drinking Water
Report Release Date		18th November, 2022		Report ID	YBAEEL-221116-145004-DW01
W. Order/ JSPCB App. No.		N/A		Work Order Date	N/A
Type of Industry(If any)		N/A		Job code/ Ref. no.	YBAEEL/WA/L/C/Nov.-22/07
Report Issue to		M/s Nirmala College Dorenda, Ranchi, Jharkhand.			
Sampling Date		16/11/2022		Mode of sample collection	By YBAEEL Team
Sampling Protocol		IS : 3025 (Part-1) 1987, R-2003		Sample Code	221116-DW-A01
Sampling Location		Borewell		Sampling Source	Drinking Water
Sample pkg. Condition		Sealed Pack in PP Bottle		Sample Quantity	3000 ml
Meteorological Cond. of Field		W.C.– Clear		RH % - 64	Temp. – 29°C
Sample receipt Date		16/11/2022	Analysis Started on	16/11/2022	Analysis completed on 18/11/2022

******Test Results ******

Sl	Parameter	Test Method	Units	MU %	Results	Limits
1.	pH value	IS 3025 (P-11):2002	pH	1.77	7.21	6.5-8.5
2.	Conductivity	IS 3025 (P-14):2013	µs/cm	1.90	590.0	--
3.	Total Alkalinity (as $CaCO_3$)	IS 3025 (P-23):2003	mg/l	3.68	150.0	200-600
4.	Total Hardness (as $CaCO_3$)	IS 3025 (P-21):2009	mg/l	1.35	298.0	200-600
5.	Total dissolved solids	IS 3025 (P-16):2006	mg/l	2.85	331.0	500-2000
6.	Chlorine Residual	IS 3025 (P-26):2003	mg/l	30.64	BDL (MDL 0.07)	0.2-1
7.	Chloride (as Cl^-)	IS 3025 (P-32):2003	mg/l	3.41	40.0	250-1000
8.	Nitrate (as NO_3^-)	APHA 4500 NO_3^- (B) 23rd edition 2017	mg/l	11.33	1.56	45-No relaxation

******End of Report******

Limit is specified as	IS 10500: 2021
Abbreviation	MDL : Minimum detection limit, BDL : Below detection limit,
Env. Condition of Lab	Laboratory is maintaining, Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196:1966 (C).
Specific contractual notes	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility
	This report, in full or in part, shall not be used for advertising or as evidence in any court of law.
	This report cannot be reproduced, except when in full, without the written permission of the CEO.
	The samples collected shall be destroyed after 15 days from the date of issue of the certificate unless specified otherwise
	The liability of the laboratory is limited to the invoiced amount.
	All disputes are subjected to the Ranchi Jurisdiction.
Remarks	Sample complies with prescribed limits.

Sample Drawn By – Mukesh Kumar
Tested By – Satyam Kumar (Lab Analyst)

18.11.2022	18/11/22
Verified by	Issued by
Shivani Kumari Singh	Umesh Das
Authorized Signatory	Authorized Signatory

Authorized Signatory
Chemical Engineer
Yugantar Bharati Analytical & Environmental Engineering Laboratory

State Pollution Control Board

Branch Office : - Jamshedpur | Dhanbad | Hazaribag | Pakur

Main Office : Namkum Post Office, Sidroul, Ranchi - 834010, Jharkhand
Ph : 098351-97960, 098357-86677, Email - ybaeel@gmail.com, Web - https://ybaeel.in

ISO 9001:2015
ISO 45001:2018

YUGANTAR BHARATI
ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

Accredited by - Jharkhand State Pollution Control Board (JSPCB)
Certified by : - An ISO 9001:2015 & ISO 45001:2018

State Pollution Control Board

Test Certificate

Discipline	Chemical	Group	Water	Sample Description	Drinking Water
Report Release Date		18th November, 2022		Report ID	YBAEEL-221116-145004-DW01
W. Order/ JSPCB App. No.		N/A		Work Order Date	N/A
Type of Industry(If any)		N/A		Job code/ Ref. no.	YBAEEL/WA/L/C/Nov.-22/07
Report Issue to		M/s Nirmala College Dorenda, Ranchi, Jharkhand.			
Sampling Date		16/11/2022		Mode of sample collection	By YBAEEL Team
Sampling Protocol		IS : 3025 (Part-1) 1987, R-2003		Sample Code	221116-DW-A01
Sampling Location		Borewell		Sampling Source	Drinking Water
Sample pkg. Condition		Sealed Pack in PP Bottle		Sample Quantity	3000 ml
Meteorological Cond. of Field		W.C.– Clear		RH % - 64	Temp. – 29°C
Sample receipt Date		16/11/2022	Analysis Started on	16/11/2022	Analysis completed on 18/11/2022

******Test Results ******

Sl	Parameter	Test Method	Units	MU %	Results	Limits
1.	Taste	IS 3025 (P-07):2002	--	--	Agree.	Agreeable
2.	Phosphate (as PO_4^{3-})	IS 3025 (P-31):2003	mg/l		BDL (MDL 0.003)	--

******End of Report******

Limit is specified as	IS 10500: 2021
Abbreviation	MDL : Minimum detection limit, BDL : Below detection limit.
Env. Condition of Lab	Laboratory is maintaining, Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196:1966 (C).
Specific contractual notes	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility
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	The samples collected shall be destroyed after 15 days from the date of issue of the certificate unless specified otherwise.
	The liability of the laboratory is limited to the invoiced amount.
	All disputes are subjected to the Ranchi Jurisdiction.
Remarks	Sample complies with prescribed limits.

Sample Drawn By – Mukesh Kumar
Tested By – Satyam Kumar (Lab Analyst)

18.11.2022	18/11/22
Verified by	Issued by
Shivani Kumari Singh	Umesh Das
Authorized Signatory	Authorized Signatory

Authorized Signatory
Chemical Section
Yugantar Bharati Analytical & Environmental Engineering Laboratory

ISO 45001:2018

Branch Office : - Jamshedpur | Dhanbad | Hazaribag | Pakur
Main Office : Namkum Post Office, Sidroul, Ranchi - 834010, Jharkhand
Ph : 098351-97960, 098357-86677, Email - ybaeel@gmail.com, Web - https://ybaeel.in

ISO 9001:2015

YUGANTAR BHARATI

ANALYTICAL & ENVIRONMENTAL ENGINEERING LABORATORY

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Certified by : - Jharkhand State Pollution Control Board (JSPCB)
ISO 9001:2015 & ISO 45001:2018

TC-4032

Test Certificate

ULR (Unique Lab Report) No.						T	C	4	0	3	2	2	2	0	0	0	0	1	9	0	1	F

Discipline	Biological	Group	Water	Sample Description	Drinking Water
Report Release Date		19th November, 2022		Report ID	YBAEEL-221116-145004-DW01
W. Order/ JSPCB App. No.		N/A		Work Order Date	N/A
Type of Industry(If any)		N/A		Job code/ Ref. no.	YBAEEL/WA/L/M/Nov-22/05
Report Issue to		M/s Nirmala College Dorenda, Ranchi, Jharkhand.			

Sampling Date	16/11/2022			Mode of sample collection	By YBAEEL Team		
Sampling Protocol	IS : 1622:1982, R - 2019			Sample Code	221116-DW-A01		
Sampling Location	Borewell			Sampling Source	Drinking Water		
Sample pkg. Condition	Sealed Pack in PP Bottle			Sample Quantity	250 ml		
Meteorological Cond. of Field	W.C.– Clear		RH % - 64		Temp. – 29°C		
Sample receipt Date	16/11/2022	Analysis Started on	16/11/2022	Analysis completed on		19/11/2022	

******Test Results ******

Sl	Parameter	Test Method	Units	Results	Limits
1.	Total coliform	APHA 9221B 23rd Edition 2017	MPN/100 ml	> 8.0	Shall not to be Detectable in any 100 ml sample
2.	Fecal coliform	APHA 9221E 23rd Edition 2017	MPN/100 ml	> 8.0	

******End of Report******

Limit is specified as	IS 10500: 2012
Abbreviation	MDL : Minimum detection limit. BDL : Below detection limit, <1.8 / < 1.1 MPN/100 ml denotes that the presence probability of bacteria is absent in the tested sample.
Env. Condition of Lab	Laboratory is maintaining, Temperature 27 ± 2°C and Relative Humidity 65 ± 5% in all testing areas as per IS 196:1966 (C).
Specific contractual notes	All values are expressed in as unit and results listed refer only to the tested sample and applicable parameter in Lab's Permanent Facility
	This report, in full or in part, shall not be used for advertising or as evidence in any court of law.
	This report cannot be reproduced, except when in full, without the written permission of the CEO
	The samples collected shall be destroyed after 7 days from the date of issue of the certificate unless specified otherwise
	The liability of the laboratory is limited to the invoiced amount
	All disputes are subjected to the Ranchi Jurisdiction.
Remarks	Sample non-compliance with prescribed limit. (water should not be used for drinking purpose)

Sample Drawn By – Pawan Kumar

Tested by	Verified & Issued by
Madhuri Sinha	Mukesh Kumar
(Lab Analyst)	Authorized Signatory

Authorized Signatory
Microbiological Section
Yugantar Bharati Analytical & Environmental Engineering Laboratory

State Pollution Control Board

Branch Office : - Jamshedpur | Dhanbad | Hazanbag | Pakur

Main Office : Namkum Post Office, Sidroul, Ranchi - 834010, Jharkhand
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ISO 9001:2015
ISO 45001:2018

Water Sample Report, Nirmala College, Ranchi

ISO 9001 / 17020 Certificate of Abhinav Gram Foundation, Ranchi

QRO
QUALITY RESEARCH ORGANIZATION

Certificate of Registration

This is to certify that

ABHINAV GRAM FOUNDATION

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JHARKHAND, INDIA

has been independently assessed by QRO
and is compliant with the requirement of:

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For the following scope of activities:

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Date of Certification: 1st July 2022
1st Surveillance Audit Due: 30th June 2023
2nd Surveillance Audit Due: 30th June 2024
Certificate Expiry: 30th June 2025

Certificate Number: 305022070241Q

QRO QUALITY RESEARCH ORGANIZATION
EGAC CAB # 119005
MEMBER OF MULTILATERAL RECOGNITION ARRANGEMENT IAF

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Certification & Inspection

Certificate of Registration

This is to certify that the

Requirements for performing inspection

of

ABHINAV GRAM FOUNDATION

at

265- C, ROAD NO. 1 B, ASHOKNAGAR, RANCHI,
PIN- 834002 JHARKHAND, INDIA

has been independently assessed and
is compliant with the requirements of:

ISO/IEC 17020:2012

For the following scope of activities:

DEVELOPMENT AND SOCIAL SERVICES, ENVIRONMENT /GREEN AUDIT OF INSTITUTIONS OF HIGHER EDUCATION, ENVIRONMENTAL IMPACT ASSESSMENT (EIA), ENVIRONMENTAL MANAGEMENT SYSTEMS (EMS)

Certificate Number: UQ - 2022070182

Validity of this certificate can be verified at www.ukcertifications.org.uk/verify

Date of Certification	1st July 2022
1st Surveillance Audit Due	30th June 2023
2nd Surveillance Audit Due	30th June 2024
Certificate Expiry	30th June 2025

Authorised Signatory

UKAF

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at 6.30 Pm **at 9.30 Pm**

Ambient Air Quality, Van Bhawan, near Nirmala College on 18.11.22

Tree Plantation by NSS Wing on College Campus


let's Save
the World


thanks!