CERTIFICATE IN ENERGY TECHNOLOGY AND MANAGEMENT (CETM)

00423

Term-End Examination June, 2018

OEY-003: ENERGY MANAGEMENT: AUDIT AND CONSERVATION

Maximum Marks: 70 Time: 3 hours **Note:** Attempt all **ten** questions. All questions carry equal marks. Use of scientific calculator is permitted. Explain the concept and purpose of energy audit 1. with suitable examples. 7 Discuss the utility of energy audit instruments 2. for conducting energy audit. 7 Describe the basic principles of classification of 3. energy conservation measures. 7

4.	100 numbers of fused 60 watt Incandescent Light	
	Bulbs (ILB) are replaced by same number of	
	12 watt CFL instead of new ILB. Calculate the	
	annual 'kWh' saved for 5000 hours of operation	
	per year.	7
5.	Discuss the energy conservation measures in refrigerant compressors.	7
6.	Explain various housekeeping measures in order to conserve energy.	7
7.	How do you calculate the life cycle cost of solar PV power?	7
8.	Discuss waste heat recovery from flue gases.	7
9.	Explain in brief the energy audit of a pharmaceutical industry.	7
10.	Discuss the energy conservation measures in steel industry.	7