

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

Term-End Examination

December, 2021

**OEY-003 : ENERGY MANAGEMENT :
AUDIT AND CONSERVATION**

Time : 3 hours

Maximum Marks : 70

Note : Attempt any **five** questions. Each question carries equal marks. Assume suitable data, if any missing.

1. (a) Describe the detailed energy audit with suitable example. 7
- (b) Enlist various temperature measuring devices. Explain any one of them in detail. 7
2. (a) Explain the various steps followed for home energy audit. 7
- (b) Classify the various energy conservation measures. Explain them briefly. 7
3. (a) Explain the importance of energy audit and conservation in rural energy planning. 7
- (b) Identify the energy conservation measures that are important in a wire manufacturing company. 7

4. (a) Discuss any two energy efficient devices in detail. 7
- (b) Explain present worth and future worth factor and derive the equation for both. 7
5. (a) Discuss the purpose of awareness and training programmes in Integrated Rural Energy Planning (IREP). 7
- (b) Discuss the present and future energy scenario with IREP. 7
6. Explain the various reasons for increased emphasis on energy conservation. 14
7. Write short notes on any **four** of the following : $4 \times 3 \frac{1}{2} = 14$
- (a) Sankey Diagram
- (b) Energy Conservation in Agricultural Sector
- (c) Animal Power
- (d) Desert Cooler
- (e) Power Factor Improvement
- (f) Energy Balance of Boiler
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