



**JSS Academy of Higher Education & Research**  
(Deemed to be University) (Accredited A+ Grade by NAAC)

## **COMPENDIUM ON SDG-7**

### **AFFORDABLE AND CLEAN ENERGY**

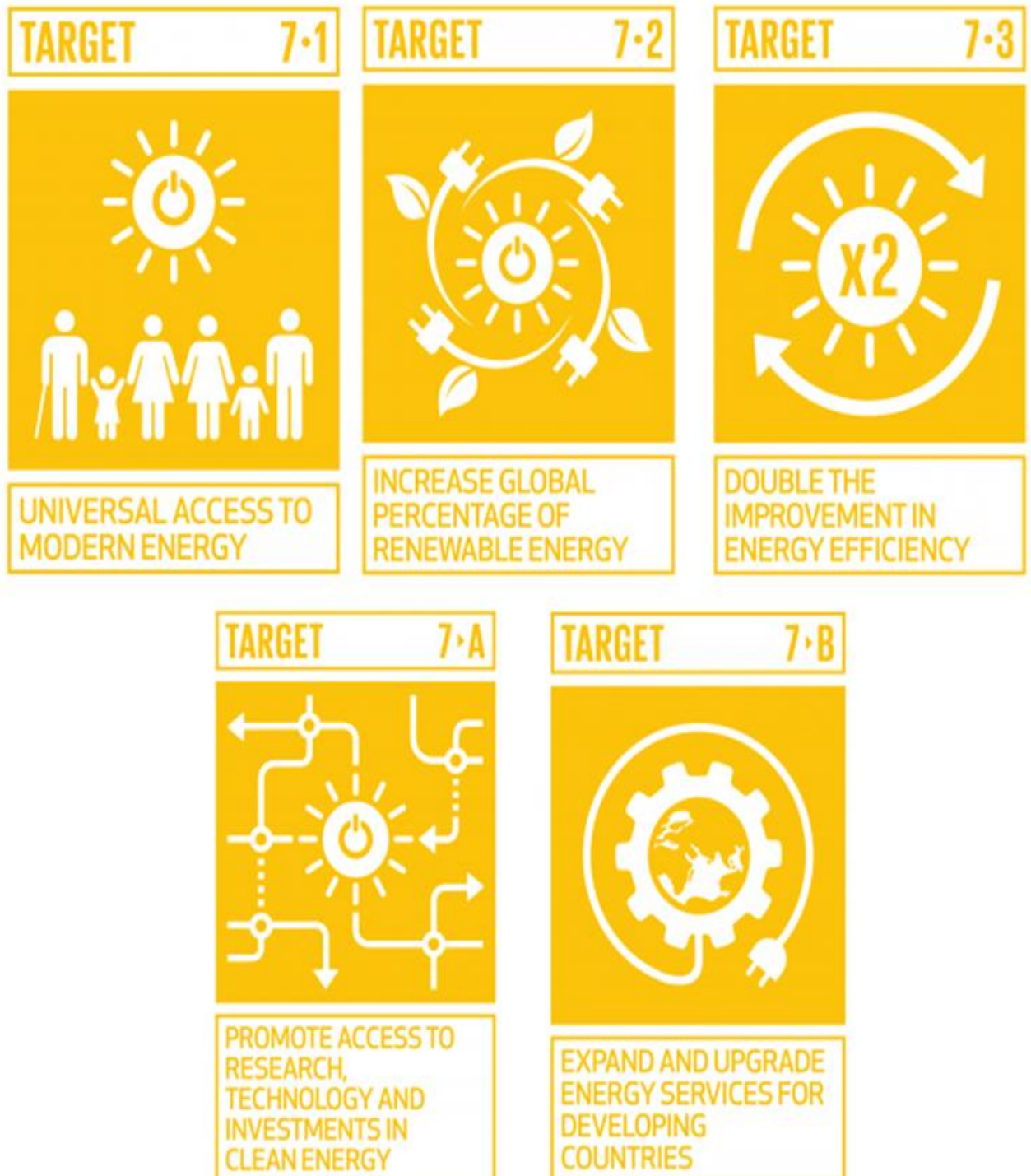
**Compendium of Activities in Achieving UN Sustainable  
Development Goals**



**2024-25**

## JSSMC

### Targets to accomplish:



## The first target of SDG-7

### Clean Energy and Sustainable Mobility Initiatives at JSS Medical College

- **Clean Fuel for Cooking:**

The hostels have transitioned to **clean cooking fuels**, reducing dependence on fossil fuels and traditional biofuels. This shift lowers harmful emissions, improves indoor air quality, and creates a healthier living environment for residents.

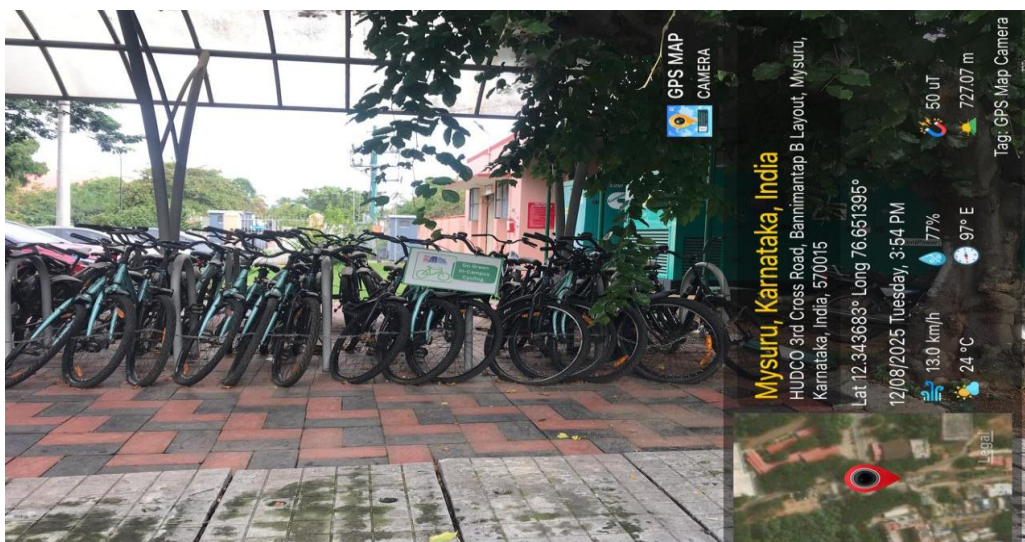
- **Promoting Sustainable Transportation:**

To minimize the use of non-renewable energy and reduce the campus's carbon footprint, bicycles are provided for students and staff. This initiative helps to:

- Encourage the adoption of **eco-friendly transportation habits** among the youth.
- Reduce CO<sub>2</sub> emissions and improve local air quality.
- Promote physical fitness and overall well-being within the campus community.

These measures support the vision of **universal access to affordable, reliable, and modern energy services**, while also contributing to environmental conservation and public health.





## 7.2: Increase the global percentage of renewable energy:

### Energy and Environmental Sustainability Measures at JSS Medical College

- **Solar Energy Implementation:**

Solar panels have been installed across the hostels, medical college, and hospital, substantially increasing the campus's reliance on renewable energy and reducing dependence on non-renewable sources.

- **Efficient Lighting Systems:**

The campus utilizes LED lighting for improved energy efficiency and extended lifespan compared to conventional lighting. Additional measures to optimize energy use include:

- Switching off lights at night when not in use.
- Installing motion-sensitive pathway lights to ensure safety while preventing unnecessary energy wastage.
- Maximizing natural ventilation and daylight in classrooms and laboratories to eliminate the need for artificial lighting during daytime hours.

- **Environmental Considerations:**

- Air conditioners are not installed in offices and chambers, reducing electricity consumption and supporting environmental conservation.
  - Rainwater harvesting systems capture and store rainwater, contributing to sustainable water management and recharging groundwater reserves.
- Through these initiatives, JSS Medical College advances its commitment to energy conservation, renewable energy adoption, and environmentally responsible practices, ensuring long-term sustainability for the campus and surrounding community.

## RAIN WATER HARVESTING



## SOLAR PANELS



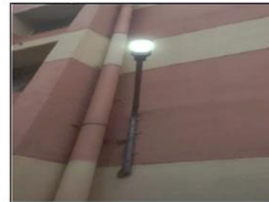
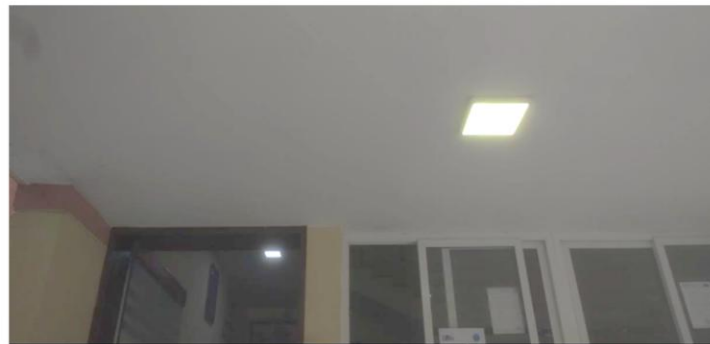
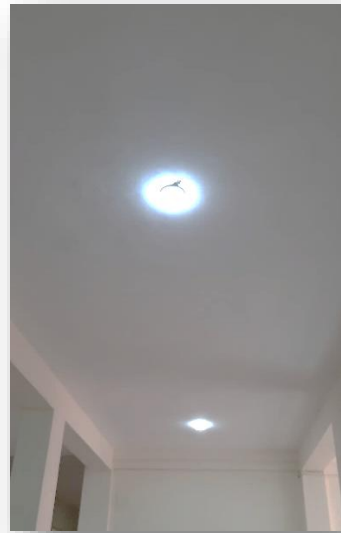
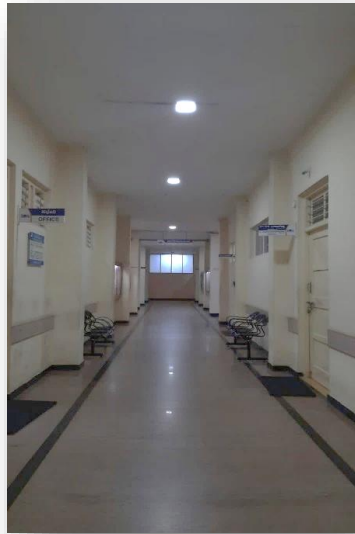
## The third target of SDG-7

### 7.3: Doubling Energy Efficiency:

In alignment with Sustainable Development Goal (SDG) 7.3—which seeks to double the global rate of improvement in energy efficiency—JSS Medical College has implemented targeted initiatives to significantly reduce energy consumption and promote sustainable energy practices.

- **Solar Power & LED Lighting:**
  - Installation of solar panels across campus buildings has shifted a substantial portion of energy needs to renewable sources.
  - LED lighting has replaced conventional bulbs, cutting electricity use while improving illumination quality.
  - Motion-sensitive lighting on pathways enhances safety for students and staff while preventing unnecessary energy wastage.
- **CPCB-Compliant Energy Use:**
  - All energy sources, appliances, and systems are fully compliant with Central Pollution Control Board (CPCB) standards, ensuring maximum operational efficiency and minimal environmental impact.
- **Pooled Transport Systems:**
  - A shared transport service links the college, hospital, and other campus facilities, reducing reliance on individual vehicles.
  - This initiative lowers petroleum fuel use, decreases emissions, and supports cleaner air around the campus.

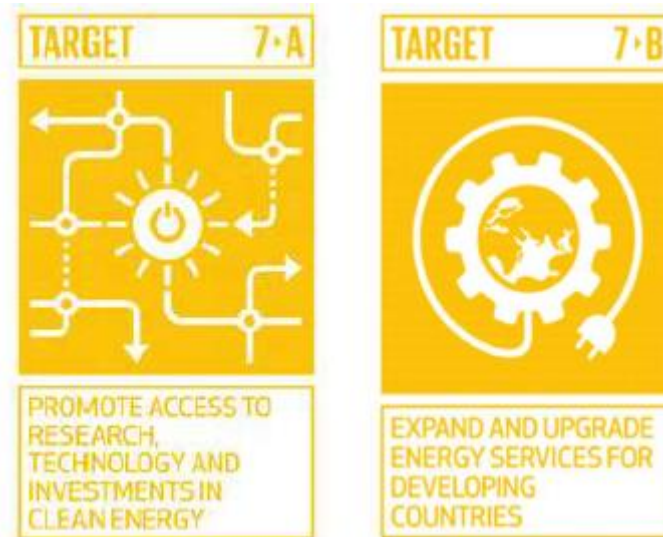
By integrating renewable energy technologies, optimizing lighting systems, ensuring strict regulatory compliance, and promoting sustainable transportation, JSS MC is actively doubling its energy efficiency gains, reducing overall consumption, and setting a benchmark for eco-conscious academic institutions.



### The fourth target of SDG-7:

**7A: Promote access to research, technology, and investments in clean energy**

**7B: Expand and upgrade energy services for developing countries.**



Located on a 43-acre campus, JSS Medical College (JSS MC) in Mysuru stands as a model of **bioclimatic architecture**—designed to optimize shading, natural ventilation, and passive heating and cooling. The campus features an internal atrium that allows for effective **insolation and natural lighting**, further reducing the need for artificial energy use. Tree canopies provide summer shade, while **solar energy systems** support passive heating, aligning with the institution's long-term sustainability goals.

### Key Initiatives and Commitments by JSS Academy of Higher Education and Research (JSS AHER):

- **Regulatory Compliance & Awareness:** Adheres to energy conservation regulations and regularly educates staff on energy-efficient practices.
- **Biomedical Waste Management:** Implements safe, compliant biomedical waste disposal within hospital operations.
- **Pollution Reduction:** Promotes cycling to reduce fossil fuel emissions in and around the campus.
- **Solar Power & Energy-Efficient Lighting:** Installs solar panels in hostels and uses LED lighting campus-wide to cut energy consumption.

- **Rainwater Harvesting:** Captures and utilizes rainwater for efficient natural resource management.
- **Soil Screening & Effluent Treatment:** Monitors soil for multidrug-resistant (MDR) pathogens and operates effluent treatment plants for microbiology lab waste.
- **Plastic Use Reduction:** Replaces Steripack plastic with brown paper for instrument wrapping in the Central Sterile Services Department (CSSD).
- **Safe Disposal of Microbiological Materials:** Autoclaves and professionally treats culture samples to prevent environmental contamination.
- **Student Engagement:** Encourages student participation in Sustainable Development Goals (SDGs) through regular awareness programs on clean and affordable energy.
- **Campus Greening:** Maintains one of the greenest institutional campuses, preserving existing trees and planting annual, biennial, and long-lived species to support biodiversity.







## Water Conservation, Green Initiatives, and Environmental Education at JSS Medical College

We are taking proactive measures to promote sustainable energy use and environmental stewardship:

- **Rainwater Utilization:**

Rainwater is redirected to irrigate the campus gardens, and plans are underway to install **rainwater-harvesting-friendly infrastructure** to further enhance water conservation efforts.

- **Tree Plantation and Afforestation Awareness:**

Students are encouraged to plant saplings during special occasions, fostering a hands-on approach to building a sustainable environment. Educational programs highlight the importance of **afforestation** and restoring green spaces as a key strategy for ecological balance.

- **Student-Led Environmental Projects:**

Students actively participate in initiatives such as sapling planting drives and the

creation of **working models** for innovative environmental solutions. These activities provide practical experience in applying sustainable concepts.

- **Recycling and Energy Reuse Education:**

Awareness sessions emphasize the principles of recycling and reusing energy in productive and constructive ways, reinforcing the importance of sustainable resource management.

Through these efforts, JSS Medical College integrates **practical learning, environmental responsibility, and sustainable resource use**, contributing to affordable and clean energy goals while nurturing future eco-conscious leaders.

## **PROGRAMMES CONDUCTED BY THE INSTITUTION**

### **OUTREACH & EXTENSION ACTIVITIES**

#### **Swachhata Hi Seva – 09-10-2024**

NSS organized a Swachh Bharat cleanliness drive, aimed at promoting hygiene and environmental awareness with the students at JSS Medical College on October 9, 2024. The event commenced at 6:30 AM and witnessed enthusiastic participation from 30 students, who were eager to contribute to this noble cause.

Equipped with T-shirts, caps, and gloves provided by the college, the participants gathered behind the college premises, extremely enthusiastic. Under the guidance of esteemed faculty members - Dr.Manu G, Mr.Manjunath and Mr.Venkatesh, the students divided into groups, efficiently cleaning the area. The enthusiasm was palpable as everyone worked together, fostering a sense of teamwork and responsibility towards the environment.

Throughout the morning, the students collected and filled numerous garbage bags, clearing the area of plastic waste, wrappers, and other debris within the JSS Hostel campus and also outside the campus. This hands-on experience not only enhanced the students' understanding of the importance of cleanliness but also highlighted the significant impact collective action can have on maintaining a sustainable environment.

The drive concluded with a brief reflection session, where participants shared their experiences and discussed the need for continued efforts in promoting cleanliness. This initiative by NSS aligns with the broader goals of the Swachh Bharat mission, inspiring future generations to prioritize cleanliness and environmental stewardship. The event was a resounding success, leaving a lasting impression on both the students and the community.



## Family Adoption Program MBBS Phase II (2022-2023 Batch) Report on NSS activity

As a part of Family Adoption Programme (FAP) Department of Community Medicine, JSS Medical College, JSSAHER in coordination with NSS unit, conducted plantation drive in Hanchya and Ramanahalli village on 23<sup>rd</sup> and 24<sup>th</sup> of October 2024. Phase II MBBS students (2022-23 batch) were part of this activity.

The programme included distribution of herbal plants by the Phase II MBBS students to the adopted families on 23<sup>rd</sup> and 24<sup>th</sup> of October 2024. On 24<sup>th</sup> of October 2024, felicitation programme was conducted for the staffs and ASHA workers of Hanchya PHC. Dr. Manu, NSS Coordinator, JSS Medical College felicitated the Health Inspector Mr. Dayanand, Community Health Officers Mrs. Rashmi and Mrs. Madhuri, Primary Health Care Officers Mrs. Nethra and Mrs. Shilpa and other staffs and ASHA workers of the PHC. FAP Mentors Dr. Amoghashree, Assistant Professor and Dr. Rashmi S, Senior Resident, Department of Community Medicine organized the event. Dr. Rashmi S, Senior Resident thanked the PHC staffs for various support received from the PHC during the last two years of FAP. The postgraduate students, medico-social workers Mr Sunil and Mr Mallikarjun Swamy and non-teaching staffs of Department of Community Medicine were present during the event. The entire plantation drive was great success.



## **AMR Frontline Workshop – 04-12-2024**

The Department of Microbiology, JSS Medical college, JSSAHER in collaboration with National Centre for Biological Sciences, Tata Institute of Fundamental Research, Department of Medical Education, Government of Karnataka conducted a workshop on December 4, 2024 for MBBS Final Year students. The event was hosted in *Sri. Rajendra Centenary Auditorium (SRCA), JSS Hospital*.

The main objective of the program was to raise awareness about Antimicrobial Resistance, surveillance, Stewardship and infection control Practices among the budding medical practitioners.

The program began with a Workshop Introduction to the participants by Dr.Satya Srinivasachari the workshop Lead & Project associate, SAS-APSI, NCBS-TIFR.

The introductory note was followed by a brief inaugural ceremony with dignitaries such as Dr. Praveen Kulkarni, vice principal para-clinical, JSSMC , Dr. Manthappa, vice principal clinical, JSSMC, Dr.Madhu CP, Medical superintendent, JSS hospital, Dr.Tejasree A, Professor & HOD, Department of Microbiology& the staff of microbiology along with the final year medical students of JSS Hospital participated in the inaugural ceremony.



The inaugural ceremony was followed by a game of Taboo incorporating AMR to develop involvement & Sense of commitment towards AMR among the blossoming medical graduates. This was lapped up by an invited guest lecture by Dr. Shivanjini Moharir, Senior Scientist, Tata Institute for Genetics & Society (TIGS), Bengaluru. She gave an excellent review on the science of Environmental AMR Surveillance and the efforts of the Alliance for pathogen surveillance Innovations (APSI) India.

The tea break which followed was distinct and involved the students in word Puzzles & an AMR themed photobooth which elated the students.



Following the tea break an Excellent session was delivered by Dr.Chaya Prathap, Consultant Microbiologist& Infection Control lead, Narayana Multispecialty Hospital, Mysore on the topic “Safe zones & Watchful Eyes” in reference to Antibiotic Stewardship & Antibiotic policy. This was paralleled by hands-on group activities, Jeopardy games & AMR Quiz for the student participants. Another highlight of the program was a guest lecture delivered by Dr. Nimrah Fathima Assistant Professor Department of general medicine, JSSMC, Mysore on the clinical Challenges due to AMR in a tertiary care hospital.

The program concluded on a positive note with the curtain call & prize distribution ceremony leaving the students in high spirits to stand tall as superheroes in the fight against superbugs.

## **Winter School in Geospatial Science & Technology**

**(Level-1, Standard Program) - 27<sup>th</sup> November to 17<sup>th</sup> December 2024**

JSS Academy of Higher Education & Research (JSS AHER) has received funding from the National Geospatial Program, Department of Science & Technology, Government of India, to conduct a 21-day Winter School in Geospatial Science & Technology (Level 1 Standard Program) from 27th November to 17th December 2024. The program is jointly organized by the Department of Community Medicine, JSS Medical College, and the Division of Geoinformatics, School of Life Sciences, JSS AHER, Mysuru.



The Inaugural Ceremony was held on 27<sup>th</sup> November 2024. Chief Guest, Dr.P.G.Diwakar, ISRO Chair Professor, National Institute of Advanced Studies (NIAS), IISc Campus, Bangalore formally inaugurated the program by lighting the lamp by the alongside other dignitaries, including Dr.C.G.Betsurmth, Executive Secretary, JSS Mahavidyapeetha;

Dr.H.Basavana Gowdappa, Vice Chancellor, JSS AHER; Dr.Sunil Kumar D, Organizing Chairperson and Professor & Head, Department of Community Medicine, JSS Medical College; Dr.Madhu B., Organizing Secretary, Professor, Department of Community Medicine, JSS Medical College and Deputy Dean (Research), JSS AHER; Dr.Praveen Kulkarni, Vice Principal (Para Clinical), JSS Medical College; and Dr.Sawant Sushant Anil, Joint Organizing Secretary and Coordinator, Division of Geoinformatics, JSS AHER, Dr.M.C.Manjunatha, Joint Organizing Secretary & Assistant Professor, DBT-BUILDER Project, JSS AHER.

Dr.P.G.Diwakar addressed the gathering and highlighted the pivotal role of Geographic Information Systems (GIS) in addressing pressing global healthcare challenges, emphasizing the critical application of geospatial technologies in mitigating the interconnected threats of air pollution and climate change to safeguard public health and environmental sustainability. Our Guest of Honor, Dr.H.Basavana Gowdappa stressed on the importance of integrating geospatial technologies in health research. Dr.C.G.Betsurmath rendered the presidential address and highlighted the program's potential to foster multidisciplinary innovation.

With 25 participants, including doctors, scientists, engineers, geographers, public health professionals, and Ph.D. scholars, the workshop provides hands-on training for real-world applications and emphasizes the role of GIS in achieving the Sustainable Development Goals (SDGs). This program reinforces JSS AHER's commitment to advancing education and research in cutting-edge geospatial science and technology.

This training program is emphasized on practical learning through daily theory sessions and hands-on exercises, with a strong focus on QGIS and SAGA software. As part of the program, participants also had a field visit to Suttur on December 1, 2024, where they had the privilege of meeting His Holiness Jagadguru Sri Shivarathri Deshikendra Mahaswamiji the Chancellor of JSS AHER.

### **World Environment Day Quiz Competition Highlights – 04-06-2024**

In celebration of World Environment Day, the School of Public Health, JSS Medical College, JSSAHER, organized an exciting quiz competition on 4th June 2024. The event, themed "Land Restoration, Desertification, and Drought Resilience," aimed to raise awareness and promote action towards environmental sustainability with the inspiring slogan, "Our Land. Our Future. We are #GenerationRestoration." The event kicked off with a welcome address by Ms. Aransha, followed by detailed instructions from Dr.Pavan. Ten teams, consisting of 1-4 members each, participated enthusiastically. The quiz, crafted by Dr.Pavan and Dr.Srinija, featured 20 questions centered on environmental knowledge.

Dr. Anil S Bilimale, Chief MPH Coordinator, School of Public Health on 5th June 2024 distributed prizes and certificates. The event concluded with a heartfelt thank you to all participants and organizers for their dedication and hard work in making the World Environment Day celebration a resounding success.



### **Arthropods- symposium – 24-09-2024**

Dr Nithya- mosquitoes

Dr Deepna- fleas, centipede, millipede

Dr Supriya- ticks, bugs

Dr Jayalaxmi- lice, spiders, scorpions

Departmental symposium was conducted in 2 sessions on 24/09/2024 and 28/09/2024, valuable insights were provided on the topic “Arthropods”. Dr. Deepna L., Dr. Nithya, Dr. Jayalaxmi and Dr. Supriya S had an interactive session regarding the dermatoses caused by arthropods such as trivial bites, stings, envenomation, anaphylactic reactions along with their management with the audience. Total of 18 post graduates and 7 faculties were present.



### **The World Environmental Day 2024 – 04-06-2024**

The World Environment Day 2024 was organized by the students of the School of Public Health, JSS Medical College, JSS AHER, on June 4th in JSS Hospital campus, Mysuru, under the theme "Land Restoration, Desertification and Drought Resilience," with the slogan "Our Land. Our Future. We are #GenerationRestoration,"

Dr. Madhu C.P., the Medical Superintendent of JSS Hospital, graced and addressed the occasion as the Chief Guest, Mr. Satish Chandra, Administrative Officer of JSS MC, was present as Guest of Honor.

The Other dignitaries who attended the event were Dr.. Vidya C. S., Head of the Department of Anatomy, Dr.Rajeshwari L., Professor and Head, of the Department of Physiology, Dr Vanitha Reddy Coordinator of- the Department of Nutrition and Dr.. Anil S. Bilimale, Chief MPH Coordinator – School of Public Health.

All the Faculties and students from the School of Public Health and other departments namely Department of Nutrition and Department of Surgery participated in the event. Saplings were adopted and planted in the new parking area of the JSS Hospital Campus as a symbolic gesture towards protecting the environment and enhancing the ecology. Later, certificates were distributed to all the participants who contributed to Environment Day by planting saplings.

A quiz competition was held among the students to mark Environment Day, enhancing their knowledge and making the event enjoyable for everyone involved. All students participated enthusiastically, contributing to a fun and educational experience.

The event emphasized the importance of nurturing nature for a better future, echoing the sentiment of sustainable environmental stewardship.



### **Plantation Drive as Part of World Environmental Day 2024**

As part of World Environmental Day 2024, the Department of Community Medicine, JSS Medical College, Mysuru organized a Plantation Drive at Hale Kesare village under Hanchya PHC of Mysuru district on 15.06.2024. Siddlingpura Gram panchayat President Mr.Madesh was the chief guest. The program was also attended by Gram Panchayat Vice-President Mrs Jyothi, Panchayat Development Officer MR Basavaraj, Dr.Praveen Kulkarni, Vice-Principal (para clinical), JSS medical college, Dr.Ravishankar, Assistant Professor, Department of Anatomy and Dr. Manu, Associate Professor, Department of Pharmacology (NSS officers), JSS Medical College, Mrs. Gowri, Headmistress-Government Primary School, Hale Kesare, Dr.Shweta N.Kurkuri, Dr.Sunitha Singh, Dr.Mythily M R, faculty, Medico-social workers and postgraduates from the Dept of Community Medicine, JSS Medical College, other members of Siddlingpura gram Panchayat and First-year MBBS students as part of their Family Adoption Program. The program followed with a pledge to save the environment and later with planting and adopting 120 saplings of Mahogany and Honge plants donated by the Forest Department,

Mysore division by the medical students. Shri N Raghavan, owner of Raghulal and Co, donated tree guards for sapling protection.



### **Dengue Awareness – 23-07-2024**

JSS Jan Shikshan Sansthan Mysore, Karnataka and JSS Urban Health Centre, Department of community medicine had organized programs at JSS urban health centre on 23/07/2024.

1. Awareness program on dengue and malaria-causes, mode of spread and preventive measures. Also about personal hygiene and cleanliness by Dr. H.V. Rama, LMO JSS UHC under swachhata pakhwada program.
2. Certificate distribution to the beneficiaries of “helper to hospital course”
3. Inauguration of new batch of tailoring course.

The program was inaugurated by chief guest Sri. Nagaraju, Subject expert, school education department, JSS mahavidyapeeda. Sri. Ramesh, director JSS Jan Shikshan sansthan, Smt. Sowbhagya, program officer JSS Jan Shikshan Sansthan were present. JSS Medical college and Dental college interns, staff of JSS Jan Shikshan Sansthan, 30 women beneficiaries, staffs of JSS UHC attended the program. The program was compered by Santosh. H.B., Health inspector, JSS UHC.



### **MOC DRILL ON FIRE SAFETY – 30-01-2025**

MOC Drill Was conducted on 30-01-2025. Members of the observational team were chosen to oversee, direct, and educate all employees and workers about the potential for mishaps and anticipated risks. Observational team members: Dr.Praveen Kulkarni, Mr.Satish Chandra, Mrs.Shilpa.

Description: This was a planned exercise designed to teach workers how to protect themselves in an emergency. As a first step, a brief demonstration was held to demonstrate how site management will help and handle workers in emergency situations. Total number of participants is 120.



### **Swacchatha Sarvekshan 2024, Kukkarahalli lake Swacchatha Abhiyan**

JSS Medical College NSS wing participated in Swacchatha Sarvekshan 2024, Kukkarahalli lake. Swacchatha Abhiyan conducted by Mysuru City Corporation on 16/02/2025 starting from Kuvempu Vana, Railway front gate, Mysuru.

The event commenced at 7:00 AM and witnessed enthusiastic participation from 25 students including MBBS and BSc students, who were eager to contribute to this noble cause.

The students collected and filled numerous garbage bags, clearing the area of plastic waste, wrappers, and other debris throughout the morning. This hands-on experience not only enhanced the students' understanding of the importance of cleanliness but also highlighted the significant impact collective action can have on maintaining a sustainable environment. The event was a resounding success, leaving a lasting impression on both the community and the students.



### **NSS – Swachh Bharath Abhiyan 2025 – 04-03-2025**

NSS conducted a Swachh Bharath Abhiyan on March 4, 2025, with the goal of raising awareness of environmental issues and hygiene among JSS Medical College students. 55 students enthusiastically participated in the event, which started at 7:30 AM, and were keen to support this admirable cause.

The students cleared the area of plastic waste, wrappers, and other litter throughout the morning by gathering and filling a large number of rubbish bags. The students' comprehension of the value of cleanliness was improved by this practical experience, which also demonstrated the enormous influence that group efforts can have on preserving a sustainable environment. The gathered waste were collected by the Mysuru City Corporation vehicle.



## **World Environmental Day – 05-06-2025**

**“What we are doing to the forests of the world is but a mirror reflection of what we are doing to ourselves and one another.” – Mahatma Gandhi**

A healthier environment is the need of the hour and we must not make any more delays. World Environment Day (WED) is celebrated to encourage and create awareness and to take appropriate action for the protection of the environment. In this regard to NSS unit JSS Medical College, Mysuru, conducted the sapling plantation program on 5<sup>th</sup> June 2025 in the JSSMC campus garden. Faculty and NSS student volunteers actively participated and witnessed the event.

Dr. Narayanappa D, Principal of JSS Medical College, Dr. Suma M.N., and Dr. Praveen Kulkarni, Vice-Principals of JSS Medical College, and Mr. Sathish Chandra, Administrative officer, Mrs Shilpa, Assistant Administrative Officer of JSS Medical College, Sports director Mr Lokeshappa H, planted Jackfruit saplings in the garden to mark this event. This program was coordinated by Dr Manu G, NSS Program Officer, JSS Medical College, Mysuru.



## Radio-Diagnosis

### Radiation safety and DEXA workshop – 17-05-2025

Department of Radiodiagnosis, JSSAHER, conducted a workshop on **Radiation Safety and DEXA** was successfully by **TechAspire**, a GE Healthcare company, at the **Department of Radiology, JSS Hospital**.

The workshop was a highly successful event that provided radiographers and B.Sc. Medical Imaging students with a comprehensive overview of radiation safety and bone densitometry. The program was inaugurated by **Mr. P. Tito Prabhakaran**, Senior Application Specialist for the South Region and Sri Lanka, Pharmaceuticals Diagnostics (PDx), GE Healthcare. In his keynote address, Mr. Prabhakaran emphasized the critical importance of **radiation safety** in medical imaging and shared valuable insights on best practices, current guidelines, and innovations in safety protocols.

Following the inauguration, a detailed seminar session was conducted by **interns of B.Sc. Medical Imaging Technology** – *Ms. Manal, Ms. Shreya Bojamma, and Mr. Krupasindhu Rana*. The seminar focused on **DEXA (Dual-Energy X-ray Absorptiometry)** and **Bone Densitometry**, elaborating on the principles, clinical significance, applications in osteoporosis diagnosis, and advancements in technology.

The session concluded with an **interactive quiz** based on the seminar topics, which saw enthusiastic participation from the attendees. The top **five winners** were recognized for their excellence and awarded **certificates of appreciation**.

The workshop was well-received and proved to be an enriching learning experience for all participants. It strengthened the knowledge base of the interns and staff and promoted awareness about safety and technological advancements in diagnostic imaging. We extend our sincere thanks to GE Healthcare's TechAspire team and all contributors for making this event a success. 60 participants attended this program.



## **Biosafety Awareness – Overview and Safe Use of Laboratory Ventilation Equipment (Biosafety and Laminar Air Flow Cabinets) – 24-01-2025**

**Ms.Sanjana V., Operations Supervisor ESCO Life Sciences Group, Bengaluru**

The Department of Biochemistry at JSS Medical College organized an insightful guest lecture on *"Biosafety Awareness – Overview and Safe Use of Laboratory Ventilation Equipment (Biosafety and Laminar Air Flow Cabinets)"* on 24<sup>th</sup> January, 2025 at the Seminar Hall, Department of Biochemistry, JSS medical College. The talk was delivered by Ms. Sanjana V. Operations Supervisor ESCO Life Sciences Group, Bengaluru, Karnataka, India. She provided an overview and in-depth information the different types of Biosafety cabinets, safety measures to be taken while working in the biosafety cabinets. She also highlighted various advanced technologies which Esco has brought in this field.



The session saw active participation, with a total of 27 attendees, including students, faculty, and researchers. The audience engaged enthusiastically during the Question-and-Answer session, reflecting their keen interest in the topic. As a token of appreciation, Ms. Sanjana V. was presented with a certificate of appreciation and a memento. The event concluded with a vote of thanks delivered by Dr.Preethi G. A., expressing gratitude to the speaker and the organizing team for the enlightening session.

## **Biological Insights from Working on Primates – 25-02-2025**

**Prof. Mewa Singh, Distinguished Professor (For Life) & INSA Distinguished Professor, Institution of Excellence, Vijnana Bhavan, University of Mysore**

The foundation of health sciences is all about exploring nature around us. "Biological Insights from Working on Primates" A Special Program was held at Department of Psychiatry, JSS Medical College, JSSAHER Mysore, on 25th Feb 2025. The Chief Guest & Resource Person was Prof. Mewa Singh, Distinguished Professor (For Life) & INSA Distinguished Professor, Institution of Excellence, Vijnana Bhavan, University of Mysore. Editor in Chief, Journal of Wildlife Science. Founding Chief Editor of Dialogue: Science, Scientists, and Society. Opening Remarks were by Dr.H.Basavanagowdappa, Vice Chancellor, JSS AHER, he called on for more collaboration and research in basic sciences. Research & learning from wildlife are important for health science conveyed Dr Kishor M Professor and Head, Dept. of Psychiatry, JSS MC. Interaction with Staff and Students of Dept. of Psychiatry and Clinical Psychology was fruitful.



### **World TB Day – 02-03-2025**

World TB Day was celebrated on 24<sup>th</sup> March 2025 at OPD of Respiratory Medicine and DOTS Centre. The theme for the year 2025 is “Yes! We Can End TB: Commit, Invest, Deliver”. Health education about Tuberculosis, its effects, importance of early diagnosis in preventing spread and minimizing the damage to vital organs, treatment was explained to the patients attending OPD.



### **World Asthma Day – 06-05-2025**

World Asthma Day was celebrated in the Department of Respiratory Medicine on 6<sup>th</sup> May 2025 at OPD. The theme for the year 2025 is “Make Inhaled Treatments Accessible for ALL”. Health education about Asthma, its early diagnosis and treatment was provided to the patients attending OPD.



### **Research Projects – Ongoing (External)**

| Title of the project                                                                                                                                          | Principal Investigator                                                               | Funding agency                    | Date of sanction | Amount sanctioned | Duration |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------|------------------|-------------------|----------|
| Phytoremediation of indoor air pollution in urban homes to improve air quality using innovative-sustainable technology based-plant wall air filtration system | Dr. Rajesh Kumar T<br>Professor of Biochemistry                                      | ICMR                              | Feb 2024         | 40.31             | 3 Yrs.   |
| Methylation of genes regulating adipogenesis (PPAR gamma, CEBPA, SREBF1) and its relation with serum vitamin D in young adults with and without obesity       | Dr.Shobha C.R                                                                        | ICMR                              | Dec 2021         | 45.53 lakhs       | 3 Yrs.   |
| Development of Millet based dietary fiber for protection of allergic asthma by modulating gut microbiome derived short chain fatty acids                      | Dr.Kiran                                                                             | ICMR                              | Nov, 2021        | 40 lakhs          | 3 Yrs.   |
| Epidemiology of chemical hazards among workers in different spectrum of agriculture activities of Southern India: a community based exploratory survey        | PI: Dr Nayanabai Shabadi<br>Assistant Professor,<br>Department of Community Medicine | ICMR                              | May 2023         | 36,96,817         | 3 Yrs.   |
| Longitudinal effects of Air Pollution Exposures on Lung growth and development of biomarker of lung function deficit in Urban Children                        | Dr. Rajesh Kumar T. & Dr.P A Mahesh                                                  | India Alliance<br>DBT-<br>Welcome | Oct 2020         | 350.0             | 5 Yrs.   |

|                                                                                                                                                       |                                     |                                                             |              |                            |                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------------------------|--------------|----------------------------|--------------------------|
| Prevalence of micronutrient deficiency, nutritional status and cognitive dysfunction among elderly residing in tribal areas of southern Karnataka     | Dr.Praveen Kulkarni                 | DBT                                                         | June 2020    | 27.5                       | 3 Yrs.                   |
| Community centred Health system strengthening for outpatient antimicrobial stewardship with replicating effective programs and framework              | Dr. Sunitha Chandrashekhar Srinivas | Pfizer- USA                                                 | January 2021 | 1 crore                    | 4 Yrs.                   |
| Global Infectious Diseases                                                                                                                            | Dr.Mahesh P A                       | Global Infectious Disease (GID), Fogarty, NIH               | 01.06.2017   | USD 1.1 Million Sanctioned | 01-06-2017 to 28-02-2023 |
| Molecular patho-mechanism of biomass smoke induced chronic obstructive pulmonary disease among women: Population based- and in vitro exposure studies | Dr.Mahesh P A                       | Swedish Heart Lung foundation, Karolinska Institute, Sweden | 17.06.2019   | 65 Lakhs Received          | 01-07-2019 to 31-12-2022 |
| Understanding the role of lung micro biome in biomass smoke exposure related chronic obstructive pulmonary disease                                    | Dr.Mahesh P A                       | Swedish research council, Karolinska Institute, Sweden      | 21.10.2021   | 46 Lakhs Received          | 01-01-2021 to 31-12-2022 |
| Adverse effect of outdoor and indoor air pollution on respiratory and vascular function among adolescents                                             | Dr.Mahesh P A                       | Swedish Heart Lung foundation, Karolinska Institute, Sweden | Jan 2022     | 15 Lakhs Received          | 21-03-2022 to 02-06-2023 |

|                                                                                                                                                                                                   |                |                          |            |                   |        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------|------------|-------------------|--------|
| Pilot study to investigate reasons for poor asthma control and to characterize Asthma and allergic rhinitis in the Indian population (SIRPAC India study & CAAR study) – A mixed methods approach | Dr. Mahesh P A | University of Birmingham | April 2021 | 20 Lakhs Received | 3 Yrs. |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------|------------|-------------------|--------|

### **ICMR, Lady Tata Memorial Trust Scholarship & DBT Fellowship details**

| Title of the project                                                                                                                       | Principal Investigator                                                                             | Funding agency | Amount sanctioned | Duration |
|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------|-------------------|----------|
| Effect of vitamin D on angiogenesis and oxidative stress induced changes in the glomerular basement membrane during diabetic nephropathy   | Ms.Lavanya B R<br>SRF<br>Dept of Biochemistry<br>JSS Medical College<br>Mysuru                     | ICMR           | 15,21,600.00      | 3 Yrs.   |
| Study of the efficacy of thymus vulgaris extract to mitigate COPD pathogenicity induced by cigarette smoke extract using an in vitro model | Mr.Mohammed Kaleem Ullah, Ph.D scholar,<br>Dept of Biochemistry,<br>JSS Medical College,<br>Mysuru | ICMR           | 12,60,000.00      | 3 Yrs.   |
| Assessing the impact of vitamin-D supplementation in mitigating Type-2 diabetes-induced histopathological changes in the mouse brain       | MsRimshia Naaz<br>SRF<br>Dept of Biochemistry<br>JSSMC Mysuru                                      | ICMR           | 2,57,800.00       | 3 Yrs.   |

**ICMR STS - UG Student Research Projects – Ongoing**

| <b>Sl No</b> | <b>Title of the project</b>                                                                | <b>PI</b>           | <b>Guide</b>         | <b>Funding agency</b> | <b>Date of sanction</b> | <b>Amount sanctioned</b> |
|--------------|--------------------------------------------------------------------------------------------|---------------------|----------------------|-----------------------|-------------------------|--------------------------|
| 1            | Directed Antimicrobial Stewardship for Culture Proven Gram Negative Bloodstream Infections | Shreya Prasanna     | Dr.Sujatha S R       | ICMR                  | 2024                    | 50,000.00                |
| 2            | Public awareness and attitudes towards microplastics: The Indian perspective               | Parishkrit Parashar | Dr Uma Vijayashankar | ICMR                  | 2024                    | 50,000.00                |

**Research Projects – Ongoing (JSS AHER)**

| <b>Title of the Project</b>                                                                                                                                           | <b>Name of the Principal Investigator/Mentor &amp; Department</b>               | <b>Amount sanctioned</b> | <b>Duration</b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------|-----------------|
| The effect of vitamin D supplementation on oxidative stress and renoprotection in streptozotocin-induced diabetic rats.                                               | Dr.Akila Prashant<br>Professor & HOD of Biochemistry<br>JSSMC, Mysuru           | 100,000.00               | 01 Yr           |
| Understanding the role of vitamin D angiogenesis and oxidative stress in diabetic nephropathy                                                                         | Dr.Prashanth Vishwanath<br>Professor of Biochemistry<br>JSSMC, Mysuru           | 300,000.00               | 01 Yr           |
| Estimating the burden of fungal infections in the intensive care units (ICUs) and Non-ICU settings of a tertiary care hospital with special emphasis on Candida auris | Ms.Niveditha Varma<br>PG in Medical Microbiology<br>JSS Medical College, Mysuru | 25,000.00                | 01 Yr           |
| Comparative Evaluation of Antioxidant capacity and glycemic index of locally available fruits in healthy volunteers.                                                  | Mr.Sagar K<br>PG Student in Biochemistry, JSSMC, Mysuru                         | 25,000.00                | 01 Yr           |

|                                                                                                                                                                                      |                                                                                                       |             |                        |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-------------|------------------------|
| A Study to know the impact of black rice (Chak-Hao) on Glycemia in normal adults.                                                                                                    | Ms.Singte Tabitha<br>PG Student in<br>Biochemistry, JSSMC,<br>Mysuru.                                 | 25,000.00   | 01 Yr                  |
| A Study to know the impact of black rice (Chak-Hao) insulin level in normal adults.                                                                                                  | Ms.Swarna Mariam Biju<br>PG Student in<br>Biochemistry, JSSMC,<br>Mysuru.                             | 25,000.00   | 01 Yr.<br>06<br>Months |
| Assessment of the Neuroprotective Effects of Herbal Extracts in Treating Alzheimers Disease Using a Model Organism.                                                                  | Dr.Sushma P<br>Asst. Prof. of Radio-<br>Diagnosis, JSSMC,<br>Mysuru.                                  | 300,000.00  | 01 Yr                  |
| Integrated Genomic Analysis of Color rectal Cancer: MSI Status Detection and Microbial Diversity Exploration via DNA Extraction, PCR, and NGS                                        | Dr.Sahana K.R<br>Assistant Professor<br>Department of<br>Biochemistry, JSS<br>Medical Collage, Mysuru | 3,00,000.00 | 24<br>Months           |
| Clinical Significance and Outcome of Pseudomonas aeruginosa Infection of Complicated Urinary Tract Infection in A Tertiary Care Hospital                                             | Mr.Ganesh R<br>Post Graduate Student<br>Dept of Microbiology,<br>JSS Medical College,<br>Mysuru.      | 25,000.00   | 12<br>months           |
| Assessing the prevalence and Impact of Indoor Air Quality on Respiratory Health Among Primary School Children in urban Mysuru an Analytical cross-sectional study                    | Ms.Sanjana M<br>Post Graduate Student<br>School of Public Health,<br>JSS Medical College,<br>Mysuru   | 25,000.00   | 12<br>months           |
| Assessing the effect of whole plant-based nutritional education on weight management, dietary habits, and health outcomes among overweight and obese women: a mixed-methods approach | Dr Madhu B,<br>Deputy Dean<br>(Research), Research,<br>JSS AHER.                                      | 1,50,000.00 | 14<br>Months           |

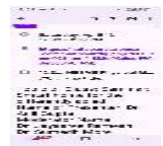
### **SIG DETAILS - ONGOING**

| Sl. No | Title of the Project                    | Name of the Principal Investigator                                             | Department           | Duration |
|--------|-----------------------------------------|--------------------------------------------------------------------------------|----------------------|----------|
| 1      | Respiratory and Environmental Diseases. | Dr. P A Mahesh<br>Professor of<br>Respiratory Diseases                         | Respiratory Diseases | 3 Yrs.   |
| 2      | Antimicrobial Resistance                | Dr. Deepashree R<br>Asst. Professor of<br>Microbiology,<br>JSS Medical College | Microbiology         | 3 Yrs    |

### **GUEST LECTURE DELIVERED BY THE FACULTY**

| Sl. No | Name of the faculty        | Title                                                                              | Date & Venue                                                                           | Certificate / Photos                                                                  |
|--------|----------------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1      | Dr. Anshu Kumar Yadav      | National Conference on New paradigms in biotechnology and sustainability (NPBS)    | 7 <sup>th</sup> January 2025<br>St. Joseph's College, Tiruchirappalli                  |  |
| 2      | Dr. MVSST Subba Rao        | National Science day                                                               | 28 <sup>th</sup> February 2025<br>Kuvempu University, Shankaragatta, Shimoga           |  |
| 3      | Dr. Ranjitha Shankaregowda | Infection control and prevention of needle stick injuries                          | 14 <sup>th</sup> May 2025<br>JSS College of Nursing, Mysuru                            |  |
| 4      | Dr. Sowmya G S             | Tackling Antimicrobial Resistance through Gamification and Artificial intelligence | 25 <sup>th</sup> to 26 <sup>th</sup> April 2025<br>Dept of Microbiology, JSSMC, Mysore |  |
| 5      | Dr. Rashmi P Mahale        | Tackling Antimicrobial Resistance through Gamification and Artificial intelligence | 25 <sup>th</sup> to 26 <sup>th</sup> April 2025<br>Dept of Microbiology, JSSMC, Mysore |  |

|    |                       |                                                                                                            |                                                                                           |                                                                                       |
|----|-----------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 6  | Dr. Raghavendra M Rao | Tackling Antimicrobial Resistance through Gamification and Artificial intelligence                         | 25 <sup>th</sup> to 26 <sup>th</sup> April 2025<br>Dept of Microbiology,<br>JSSMC, Mysore |    |
| 7  | Dr Mythily M R        | As Co-Mentor in 21 days Winter school on Geospatial Science and Technology, Level-1 Standard Program       | 17 <sup>th</sup> December 2024<br>JSS Medical College                                     |    |
| 8  | Dr Rashmi S           | As Resource Person in 21 days Winter school on Geospatial Science and Technology, Level-1 Standard Program | 17 <sup>th</sup> December 2024<br>JSS Medical College                                     |    |
| 9  | Dr Rashmi S           | As Co-mentor in 21 days Winter school on Geospatial Science and Technology, Level-1 Standard Program       | 17 <sup>th</sup> December 2024<br>JSS Medical College                                     |   |
| 10 | Dr Smitha MC          | Adolescent Health                                                                                          | 10 <sup>th</sup> May 2025<br>Public Health<br>Research Institute of<br>India              |  |
| 11 | Dr Smitha MC          | Tobacco Threats                                                                                            | 31 <sup>st</sup> May 2025<br>JSS Dental College,<br>Mysuru                                |  |
| 12 | Dr Mythily M R        | Updates on national guidelines on Dengue and Chikungunya                                                   | 16 <sup>th</sup> May 2025<br>Online                                                       |  |
| 13 | Dr Praveen Kulkarni   | Global and National Strategies for tobacco control                                                         | 31 <sup>st</sup> May 2025<br>JSS Dental College,<br>Mysuru                                |  |
| 14 | Dr Praveen Kulkarni   | Global and National Strategies for tobacco control                                                         | 31 <sup>st</sup> May 2025<br>JSS Dental College,<br>Mysuru                                |  |

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|----|----------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 15 | Dr Anil S Bilimale   | “Bridging Eras in Public Health: A Personal Narrative from Disease Eradication to Longevity and Well-Being”                      | 27 <sup>th</sup> May 2025                                                    |    |
| 16 | Ms Sheeba B          | JSS Panchamantra : A Lifestyle for Longevity                                                                                     | 28 <sup>th</sup> May 2025                                                    |    |
| 17 | Dr.K.C.Shashidhara   | APICON 2025 – 80 <sup>th</sup> annual conference of the Association of Physicians of India<br>topic: “Dengue fever in pregnancy” | 23 <sup>rd</sup> to 26 <sup>th</sup> January 2025<br>APICON 2025,<br>KOLKATA |    |
| 18 | Dr. Shilpa Avarebeel | Talk on Cleanliness, Health and Infectious Diseases                                                                              | 23 <sup>rd</sup> March-2025<br>Suttur, Mysuru                                |   |
| 19 | Dr.Mahesh PA         | The Indian College of Allergy Asthma and applied Immunology                                                                      | 19 <sup>th</sup> to 22 <sup>nd</sup><br>December 2024<br>Delhi               |  |
| 20 | Dr.Mahesh PA         | Allergocon 2025                                                                                                                  | 24 <sup>th</sup> & 25 <sup>th</sup> January 2025<br>IMA Vellore              |  |
| 21 | Dr Jayasree Ramesh   | Moderator Seminar Smart Home for the Differently Abled                                                                           | 12 <sup>th</sup> April 2025<br>Delhi, National Board Examination             |  |
| 22 | Dr Sarika M Shetty   | Hospital infection control                                                                                                       | February 2025<br>JSS College of Nursing<br>Mysuru                            |  |

### **PAPER / POSTER PRESENTED BY FACULTY & STUDENTS**

| <b>Sl. No</b> | <b>Name of the faculty / Student</b> | <b>Papers / Posters presented</b>                                                                                                                                                      | <b>National / International</b> | <b>Title of the programme</b>                                           | <b>Venue &amp; Date presented</b>                                                                                    |
|---------------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| 1             | Dr. Divya A J                        | Oral presentation<br>: Is there an association between physical exercise and screen time, sleep anxiety among Indian health care students.                                             | International                   | Conference on Health Professions Education (ICHPE) 2024                 | 13 <sup>th</sup> & 14 <sup>th</sup> Dec 2024; SDUAHER, Kolar                                                         |
| 2             | Mr. Vinay Kumar Vasimalli            | Seroprevalence of Hepatitis C Virus infection at a tertiary care hospital in Mysuru region.                                                                                            | International                   | International Conference on Emerging and Re-Emerging infectious Disease | CSIR- SERC Taramani, Chennai. INDIA 17 <sup>th</sup> & 18 <sup>th</sup> Feb 2025.                                    |
| 3             | Dr M N Sumana                        | Gamified Intervention to Enhance Antimicrobial Stewardship: Improving Knowledge and Practices on the Rational Use of Antimicrobials Among Medicines and Therapeutics Committee Members | International                   | ESCMID Global 2025                                                      | 11-15 <sup>th</sup> April 2025<br>European Society of Clinical Microbiology and Infectious Diseases, Vienna, Austria |
| 4             | Dr. Nayanabai Shabadi<br>Asso. Prof  | Evaluating Agrochemical Residues in Agriculturists, Biological samples and correlating with Potential Health risks                                                                     | International                   | CLiCON OEH2025                                                          | February 26–28, 2025, Ahmedabad,                                                                                     |
| 5             | Dr Shilpa D M                        | Ambient air pollution and perceived health risks: A Qualitative study in Mysuru Urban                                                                                                  | National                        | Research Scholars Conference                                            | JSS MS 27.02.2025                                                                                                    |

|    |                          |                                                                                                                                                                 |               |                                                                          |                                              |
|----|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------------------------------------------------------------------|----------------------------------------------|
| 6  | Ms Sheeba B              | Longevity India RISE for Healthy Aging                                                                                                                          | International | Rise for Healthy Aging Conference                                        | J N Tata Auditorium, IISc, Bangalore         |
| 7  | Dr Divya K L             | Longevity India RISE for Healthy Aging                                                                                                                          | International | Rise for Healthy Aging Conference                                        | J N Tata Auditorium, IISc, Bangalore         |
| 8  | Ms Chandana H N          | Association of Air pollution and non communicable disease among traders community working around polluted roads in Mysuru : An analytical Cross-sectional study | International | Rise for Healthy Aging Conference                                        | J N Tata Auditorium, IISc, Bangalore         |
| 9  | Darshan                  | Environmental effects on latent Fingerprint Persistence And Quality                                                                                             | Regional      | Research Scholar Conference 2025                                         | 27 <sup>th</sup> & 28 <sup>th</sup> Feb 2025 |
| 10 | Dr.K.M Srinath Professor | Effect of vitamin D on cytokine profile in diabetic and diabetic nephropathy                                                                                    | Local         | Research Scholars Conference in Health Sciences and life Sciences - 2025 | 02 <sup>nd</sup> Feb 2025<br>JSS AHER Mysuru |

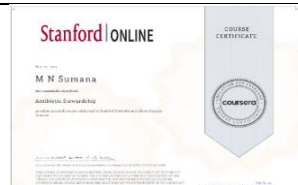
#### **GUEST LECTURES CONDUCTED**

| <b>Sl. No</b> | <b>Department</b> | <b>Date</b> | <b>Topic</b>                                                                                          | <b>Speaker</b>                                                                                                                                 |
|---------------|-------------------|-------------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| 1             | Biochemistry      | 02-01-2025  | <i>Microplastics and Next Gen Remediation Technologies</i>                                            | Dr.Thava Palanisami, Associate Professor, Global Innovative Center for Advanced Nanomaterials (GICAN), The University of New Castle, Australia |
| 2             | Biochemistry      | 24-01-2025  | <i>Biosafety Awareness – Overview and Safe Use of Laboratory Ventilation Equipment (Biosafety and</i> | Ms. Sanjana V. Operations Supervisor ESCO Life Sciences Group, Bengaluru, Karnataka, India.                                                    |

|   |                         |            |                                                                                                                          |                                                                                                                        |
|---|-------------------------|------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
|   |                         |            | <i>Laminar Air Flow Cabinets)</i>                                                                                        |                                                                                                                        |
| 3 | School of Public Health | 02-12-2024 | Global Health Beyond Borders                                                                                             | Dr. Deepa Iyengar: Vice Chair of the Department of Family and Community Medicine at UT Houston McGovern Medical School |
| 4 | Respiratory Medicine    | 19-03-2025 | Thromboxane and thromboxane receptor signaling at the crossroads of pulmonary disease, cardiovascular disease and cancer | Dr. Ajay Gupta, MBBS, MD., President & CSO, Charak Laboratories India Pvt. Ltd, Clinical Professor                     |
| 5 | Respiratory Medicine    | 23-03-2025 | Chronotherapy of Asthma                                                                                                  | Dr. P.K. Vedanthan, MD., DABP(USA), DABAI(USA) Professor, University of Colorado                                       |
| 6 | Respiratory Medicine    | 27-03-2025 | Basics of Interventional Pulmonology                                                                                     | Dr. Shivalingaswamy Salimath, Interventional Pulmonologist, Bengaluru                                                  |

### **FACULTY DEVELOPMENT PROGRAMME [FDP] ATTENDED BY FACULTY**

| Sl. No. | Name & Designation                                    | Title of the programme                          | Date, Name of the Institution & Place                                                                                                                       | Certificate & Photo                                                                   |
|---------|-------------------------------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1       | Dr. Poonam D N.<br><br>Assistant Professor            | One Health                                      | January– April 2025- 12 week course<br><br>NPTEL – AICTE SWAYAM<br>Online course co-ordinated by ICMR - RMRCCB, Department of Health Research & IIT Madras. |  |
| 2       | Dr. Ranjitha Shankaregowda<br><br>Associate Professor | Certificate course in Antimicrobial stewardship | 24-2-2025 to 28-2-2025, online                                                                                                                              |  |

|   |                                                     |                                                                                                                      |                                                                                |                                                                                       |
|---|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 3 | Dr. Ranjitha Shankaregowda<br>Associate Professor   | National certification in infection prevention & control                                                             | CAHO online certification February 2025                                        |    |
| 4 | Dr. Vidyavathi B Chitharagi,<br>Associate professor | National certification in infection prevention and Control - Certificate course in Infection Control practice (CICP) | CAHO, New Delhi                                                                |    |
| 5 | Dr. Sowmya G S                                      | National certification in infection prevention and control                                                           | 14-02-2025<br>CAHO<br>Certification course on Infection control and prevention |   |
| 6 | Dr M N Sumana<br>Professor                          | Antibiotic stewardship an online non-credit course authorised by Stanford University and offered through Coursera    | 27th May 2025                                                                  |  |
| 7 | Dr Shweta N Kurkuri<br>Senior Resident              | NGP-DST Winter School on Geospatial Sciences & Technologies (Level-1)                                                | NGP, DST, GOI<br>27th November to 17th December                                |  |

|    |                                       |                                                                                                                                                                                     |                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8  | Dr Amoghashree<br>Assistant Professor | Endocrine Disruptors and Reproductive Health (short course)                                                                                                                         | Conducted by CCDC, CHART, TSB, Ashoka University & Harvard T.H. Chan School of Public Health organized at JSS Medical College, JSS AHER<br><br>March 3-7, 2025 |  <p>A certificate of appreciation for Dr. Amoghashree, presented by the Centre for Chronic Disease Control (CCDC), Centre for Health Analytics Research and Trends (CHART), TSB, Ashoka University, and Harvard T.H. Chan School of Public Health (HSPPH). The certificate is for the successful completion of the short course on Endocrine Disruptors and Reproductive Health, held from March 3 to 7, 2025, at JSS Academy of Higher Education and Research, Mysore, Karnataka. The certificate is signed by Dorairaj Prabhakaran, Poornima Prabhakaran, Shrutitha Mahalingam, and Aditi Roy. A group photo of the participants and organizers is included at the bottom.</p> |
| 9  | Dr Rashmi S<br>Senior Resident        | Endocrine Disruptors and Reproductive Health (short course)                                                                                                                         | Conducted by CCDC, CHART, TSB, Ashoka University & Harvard T.H. Chan School of Public Health organized at JSS Medical College, JSS AHER<br><br>March 3-7, 2025 |  <p>A certificate of appreciation for Dr. Rashmi S, presented by the Centre for Chronic Disease Control (CCDC), Centre for Health Analytics Research and Trends (CHART), TSB, Ashoka University, and Harvard T.H. Chan School of Public Health (HSPPH). The certificate is for the successful completion of the short course on Endocrine Disruptors and Reproductive Health, held from March 3 to 7, 2025, at JSS Academy of Higher Education and Research, Mysore, Karnataka. The certificate is signed by Dorairaj Prabhakaran, Poornima Prabhakaran, Shrutitha Mahalingam, and Aditi Roy. A group photo of the participants and organizers is included at the bottom.</p>   |
| 10 | Dr Anil S Bilimale                    | Attended the Yoga Utsava Mysore                                                                                                                                                     | Offline<br><br>12.12.2024                                                                                                                                      |  <p>A photograph showing a group of people participating in a yoga session outdoors. They are sitting on mats on the ground, and a large tree is visible in the background.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 11 | Dr Anil S Bilimale                    | Delivered a session on How to live healthier and longer amidst climate change in the National Seminar on Environmental challenges and resilience strategies by University of Mysore | Offline<br><br>23.12.2024                                                                                                                                      |  <p>A photograph showing a presentation slide titled 'How to live healthier and longer amidst climate change' during a seminar. The slide lists various health and environmental factors. A person is visible in the background, likely the presenter.</p>                                                                                                                                                                                                                                                                                                                                                                                                                     |

|    |                    |                                                                                                                                                                                                                                 |                                  |                                                                                       |
|----|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------------------------------------------------------------------|
| 12 | Dr Anil S Bilimale | Stakeholder's Workshop" as a part of a research project titled: "Developing and implementing a life skills and study skills intervention model utilizing mentoring as an approach for students within BBMP & Government schools | 11.03.2025<br>NIMHANS, Bengaluru |    |
| 13 | Dr Anil S Bilimale | ICMR- Dengi Project Co I Training and Delegant                                                                                                                                                                                  | 08/05/2025                       |   |
| 14 | Dr Minu Maria Rose | Completed WHO course on AMR                                                                                                                                                                                                     | Online<br>27.12.2024             |  |
| 15 | Dr Minu Maria Rose | Attended webinar- Public Policy in Climate-driven Antimicrobial Resistance (AMR) in India                                                                                                                                       | 20.03.2025<br>Online             |  |
| 16 | Ms Sheeba B        | Attended Dr. George Kuchel on Education in Healthy Longevity Medicine   Longevity Education Hub Webinar                                                                                                                         | Online<br>11.12.2024             |  |

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|----|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 17 | Ms Sheeba B                                             | Webinar:<br>Advancing<br>Smokeless<br>Tobacco Control<br>and Protecting<br><br>Youth from<br>Industry<br>Interference | 23/05/2025                                                                                     |    |
| 18 | Dr. Sowmya K,<br>Associate<br>Professor                 | Short course on<br>Endocrine<br>Disruptors and<br>Reproductive<br>Health                                              | March 3 - 7, 2025, JSS<br>Academy of Higher<br>Education and<br>Research, Mysore,<br>Karnataka |    |
| 19 | Dr. Soumya<br>Rajshekar Patil<br>Assistant<br>Professor | short course on<br>Endocrine<br>Disruptors and<br>Reproductive<br>Health                                              | March 3 - 7, 2025, JSS<br>Academy of Higher<br>Education and<br>Research, Mysore,<br>Karnataka |   |
| 20 | Dr. Meghana H S,<br>Assistant<br>Professor              | short course on<br>Endocrine<br>Disruptors and<br>Reproductive<br>Health                                              | March 3 - 7, 2025, JSS<br>Academy of Higher<br>Education and<br>Research, Mysore,<br>Karnataka |  |

### **Publications**

1. Gopika Indu, Shiva Nagendra S M, Padukudru Anand Mahesh, Indoor air pollution in rural south Indian kitchens from biomass-fuel usage and the predicted lung deposition in women, Atmospheric Environment, 2024 Nov;336:120732-120732.
2. Bharathi M B, Susheen Dutt, Mubarak Khan, Jaskaran Singh, Dinesh Patil, Darshan Rana, Onkar Swami, The Efficacy, Safety, and Economic Outcomes of Using Azithromycin in Both Upper & Lower Respiratory Tract Infection: A Health Technology Assessment, Medical Research Archives, 2024 Sep;12(9).
3. Danqing Li, Soubhagyalaxmi Mohanty, Ramesh Mavathur, Vijaya Vageesh Y, Anup Jain, Arun Gopi, Nagarathna Raghuram, Study Protocol for Mindfulness-Based Yoga Versus Physical Exercise on the Psychological Well-Being in Students With Early Visual Impairment: A Three-Armed, Multi-Centered, Randomized Controlled Trial, Cureus, 2024 Sep;16(9).
4. Mahesh P A, Praveena A S, Mandya V Greeshma, Vikram Patil, Jayaraj B S, Kjell Larsson, Lena Palmberg, Swapna Upadhyay, Koustav Ganguly, Respiratory Outcomes Among Women Using Biomass Cooking Fuel in India: Evidence Generation for Policy Action, SSRN, 2024 Sep.

5. Dommasandra Rajanna Y, Kulkarni P, Rajaram P, Basheer S, Shabadi N, Assessment of indoor air pollution in causing respiratory illness among women residing in rural areas of Mysuru, *Journal of Air Pollution and Health*, 2024 Oct;9(3):373-382.
6. Zhao J, Ren R, Beeraka N M, Pa M, Xue N, Lu P, Bai W, Mao Z, Fan R, Liu J, Pr H V, Bulygin K V, Nikolenko V N, Correlation of time trends of air pollutants, greenspaces and tracheal, bronchus and lung cancer incidence and mortality among the adults in United States, *Frontiers in Oncology*, 2024 Jul;14.
7. Likitha Sirigondanahalli Gangadhar, Amogha Shree, Divya Kindiyode Lakshmi Narayanan, Prevalence of Acute Respiratory Infection among Under-five Children in a Rural Area of Mysore District, *Indian Journal of Respiratory Care*, 2024 Sep;13(3):182-187.
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### **About the Goal**

Goal 7 of the Sustainable Development Agenda, also known as SDG 7 or Global Goal 7, is one of the 17 goals that make up the Sustainable Development Agenda. 2015 was the year that the United Nations General Assembly set their respective goals. Its mission statement reads as follows: "Ensure access to affordable, reliable, sustainable, and modern energy for all." The seventh Sustainable Development Goal (SDG) has five measurable objectives that are to be accomplished by the year 2030. There are three "Outcome targets" and two "Means of achieving targets" in the total of five goals. Three of the five goals are considered "Outcome targets," while the other two are considered "Means of achieving targets."

Achieving the efficient use of renewable and non-renewable source energies takes care of all 16 goals, as Sustainable Development Goal 7 addresses the provision of affordable and clean energy, which plays a crucial role in the overall development of the nation as well as the global health and prosperity of the world. The overall sustainability is the way to overcome poverty and hunger, to get a better ecosystem to confront climatic changes, to reduce inequality and therefore maintain integrity, global peace, and partnership, which in turn addresses the socio-economic growth of the world. This helps to achieve infrastructure and industrialization, which in turn increases the amount of sustainable production and helps with the channelized utilization of natural resources. The solution to world hunger and the problem of gender inequality is better employment, which also guarantees healthier and more fulfilling lives.

#### **7.1 Universal access to modern energy:**

- Our implementation consists of using clean fuel for cooking at the hostel and decreasing the use of fossil fuels and biofuels.

- Bicycles are provided for students and staff to use on and around campus to encourage the youth to reduce the use of nonrenewable energy sources and air-pollution by decreasing CO2 emissions.



## 7.2 Increase the global percentage of renewable energy:

- Our implementation includes the use of solar panels in dormitories and LED lighting throughout the campus.
- To ensure the safety of the hostel's students, the majority of the lights are turned off at night and only provided on the pathways.
- We do not use lights during the day because our classrooms and laboratories are equipped with sufficient ventilation to fulfill the need for light.
- To protect the environment, we have refrained from installing air conditioners in the office and rooms.





### 7.3: Double the improvement in energy efficiency

- Our implementation includes solar panels and LED because they significantly reduce energy consumption.
- In order to reduce the use of fossil fuels, we have provided pooled transportation systems for college students traveling to hospitals or to other campuses.



7A: Promote access to research, technology, and investments in clean energy & Target

7B: Expand and upgrade energy services for developing countries.

The sprawling 43-acre campus of the JSS MC in Mysuru, the cleanest city in India, features bioclimatic architecture that provides sufficient shading, natural ventilation, passive heating and cooling. Additionally, it features an internal atrium for insulation and natural illumination. The building uses solar energy for passive heating and has tree canopies for summer sun protection.

JSS AHER is committed to a cleaner and greener campus, and the University is committed to achieving this objective by:

- Complying with applicable rules and regulations and other recognized requirements to encourage and educate staff to conserve energy wherever applicable.
- By implementing and encouraging the use of bicycles on campus, we can avoid and reduce air pollution caused by fossil fuels.
- Incorporation of solar panels in dormitories and LED lighting across the campus to promote energy efficiency and conservation.
- The rainwater harvesting is done at the hospital.
- Examining the soil samples surrounding the Hospital and the University in an effort to contain the spread of MDR bugs that are contaminating the environment near JSS Dental College and Hospital by means of the soil.
- Guaranteed the use of an Effluent treatment plant for the laboratory's effluents.
- Reduced the use of plastic in CSSD by wrapping dressing instruments in brown paper instead of Steripack made of plastic.
- The culture samples and microbiology specimens are autoclaved and discarded in order to prevent environmental contamination by Shree consultancy.
- Ensure students' participation in achieving sustainable development objectives.  
During the year in question.

In order to improve the environment on a global scale, we have been advocating the effective use of renewable energy sources, along with ideas and strategies for dealing with a polluted environment and avoiding or using as little non-renewable energy as possible, which depends on the continued health of the environment around us. In fact, we have been working to educate the staff and students about "Affordable and Clean energy" in order to live up to the school's motto of achieving a sustainable environment. They receive regular educational sessions to assist them in managing non-renewable energy.

Our college has made significant investments to offer one of the greenest campuses among the majority of other institutions. The campus has kept the trees that were previously planted and has been re-cultivating the annual, biennial, and long-living trees that also improve the ecosystem for the local fauna.

The rainwater is diverted to the garden to irrigate the plants, and in the near future, we intend to install infrastructure that is conducive to rainwater harvesting. As a result, we have made progress toward using clean energy continuously.



### **Contribution to environmental awareness:**

To inculcate the knowledge of afforestation and rebuilding the green life on the earth, humans can merely contribute but a little effort on behalf of our college is put into the view of educating them students.

They are made to participate in certain events that include planting the saplings and creating the working models of certain ideas that shall in high-end infrastructure bring fair change in the betterment of a healthy environment.

Knowledge of recycling and reuse of energy productively and constructively would help to accomplish the sustenance of affordable and clean energy.

## **JSSCPM**

### 1.1 Research on clean energy

Research supporting SDG 7: Research on Clean Energy (List of publications reflecting the research towards Clean Energy in Vancouver style)

**NO**

### 1.2 College & University measures towards affordable and clean energy

7.2.1 Does your College & University have a policy in place for ensuring all renovations / new builds are following energy efficiency standards? (relevant standards to be indicated) Energy-efficient renovation and building: college/ university measures towards affordable clean energy policy energy efficiency standards

Explain and attach evidence /documents supporting your explanation: **Yes, the College and University has an Infrastructure policy.**

<https://jssuni.edu.in/admin/BlobFileWorking.aspx?FILENAME=NEM003229.pdf&FORWHAT=3>

Evidence: Weblink and details of policies/guidelines/strategies/green audit reports for ensuring all renovations / new builds are following energy efficiency standards in the campus.

Any other Comments: **Infrastructure policy.**

Institutional Policies/Guidelines/Strategies created (yyyy)

01/01/2022

Any other Comments:

Institutional Policies/Guidelines/Strategies reviewed (yyyy)

01/01/2024

Any other Comments: NIL

7.2.2 Does your College & University have plans to upgrade existing buildings to higher energy efficiency?

Upgrade buildings to higher energy efficiency: College/ university measures towards affordable clean energy upgrade existing buildings

Explain and attach evidence /documents supporting your explanation

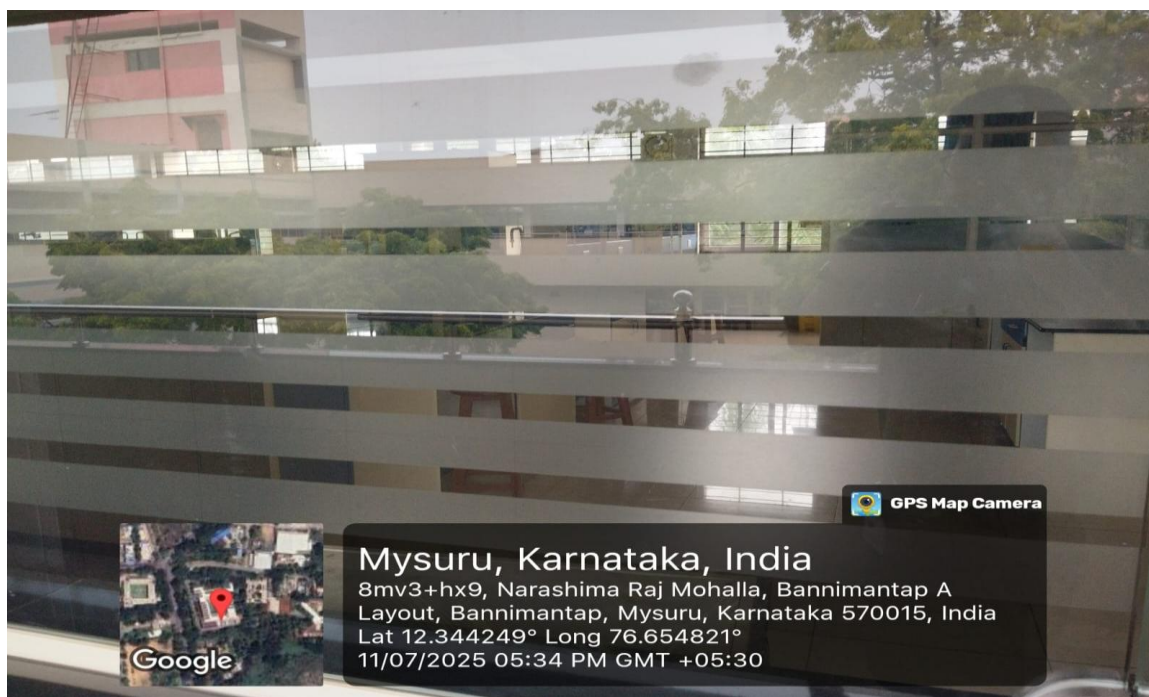
<https://jssuni.edu.in/admin/BlobFileWorking.aspx?FILENAME=NEM000260.pdf&FORWHAT=3>

Evidence: Weblink and details of plans and strategies to upgrade existing buildings to higher energy efficiency and measures towards affordable clean energy upgrade existing buildings

Any other Comments: **Smart Campus policy**

### **Labs with Natural lights and Ventilation:**

The laboratory facilities are undergoing renovation to integrate natural lighting and ventilation. As part of this effort, the pharmaceutical chemistry lab has been upgraded into a modern, well-designed space that effectively utilizes natural light.



7.2.3 Does your College & University have a process for carbon management and reducing carbon dioxide emissions?

Carbon reduction and emission reduction process (Measuring carbon/carbon dioxide emission in the campus to be implemented by the colleges): college/university measures towards affordable clean energy process carbon management

### **Zero Carbon Policy**

Explain and attach evidence /documents supporting your explanation: **Yes, the College and University has an Smart campus policy and Energy Conservation Policy.**

<https://jssuni.edu.in/admin/BlobFileWorking.aspx?FILENAME=NEM003227.pdf&FORWHAT=3>

<https://jssuni.edu.in/admin/BlobFileWorking.aspx?FILENAME=NEM000260.pdf&FORWHAT=3>

Evidence: Weblink and details of process for carbon management and reducing carbon dioxide emissions in campus supporting Zero Carbon Policy

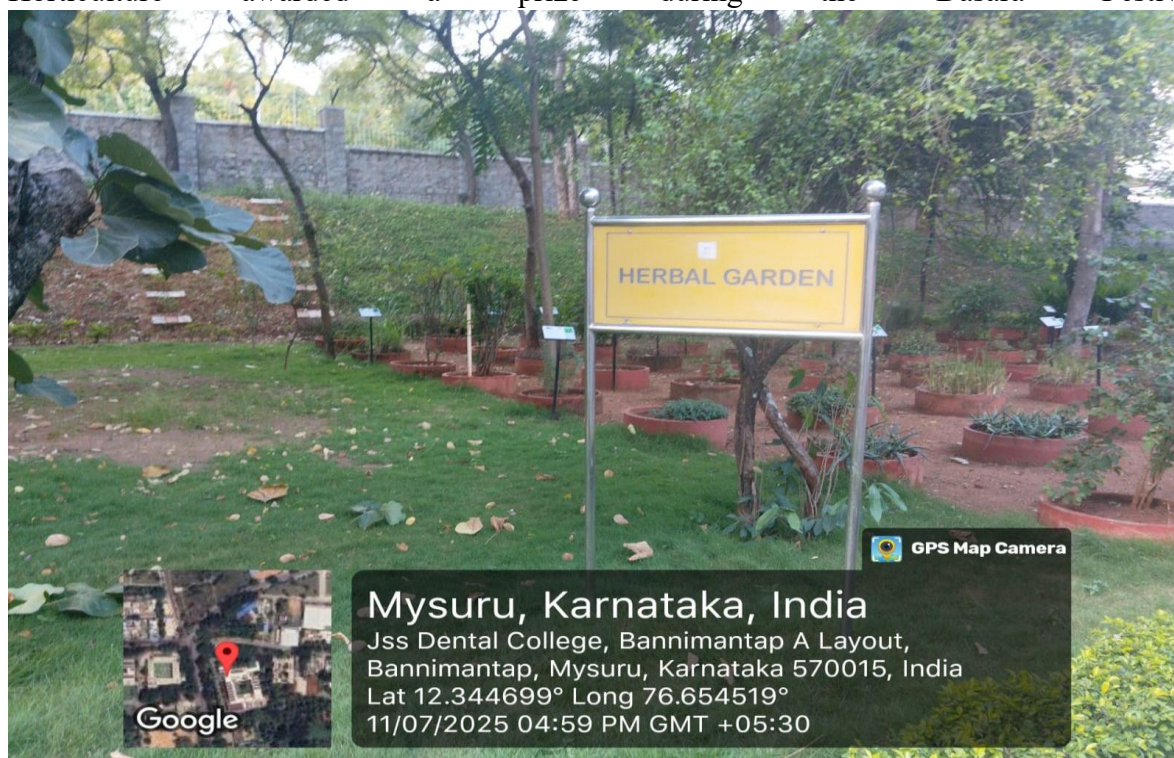
Any other Comments: **Smart Campus Policy and Energy Conservation Policy**

### **Green and Clean Campus initiative**



The campus boasts an impressive green space, with over 60% of the area dedicated to lush greenery, including an herbal garden and a diverse collection of 20 fruit-bearing tree varieties. Recognizing the college's exceptional efforts in garden maintenance, the Department of

Horticulture awarded a prize during the Dasara Festival.



7.2.4 Does your College & University have an energy efficiency plan in place to reduce overall energy consumption? Plan to reduce energy consumption: college/ university measures towards affordable clean energy efficiency plan

Explain and attach evidence /documents supporting your explanation: **Yes, the College and University has an Energy Conservation Policy.**

<https://jssuni.edu.in/admin/BlobFileWorking.aspx?FILENAME=NEM003227.pdf&FORWHAT=3>

Evidence: Weblink and details of energy efficiency plans and measures towards energy conservation.

Details on measures taken towards affordable clean energy efficiency plan

Any other Comments: **Energy Conservation Policy**

7.2.5 Does your College & University undergo energy reviews to identify areas where energy wastage is highest?

Energy wastage identification: college/ university measures towards affordable clean energy reviews

Explain and attach evidence /documents supporting your explanation: **Yes, the College and University has an Energy Conservation Policy and also Energy and Environmental Management System Audits**

<https://jssuni.edu.in/admin/BlobFileWorking.aspx?FILENAME=NEM003227.pdf&FORWHAT=3>

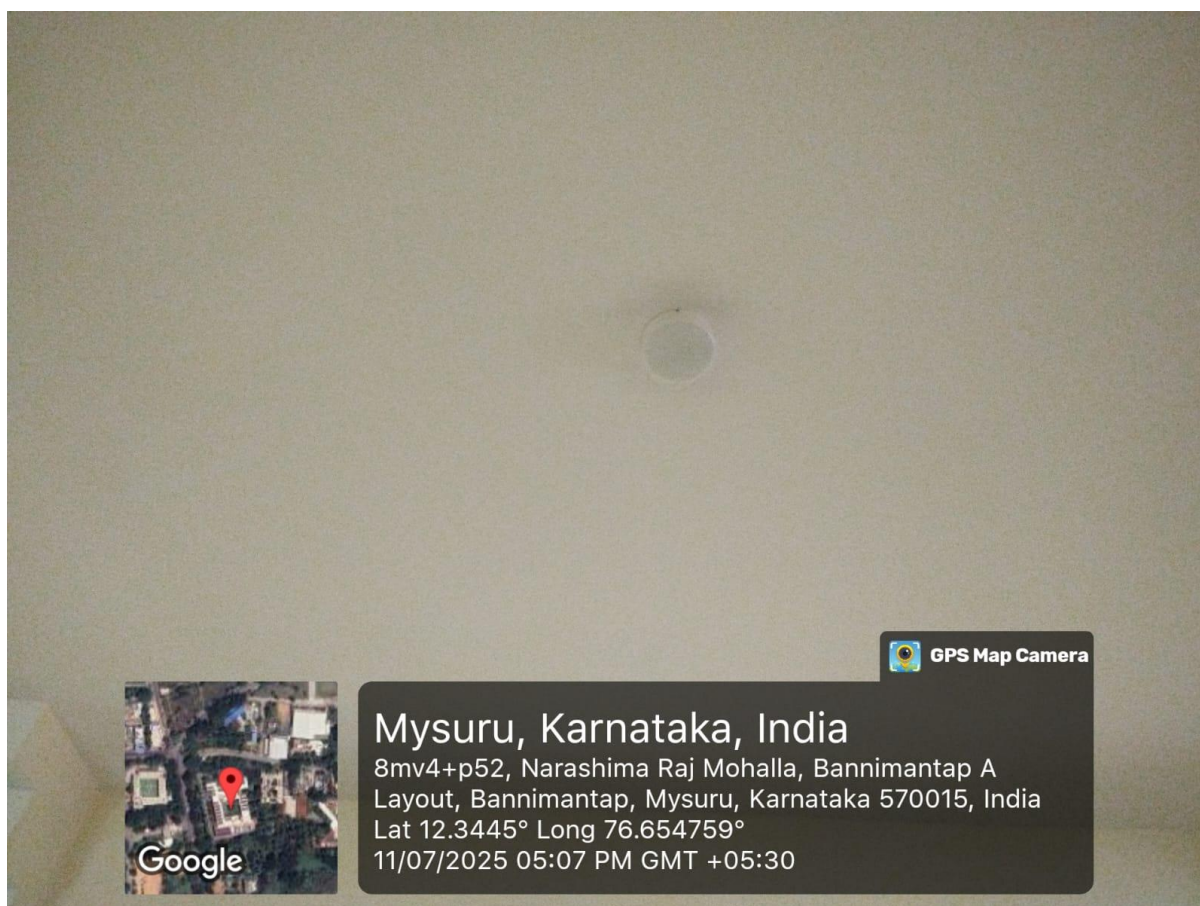
Evidence: Weblink and details of energy reviews to identify areas where energy wastage is highest in the campus.

Measures towards affordable clean energy reviews.

Any other Comments: **Energy Conservation Policy**

**Reduction of electricity consumption:**

- By transitioning from incandescent bulbs to LED bulbs, the campus successfully reduced its overall **electricity consumption from 45000 watts to 31000 watts**.
- **Streetlight timers:** Streetlight timers are installed to save energy in the campus, the timer is timed to switch on the light from 6:30 PM to 12:00 AM and 05:00 AM to 06:30 AM.
- **Motion sensor lights** have been installed in unoccupied areas of the college (>45 Nos. installed), specifically at the elevator and along the corridors of, **as an energy-saving measure**.



- `Awareness program to the students and faculties to conserve the electricity and other forms of energy.

- Awareness is given on a regular basis to students and staff to conserve the electricity and sign board are placed to execute the same conserve the electricity.



### **Energy and Environmental Management System Audits**

To promote sustainability and enhance operational efficiency, JSS College of Pharmacy, Mysuru has undergone Audits, like **ISO 14001** and **ISO 50001** through systematic audits of their **Environmental Management Systems (EMS)** and **Energy Management Systems (EnMS)**.

#### **Environmental Management System (EMS) – ISO 14001**

The **ISO 14001** standard specifies the requirements for establishing, implementing, maintaining, and continually improving an Environmental Management System (EMS). Applicable across all sectors and organizational sizes, this standard places a strong emphasis on leadership and environmental accountability within core business governance.

A key feature of ISO 14001 is its proactive approach to identifying and addressing environmental and social impacts throughout the lifecycle of products and services. This includes integrating environmental considerations into strategic planning, operational processes, and risk management frameworks. The system encourages organizations to take responsibility for environmental performance while aligning with regulatory compliance and sustainability goals.

The EMS audit process ensures that the environmental aspects and impacts are systematically assessed and managed, enabling the organization to meet its environmental obligations while improving its public image and overall sustainability.

#### **Energy Management System (EnMS) – ISO 50001**

**ISO 50001** provides a comprehensive framework for managing energy usage, improving energy efficiency, and reducing operational costs. It supports organizations in establishing policies for more efficient energy use and setting achievable energy goals backed by data-driven decision-making.

Through regular audits of the EnMS, organizations can monitor their energy performance, identify key areas of energy consumption, and implement improvements that contribute to lower energy costs, reduced greenhouse gas emissions, and increased operational resilience.

With the rising cost of energy and increasing global pressure to reduce carbon footprints, ISO 50001 has become a vital tool for enhancing long-term sustainability and competitiveness.

The EnMS audit process ensures a systematic approach to continuous improvement in energy performance, enabling organizations to maintain compliance, secure energy supply, and build a reputation as an environmentally responsible entity.

Together, EMS and EnMS audits serve as essential tools for organizations aiming to integrate environmental and energy management into their business strategy. They not only ensure regulatory compliance and cost efficiency but also reinforce a commitment to sustainable development and responsible resource utilization. By implementing ISO 14001 and ISO 50001 standards, businesses can drive continuous improvement, enhance corporate reputation, and contribute positively to environmental protection and climate change mitigation.



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SYSTEMS AND SOLUTIONS PRIVATE LIMITED

**CERTIFICATE OF APPROVAL**  
Issued by Indian Register Quality Systems  
(A Division of IRCLASS Systems and Solutions Private Limited)

This is to certify that the Energy Management Systems of

**Organisation:** JSS Academy of Higher Education & Research

**Address:** Site 4 -  
JSS College of Pharmacy,  
Sri Shivarathreeshwara Nagara,  
Mysuru - 570 015, Karnataka, India

has been assessed and found conforming to the following requirement

**Standard:** ISO 50001:2018

**Scope:** Providing Undergraduate and Post Graduate Education in Pharmacy

**Certificate No.:** IRQS/241000699- D

**Initial Certification Date:** 18/04/2024

**Current Date of Granting:** 18/04/2024

**Expiry Date:** 17/04/2027



Indian Register Quality Systems



**Shashi Nath Mishra**  
Head IRQS

This approval is subject to continued satisfactory maintenance of the Energy Management Systems of the organisation to the above standard which will be monitored by IRQS. The use of the Accreditation Mark indicates accreditation with respect to activities covered by the certificate with accreditation no. EN 001. Condition Overleaf.

Head Office: 52A, Adi Shankaracharya Marg, Opp. Powai Lake, Powai, Mumbai - 400 072, India.



## CERTIFICATE OF APPROVAL

Issued by Indian Register Quality Systems  
(A Division of IRCLASS Systems and Solutions Private Limited)

This is to certify that the Environmental Management Systems of

Organisation: JSS Academy of Higher Education & Research

Address: Site-2: JSS College of Pharmacy,  
Sri Shivarathreeswara Nagara,  
Mysuru - 570 015, Karnataka, India

has been assessed and found conforming to the following requirement

Standard: ISO 14001:2015

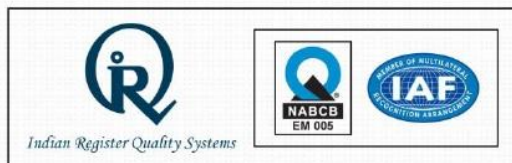
Scope: Providing Undergraduate And Post Graduate  
Education In Pharmacy

Certificate No.: IRQS/240300698/B

Initial Certification Date: 16/04/2024

Current Date of Granting: 16/04/2024

Expiry Date: 15/04/2027



**Shashi Nath Mishra**  
Head IRQS

This approval is subject to continued satisfactory maintenance of the Environmental Management Systems of the organization to the above standard which will be monitored by IRQS. The use of the Accreditation Mark indicates accreditation with respect to activities covered by the certificate with accreditation no. EM 005. Condition Overleaf

COA/IRQS/NABCB/EMS/Rev 01

Head Office: 52A, Adi Shankaracharya Marg, Opp. Powai Lake, Powai, Mumbai - 400 072, India.

7.2.6 Does your College & University have a policy on divesting investments from carbon-intensive energy industries especially coal and oil?

Divestment policy: college/ university measures towards affordable clean energy policy divesting investments

Explain and attach evidence /documents supporting your explanation: **NO**

Evidence: Weblink and details of institutional policies/guidelines on divesting investments from carbon-intensive energy industries especially coal and oil

Institutional Policy/Guidelines created (yyyy)

Institutional Policy/Guidelines reviewed (yyyy)

7.3 Energy use density (Measurement of energy used per sqm to be implemented by the colleges)

7.3.1 Energy usage per sqm

**Total energy consumption in the college: Electricity Board = 353513.5 Units, Solar power= 180677 Units, Generator= 3700.8 Units.**

**Total= 537891.3 Units**

**College floor space: 11,505.39 Sqmt.**

**Total energy consumption per sqm in college: Electricity Board = 30.73 Units, Solar power= 15.70 Units, Generator= 0.32 Units.**

**Total= 46.75 Units/Sqmt.**

#### **Clean and renewable energy utilization**

As part of its initiative to develop a smarter campus, the college has installed solar panels to reduce dependence on conventional electricity sources and encourage the use of clean, renewable energy. Earlier, the college met 100% of its electricity requirements through the government agency (CESCOM). With the introduction of solar power, this reliance has been cut by 50% or more.



#### 7.4 Energy and the community

7.4.1 Does your College & University provide programmes for local community to learn about importance of energy efficiency and clean energy?

local community outreach for energy efficiency: energy and community programmes to learn clean energy

Explain and attach evidence /documents supporting your explanation: **NO**

Evidence: Weblink and details of awareness programs, workshops, seminars, training programs, camps for local community to learn about importance of energy efficiency and clean energy with photographs of high resolution.

Any other Comments:

7.4.2 Does your College & University promote a public pledge toward 100% renewable energy (petitions, meetings, discussions, events) beyond the University / College?

100% renewable energy pledge

Explain and attach evidence /documents supporting your explanation

<https://jssaherstoragenew.blob.core.windows.net/jss/Notices/NEM006328a.pdf>

Evidence: Weblink and details of promoting public pledge towards 100% renewable energy

Renewable energy pledge to be formulated by the college and solemn pledge on World Environmental Day/National Energy Conservation Day with photographs of high resolution

Any other Comments: NIL

7.4.3 Does your College & University provide direct services to local industry aimed at improving energy efficiency and clean energy

energy efficiency assessments, workshops, research renewable energy options, Energy efficiency services for industry

Explain and attach evidence /documents supporting your explanation: **NO**

Evidence: Weblink and details that provide direct services to local industry aimed at improving energy efficiency and clean energy for industries.

Details on energy efficiency assessments, workshops, research renewable energy options, energy efficiency services for industry.

Any other Comments:

7.4.4 Does your College & University inform and support government in clean energy and energy-efficient technology policy development?

Policy development for clean energy technology

Explain and attach evidence /documents supporting your explanation: **NO**

Evidence: Weblink and details that supports government in clean energy and energy-efficient technology policy development

Any other Comments:

7.4.5 Does your College & University provide assistance for start-ups that foster and support a low-carbon economy/technology?

Assistance to low-carbon innovation: energy and community assistance for start ups

Explain and attach evidence /documents supporting your explanation: **NO**

Evidence: Weblink and details that provide assistance for start-ups that foster and support a low-carbon economy/technology

Details on assistance to low-carbon innovation: energy and community assistance for start-ups

Any other Comments: The college follows environmental and eco-friendly practices, focusing on affordable energy management.



### About the Goal 7 – Affordable and Clean Energy

The primary aim of SDG 7 is to ensure universal access to affordable, reliable, sustainable, and modern energy by 2030. This goal tackles critical global challenges related to energy access, efficiency, and sustainability.

#### Key Targets of SDG 7

- **Universal Energy Access:** Guarantee access to affordable, reliable, and modern energy services for all—both in urban and rural areas. This includes electricity, clean cooking technologies, and other sustainable energy sources.
- **Renewable Energy:** Significantly increase the share of renewable energy in the global energy mix by promoting solar, wind, hydro, and geothermal sources, thereby reducing reliance on fossil fuels and addressing climate change.
- **Energy Efficiency:** Double the global rate of improvement in energy efficiency. This involves adopting energy-saving practices across sectors such as industry, construction, and transport to reduce overall consumption and greenhouse gas emissions.
- **Sustainable Energy Infrastructure:** Strengthen international cooperation to support clean energy research, innovation, and infrastructure—especially in developing countries—to ensure secure and resilient energy systems.
- **Energy for Development:** Promote the use of sustainable energy in sectors like agriculture, industry, and transport, while supporting developing nations in upgrading energy technologies and infrastructure.

SDG 7 is foundational to achieving many other Sustainable Development Goals, as energy access influences poverty reduction, health, education, environmental protection, and inclusive economic growth. Ensuring progress on SDG 7 requires coordinated global, national, and local efforts to expand access to clean, affordable, and modern energy—protecting both people and the planet for future generations.

### TARGETS UNDER THE GOAL



### OUR INITIATIVES

JSS College of Pharmacy, Ooty, a constituent college of JSS Academy of Higher Education and Research (JSS AHER), is renowned not only for its academic excellence but also for its outstanding infrastructure, which significantly contributes to a holistic teaching and learning experience. The college is nestled in a tranquil environment, spanning over 6.5 acres, and is exclusively dedicated to the pharmacy discipline. This serene and purpose-built campus creates an ideal setting for students to focus on academic and research pursuits.

The campus is equipped with **modern infrastructure** that caters to both academic and residential needs. One of its key features is the **centralized gas supply** system, which ensures safety and efficiency in laboratories and hostel kitchens. The institution has invested in **exclusive high-power transformers and generator backup systems** to provide a stable and uninterrupted power supply, essential for continuous laboratory experiments, research, and other academic activities. The entire campus, including hostels, is **Wi-Fi enabled**, facilitating seamless internet connectivity for students and faculty members around the clock.

Academic facilities include **state-of-the-art laboratories** that are accessible 24x7. These laboratories are well-equipped with advanced instruments and specialized software, fostering high-quality research and practical learning in pharmaceutical sciences and pharmacy practice. The college also houses **smart classrooms, simulation laboratories**, and a **model pharmacy**, all of which are integral to providing hands-on training and preparing students for real-world clinical and industrial scenarios.

The **central library** is another cornerstone of the academic infrastructure, offering a rich collection of over **10,000 print and digital resources**, including textbooks, reference books, national and international journals, and access to databases like **Clinical Key**, which provides up-to-date clinical and pharmacological information. The library serves as a knowledge hub for students, researchers, and faculty members alike.

To support the overall development of students, the college also provides **comprehensive residential facilities** for both students and staff members. These hostels are well-maintained and offer a safe and comfortable living environment. In addition, the campus features various **indoor and outdoor sports facilities**, promoting physical wellness and team-building skills. A **multipurpose auditorium** is available for academic events, seminars, cultural programs, and other institutional gatherings. A fully equipped **health centre** is also present on campus to cater to the medical needs of students and staff.

JSS College of Pharmacy is also committed to promoting **sustainability and energy conservation**. As part of its green initiative, the college is systematically replacing all conventional phosphorous light bulbs with energy-efficient **LED bulbs** across the campus. Looking forward, the institution plans to implement an **electricity capacitor panel** to enhance power conservation and reduce energy wastage.

In summary, the college's well-rounded and forward-thinking infrastructure supports its mission to deliver excellence in pharmaceutical education, research, and student welfare, while also embracing sustainable development practices for a better future.

## PHOTOS OF THE ACTIVITIES INITIATED

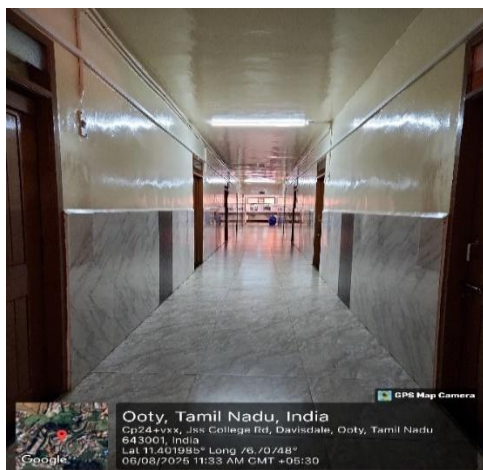
### Wi-Fi ENABLED CAMPUS



### ENERGY SAVING (LED) LIGHTS IN CAMPUS



## Infrastructure Development



## Electricity Bill statement

JSS College of Pharmacy, Ooty electricity unit consumed and amount. Compared to 2023-2024 this 2024-2025 consumption of electricity is reduced.

### Statement showing details of electricity and diesel consumption from August 2024 to July 2025

| Sl. No. | Month/Year | Demand MD | Used MD    | Total Amount | DG Unit | Diesel (litres) | Diesel Purchase Amount |
|---------|------------|-----------|------------|--------------|---------|-----------------|------------------------|
| 1       | Aug-24     | 150 KVA   | 135 KVA    | 5,39,878.00  | 960     | 300             | 28,310.00              |
| 2       | Sep-24     | 150 KVA   | 135 KVA    | 5,10,474.00  | 610     | 300             | 28,311.00              |
| 3       | Oct-24     | 150 KVA   | 139.2 KVA  | 5,17,307.00  | -       | -               | -                      |
| 4       | Nov-24     | 150 KVA   | 135 KVA    | 5,35,347.00  | 640     | -               | -                      |
| 5       | Dec-24     | 150 KVA   | -          | -            | -       | -               | -                      |
| 6       | Jan-25     | 150 KVA   | 127.20 KVA | 4,88,511.00  | -       | 300             | 28,302.00              |
| 7       | Feb-25     | 150 KVA   | 122 KVA    | 4,08,786.00  | -       | 300             | 28,281.00              |
| 8       | Mar-25     | 150 KVA   | 130.40 KVA | 4,91,718.00  | 1664    | -               | -                      |
| 9       | Apr-25     | 150 KVA   | 130.80 KVA | 5,39,245.00  | 240     | 300             | 28,281.00              |
| 10      | May-25     | 150 KVA   | 118.80 KVA | 4,74,751.00  | 300     | 600             | 56,646.00              |
| 11      | Jun-25     | 150 KVA   | 114.40 KVA | 4,54,308.00  | 193     | 600             | 56,646.00              |
| 12      | Jul-25     | 150 KVA   | 113.20 KVA | 4,43,287.00  | 88      | -               | -                      |
|         |            | TOTAL     |            | 59,43,490.00 | 4695    | 2700            | 2,54,777.00            |

  
Electrician



Dr. Gomathi S



Dr. Kousalya S

  
Principal

**PRINCIPAL**  
J.S.S. COLLEGE OF PHARMACY  
Rockland's, Ootacamund - 643 001

**1. AFFORDABLE AND CLEAN ENERGY (SDG 7)**

| <b>Details Related to SDGs</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>Evidence with documents</b> | <b>Weblink to support the details</b> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------------------------------------|
| <p><b>1.1 Research on clean energy</b></p> <ol style="list-style-type: none"><li>1. Anusha, H. S. (2024). MgFeO<sub>3</sub> nanostructures for water splitting. <i>International Journal of Hydrogen Energy</i>, 88(1), 617-625.</li><li>2. Anusha, H. S. (2024). MgMnO<sub>3</sub> nanostructures for water splitting. <i>International Journal of Hydrogen Energy</i>, 77(5), 1074-1089.</li><li>3. Srithejas, K. (2025). Waste cooking oil biodiesel blend. <i>Journal of Ecological Engineering</i>, 26(10), 200-210.</li><li>4. Srithejas, K. (2025). Waste cooking oil biofuel study. <i>Pollution Research</i>, 44(3-4), 150-158.</li><li>5. Anusha, H. S. (2024). MgFeO<sub>3</sub> water splitting (duplicate – ensure once only).</li><li>6. Research supporting SDG 7: Research on Clean Energy (List of publications reflecting the research towards Clean Energy in Vancouver style)</li><li>7. Vadiraj, K. T. (2025). Pyrolysis of plastic waste to plastic oil: A future source of fuel. <i>Journal of Sustainable Development of Energy, Water and Environment Systems</i>, 13(1), 1130545(1)–22.*</li><li>8. Ravishankar, B. S. (2025). PVA nano composites: Harvesting electrical energy from mechanical energy using TENG. <i>AEU - International Journal of Electronics and Communications</i>, 12(4), 268–278. Seventh Sense Research Group.</li><li>9. Sumitha, E. (2025). Enhanced oil recovery strategy prediction using temporal convolutional network. IGI Global Scientific Publishing. ISBN: 1988-2025.</li><li>10. Sumitha, E. (2025). Anaerobic digestion protocols for green valorization of food waste. Springer. ISBN: 978-1-0716-4646-5.</li></ol> |                                |                                       |

Sumitha, E. (2025). Green enzymatic hydrolysis protocols for protein recovery from food by-products. Springer. ISBN: 9781071646465.

Sumitha, E. (2024). Pulsed field extraction. Springer Protocol. ISBN: 978-1-0716-3600-8.

Sumitha, E. (2024). Enzyme-assisted extraction. Springer Protocol. ISBN: 978-1-0716-3600-8.

## 1.2 College & University measures towards affordable and clean energy

7.2.1 Does your College & University have a policy in place for ensuring all renovations / new builds are following energy efficiency standards? (relevant standards to be indicated) **Energy-efficient renovation and building:** college/university measures towards affordable clean energy policy energy efficiency standards

Yes

<https://jssaherdatalake.blob.core.windows.net/quality/EnergyEfficiencyRenovationandNewBuildingPolicy.pdf>

Evidence: Weblink and details of policies/guidelines/strategies/green audit reports for ensuring all renovations / new builds are following energy efficiency standards in the campus.

Any other Comments:

Institutional Policies/Guidelines/Strategies created (Year)?

|                                                                                                                                                                                                                                                                            |                                                                    |                                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Any other Comments:                                                                                                                                                                                                                                                        |                                                                    |                                                                                                                                                                   |
| Institutional Policies/Guidelines/Strategies reviewed (Year)?                                                                                                                                                                                                              |                                                                    |                                                                                                                                                                   |
| Any other Comments:                                                                                                                                                                                                                                                        |                                                                    |                                                                                                                                                                   |
| <p>7.2.2 Does your College &amp; University have plans to upgrade existing buildings to higher energy efficiency?</p> <p><b>Upgrade buildings to higher energy efficiency:</b> College/university measures towards affordable clean energy upgrade existing buildings</p>  | Explain and attach evidence /documents supporting your explanation |                                                                                                                                                                   |
| Evidence: Weblink and details of plans and strategies to upgrade existing buildings to higher energy efficiency and measures towards affordable clean energy upgrade existing buildings                                                                                    |                                                                    |                                                                                                                                                                   |
| Any other Comments:                                                                                                                                                                                                                                                        |                                                                    |                                                                                                                                                                   |
| <p>7.2.3 Does your College &amp; University have a process for carbon management and reducing carbon dioxide emissions?</p> <p><b>Carbon reduction and emission reduction process (Measuring carbon/carbon dioxide emission in the campus to be implemented by the</b></p> | Yes                                                                | <a href="https://jssaherdatalake.blob.core.windows.net/quality/Transportpolicy.pdf">https://jssaherdatalake.blob.core.windows.net/quality/Transportpolicy.pdf</a> |

|                                                                                                                                                                                                                                                 |                                                                    |                                                                                                                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>colleges):</b><br>college/university<br>measures       towards<br>affordable clean energy<br>process       carbon<br>management.<br><br><b>Zero Carbon Policy</b>                                                                            |                                                                    |                                                                                                                                                                                                             |
| Evidence: Weblink and details of process for carbon management and reducing carbon dioxide emissions in campus supporting Zero Carbon Policy                                                                                                    |                                                                    |                                                                                                                                                                                                             |
| Any other Comments:                                                                                                                                                                                                                             |                                                                    |                                                                                                                                                                                                             |
| 7.2.4 Does your College & University have an energy efficiency plan in place to reduce overall energy consumption?<br><br><b>Plan to reduce energy consumption:</b> college/university measures towards affordable clean energy efficiency plan | Yes                                                                | <a href="https://jssaherdatalake.blob.core.windows.net/quality/EnergyConservation%26RecyclingPolicy.pdf">https://jssaherdatalake.blob.core.windows.net/quality/EnergyConservation%26RecyclingPolicy.pdf</a> |
| Evidence: Weblink and details of energy efficiency plans and measures towards energy conservation.<br><br>Details on measures taken towards affordable clean energy efficiency plan                                                             |                                                                    |                                                                                                                                                                                                             |
| Any other Comments:                                                                                                                                                                                                                             |                                                                    |                                                                                                                                                                                                             |
| 7.2.5 Does your College & University undergo energy reviews to identify areas where energy wastage is highest?<br><br><b>Energy wastage identification:</b> college/university measures                                                         | Explain and attach evidence /documents supporting your explanation |                                                                                                                                                                                                             |

|                                                                                                                                                                                                                                                                                        |                                                                           |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--|
| towards affordable<br>clean energy reviews                                                                                                                                                                                                                                             |                                                                           |  |
| <p>Evidence: Weblink and details of energy reviews to identify areas where energy wastage is highest in the campus.</p> <p>Measures towards affordable clean energy reviews.</p>                                                                                                       |                                                                           |  |
| Any other Comments:                                                                                                                                                                                                                                                                    |                                                                           |  |
| <p>7.2.6 Does your College &amp; University have a policy on divesting investments from carbon-intensive energy industries especially coal and oil?</p> <p><b>Divestment policy:</b><br/>college/ university measures towards affordable clean energy policy divesting investments</p> | <p>Explain and attach evidence /documents supporting your explanation</p> |  |
| <p>Evidence: Weblink and details of institutional policies/guidelines on divesting investments from carbon-intensive energy industries especially coal and oil</p>                                                                                                                     |                                                                           |  |
| Institutional Policy/Guidelines created (Year)?                                                                                                                                                                                                                                        |                                                                           |  |
| Institutional Policy/Guidelines reviewed (Year)?                                                                                                                                                                                                                                       |                                                                           |  |
| <p><b>7.3 Energy use density (Measurement of energy used per sqm to be implemented by the colleges)</b></p> <p>7.3.1 Energy usage per sqm</p> <p>Total energy consumption in the college:</p> <p>College floor space:</p> <p>Total energy consumption per sqm in college:</p>          |                                                                           |  |
| <b>7.4 Energy and the community</b>                                                                                                                                                                                                                                                    |                                                                           |  |
| <p>7.4.1 Does your College &amp; University</p>                                                                                                                                                                                                                                        | <p>Explain and attach evidence /documents</p>                             |  |

|                                                                                                                                                                                                                                                                                |                                                                                                 |                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>provide Programmes for local community to learn about importance of energy efficiency and clean energy?</p> <p><b>local community outreach for energy efficiency:</b> energy and community Programmes to learn clean energy</p>                                             | <p>supporting your explanation</p>                                                              |                                                                                                                                                                                            |
| <p>Evidence: Weblink and details of awareness programs, workshops, seminars, training programs, camps for local community to learn about importance of energy efficiency and clean energy with photographs of high resolution.</p>                                             |                                                                                                 |                                                                                                                                                                                            |
| <p>Any other Comments:</p>                                                                                                                                                                                                                                                     |                                                                                                 |                                                                                                                                                                                            |
| <p>7.4.2 Does your College &amp; University promote a public pledge toward 100% renewable energy (petitions, meetings, discussions, events) beyond the University / College?</p> <p><b>100% renewable energy pledge</b></p>                                                    | <p>Yes</p> <p>University encourages to use electric vehicles. The circular is attached here</p> | <p><a href="https://drive.google.com/file/d/1M5gBopNq9E2TrlzPPaHsu65ihTUSCBYy/view?usp=sharing">https://drive.google.com/file/d/1M5gBopNq9E2TrlzPPaHsu65ihTUSCBYy/view?usp=sharing</a></p> |
| <p>Evidence: Weblink and details of promoting public pledge towards 100% renewable energy</p> <p>Renewable energy pledge to be formulated by the college and solemn pledge on World Environmental Day/National Energy Conservation Day with photographs of high resolution</p> |                                                                                                 |                                                                                                                                                                                            |
| <p>Any other Comments:</p>                                                                                                                                                                                                                                                     |                                                                                                 |                                                                                                                                                                                            |
| <p>7.4.3 Does your College &amp; University</p>                                                                                                                                                                                                                                | <p>Explain and attach evidence /documents</p>                                                   |                                                                                                                                                                                            |

|                                                                                                                                                                                                                                                                                                   |                                    |                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>provide direct services to local industry aimed at improving energy efficiency and clean energy</p> <p><b>energy efficiency assessments,</b></p> <p>workshops, research renewable energy options, Energy efficiency services for industry</p>                                                  | <p>supporting your explanation</p> |                                                                                                                                                                                                                                        |
| <p>Evidence: Weblink and details that provide direct services to local industry aimed at improving energy efficiency and clean energy for industries.</p> <p>Details on energy efficiency assessments, workshops, research renewable energy options, energy efficiency services for industry.</p> |                                    |                                                                                                                                                                                                                                        |
| Any other Comments:                                                                                                                                                                                                                                                                               |                                    |                                                                                                                                                                                                                                        |
| <p>7.4.4 Does your College &amp; University inform and support government in clean energy and energy-efficient technology policy development?</p> <p><b>Policy development for clean energy technology</b></p>                                                                                    | <p>Yes</p>                         | <p><a href="https://jssaherdatalake.blob.core.windows.net/quality/EnergyEfficiencyRenovationandNewBuildingPolicy.pdf">https://jssaherdatalake.blob.core.windows.net/quality/EnergyEfficiencyRenovationandNewBuildingPolicy.pdf</a></p> |
| <p>Evidence: Weblink and details that supports government in clean energy and energy-efficient technology policy development</p>                                                                                                                                                                  |                                    |                                                                                                                                                                                                                                        |
| Any other Comments:                                                                                                                                                                                                                                                                               |                                    |                                                                                                                                                                                                                                        |
| <p>7.4.5 Does your College &amp; University provide assistance for start-ups that foster and support a low-</p>                                                                                                                                                                                   | <p>Yes</p>                         | <p><a href="https://jssuni.edu.in/jssaher/sparklecine/">https://jssuni.edu.in/jssaher/sparklecine/</a></p>                                                                                                                             |

|                                                                                                                                                                                                                                  |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| carbon<br>economy/technology?<br><br><b>Assistance to low-carbon innovation:</b><br><i>energy and community assistance for start ups</i>                                                                                         |  |  |
| Evidence: Weblink and details that provide assistance for start-ups that foster and support a low-carbon economy/technology<br><br>Details on assistance to low-carbon innovation: energy and community assistance for start ups |  |  |
| <b>7.5 Low carbon energy use</b><br><br>7.5.1 - Total energy used<br><br>7.5.2 - Total energy used from low-carbon sources                                                                                                       |  |  |
| Any other Comments:                                                                                                                                                                                                              |  |  |

## SLS, Ooty

### 1. AFFORDABLE AND CLEAN ENERGY (SDG 7)

| Details Related to SDGs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Evidence with documents                                                                                                            | Weblink to support the details                                                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1.1 Research on clean energy</b><br>Research supporting SDG 7: Research on Clean Energy (List of publications reflecting the research towards Clean Energy in Vancouver style): 1<br>Ashokkumar V, Kumar G, Lakshmanan H, Chandramughi VP, Flora G, Kothari R, Piechota G. A critical review of biogas production and upgrading from organic wastes: Recent advances, challenges and opportunities. Biomass and Bioenergy. 2025 Mar 1;194:107566.<br><a href="https://www.sciencedirect.com/science/article/abs/pii/S0961953424005191">https://www.sciencedirect.com/science/article/abs/pii/S0961953424005191</a> |                                                                                                                                    |                                                                                                                                                                                                                                                                                   |
| <b>1.2 College &amp; University measures towards affordable and clean energy</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                    |                                                                                                                                                                                                                                                                                   |
| 7.2.1 Does your College & University have a policy in place for ensuring all renovations / new builds are following energy efficiency standards? (relevant standards to be indicated) <b>Energy-efficient renovation and building:</b> college/university measures towards affordable clean energy policy energy efficiency standards                                                                                                                                                                                                                                                                                 | Yes, SLSO implements the University policies that are applicable. Energy Efficiency, Renovation, and New Building Policy is given. | <a href="https://jssaherdatalake.blob.core.windows.net/quality/sls-ooty-sdg-7-2-1-energy-efficiency-renovation-and-new-building-policy.pdf">https://jssaherdatalake.blob.core.windows.net/quality/sls-ooty-sdg-7-2-1-energy-efficiency-renovation-and-new-building-policy.pdf</a> |
| Evidence: Weblink and details of policies/guidelines/strategies/green audit reports for ensuring all renovations / new builds are following energy efficiency standards in the campus.                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                    |                                                                                                                                                                                                                                                                                   |
| Any other Comments:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                    |                                                                                                                                                                                                                                                                                   |
| Institutional Policies/Guidelines/Strategies created (Year)?                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                    |                                                                                                                                                                                                                                                                                   |
| Any other Comments:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                    |                                                                                                                                                                                                                                                                                   |

|                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Institutional Policies/Guidelines/Strategies reviewed (Year)?                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                |
| Any other Comments:                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                |
| <p>7.2.2 Does your College &amp; University have plans to upgrade existing buildings to higher energy efficiency?</p> <p><b>Upgrade buildings to higher energy efficiency:</b> College/university measures towards affordable clean energy upgrade existing buildings</p>                                                                                        | <p>Yes, Smart campus facility is implemented according to the University policy and is given here.</p> <p>Normal bulbs and old fitting lights were replaced by LED lamps which are power saving.</p> <p>Glass windows are present in lecture halls for good supply of green energy.</p> | <p><a href="https://jssaherdatalake.blob.core.windows.net/quality/sls-ooty-sdg-7-2-2-and-7-2-5-and-7-2-6-smart-campus-policy.pdf">https://jssaherdatalake.blob.core.windows.net/quality/sls-ooty-sdg-7-2-2-and-7-2-5-and-7-2-6-smart-campus-policy.pdf</a></p> |
| Evidence: Weblink and details of plans and strategies to upgrade existing buildings to higher energy efficiency and measures towards affordable clean energy upgrade existing buildings                                                                                                                                                                          |                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                |
| Any other Comments:                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                |
| <p>7.2.3 Does your College &amp; University have a process for carbon management and reducing carbon dioxide emissions?</p> <p><b>Carbon reduction and emission reduction process (Measuring carbon/carbon dioxide emission in the campus to be implemented by the colleges):</b> college/university measures towards affordable clean energy process carbon</p> | <p>SLSO has many trees and plants in the campus which absorbs the carbon emission.</p>                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                |

|                                                                                                                                                                                                                                                 |                                                      |                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| management.<br><b>Zero Carbon Policy</b>                                                                                                                                                                                                        |                                                      |                                                                                                                                                                                                                                                                               |
| Evidence: Weblink and details of process for carbon management and reducing carbon dioxide emissions in campus supporting Zero Carbon Policy                                                                                                    |                                                      |                                                                                                                                                                                                                                                                               |
| Any other Comments:                                                                                                                                                                                                                             |                                                      |                                                                                                                                                                                                                                                                               |
| 7.2.4 Does your College & University have an energy efficiency plan in place to reduce overall energy consumption?<br><br><b>Plan to reduce energy consumption:</b> college/university measures towards affordable clean energy efficiency plan | Yes, Energy Conservation & Recycling Policy is given | <a href="https://jssaherdatalake.blob.core.windows.net/quality/sls-ooty-sdg-7-2-4-and-6-4-1-energy-conservation-and-recycling-policy.pdf">https://jssaherdatalake.blob.core.windows.net/quality/sls-ooty-sdg-7-2-4-and-6-4-1-energy-conservation-and-recycling-policy.pdf</a> |
| Evidence: Weblink and details of energy efficiency plans and measures towards energy conservation.                                                                                                                                              |                                                      |                                                                                                                                                                                                                                                                               |
| Details on measures taken towards affordable clean energy efficiency plan                                                                                                                                                                       |                                                      |                                                                                                                                                                                                                                                                               |
| Any other Comments:                                                                                                                                                                                                                             |                                                      |                                                                                                                                                                                                                                                                               |
| 7.2.5 Does your College & University undergo energy reviews to identify areas where energy wastage is highest?<br><br><b>Energy wastage identification:</b> college/university measures towards affordable clean energy reviews                 | Yes, Smart campus policy is given here               | <a href="https://jssaherdatalake.blob.core.windows.net/quality/sls-ooty-sdg-7-2-2-and-7-2-5-and-7-2-6-smart-campus-policy.pdf">https://jssaherdatalake.blob.core.windows.net/quality/sls-ooty-sdg-7-2-2-and-7-2-5-and-7-2-6-smart-campus-policy.pdf</a>                       |
| Evidence: Weblink and details of energy reviews to identify areas where energy wastage is highest in the campus.                                                                                                                                |                                                      |                                                                                                                                                                                                                                                                               |
| Measures towards affordable clean energy reviews.                                                                                                                                                                                               |                                                      |                                                                                                                                                                                                                                                                               |
| Any other Comments:                                                                                                                                                                                                                             |                                                      |                                                                                                                                                                                                                                                                               |

|                                                                                                                                                                                                                                                                                        |                                               |                                                                                                                                                                                                                                                                |
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| <p>7.2.6 Does your College &amp; University have a policy on divesting investments from carbon-intensive energy industries especially coal and oil?</p> <p><b>Divestment policy:</b><br/>college/ university measures towards affordable clean energy policy divesting investments</p> | <p>Yes, Smart campus policy is given here</p> | <p><a href="https://jssaherdatalake.blob.core.windows.net/quality/sls-ooty-sdg-7-2-2-and-7-2-5-and-7-2-6-smart-campus-policy.pdf">https://jssaherdatalake.blob.core.windows.net/quality/sls-ooty-sdg-7-2-2-and-7-2-5-and-7-2-6-smart-campus-policy.pdf</a></p> |
| Evidence: Weblink and details of institutional policies/guidelines on divesting investments from carbon-intensive energy industries especially coal and oil                                                                                                                            |                                               |                                                                                                                                                                                                                                                                |
| Institutional Policy/Guidelines created (Year)?                                                                                                                                                                                                                                        |                                               |                                                                                                                                                                                                                                                                |
| Institutional Policy/Guidelines reviewed (Year)?                                                                                                                                                                                                                                       |                                               |                                                                                                                                                                                                                                                                |
| <p><b>7.3 Energy use density (Measurement of energy used per sqm to be implemented by the colleges)</b></p> <p>7.3.1 Energy usage per sqm</p> <p>Total energy consumption in the college:</p> <p>College floor space:</p> <p>Total energy consumption per sqm in college:</p>          |                                               |                                                                                                                                                                                                                                                                |
| <b>7.4 Energy and the community</b>                                                                                                                                                                                                                                                    |                                               |                                                                                                                                                                                                                                                                |
| <p>7.4.1 Does your College &amp; University provide Programmes for local community to learn about importance of energy efficiency and clean energy?</p> <p><b>local community outreach for energy efficiency:</b> energy and community Programmes to learn clean energy</p>            | <p>NIL</p>                                    |                                                                                                                                                                                                                                                                |
| Evidence: Weblink and details of awareness programs, workshops, seminars, training                                                                                                                                                                                                     |                                               |                                                                                                                                                                                                                                                                |

|                                                                                                                                                                                                                                                                                            |     |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|
| programs, camps for local community to learn about importance of energy efficiency and clean energy with photographs of high resolution.                                                                                                                                                   |     |  |
| Any other Comments:                                                                                                                                                                                                                                                                        |     |  |
| 7.4.2 Does your College & University promote a public pledge toward 100% renewable energy (petitions, meetings, discussions, events) beyond the University / College?<br><br><b>100% renewable energy pledge</b>                                                                           | NIL |  |
| Evidence: Weblink and details of promoting public pledge towards 100% renewable energy<br><br>Renewable energy pledge to be formulated by the college and solemn pledge on World Environmental Day/National Energy Conservation Day with photographs of high resolution                    |     |  |
| Any other Comments:                                                                                                                                                                                                                                                                        |     |  |
| 7.4.3 Does your College & University provide direct services to local industry aimed at improving energy efficiency and clean energy<br><br><b>energy efficiency assessments,</b> workshops, research renewable energy options, Energy efficiency services for industry                    | NIL |  |
| Evidence: Weblink and details that provide direct services to local industry aimed at improving energy efficiency and clean energy for industries.<br><br>Details on energy efficiency assessments, workshops, research renewable energy options, energy efficiency services for industry. |     |  |
| Any other Comments:                                                                                                                                                                                                                                                                        |     |  |
| 7.4.4 Does your College & University inform and                                                                                                                                                                                                                                            | NIL |  |

|                                                                                                                                                                                                                                           |     |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|
| support government in clean energy and energy-efficient technology policy development?<br><br><b>Policy development for clean energy technology</b>                                                                                       |     |  |
| Evidence: Weblink and details that supports government in clean energy and energy-efficient technology policy development                                                                                                                 |     |  |
| Any other Comments:                                                                                                                                                                                                                       |     |  |
| 7.4.5 Does your College & University provide assistance for start-ups that foster and support a low-carbon economy/technology?<br><br><b>Assistance to low-carbon innovation:</b><br><i>energy and community assistance for start ups</i> | NIL |  |
| Evidence: Weblink and details that provide assistance for start-ups that foster and support a low-carbon economy/technology<br><br>Details on assistance to low-carbon innovation: energy and community assistance for start ups          |     |  |
| <b>7.5 Low carbon energy use</b><br><br>7.5.1 - Total energy used<br>7.5.2 - Total energy used from low-carbon sources                                                                                                                    |     |  |
| Any other Comments:                                                                                                                                                                                                                       |     |  |

**Table 14: Activities conducted aligning to Goal 7**

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Curriculum</b>              | The curriculum contained topics that relate to renewable and non-renewable energies, environmental sustainability, energy conservation, radiation and its hazards. Gaining knowledge on these concepts is of paramount importance in training the future responsible citizens. The concepts provide insights to the students in understanding the nature and environment from it's micro level, there by relating to the macro level outcomes if not managed properly.                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Teaching &amp; Learning</b> | <p>Department of Health System Management Studies adopts eco friendly practices by conducting student internal assessments online through JSSAHER portal there by conserving natural resources. Displays posters across department for energy saving through switching off lights and fans when not in use, posters for water conservation in hand washing areas.</p> <p style="text-align: center;"><b><u>Energy conservation practices</u></b></p> <p>The department adopts energy conservation practices by promoting awareness through poster displays in classrooms, corridors, boys' common room and girls' common room areas, and staff room. The posters reiterate and remind the students, teaching, and non-teaching staff of the department on the importance of adopting energy conservation practices 'Save Water' and 'Save Electricity'.</p>  |