# GREEN AUDIT REPORT

Academic Year 2020 - 2023

EARTH WATER AIR LIGHT SPACE

## Chhatrapati Shahu Ji Maharaj University

Kanpur, Uttar Pradesh

Prepared by

**GREEN MENTORS**

Powered by Law of Nature

Special Consultative Status with the
Economic and Social Council of United Nations from 2021

GREEN UNIVERSITY
# AUDIT REPORT
Academic Year 2020 - 2023

## AUDITOR'S VIEW

A Green University is an educational institution that meets its need for natural resources – such as energy, water, and materials – without compromising the ability of people and future generations to meet their own needs.

Green Mentors having special consultative status with the Economic and Social Council (ECOSOC) of the United Nations, is proud to present Global Readiness in Ensuring Ecological Neutrality Audit Report & Accreditation Certificate to the Chhatrapati Sahu Ji Maharaj University, Kanpur Uttar Pradesh.

This report is prepared based on the information provided by the CSJMU Green Auditing Team to address the impact of teaching-learning practices on the local environment and presents systematic identification, quantification, and analysis of environmental diversity.

Biodiversity Landscaping & Built-up Space

Water Management Practices

Air Quality Level within the Campus

Application of Sustainable Technologies

Energy Management Practices

Green University Auditing and Accreditation is a Set of Global Indicators of Sustainability for assessing Governance, Academics, Biltup Spaces, Landscaping, Water Management, Energy Sourcing & Saving, Air Quality Level, Health, Hygiene & Resource Utilization.

Each Green University Auditing & Accreditation Indicator is, in turn, measured against a set of the Global Standard for Sustainable Learning Spaces Auditing and Accreditation.

CSJMU is an excellent seat of learning that transforms its students' lives, producing research that changes the world with respecting the local environment

Green Mentors is proud to declare that CSJMU has achieved **458** Points out of **500** Points & earned Platinum Ranking in the Green University Accreditation Standards for the Period of Academic Year 2020-2023.

We are confident that CSJMU will emerge as a Green engine for the new paradigm of the "green economy," in short, CSJMU will contribute to the overall sustainability of the planet.

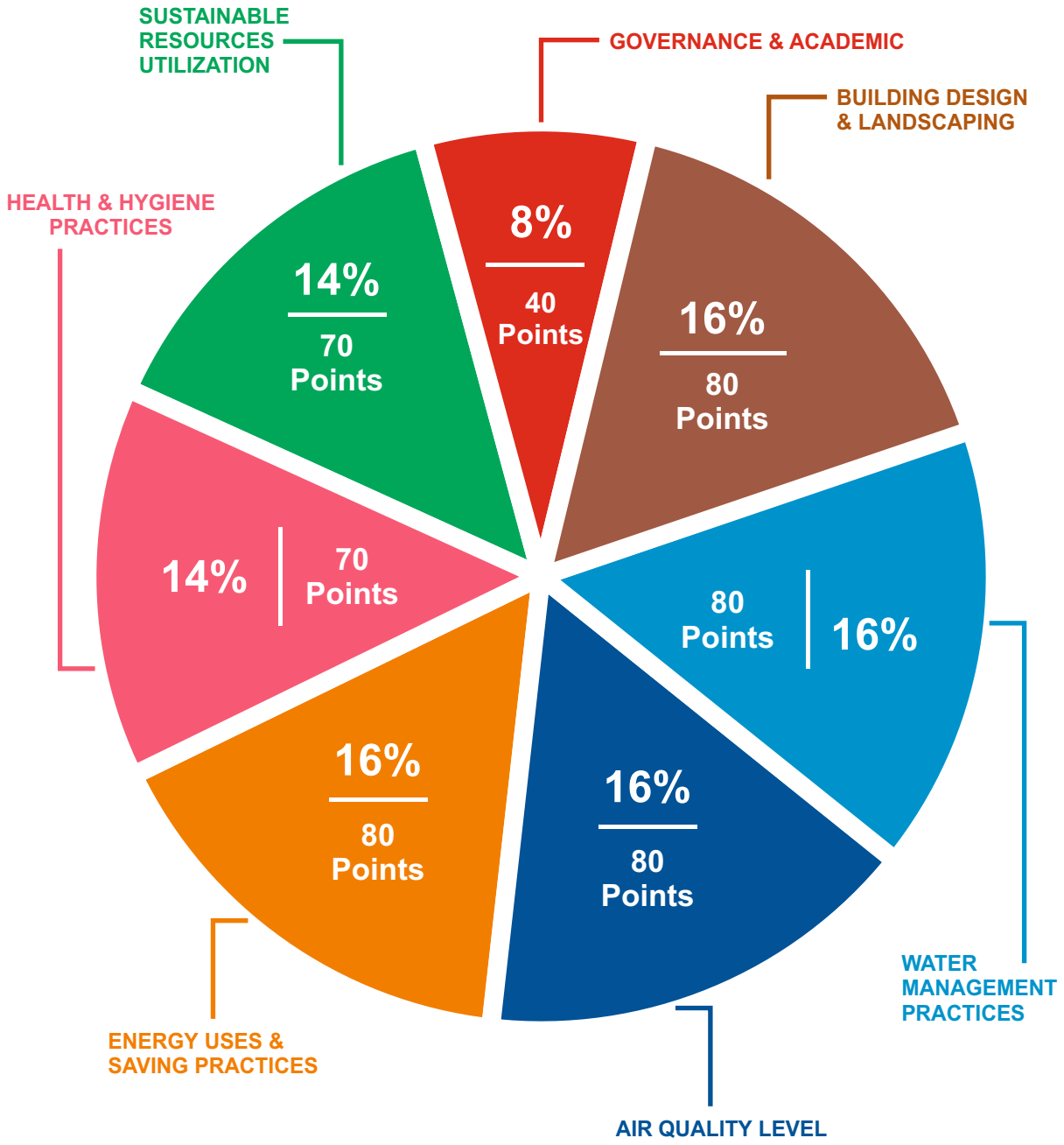
Virendra
22-12-2022

**Virendra Rawat**
Director,
Green Mentors

**GOOD FOR PUPIL &**
**GOOD FOR PLANET**

GREEN MENTORS

## Sustainability Weightage of Assessment Areas




## Certification Level

| Rejection | Certification | Silver | Gold | Platinum |
|---|---|---|---|---|
| 000-100 Points | 100-200 Points | 200-300 Points | 300-400 Points | 400-500 Points |

# ACCREDITATION CERTIFICATE

ACCREDITED GREEN UNIVERSITY
PLATINUM
2020-2023

EARTH WATER AIR LIGHT SPACE

EDUCATION INNOVATION HYGIENE SPACE TRANSPORT

## CHHATRAPATI SHAHU JI MAHARAJ UNIVERSITY

Kanpur, Uttar Pradesh

has successfully achieved the Green University Accreditation Standards, designed & defined by Green Mentors, & hereby Accredited as a

**GREEN UNIVERSITY**

in Platinum Ranking.

22-12-2022
**Virendra Rawat**
Director, Green Mentors

**GREEN MENTORS**
Powered by Law of Nature
Special Consultative Status with the
Economic and Social Council of United Nations from 2021

GREEN MENTORS

GM/GA/2022/025/G1

This Certificate is issued on 22nd December, 2022 & Valid till the Academic Year 2023

CERTIFICATE

## Brief Introduction of Chhatrapati Shahu Ji Maharaj University Kanpur


Chhatrapati Sahu Ji Maharaj University (formerly Kanpur University) was established in 1966 and is a leading research-led State University of North India that carries a legacy of academic excellence. The sprawling Green campus of the University is spread over 264 acres, where the environment encourages education and landscaping leads towards learning.

Presently the University offers 39 undergraduate and 47 postgraduate programs, including Ph.D., 06 Postgraduate Diplomas, 07 Diplomas, and 09 Certificate programs ranging from Life Sciences, Pharmacy, Engineering, and Technology to Legal Studies, Humanities, and Social Sciences.

CSJM University has 45 Centers of Excellence, and various Schools, each consisting of several departments that offer creative freedom to its scholars with a commitment to world-class learning and cutting-edge research.

University offers modern tech-led services in admission procedures and evaluation processes,. In addition, the University has also developed an e-learning portal: GyanSanchay, and an electronic library database accessible to all faculty members and students. Also, the University has ICT-enabled classrooms, campus-wide internet, and Wi-Fi facilities.

CSJMU strives to provide an exemplary teaching, learning, and research environment. The University also has forty-nine collaborative partnerships and 72 MoUs, internships, and combined forty-three multiparty research programs with government bodies.

## Program offered

| Certificate | |
|---|---|
| Advanced certificate course in Garbh Sanskar | Certificate Course in Happiness |

| Diploma |
|---|
| PG Diploma in Data Science and Machine Learning |
| PG Diploma in Guidance and Counselling |
| Post Graduate Diploma In Industrial Safety and Occupational Health management (ISOHM) |
| Post Graduate Diploma Course in Journalism and Mass Communication |
| Post Master Diploma NGO administration and Extension |
| Post Graduate Diploma in Yoga Education (PGDYED) |

| Under Graduate |
|---|

| B.Sc. | |
|---|---|
| Bio-Technology | Hotel Management & Catering Technology |
| Medical Laboratory Technology | Biological Science (Hons.) |
| Human Nutrition | Biotechnology (Hons.) |
| Hospital Administration | Chemistry (Hons.) |
| Medical Microbiology | Mathematics (Hons.) |
| Yoga | Physics (Hons.) |
| Hospitality and Hotel Administration | |

| B.Tech. | |
|---|---|
| Chemical Engineering | Materials Science & Metallurgical Engineering |
| Mechanical Engineering | Computer science and Engineering |
| Electronics & Communication Engineering | Computer science and Engineering- Artificial Intelligence |
| Information Technology | |

| B.A. | |
|---|---|
| B.A.- Economics (Hons.) | B.A.- English (Hons.) |
| B.A.- LLB (Hons.) | B.A.- Sociology (Hons.) |
| B.A.- Psychology (Hons.) | |

## GOVERNANCE & ACADEMIC

| Bachelor of | |
|---|---|
| Computer Application (BCA) | Pharmacy (B.Pharm.) |
| Business Administration (BBA) | Physiotherapy (BPT) |
| Education (B.Ed) | Fine Arts (Applied Art/ Painting/ Sculpture) |
| Library & Information Science | Social Work (BSW) |
| Physical Education (BPED) | Journalism & Mass Communication |
| Physical Education & Sports (B.P.E.S.) | |

| Post Graduate |
|---|

| M.Sc. | |
|---|---|
| M.Sc. - Environmental science | M.Sc. - Microbiology |
| M.Sc. - Food Technology | M.Sc. - Applied Mathematics |
| M.Sc. - Biochemistry | M.Sc. - Industrial Chemistry |
| M.Sc. - Nutritional science | M.Sc. - Computer Science |
| M.Sc. - Bioinformatics | M.Sc. - Mathematics |
| M.Sc. - Biotechnology | M.Sc. - Physics |
| M.Sc. - Electronics | M.Sc. Medical Laboratory Technology |
| M.Sc. - Life Sciences | Integrated M.Sc. - Electronics |

## GOVERNANCE & ACADEMIC

| M.A. | |
|---|---|
| M.A. - Drawing & Painting | M.A.-English |
| M.A. Music (Tabla/Vocal/ Sitar) | M.A.- English Language & Literature |

| Master of | |
|---|---|
| Pharmacy | Journalism & Mass Communication |
| Library & Information Science | Library & Information Science |
| Computer Application (MCA) | Physical Education |
| Education (M.Ed.) | Physiotherapy |
| Extension and Rural Development | Law (LLM) |
| Fine Arts (Applied Art/ Painting/ Sculpture) | Business Administration (MBA) |

| Research / Ph.D. |
|---|
| Doctor of Philosophy (Ph.D.) |

| Number of Students | | | | |
|---|---|---|---|---|
| UG | PG | Diploma | Certificate | PhD |
| 4353 | 1570 | 235 | 37 | 25 |

# 1. GOVERNANCE

1 2 3 4 5 6 7 8 9 10

Governance in CSJMU is driven by State and Statutes. Governing body of CSJMU is committed to its purpose, dedicated to serving the interests of all stakeholders, including the environment.
Governing Body of CSJMU also follows well-informed decision-making, transparency in teaching-learning practices & accountability in the performance and use of human potential.

## About Governing Body

The Executive Council of the University is the principal executive body of the University, and it sets down the policy and rules and oversees the governance of the University.

The Vice-Chancellor of the University is the chairman of the Council, and the Registrar of the University is the Secretary of the Council. The Executive Council consists of –

1. The Vice-Chancellor, Chairman
2. The Pro Vice-Chancellor
3. The Deans of Faculties, by rotation in the manner, prescribed.
4. Two members from amongst the Professors or Readers belonging to the scheduled castes or scheduled tribes and two members from amongst the Professors or readers belonging to other backward classes of citizens.
5. One Professor other than the Pro-Vice-Chancellor or a Dean referred to in clause (c) above, on the reader and one lecturer of the University to be selected in the manner prescribed.
6. Three principals and two other teachers of affiliated colleges will be selected as prescribed.
7. Four persons to be elected by the court members from among such of them are not enrolled as students of or in the service of the University or an institute or of a constituent college or an affiliated or associated college or hall or hostel.
8. Four members of academic eminence are to be nominated by the Chancellor.
9. One member from amongst the reputed industrialists who have contributed to higher education is nominated by the State Government.
10. The Registrar is the Secretary of the Council.

## 2. LEADERSHIP

1 2 3 4 5 6 7 8 9 10

Prof. Vinay Kumar Pathak, Vice-Chancellor of CSJMU, plays a pivotal role in making CSJMU a Responsible University. He has nurtured many successful leaders through quality & responsible education.

He is a lifelong learner who strives to build the nation through responsible education. Prof. Vinay Kumar Pathak is passionate about his vision and plans to make CSJMU a leading responsible University.

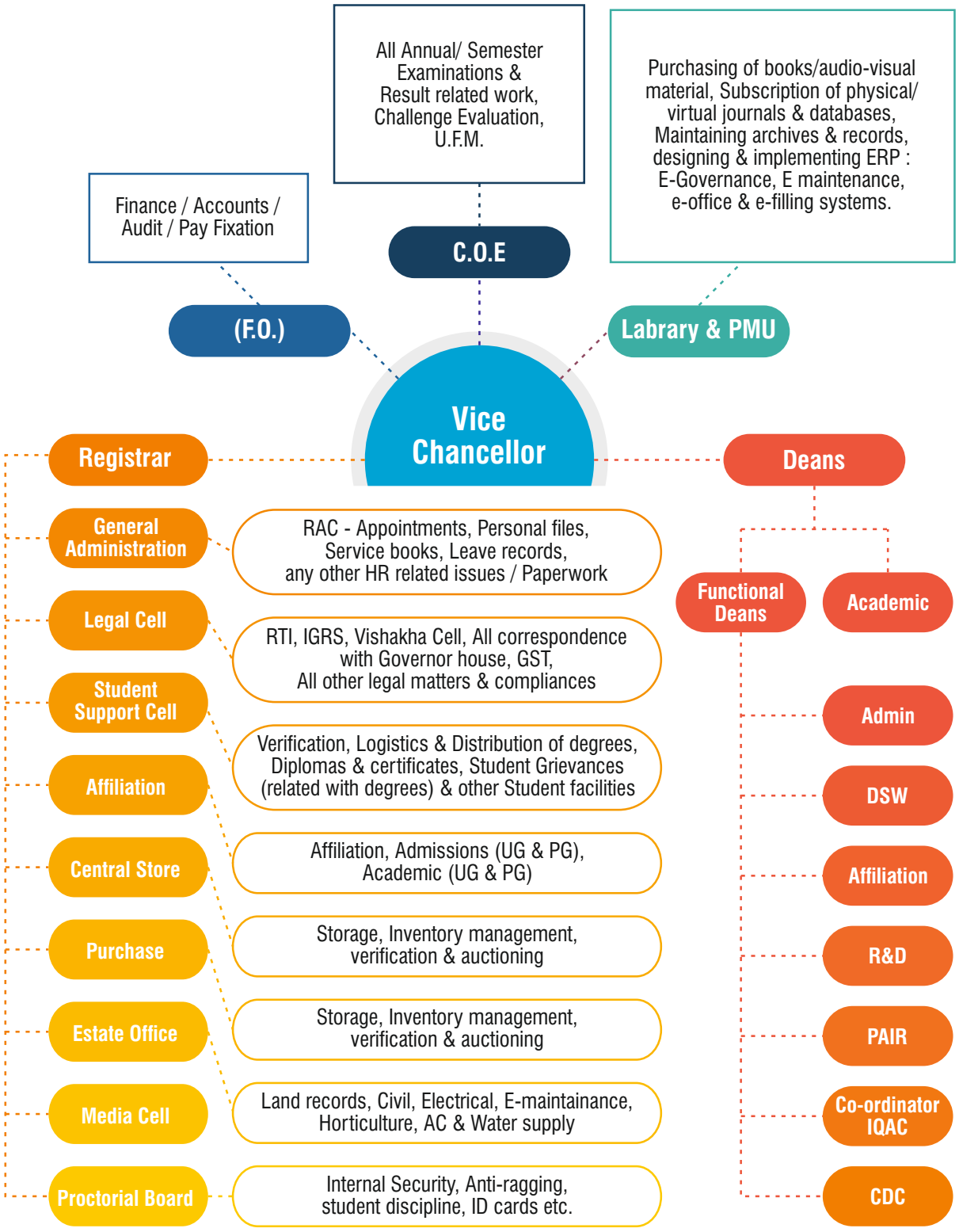
**Prof. Vinay Kumar Pathak**
Vice Chancellor

**The Vice-Chancellor** provides leadership, academic and administrative, to the whole University. He performs functions that align with the University's mission, vision, and objectives.

**The Registrar** is a statutory position in the University and is responsible for all operational issues in administration, human resources, management, and meeting statutory compliance needs with all government bodies.
He carries legal authority in so far as the University activities are concerned. The Registrar hires, supervises, and evaluates the records and the staff. He also administers the academic functions to provide maximum services to students while ensuring efficient and effective workflow.

## GOVERNANCE & ACADEMIC

### Organization Chart



## GOVERNANCE & ACADEMIC

### List of Teaching Staff

| Professor | | |
|---|---|---|
| Prof. Nand Lal | Prof. Sudhanshu Pandiya | Prof. M.P. Sinha |
| Prof. Sanjay Kumar Swarnkar | Prof. Anshu Yadav | Prof. Varsha Gupta |
| Prof Sudhir Kumar Awasthi | Prof. Mukesh Ranga | Prof. Suvijna Awasthi |
| Prof. Munesh Kumar | | |

| Associate Professor | | |
|---|---|---|
| Dr. Arpita Yadav | Dr Rajesh Pratap Singh | Dr. Sandeep Kumar Singh |
| Dr. Vineeta Kulshrestha | Dr. Versha Gupta | Dr. Nisha Sharma |
| Dr Ajay Kumar Gupta | Dr. Ravindra Nath Katiyar | Dr. Vinay Kumar Sachan |
| Dr. Mradulesh Singh | Dr. Niraj Kumar | Dr. Sidharth Mishra |
| Dr. Brishti Mitra | Dr. Rajesh Kumar | |

| Assistant Professor | | |
|---|---|---|
| Dr. Sudesh Kumar Srivastava | Dr. Brijesh Swaroop Katiyar | Dr. Kiran Jha |
| Dr. Deepak Kumar Verma | Dr. Prahlad Singh | Dr. Rashmi Dubey |
| Dr. Vishal Awasthi | Dr. Bhoomika Yadav | Dr. Mayur Rahul |
| Dr. Pooja Singh | Dr. Manishi Tripathi | Dr. Ajay Tiwari |
| Dr. Neerja Srivastava | Dr. Madhulika Singh | Dr. Anita Awasthi |
| Dr. Shashwat Katiyar | Dr. Vishal Chand | Dr. Sandesh Gupta |
| Dr. Charu Khan | Dr. Sidhanshu Rai | Dr Alok Kumar |
| Dr. Arun Kumar Gupta | Dr. Kalpana Agnihotri | Dr. Richa Verma |
| Dr. Rashmi Gore | Dr. Munish Rastogi | Dr. Poonam Dixit |
| Dr. Niyati Padhi | Dr. Abhishek Kumar Chandra | Dr. Ajay Pratap Singh |
| Dr. Vijay Kumar Kashyap | Dr. Umesh Chandra Sharma | Dr. Shashi Kiran Misra |
| Dr. Bharti Dixit | Dr. Pushpa Mamoria | Dr. Ajay Kumar |
| Dr. Shilpa Deshpande Kaistha | Dr. Rashi Agarwal | Dr. Shalini Verma |
| Dr. Meenakshi Gupta | Dr. Jitendra Dabral | Dr. Swasti Srivastava |
| Dr. Digvijay Sharma | Dr. Anju Dixit | Dr. Annika Singh |
| Dr. Vivek Singh Sachan | Dr. Kaushalendra Kumar Pandey | Dr. Krishan Kumar Bajpai |
| Dr. Akhilesh Kumar Dixit | Dr. Praveen Katiyar | Dr. Ratna Shukla |
| Dr. Praveen Bhai Patel | Dr. Prakash Chandra Gupta | Dr. Sumana Biswas |
| Dr. Birendra Pratap Singh | Dr. Kalpana | Dr. Dharam Singh |
| Dr. Mamta Tiwari | Dr. Saswati Sarkar | Dr. Rashmi Gautam |

## GOVERNANCE & ACADEMIC

| Assistant Professor | | |
|---|---|---|
| Dr. Dharmendra Kumar Singh | Mr Chandra Shekhar Kumar | Mr Ajeet Pratap Singh |
| Dr. Ekta Khare | Ms Neha Shukla | Ms Yastuti Rao Gautam |
| Dr. Anamika Dixit | Mr Brijendra Singh | Mr Mukesh Kumar Verma |
| Dr. Ram Janma | Mr Shekhar Verma | Mr Vikash Katiyar |
| Dr. Archna Yadav | Mr Shivneet Tripathi | Mr Arpit Srivastava |
| Dr. Urvashi | Mr Akhilesh Singh | Mr Atul Kumar Agnihotri |
| Dr. Satya Prakash Verma | Mr Himanshu Shukla | Mr Shailesh Srivastava |
| Dr. Ram Prakash Saini | Mr Shesh Mani Tiwari | Mr Shishupal Singh |
| Dr. Surabhi Tipathi | Mr Mohd Shah Alam | Ms Anupriya |
| Dr. Lokeshwar Singh | Mr Amit Kumar Katiyar | Mr Deepak Chaurasia |
| Dr. Prabal Pratap Singh | Mr Somesh Kumar Malhotra | Mr Raghvendra Singh |
| Dr. Shikha Shukla | Mr Ramnayan Mishra | Mr Satyendra Singh Chauhan |
| Dr. Ritesh Agarwal | Mr Shivendra Trivedivi | Mr Dev Baksh Singh |
| Dr. Prabal Pratap Singh | Ms Pratima Katiyar | Mr Vinay Singh |
| Dr. Deepti Agarwal | Ms Anju Singh | Mr Manoj Gond |
| Dr. Draupadi Yadav | Mr Vinod Dohrey | Ms Shivangi Kanaujia |
| Dr. Shalini Shirvasta | Mr Arvind Kumar Senger | Mr Shubhendra Singh |
| Dr. G.s. Nigam | Ms Shilpi Dubey | Mr Sunil Kumar |
| Dr. Deepti Rai | Ms Suruchi Singh | Mr Prabal Pratap Singh |
| Dr. Alka Gupta | Mr Ajeet Kumar Shrivastava | Ms Smita Gupta |
| Dr. Nikunj Sethi | Ms Parul Awasthi | Ms Deepmala Nigam |
| Dr. Versha Prasad | Mr Sanjeet Kumar | Mr Shubham Verma |
| Dr. Shalini Rohtagi | Mr Shah Mohd. | Mr Rajender Prakash Verma |
| Mr Amit Virmani | Mr Prem Kishore Shukla | Mr Pramod Ranjan |
| Mr Omkar Agrahari | Mr Vaibhav Saxena | Ms Priya Awasthi |
| Mr Prashant Srivastava | Mr Jiut Bali Yadav | Ms Namita Tiwari |
| Mr Shiv Charna Patel | Ms Mamta Dixit | Mrs. Anshika Tiwari |
| Ms Mamta Sagar | Mr Ankur Katiyar | Mr Santosh Prasad |
| Mr Anand Kumar Gupta | Ms Shilpi Uttam | Mr Prateek Srivastava |
| Mr A. Rajendiran | Ms Aamena Zaidi | Mr Vaibhav Mishra |
| Mr Sudhir Verma | Mr Saurabh Tripathi | Mr Ranbir Mukhya |
| Mr Warshi Singh | Mr Anurag Agnihotri | Mr Praveen Shukla |
| Ms Arpana Katiyar | Mr Hemant Kumar | Mr Gunjan Pathak |
| Mr Sachin Sharma | Ms Sushma Bajpai | Ms Mayuri Singh |
| Ms Anupama Yadav | Mr Ompal | Mr Shivansu Sachan |
| Mr Abhishek Dwivedi | Ms Preeti Singh | Mr Shivam Mishra |
| Ms Mamata Mayee Panda | Mr Mohit Awasthi | Ms Noopur Verma |
| Mr Ramendra Singh Niranjan | | |

## GOVERNANCE & ACADEMIC

### List of Non-Teaching Staff

| Registrar |
|---|
| Dr. Anil Kumar Yadav |

| Assistant Registrar | |
|---|---|
| Sri Dinesh Kumar Maurya | Sri Saras Kapoor |
| Sri Gyanendra Kumar | Smt Anjali Maurya |

| Finance Officer |
|---|
| Sri Prem Shanker Chaudhary |

| Account Officer |
|---|
| Sri Jitendra Kumar Verma |

| Controller Of Exam |
|---|
| Sri Anjani Kumar Mishra |

| System Manager |
|---|
| Dr Saroj Kumar Dwivedi |

| Director, CDC |
|---|
| Dr Rajesh Kumar Dwivedi |

| Librarian |
|---|
| Sri Ashish Kumar Srivastava |

| Junior Engineer |
|---|
| Satish Chandra Madhukar |

| Programmer |
|---|
| Sri Rajiv Jain |

| Prashasanik Adhikari | | |
|---|---|---|
| Sri Hari Om Kumar | Sri Shashank Malviya | Sri Anjani Kumar Shukla |
| Sri Vinai Kumar | Sri Mohd Azeem Farooqui | Sri Rama Kant Tripathi |
| Sri Surendra Kumar | Sri Alok Kumar | Sri Pradeep Chohattiwal |
| Sri Manoj Kumar | Sri Shreepal Maurya | Sri Ravindra Sharma |
| Sri Awadhesh Kumar | Sri Satya Priya Samant | Sri Himanshu Shukla |
| Sri Ghanshyam Gond | Sri Ranjeet Singh | Sri Abhishek Mishra |

| Pradhan Sahayak | | |
|---|---|---|
| Sri Suresh Chandra Dewaker | Sri Sri Narayan Pandey | Sri Abhishek Trivedi |
| Sri Bhanu Pratap | Sri Balbhadra Prasad | Smt Tapsya Sharma |
| Sri Deen Dayal | Sri Ajay Kanaujia | Sri Deepak Kumar Mishra |
| Sri Salig Ram | Sri Ashok Diwakar | Sri Vidya Khant Misra |
| Sri Pankaj Kumar | Sri Ram Balak Sharma | Sri Sudheer Kumar Awasthi |
| Sri Ramesh Singh | Sri Basant Singh Chauhan | Dr Pratima Asthana |
| Sri Ram Nayan Kashyap | Sri Mithai Ram | Sri Mohd Sagir |
| Sri Sanjeev Massey | Sri Dushyant Singh | Smt Rajesh Gupta |
| Sri Laxmi Narayan | Sri Sunil Kumar | Sri Deepak Kumar Rai |
| Sri Ramjeet | Sri Nand Lalsingh Yadav | Sri Shailendra Kumar Tiwari |

## GOVERNANCE & ACADEMIC

| Pradhan Sahayak | | |
|---|---|---|
| Smt Ram Dulari Bhadhuriya | Sri Prashant Kushwaha | Sri Hari Shanker Sahu |
| Sri Shiv Shankar | Sri Ashok Kumar Srivastava | Sri Ashok Kumar Yadav |
| Sri Amit Johari | Smt Jagrati Tripathi | Sri Siddhnath Tripathi |
| Sri Rajesh Singh | Sri Gaurav Tiwari | Sri Rufee Akhtar |
| Sri Amit Dixit | Sri Samaksh Kumar Nishad | Sri Vishnu Prasad Shukla |
| Sri Pashupati Nath Singh | Smt Jyoti Shikha Shukla | Sri Mohd Arshad |

| Technical Assistant / Lab. Technician | | |
|---|---|---|
| Sri Kamesh Babu Shakya | Sri Rakesh Kumar Savita | Gaurav Mishra |
| Alok Singh | Anurag Mishra | Amitabh Singh |
| Pradeep Audichya | Laxman Rajput | Shailendra Kumar Verma |
| Sri Kapil Mishra | Jitendra Kumar Rajput | Harish Chandra Sharma |
| Dr Manish Dwivedi | Ajay Kumar | Rupesh Kumar Bajpai |
| Poonam Yadav | Amit Kumar Gupta | Sachin Kumar Pal |
| Dhirendra Mohan Sharma | Puneet Mehrotra | Anjali Tiwari |
| Neetu Yadav | Rajesh Kumar Verma | Narendra Kumar Sharma |
| Saurabh Yadav | Geeta Maurya | Shailesh Kumar |
| Dharmendra Nishad | Sri Vikram Singh | Sujeet Srivastava |
| Richa Tiwari | Sri Arun Kumar | Sri Shilpy Singh |
| Sri Pravin Kumar | Sri Sunil Kumar Katiyar | |

| Lab. Assistant | | |
|---|---|---|
| Rahat Niyazi | Sri Dhananjay Singh | Bhupendra Verma |
| Rajesh Singh | Sri Sandeep Gupta | Himanshu Kannujiya |
| Sri Ghanshyam Singh | Sri Praveen Kumar Singh | Rajendra Kumar |
| Sri Abhishek Kumar Gupta | Sri Awdhesh Pratap | Sri Shailendra Kumar |
| Sri Shailendra Kumar | Sri Ramesh Kumar | Dr. Murli Manohar Agnihotri |
| Amar Singh Katiyar | Sri Ashish Kumar | Sri Ashok Kumar Singh |
| Sri Anil Kumar Verma | Anoop Singh | Sri Sanjay Kulshershta |
| Bhanu Pratap | | |

| Computer Operator | | |
|---|---|---|
| Sri Naendra Singh | Sri Shiv Adhar Yadav | Sri Nitin Dhawan |
| Sri Sachin Kumar Sharma | Km. Jyoti Verma | Km Dipti Mishra |
| Sri Atul Kumar | Sri Shanti Bhushan | Sri Pulkit Pandey |
| Smt Divya Mishra | Sri Shivendra Dixit | Sri Ajay Katheria |

## GOVERNANCE & ACADEMIC

| Data Entry Operator | | |
|---|---|---|
| Smt Megha Joshi | Sri Shailesh Kumar Mishra | Sri Jitendra Prakash Dixit |
| Sri Shiv Kumar Yadav | Sri Satish Kumar Gaur | Sri Shailendra Dhanwick |
| Sri Manish Kumar Tripathi | Sri Shiv Kumar Kureel | Smt Neelam Singh |
| Sri Siddharth Joshi | Sri Manoj Kumar Shukla | Sri Gyanopdesh Narayan Tripa |
| Sri Atul | Sri Amit Shukla | Dinesh Kumar |
| Sri Ratan Bhushan | Sri Manish Dwivedi | Km Laxmi Srivastava |
| Sri Avidesh Kumar | Smt Usha Singh | |

| Junior Assistant | | |
|---|---|---|
| Sri Rakesh Kumar | Sri Ashok Kumar | Sri Mohit Kumar |
| Sri Amit Kumar | Sri Neeraj Kumar | Sri Vishal Rawat |
| Sri Manoj Kumar | Sri Shubham Nigam | Sri Ramesh Sherastha |
| Sri Sumit Kumar | Shri Abhishek Sharma | Sri Manish Chaubey |

| Store Keeper |
|---|
| Smt Rachana Katiyar |

| Supervisor |
|---|
| Sri Sujeet Kumar Singh |

| Electrician |
|---|
| Sri Om Prakash |
| Sri Umesh Chandra |

| Driver | | |
|---|---|---|
| Sri Sanjay Kumar | Sri Surendra Prasad | Sri Shashi Kant Tripathi |
| Sri Dinesh Kumar Yadav | Sri Subhash Kumar Tiwari | Sri Ram Chandra Singh Sanger |
| Sri Abdul Saeed | Sri Dev Narain Singh | |

| Catelouger | |
|---|---|
| Sri Surdip Chandan | Sri Shishir Yadav |

| Chowkidar | | |
|---|---|---|
| Sri Ravindra Prasad Gupta | Sri Pradeep Kumar Katheria | Sri Atar Singh |
| Sri Ram Jeet Singh | Sri Tek Bahadur | |

| Sweeper | | |
|---|---|---|
| Sri Ashok Kumar | Sri Amit Kumar | Sri Munna Lal |
| Sri Brij Lal | Sri Dilip Kumar | |

## GOVERNANCE & ACADEMIC

| Peon | | |
|---|---|---|
| Sri Ram Vilas | Sri Deepak Kumar Pal | Sri Virendra Singh |
| Sant Ram Gupta | Sri Bipin Kumar Pal | Sri Ram Krishna |
| Sri Satya Prakash | Sri Ajay Kumar | Shaharukh Khan |
| Sri Dwarika Prasad Yadav | Sri Manoj Kumar | Smt. Beena Devi |
| Sri Ram Chandra | Sri Udit Kumar Yadav | Smt Pratibha Sagar |
| Sri Janardan Prasad | Sri Raj Kumar | Sri Nitin Mishra |
| Sri Jagdish Pal | Sri Rajit Ram | Sri Gurjesh Kumar Dwivedi |
| Sri Ram Singh | Sri Arvind Kumar Verma | Sudarshan Prasad |
| Sri Bhawani Bux Singh | Sri Srawan Pandey | Sri Indra Nath Tiwari |
| Sri Brijendra Kr Singh Yadav | Sri Rohit Yadav | Sri Prabhu |
| Sri Pratap Narayan Sharma | Smt Mira Devi | Sri Suresh Chandra |
| Karam Beer Singh | Sri Ansu Rawat | Sri Budhi Prasad |
| Sri Raj Narain | Smt Sushma Kushwaha | Sri Radhey Shyam Kasyap |
| Sri Umesh Kumar | Sri Vinod Kumar | Sri Jitendra Kumar |
| Sri Shiv Kumar Tripathi | Sri Arun Kumar Kurel | Sri Ranjeet Kumar |
| Sri Paras Ram | Sri Jai Singh | Manoj Kumar |
| Smt Vimla Devi | Sri Ganesh Kumar Verma | Shobhit Ram Shahu |
| Sri Fatte Bahadur | Sri Brijendra Kumar Anuragi | Smt. Roop Sagar Sharma |
| Shiv Kumar Kaushal | Sri Pradeep Kumar Gautam | Sri Jagannath Rai |
| Sri Mohd Shekhu | Km Shashi Rawat | Sri Ram Raj |
| Sri Ram Gopal | Sri Ravi Kumar Kanaujia | Sri Vinod |
| Sri Sher Bhadur | Sri Nizzamudin | Sri Anil Kumar |
| Sri Akhilesh Kumar | Sri Mata Deen | Sri Devi Charan |
| Sri Tan Singh | Sri Ram Dulare Kushwaha | Sri Rajesh Kumar |

| Book Attendent | | |
|---|---|---|
| Sri Ravindra Yadav | Sri Bhrama Prakash Shukla | Sri Srawan Kumar |
| Sri Amol Kumar Yadav | Sri Brij Bhushan Shukla | |

| Janitor | Gestetner Operator | Electrician |
|---|---|---|
| Smt. Ranjana Pandey | Sri Ramu Verma | Sri Om Prakash |
| | | Sri Umesh Chandra |

## 3. Sustainability Commitment

1 2 3 4 5 6 7 8 9 10

CSJMU firmly accepts the" accountability to the future"—a special role and responsibility in confronting climate change and sustainability challenges.

The vision of CSJMU is rooted in its shared responsibility to build and operate a campus that contributes to the well-being of every member of its community—and ultimately to the health of the planet.

## 4. Innovative Practices

1 2 3 4 5 6 7 8 9 10

Innovation is an application and implementation of creativity; thus, creativity and innovation are inseparably related, which reflects their complementarity in providing what is new and adding value.

The innovation drives the Post Graduate & Research Programs of CSJMU.

Deans and HoDs of various academic departments bring innovation into learning opportunities through collaboration with exceptional researchers, innovators & entrepreneurs.


| Cumulative Score | 38/40 |
|---|---|

# BUILDING DESIGN & LANDSCAPING

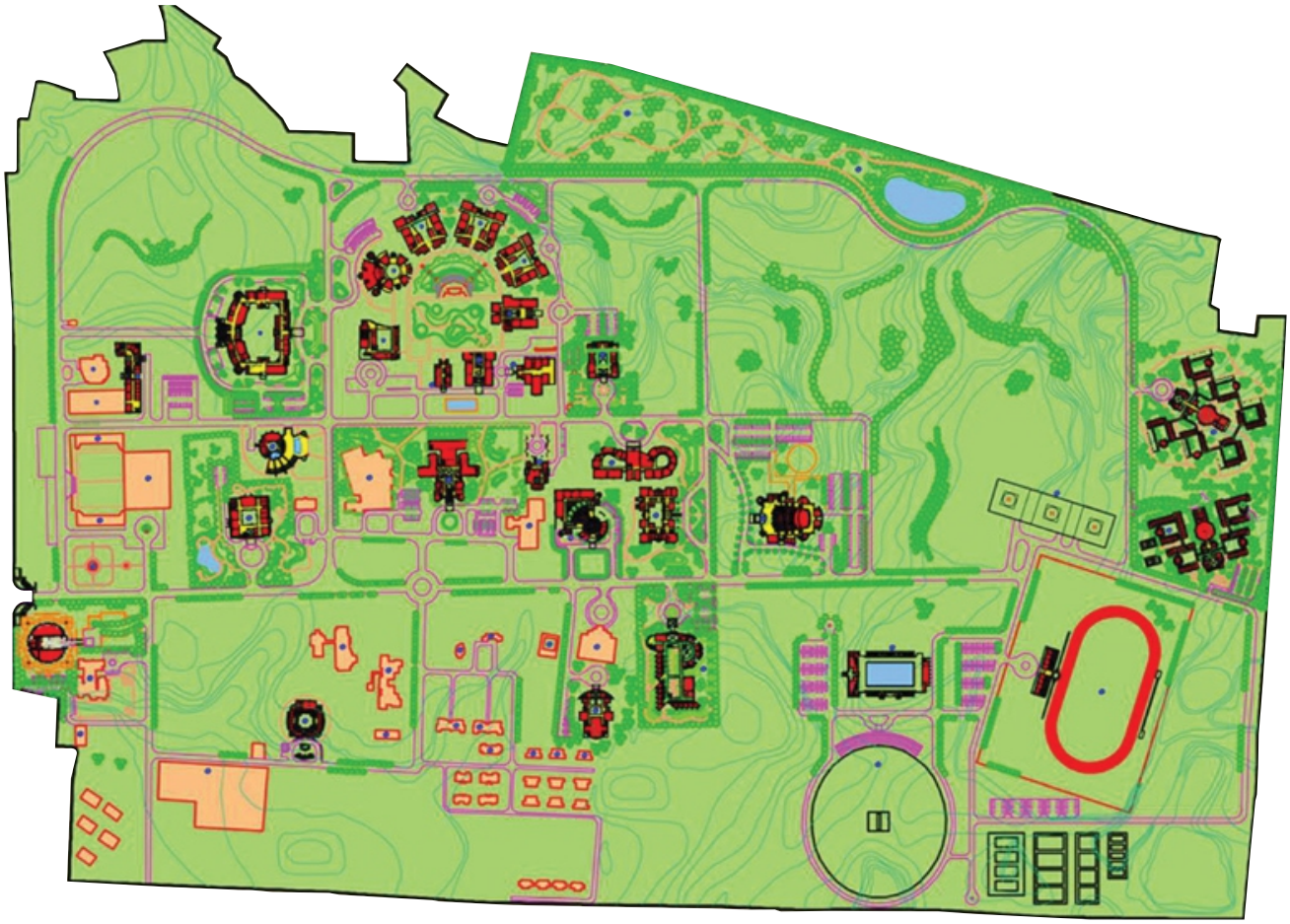
## 1. Local Building Regulations

1 2 3 4 5 6 7 8 9 10

Green building laws and codes in our country are voluntary. A green building uses less water, optimizes energy efficiency, conserves natural resources, generates less waste, and provides healthier spaces for occupants than a conventional structure.

Built-up learning spaces of CSJMU meet all local building laws.

- Land area 264.0 acre
- Roof area 112000.0 sq.mt. approx
- No.of trees 10500 nos.
- Green area 100.0 area approx
- Road area 55000.0 sq.mt. approx
- Footpath 35000.0 sq.mt.
- Uncovered or turf area 200000.0 sq.mt. approx



## BUILDING DESIGN & LANDSCAPING

## BUILDING DESIGN & LANDSCAPING

### 2. Top-Soil Preservation

1 2 3 4 5 6 7 8 9 10

Topsoil is the uppermost layer of soil capable of growing and supporting vegetation. Soil conservation is the prevention of loss of the topmost layer of the earth from erosion or the prevention of reduced fertility caused by over usage, acidification, salinization, or other chemical soil contamination.

CSJMU has taken proactive measures towards topsoil conservation on the campus through regular aeration that allows the nutrient to reach the roots of plants, filling the holes created by aeration, indigenous gardening, building wind barriers, mulching, and placing stepping stones for walkers on topsoil.

## BUILDING DESIGN & LANDSCAPING

### 3. Eco-friendly Commuting Practices

1 2 3 4 5 6 7 8 9 10

CSJMU encourages its students & professors to adopt environmentally friendly transport to minimize the environmental impact of automobile use.
In addition, University offers residential facilities to its professors and non-teaching staff that reduce ecological impact.

| | Walking | Bicycle | Motorcycle | Car | University Bus | Public Transport | Total |
|---|---|---|---|---|---|---|---|
| Students | 500 | 615 | 1000 | 05 | 0 | 4100 | 6220 |
| Teachers | 20 | 7 | 100 | 70 | 0 | 0 | 197 |
| Non-Teaching Staff | 50 | 50 | 100 | 30 | 0 | 73 | 303 |

## BUILDING DESIGN & LANDSCAPING

### 4. Parking Facility

1 2 3 4 5 6 7 8 **9** 10

CSJMU has sustainable tree-shaded parking spaces, including sustainable paving materials, energy-efficient or natural lighting, renewable energy sources, and improved pedestrian walkways.

| Buses | Cars | Motorcycles | Bicycles |
|---|---|---|---|
| 10 | 500 | 1200 | 500 |

## BUILDING DESIGN & LANDSCAPING

### 5. Greenery in Campus

1 2 3 4 5 6 7 8 9 10

Maintaining a rich diversity of plants is vital to stable and healthy ecosystems as they provide food, shelter, and other essential habitat components for wildlife.

Interaction with Greenery can improve human stress reduction, emotional states, and cognitive function.

CSJMU has maximized Greenery on its campus, including community gardens, parks, meadows, green roofs, playing fields, and wetland that supports well-being and education outcomes.

| | | |
|---|---|---|
| 1 | Building foot print | 80 Acre |
| 2 | Playground area | 6 Acre |
| 3 | Vegetated space | 125 Acre |
| | A. Turf area | 100 Acre |
| | B. Area with native species | - |
| | C. Area with drought tolerant species | 2 Acre |
| | D. Other Species area | 1 Acre |
| 4 | Non-roof impervious area | 5 Acre |
| 5 | Water body | 9 Nos |

## BUILDING DESIGN & LANDSCAPING

## BUILDING DESIGN & LANDSCAPING

### 6. Minimise Heat Exposure to Sun: Non-Roof

1 2 3 4 5 6 7 8 **9** 10

CSJMU Campus is housing 10500 trees and plants speared in 264 acres of land area that is restricting impervious surfaces from being exposed to the Sun to minimize the impact on microclimate in the campus.

| | | |
|---|---|---|
| **A.** | University campus area | 264 Acre |
| **B.** | No. of existing trees / saplings planted | 10500 |
| **C.** | Total non-roof area, area covered with trees (foliage) or open grid pavers | 100 Acres |

## BUILDING DESIGN & LANDSCAPING

### 7. Minimise Heat Exposure to Sun: Roof

1 2 3 4 5 6 7 8 **9** 10

CSJMU has planted trees in a strategic way that provides shade to the roof in summer; when the leaves fall, the trees allow the Sun to shine through, creating a desired solar heat gain effect during the winter.

Most of the roof areas are covered with solar panels, and the remaining areas are covered with tiles & paint to reduce the concrete surface that was exposed to the Sun that minimizes the impact on the microclimate on the campus.

| | |
|---|---|
| Total Roof Area | 80 Acres |
| Total Roof Area covered with tiles/ paint/ vegetation | 80 Acres |

## BUILDING DESIGN & LANDSCAPING

### 8. Universal Design

1 2 3 4 5 6 7 8 **9** 10

Universal Design for Learning (UDL) is an approach to teaching and learning that gives all students an equal opportunity to succeed. The goal of UDL is to use various teaching methods to remove barriers to learning. It's about building flexibility that can be adjusted for every person's strengths and needs.

Learning spaces at CSJMU are designed to facilitate differently-abled pupils. Rest Rooms are also designated for differently abled Students; a Hindrance-free movement facility is available in the common area.

| Cumulative Score | 74/80 |
|---|---|

## WATER MANAGEMENT PRACTICES

### 1. Rainwater Harvesting: Roof & Non-Roof

1 2 3 4 5 6 7 8 9 10

The Earth's surface is acquired by 71%with water, but only 3% of water can be used as potable water. Nowadays, water conservation is one of the basic principles of green University.

CSJMU's well-designed rainwater harvesting system enhances the groundwater table and reduces potable water usage. CSJMU captures the maximum runoff volume of rainwater from Roof & Non-Roof areas

**Runoff coefficients for Typical Surface Types**

| Sr. No. | Surface Type | Runoff coefficient |
|---|---|---|
| 1 | Cemented / Tiled Roof | - |
| 2 | Roof Garden (<100 mm thickness) | 2 NOS. |
| 3 | Roof Garden (100 – 200 mm thickness) | - |
| 4 | Roof Garden (201 – 500 mm thickness) | - |
| 5 | Turf, Flat (0 – 1% slope) | 30000.0 SQMT. |
| 6 | Turf, Average (1 - 3% slope) | 25000.0 SQMT. |
| 7 | Turf, Hilly (3 - 10% slope) | 1500.0 SQMT. |
| 8 | Vegetation, Flat (0 - 1% slope) | 3000.0 SQMT. |
| 9 | Vegetation, Average (1 - 3% slope) | 6000.0 SQMT. |
| 10 | Vegetation, Hilly (1 - 3% slope) | 5000.0 SQMT. |
| 11 | Concrete Pavement | 25000.0 SQMT. |
| 12 | Gravel Pavement | 30000.0 SQMT. |
| 13 | Open-grid Concrete Pavement | - |
| 14 | Open-grid Grass Pavement | 75000.0 SQMT. |
| 15 | Water Body | - |
| 16 | Playground | 35000.0 SQMT. |

## WATER MANAGEMENT PRACTICES

### Rain Water Harvesting Calculation

| Sr. No. | Surface Type | Run-off coefficient ( c ) | Area (m2) ( a ) | Impervious area (m2) I = ( c × a ) |
|---|---|---|---|---|
| 2 | Playground | | 35000.0 | |
| 4 | Vegetation, average (1-3% slope) | | 5000.0 | |
| 6 | Water Body | | 1 NOS | |

## WATER MANAGEMENT PRACTICES

### 2. Water Efficient Plumbing Fixtures

1 2 3 4 5 6 7 8 9 10

CSJMU has initiated responsible use of freshwater practices in academic and hostel areas to reduce potable water consumption in drinking Water Points, face washing points, urinals, and toilets to reduce water flow rate in daily use.

Most of the plumbing fixtures are low flow without hammering the performance. Plumbing fixtures have achieved water efficiency standards for Green University and are working correctly with no leaks or drips.

## WATER MANAGEMENT PRACTICES

### 3. Turf Design

1 2 3 4 5 6 7 8 9 10

Turf is a significant component of the whole landscape in CSJMU, which meets functional and aesthetic expectations for the teaching-learning community while at the same time minimizing the impact of natural resources and the more great environment.

The turf area of CSJMU has many drought-tolerant species in its total vegetated area that minimizes water consumption.

| Type of vegetation | On Ground (sq.m.) |
|---|---|
| Turf | 200000.0 sqmt approx |
| Native species | 5000.0 Trees |
| Drought tolerant species | - |
| Other plant species | 5500.0 Trees |
| Total | 10500.0 Trees |

## WATER MANAGEMENT PRACTICES

### 4. Water Efficient Landscaping

1 2 3 4 5 6 7 8 9 10

Most universities in India use their maximum water for landscape and lawn irrigation, while a water-efficient landscape is functional, attractive, and easily maintained in its natural surroundings.

Whole Landscaping on the CSJMU campus is water efficient, reducing water consumption through responsible irrigation practices and mulching. In addition, the vegetated area of campus contains drought-tolerant plant species, including trees, shrubs, herbs, climbers, and grass, that require less water than other species.

## WATER MANAGEMENT PRACTICES

### 5. Water Efficient Irrigation System

1 2 3 4 5 6 7 8 9 10

CSJMU uses sprinkle irrigation is an efficient irrigation system that keeps landscape plants healthy and beautiful.

Instead of wetting the whole landscape, water is applied only to the plant root zone.

The primary goal of sprinkle irrigation is to use water when plants need it most and at rates necessary for proper plant growth.

## WATER MANAGEMENT PRACTICES

### 6. Waste Water Treatment

1 2 3 4 5 6 7 8 9 10

The so-called 'wastewater' is a vital resource; after treatment, it returns to the water cycle.

CSJMU treats its used water generated from toilets, showers, baths, kitchen sinks, laundries, and agricultural processes on the campus.

## WATER MANAGEMENT PRACTICES

### 7. Use of Treated Waste Water

1 2 3 4 5 6 7 8 9 10

Treated water replenishes surface water and groundwater and recharges aquifers. In addition, CSJMU uses treated water for flushing toilets and irrigation of vegetated areas, reducing dependence on fresh water.

## WATER MANAGEMENT PRACTICES

### 8. Water Use Monitoring

1 2 3 4 5 6 7 8 **9** 10

The water Monitoring system helps the University improve water distribution and detect water loss and leakages. This system allows University to know where the leak is occurring and the extent of the water loss.
The Water quality monitoring system also helps University continuously monitor water quality on a REAL time basis. Furthermore, this intelligent system raises alarms in case the water quality differs from the required standards. This helps the treatment plant operators take immediate corrective actions if the water quality is not as high as the required standards.
CSJMU has a modern water monitoring system with few flow meters indicating daily, weekly and monthly water uses in various facilities.
Water loss is prevented through real-time alerts of water overflow, leakages, and dripping, ensuring judicious use of Water Consumption.

| Cumulative Score | 75/80 |
|---|---|

## AIR QUALITY LEVEL

### 1. Tobacco Smoke Control

1 2 3 4 5 6 7 8 9 10

Air quality is a measure of how clean or polluted the air is. Monitoring air quality is important because polluted air can be bad for our health—and the health of the environment.

Exposure to air pollution can affect everyone's health. When we breathe in air pollutants, they can enter our bloodstream and contribute to coughing or itchy eyes and cause or worsen many breathing and lung diseases, leading to hospitalizations, cancer, or even premature death.

Cigarette smoking causes environmental pollution by releasing toxic air pollutants into the atmosphere. One cigarette per day is equivalent to a PM2. 5 particle concentration of 22 µg/m3.

The cigarette butts also litter the environment, and the toxic chemicals in the residues seep into soils and waterways, thereby causing soil and water pollution, respectively.

Breathing clean air can lessen the possibility of diseases from stroke, heart disease, and lung cancer, as well as chronic and acute respiratory illnesses such as asthma.

CSJMU is a totally Smoke-Free Campus; Anti Smoking Policies are strictly implemented that eliminate exposure of students & teachers to tobacco smoke & reduce health impacts caused due to passive smoking.

## AIR QUALITY LEVEL

### 2. Day Lighting

1 2 3 4 5 6 7 8 9 10

Indoor environmental conditions in classrooms and namely day lighting conditions also influence student's health, well-being and performance. The conscious use of daylight in Classrooms has a great potential for improving the comfort and the academic performance of users, contributing, simultaneously for the rational use of energy in building.

Maximum regular occupied spaces at IIITB Campus are daylit, & average daylight factor is maintained.

## AIR QUALITY LEVEL

### 3. Fresh Air Ventilation

1 2 3 4 5 6 7 8 9 10

A good ventilation system helps to expel a build-up of pollutants, bacteria, moisture and unpleasant odors, such as body odor from classroom.

Maximum regularly occupied spaces like Classrooms, Laboratories, Libraries & Indoor Game Facilities of IIITB Campus are adequately ventilated, and that improves health and well-being of Students & Faculties.

## AIR QUALITY LEVEL

### 4. Area of Class Room

1 2 3 4 5 6 7 8 9 10

A conducive classroom environment helps both teachers to teach effectively and students to learn with ease and perform better academically. The appropriate area available for teaching and learning enhances the learning outcomes of students.

All learning spaces, including classrooms of CSJMU, are well designed according to statuary standards and norms that follow appropriate occupant density, which enhances Student Productivity.

Anthropometry has considerable importance in optimizing the design of buildings. The underlying principle of anthropometrics is that building designs should adapt to suit the human body rather than people having to adapt to suit the buildings.

Anthropometric dimensions of learning spaces aim to create safe, comfortable, and productive learning spaces by bringing human abilities and limitations into the design of the building, including the individual's body size, strength, skill, speed, sensory abilities (vision, hearing), and even attitudes.

Maximum learning spaces of CSJMU, including Classrooms, Laboratories, Libraries & Indoor Game Facilities, Toilets, and Hostels & Canteen, are designed according to standard anthropometric dimension norms that allow comfort to the students.

## AIR QUALITY LEVEL

### 5. Anthropometric Dimensions in spaces

1 2 3 4 5 6 7 8 9 10

Anthropometrics are used in designing teaching-learning spaces to make everyone as comfortable as possible; this means that the room's dimensions must be acceptable, with high ceilings, broad doorways and hallways, and so on. The underlying principle of anthropometrics is that building designs should adapt to suit the human body rather than people having to adapt to suit the buildings.

Anthropometric measurements commonly used for students include height, weight, mid-upper arm circumference (MUAC), and head circumference.

Anthropometric dimensions of the University aim to create safe, comfortable, and productive learning spaces by bringing human abilities and limitations into the design of the building, including the individual's body size, strength, skill, speed, sensory abilities (vision, hearing), and even attitudes.

Maximum learning spaces of CSJMU, including Classrooms, Laboratories, Libraries & Indoor Game Facilities, Toilets, and Hostels & Canteen, are designed according to standard anthropometric dimension norms that allow comfort to the students.

## AIR QUALITY LEVEL

### 6. Toxin-free Environment

1 2 3 4 5 6 7 8 9 10

A toxin-free environment is also known as a chemical-free environment. Every student is, in some or another ways, exposed to millions of toxins daily. These include things like cleaning products, paints, chalks, cosmetics, and personal care items.

The best way to reduce exposure to chemicals is to keep them out of learning spaces and let the students make conscious choices about chemical use.

Using non-toxic or less toxic chemicals such as cleaners, degreasers, and other maintenance chemicals. Implementing water and energy conservation practices.

Governing body of CSJMU has declared the policy to use materials with low emissions, especially Paints and Cleaning products, to reduce adverse health impacts on the students and teachers.

## AIR QUALITY LEVEL

### 7. Dust-free Environment

1 2 3 4 5 6 7 8 9 10

Airborne dust functions in a manner similar to the greenhouse effect: it absorbs and scatters solar radiation entering Earth's atmosphere, reducing the amount reaching the surface, and absorbs long-wave radiation bouncing back up from the surface, re-emitting it in all directions.

Dust also affects photosynthesis, respiration, and transpiration and allows the penetration of phytotoxic gaseous pollutants. Most of the plant communities are affected by dust deposition, so the community structure is altered.

Dust reduces indoor air quality due to the presence of dust mites. These small arachnids are invisible to the eye but can be found in the same areas where dust collects. Many people have dust mite allergies which can cause symptoms similar to a cold, such as a runny nose, coughing, and sneezing. The dust has a severe impact on learning outcomes.

Governing body of CSJMU has declared the policy to use Dust Free Products, including chalk & other materials, to reduce adverse health impacts on the Students and Faculties.

## AIR QUALITY LEVEL

### 8. Exhaust Systems

1 2 3 4 5 6 7 **8** 9 10

Exhaust Fans are installed in all Toilets, Urinals, Canteens & Laboratories of IIITB learning and residential facilities that maximize airflow & enhance the Indoor Air Quality.

| Cumulative Score | 73/80 |
|---|---|

## ENERGY USES & SAVING PRACTICES

### 1. Ozone Depleting Substances

1 2 3 4 5 6 7 8 9 10

Ozone-depleting substances (ODS) are synthetic chemicals used worldwide in a wide range of industrial and consumer applications.

Ozone-depleting substances are chemicals that destroy the earth's protective ozone layer. These substances' main uses were refrigeration and air conditioning equipment and fire extinguishers.

CSJMU has procured refrigerators and air conditioners, fire extinguishers, foam, and aerosol propellants that have minimum impact on Ozone Layer Depletion.

## ENERGY USES & SAVING PRACTICES

### 2. Energy Efficient Lighting Fixtures

1 2 3 4 5 6 7 8 9 10

It has been proven repeatedly that natural light is the best solution for reading or studying. Therefore, CSJMU uses natural lights as much as possible to get the best learning outcome. Energy efficient lighting uses more illumination from fewer power lights by replacing high power consumption lights like incandescent and high discharge lamps.

LED lighting provides a safe, secure & energy-efficient environment on campus at all times. LEDs also reduce the cost of operation while satisfying the needs of faculty members and students who can appreciate the benefits of eco-friendly solutions.

LEDs also provide outstanding durability in environments that can place an incredible amount of stress on light bulbs and lighting fixtures, such as a university campus.

Due to the high-quality energy efficiency, LED lighting allows universities to save significant money on repairs, operating costs, and maintenance costs. When compared to a traditional light bulb, LED light bulbs consume less than half the energy that the traditional light bulb.

CSJMU has installed LED Lightening & Fixtures instead of old Lightning that, reduces the environmental impacts associated with energy use

## ENERGY USES & SAVING PRACTICES

### 3. Energy Efficient Fans

1 2 3 4 5 6 7 8 9 10

CSJMU has installed Energy efficient Fans and Air Conditioners instead of High Energy Consuming Fans and Air conditioners that reduce the environmental impacts associated with energy use.

## 4. Energy Efficiency in Appliances & Equipment



Using energy-efficient appliances minimizes exploiting natural resources, such as natural gas, oil, coal, and water. Energy efficiency works to enhance the conservation of these resources as a way to achieve sustainable development.

Modern electronic appliances, such as freezers, ovens, stoves, dishwashers, clothes washers, and dryers, use less energy than older appliances. Installing STAR-rated electronic appliances significantly reduces energy consumption.

CSJMU has replaced energy-efficient Electronic Appliances & equipment instead of High Energy Consuming Appliances that reduce the environmental impacts of energy use.

## ENERGY USES & SAVING PRACTICES

### 5. Energy Sub-Metering

1 2 3 4 5 6 7 8 9 10

Submetering is an efficient method of determining the unit of energy in every block of the University. In addition, this process helps in taking corrective measures.
CSJMU practices continuous energy use monitoring through sub-metering and aspirate metering of each learning space, residential and open space throughout the year towards achieving reasonable energy use, which inspires the teaching-learning community to save energy in their day-to-day benefits.

## ENERGY USES & SAVING PRACTICES

### 6. On-Site Renewable Energy

1 2 3 4 5 6 7 8 9 10

On-site renewable energy means renewable sources, such as wind, solar, and co-generation, generated on the University campus, thereby relieving reliance on the grid, reducing global warming, and improving the teaching-learning community's health.
CSJMU has installed a 2 MW Solar power plant as an on-site Renewable Energy Source; however, it encourages the student community to save energy to minimize the environmental impacts of using fossil fuels.

## ENERGY USES & SAVING PRACTICES

### 7. Solar Water Heating Systems

1 2 3 4 5 6 7 8 9 10

**The Solar water heating system is a device that helps heat water using the SUN's energy with zero CO2 emission and No consumption of fossil fuels.**
CSJMU has installed a Solar water heating System in all its hostel facilities that minimize the environmental impacts of using fossil fuels.

## ENERGY USES & SAVING PRACTICES

### 8. Distributed Power Generation

1 2 3 4 5 6 7 8 **9** 10

Distributed generation is used when electricity is generated from renewable energy sources near the point of use, like rooftop solar photovoltaic units, instead of centralized generation sources from power plants.

DG systems have several advantages, including reduced transmission and distribution losses, improved grid stability and security, and reduced environmental impact.

CSJMU has a well-designed distributed power generation system that reduces transmission and distribution losses, improves grid stability and security, and reduces environmental impact.


| Cumulative Score | 75/80 |
|---|---|

## HEALTH & HYGIENE PRACTICES

### 1. Toilet Facilities

1 2 3 4 5 6 7 8 9 10

Good sanitation also provides a healthy living environment for everyone, protects natural resources such as surface water, groundwater, and soil, and provides safety, security, and dignity for people when they defecate or urinate.
Clean and age-appropriate toilets for both boys and girls in teaching learning spaces, access to clean water, handwashing facilities, and hygienic behaviors not only prevents the transmission of communicable diseases but it also contributes to better learning outcomes.
All Toilets at CSJMU are well maintained; however, Hygiene & Cleanliness work has been outsourced to the local external cleaning agency, which maintains Hygiene & Cleanliness standards in all toilets regularly, which reduces the infections risk to Students' and Teacher's Health & well-being.

## HEALTH & HYGIENE PRACTICES

### 2. Drinking Water Facility

1 2 3 4 5 6 7 8 9 10

Contaminated water and poor sanitation are linked to the transmission of diseases such as cholera, diarrhea, dysentery, hepatitis A, typhoid, and polio. Absent, inadequate, or inappropriately managed water and sanitation services expose students to preventable health risks.

The water must meet the required (chemical, biological and physical) quality standards at the point of supply to the teachers and learners.

Safe drinking (potable) water is water that can be delivered to the user and is safe for drinking, food preparation, personal hygiene, and washing.

Providing access to drinking water helps to increase students' overall water consumption, maintain hydration, and reduce energy intake if substituted for sugar-sweetened beverages.

Water Quality of all Drinking Water stations & Tapes is maintained at CSJMU Campus. Water Quality Reports are checked by Government Authorized Laboratories at regular intervals of time to ensure Clean & Safe Drinking Water at all the time to everyone.

## HEALTH & HYGIENE PRACTICES

### 3. Access to Healthy Food

1 2 3 4 5 6 7 8 9 10

Healthy food is essential for good health and nutrition. Healthy food plays an important role in the optimal growth, development, health, and well-being of individuals in all stages of life.
Fruit and vegetables, whole grains, proteins, and carbohydrates are all necessary components of a healthy diet for students. Keep in mind that eating healthy meals necessitates being aware of not only what you consume but also how you cook it.
Protein-rich foods include lean meat, fish, chicken, eggs, beans, lentils, chickpeas, tofu, and nuts. These foods are important for students' growth and muscle development. These foods also contain other useful vitamins and minerals like iron, zinc, vitamin B12, and omega-3 fatty acids.
Healthy and nutritious food is accessible to all students & teaching staff at the Canteen of CSJMU, maintaining the fitness of the teaching and learning community. The catering facility of CSJMU is outsourced to the local food-making agency. Junk Food is strictly prohibited on Campus.

## HEALTH & HYGIENE PRACTICES

### 4. Sports Amenities

1 2 3 4 5 6 7 8 9 10

Sports teach values such as fairness, team building, equality, discipline, inclusion, perseverance, and respect. Sport has the power to provide a universal framework for learning values, thus contributing to the development of soft skills needed for responsible citizenship. Playing various sports helps students to learn life skills such as teamwork, leadership, accountability, patience, and self-confidence and prepares them to face life challenges. Sports enhance the physical and mental abilities of the students to achieve goals in their life. CSJMU offers various sporting opportunities to its undergraduate, postgraduate & doctoral students. All Indoor & Outdoor sports amenities at CSJMU are designed to achieve excellence in sports to enhance the growth and health of students.

## HEALTH & HYGIENE PRACTICES

### 5. Dedicated Playground

1 2 3 4 5 6 7 8 9 10

CSJMU has dedicated Sports Amenities for swimming, Long Tennis, and Basketball, while facilities for other sports are shared to minimize the impact on the environment.

## HEALTH & HYGIENE PRACTICES

### 6. Organic Fertilizers and Pesticides

1 2 3 4 5 6 7 8 9 10

Organic fertilizers are derived from living things such as minerals, animals, sewage sludge, and plants.

The use of organic fertilizers has the advantage of being cheap, improving soil structure, texture, and aeration, increasing the soil's water retention abilities, and stimulating healthy root development.

Organic fertilizers are not only required for the production of organic food, better for human health and the environment than conventional production.

CSJMU uses Organic Fertilizers and Pesticides to reduce Health impacts on Students and Faculties. Composting pits prepare enough fertilizers for the entire vegetated area.

## HEALTH & HYGIENE PRACTICES

### 7. Green Housekeeping

1 2 3 4 5 6 7 **8** 9 10

Using environmentally preferred products in cleaning the teaching and learning spaces is safer for human health and minimizes the impact on water bodies.

CSJMU uses environment-friendly cleaning products to clean its Learning & residential spaces. Eco-friendly Cleaners are also used to clean the toilets and drinking water Stations to prevent chemical-related Health hazards.

| Cumulative Score | 65/70 |
|---|---|

## SUSTAINABLE RESOURCES UTILIZATION

### 1. Waste Segregation

1 2 3 4 5 6 7 8 9 10

The average composition of waste in the University consists of organic waste (24.840%), paper (23.499%), soft plastic (7.450%), hard plastic (5.673%), plastic bag (9.129%), metal (1.294%), glass (1.392%), hazardous waste (0.512%), other waste (9.289%), and residue (16.922%)

Waste segregation is the sorting and separating of waste types to facilitate recycling and correct onward disposal.

Waste Segregation Mechanism is well-placed at CSJMU Campus. Waste generated through various sources and practices is being segregated safely & sent to recycling & composting sites or authorized recyclers safely, preventing debris from being sent to landfills.

## SUSTAINABLE RESOURCES UTILIZATION

- **Solid Waste Management and Recycling:**

Collection bins have been placed at different locations on campus. After segregation, the biodegradable waste is subject to degradation for academic, research, and community development activities.

- **Liquid Waste Management:**

The grey and black water from the residences is treated in the Sewage Treatment Plant (STP) installed on campus. In addition, wastewater is treated through the primary, biological, and tertiary units.

- **Biomedical waste management:**

Biomedical waste generated from the health center, School of Health Sciences, School of Pharmacy, and other laboratories is being managed through the medical pollution control committee Kanpur. In this regard, the University also has an MoU with Medical Pollution Control Committee.

- **E-Waste Management:**

The University has MoU with M/S Bharat Oil & Waste Management Ltd (BOWML) for the Management of E-Waste.

- **Waste recycling system:**

CSJMU recycles waste and produces energy that is used for different purposes.

- **Hazardous chemical Waste:**

CSJMU follows the UGC guidelines, 2011, concerning using and storing chemicals for academic and research purposes. The University has MoU with M/S Bharat Oil & Waste Management Ltd (BOWML) for the Management of Hazardous substances.

## SUSTAINABLE RESOURCES UTILIZATION


उत्तर प्रदेश UTTAR PRADESH 47AE 026552

**MEMORANDUM OF UNDERSTANDING**

**This agreement is entered into between:**
**Chhatrapati Shahu Ji Maharaj University, Kanpur**
**Kalyanpur**
**Kanpur Nagar (UP)**
Herein after the above will be termed as the **FIRST PARTY.**

**MEDICAL POLLUTION CONTROL COMMITTEE,**
**H.O.: 21, E Block, Kalpi Road Panki, Kanpur**
**Contact No. +919235659305, +919235659306**

Herein after the above will be termed as the **SECOND PARTY.**

**The Terms and conditions of the contract are:**

1. That the First Party is engaged in the activity of Nursing Homes/ Hospitals/ Pathological Laboratories/ Blood Bank/Dental Clinics/Surgical Clinics/Private Clinics/Pharmaceutical Company, Veterinary Hospital etc. at **Kanpur Nagar, UttarPradesh**
2. That the Second Party is a **Non-Government Organization** with it registered office situated at H.O. **21, E Block, Kalpi Road Panki, Kanpur.**

**Chhatrapati Shahu Ji Maharaj University** **Medical Pollution Control Committee**

REGISTRAR
C.S.J.M. UNIVERSITY
KANPUR

## SUSTAINABLE RESOURCES UTILIZATION

ISO 9001:2015

# BHARAT OIL & WASTE MANAGEMENT LTD.

(BOWML)

www.bharatoil.com

Passionately Protecting Mother-Nature Since 1978

## MEMBERSHIP CERTIFICATE

M/s. **Chhatrapati Shahuji Maharaj University**

**02, G T Road, Kalyanpur Kanpur Kanpur Nagar-208002, UP**

is a registered member of our facility

BOWML/K/4838/22

**Gata No. 672. Vill. Kumbhi, Akbarpur Road, NH - 2 Kanpur-Dehat-209101, UP**

for safe, legal & scientific Disposal of Hazardous Waste

**Member # : BOWML/K/4838/22**

**Expiry Date : June 07, 2023**

Scan & Verify

One may verify 'active' membership by calling
Bharat Oil & Waste Management Ltd. at
011-4100 0710, 2621 6466 or Email : sales@bharatoil.com

For Bharat Oil & Waste Management Ltd.

Authorized Signatory

For Bharat Oil & Waste Management Ltd.

Authorized Signatory

*Membership is subject to the terms & conditions of agreement & may be terminated by BOWML, upon non-payment of dues / payment.

## SUSTAINABLE RESOURCES UTILIZATION

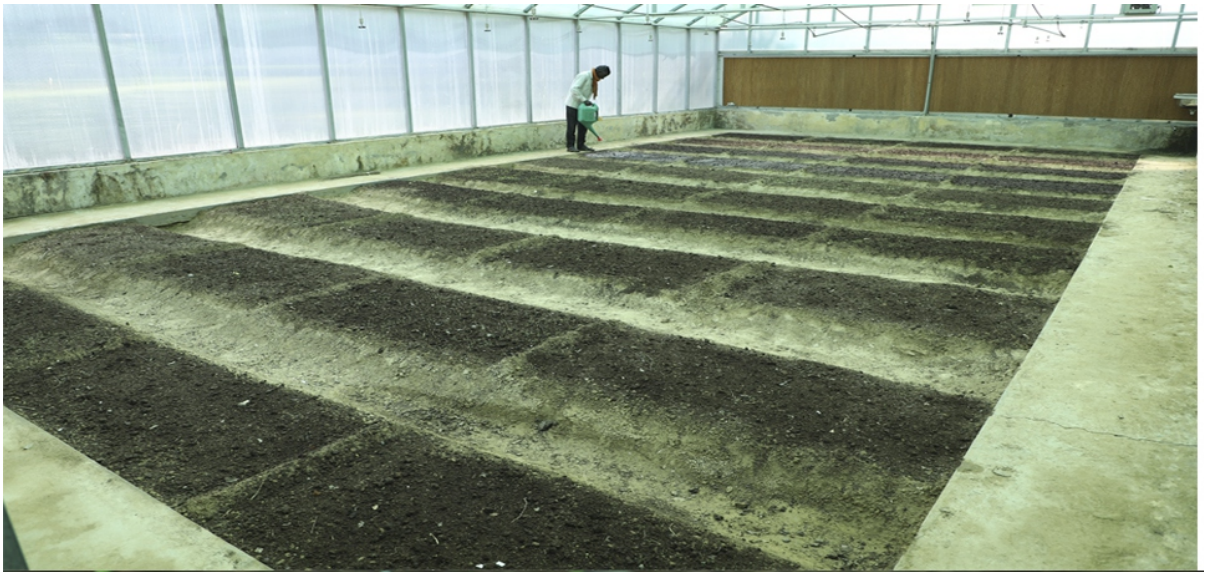
### 2. Organic Waste Management

1 2 3 4 5 6 7 8 9 10

Organic waste is any material that is biodegradable and comes from either a plant or an animal. Biodegradable waste is organic material that can be broken into carbon dioxide, methane, or simple organic molecules.

Composting is a managed process that utilizes microorganisms naturally present in organic matter and soil to decompose organic material. These microorganisms require essential nutrients, oxygen, and water for decomposition to occur at an accelerated pace.

CSJMU sends its organic waste to various composting and Vermicomposting Facilities that make waste a resource and prevents the trash from being sent to landfills.



## SUSTAINABLE RESOURCES UTILIZATION

### 3. Green Policy

1 2 3 4 5 6 7 8 9 10

The green campus policy is a Statement that focuses on the ecological impact of teaching-learning practices on the Campus and develops new paradigms for the pupil-planet relationship.

The Green campus policy is designed to protect the Campus's ecological systems and resources and reasonably use environmental resources to meet the needs and aspirations of the present and future generations.

CSJMU framed a broader Green Policy that inspires its teaching-learning community to take responsibility for the future through their behavior toward nature and natural resources

### Introduction

Green campus is a place where environment friendly practices and education combine to promote sustainable development. The green campus offers an institution, the opportunity to take the lead in redefining its environmental culture and developing new paradigms by creatingsolutions to environmental, social and economic needs of mankind.

Chhatrapati Shahu Ji Maharaj University, Kanpur isrecognized for pursuing its strategic objectives, in relation to research and teaching. The University demonstrates higher sensitivity and responsibility in implementing green concepts in the campus. Spreading awarenesson the green practice among students and educating stakeholders regarding establishment and maintenance of green campus is the priority. The University fairly manages waste, water resources solar and electric energy, conserve natural resources, and provide ecofriendly and solar passive buildings etc.

The University is striving to develop on a self –sustainable basis in the areas of power, water and cleanliness. Therefore, this policy represents an important component of sustainability strategy of the University. This document makes out the University aims and objectives for safeguardingthe details of the organization and arrangements for implementing and monitoring them in accordance with national environment policy 2006.

### Scope

All the stakeholders of Chhatrapati Shahu Ji Maharaj University, Kanpur, including officers, teaching and non-teaching staff, students, and those who use the Campus, shall adhere to the green policy.

# SUSTAINABLE RESOURCES UTILIZATION

## Aims &Objectives

### Aims of the Green Policy

- To promote sound environmental management policies and practices throughout the campus.
- To adopt targets for improving environmental performance.
- To manage its operations in ways that are environmentally sustainable, economically feasible and socially responsible.
- To ensure a sound understanding of current environmental performance.
- To ensure sustainable use of resources and prevent wasteful or damaging practices.
- To protect and nurture the environment by exercising proper control over all its activities.
- To reduce and prevent environmental pollution.

### Objectives : Clean & Green Campus

- To maintain cleanliness in the campus.
- To maintain greenery in the campus by establishing landscaping with trees & plants & gardening.

### Water Management

- To promote effective water management drip pipe lines, recycling of drainage and rain water harvesting.
- To make efficient and environmentally responsible use of water, including identifying opportunities for water reuse.
- To inspect taps for draining and repair immediately to avoid loss of potable water.
- To resolve and manage water scarcity problem regularly.
- To protect environment towards climatic changes and conservation of resources for drinking water.

### Energy

- To promote installation of solar power equipment's/converters.
- To promote use of bee (bureau of energy efficiency) rated electronic equipment's.

### Waste Reduction and Recycling

- To spread the awareness amongst society about the waste management for ecosystem and methods for its disposal.
- To create awareness about conversion of waste into renewable energy.
- To set and achieve targets for reducing resource use.
- To increase the rate of recycling of all appropriate materials based on life-cycle principles.
- To implement sustainable resource management practices, based on 3R -Reduce, Reuse and Recycle principles.
- To manage all type of waste properly.

## SUSTAINABLE RESOURCES UTILIZATION

### Green Buildings

- To promote and advocate the implementation of solar passive technology for sustainability and green concepts.

### Tobacco Free and Smoking Free Campus

- To prohibit chewing of tobacco and smoking in the campus.

### Paperless Office & Communication

- To advocate the benefits of paperless work in reducing the waste production.

### Awareness and Training

- To communicate internally and externally the environmental objectives and performance of the University.
- To raise awareness among the staff and students regarding environmental impact, activities and performance, and good practices of the University.
- To arrange appropriate environmental educational programs for staff and students.
- To encourage and facilitate feedback and suggestions on ensuring good practice.

## Specific Measures for the Green Policy

### Lighting

- Most lighting on campus to be upgraded to high-efficiency lighting (such as led technology, etc.) With electronic ballasts.
- Increase use of daylighting should be considered because the use of daylight spaces decreases energy costs and may improve productivity.
- Lighting, wherever practical, should be controlled by campus-wide energy management system occupancy times, unoccupied period set-backs, and environmental parameters, as well as campus-related (and athletic) activities, will be coordinated to ensure the best possible use of resources.
- Installation of more solar power generation plants.
- Use of the 'change brightness automatically when lighting changes' feature for computer screens.
- Training in the Practice of turning the computer off or into stand-by mode when idle.
- Water management
- There should be rainwater conservation through rainwater harvesting to enhance groundwater.
- Water leaks, dripping faucets, and fixtures that do not shut off should be repaired.
- Installation of water-saving devices in toilets and tabs.
- Installation of water-efficient fixtures to reduce the consumption of potable water.

## SUSTAINABLE RESOURCES UTILIZATION

- Adoption of water-efficient landscaping to reduce water consumption.
- Reduction of the demand for irrigation water through water-efficient irrigation technology.
- Treatment of wastewater to tertiary standards so as not to pollute water streams.
- Use of treated wastewater for in-situ applications, to reduce dependence on potable water.
- Introduce double-sided printing to reduce paper waste.
- Reuse of one-sided papers for internal college work.

### Energy efficient equipment & Management

- Energy-efficient products shall be purchased whenever possible.
- Recyclable and reusable products should also be purchased when feasible to reduce disposal costs.
- Continuous review of energy conservation programs.
- Tracking of electricity supply metre readings to locate problem areas as well as to determine if conservation goals are being met.
- Training must be provided to ensure that both operation and service technicians have the skills and knowledge to effectively achieve energy savings education.
- An education program providing information on utility costs, trends, and user impact on these costs will be arranged.

### Waste management

- The green policy focuses on systemic way of waste management. It should be based on 3Rs-Reduce, reuse and recycle.
- All type of waste generated in the university campus should be managed through the university itself or by collaboration with waste management agencies. There should be memorandum of understanding between the university and waste management agency.
- All stakeholders of the college shall be sensitized about green campus initiatives through wallpapers, notices, circulars, street play, mimes, etc.
- Landscaping with trees & plants
- Proper landscaping should be done in the campus.
- Plantation of more trees and plants
- Tree plantation drive should be conducted.
- Various programmes on green campus and benefits of tree plantation should be conducted to increase awareness among students for tree plantation.

### Clean air

- Campus should be tobacco free. Smoking and use of tobacco products should be prohibited.
- Students and staff should be motivated for use of electrically operated vehicle.
- More use of electrically operated vehicle or CNG bus or e rickshaw for travel inside the campus.
- There should be restricted entry of automobiles in the university campus.
- Observation of no Vehicle Day in the university campus at least once in a month.

## SUSTAINABLE RESOURCES UTILIZATION

### Minimize use of paper

- Maximize use of paperless technology i.e. sharing of data/lecture notes on e-mail, social media, learning management system, etc.
- Increase awareness about taking notes electronically.

### Plastic Free Campus

- Ban on single-use plastic as per the govt. Norms.
- To facilitate environment-friendly substitutes like stainless steel, washable & reusable tumblers, steel or paper plates, glasses, etc. to systemically ban the use of plastics on the campus.

### Green Environmental & Energy Audit

- Regular conduction of green/energy-environment / audits to assess our strengths & weakness to further our long-term sustainability goals.

## Review and Implementation of Green Policy

- A committee will be constituted by the Vice-chancellor of the university to implement &review the policy from time to time.
- Green policy will be displayed on the college website and communicated to all stakeholders.

### Initiatives are taken by the University to implement the Green Policy

### The university is committed to managing its campus in accordance with its green policy.

### The university has established the infrastructure and carried out many activities:

1. Landscaping with trees & plants and gardening.
2. Waste management- solid waste/ liquid waste/ biomedical waste/ hazardous chemicals and other waste management.
3. Water management through rainwater harvesting, installation of water-saving devices etc.
4. Maintenance of water bodies & distribution systems on the campus.
5. Use of electrical/battery-operated vehicles inside the campus.
6. Plastic free campus.
7. Installation of solar panels.
8. Use of energy-efficient LED Bulbs, Fans& other types of equipment, etc.
9. Biogas plant.
10. Restricted entry of vehicles.
11. Paperless office & communication.
12. Sensor based energy conservation.
13. Use of street light controller on campus.
14. Tree plantation drive.
15. Cleanliness drive.
16. Tobacco-free campus.
17. Digital library facility.

## SUSTAINABLE RESOURCES UTILIZATION

18 Awareness initiatives- various activities have been conducted under Swachh Bharat Abhiyan for awareness of clean & green campus by NSS, NCC.
19 Volunteers and students of the university.
20 Installation of sanitary napkin incinerator machine at Girl's hostel, different departments/ institutes of the university.
21 Workshops have been conducted on the 3Rs-: Reduce., Reuse & Recycling of waste.
22 Observation of no vehicle day once a month.
23 Observance of days to protect & nurturing the environment.
24 Display of posters on clean/ Green Campus, waste management, saving water, etc.
25 Green Environmental & Energy Audit.

### 4. Salvaged Materials

1 2 3 4 5 6 **7** 8 9 10

Salvaged or reclaimed building materials are not a solid waste, but components include woodwork in the form of doors and windows, steel in the form of grills, and any other reusable fixtures in good condition, removed from a building during renovation. Salvaged or reclaimed building materials are materials that are recycled for reuse.

CSJMU makes new furniture & fixtures by using salvaged materials to reduce the dependence on virgin materials.

### 5. Eco-friendly Wood Based Materials

1 2 3 4 5 6 7 **8** 9 10

Timber is usually classified as either hardwood from broad-leafed trees, such as Beech and Oak, or softwood from conifers like Pine and Fir. Simply because they're replaceable, fast-growing species like Pine trees tend to be more sustainable than slow-growing trees like Oak.

Sustainable timber is harvested from professionally managed forests, which means that once a tree is cut down, a new one is planted in its place. This initiative has a positive impact on forest diversity, which ensures animals and plant habitats are protected.

CSJMU encourages using Certified Composite Wood to encourage the use of Eco-friendly Wood Based Materials towards conserving Forest Resources and reducing the dependence on virgin materials.

## SUSTAINABLE RESOURCES UTILIZATION

### 6. Materials with Recycled Content

1 2 3 4 5 6 **7** 8 9 10

Material with Recycled content is content like many kinds of glass, paper, cardboard, metal, plastic, tires, textiles, batteries, and electronics that have been made from pre- and post-consumer material.

CSJMU uses materials in its new construction sites and repairing spaces that have recycled content like Concrete, Bricks, Fly ash Bricks, Aluminum Windows, and Glass & Tiles to reduce environmental impacts associated with the use of virgin materials.

### 7. Local Materials

1 2 3 4 5 6 7 **8** 9 10

Local materials are resources that can be found readily in large quantities at a particular location or area at a certain time. It could also be referred to as material that can be used to fabricate a finished element. These materials, however, could be abundant in some areas but not available in another.

Localizing your supply chain represents a tremendous opportunity to help the environment. When we reduce shipping and storage, we also reduce emissions and energy usage. Sourcing locally not only contributes to green manufacturing but ultimately helps you build consumer confidence.

Utilizing local raw materials, such as homegrown timber, provides jobs for the local community and housing for local residents and ensures that these same residents are invested in their local businesses. This creates an effective and robust partnership that allows local communities to thrive.

CSJMU uses Building Materials available locally to minimize the associated environmental impacts resulting from transportation to build its new facilities.

| Cumulative Score | 58/70 |
|---|---|

## SUSTAINABLE RESOURCES UTILIZATION

# SUSTAINABILITY EVALUATION CHART

| Sr. No. | Assessment Areas | Cumulative Score |
|---|---|---|
| 1. | GOVERNANCE & ACADEMIC | 38/40 ✓ |
| 2. | BUILDING DESIGN & LANDSCAPING | 74/80 ✓ |
| 3. | WATER MANAGEMENT PRACTICES | 75/80 ✓ |
| 4. | AIR QUALITY LEVEL | 73/80 ✓ |
| 5. | ENERGY USES & SAVING PRACTICES | 75/80 ✓ |
| 6. | HEALTH & HYGIENE PRACTICES | 65/70 ✓ |
| 7. | SUSTAINABLE RESOURCES UTILIZATION | 58/70 ✓ |
| | **Total** | **458/500** |

## Certification Level

| Rejection | Certification | Silver | Gold | Platinum |
|---|---|---|---|---|
| 000-100 Points | 100-200 Points | 200-300 Points | 300-400 Points | 400-500 Points |

# GREEN MENTORS

Powered by Law of Nature

Special Consultative Status with the
Economic and Social Council of United Nations from 2021

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