

ENVIRONMENT AUDIT REPORT



JK LAKSHMIPAT UNIVERSITY
Near Mahindra SEZ, Mahapura
Ajmer Road, Jaipur - 302026
(Rajasthan)



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ACKNOWLEDGEMENT

Prakash Engineers & Consultants Green Audit Team thanks the management JK Lakshmipat University for assigning this important work of Green Audit (Environmental Audit). We appreciate the co-operation to our team for completion of study.

Our special thanks are due to:

Mr. Narendra Kumar Sharma, JEn. Electrical & Maintenance, Mr. Saurabh Virmani, Senior Manager Admin, Mr. Praveen Verma, GM Administration, Mr. KK Maheshwari, Sr. GM (F&A), JKLU University.

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

DISCLAIMER

JKLU Audit Team has prepared this report for **JK Lakshmipat University** based on input data submitted by the representatives of university complemented with the best judgment capacity of the expert team.

While all reasonable care has been taken in its preparation, details contained in this report have been compiled in good faith based on information gathered.

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



CONTEXT

It is part of Corporate Social Responsibility of the Higher Educational Universities should submit an annual Green Audit Report. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Universities to ensure that they contribute towards the reduction of global warming through Carbon Footprint reduction measures.

In view of the NAAC circular regarding Green Auditing, the University Management decided to conduct an external Environment Evaluation by a competent Environment Auditor along with a Environment Audit Assessment Team.

Green Audit or Environment Audit focuses on the Green Campus, Waste Management, Water Management, Air Pollution, Energy Management & Carbon Footprint etc. being implemented by the University Management.

The concept, structure, objectives, methodology, tools of analysis, objectives of the audit are mentioned below.

CONCEPT

Green auditing is a means of assessing environmental performance. It is a systematic, documented, periodic, and objective review by regulated entities of facility operations and practices related to meeting environmental requirements. It is otherwise the systematic examination of the interactions between any operation and its surroundings. This includes all emissions to air; land and water; legal constraints; the effects on the neighboring community; landscape and ecology; the public's perception of the operating company in the local area.

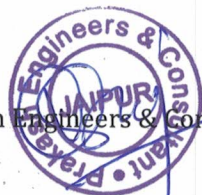
Although there is no universal definition of Green Audit, many leading companies/Universities follow the basic philosophy and approach summarized by the broad definition adopted by the International Chambers of Commerce (ICC) in its publication of Environmental Auditing (1989).

The ICC defines Environmental Auditing as:

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

FOR

Prakash Engineers & Consultant.



Dr. Rajesh Chedwal

(Environment Auditor)

INTRODUCTION

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

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

A very simple indigenized system has been devised to monitor the environmental performance of educational Universities. It comes with a series of questions to be answered on a regular basis. Environmental conditions may be monitored from angles that are relevant to Indian requirements, without stress on legal issues or compliance. This innovative scheme is user-friendly and totally voluntary. The environmental monitoring system helps the University to set environmental examples for the community and to educate young learners. It can be adapted to urban and / or rural situations.



OVERVIEW OF UNIVERSITY

JK Lakshmipat University (JKLU), Jaipur

Established in 2011, JK Lakshmipat University (JKLU) is located in the historic city of Jaipur, Rajasthan. Supported by the JK Organization- 125 year's old legacy of contributions to nation- building, the JKLU is passionate about building the country's most innovative Higher Education University. The 30-acre campus is a modern, environmentally conscious and inviting space designed to help students live, work and play in a setting that is safe, productive and student-centric. JKLU has the following vision and mission:

Vision: - To create an educational environment that engages deep intellectual, moral and spiritual stimulation, thereby nurturing leadership.

Mission: - To Practice a 'mentoring' based education system with intellectual, moral and spiritual culture of its own rooted in Indian ethos and in tune with the global vision of the time. To inculcate learning through understanding, knowledge enhancement, skill development and positive attitude formation. To encourage innovative thinking. To develop a mindset for action without fear, with self-discipline and care for society.

OBJECTIVES

The broad aims/benefits of the eco-auditing system would be

- Environmental education through systematic environmental management approach
- Improving environmental standards
- Benchmarking for environmental protection initiatives
- Reduction in resource use
- Financial savings through a reduction in resource use
- Curriculum enrichment through practical experience
- Development of ownership, personal and social responsibility for the university campus and its environment
- Enhancement of university profile
- Developing an environmental ethic and value systems in young people



AUDIT PARTICIPANTS

On behalf of University:

| Name | Position/Department |
|-----------------------------|-------------------------------|
| Mr. Vinod Kumar Vishwakarma | Civil Engineering |
| Dr. Kedar Sharma | Civil Engineering |
| Dr. D K Sharma | Civil Engineering |
| Mr. Rudraksh Agarwar | Civil Engineering |
| Mr. Narendra Kumar Sharma | JEn. Electrical & Maintenance |
| Mr. Saurabh Virmani | Senior Manager - Admin |
| Mr. Praveen Verma | GM Administration |
| CA. KK Maheshwari | Registrar, JKL University |

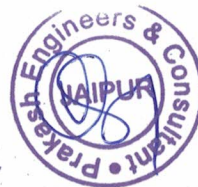
Audit was conducted on behalf of Prakash Engineers & Consultants:

| Name | Position |
|--------------------|-----------------------------|
| Dr. Rajesh Chedwal | Lead Auditor ISO 14001:2018 |
| Mr. Rajeev Jain | Energy auditor |

EXECUTIVE SUMMARY

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

This is very first environmental audit of University for NACC affiliation; doing their bid towards environmental protection and environmental awareness at local and global front. Audit criterion is environmental cognizance, waste minimization and management, biodiversity conservation, water conservation, energy conservation and environmental legislative compliance by the campus. A questionnaire is used during audit. This audit report contains observations and recommendations for improvement of environmental consciousness.



AREA OF IMPROVEMENTS

- Environment Policy to be adopted by the University Campus.
- Film should be applied at window glazing and other exposed fenestrations.
- Stack height at DG set should be as per DG Rules.
- Internal inspection system should be developed for maintenance and assessing performance of various equipment available in campus.
- Plumbing fixtures need to be maintained.

FOR

Prakash Engineers & Consultant.



A handwritten signature in blue ink, appearing to read "Dr. Rajesh Chedwal".

Dr. Rajesh Chedwal

(Environment Auditor)

ENVIRONMENTAL AUDIT -QUESTIONARE

The areas of eco/environmental/green auditing to be followed/practiced by participating University:

- I. Waste Minimization and Recycling
- II. Greening
- III. Energy Conservation
- IV. Water Conservation
- V. Clean Air
- VI. Environmental Legislative
- VII. General Practices

Dose any Environmental Audit conducted earlier?

Yes, Environmental eminence initiative taken by university for environment protection.

What is the total permanent population of the University?

| | Male | Female | Total |
|---|------|--------|------------|
| Students | 350 | 200 | 550 |
| Teachers | 62 | 24 | 86 |
| Non-Teaching Staff | 30 | 10 | 40 |
| Sub Total | 442 | 234 | 676 |
| Approximate Number of Visitors (Per day) | | | 50 |
| What is the total number of working days of your campus in a year? | | | 246 |

Where is the campus located?

The campus is Located near Mahindra SEZ, Ajmer Road, Mahapura, Jaipur 302026 (Rajasthan)

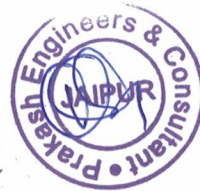


Which of the following are available in your University?

| | |
|-----------------------------|--------------------------------|
| 1 Garden area | Available |
| 2 Play ground | Available |
| 3 Kitchen | Available |
| 4 Toilets | Available |
| 5 Garbage Or Waste Yard | Available |
| 6 Labs | Available |
| 7 Mess / Cafeteria | Available |
| 8 Hostel Facility (numbers) | 204 + 98 |
| 9 Guest House | 23 (single / double occupancy) |

Which of the following are found near your University?

| | |
|--|--------------------------------------|
| 1 Municipal dump yard | Not in vicinity of University |
| 2 Garbage heap | No Garbage heaps |
| 3 Public convenience | Public convenience is available 4 km |
| 4 Sewer line | sewer line within campus |
| 5 Stagnant water | No stagnant water |
| 6 Open drainage | No |
| 7 Industry - (Mention the type) | Faraway from campus |
| 8 Bus / Railway station | 20 KM approx. |
| 9 Market / Shopping complex / Public halls | Yes |



I - WASTE MINIMIZATION AND RECYCLING

| | | | | |
|---|--|------------------------------------|--------------------------|---------------------------|
| <p>1. Does your University generate any waste? If so, what are they?</p> | <p>Yes, Solid waste Canteen waste, paper, plastic, Horticulture Waste etc.</p> | | | |
| <p>2. What is the approximate amount of waste generated per day? (in Kilograms/month) (approx.)</p> | <p>Bio Degradable 1500kg</p> | <p>Non-Biodegradable 150kg</p> | <p>Hazardous Yes</p> | <p>others <1kg</p> |
| <p>3. How is the waste generated in the University managed? By 1 Composting 2 Recycling 3 Reusing 4 Others (specify)</p> | <p>Reuse of one side printed Paper for internal communication. Sewage water is discharged to public Sewer. Domestic Waste is given to Municipal Corporation.</p> | | | |
| <p>4. Do you use recycled paper in University?</p> | <p>Yes, we also have ERP system in order to reduce use of paper</p> | | | |
| <p>5. Do you use reused paper in University?</p> | <p>Yes</p> | | | |
| <p>6. How would you spread the message of recycling to others in the community? Have you taken any initiatives? If yes, Please specify.</p> | <p>Not done in locality for awareness of resource crunches.</p> | | | |
| <p>7. Can you achieve zero garbage in your University? If yes, how?</p> | <p>Not yet achieved. Possible through waste management plan.</p> | | | |



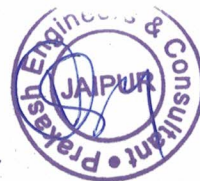
II - GREENING THE CAMPUS

| | | | |
|-----|--|--|----------------|
| 8. | Is there a garden in your University? | Yes, about 60% of total area (30 acre.) are developed as Gardens / Sports ground. | |
| 9. | Do students spend time in the garden? | 2-4 Hours | |
| 10. | Total number of Plants in Campus | Plant type | Approx. number |
| | | Trees | 1700 |
| | | Ornamental | 2300 |
| 11. | Suggest plants for your campus. (Trees, vegetables, herbs, etc.) | Ashoka, Boganvella, Alovera and many more as per geographical regime. | |
| 12. | Is the university campus have any Horticulture Department | Yes | |
| | Number of Staff working in Horticulture Department | 10 Tree Gardeners inclusive of 1 Supervisor, One Civil Engineer and Services of External Experts are also taken. | |
| 13. | Number of Tree Plantation Drives organized by School per annum. (If Any) | Yes, One Tree Plantation Drives are Organized Annually. 50 trees and 100 shrubs planted in this financial year. | |
| 14. | Number of Trees Planted in Last FY. | 100 | |
| | Survival Rate | 65% | |
| 15. | Plant Distribution Program for Students and Community | Yes, Saplings are distributed to Students and visitors at various Occasions. | |
| 16. | Plant Ownership Program | Various Trees are Planted and owned by Visitors as well as students. The Name plates are also displayed near the plants. | |



III - ENERGY

| | | |
|-----|---|--|
| 17. | List ten ways that you use energy in your University. (Electricity, LPG, firewood, others). Using this list, try to think of ways that you could use less energy every day. | Electricity saves by use of CFL/LED bulbs for illumination, LPG saves by use of Pressure cookers for cooking food. Alternate source of energy i.e. Solar water Heater Installed at MDC & Mess. |
| 18. | Are there any energy saving methods employed in your University? If yes, please specify. If no, suggest some | Yes, Renewable source of energy through solar plant (400 KW) Massages are displayed at various locations to Aware the Peoples about Energy Savings. Use of Natural Lights and Natural Ventilation is promoted. |
| 19. | How many CFL/LED bulbs has your University installed? | 50 % of Total Conventional bulbs are Replaced by LED/CFL Lights. |
| 20. | Are any alternative energy sources employed / installed in your University? (photovoltaic cells for solar energy, windmill, energy efficient stoves, etc.) Specify. | Yes, SPV of capacity 400 kW has been installed at the campus. |
| 21. | Do you run "switch off" drills at University? | Yes |
| 22. | Are your computers and other equipment's put on power-saving mode? | Yes, In Practice |
| 23. | Does your machinery (TV, AC, Computer, weighing balance, printers, etc.) run on standby modes most of the time? If yes, how many hours? | No |



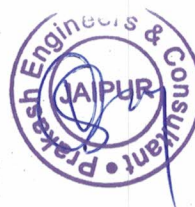
IV – WATER CONSERVATION

| | | |
|-----|---|--|
| 24. | List four uses of water in your University | <p>Basic use of water in campus:</p> <ol style="list-style-type: none"> 1. Drinking – 1000 KL/month 2. Gardening – STP treated water / bore well water 3. Kitchen and Toilets – 2000 KL/month 4. Others – 500 KL/month |
| 25. | How does your University store water? Are there any water saving techniques followed in your University? | <p>76# Overhead Water Tanks and 03# Underground Water tank installed for storage of water.</p> <p>Avoid overflow of water controlled valves are provided in water supply system. Close supervision for water supply system.</p> |
| 26. | If there is water wastage, specify why and How Can the wastage be prevented / stopped? | No |
| 27. | <p>Locate the point of entry of water and point of exit of waste water in your University.</p> <p>Entry-</p> <p>Exit-</p> | <p>Entry- Water comes from five Submersible Pumps at campus</p> <p>Exit- From Water Drainage System to STP.</p> |
| 28. | Write down four ways that could reduce the amount of water used in your University | <p>Basic Four ways:</p> <ol style="list-style-type: none"> 1. Close the taps after usage 2. Maintenance and monitoring of valves in supply system to avoid overflow, leakage and spillage 3. Water Conservation awareness for new Students. |
| 29. | Record water use from the University water meter for six months (record at the same time of each day). At the end of the period, compile a table to show how many liters of water have been used. | Yes, Water Meters available for calculation of usage of total quantity only. |
| 30. | Does your University harvest rain water? | Modern rain water harvesting system is available with roof area of around 10,000 sqft. |
| 31. | Is there any water recycling System. | Yes |



V - CLEAN AIR

| | | | | | | |
|-----|---|---|------|------|-------|-------|
| 32. | Are the Rooms in Campus are Well Ventilated? | Yes | | | | |
| 33. | Window Floor ratio of the Rooms | Very Good | | | | |
| 34. | What is the ownership of the vehicles used by your school? (Please Tick ✓ only one) | Yes | | | | |
| | | Operator-owned vehicles | | | | |
| | | ✓ School-owned vehicles | | | | |
| | | A combination of campus-owned and operator-owned vehicles | | | | |
| 35. | Provide details of school-owned motorized vehicles? | Buses | Cars | Vans | Other | Total |
| | No. of vehicles | 06 | 01 | 01 | 02 | 10 |
| | No. of vehicles more than five years old | -- | -- | -- | -- | -- |
| | No. of Air conditioned vehicles | 06 | 01 | 01 | 02 | 10 |
| | PUC done | Yes | Yes | Yes | Yes | Yes |
| 36. | Specify the type of fuel used by your school's vehicles: | Buses | Cars | Vans | Other | |
| | Diesel | 06 | 01 | -- | 02 | |
| | Petrol | -- | -- | 01 | -- | |
| | CNG | -- | -- | -- | -- | |
| | LPG | -- | -- | -- | -- | |
| | Electric | -- | -- | -- | -- | |
| 37. | Air Quality Monitoring Program (If Any) | Yes | | | | |
| 38. | Students suffer from respiratory ailments? (If Any) | No | | | | |
| 39. | Details of Genset. | Yes, 2 Numbers of Cummins Three Phase Silent Diesel Generator. The capacities of D.G. Set (250KVA) & D.G. Set (630KVA) | | | | |



VI - ENVIRONMENTAL LEGISLATIVE COMPLIANCE

| | | | |
|-----|---|--|--|
| 40. | Are you aware of any environmental Laws pertaining to different aspects of environmental management? | Yes | |
| 41. | Does your University have any rules to protect the environment? List possible rules you could include. | No | |
| 42. | Dose Environmental Ambient Air Quality Monitoring conducted by the University? | Yes | |
| 43. | Dose Environmental Water and Wastewater Quality monitoring conducted by the University? | Yes | |
| 44. | Dose stack monitoring of DG sets conducted by the University? | Yes | |
| 45. | Is any warning notice, letter issued by state government bodies? | No | |
| 46. | Dose any solid / Hazardous waste generated by the University? If yes explain its category and disposal method | Yes, It is being disposed though the authorized external agency. | |
| 47. | Dose any Bio medical waste generated by the University? If yes explain its category and disposal method | No | |



VII - GENERAL

| | | | |
|-----|--|--|--|
| 48. | Are you aware of any environmental Laws pertaining to different aspects of environmental management? | Yes | |
| 49. | Does your University have any rules to protect the environment? List possible rules you could include. | No | |
| 50. | Does housekeeping schedule in your campus? | Yes, Swatch Bharat movement | |
| 51. | Are students and faculties aware of environmental cleanliness ways? If Yes Explain | Yes, Periodically pollution reduction, plantation, energy conservation awareness campaigns carried out by University | |
| 52. | Dose Important Days Like World Environment Day, Earth Day, and Ozone Day etc. eminent in Campus? | Yes | |
| 53. | Dose University participated in National and Local Environmental Protection Movement? | Yes | |
| 54. | Dose University has any Recognition/certification for environment Friendliness? | No | |
| 55. | Dose University using renewable energy? | Yes | |
| 56. | Dose University conducts a green/environmental audit of its campus? | Yes | |
| 57. | Has the University been audited / accredited by any other agency such as NABL, NABET, TQPM, NAAC etc.? | No | |

FOR


Prakash Engineers & Consultant.



Dr. Rajesh Chedwal

(Environment Auditor)

BEST PRACTICES/INITIATIVES FOR ENVIRONMENT

| | | |
|---|--|--|
| A | <p>Renewable Energy A clean source of energy is utilized at campus. Efforts towards Carbon Neutrality The capacity of 400 KW Solar plant on building roofs is commissioned and will be operational in a month that will supply Approx. 45% of total power in campus.</p> |  |
| B | <p>Biodiversity</p> | <p>Yes, Bio gas plant setup at campus.</p> |
| C | <p>Tree Plantation Drives</p> | <p>Yes, One Drives Annually as well as Every Guest is honored by Tree Plantation at Campus.</p> |
| d | <p>Ground Water Recharge</p> | <p>Yes, Rain Water Harvesting System with roof area of about 10,000 sqft. Recharge points being created in campus (60 nos.) at different locations</p> |
| E | <p>Pollution Reduction Personal Vehicles (Students) not allowed at campus</p> | <p>Reduction in Air Pollution through vehicular emission.</p> |
| F | <p>E Waste Management</p> | <p>Authorized recycler “ETCO E-WASTE RECYCLER PVT. LTD”</p> |
| G | <p>Solid Waste Management</p> | <p>Yes, Lifting of garbage from JKLU campus on alternate day by Authorized agency</p> |
| H | <p>Adoption of Village</p> | <p>No</p> |
| I | <p>Water Conservation</p> | <p>Yes, The STP treated water used for gardening in campus.</p> |



RECOMMENDATIONS

- Formation of Environment Policy and communicated to all faculties and other staff.
- Environmental Monitoring i.e. (Ambient Air Quality monitoring, Stack Monitoring of DG sets, Water and wastewater monitoring need to be conducted with frequency of six month.)
- Retrofitting of remaining lighting fixtures with LED lights should be done
- Increase in Environmental promotional activities for spreading awareness at campus.
- Environment/Green committee formation for regulating eco-friendly initiatives at campus premises and periphery.
- The energy Performance Index of the university building, which is below 50% air conditioned, is 29.4 KWH/m²/year. Therefore, the university should apply for energy star rating from Bureau of Energy Efficiency (BEE) and also certification from Indian Green Building Council (IGBC).

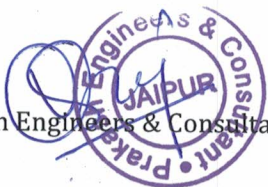
CONCLUSION

This audit involved extensive consultation with all the campus team, interactions with key personnel on wide range of issues related to Environmental aspects. The JKL University has Environmental Committee for sustainable use of resources. Overall 40% of university campus is for landscaping. The audit has identified several observations for making the campus premise more environmental friendly. The recommendations are also mentioned with observations for university campus team to initiate actions.

The audit team opines that the overall site is maintained well from environmental perspective. There is no major observations but few things are important to initiate urgently are rainwater harvesting recharge; water balance cycle and periodic inspection of buildings; environment policy and initiation of composting at campus.

FOR

Prakash Engineers & Consultant.



A handwritten signature in blue ink, appearing to read "Dr. Rajesh Chedwal".

Dr. Rajesh Chedwal

(Environment Auditor)

ANNEXURE – PHOTOGRAPHS OF ENVIRONMENT CONSIIOUSNES

Green Campus- Landscaping, gardens

The University has a sprawling lush green campus and offers the students an open, green and high-tech learning environment, combining the serene settings of the Gurukuls of yesteryears with the technological advancements of the new age. The campus presently prides of having 1700 trees of different varieties, flowering shrubs and plants which makes the campus green and color ful.

As part of their CSR initiative, National Seeds Corporation gifted 300 saplings. A tree plantation campaign was organized in the campus by the students in the presence of the officials of National Seeds Corporation on March 31, 2016. A tree plantation campaign by the fresher’s is planted during the onset of the monsoons in the month of July and August. The event was coordinated by Col. S. Manohar.

Community Development Committee (CDC) of JK Lakshmipat University planted around 150 saplings throughout the campus. The activity was inaugurated by the Honorable Vice Chancellor, Dr. Roshan Lal Raina by planting the first sapling and was followed by the CDC Coordinators, Students and other faculty members. Students of all the programs actively participated in this activity. The plantation was taken up with an intention to sensitize the students towards nature and making them realize their responsibility for future. The event was coordinated by Prof. Divanshu Jain, Dr. Shahnawaz Khan, Dr. Jaya Gupta and Dr. Vaibhav Kaushik.

We have a dedicated contract with M/s. Vikram Nursery, C-18, Gayatri Nagar Vistar, Rampath, Maharani Farm, Durgapura, Jaipur for gardening and maintaining greenery in the campus.



JK LAKSHMIPAT UNIVERSITY

Tree Plantation Drive

Date : 30th June 2020

Time : 11:00 AM to 12:00 PM

Venue : Road side near Mahindar SEZ road towards campus





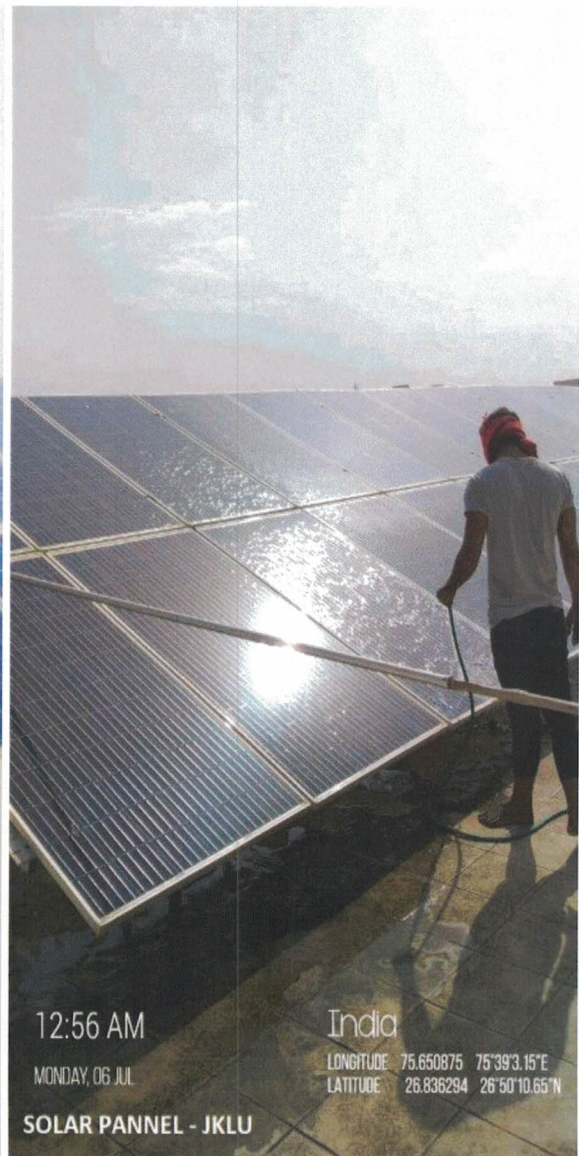
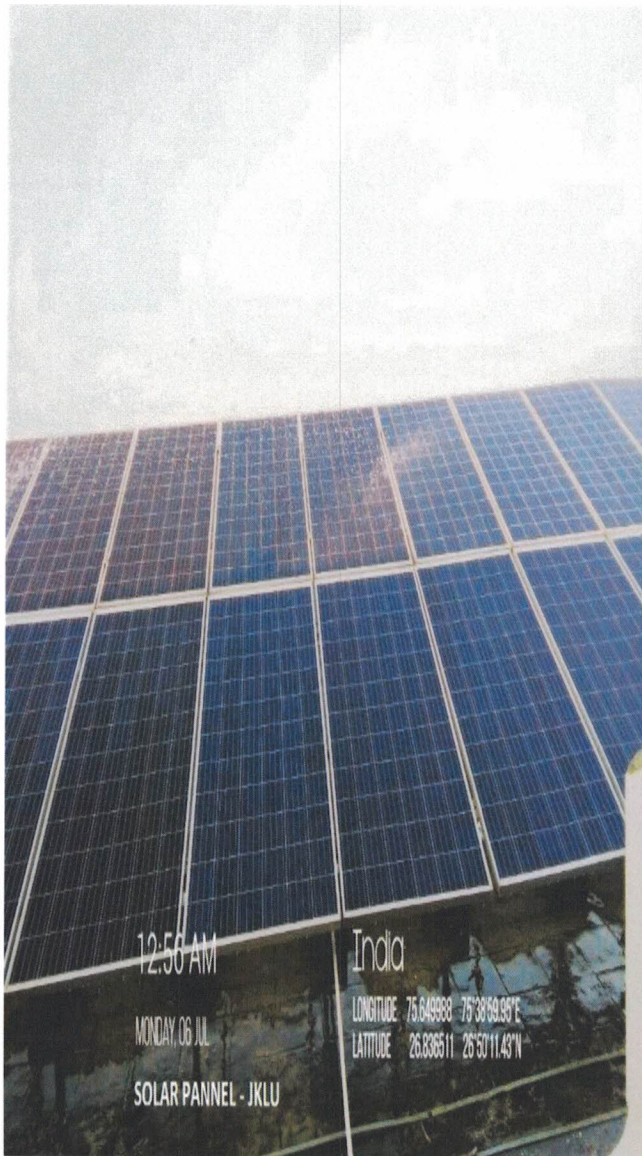

Renewable Energy

A clean source of energy is utilized at campus. Efforts towards Carbon Neutrality
The capacity of 400 KW Solar plant on building roofs is commissioned and will be operational in a month that will supply approx. 45% of total power in campus.

Solar energy & Wheeling to the Grid

Solar power system installed of 400 KWp roof power plant at JK LakshmiPat University, 16th March 2017

Electricity units generated from solar plant 400 KWp till July 2020 – 1686207 KWH units.



2. Biogas plant: Yes



Use of LED bulbs/ power efficient equipment (no. of LEDs are in use and details of star rated appliances including ACs, fans, motors etc)

| LED detail from 2016 to 2019 | | | |
|------------------------------|---------------|----------|---------------------------|
| Total Load KW (Old Lighting) | Replaced (KW) | LED (KW) | New LED Installation (KW) |
| 190 | 97.87 | 28.90 | 9.50 |

Ductable ACs

| S.no | Capacity (TR) | No. Of Unit | Total (TR) | Type/Model | Floor | Make | Current Cooling Area |
|--------------------|---------------|-------------|--------------|------------|-------|------|--|
| Admin Block | | | | | | | |
| 1 | 8.50 | 1 | 8.5 | Ductable | GF | LG | Establishment, Estate & Project Office |
| 2 | 4.25 | 1 | 4.25 | Ductable | GF | LG | Dy. Registrar Office, CFO |
| 3 | 1.50 | 1 | 1.5 | Ductable | FF | LG | Registrar Office |
| 4 | 3.00 | 1 | 3.0 | Ductable | FF | LG | VC Office Area/Lounge |
| 5 | 4.25 | 1 | 4.25 | Ductable | FF | LG | Chancellor Office |
| 6 | 3.00 | 1 | 3.0 | Ductable | FF | LG | Vice Chancellor Office |
| 7 | 4.25 | 1 | 4.25 | Ductable | FF | LG | Board Room |
| 8 | 2.00 | 1 | 2.0 | Ductable | FF | LG | Mini Board Room |
| 9 | 2.50 | 1 | 2.5 | Ductable | SF | LG | DY.Registrar Exam Officer (204) |
| 10 | 1.50 | 1 | 1.5 | Ductable | SF | LG | Lounge (205) |
| | | 10 | 34.75 | | | | |
| MDC Block | | | | | | | |
| 1 | 8.50 | 1 | 8.5 | Ductable | GF | LG | Training Room-1 |

ENVIRONMENTAL AUDIT REPORT

| | | | | | | | |
|--------------------------|------|----|-------|---------------|----------|---------|------------------------------|
| 2 | 8.50 | 1 | 8.5 | Ductable | GF | LG | Training Room-2 |
| 3 | 4.25 | 1 | 4.25 | Ductable | GF | LG | Lounge |
| 4 | 2.00 | 1 | 2.0 | Ductable | GF | LG | Co-Orparate manager Office |
| 5 | 4.25 | 1 | 4.25 | Ductable | GF | LG | Dining Hall |
| 6 | 2.00 | 4 | 8 | Ductable | FF | LG | 2x4 (room no.101 to 104) |
| 7 | 1.50 | 6 | 9 | Ductable | FF | LG | 1.5x5(room no.105 to 110) |
| 8 | 2.00 | 4 | 8 | Ductable | SF | LG | 2x4 (201, 202,213,214)) |
| 9 | 1.50 | 9 | 13.5 | Ductable | SF | LG | (1.5x 9) Room no. 203 to 211 |
| | | 28 | 66.0 | | | | |
| MBA Block | | | | | | | |
| 1 | 2.00 | 1 | 2 | Ductable | GF | LG | Room no. 001 (Server room) |
| 2 | 4.25 | 1 | 4.25 | Ductable | GF | LG | Tutorial (002) |
| 3 | 8.50 | 2 | 17 | Ductable | GF | LG | Amphiheater (8.5x2)003 |
| 4 | 4.00 | 1 | 4 | Ductable(VRV) | GF | Daikin | Account Section 005 |
| 5 | 4.25 | 1 | 4.25 | Ductable | GF | LG | Placement Office 006 |
| 6 | 1.50 | 1 | 1.5 | Ductable | GF | LG | Record Room 007 |
| 7 | 2.00 | 1 | 2.0 | Ductable | GF | LG | Director IM |
| 8 | 3.00 | 1 | 3.0 | Ductable | GF | LG | Conference Room |
| 9 | 8.50 | 1 | 8.5 | Ductable | FF | LG | Class Room 1 (101) |
| 10 | 4.25 | 1 | 4.25 | Ductable | FF | LG | Tutorial 1 (102) |
| 11 | 4.25 | 1 | 4.25 | Ductable | FF | LG | Tutorial 2 (103) |
| 12 | 4.25 | 1 | 4.25 | Ductable | FF | LG | Tutorial 3 (104) |
| 13 | 8.50 | 1 | 8.5 | Ductable | FF | LG | Class Room 2 (105) |
| 14 | 8.50 | 1 | 8.5 | Ductable | FF | LG | Class Room 3 (106) |
| 15 | 3.00 | 1 | 3.0 | Ductable | SF | LG | Lounge (201) |
| | | 16 | 79.25 | | | | |
| Eng. Block -1 | | | | | | | |
| 1 | 5.5 | 2 | 11 | Ductable | B | LG | Design Studios(B001) |
| 2 | 4.25 | 1 | 4.25 | Ductable | GF | LG | Tutorial (001) |
| 3 | 3.00 | 1 | 3.0 | Ductable | GF | LG | Placement Office 002 |
| 4 | 3.00 | 1 | 3.0 | Ductable | GF | LG | Admin Office 003 |
| 5 | 3.00 | 1 | 3.0 | Ductable | GF | LG | Director IET 004 |
| 6 | 4.25 | 1 | 4.25 | Ductable | GF | LG | Conference Room 005 |
| 7 | 8.50 | 1 | 8.5 | Ductable | GF | LG | Class Room 007 |
| 8 | 8.50 | 2 | 17.0 | Ductable | GF | LG | Amphitheater (8.5x2) |
| 9 | 8.50 | 2 | 17.0 | Ductable | FF | LG | Class room (101&102) |
| 10 | 5.50 | 1 | 5.5 | Ductable | FF | LG | Tutorial -105 |
| 11 | 8.50 | 2 | 17.0 | Ductable | FF | Hitachi | Class room (103&104) |
| | | 15 | 93.5 | | | | |
| Lab Block (EB -2) | | | | | | | |
| 1 | 4.25 | 1 | 4.25 | Ductable | GF | LG | Multimedia |
| 2 | 5.50 | 1 | 5.5 | Ductable | GF | LG | C++ Lab |
| 3 | 8.50 | 1 | 8.5 | Ductable | GF | LG | Class Room. No. 004 |
| 4 | 5.50 | 2 | 11 | Ductable | GF | LG | Class Room. No. 005 (5.5x2) |
| 5 | 8.50 | 1 | 8.5 | Ductable | GF | LG | Class Room. No. 006 |
| 6 | 5.50 | 1 | 5.5 | Ductable | GF | LG | Class Room. No. 006 |
| 7 | 5.50 | 1 | 5.5 | Ductable | Basement | Hitachi | Class Room. No. B007 |
| 8 | 8.50 | 1 | 8.5 | Ductable | FF | Hitachi | Class Room No 104 |
| 9 | 5.50 | 2 | 11 | Ductable | FF | Hitachi | Class Room No 105 (5.5 x 2) |

ENVIRONMENTAL AUDIT REPORT

| | | | | | | | |
|------------------|------|----|---------------|----------|----|---------|---------------------------|
| 10 | 8.50 | 1 | 8.5 | Ductable | FF | Hitachi | Class Room No 106 |
| 11 | 5.50 | 1 | 5.5 | Ductable | FF | Hitachi | Class Room No 106 |
| 12 | 5.50 | 1 | 5.5 | Ductable | SF | Hitachi | Tutorial (201) |
| 13 | 8.50 | 1 | 8.5 | Ductable | SF | Hitachi | Class Room 202 |
| 14 | 5.50 | 2 | 11 | Ductable | SF | Hitachi | Class Room 204 (5.5x2) |
| 15 | 5.50 | 2 | 11 | Ductable | SF | Hitachi | Class Room 205 (5.5x2) |
| 16 | 8.50 | 1 | 8.5 | Ductable | SF | Hitachi | Class Room No. 206 |
| 17 | 5.50 | 1 | 5.5 | Ductable | SF | Hitachi | Class Room No. 206 |
| | | 21 | 132.25 | | | | |
| LRC Block | | | | | | | |
| 1 | 5.5 | 1 | 5.5 | Ductable | GF | Hitachi | Computer Lab -1 |
| 2 | 5.5 | 1 | 5.5 | Ductable | GF | Hitachi | Computer Lab -2 |
| 3 | 5.5 | 1 | 5.5 | Ductable | GF | Hitachi | Computer Lab -3 |
| 4 | 5.5 | 1 | 5.5 | Ductable | GF | Hitachi | Research Lab |
| 5 | 11.0 | 1 | 11 | Ductable | GF | Hitachi | Librarian & News Magazine |
| 6 | 11.0 | 1 | 11 | Ductable | GF | Hitachi | Refrance Section |
| 7 | 16.5 | 1 | 16.5 | Ductable | GF | Hitachi | Reading Section |
| 8 | 16.5 | 1 | 16.5 | Ductable | FF | Hitachi | Reading Section |
| | | 8 | 77 | | | | |

| | | | | | |
|-----------------|----|---------------|--------------|-------------|--------------|
| Ductable | TR | 482.75 | Ductable | Unit | 98.0 |
| Split | TR | 233.00 | Split | Unit | 152 |
| Total TR | | 715.75 | Total | Unit | 250.0 |

Split/Window ACs

| S.no | Capacity (TR) | No. Of Unit | Total (TR) | Type/Model | Floor | Make | Currently Cooling Area |
|--------------------------|---------------|-------------|-------------|-------------------|-----------|----------|-------------------------------------|
| Admin Block | | | | | | | |
| 1 | 2.0 | 1 | 2.0 | Hi-wall/LSA6P3F | SF | LG | Server Room |
| 2 | 1.5 | 1 | 1.5 | Hi-wall/RAU317KWD | GF | Hitachi | Dy. Registrar HR |
| 3 | 1.5 | 2 | 3.0 | Hi-wall/RAU317KWD | SF | Hitachi | Call Center |
| 4 | 4.0 | 2 | 8.0 | Tower AC | GF | Midea | Reception |
| | | 6 | 14.5 | | | | |
| MBA Block | | | | | | | |
| 1 | 1.5 | 26 | 39 | Hi-wall/LSA5AT3M | SF | LG | Faculty Chamber 202 to 227 (1.5x26) |
| 2 | 1.5 | 1 | 1.5 | Hi-wall/RAU317KWD | GF | Hitachi | Server Room |
| | | 27 | 40.5 | | | | |
| Eng. Block -1 | | | | | | | |
| 1 | 1.5 | 11 | 16.5 | Hi-wall/RAC318KTD | SF | Hitachi | Faculty Chamber (201 to 218) |
| 2 | 1.0 | 1 | 1.0 | Hi-wall/RAC511KTD | SF | Hitachi | Faculty Chamber |
| 3 | 1.5 | 15 | 22.5 | Hi-wall/RAC511KTD | SF | Hitachi | Faculty Chamber (220 to 241) |
| | | 27 | 40.0 | | | | |
| Lab Block (EB -2) | | | | | | | |
| 1 | 2 | 1 | 2 | Hi-wall/LSA6P3F | Base ment | LG | Server Room |
| 2 | 1 | 1 | 1 | Hi-wall 3 star | Base | Bluestar | IOD |



ENVIRONMENTAL AUDIT REPORT

| | | 2 | 3 | | ment | | |
|------------------------|-----|-----------|-------------|-----------------------------------|-----------|----------|--|
| LRC Block | | | | | | | |
| 1 | 1.5 | 5 | 7.5 | Hiwall/RAC318KSDI | GF | Hitachi | Server Room |
| Boys Hostel 1st | | | | | | | |
| 1 | 1.5 | 22 | 33 | Hi- wall/183 Eyu Split 3 star | GF,FF | Voltas | Room no.03 to 09,101 to 108,110 to 116 |
| 2 | 1.5 | 6 | 9 | Hi- wall/183 Eyu Split 3 star | SF | Voltas | Room no. 201 to 206 |
| | | 28 | 42 | | | | |
| Boys Hostel 2nd | | | | | | | |
| 1 | 1.5 | 22 | 33 | Hi- wall/183 Eyu Split 3 star | GF,FF, SF | Voltas | Room no.06 to 09, 101 to 108, 210 to 216 |
| Girls Hostel | | | | | | | |
| 1 | 1.5 | 3 | 4.5 | Hi- wall/183 Eyu Split 3 star | TF | Voltas | Room no. 301 to 304 |
| 2 | 1.5 | 7 | 10.5 | Hi- wall/183 Eyu Split 3 star | FF | Voltas | Room no. 101C,101D,102C,102D,103 C,104C,104D |
| 3 | 1.5 | 5 | 7.5 | Hi- wall/183 Eyu Split 3 star | FF,SF | Voltas | Room no. 202D,203D,202C,203C,204 D |
| 4 | 1.5 | 7 | 10.5 | Hi- wall/RSNS318HCDO Split 3 star | GF,TF | Hitachi | Room no. 301 to 304 and 003 |
| | | 22 | 33 | | | | |
| Flats | | | | | | | |
| 1 | 1.5 | 4 | 6 | Window AC | GF/FF | Hitachi | VC bungalow |
| 2 | 1.5 | 3 | 4.5 | Hi- wall/183 Eyu Split 3 star | GF/FF | Daikin | VC bungalow |
| | 1.5 | 1 | 1.5 | Hi- wall/183 Eyu Split 3 star | GF | Voltas | Health center |
| 3 | 1.5 | 2 | 3 | Window AC | GF | Samsun g | Warden office (Hostel 1st &2nd) |
| 4 | 1.5 | 3 | 4.5 | Window AC | GF | Samsun g | GYM |
| | | 13 | 19.5 | | | | |

| | |
|------|--------------|
| TR | 233.0 |
| Unit | 152.0 |



Borewell /Open well recharge - Various initiatives to maintain adequate level of ground water have been taken. The campus has **5 borewells** at different locations in campus, which provide **100 KLD** due to water recharge points being created in campus (60 nos.) at different locations.

Owing to the minimal concrete floor construction in campus, rain water can sufficiently seep underground thereby maintaining the natural ground water table.

Gardens are watered using drip/sprinkler irrigation system to save water. The University ensures that the water wastage is minimized at an optimal level and the leaky taps and pipes are under regular check and hence no loss of water is observed, neither by any leakages nor by overflow from overhead tanks

Construction of tanks and bunds – Campus have Pump room having 4 tanks (2 nos. of 1 lac liter water storage capacity each & 2 nos. of 50000-liter water storage capacity each. (Physically shown if required.)

Underground tank pump room pics :-



Waste water recycling. - Sewage treatment plant (STP) facility for waste water recycling of capacity 100 KLD setup installed in JKLU on 4th Sep 2014, helps us in removing contaminants from wastewater, primarily from sewage generated from the mess, hostel, building etc. We further utilize this water for the horticulture & fields. (Pls refer STP agreement for the same)

Waste management Steps - JKLU has taken up various initiatives to maintain an environment friendly campus. The campus is full of greenery and is kept clean and tidy. The gardens, lawns and plantations inside the campus is maintained by a dedicated group of horticulture team and housekeeping staff.

The University implements effective waste management through waste segregation and disposing of the waste through concerned agencies.

1. Solid waste management: JKLU implements solid waste management by enforcing the waste segregation rules. Dustbins are placed in every classroom, laboratory, rest room, canteen & pathway at different locations in the campus. Sweepers are allotted to each block who manage all the waste generated in the campus. All waste/garbage from University and hostel is segregated at source and disposed of in a proper manner. Outsource registered agency hired for the dispose of garbage from university on daily basis.

2. Liquid waste management: JKLU follows the systematic procedure for proper management and disposal of liquid waste. A sewage treatment plant for the University is in place. This treated water is then used for the gardening and other purpose. University also conducts discussions with students to make them aware about the liquid waste management techniques.

Liquid waste from the points of generation like the canteen and toilet etc. is let out as effluent into a proper drainage facility and to avoid stagnation.

3. E-waste management: The University has undertaken a number of E-waste Management initiatives with the objective of creating an eco-friendly environment in the campus. E-waste such as computers and its peripherals are upgraded regularly to continue usage and to avoid its wastage.

Restricted entry of automobiles

Entry of vehicles inside the campus is restricted. Vehicles of Student / employee / outside visitor / guest etc. are restricted to parking area only near the entry gate.

Security people are assigned duties on entry gate and crossing to the campus.



Pedestrian Friendly pathways

Campus has sufficient space for parking vehicles of staff and students. Roads inside the campus are well maintained .Pedestrians can walk safely through the campus through walk friendly pathways.

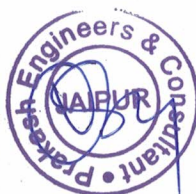
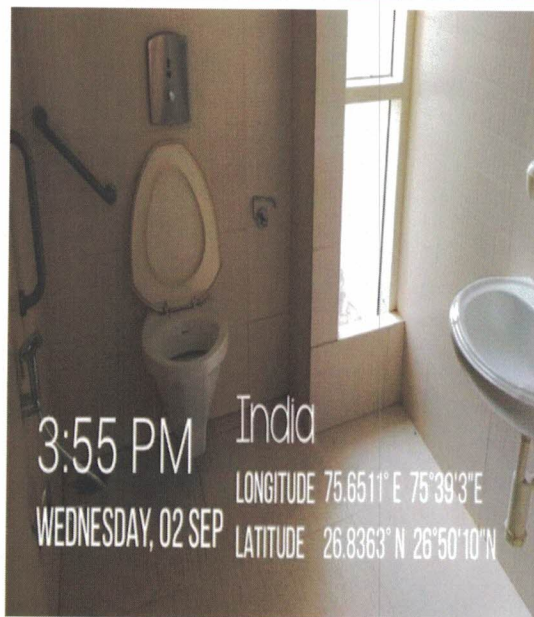


Disabled-friendly washrooms.

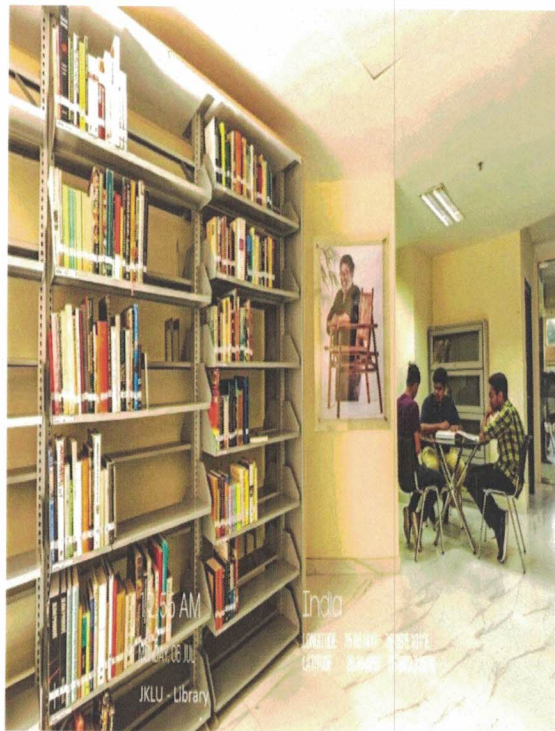
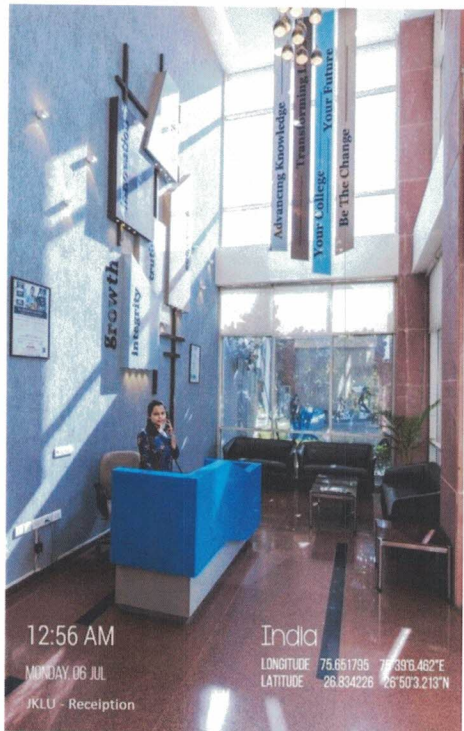
- All academic building (Admin block, MDC, Cafeteria, LRC, IET, IoD & Technology center) are facilitated with disabled-friendly washrooms
- However, some repairing work is required for making it fully functional.
- Signage including tactile path, lights, display, boards & signposts. We have signage, display boards etc. throughout the campus.

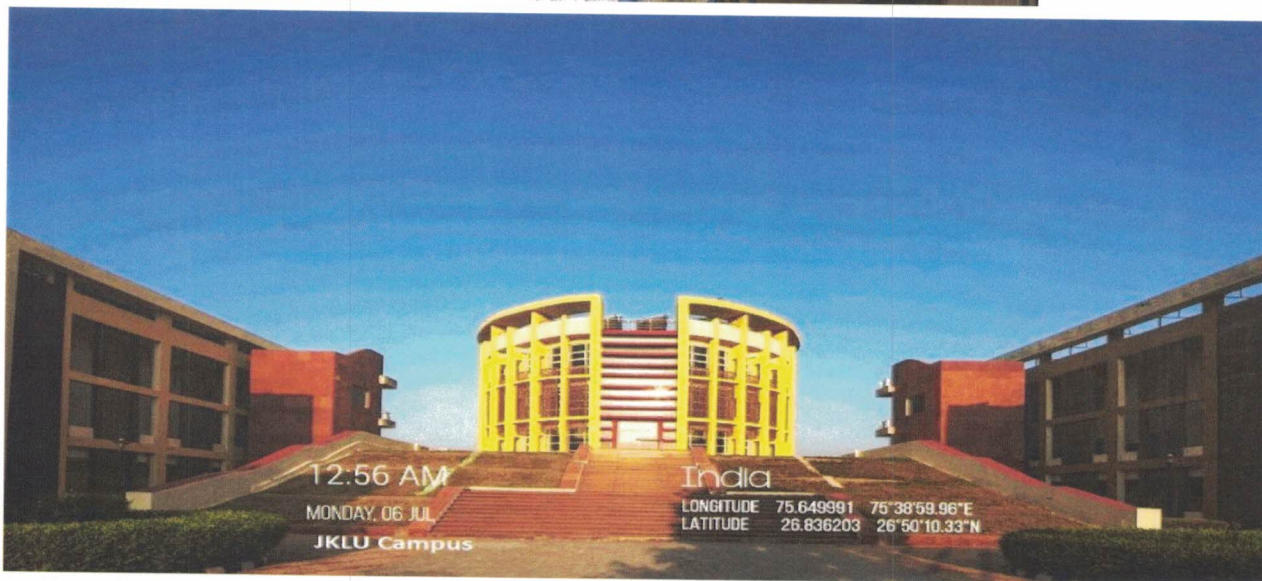
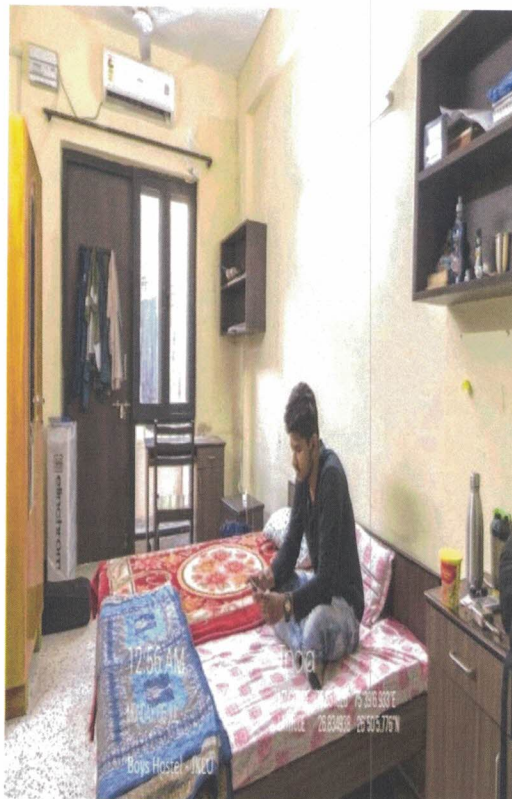
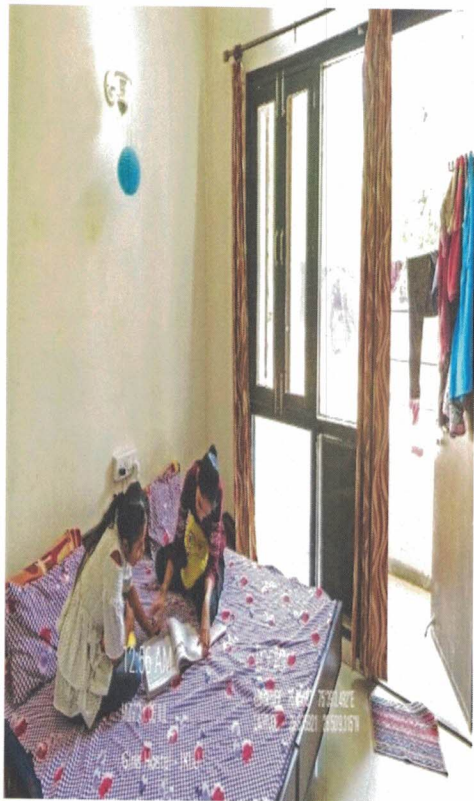
An accessible toilet is designed to accommodate people with physical disabilities. Persons with reduced mobility find them useful, as do those with weak legs, as a higher toilet bowl makes it easier for them to stand up. Additional measures to add accessibility are providing more space and grab bars to ease transfer to and from the toilet seat, and including enough room for a caregiver if necessary.

| Sr. No | Location | No. of Disabled toilet | | |
|--------------|-------------------|------------------------|----------|----------|
| | | Ground | First | Second |
| 1 | Admin | 1 | 0 | 0 |
| 2 | MDC | 1 | 0 | 0 |
| 3 | IM Block | 1 | 1 | 1 |
| 4 | LRC | 1 | 0 | 0 |
| 5 | IET -1st | 1 | 1 | 1 |
| 6 | IET - 2nd | 1 | 0 | 0 |
| 7 | Technology Centre | 1 | 1 | NA |
| 8 | Cafeteria | 1 | NA | NA |
| Total | | 8 | 3 | 2 |




Campus Facilities





FOR
Prakash Engineers & Consultant.




Dr. Rajesh Chedwal
(Environment Auditor)