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**OEY-003**

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

**Term-End Examination**

**June, 2020**

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

*Time : 3 Hours*

*Maximum Marks : 70*

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*Note : (i) Attempt any seven questions. All  
questions carry equal marks.*

*(ii) Use of scientific calculator is permitted.*

*(iii) Assume suitable data, if missing.*

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1. What is the concept and purpose of Energy Audit ? List the information to be collected during detailed energy audit.
2. Explain good housekeeping measures important for energy conservation at home.

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3. Classify energy conservation measures. How does tuning of boiler help in energy conservation ?
4. Discuss the components of material and energy balance with suitable example.
5. Identify the energy conservation measures in transport sector.
6. There are two energy conservation measures as described below :

	Equipment cost	Payback
Energy conservation measure 1	₹ 10,000	₹ 12,000 in two years
Energy conservation measure 2	₹ 7,000	₹ 4,000 each year for two years

If the interest rate is 8%, determine the best alternative.

7. Explain any *two* devices based on PV technology.
8. Explain the survey methodology. What are its limitations?
9. Write short notes on any *four* of the following :
  - (a) Optimal mix of renewable energy technologies
  - (b) Thermal energy balance
  - (c) Power factor
  - (d) Combustion analyser
  - (e) Wattmeter
  - (f) Desert coolers