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|  | **Environmental Consciousness and Sustainability** |  |
| **7.1.2**  **QnM** | ***The Institution has facilities for alternate sources of energy and energy conservation measures***   1. Solar energy 2. Biogas plant 3. Wheeling to the Grid 4. Sensor-based energy conservation 5. Use of LED bulbs/ power efficient equipment   **Options:**  A. Any 4 or all of the above  B. Any3 of the above  C. Any2 of the above  D. Any1of the above  E. None of the above  **Response: A**  The institute has taken various measures for energy conservation/ use of renewable energy in the campus. Some of the important measures taken by the university are given below.   1. LED bulbs are used in the campus. High mask solar lights, Solar streetlights (sensor based) are laced in the campus. 2. All lights/fans in the classrooms/ labs are kept in switch off mode when they are not in use. Minimal consumption of energy is the saving factor of energy conservation in the campus. 3. Open air auditorium is used to conduct university level events like Annual day, orientation Day etc. 4. 550 KW solar powers is generated and connected to the state electricity board. 5. **Solar energy**   A solar power plant of capacity 550 KW has been installed in the campus and sensor based solar streetlights are also provided in the campus.   1. **Wheeling to grid**   Institute has a well-established network for supply of electricity for the entire campus including hostels, labs and residential premises. Process of transmission of electricity through the transmission lines have been completed in the entire campus. Bidirectional connectivity from solar to electric grid is provided.   1. **Sensor-based energy conversation**   All the streetlights in the university campus are sensor-based energy conversion; hence loss of power has been controlled effectively. All the streetlights in the campus are fully automated.   1. **Use of LED Bulbs/power efficient equipment**   LED bulbs are used in the entire campus.  **Details about percentage of power requirements met through LED bulbs**   |  |  |  |  | | --- | --- | --- | --- | | **Session** | **Total Lighting requirements Lacs Unit** | **Percentage Lighting through LED bulbs** | **Percentage Lighting through other sources** | | 2021-22 | 2.97 | 81.49% | 18.51% | | 2020-21 | 3.29 | 73.56% | 26.44% | | 2019-20 | 7.01 | 56.01% | 43.09% | | 2018-19 | 7.24 | 54.00% | 46.00% | | 2017-18 | 8.56 | 49.50% | 50.50% | | 2016-17 | 8.87 | 30.00% | 70.00% |   **Facilities for alternate sources of energy and energy conservation measures**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Session** | | Solar Energy Lacs Unit | Wheeling to grid | Sensor based energy Conservation | | 2021-22 | 5.93 | Yes (1.93 Lacs Unit) | Street Lights | | 2020-21 | 5.89 | Yes | Street Lights | | 2019-20 | 5.68 | Yes | Street Lights | | 2018-19 | 3.25 | Yes | Street Lights | | 2017-18 | 0.79 | Yes | - | | 2016-17 | 0.08 | Yes | - | | **5** |