Seat No.:			
Subjection Times Instruction 1.	ect N : 10: ructi Atte Mal	GUJARAT TECHNOLOGICAL UNIVERSITY M.E –II st SEMESTER–EXAMINATION – JULY- 2012 ode: 1721107 Date: 14/0′ lame: Energy Conservation and Management (I.D.EII) 230 am – 13:00 pm Total Management all questions. lempt all questions. ke suitable assumptions wherever necessary. ares to the right indicate full marks.	
Q.1	(a)	Explain importance and role of energy management.	07
	(b)	Explain energy conservations in I. C. Engine.	07
Q.2	(a)	Explain principles of energy conservation.	07
	(b)	Discuss opportunities of waste heat recovery in case of large capacity steam generator. OR	07
	(b)	Explain the factors that influence thermal performance of any building.	07
Q.3	(a)	Discuss use of insulating materials for hot as well as cold insulation.	07
	(b)	Write short note on co-generation of process.	07
		OR	
Q.3	(a)	Discuss energy conservation opportunities in case of HVAC systems.	07
	(b)	Discuss the need for electrical load management.	07
Q.4	(a)	Explain in detail about energy audit.	07
	(b)	Discuss energy conservation opportunities in case of air compressors used in industry.	07
		OR	
Q.4	(a)	Explain any two methods for energy storage.	07
	(b)	Explain energy management strategies for industry.	07
Q.5	(a)	How losses occurring in electrical power supply system can be reduced?	07
	(b)	Explain the following: (i) Power factor	07

OR

(a) Explain energy conservation opportunities for D.G. sets used in 07

(b) Explain energy conservation opportunities in case of furnaces.

(ii)

industry.

Q.5

Payback period

07