No. of Printed Pages : 3

# **MED-003**

# POST GRADUATE DIPLOMA IN ENVIRONMENT AND SUSTAINABLE DEVELOPMENT

#### **Term-End Examination**

#### June, 2024

### **MED-003 : ENERGY AND ENVIRONMENT**

Time : 2 Hours Maximum Marks : 50

Note: Question no. 1 is compulsory. Attempt any three question from questions no. 2 to 6. Support your answer with suitable examples, wherever necessary.

Answer all the parts in about 200 words each.

- 1. (a) List any five good governance actions designed to mobilise financial investment in energy sector.  $4 \times 5 = 20$ 
  - (b) With suitable diagram, explain how electricity is produced in coal-based thermal power plant.

[2] MED-003

- (c) What is clean development mechanism ? List the advantages of CDM.
- (d) Discuss the main considerations related to technology transfer.
- (a) Explain the term biomass and give examples. Discuss the three main categories of raw feedstock materials for biomass technologies.

5

- (b) Discuss the limitations of a small hydropower plant.5
- 3. (a) Discuss the key challenges for the policy makers to provide sustainable energy for urban poor.
  - (b) Analyse the energy demand due to growing industrialisation.
- 4. (a) Analyse the energy related activities and services of commercial sector in India with the increasing energy demand.
  - (b) Briefly discuss the demand-side and supplyside approaches to the energy related issues.

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## [3] MED-003

- 5. (a) Explain how fuel switching helps in cleaning up the environment.
  - (b) Discuss the major environmental issues associated with the development of hydropower projects.
- 6. Write short notes on any **two** of the following.

 $2 \times 5 = 10$ 

- (a) Applications of solar photovoltaic technology.
- (b) Key concerns for a sustainable energy policy in India.
- (c) Role of state government in energy planning process.
- (d) Energy efficiency in buildings.
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