

**CERTIFICATE IN ENERGY  
TECHNOLOGY AND MANAGEMENT  
(CETM)**

**Term-End Examination  
December, 2025**

**OEY-001 : ENERGY RESOURCES AND  
CONVERSION PROCESSES**

*Time : 3 Hours*

*Maximum Marks : 70*

---

**Note :** (i) Answer any **seven** questions.

(ii) All questions carry equal marks.

---

---

1. Define the following : 5×2=10
- (a) Calorific value
  - (b) Specific heat
  - (c) Hydraulic Retention Time
  - (d) pH factor
  - (e) High Grade Energy

[ 2 ]

2. Describe briefly the different forms of renewable energy. 10
3. Define 'Fuel'. Discuss the advantages of gaseous fuels over solid fuels. 10
4. What are biofuels ? Discuss their importance in the Indian environment. 10
5. What is a solar collector ? Differentiate among low, medium and high temperature solar collectors. 10
6. How is coal classified ? Discuss in detail the characteristics of lignite and anthracite. 10
7. Name and describe the *two* different types of wind machines commonly in use. 10
8. Explain the principle of tidal energy and enlist its advantages and disadvantages. 10
9. Describe the process of photoelectric energy conversion with a neat diagram. 10

x x x x x