

No. of Printed Pages : 3 **MED-003/MED-009**

**POST GRADUATE DIPLOMA IN
ENVIRONMENT AND
SUSTAINABLE DEVELOPMENT/
M. SC. IN RENEWABLE ENERGY
AND ENVIRONMENT
(PGDESD/MSCRWEE)**

Term-End Examination

June, 2025

**MED-003/MED-009 : 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.*

1. (a) Outline the main features of the 'No-regrets' policy. 5

- (b) Explain with a suitable diagram how electricity is produced in a coal-based thermal power plant. 5
 - (c) Discuss the North-South debate related to energy subsidies. 5
 - (d) Elaborate on the highlights of the major United Nations Conferences held during the 1990s with respect to energy. 5
2. (a) Describe the applications of biomass technologies based on direct combustion. 5
- (b) Discuss the working of a wind energy system with a labelled diagram. 5
3. (a) Describe how fuel switching to natural gas from coal-based power production technologies helps in cleaning up the environment. 5
- (b) Discuss the poverty of rural India with respect to the health and nutrition effects of energy scarcity. 5

4. (a) “Population growth and industrialisation are the factors driving the worldwide energy demand.” Discuss. 5
- (b) Discuss the global impact of fossil fuel consumption on CO₂ emissions. 5
5. (a) Explain the factors responsible for increased energy demand and its response to price. 5
- (b) Discuss how the supply and demand side energy efficiency can be improved in your workplace. 5
6. Write short notes on any *two* of the following : 2×5=10
- (a) Rebound effect in the supply of energy
- (b) Environmental issues of hydropower
- (c) Role of state government in the energy planning process
- (d) Types of solar thermal collectors

× × × × ×