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OEY-003

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

**Term-End Examination
December, 2022**

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

Time : 3 Hours

Maximum Marks : 70

Note : (i) *Attempt any five questions.*

(ii) *All questions carry equal marks.*

1. (a) Explain the principles of energy management. 7
- (b) Distinguish between the preliminary and detailed energy audit with the help of a suitable example. 7
2. (a) Explain the utility of energy audit instruments. 7

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- (b) Describe the working principles of manometer. Discuss, any *one* type of manometer in detail. 7
3. (a) Enlist any *seven* housekeeping measures to conserve energy. 7
- (b) Discuss the working principle of desert cooler. 7
4. Identify the energy conservation measures in pharmaceutical industry. 14
5. (a) Enlist the areas where energy could be conserved in rural industries. 7
- (b) Is gasifier based engine pump an economical option to conserve energy in rural areas ? Justify your answer. 7
6. (a) What is life cycle cost ? Explain its component in brief. 7
- (b) Explain the importance and limitations of survey data in energy planning. 7

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7. Write short notes on any *two* of the following :

$$7 \times 2 = 14$$

- (a) Present and future energy scenario with IREP
- (b) Sonkey diagram
- (c) Future worth method
- (d) Animal power