

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

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

**Term-End Examination**

**December, 2022**

**MED-003/MED-009 : ENERGY AND ENVIRONMENT**

*Time : 2 Hours*

*Maximum Marks : 50*

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**Note : Attempt any *five* questions.**

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1. (a) List any *three* measures to save energy while using refrigerators and washing machines. 5
- (b) List the key objectives of energy policy. 5
2. (a) Explain the working of a fixed dome biogas plant with a suitable diagram. 5

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- (b) Discuss any *two* major issues associated with the development of hydropower projects. 5
3. (a) Define different types of carrying capacity of an ecosystem. Discuss the role and types of resources for a sustainable carrying capacity. 2+3
- (b) What factors need to be considered for energy economics ? Explain the relation of energy demand with price elasticity and inelasticity. 5
4. (a) What is energy planning ? Give any *two* aims and any *two* benefits of energy planning. 1+4
- (b) What are the activities involving energy use in rural India ? Explain the challenges involved. 5
5. (a) Discuss the use of energy in commercial and agricultural sectors in India. 5

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- (b) Describe in about **250** words the *three* main stages of oil production at a given reservoir with a suitable diagram. 5
6. (a) Discuss the need of fuel switching for sustainable energy use in future. 5
- (b) List the criteria for site selection for generating wind energy. What are the applications of wind energy ? 5
7. (a) Elaborate on need and benefits of carbon taxation. 5
- (b) Discuss any *two* broad goals for energy sustainability defined by World Energy Council. 5
8. Write short notes on the following : 2×5=10
- (a) Solar Thermal Power Generation
- (b) Clean Development Mechanism (CDM)

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