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MED-003

**POST GRADUATE DIPLOMA IN
ENVIRONMENT AND SUSTAINABLE
DEVELOPMENT / MASTER OF SCIENCE
(RENEWABLE ENERGY AND
ENVIRONMENT) (PGDESD/MSCRWEE)**

Term-End Examination

December, 2025

MED-003 : ENERGY AND ENVIRONMENT

Time : 2 Hours

Maximum Marks : 50

Note : *Question No. 1 is compulsory. Attempt any **three** questions from Question Nos. 2 to 6. Write each answer in about **250 words.***

A-404/MED-003

P. T. O.

1. Attempt all the parts :
 - (a) Discuss the key objectives of the sustainable energy policy of a nation. 5
 - (b) Discuss energy infrastructure planning in the context of site planning and building design in an urban area. 5
 - (c) What are the key challenges in providing sustainable energy for the urban poor ? 5
 - (d) Briefly discuss the demand-side and supply-side approaches to the energy problem. 5
2. (a) Explain the role of any *two* renewable energy resources in meeting the energy needs of India. 5
- (b) Analyze the impact of liberalization of the energy sector on the people of developing countries. 5

3. (a) Define the term 'Biomass'. Discuss the *three* main categories of raw feedstock materials for biomass technologies. 5
- (b) What is the importance of governance and finance for sustainable energy ? 5
4. (a) Discuss the role of resources in the sustainable carrying capacity of the Earth. 5
- (b) Discuss the energy-related activities and services provided by the commercial sector in India. 5
5. (a) List any *five* benefits of solar photovoltaic system utilization in India. 5
- (b) Discuss the major environmental issues associated with the development of hydropower projects. 5

6. Write short notes on any *two* of the following: 2×5=10

- (a) Energy efficiency in buildings
- (b) Principle of electricity generation in a nuclear power plant
- (c) Wind energy and its applications
- (d) Various scenarios of future energy use

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