

# **Malaviya National Institute of Technology Jaipur**

## **Centre for Energy and Environment**

### **Syllabus for written examination - PhD Admission 2021 (Even Semester)**

Introduction to energy and environment, National and International energy scenario, energy and development linkage, indoor environmental quality. Fundamentals of Solar photovoltaic, Wind Energy Systems, Biomass energy, Solar thermal, solar passive systems and Applications, Energy Storage Technologies, Hydrogen energy, Fuel cells, Hybrid energy storage systems, Electric Vehicles, Energy conservation and management, Energy audit, renewable energy policies, Energy sector regulations, Environmental policy, building codes, net zero energy buildings, Power system operation and planning, Energy economics, Energy markets, Issues of RE integration, grid flexibility, demand side management, Ancillary Services and smart grid systems.