

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

00701

**Term-End Examination**

**June, 2019**

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

*Time : 3 hours*

*Maximum Marks : 70*

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

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1. Describe in detail, the three types of thermal solar collectors. 10
  
2. Discuss in detail, all types of classification of biomass. 10
  
3. How do 'hydraulic retention time' and 'temperature' factors affect biogas production ? Explain. 10

4. Discuss the impact of biomass on the environment. 10
  5. Explain the principle on which wind machines work. Name the types of wind machines with suitable sketches. 10
  6. Describe the working and construction of a fuel cell. 10
  7. Discuss in detail, the scenario of animal energy in India. 10
  8. Elaborate the concept of geothermal energy and its applications. 10
  9. (a) Name the materials which can be used as feed for biogas digesters. 5  
(b) Explain the stages involved in biogas production. 5
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