

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

Term-End Examination

June, 2022

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

Time : 3 hours

Maximum Marks : 70

Note : Answer any **seven** questions. All questions carry equal marks. Use of scientific calculator is permitted.

1. Describe briefly the different forms of renewable energy. 10
2. How do fossil fuels impact the greenhouse effect ? Discuss in detail and state the Kyoto Protocol. 10
3. What are biofuels ? Discuss their importance in the Indian environment. 10

4. (a) What are the materials that can be fed to biogas digesters ? 5
- (b) Explain briefly the process occurring in the digester and the material coming out of it, along with biogas. 5
5. Discuss a water pumping windmill along with its advantages and limitations. 10
6. Discuss the advantages of gaseous fuels over solid and liquid fuels. 10
7. Explain the construction and working of a fuel cell along with its components. 10
8. Write about the environmental impacts of nuclear energy and hydroelectric power plant. 10
9. Write short notes on the following : 2×5=10
- (a) Solar Collector
- (b) Photoelectric Effect
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