

CERTIFICATE IN ENERGY TECHNOLOGY AND MANAGEMENT (CETM)

Term-End Examination

December, 2019

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. Describe in detail any three conventional energy resources. 10
2. How is coal classified ? Discuss in detail the characteristics of lignite and anthracite. 10
3. What is a solar collector ? Differentiate between low, medium and high temperature solar collectors. 10
4. How is biogas produced ? Describe various components of a biogas production plant. 10
5. Explain the principle of tidal energy and enlist its advantages and disadvantages. 10
6. Describe the process of photoelectric energy conversion with a neat diagram. 10
7. Name and describe two different types of wind machines generally used. 10
8. Explain 'first law of thermodynamics'. Discuss energy conversion processes in an automobile. 10