

# GREEN AUDIT

2019-20 & 2020-21

## AUDIT REPORT

Studied for

**Rama University**

Rama City, G.T. Road Mandhana, Kanpur,  
Uttar Pradesh, Pin- 209217

Analysed by



**11 March 2022**



## Disclaimer

The Audit Team has prepared this report for the **Rama University** located at Rama City, GT Road Mandhana, Kanpur, Uttar Pradesh, Pin- 209217 based on input data submitted by the University analysed by the team to the best of their abilities.

The details have been consolidated and thoroughly studied as per the various guidelines for Green Buildings available in National and International Standards; the report has been generated based on comparative analysis of the existing facilities and the prerequisites formulated by various standards. The inputs derived are a result of the inspection and research. These will further enhance and develop a Healthy and Sustainable Institution.

These can be implemented phase wise or as a whole depending on the decision taken by the Hon'ble Management and University. The warranty or undertaking, expressed 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.

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The Report is prepared by the Team of Greenvio Solutions under their brand and department – Sustainable Academe as Consultancy firm with the Project Head - Ar. Nahida Shaikh who has completed audits of multiple Institutes including Technical, State University, Private University and Single Faculty Universities for a total of more than 50 lakhs+ sq. ft. of Built-up area audited till date Pan India as an Accredited and Certified Green Building Professional-Architect. Green Building consultancy is her forte and she is one of the most sought after names when it comes to providing excellent quality services within the stipulated time frame.

The Study is conducted in capacity of Accredited & Certified Green Building Professional with extensive experience.

### Greenvio Solutions

*Developing Healthy and Sustainable Environments*

We are an Environmental and Architectural Design Consultancy firm

Sustainable Academe is our department for conducting Audits

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### Sustainable Academe

Brand of Greenvio Solutions, Palghar District, Maharashtra- 401208

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Hereby presents

# An Environment & Ecological friendly premise

Established as a State Private University at Kanpur  
vide U.P. Act No. 1 of 2014 as passed by the State Legislature

The prestigious

## Rama University

Rama City, G.T. Road Mandhana, Kanpur, Uttar Pradesh, Pin- 209217





## Best features of the University as per our study



**1. Solar generation**  
Installation of Solar panels



**2. Waste water recycling**  
In-house system designed



**3. Amenities**  
Provision for parking & E-vehicles



**12. Residential facility**  
Provided for staff and students



**4. Natural manure**  
Prepared in premise and used



**11. Natural water is harvested**  
Borewell system



## An Environment and Ecological friendly premise



**5. Waste segregation**  
Practiced at the source



**10. Community development**  
Adopted 5 villages in UBA



**6. Pollution free environment**  
No smell or smoke



**9. Mobility**  
90 buses free of cost for students



**8. Universal design**  
Ramps, Universal toilet, 100% lifts



**7. Clean and hygienic premise**  
Regular maintenance

# 1. Introduction

## 1.1 About Rama University

An educational institute is beyond than being just a building. It helps one in acquiring knowledge which is a gateway to being successful and a good human.

*“A good education is the best gift you can give yourself or anyone else”*

- Mahtab Narsimhan

Rama University is the one of the best private universities in the state of Uttar Pradesh, India; started in the year 2014 by the founder **Late Dr. Babu Singh Kushwah, a great visionary, a dentist, an educationist and the guiding force behind the Rama Group with a motto “Healthy people build healthy nation and education is an important tool in transforming the society”.**

Following the directions of the founder, Rama Group has evolved as a multi-activity and multi-industry group that actively participates in many major contributions to our society. It strongly believes in creating responsible citizens out of its students and hence works with a 360 degree approach towards the all-round development of the students. In this effort, the group provides adequate opportunities to its students to gain both the theoretical and the practical hands on knowledge by way of providing training and work exposure within the Group companies.

*“There is no school equal to a decent home and no teacher equal to a virtuous parent.”*

- Mahatma Gandhi

The University offers undergraduate, post-graduate courses, research programmes. It has full-fledged infrastructure, advanced academic programs and efficient administrative hierarchy. **It is one of the premier Educational University providing quality education with best state of the art facility and Infrastructure to the students.**

## 1.2 Vision and Mission Statement of University

### 1.2.1 Vision towards the future

To emerge as a Global Premier University in imparting education of international standards, to build superior professionals with strong work ethics and to empower the world with futuristic minds, through excellence in research and innovation.

### 1.2.2 Mission for achieving benchmarks

- To promote national and international collaboration for industry academia integration to achieve top most position in global hierarchy.
- To create a scientific, challenging, transparent and sustainable environment/curriculum ideal for research, innovation, entrepreneurship and consultancy.
- To nurture talent and creativity, committed to serve people, society and nation at large.
- To inculcate strong morals, values & ethics to build socially committed and spiritually inspired personalities.
- To empower and uplift each section of society through education and to contribute back to the environment by adapting and promoting eco-friendly practices.

### 1.2.3 Aim for community development through goals

University have set ten Broad Based Goals for 2015-19

1. Ensuring Educational Excellence
2. Ensuring Student Development including physical and emotional health and wellbeing.
3. Creating culture of excellence in Research, Scholarship, Innovation and Creativity for high impact.
4. Enhancement of quality of faculty and staff for outstanding performance.
5. Advancing internationalization.
6. Enhancing relations with industry, alumni and society.



7. Enhancing employability and promote entrepreneurial initiatives.
8. Committing to all aspects of social, economic and environmental sustainability.
9. Enhancement of supporting resources.
10. Ensuring excellence in Organizational Leadership and governance.

#### 1.2.4 Objective defining the educational purpose

- The objectives of the University are to disseminate and advance knowledge by providing instructional, research and extension facilities in such branches of learning as it may deem fit.
- The University endeavours to provide students and teachers the conducive atmosphere and facilities and infrastructure for the promotion of :
  - a) *Innovations in education leading to restructuring of courses, new methods of teaching and learning and integral development of personality*
  - b) *Studies in established and new disciplines.*
  - c) *Inter-disciplinary studies*
  - d) *National integration, secularism, international understanding and ethics.*

### 1.3 Institutions in the premises

The aim of the University is to continuously enhance the teaching methods in order to provide students with an opportunity for their all-round development. In order to manage the programme offerings in a much better way, Rama University has **structured its offerings under 11 Major Sections** as follows:

- 1. Faculty of Agricultural Sciences and Allied Industries**
- 2. Faculty of Ayurveda**
- 3. Faculty of Commerce and Management**
- 4. Faculty of Dental Sciences**
- 5. Faculty of Engineering and Technology**
- 6. Faculty of Juridical Sciences**
- 7. Faculty of Medical Sciences**

8. Faculty of Nursing
9. Faculty of Paramedical Sciences
10. Faculty of Pharmaceutical Sciences
11. Faculty of Professional Studies

Each of these Schools is headed by highly experienced and competent Director/Deans along with H.O.Ds checking on the right academic progress of each faculty/department in the University. The University strives for excellence in academics and makes an effort to induce passion for learning along with the inspiration for decisive thinking and assessment, thereby helping them to become the best professionals in their chosen careers.

## 1.4 Programs offered by the University

The University a wide range of courses for the students to upgrade their educational qualification. The details of each of these courses as per the School are as follows.

S. No.	School	Course offered
1.	Faculty of Medical Sciences	<u>1.1. MBBS</u> <u>1.2. MD(Anatomy)</u> <u>1.3. MD(Physiology)</u> <u>1.4. MD(Biochemistry)</u> <u>1.5. MD(Pathology)</u> <u>1.6. MD(Community Medicine)</u> <u>1.7. MD(Pharmacology)</u> <u>1.8. MD(Microbiology)</u> <u>1.9. MSc(Medical Microbiology)</u> <u>1.10. MSc(Medical Anatomy)</u> <u>1.11. MSc(Medical Physiology)</u> <u>1.12. MSc(Medical Pharmacology)</u> <u>1.13. MSc(Medical Biochemistry)</u> <u>1.14. PhD (Medical Anatomy)</u> <u>1.15. PhD (Medical Physiology)</u> <u>1.16. PhD (Biochemistry)</u> <u>1.17. PhD (Medical Pharmacology)</u> <u>1.18. PhD (Medical Microbiology)</u> <u>1.19. PhD (Medical Community Medicine)</u> <u>1.20. PhD (Forensic Medicine)</u> <u>1.21. PhD (Bio. Statistics)</u>
2.	Faculty of Dental	<u>2.1. BDS</u>

	Sciences	<u>2.2. MDS(Oral Medicine and Radiology)</u> <u>2.3. MDS(Prosthodontics and Crown and Bridge)</u> <u>2.4. MDS(Orthodontics and Dentofacial Orthopedics)</u> <u>2.5. MDS(Oral and Maxillofacial Surgery)</u> <u>2.6. MDS(Periodontology)</u> <u>2.7. MDS(Pediatric and Preventive Dentistry)</u> <u>2.8. MDS(Conservative Dentistry and Endodontics)</u> <u>2.9. MDS(Public Health Dentistry)</u> <u>2.10. MDS(Oral Pathology and Microbiology)</u> <u>2.11. PhD (Oral Medicine and Radiology)</u> <u>2.12. PhD (Prosthodontics and Crown and Bridge)</u> <u>2.13. PhD (Oral and Maxillofacial Surgery)</u> <u>2.14. PhD (Periodontology)</u> <u>2.15. PhD (Conservative Dentistry and Endodontics)</u>
<b>3.</b>	Faculty of Nursing	<u>3.1. BSc Nursing</u> <u>3.2. BSc(Post Basic Nursing)</u> <u>3.3. MSc(Medical Surgical Nursing)</u> <u>3.4. MSc(Obstetrics and Gynecology Nursing)</u> <u>3.5. MSc(Psychiatric Nursing)</u> <u>3.6. MSc(Community Health Nursing)</u> <u>3.7. MSc(Child Health Nursing)</u>
<b>4.</b>	Faculty of Paramedical Science	<u>4.1. BPT</u> <u>4.2. BSc(Medical Lab Technology)</u> <u>4.3. BSc(Optomety)</u>
<b>5.</b>	Faculty of Engineering and Technology	<u>5.1. BTech(Mechanical Engineering)</u> <u>5.2. BTech(Electronics &amp; Communication Engineering)</u> <u>5.3. BTech(Computer Science and Engineering)</u> <u>5.4. BTech(Civil Engineering)</u> <u>5.5. BTech(Biotechnology)</u> <u>5.6. BTech(Agricultural Engineering)</u> <u>5.7. Mtech(Electrical Engineering Power Electronics and Power System)</u> <u>5.8. Mtech(Mechanical Engineering CAD CAM)</u> <u>5.9. Mtech(Microelectronics and VLSI Design)</u> <u>5.10. Mtech(Computer Science and Engineering)</u> <u>5.11. Mtech(Civil Engineering Structure Engineering)</u> <u>5.12. Mtech(Biotechnology)</u> <u>5.13. PhD (Electrical Engineering)</u> <u>5.14. PhD (Electronics and Communication Engineering)</u>



		<u>5.15. PhD (Computer Science and Engineering)</u> <u>5.16. BCA</u> <u>5.17. PhD (Environmental Chemistry)</u> <u>5.18. PhD (Applied Physics)</u> <u>5.19. PhD (Applied Mathematics)</u> <u>5.20. BSc(Biotechnology)</u> <u>5.21. MSc(Biotechnology)</u> <u>5.22. PhD (Biotechnology)</u>
<b>6.</b>	Faculty of Commerce & Management	<u>6.1. BBA</u> <u>6.2. BCom</u> <u>6.3. MBA(Dual Specialisation)</u> <u>6.4. PhD (Commerce)</u> <u>6.5. PhD (Management)</u>
<b>7.</b>	Faculty of Professional Studies	<u>7.1. BA(Journalism and Mass Communication)</u> <u>7.2. MA(Journalism and Mass Communication)</u> <u>7.3. PG Diploma(Journalism and Mass Communication)</u> <u>7.4. PhD (Journalism and Mass Communication)</u>
<b>8.</b>	Faculty of Agricultural Sciences and Allied Industries	<u>8.1. BSc(Agriculture)</u> <u>8.2. MSc(Agriculture)(Agronomy)</u> <u>8.3. MSc(Agriculture)(Horticulture)</u> <u>8.4. MSc(Agriculture)(Genetics and Plant Breeding)</u> <u>8.5. MSc(Agriculture)(Plant Pathology)</u> <u>8.6. MSc(Agriculture)(Soil Science)</u> <u>8.7. PhD (Horticulture)</u> <u>8.8. PhD (Plant Pathology)</u> <u>8.9. PhD (Agriculture)</u> <u>8.10. PhD (Agronomy)</u>
<b>9.</b>	Faculty of Juridical Science	<u>9.1. LLB</u> <u>9.2. BA LLB</u> <u>9.3. BBA(LLB)</u> <u>9.4. PhD (Law)</u> <u>9.5. LLM(Criminal and Security Law)</u> <u>9.6. LLM(Constitutional and Administrative Law)</u> <u>9.7. LLM(Business and Corporate Law)</u>
<b>10.</b>	Faculty of Pharmaceutical Sciences	<u>10.1. BPharm</u>

**Table 1: Details of the various courses offered by each faculty of Rama University, Uttar Pradesh**

## 1.5 Assessment of the University

### 1.5.1 Establishment and Affiliation

Rama University, Uttar Pradesh, has been established as a State University at Kanpur vide U.P. Act No. 1 of 2014 as passed by the State Legislature and is empowered to give degrees as specified by UGC under section 22 of the UGC Act 1956 through its main campus with the approval of Statutory Councils, wherever required. (Reference No. : 1-2014-15(63)/2005 dated 24.01.2014)

### 1.5.2 Approvals

The University is approved University Grant Commission (UGC).

### 1.5.3 Accreditation

**NAAC** - Rama Dental College (presently, the Faculty of Dental Sciences of Rama University) has been accredited with NAAC on 05 May 2014. *The University as a single entity is due to enter its First cycle of NAAC soon.*

### 1.5.4 Recognitions

The University has achieved the following recognitions:

- **University Grant Commission (UGC)** - Rama University under section 2 (f) of the UGC Act, 1956 vide by University Grants Commission, New Delhi.
- **Dental Council of India (DCI)** - Rama Dental College has been established in year 1996 and recognized by Dental Council of India for BDS and MDS courses. (Reference No.: UG [V-12017/21/95-PMS (Vol.VII)] and PG [V-12017/44/2003-DE (Vol. VI)])
- **Indian Nursing Council (INC)** - Nursing Council of India, after visiting and inspecting the medical as well as academic infrastructure and facilities and reviewing the history of successfully releasing qualified batch of nursing students, has recognized the Nursing College and permitted the University to award degrees to Nursing students. (Reference No: 386/71-3-08-N-5/08 and Date of Approval: Jan 31, 2008)

- **Medical Council Of India (MCI)** - On recommendation of MCI, Rama Medical College Kanpur, has been recognized by MOHFW, Govt. of India under the notification no. MCI-34(41)/2013-Med./19815
- **BAR Council Of India (BCI)** - The University has also been recognized by Bar Council of India to offer LLB (3 Years), BA LLB (Five Years) & BBA LLB (Five Years) courses since 2015 vide notification no. BCI: D: 2162/ 2015 (LE) dated 2.11.15.
- **DSIR-SIRO** – The University has been recognised as a Scientific and Industrial Research Organisation (SIRO) by the Dept. of Scientific and Industrial Research under the scheme on recognition of Scientific and Industrial Research Organisation (SIROs), 1988.
- **AICTE** - The University is approved by All India Council for Technical Education (AICTE), New Delhi.

### 1.5.5 Certification

**ISO** - The University received ISO 9001:2015 (QMS) Certification for providing Educational Services by M/s Accredium Certifications Pvt. Ltd. since 2018.

## 1.6 Achievements of the University

The University has a tremendous track record of excellence in Built form and educational services provided, below are some of the achievements of the prestigious Institute.

Year of Award	Title of the innovation	Name of the Awardee	Name of the Awarding Agency
2015	Management of acute lymphoblastic leukemia in childhood	Dr. Nilam Nigam	CSJM university Kanpur
2017	Awarded second prize for Scientific paper presentation	Dr Vishal Mehrotra	Indian Academy of Oral Medicine and Radiology, VI National Triple O Symposium
2018	"Acclaimed Educator .	Dr Aftab Alam	MontanaUSA



<b>2018</b>	"BEST EDITOR" of International Journal of Contemporary Medicine, Surgery And Radiology	Dr. Rahul Srivastava	International Society for Holistic Dentistry (ISfHD) and International Society for Contemporary Medical Research (ISfCMR).
<b>2018</b>	Basics of medical education	Dr. Nilam Nigam	rama medical college hospital & research centre
<b>2018</b>	Best Postgraduate Student of the Year (Public Health Dentistry)	Dr. Devina Pradhan	International Dental Excellence Awards' Mumbai
<b>2018</b>	Best Professor Award in Services Marketing and Management	Dr Aftab Alam	ICBM Hyderabad
<b>2018</b>	Distinguished Academic Achievements in Dentistry	Dr. Janardhana Amaranath Bj	Bapuji Dental College and Hospital, Davengere, Rajiv Gandhi University of Health Sciences
<b>2018</b>	Distinguished Teacher in Management.	Dr Aftab Alam	MTC Global Bangalore
<b>2018</b>	International Exemplary Research and Performance Awards for "Best Editor"	Dr. Rahul Srivastava	International Society for Holistic Dentistry (ISfHD) and International Society for Contemporary Medical Research (ISfCMR).
<b>2019</b>	Best Model Polling Booth Award by National Election commission	Mis. Anjali Dixit	Loksabha Election Certificate
<b>2019</b>	Best Rural Dentist of the Year	Dr. Devina Pradhan	Indian Association of Dental Students
<b>2019</b>	Calcifying epithelial odontogenic tumor in a child patient a rare case report	Dr. Rahul Katyayan	International maxillofacial summit craniofacial surgery and oncology. Kanpur
<b>2019</b>	Dental website of the year. www.vivavoceoralmedici	Dr. Rahul Srivastava	International Society for Holistic Dentistry (ISfHD) and International Society for Contemporary Medical Research (ISfCMR).

	neradiology.com		
<b>2019</b>	Drug induced parkinsonism	Dr. Nilam Nigam	Govt. Medical college kannauj
<b>2019</b>	Excellence in Oral Health/ Oral Hygiene Awareness	Dr. Devina Pradhan	International Society for Holistic Dentistry (ISfHD) and International Society for Contemporary Medical Research (ISfCMR).
<b>2019</b>	Excellence in Public Health Dentistry	Dr. Devina Pradhan	International Society for Holistic Dentistry (ISfHD) and International Society for Contemporary Medical Research (ISfCMR).
<b>2019</b>	MTC Global Award	Dr. Suraj Kushwah	MTC Global Award Global outstanding contribution to education award
<b>2020</b>	Academic Excellence Award	Dr. Devina Pradhan	International Accurate Certification
<b>2020</b>	Boived Best Teacher Award 2020	Dr. Aneeta Yadav	National conference organized by BRIATS, Allahabad & Rama University Kanpur
<b>2020</b>	Contribution to education community	Dr. Rahul Srivastava	Asian eduction awards
<b>2020</b>	Excellence in Dentistry	Dr. Karuna Sharma	Online Dentistry
<b>2020</b>	Rational use of antimicrobials	Dr. Nilam Nigam	Hamdard institute of medical sciences & research hamdard nagar new delhi
<b>2020</b>	Research excellence award	Dr. Rahul Srivastava	Institute of Scholars, Bangalore Institute of Scholars, Department of Awards, #1338, 2nd Cross, 7th Block Sir M V Layout, Muddhinapalya Bengaluru-560091, Karnataka, India
<b>2020</b>	Research excellence award 2020	Dr. Rahul Srivastava	Institute of Scholars, Bangalore Institute of Scholars, Department of Awards, #1338, 2nd Cross, 7th Block Sir M V Layout, Muddhinapalya Bengaluru560091, Karnataka, India
<b>2020</b>	Young Researcher in oral	Dr. Rahul	Global Outreach Medical & Health

	medicine and radiology	Srivastava	Association <a href="http://www.gomha.org/">http://www.gomha.org/</a>
<b>2020</b>	Young Researcher in Public Health Dentistry	Dr. Devina Pradhan	Global Outreach Medical & Health Association
<b>2020</b>	Young Researcher in Public Health Dentistry	Dr. Rahul Srivastava	Global Outreach Medical & Health Association <a href="http://www.gomha.org/">http://www.gomha.org/</a>
<b>2020</b>	Bioved Ratan	Dr. Suraj Kushwah	Bioved Ratan Awarded From Bioved Research Institute Of Agriculture Technology Of Science. Prayagraj
<b>2017</b>	Awarded second prize for Scientific paper presentation	Dr Vishal Mehrotra	Indian Academy of Oral Medicine and Radiology, VI National Triple O Symposium

*Table 2: Details of the awards*

## 1.7 MoU's and Collaborations

The University has teamed up with the following Organizations for a smooth and efficient functioning.

- Regional Food Research and Analysis Center, Lucknow, Ministry of Horticulture and food Processing Govt. of U. P.
- Tribhuvan University
- VNurt Technology Solution Pvt. Ltd.
- Favoriot
- International Institute of Goat Management
- Red Hat India Private, Mumbai
- GLA University Mathura
- ICAR-CSSRI, Karnal/RSS, Lucknow
- National Institute of Informatics, Tokyo, Japan
- Foundation for Innovation & Research in Science & Technology, IIT Kanpur
- ICAR-Central Institute for Subtropical Horticulture, Lucknow
- ICAR-Indian Institute of Pulses Research, Kanpur



- National AIDS Control Organization, Government of India
- Paliwal Diagnostics Private Limited
- Gian Life Care Ltd.
- Willworld Environmental
- Computer Society of India
- Center for Research and Development
- Vraddhi Organic Agro India Private Limited Vrindavan Mathura
- Alloix Technical Education LLP, Kanpur
- ICTC-UP SACS
- Saraswati Medical College

## 2. Institution overview

### 2.1 Populace analysis for Academic year 2019-20

#### 2.1.1 Students data

The student data (shared by the University) shows there were a total of **2,363 Boys and 1,866 Girls** students thus **a total of 4,584 students** in the premises.

#### 2.1.2 Staff data

Type	Male	Female	Total
<b>Admin Staff</b>	180	80	<b>260</b>
<b>Teaching Staff</b>	313	206	<b>519</b>
<b>Non-Teaching Staff</b>	890	145	<b>1,035</b>
<b>Total Staff Members</b>	<b>1,383</b>	<b>431</b>	<b>1,814</b>

*Table 3: Staff data of the Institution for 2019-20*

The staff data shows the premises had a total of **1,814** Staff Members.

### 2.2 Populace analysis for Academic year 2020-21

#### 2.2.1 Students data

The student data (shared by the University) shows there were a total of **2,752 Boys and 1,866 Girls** students thus **a total of 4,618 students** in the premises.

#### 2.2.2 Staff data

Type	Male	Female	Total
<b>Admin Staff</b>	180	84	<b>264</b>
<b>Teaching Staff</b>	320	212	<b>532</b>
<b>Non-Teaching Staff</b>	895	150	<b>1,045</b>
<b>Total Staff Members</b>	<b>1,395</b>	<b>446</b>	<b>1,841</b>

*Table 4: Staff data of the Institution for 2020-21*

The staff data shows the premises had a total of **1,841** Staff Members.

## 2.3 Total University Area & Building Spread Area

The **total site area is 84.99 Acres** and the **total Built-up area of University is 3,26,523 sq. ft.** for a total of **6,459 footfalls.**

## 2.4 University Infrastructure

The Buildings are made of Reinforced Cement Concrete (RCC) framework. These are equipped with modern amenities. It facilitates the students with a good environment for studies and stays true to its aim of providing Holistic development. The Residential and Academic buildings amalgamate smoothly with the open space in order to stand out as one of the most premier Institutes in the country.

**Overall the Infrastructure of the Building is excellent in terms of the Architecture Design and Green Building Design. The Premises covers most of the requirements for a Green Habitat. It continues to upgrade itself in terms of the facilities and makes sure that there is no compromise on the quality of services towards Building requirements. The cooperative teamwork and the leadership of the Hon'ble dignitaries are one of the main reasons for achieving success in providing quality education with an advanced and up-to date premises.**

### 2.4.1 Spatial Organisation

#### 2.4.1.1 Architectural Design

The overall ambience of the University is warm and inviting. The courtyards, educational spaces, learning spaces, residential spaces and recreational spaces have ample natural ventilation in the form of clear glass windows with fresh air ventilation. The architecture of the buildings are quite well designed. The colour palette not just helps the buildings to stand out as per respective typology of the Building be it Educational or Residential but also provides an Institutional arena. There are provisions for lifts, CCTV, Fire extinguishers, first aid box and much more.

#### 2.4.1.2 Landscape design

The built-form balances with the local architecture and amalgamates very well with the natural landscapes in form of open ground, designed landscape spaces, streetscape elements such grounds, designed gardens, greenhouse, botanical gardens and huge



trees all around. There are provisions for ramps, open ground, courtyards, designated landscape areas, signages, Utility Boxes, Parking, Sidewalk Furniture and Utility Poles.

### 2.4.2 Building and Block wise details

The Building & Block wise details on the Rama University premises are mentioned below:

S. No.	Branch name	Floor
1	Faculty of pharmaceutical sciences	G+4
2	Faculty of Agricultural Sciences & Allied Industries	G+3
3	Vice Chancellor Building	G+3
4	Faculty of Ayurvedic Medical Sciences	G+2
5	Faculty of Nursing	B+G+3
6	Rama Hospital	B+G+3
7	Faculty of Medical Sciences	G+3
8	Faculty of Engineering & Technology	B+G+3
9	Raman House	G+3
10	Kalpana House	G+3
11	MBBS Boys Hostel	G+3
12	MBBS Girls Hostel	G+4
13		G+3
14	Nursing Girls Hostel	B+G+3
15	Nursing Boys Hostel	B+G+3
16	Resident Hostel	G+5
17	Staff Accommodation I	G+5
18	Staff Accommodation II	G+5

*Table 5: Block and department wise details of the University premises*

### 2.4.3 Salient features

**The University had the best State of the art Infrastructure in the Country. Some of the best features available are as follows:**

1. ERP System for monitoring administration /academics
2. Wi-Fi enabled premises
3. Modern infrastructure with well-equipped laboratories

4. Guest Lectures by Eminent Scholars
5. Ragging free environment
6. Hostels for Girls and Boys
7. 24 x 7 Power and RO water supply
8. State of art Library
9. Canteen Facility
10. Medical Facility (Health Centre)
11. Auditorium with all ultra-modern facilities.
12. Multipurpose Hall
13. Landscaped Gardens
14. On premises Residential Facilities for faculties and employees.
15. Community development programs
16. Arrangement for physically Challenged persons/students.

**The University endeavours at training young women to be competent, committed and compassionate and lead in all walks of life.**

#### **2.4.5 Operation and Maintenance of the premises**

The interview session with the staff regarding the operation and working hours is summarized in the table. The Institutions are open Monday to Friday for full day. Saturday, Sunday is an off for all. Below mentioned in the table are the average working hours. The detail wise timing for each is mentioned below the table.

S. No.	Section	Spaces	Time	Hours / day	Days in a year
1	Main Institutional University	Student areas and Teaching faculty	09:00 a.m. to 4:30 p.m.	7.5	280
2	General areas	Admin areas and library, Passage, staircase, toilet	8:00 a.m. to 5:00 p.m.	9	300

*Table 6: Schedule of the timings of the premises*

**On-site investigation and physical verification**  
The Beautiful and Eminent Institution Building and premises



Auditorium



Faculty of Agricultural Sciences & Allied Industries



Faculty of Ayurveda Sciences



Faculty of Commerce and Management



Faculty of Engineering and Technology



Faculty of Juridical Sciences



Faculty of Medical Sciences



Faculty of Nursing



**On-site investigation and physical verification**  
The Beautiful and Eminent Institution Building and premises



Faculty of Pharmaceutical Sciences



Kalpana House



MBBS and Nursing Girls Hostel



MBBS Boys Hostel



Rama Hospital and Research Centre



Raman House



Staff Accommodation First And Resident Hostel



Vice Chancellor's Secretariat



## 3. Green Building Audit Study

### 3.1 About the Green Building Study Audit

It is a systematic study of the aspects which make the Institution a sustainable and healthy premises for its inhabitants.

### 3.2 Analysis for the Green Building Study Audit

The procedure included detailed verification for the following:

#### Energy Audit

- Analysis of the Lights, Fans, AC, Equipment
- Renewable energy
- Scope for reducing the current energy bills if any
- Improvement in the thermal comfort of the premises

#### Green Audit

- Green initiatives
- Hygiene audit
- Water Audit - Analysis of the current water consumption of premises; Scope to include Rain water harvesting and Waste water treatment in premises
- Waste Audit - Current waste produced, its segregation and usage; Strategies to be adopted for waste management and awareness

#### Environmental Audit

- Analysis of the current landscape + hardscape of premises
- Analysis of the flora and fauna of campus
- Strategies adopted at present to enhance vegetation
- Measures that can be adopted for ecological improvement of the premises.

### 3.3 Strategy adopted for Green Building Study Audit

The strategies included data collection from admin department, actual inventory, investigation to check the operation and maintenance, analysis of the data collected and preparation of the Report.

### 3.4 Timeline of the activities for Green Building Study Audit

- 28 December 2021 – Discussion with the University
- 13 January 2022 – Allotment and Initiation by the University
- 20 January 2022 – Induction meeting
- 25 January 2022 – Survey of the Student and staff submitted
- 7 to 9 March 2022 – Data submitted by University
- 11 March 2022 – Submission of the Report



# Green Practices

Background reference image Free photos on pixabay



## 4. Green Practices Audit

The increasing global warming and climate change have made us realise that apart from the enormous strategies the individual small efforts need to be taken by individuals and Educational Institutes as the younger generations are the future of the world and once they are taught about these practices only then can we assume a better future.

### 4.1 Green practices

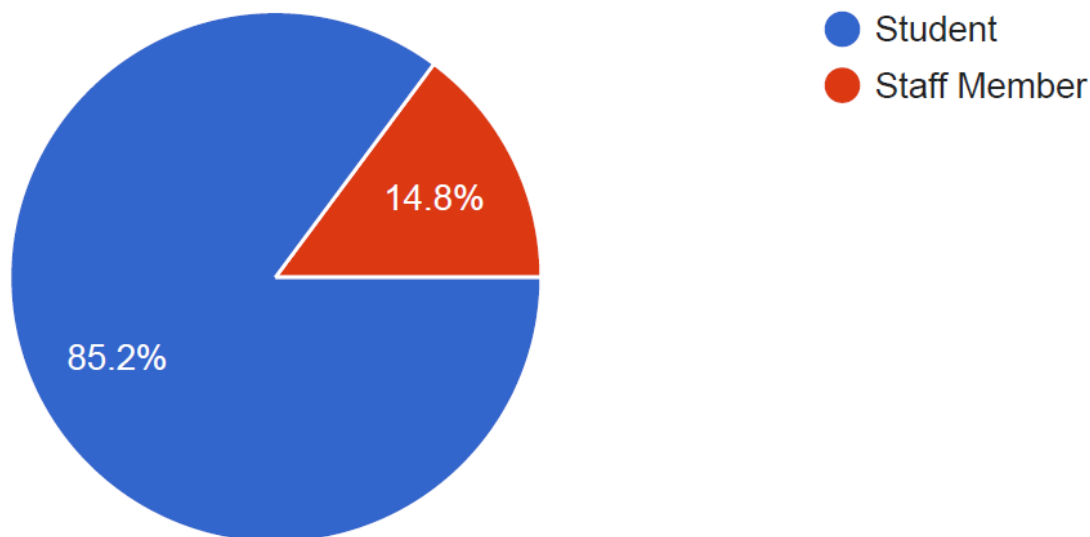
We observed the following points during the Site investigation:

- There is **availability of open space in the premises in addition to the provision of the multiple varieties of flora.**
- **The ample vegetation benefit the users by providing shade.**
- **Self-sustaining premises has provision for organic composting and waste water contain organic nutrients which do not require additional nutritioning. These are utilised in the gardens of the premises.**
- There is **organic composting process carried out for decomposition of organic matter of plants and it is used as an organic fertilizer and increase ecology, this is done through Vermiculture.**
- The Students, University authorities **jointly conduct initiatives for upgrading of the premises from environmental view.**
- **The trees are well planned and organised this makes the ambience very refreshing.**
- **We would like to specially mention about the staff, though the University's provision for staff, personal housekeeping their co-operation and dedication towards maintaining the premises has lead to it being one of the most clean premises in the city of Kanpur.**
- **The Teaching staff too is very cautious about eco-friendly initiatives and have ample knowledge about systems which is commendable.**

## 4.2 Survey results

An online survey was conducted to analyse the student and staff views about the premises, following are some of the reviews. (Note - Responses have been rounded off keeping in the population study)

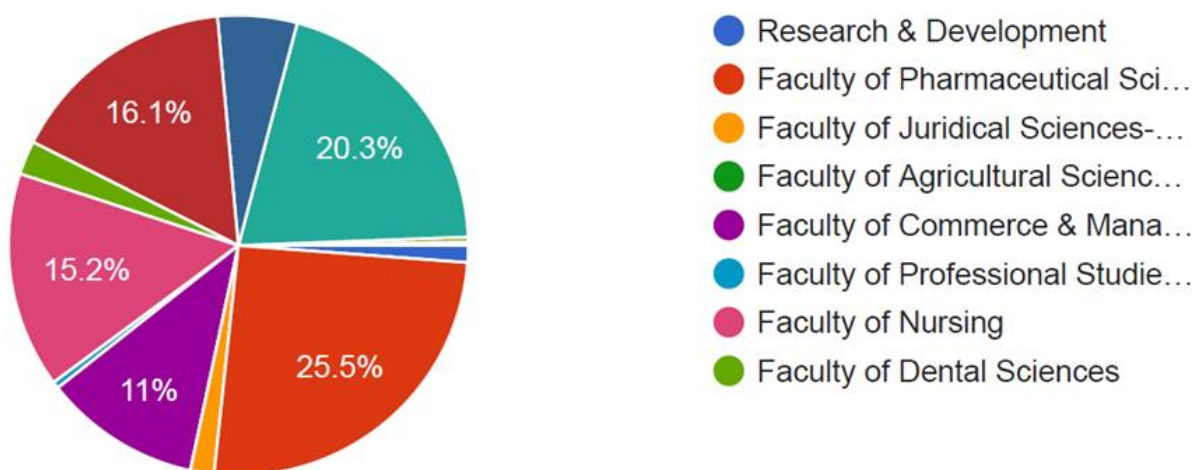
### 4.2.1 Participation



*Figure 1: Participation analysis in the survey*

A total of **843 responses** were received out of which 85% were students.

### 4.2.2 Schools (Dept./ Faculty)



*Figure 2: Participation analysis in the survey*

The **highest response which is 26% was received from Faculty of Pharmaceutical sciences** the other responses were almost equal among all departments and encouragement of students to participate is quite commendable.



### 4.3 Survey Ratings

#### Note about the review-rating survey

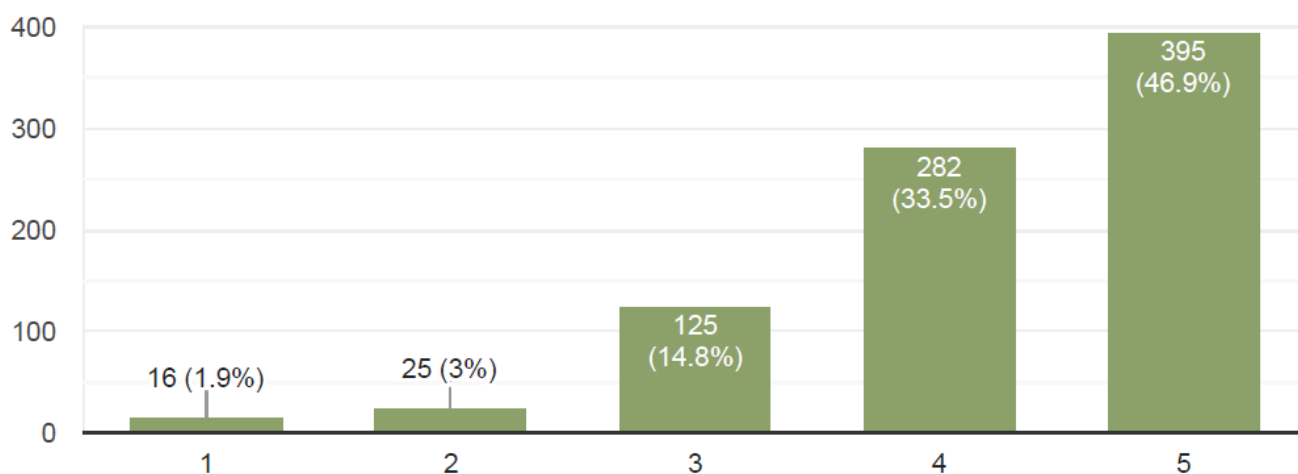
The Participants were asked to review (Through an online mode) the practice on a scale of 1-5 with scale components as follows:

- Scale 1 – Poor
- Scale 2 – Satisfactory
- Scale 3 – Good
- Scale 4 – Very good
- Scale 5 – Excellent

The figures in each of the columns of graph depict the Number of participants responses in numerical (Percentage of the participant response) – For example 101 responses (44.5%)

#### Rate the Green awareness practices in University

An online survey was conducted to analyse the student and staff views



*Figure 3: Participation analysis in the survey*

There were mixed responses received the equal also the highest was for **rating 5 (Excellent) at 47% (which is a very good point to be noted) and rating 4 (Very good) at 34%** followed by **15% for rating 3 (Good).**

## 4.4 Community Development

### 4.4.1 About the initiative and concept

The various community development programs conducted include Tree Plantation, Life Learning, Employability Skill program introduced for the youth, Blood Donation Camp, Food Kit Distribution Program to the neighbourhood community, Relief fund programs. **The most special part is the Unnat Bharat Abhiyan initiative which are conducted by the University for generating awareness. A lot of efforts get involved right from planning to execution. The main motive behind these is social welfare. This kind of a tough process is highly admirable. We respect and congratulate the University for the same.**

#### 4.4.1.1 Unnat Bharat Abhiyan

The conceptualization of UBA started with the initiative of a group of dedicated faculty members of Indian Institute of Technology (IIT) Delhi working for long in the area of rural development and appropriate technology. The concept was nurtured through wide consultation with the representatives of a number of technical Universities, Rural Technology Action Group (RuTAG) coordinators, voluntary organizations and government agencies, actively involved in rural development work, during a National workshop held at IIT Delhi in September, 2014. The workshop was sponsored by Council for Advancement of People's Action and Rural Technology (CAPART), Ministry of Rural Development, Govt. of India. The program was formally launched by the Ministry of Education (MoE) (formerly Ministry Human Resource Development (MHRD)) in presence of The President of India on 11 November, 2014.

**Rama University , Kanpur became a participating institute of UBA in the year of 2020 with AISHE CODE: 0808. As a part of Unnat Bharat Abhiyan, Rama University is acting as representative of UBA in their area for promoting & facilitating UBA network. The University is responsible for conducting cluster activities in their own adopted village under UBA. The University is consistently work on the overall development of adopted villages through various innovative ideas and trying to identify the problems and need of the village peoples. The institute will also responsible to solve the problems and helps them to raise the standard of living of villagers.**

**To full fill the requirement of the adopted villages related to their**

**socioeconomic development and to conduct the activities, disseminate the new technologies the UBA team of our institution is actively involved and is trying to improve the quality of rural life through innovative and affordable technological interventions.**

#### **4.4.1.2 Villages adopted**

There are a total of five villages adopted by the Rama University in this context. The details of the same are as follows.

**Shadi Pur**

**Bhavanipur**

**Pachor**

**Biritiyan Bithoor**

**Hardaspur**

#### **4.4.2 Survey reviews**

An online survey was conducted to analyse the student and staff views about **the Rural community programs undertaken by the Institute?**

**Some of the key responses are noted below as a result of Online survey.**

- The view of the university is excellence, because the initiatives to level up the rural are really nice job.
- Departments of the university organised various awareness program in the rural area. Good Efforts from university side, University try to improve medical facility to rural community.
- Our university is very good University .it performs many free medical camps in rural areas.
- Many of the programs are organized for the Rural area peoples like malaria awareness, health camps and sanitary pad distribution, save girl child and many more.
- Campus runs such programs in which University provide help to farmer of neighbourhood village to grow crop in his field....
- This is a very good initiative by the university, it works to increase awareness among the people of the village and the community.

## 4.5 Eco-friendly initiatives undertaken

The University has undertaken the following initiatives through **excellent efforts** towards save environment measures before pandemic. The NSS and NCC Department conduct various activities like tree plantation, nature cleanliness, visits to nearby flora and fauna, rural development initiatives.

### 4.5.1 Environment initiatives

#### 4.5.1.1 Activities undertaken by University departments

Date	Name of Activity	Committee Constituted
09-Apr-19	World Health Day Observed	Faculty of Commerce & Management
23-Apr-19	World Earth Day observed by the Faculty of Agriculture & Allied Industries	Faculty of Agriculture & Allied Industries
01-Jun-19	World No Tobacco Day Observed at Rama Dental College	Rama Dental College- Hospital and Research Centre, Lakhanpur
16-Sep-19	Swachhta Pakhwada Observed at Rama Dental College	Rama Dental College
12-Oct-19	Swachh Bharat Campaign Organized	Faculty of Juridical Sciences
23-Apr-21	World Earth Day	Faculty of Agricultural Sciences and Allied Industries, Rama University, Kanpur.
05-Jun-21	World Environment Day	Rama University, Kanpur
12-03-2021	"Agriculture Education Day"	Faculty of Agricultural Sciences and Allied Industries, Rama University, Kanpur
12-05-2021	"World Soil Day"	Faculty of Agricultural Sciences and Allied Industries, Rama University, Kanpur.

*Table 7: Details of the Activities undertaken by University departments*

#### 4.5.1.2 Activities undertaken by the NSS department

The NSS has undertaken many Environment initiatives related to Green practices, cleanliness, health and hygiene, awareness sessions and so on, we have summarised some of the key events below:

Date	Name of Activity	Committee Constituted
31-Jan-19	Jago Grahak Jago	Faculty of Juridical Sciences
04-Feb-19	World Cancer Day 2019	Dept. of community health nursing
06-Feb-19	A.R.T Center Visit Report	Department of community health nursing
09-Feb-19	Visit at Sewage Treatment Plant- Kanpur	Department of community health nursing



09-Feb-19	Legal Awareness Camp	Faculty of Juridical Sciences
12-Feb-19	Workshop on Art of Living	Faculty of Commerce and Management
27-Feb-19	Rama University organized a Two-Day International Conference on Advances in Agriculture and Allied Science Research.	Rama University
26-Feb-19	Visit to ALIMCO organized by Dept. of Nursing	Department of community health nursing
20-Mar-19	ESAR-19 from 13-15 March 2019	Faculty of Engg. & Technology
05-Apr-19	World Oral Health Day Observed	Department of Public Health Dentistry, Rama Dental College Hospital & Research Centre
09-Apr-19	World Health Day Observed	Faculty of Commerce & Management
11-Apr-19	HIV AIDS Awareness Program at Bhawanipur Village	Dept. of Journalism and Mass Communication
11-Apr-19	HIV AIDS Awareness Program held at Ram Nagar Village	Dept. of Journalism and Mass Communication
12-Apr-19	World Health Day Observed	Department of Community Health Nursing, Faculty of Nursing,
15-Apr-19	World Health Day Observed by the Dept. Of Public Health Dentistry	Dept. of Public Health Dentistry, Rama Dental College
16-Apr-19	Survey Camp Organized at Nainital	Department of Civil Engineering
16-Apr-19	Rama University will hold Chunav Pathshala in the Polling Stations	Rama University
25-Apr-19	Faculty Of Juridical Science Organized a Voters Awareness Campaign	Faculty of Juridical Sciences
02-May-19	Faculty of Juridical Sciences Adopted Two Model Polling Booth	Faculty of Juridical Sciences
06-May-19	Scientific and Industrial Research visit to Central Institute for Medicinal and Aromatic Plants	Department of Biotechnology, Faculty of Engineering and Technology
01-Jun-19	World No Tobacco Day Observed at Rama Dental College	Rama Dental College- Hospital and Research Centre, Lakhanpur
18-Jun-19	Health Awareness Program on Diarrhoea	Department of community health nursing
31-Jul-19	Upcoming District & Session Court visit details	Faculty of Juridical Sciences
06-Aug-19	Run For Health Happiness and For Nation	Faculty of Juridical Sciences
09-Aug-19	Law students visited Kanpur District Court	Faculty of Juridical Sciences
16-Sep-19	Swachhta Pakhwada Observed at Rama Dental College	Rama Dental College
23-Sep-19	Entrepreneurship Awareness Camp held	Faculty of Agriculture

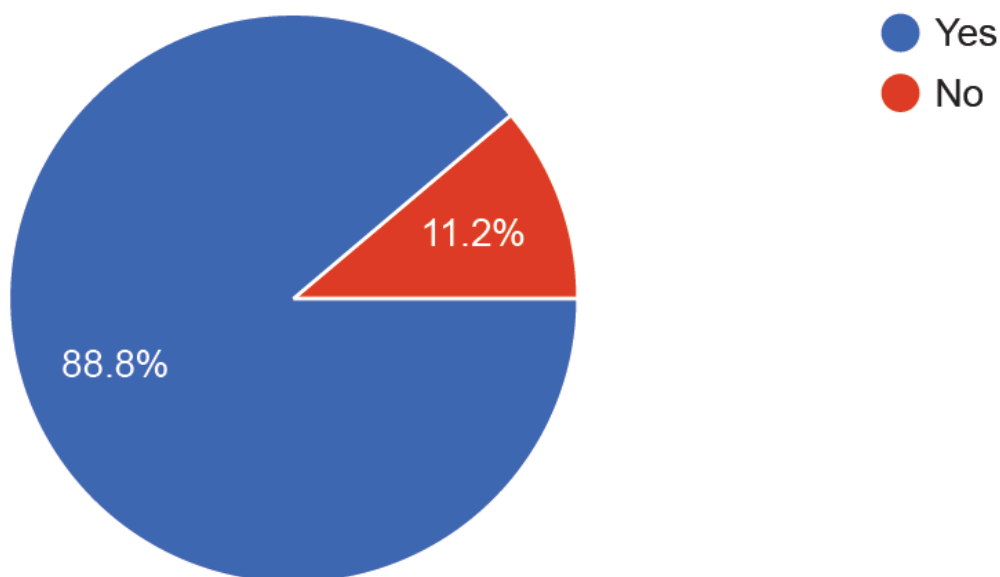
04-Oct-19	"Swachhata Hi Seva" – Plastic Waste Free Campaign Observed	Rama Dental College
12-Oct-19	Swachh Bharat Campaign Organized	Faculty of Juridical Sciences
24-Oct-19	Awareness Program against Plastic Pollution by FJS and NSS	Faculty of Juridical Sciences
30-Oct-19	Swachh Bharat Abhiyan at Kalyanpur and Rawatpur Railway Station	Faculty of Juridical Sciences
06-Nov-19	Beti Bachao Beti Padhao Skit organized on 04 Nov. 2019.	Faculty of Juridical Sciences
14-Nov-19	Legal Awareness Camp-Jagruk Nagrik Bane organized	Faculty of Juridical Sciences
18-Nov-19	FET organized an Awareness Program on Cervical Cancer	FET
18-Nov-19	Workshop on Women Self Defense Organized	Faculty of Juridical Sciences
19-Nov-19	Spread of Happiness Program on Children Day	Faculty of Juridical Sciences
25-Nov-19	Awareness Drive for Adolescent Girls Organized	Faculty of nursing
25-Nov-19	Joining hands to fightback HIV	Rama University joins hand with NGOs Warsi Seva Sadan and Amin Welfare Trust
28-Nov-19	Awareness program about Child Trafficking and HIV AIDS organized	Department of Mass Communication and Journalism
30-Nov-19	Awareness Drive for adolescent girls at Shri Ram Education Center	Faculty of nursing
03-Dec-19	World AIDS Day Observed	Department of Community Health Nursing
03-Dec-19	Self defense training or 'Mission Sahasi' concluded successfully	Faculty of Agriculture & Allied Sciences
04-Dec-19	Industrial visit to Chandigarh and Manali by Pharma students	Faculty of Pharmaceutical Sciences
07-Dec-19	Faculty of Journalism and Masscom celebrated world AIDS Day	Department of Mass Communication & Journalism
11-Dec-19	Rama University is organizing a Cloth Donation Campaign	Rama University

**Table 8: Table 10: Details of the Activities undertaken by NSS departments**

Apart from the above mentioned activities the NSS constitute an active participation in multiple other activities as well.

## 4.5.2 Survey results

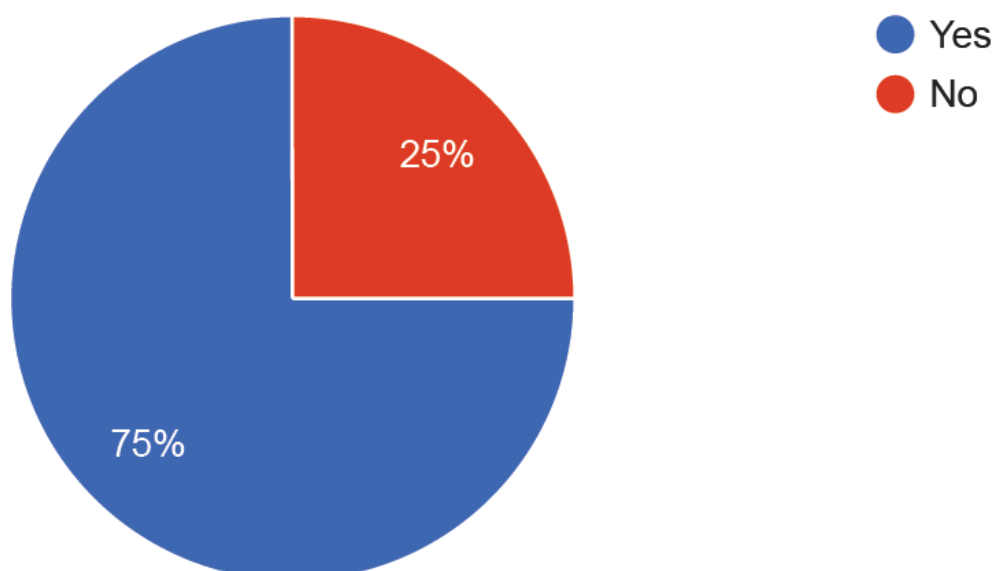
### 4.5.2.1 Does your University conduct environment awareness programs/ webinars/ plantations/ cleanliness or similar programs?



*Figure 4: Green awareness practices in University*

The students, staff (**almost 89%**) of responses confirmed activities are conducted which is very excellent.

### 4.5.2.2 Do you participate in such events?



*Figure 5: Green awareness practices in University*

The students, staff (**almost 75%**) of the responses confirmed their participation, **this is a good number however it can be increased in future .**

### 4.5.3 Survey review

#### 4.5.3.1 If yes, what has been your experience about the program?

We have listed some of the key responses below.

- Very good
- That is excellent
- Helpful in daily living
- Very informative and interesting event and also distribute many plants to faculty and guest
- Very knowledgeable
- In such environmental programs we make our small groups and learn about trees and plants, how to grow them, taking care of them etc.
- It felt good to be close to the trees and plants. Realized that we should stay close to nature
- The students participated very enthusiastically in these programs and extension activities which proves that they just need a guidance in this direction. This will surely help in generating an equitable society. The experience has been great as the university management actively promotes such events. which are in the larger interest of the society.

## 4.6 Recommendations for a Sustainable Habitat

We have found that the current practices are very excellent and thus there are only minimal recommendation with respect to this section.

### a) Increase the plantations in the premises

There can be provision for more plantations in the premises may be even Kitchen garden facility.

### b) Plant as a gift

As a kind gesture the guests visiting the premises can be asked to plant a small plant in the premises itself and they can be even given plants/ bouquet from the flowers of the plants in the premises as a gift.

**c) Environmental awareness**

There can be various artworks on compound wall giving message of saving environment through the joint efforts of the students and staff thereby making the student socially and environmentally responsible citizen.

**d) Tree adoption scheme**

The University can adopt One Faculty – One tree adoption scheme which is one of its kind practice, this can be very beneficial especially during the summer season.

**e) No vehicle day**

Once in a while a No vehicle day can be adopted by students and staff to promote the use of eco-friendly vehicles in the premises.

**f) Signages on the plants mentioning scientific names**

The practice of having the names of each plant and tree will provide awareness among the staff and students.



# Green practices as part of Unnat Bharat Abhiyan & other activities





# Green practices as part of Unnat Bharat Abhiyan & other activities





# Waste Audit



Background reference image Polina Tankilevitch on pexels

## 5. Waste Audit

Waste is an inevitable part of our lives. Over the years as the awareness about waste management techniques has given a rise to rethink how the waste can be avoided from being sent to the landfills. The audit provides an approximation of the types of waste generated, location of waste collections, disposal techniques used, waste segregation methodologies adopted, waste management strategies that are and implemented in addition to the newer ways the can be adopted aiming to make the premises clean and sustainable. Here sustainable refers to a broader aspect to analyse whether the current techniques are having positive or negative effect on the stakeholders of the premises.

### 5.1 Waste produced

#### 5.1.1 Types and disposal of waste in Premises

The types of waste collected in the premises are as follows, these are separated before processing.

S. No.	Type of waste	Source and quantity	Current Disposal method	Can be treated/ recycled?	Methodology
1	Solid waste	Toilets–Biodegradable waste of 50-60 kg per week	Sewage Treatment plant	Yes	CONTINUE - with the current practice
2	Paper waste	Newspaper and other paper	Given to vendor	Yes	CONTINUE - with the current practice
3	E-waste	Computers - Non-biodegradable waste as per the annual year usage	Given to vendor	Yes	CONTINUE - with the current practice
4	Dry waste in form of leaves	Open space & plantations, papers - Non biodegradable waste of 80-100 kg per week	Organic & Vermi-composing	Yes	CONTINUE - with the current practice
5	Liquid waste	Toilets, washbasins – Around 100 – 120 litres per week during general times and 50 litres at present	Sewage Treatment plant	Yes	CONTINUE - with the current practice
6	Organic regular waste	Dust, dirt usually dry waste from Canteen and all sources – approx. 3 to 5 kg	Organic & Vermi-composing	Yes	CONTINUE - with the current practice

*Table 9: Summary of the types of waste produced in the premises*

## 5.1.2 Bins summary

Room Name	Floor	Building	Nos.	Dustbin Type
V C Office	Ground	V. C. Building	1	Small
Registrar Office	Ground	V. C. Building	1	Small
Dy. Registrar Office	Ground	V. C. Building	1	Small
Exam Cell	Ground	V. C. Building	5	Small
Exam Cell	Ground	V. C. Building	1	Small
Confedential	Ground	V. C. Building	3	Small
Admission Cell	Ground	V. C. Building	6	Small
Academic Office	Ground	V. C. Building	4	Small
Account Cell	Ground	V. C. Building	1	Small
Kitchen Room	Ground	V. C. Building	1	Small
Stairs	Ground	V. C. Building	2	Small
Guard Room	Ground	V. C. Building	2	Small
Fjs Dean Office	First	V. C. Building	1	Small
Fjs Law	First	V. C. Building	6	5small/ 1 Big
Fjs Library	First	V. C. Building	3	2 Small/ 1 Big
Fjs Hod	First	V. C. Building	1	Small
Dean Fcm	Third	V. C. Building	1	Small
Erp Cell	Third	V. C. Building	3	Small
Library Fcm	Third	V. C. Building	2	Small
Computer Lab	Third	V. C. Building	1	Small
Faculty Room	Third	V. C. Building	4	Big
Stairs	Third	V. C. Building	1	Small
Dean Office Pharma	Ground	Fops	1	Small
Office Room	Ground	Fops	1	Small
Conference Room	Ground	Fops	1	Small
Store Room	Ground	Fops	1	Small
Machine Room	Ground	Fops	2	1big/1small
Computer Room	Ground	Fops	1	Small
Library Pharma	Ground	Fops	2	Small
Ground Whole	Ground	Fops	2	Small
"P" Chemistry	First	Fops	1	Small
"P" Chemistry 2	First	Fops	1	Small
"P" Chemistry 3	First	Fops	1	Small
Microbiology Lab	Second	Fops	1	Small
Studio	Second	Fops	1	Small
Radio Station	Second	Fops	2	Small



"P" Cognosy Lab	Second	Fops	1	Small
Ground Total	Second	Fops	2	Small And Big
Cif Lab	Third	Fops	1	Small
"P" Ceutics Lab 1	Third	Fops	1	Small
Pharmacy Practice Room	Third	Fops	1	Small
Third Floor	Third	Fops	2	Small And Big
"P" Cology Lab 1	Fourth	Fops	1	Small
"P" Cology Lab2	Fourth	Fops	1	Small
Hap Lab	Fourth	Fops	1	Small
Girls Common Room	Fourth	Fops	2	Small
Faculty Room	Fourth	Fops	1	Small
Pantry Room	Fourth	Fops	2	Small And Big
Floor	Fourth	Fops	1	Small
3005-Lab	Basement	Fet	2	Small
3012	Ground	Fet	4	Small
3014	Ground	Fet	1	Small
3016	Ground	Fet	2	Small
3018	Ground	Fet	1	Small
3019	Ground	Fet	7	Small
3022	Ground	Fet	2	Small
3025	Ground	Fet	2	Small
3026	Ground	Fet	1	Small
3028	Ground	Fet	1	Small
3030	First	Fet	1	Small
3032	First	Fet	2	Small
3033	First	Fet	1	Small
3034	First	Fet	2	Small
3040	First	Fet	2	Small
3041	First	Fet	2	Small
3050	Second	Fet	1	Small
3067	Third	Fet	2	Small
3070	Third	Fet	4	Small
3070	Third	Fet	2	Small
.	Ground	College	10	09small /1big
.	Ground	Hospital	47	35small /12big
.	First	Hospital	27	17small /10big
.	First	College	5	03small /02big
Panch Karma	Second	Hospital	15	11small /4big

Ot	Second	Hospital	14	10small /4big
Lab	Second	Hospital	11	6small /5big
Floor	Ground	Agriculture Building	1	Big
Faculty Room	First	Agriculture Building	1	Small
Floor	First	Agriculture Building	2	Big
Washroom	First	Agriculture Building	1	Small
Hod Room	Second	Agriculture Building	1	Small
Faculty Room	Second	Agriculture Building	10	Small
Hod Room	Third	Agriculture Building	1	Small
Faculty Room	Third	Agriculture Building	5	Small
Library	Fourth	Agriculture Building	4	Small
Washroom	Fourth	Agriculture Building	3	Small
Ground-Nursing	Ground	Nursing	2	Big
4016	Ground	Nursing	3	Small
4019	Ground	Nursing	2	Small
4020	Ground	Nursing	1	Small
4015	Ground	Nursing	1	Small
4025	Ground	Nursing	1	Small
4026	Ground	Nursing	2	Small
4033	Ground	Nursing	1	Small
4027	Ground	Nursing	2	Small
4031	Ground	Nursing	1	Small
4030	Ground	Nursing	1	Small
4028	Ground	Nursing	2	Small
4029	Ground	Nursing	2	Small
4023	Ground	Nursing	2	Small
4024	Ground	Nursing	3	Small
4017	Ground	Nursing	2	Big
4003	Basement	Nursing	1	Small
4002	Basement	Nursing	1	Small
4001	Basement	Nursing	1	Small
4005	Basement	Nursing	3	Small
4006	Basement	Nursing	1	Small
4007	Basement	Nursing	1	Small
Floor	Basement	Nursing	2	Big
4008	Basement	Nursing	1	Small
4042	First	Nursing	3	Small
4043	First	Nursing	2	Small

4044	First	Nursing	1	Small
4045	First	Nursing	2	Small
4041	First	Nursing	1	Small
4040	First	Nursing	1	Small
Floor	First	Nursing	2	Big
4036	First	Nursing	2	Small
4037	First	Nursing	1	Small
4038	First	Nursing	2	Small
4039	First	Nursing	3	Small
2047	Ground	Medical College	1	Small
2046	Ground	Medical College	1	Small
2045	Ground	Medical College	1	Small
2044	Ground	Medical College	1	Small
2043	Ground	Medical College	1	Small
2040	Ground	Medical College	1	Small
2030	Ground	Medical College	1	Small
2035	Ground	Medical College	2	Small
2037	Ground	Medical College	1	Big
2029	Ground	Medical College	2	Small
2051	Ground	Medical College	1	Big
2048	Ground	Medical College	1	Big
2049	Ground	Medical College	1	Big
Reception	Ground	Medical College	1	Small
2095	First	Medical College	4	Small
2067	First	Medical College	2	Small
2068	First	Medical College	2	Small
2094	First	Medical College	3	Small
2069	First	Medical College	10	7s/3b
2072	First	Medical College	2	1s/1b
2086	First	Medical College	1	Small
2084	First	Medical College	2	Small
2081	First	Medical College	1	Small
2077	First	Medical College	1	Small
2078	First	Medical College	1	Small
2124	Second	Medical College	2	Small
2125	Second	Medical College	1	Small
2119	Second	Medical College	1	Small
2117	Second	Medical College	1	Small

2118	Second	Medical College	1	Small
2171	Third	Medical College	1	Small
2172	Third	Medical College	1	Small
2173	Third	Medical College	1	Small
2174	Third	Medical College	1	Small
2178	Third	Medical College	1	Small
2176	Third	Medical College	1	Small
2177	Third	Medical College	1	Small
2178	Third	Medical College	1	Small
2179	Third	Medical College	1	Small
2180	Third	Medical College	1	Small
2181	Third	Medical College	1	Small
2182	Third	Medical College	1	Small
2183	Third	Medical College	1	Small
2184	Third	Medical College	1	Small
2012	Basement	Medical College	1	Small
2013	Basement	Medical College	1	Small
2015	Basement	Medical College	1	Small
2009	Basement	Medical College	1	Small
2022	Basement	Medical College	1	Small
2001b	Basement	Medical College	1	Small
2001c	Basement	Medical College	1	Small
2001d	Basement	Medical College	1	Small
Floor	Basement	Medical College	1	Big
Basement	Basement	Nursing Girls Hostel	6	5small /1big
Ground Floor	Ground	Nursing Girls Hostel	3	2small/1big
First Floor	First	Nursing Girls Hostel	4	3small /1big
Second Floor	Second	Nursing Girls Hostel	6	5small /1big
Third Floor	Third	Nursing Girls Hostel	4	3small /1big
Basement-Nursing Boys Hostel	Basement	Nursing Girls Hostel	3	1small /2big
Ground Floor- Nbh	Ground	Nursing Girls Hostel	7	3small /4big
First-Nbh	First	Nursing Boys Hostel	2	1small /1big
Second Floor - Nbh	Second	Nursing Boys Hostel	5	4small /1big
Ground Floor- Rama Boys Hostel	Ground	Rama Boys Hostel	3	Big
First Floor- Rama Boys Hostel	First	Rama Boys Hostel	2	Big
Second Floor- Rama Boys Hostel	Second	Rama Boys Hostel	2	Big
Third Floor- Rama Boys Hostel	Third	Rama Boys Hostel	2	Big
Fourth Floor- Rama Boys Hostel	Fourth	Rama Boys Hostel	2	Big

Ground Floor - Kalpana House	Ground	Kalpana House	3	Big
First Floor - Kalpana House	First	Kalpana House	3	Big
Second Floor - Kalpana House	Second	Kalpana House	2	Big
Third Floor - Kalpana House	Third	Kalpana House	2	Big
Fourth Floor - Kalpana House	Fourth	Kalpana House	2	Big
Ground Floor	Ground Floor	Staff Accomodation 1	1	Big
First Floor - Kalpana House	First Floor - Kalpana House	Staff Accomodation 1	1	Big
Second Floor	Second Floor	Staff Accomodation 1	1	Big
Third Floor	Third Floor	Staff Accomodation 1	1	Big
Fourth Floor	Fourth Floor	Staff Accomodation 1	1	Big
Fifth Floor	Fifth Floor	Staff Accomodation 1	1	Big
Ground Floor - Staff Accomodation 2	Ground Floor	Staff Accomodation 1	1	Big
First Floor - Staff Accomodation 2	First Floor - Kalpana House	Staff Accomodation 2	1	Big
Second Floor- Staff Accomodation 2	Second Floor	Staff Accomodation 2	1	Big
Third Floor- Staff Accomodation 2	Third Floor	Staff Accomodation 2	1	Big
Fourth Floor- Staff Accomodation 2	Fourth Floor	Staff Accomodation 2	1	Big
Fifth Floor- Staff Accomodation 2	Fifth Floor	Staff Accomodation 2	1	Big
Ground Floor - Old Medical Boys Hostel	Ground	Old Medical Boys Hostel	1	Big
First Floor - Old Medical Boys Hostel	First	Old Medical Boys Hostel	1	Big
Second Floor - Old Medical Boys Hostel	Second	Old Medical Boys Hostel	1	Big
Third Floor - Old Medical Boys Hostel	Third	Old Medical Boys Hostel	1	Big
Ground Floor - Medical Boys Hostel	Ground	Medical Boys Hostel	1	Big
First Floor - Medical Boys Hostel	First	Medical Boys Hostel	1	Big
Second Floor - Medical Boys Hostel	Second	Medical Boys Hostel	1	Big
Third Floor - Medical Boys Hostel	Third	Medical Boys Hostel	1	Big
Ground Floor -Residence Medical Boys Hostel	Ground	Residence Medical Boys Hostel	1	Big
First Floor - Residence Medical Boys Hostel	First	Residence Medical Boys Hostel	1	Big
Second Floor - Residence Medical Boys Hostel	Second	Residence Medical Boys Hostel	1	Big
Third Floor -Residence Medical Boys Hostel	Third	Residence Medical Boys Hostel	1	Big
Fourth Floor -Residence Medical Boys Hostel	Fourth Floor	Residence Medical Boys Hostel	1	Big
Fifth Floor -Residence Medical	Fifth Floor	Residence Medical Boys Hostel	1	Big

Boys Hostel				
Ground Floor -Residence Medical Girls Hostel	Ground	Residence Medical Girls Hostel	1	Big
First Floor - Residence Medical Girls Hostel	First	Residence Medical Girls Hostel	1	Big
Second Floor - Residence Medical Girls Hostel	Second	Residence Medical Girls Hostel	1	Big
Third Floor -Residence Medical Girls Hostel	Third	Residence Medical Girls Hostel	1	Big
Fourth Floor -Residence Medical Girls Hostel	Fourth Floor	Residence Medical Girls Hostel	1	Big
Fifth Floor -Residence Medical Girls Hostel	Fifth Floor	Residence Medical Girls Hostel	1	Big
Basement -Old Medical Girls Hostel	Basement	Old Medical Girls Hostel	1	Big
Ground Floor - Old Medical Girls Hostel	Ground	Old Medical Girls Hostel	1	Big
First Floor - Old Medical Girls Hostel	First	Old Medical Girls Hostel	1	Big
Second Floor - Old Medical Girls Hostel	Second	Old Medical Girls Hostel	1	Big
Third Floor - Old Medical Girls Hostel	Third	Old Medical Girls Hostel	1	Big

*Table 10: Details of the dustbins in the premises*

As per our analysis we found that there are more than 500 dustbins in the entire premise. the only defect is that all of these are made up of plastic, in future the University may adopt dustbins made of eco-friendly materials.

## 5.2 Waste handling

Quantification wise as per Interview and survey it was found that the Solid, Dry leaves collected is approximately 55 kg per week. The liquid and hazardous waste (septic tanks) is approximately 1,00,000 litres per week. The waste produced on campus is segregated. The staffs are very well trained and do an excellent job. **Further the Team has shared the following strategy which is adopted for waste management.**

Presently solid waste and waste from trees is being dealt by making several pits at one place. Leaves and waste of tree is dumped in three pits for making compost manure. Similarly, solid waste is collected from residences, hostels, offices and departments. The same is segregated and accordingly solid waste is lifted by municipality and garbage is dumped in the pits for preparing compost manure.

Further proposal for installation of solid waste treatment plant is underway for which agency has been selected and issued supply order for Seeking Consultancy Services for



Development of Solid Waste and Liquid Waste management including 05 years' maintenance and running of plant in Rama University. After getting consultancy/proposal the work of Development of Solid Waste Plant will be got constructed in the campus at the earliest.

**During on interaction with the Team we observed the concern and dedication the entire Team shows towards the University management aspect. We highly appreciate these efforts and way of working.**

### 5.3 Waste management

The University reuses the papers. It was informed newspapers were given in bulk to Vendor who shreds and converts it into new paper, thereby not sending it to Municipal Corporation **and not adding to landfill site**. Ample measures are taken to maintain hygiene. **No smell problem or health related issues were observed**. There are adequate numbers of bins present in all parts of building. **The waste does not pollute the ground or surface water**. The wastes from toilets are discharged to main drains through underground covered channels (Safety Tanks) thus avoiding any incident. **There is no problem of air, dust pollution from waste.**

### 5.4 Survey Ratings

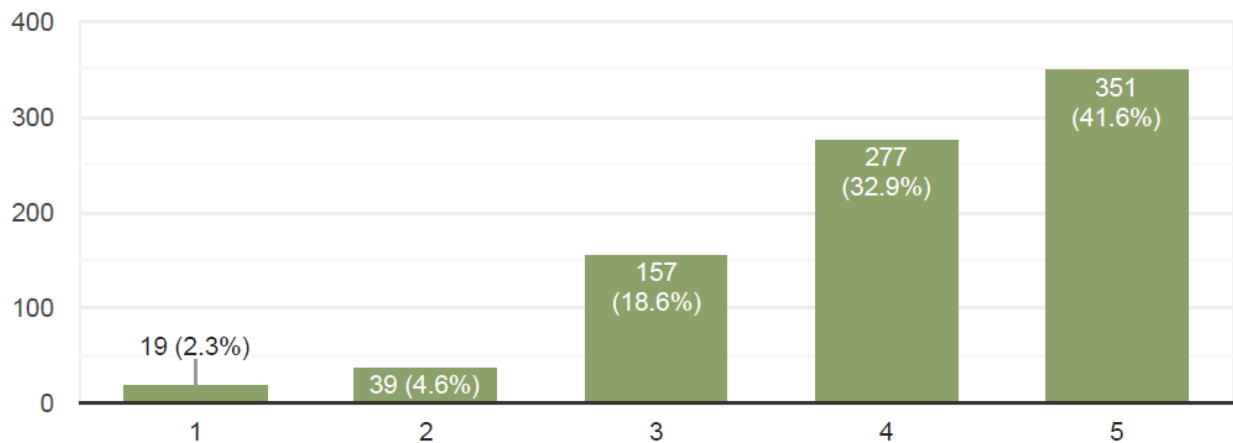
#### Note about the review-rating survey

The Participants were asked to review (Though an online mode) the practice on a scale of 1-5 with scale components as follows:

- Scale 1 – Poor
- Scale 2 – Satisfactory
- Scale 3 – Good
- Scale 4 – Very good
- Scale 5 – Excellent

The figures in each of the columns of graph depict the Number of participants responses in numerical (Percentage of the participant response) – For example 101 responses (44.5%)

## Rate - Usage of waste saving practices adopted in Institute premises

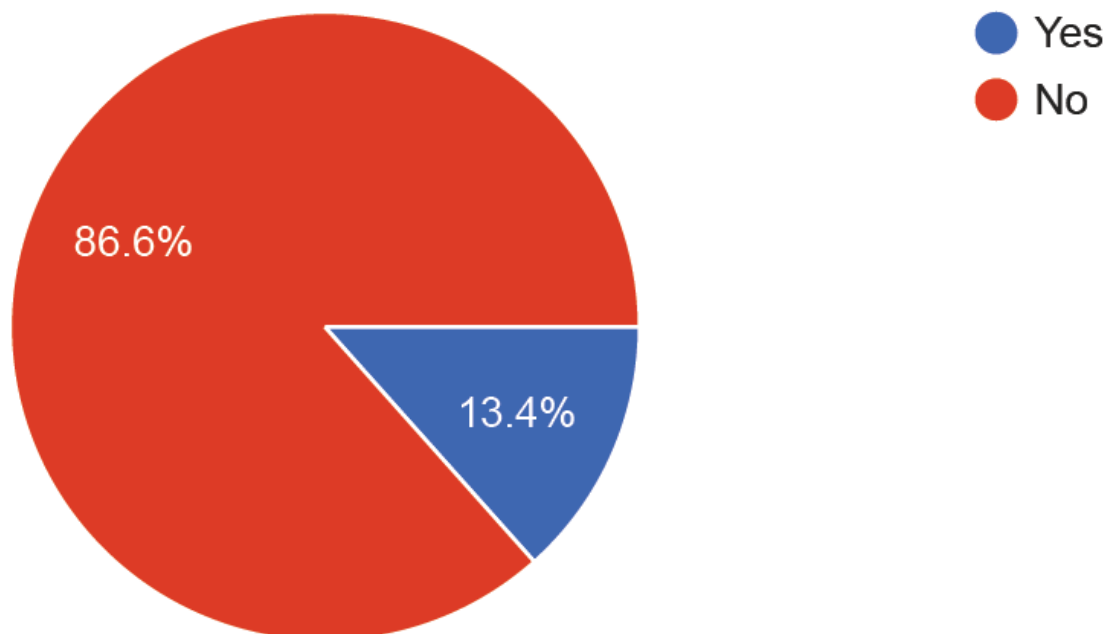


*Figure 6: Waste management practices in University*

There were mixed responses received the highest was for **rating 5 (Excellent) at 42%** followed by **33% for rating 4 (Very Good)**.

## 5.5 Survey Results

### Is there any Waste pollution in the premises?



*Figure 7: Participants response in survey*

The students, staff (**almost 87%**) of responses confirmed there is no waste pollution

## 5.6 Survey review

**According to your observation what are the simple steps adopted by the Institute towards waste conservation?**

**Some of the key responses are noted below as a result of Online survey.**

- They are doing their best
- Reuse the things for minimize the wastage
- Sewage Treatment Plant (STP)
- Dustbins are kept for taking out the garbage and the garbage is disposed of properly.
- There is separate management of waste disposal for both biohazard and normal waste product.
- There are dustbins placed all over in the campus. And a daily truck comes to take all the waste from dustbins and hostels
- Garbage boxes are placed in every short distance and clean on daily basis
- Use of Smart flow taps

## 5.7 Additional features towards waste protocols

The University has undertaken the following practices towards a better waste management.

### a) Zero Waste

The University has undertaken a zero organic waste protocol. The entire waste collected appropriately, there are machineries which belong to the university such as rollers, trimmers, these are useful is appropriate collection. This is thereby segregated with scientific methods such as dry and organic waste is send to the compost pit nearthe animal husbandary area, the wet waste is very well designed and it collected near the farms area in a waste water treatment plant. This is mixed with the waste from the animal husbandary and this nutrient rich fertilizer and revamped water is then channelized into the farms in premises and adjacent areas. This reduces the load for external chemical fertilizers and the Landscape areas are self-sustaining. **This is one of its kind activity we have observed in an Educational premises, where the**

**concern is not just avoid waste in landfill but also towards social welfare.**

**b) Sanitary vending machine**

There are machines installed at various appropriate locations and the Female Faculties have provision of sanitary pads in every building, this makes it an appropriate practice.

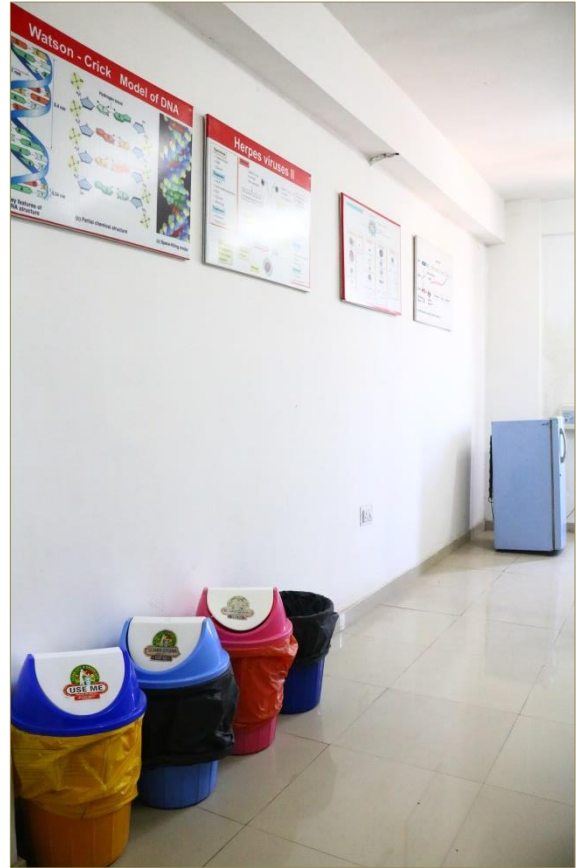
## **5.8 Recommendations for a Sustainable Habitat**

**As per our verification for this audit the efforts of the University are highly appreciable as they are very well maintained hence additional recommendations are excluded for this section.**



# On-site investigation and physical verification

## Waste management practices in the premises





# On-site investigation and physical verification

## Waste management practices in the premises





# Water Audit



*Background reference image Vlad Chetan on pexels*

## 6. Water Audit

Water is one of the basic needs. Pure drinking water is a resource which needs to be preserved efficiently. Water audit helps to identify the sources of water consumption, the water requirement by the campus met by these sources. The points and effective usage of without any wastage. Understanding the techniques which are best suited to the site to increase water conservation in terms of awareness and practice.

### 6.1 Water availability and consumption

#### 6.1.1 Sources of Primary water supply

The Borewell is the main source of water in the premises.

S. No.	Source of water supply	Location	Quantity
1	Borewell (8 inches)	Behind V.C building	Over Head Tank ( Cemented) 2 Lacks Liter For university
2	Borewell (8 inches)	Between Staff II Quater & Nursing College	Over Head Tank ( Cemented) 2 Lacks Liter for university
3	Submersible Motor (6 inches)	Behind hospital	For supply in Hospital
4	Submersible Motor (6 inches)	Behind OT Hospital	For supply in Hospital
5	Submersible Motor (6 inches)	Opposite to OT	For Garden of Hospital
6	Submersible Motor (6 inches)	Between OT & OPD Area	For hospital area

*Table 11: Details of the primary source of water supply*

#### 6.1.2 Source of Secondary water supply

The University requires some water from the Local Municipality. The total water consumption through the tanks on site at multiple locations is summarised below:

S. No	Type of Tank	Nos.	Location	Capacity (litres)
1	Cemented	1	New Boys Medical	38,232
2	Plastic	2	Old Boys hotsle	5,000
3	Plastic	1	Staff Accommodation -1	5,000



4	Cemented	1	Old Medical Girls	31,254
5	Plastic	1	New Girls Hostel	2,000
6	Plastic	2	Nursing (Boys and Girls ) Hostel	5,000
7	Plastic	1	Medical Collage	5,000
8	Cemented	1	Kalpna House	28,886
9	Cemented	1	Raman House	34,664
10	Cemented	1	Staff Accommodation -2	20,000
11	Plastic	3	FET Building	2,000
12	Plastic	1	V.C Building	2,000
13	Cemented	1	Hospital	1,00,000
14	Plastic	1	Hospital	1,000
15	Plastic	1	Hospital	2,000
16	Cemented Over Head Tank	1	Near Staff Accommodation-2	2,00,000
17	Cemented Over Head Tank	1	Behind V.C Office	2,00,000
<b>Total</b>		<b>21</b>		<b>6,82,036</b>

*Table 12: Tanks in the premises*

As per the investigation and data collection shared we found that there are total of 4 tanks in the premises. There is no issue with respect to cleanliness and hygiene. The areas are kept clean. There is periodic maintenance carried out.

### 6.1.3 Sources of Tertiary water supply

**Natural Rainwater harvesting** – It is done through the ground water recharging and upgrading the water quantity for bore well recharging. The water gets recharged and water table is maintained well naturally. The areas of gardens, tracks do not hav any kind of flooding and water is percolated on its own. Though, there can be provision of water tanks to store the water in future. At present the requirements are met within the limits.

Rain water harvesting has been done to recharge the rain water of roof and parking in the premises. **At this stage only 1 water pit near Vice Chancellor Building.** The rain water of roof and parking is directly recharged through these bore wells. **We would suggest to have more pits in future.**

## 6.2 Water requirement

The main areas of water requirement and type of usage is as follows

- **Drinking water** – Consumption of around 70,000 litres of water through Water cooler, stabilizer, starter & Aquaguard with filter is available in premises.
- **Toilet blocks**– General usage by occupants in toilets, urinals, bathrooms, wash basins using approx. 80,000 - 1,00,000 litres of water daily
- **Cleaning of the premises** – The entire University is very well maintained with respect to hygiene and cleaning is one of the major uses of water requirement. **The toilet areas are cleaned twice on a daily basis.**
- **Garden and surrounding open space**
  - Cleaning, watering the plants requires approximately more than good amount of water.
  - Keeping in mind the scale of the open spaces there is supply system connected directly and the plants, trees are hardly watered regularly.
  - Though, they are watered on alternate days in winter season and about 2-3 times a day in summer season.
  - On a regular climate day it is watered 3 days a week and in rainy season it is dependent on the monsoon showers.

## 6.3 Areas of water usage

Based on the inventory done - data shared by the staff it was found that the premises has the following facilities.

- No. of Urinals - 900
- No. of Toilets - 300
- No. of Wash Basins - 300
- No. of Taps in Indoors - 246
- No. of Taps in the Outdoors - 54

**As per on site observation, it was noted that there is no water wastage of water in the form of Cleanliness of toilets.**

## 6.4 Site investigation about water management.

The University has an excellent management system which is very appreciable. We have observed the following points.

- There was **no water leakage in the entire premises**. The **pipes are well maintained with adequate hygiene**.
- **The premises has an efficient water management in terms of operations and maintenance**. The toilets were kept very tidy and are cleaned every day.
- The **waste water does not mix with ground water and gets directed to storm water drains**.
- **The University has natural rainwater harvesting system which is very useful**. There are **sufficient number of taps** in the premises.
- **There is an efficient waste water treatment system in form of Sewage Treatment Plant**.

## 6.5 About the Sewage Treatment Plant

Based on the information provided by the University the process is such that the

- Raw water is collected from all sources, it is then directed towards the sedimentation pit near the rain water harvesting pit located at the V.C. Building. In this pit the water is treated and reused for agriculture purpose.
- Further sewage water collected from toilets, laboratories. is again treated at sewage treatment plant of Rama University, Kanpur. The sewage treatment plant is situated in remote area i.e. the extreme end of the University.
- After getting the sewage treated at STP, the effluent is again utilized in agriculture areas.
- Approximately 50,000 to 60,000 ltr. sewage water is treated daily at sewage treatment plant. Lot of plants and green area has been developed by using sewage treated water in the premises.

## 6.6 Survey Ratings

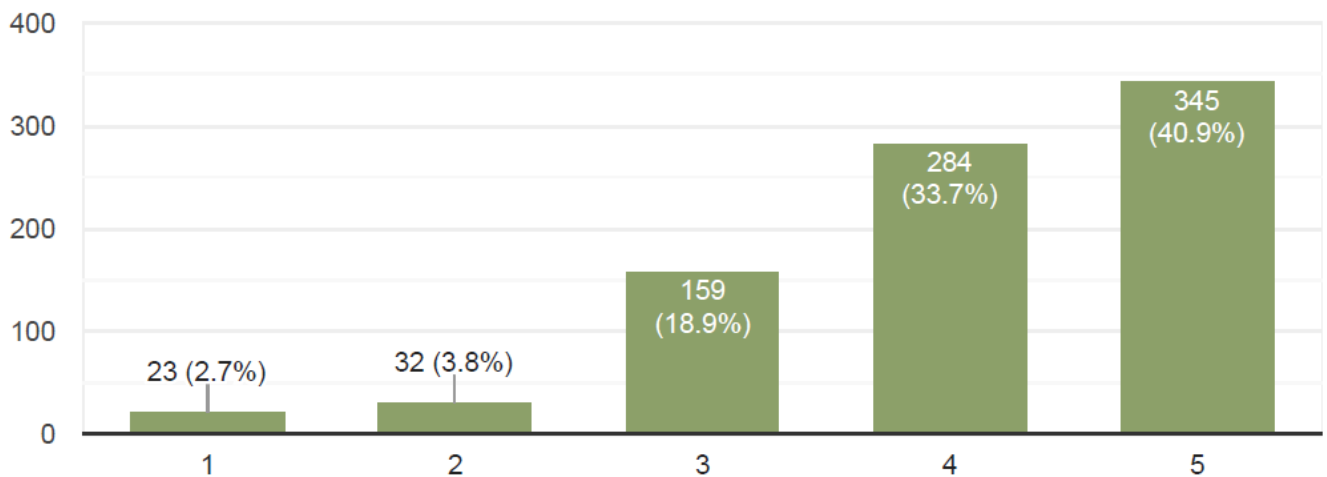
### Note about the review-rating survey

The Participants were asked to review (Through an online mode) the practice on a scale of 1-5 with scale components as follows:

- Scale 1 – Poor
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- Scale 3 – Good
- Scale 4 – Very good
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The figures in each of the columns of graph depict the Number of participants responses in numerical (Percentage of the participant response) – For example 101 responses (44.5%)

### Rate - Usage of water saving practices adopted in Institute premises

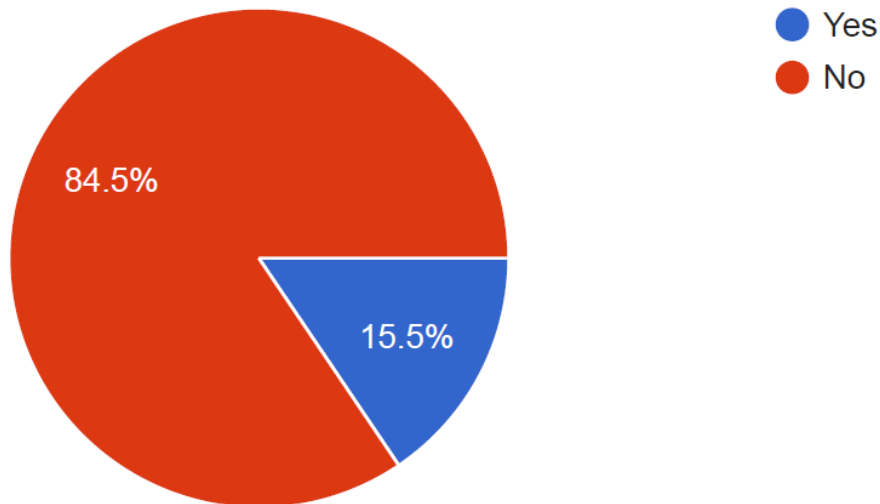


*Figure 8: Water management practices in University*

There were mixed responses received the highest was for **rating 5 (Excellent) at 41%** followed by **34% for rating 4 (Very Good)**.

## 6.7 Survey Results

### Is there any Water pollution in the premises?



*Figure 9: Participants response in survey*

The students, staff (**almost 85%**) of responses confirmed there is no water pollution

## 6.8 Survey review

### According to your observation what are the simple steps adopted by the Institute towards water conservation?

**Some of the key responses are noted below as a result of Online survey.**

- There is a drip irrigation system to fulfill the needs for the plants ,which helps in not the wastes of the water
- Conserving water reduces wear and tear on major resources such as water and wastewater treatment plants and the distribution systems that deliver water to the public. Using less water can also enable us to become more flexible during times when there is a water shortage
- Water Tanks /sewage treatment plant. University already adopted good steps for water conservation. They don't waste water recklessly
- The waste water is conserved and is given to the greeneries after it is filtered.
- Purifying of water and fertilizing the water for agricultural fields is great step for utilizing the waste water.
- The university has been stabilized its own sewage treatment plant.



## **6.9 Additional features related to Water Audit**

Below mentioned are few aspects adopted for better water management practices in the premises.

### **a) Waste water from toilets**

This is collected and a waste water treatment plant is installed in open space wherein this water is treated and reused for gardening.

### **b) Waste water reuse in toilets for flushing**

The treated waste water is reused for toilets flushing with sewage treatment plant system.

## **6.10 Recommendations for a Sustainable Habitat**

Below mentioned are few suggestions for better water management practices in the premises.

### **a) Universal Toilet**

At least 1 toilet should be made for specially abled as per universal design norms.

### **b) Waterless urinals**

There can be provision of waterless urinals as a Green Building initiative in the premises, either the existing ones can be replace with such a facility of new toilets can be constructed in this manner.

# On-site investigation and physical verification

## Facilities related to water consumption and usage in the premises



# Health & Hygiene Audit



*Background reference image Curology on unsplash*

## 7. Health and Hygiene Audit

The hygiene is a part and parcel of our daily life. It is extremely essential to keep the surroundings clean in the same manner as we would want our houses to be. Educational Institutes have a bigger role to play in order to affect the young minds in the positive manner through better hygienic practices.

### 7.1 Facilities available

The University has the following facilities as part of the premises.

- Washroom facility in each of the Building.
- Hand wash facility
- Drinking water facility in the form of Water coolers and taps
- Ample number of dustbins in the premises

### 7.2 Smoke Exposure

As per the Site visit the following analysis **has a positive impact on premises.**

- The University has No Smoking messages as part of the awareness.
- Canteen uses Gas cylinders for cooking, there is no utilisation of fire wood. Thus **there is no smoke from burning of fire wood and any health issues related to the same.**
- The **garbage in premises is not burnt and there is no air pollution because of it.**
- The University is a tobacco and smoke free campus which helps in adapting to a Healthy University
- There is parking provision inside the campus there is slight issue of dust owing to the same but it is **balanced with the good vegetation in the premises.**

### 7.3 Hygiene

As per our analysis the following points **has a positive impact on premises.**

- For overall hygiene of the students and staff there are facilities such as Washroom

facility on ground floor, hand wash. The hygiene of toilet areas is well maintained. **The entire premises is cleaned twice on a daily basis. It is very appreciating that there are sufficient numbers of Maintenance staff who strive their best to take care of the entire premises in the most excellent way possible.**

- There staff keep a regular check about the operation and maintenance of the equipments each floor.
- Water management initiative with appropriate hygiene is undertaken. The areas of water tanks in site on ground floor are clean and no mosquito breeding spots are there.
- There are pest controls program practiced with appropriate sanitation facilities and Annual Maintenance Contract for pest control is done once a year by professional Pest control units
- The food premises and equipments are cleaned as per schedule with special care taken to avoid any water stagnation. The food waste and other refuse are removed periodically from food handling areas to avoid accumulation.
- As part of Tree Plantation programme the initiative of **Swachh Bharat Abhiyan of Govt. of India** is undertaken during various occasions.
- There are appropriate storage areas which are well maintained.

## 7.4 Site investigation

During the physical verification of the site, the following points were noted.

- All the facilities are cleaned on a daily basis.
- The Maintenance staffs are allotted the responsibility of the washroom hygiene and they do a very commendable and excellent job to maintain hygiene of the premises.

## 7.5 Recommendations for a sustainable habitat

**As per out physical site verification for this audit the efforts of the University are highly appreciable as they are very well maintained and no new recommendation with respect to this aspect is required.**



## 7.6 Survey ratings

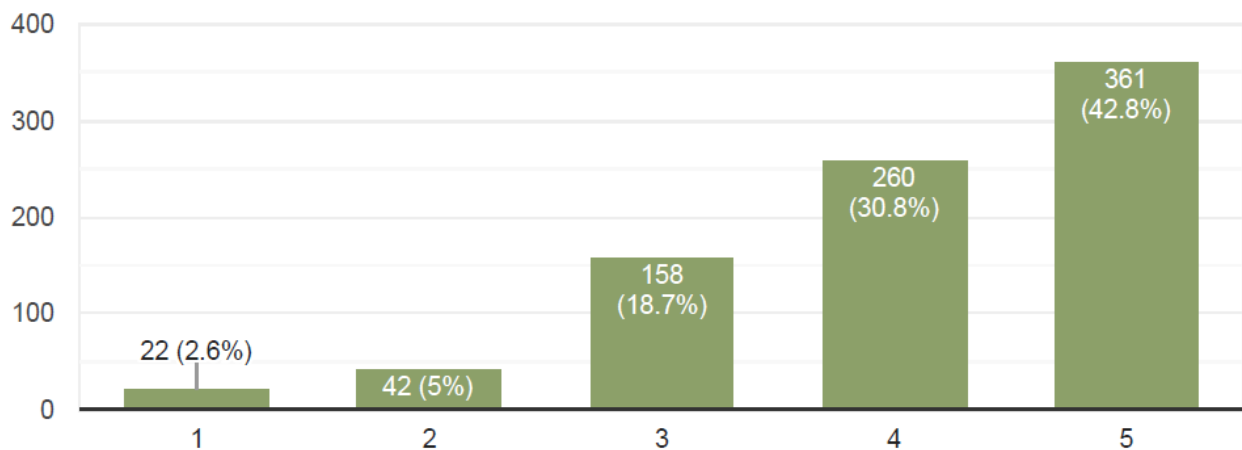
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- Scale 5 – Excellent

The figures in each of the columns of graph depict the Number of participants responses in numerical (Percentage of the participant response) – For example 101 responses (44.5%)

An online survey was conducted to analyse the student and staff views about **Rate - Hygiene practices in Institute premises**



*Figure 10: Participation analysis in the survey*

There were mixed responses received the equal also the highest was for **rating 5 (Excellent) at 43%** and **rating 4 (Very good) at 31%** followed by **18% for rating 3 (Good)**.

## 7.7 Survey review

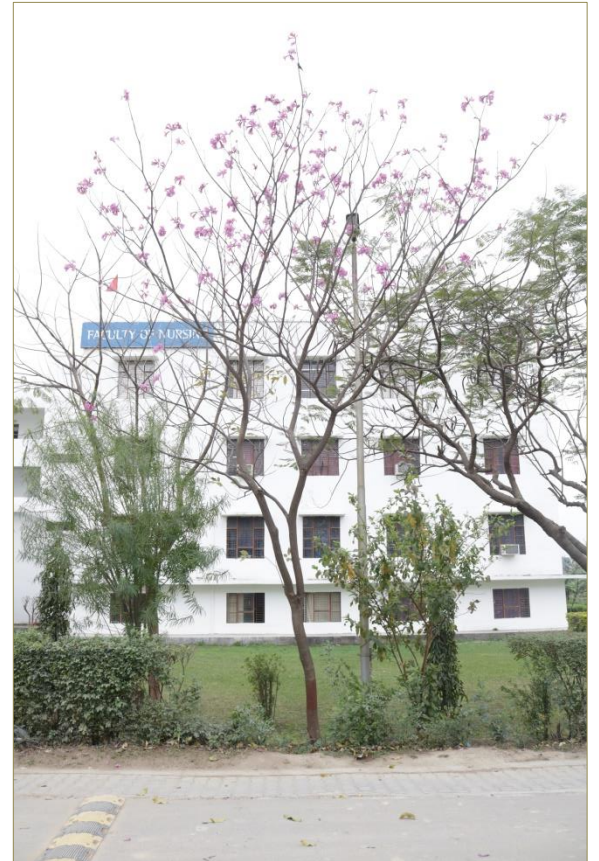
Some of the key responses are noted below as a result of Online survey.

### 7.7.1 According to your observation what are the simple steps adopted by the Institute towards cleanliness of the premises?

- Provide door mats in each class.
- Keep trash cans in each working station and class.
- Start recycling practices in the school.
- Encourage students and teachers to keep things away immediately after use.
- Organise cleaning day events.
- Clean the school facilities frequently.
- Regular cleanliness practices
- Proper hygiene
- Periodic inspection
- Daily sweeping
- Keeping clean, beautifying everywhere, and now a lot of attention is being paid to cleanliness
- Time to time clinging
- Awareness programme
- It is fine but it could be better
- Proper dusting, keeping covered dustbin at corner of public places, no spitting at public places
- Biomedical Waste Management

# On-site investigation and physical verification

Facilities related to health and hygiene in the premises





## 8. Survey review of Positive steps

Some of the key responses are noted below as a result of Online survey.

### **What according to you are the positive steps taken by the Institute towards Green Building/ Good maintenance?**

We have listed some of the key responses below.

- Promoting ecological health and awareness
- Plantation of many trees and maintainence of herbal garden
- Construction through the mostly reusable Items
- Good steps has been taken to make green building.
- Regular trimming of plants, spraying of insecticide and pesticides minimum use of paper.



## 9. Towards a Healthy & Sustainable University

### 9.1 Inputs by Greenvio Solutions

Based on the analysis of the study of premises in addition to the recommendations provided in each section of Ecological, Water, Waste and Energy Audit the University can adopt the following strategies towards a Healthy and Sustainable Institution practices.

- a) Kitchen garden** - There can be provision of kitchen garden practices in a designated area of the open space this would enhance the biodiversity and be useful in training students and staff about the healthy practices and vegetables grown which would be used in Canteen/ Mess. It helps in capacity building. The smaller steps taken have huge impacts when each student would adopt these practices in their homes or societies and grow kitchen garden, terrace garden there will be a long term benefit for the environment as a whole.
- b) Cutlery in the Canteen** – The regular plastic and steel plates, spoons used in Canteen can be replaced with eco-friendly and organic leaves, paper straw, disposable plates, edible spoons and tables made out of sugarcane waste or bamboo. This will be first of its kind initiative to be adopted and practiced thus also inculcating the healthy practices in students.
- c) Signages** – In addition to the signages being in regular language there can be additional signages in braille language for the specially abled students.
- d) Waste vio** – Stepping up a little further an initiative can be undertaken wherein University can tie up with an organisation and students can be encouraged to collect dry waste and electronic waste such as newspapers, old computers and others and hand over to organisation on a weekly or monthly basis thereby making a waste reduction approach in the community. This has benefits such as awareness, eco-friendly habits in becoming a responsible citizen.
- e) Eco clubs** – In addition to the NSS there can be an eco-club with school and college students operating together which will help the collaboration to yield results right from micro level.

## 9.2 Survey Results

An online survey was conducted to analyse the student and staff views about what changes according to you can be undertaken for Green audit improvement in University premises and activity, some of the key responses are listed below. Whereas many responses **stated there were no changes requires because the present practices are excellent.**

- No need for changes or activities
- Good surrounding

**Some of the suggestions by the Students and staff are listed below:**

- Tree plantation programme
- Unnecessary water uses should be reduced
- Donate bicycles ask facilities HOD or Dean to switch to cycle
- We should adopt fully paperless system.
- Plantation of different types of plant or new varieties of flower which make university environment green, fragrance and also attractive.
- Waste management could be improved by keeping different bins for biodegradable and non-biodegradable wastes. These biodegradable wastes can be used to make compost for gardens. Students active participation is also required, thus conducting seminars for waste management and air and water pollution management and its effect on climate change, should be conducted more.
- Student awareness program for growing more trees and respecting the trees and plants, caring of them and knowledge about how to grow them.
- Minimising the use of plastics
- Use of e-vehicles in the premise and not allowing of fuel vehicles to run in the premises.
- Cleaning of university

**However, it should be noted that the University has taken up multiple initiatives and because of Pandemic the students have not practically visited the campus so many of these points are not mandatory at the moment.**

## 10. References

- Uniform Plumbing Code – India, 2008
- IGBC Green Existing Buildings – Operation & Maintenance (O&M) Rating system, Pilot version, Abridged Reference Guide, April 2013
- IGBC Green Landscape Rating system, March 2013
- BOMA Canada Waste Auditing Guide, Best Environmental Standards, BOMA BEST – Canada
- Climate data <https://en.climate-data.org/asia/india/uttar-pradesh/kanpur-5844/>
- Used only for understanding Universal design - Universal accessibility Guidelines for Pedestrian, Non-motorized vehicle and Public Transport Infrastructure – Report guidelines by Samarthyam (National centre for Accessible Environments) – an initiative supported by Shakti Sustainable Energy Foundation.
- City of Cheyenne, Streetscape/ Urban Design elements - Wyoming Planning Association, Gillette, Wyoming, United States

