**Title of the Practice:**

**Clean, Green, Environment Friendly and Energy Efficient Campus Providing Perfect Educational Ambiance for All-round Developments of Students.**

**Objectives:**

To provide neat, clean, serene, calm educational environment for the students to enhance their learning experience and nurture innovations & creativity in them.

To sensitize all stake-holders towards environmental issues and sustainable growth and development.

To adopt good practices, minimizing energy utilization, use of renewable energy sources, thereby protecting and preserving environment.

**Context:**

A clean and green campus has an ability to provide for near perfect education environment where the students can focus on enhancing their knowledge and skills and developing right kind of attitude and sensitiveness to environmental issues. Further climate change & environmental degradation are major concerns that not only affect us but will affect future generations. It is therefore duty of all individuals and organizations to preserve & protect environment, conserve natural resources, minimize energy utilization and protect. Providing a good educational ambience protecting environment and conserving energy, using energy efficient systems therefore is our best practice.

**The Practice:**

The Institution has 122 acres beautiful, well-planned campus with modern buildings having all the facilities like constituent colleges, administrative block, hospitals, hostels, and staff quarters amongst others. There is a physical infrastructure maintenance & department working round-the-clock. They ensure the cleanliness and safety of the campus. The campus is vehicle free, plastic, pollution and smoke free, electrical battery operated golf-carts are provided in the campus for movement within the campus. Regular tree plantation drives are undertaken ensuring adequate greenery. The campus has more than 60% of open spaces, gardens, water bodies and abundant trees. As it is gated community, movement of the general public is not permitted within its premises. As a result of all these practices, the campus provides for a serene & calm education ambiance where the learners can focus on learning & doing his/her best.

The environment friendly energy efficient practices are as

**Management of Biomedical waste:**

1. The solid biomedical waste is segregated at source as infectious waste, noninfectious waste, glass and sharps into different color coded bags. The infectious waste is sent to the incinerator. Heat recovery unit is installed at the incinerator. Temperature of 1000°c is generated, which is used for boiling water saving 6000 liters of diesel/month. Steam generated is used for cooking and laundry.
2. The liquid waste is passed through the liquid disinfectant unit which treats the liquid waste before it is left into the drain.

**Water recycling:**

The Institution has functional effluent treatment & recycling plant of 2000 m3/day capacity. Treated sewage after chlorination is pumped for gardening in hospital and University campus. Treated waste water is used for flush tanks. Rain water harvesting units are placed in multiple areas of campus.

Taps are fitted with pressure compensating Aerators for water conservative that saves 15-20% of water.

**Management of Organic waste: garden waste, kitchen waste**

Campus has efficient vermicompost units & compost pits that utilizes garden and kitchen waste from hostels, residential quarters and gardens to produce compost.

**Use of renewable energy:**

977 Solar panels are placed that saves 100 - 150 units per panel. Campus uses solar energy and wind energy alternatively. This process makes solar energy, 14% wind energy is 88% and 11% saved by solar heating units. Only 12% KEB electricity is used. And 640 KWP SPPTV project commissioned which generates 70000 to 80000 KWH units.

All buildings are fitted with energy efficient LED lighting.

**Evidence of success:**

These awards are recognitions towards institutions efforts in environmental protection.

Practices of

1. Campus is a example for excellent use of renewable energy, water recycling system, appropriate disposal of waste, appreciation by all stake holders for the maintenance of clean and green environment.
2. Organic waste produces compost which is used for the gardens and plantation in 100 acres campus.
3. Treated sewage after chlorination is pumped for gardening in hospital covering 6 acres and University campus covering 15 acres. Treated waste water is used for flush tanks.
4. Rain water harvesting units are placed in multiple areas of campus.
5. The clean green campus of the Institution that provides excellent educational ambience is appreciated by a number of dignitaries who have visited the campus, some of the prominent include Shri. Venkaiah Naiduji, Hon. Vice-President of India, Shri. Narendra Modiji, Hon. Prime Minister, Shri. Rajnath Singhji, Hon. Defence Minister, Shri. Amit Shahji, Hon. Home Minister. Smt. Maneka Gandhi, Smt. Mridula Sinha, Hon. Governor of Goa, Smt. Sudha Murthy and many more.
6. As a result of these practices, the institution was awarded **3rd and 4th position** in **‘All India Swachhta Campus Ranking’** of Higher Educational Institutions in **‘University Category’ by the MHRD, Government of India** in the 2018 & 2017 respectively.

**Resources required:**

* Monthly expenditure for waste disposal to Pollution Control Board
* Paper shredding machine; Plastic shredding machine
* Development of vermicompost sheds
* Instalment of liquid waste disposal units
* Provided LED lamps for all the buildings
* Change of tap water dispensing through aerators
* Addition appointment of manpower for maintenance.

**7. Notes (optional):**

The Institution has been following best practices for environmental protection and sustainable growth. These best practices have not only reduced our dependence on conventional energy sources but made the campus beautiful and environmental friendly and with a good educational ambience. The students greatly appreciate the educational environment and enjoy their stay on campus.