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OEY-003

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

Term-End Examination

June, 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 audit. 7
(b) Explain the procedure of energy audit. 7
2. (a) Write the name of various temperature measuring devices used in energy audit. Explain any **two** of them. 7
(b) What is power factor ? How do we improve power factor ? 7

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3. Identify the energy conservation measures in a steel industry. How can these measures be classified ? 14
4. (a) Discuss briefly the thermal energy balance. 7
(b) Describe the process of evaporative cooling in detail. 7
5. (a) Derive an expression for the future value of an asset considering the inflation rate. 7
(b) Enlist the various policies related to energy conservation that could be advantageous for the rural areas. 7
6. (a) Identify the energy conservation measures in agricultural sector. 7
(b) How the energy could be conserved while using air-conditioner ? 7
7. (a) Explain the advantages of optimal mix of technology with the help of a suitable diagram. 7

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- (b) How the training and awareness programmes may help in energy conservation ? Explain.

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

2×7=14

- (a) Sankey diagram
- (b) Good housekeeping measures for energy conservation
- (c) Manometer
- (d) Long-term energy conservation measures in Vanaspati industry