Seat No.:	Enrolment No
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GUJARAT TECHNOLOGICAL UNIVERSITY

ME - SEMESTER- I (OLD course) • EXAMINATION - SUMMER 2015

Subject Code: 710706 Subject Name: ENERGY MANAGEMENT			Date:15/05/2015	
Tir		0:30 am to 1:00 pm Total Marks: 7	70	
		Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q.1	(a) (b)	Explain the approach for energy saving in Engineering College campus. Explain the importance of quality power.	07 07	
Q.2	(a)	What is importance of Power Factor Improvement and what is most economical Power Factor?	07	
	(b)	What do you mean by energy efficient motors? Give its advantages. OR	07	
	(b)	Explain variable frequency drive.	07	
Q.3	(a) (b)	Give differences between preliminary and detailed energy audit. Name various instruments used for energy audit and explain any one in detail. OR	07 07	
Q.3	(a) (b)	Explain the importance of demand side management. Discuss good practices in lighting with replacing conventional system.	07 07	
Q.4	(a)	What do you mean by cogeneration and where does cogeneration find its application?	07	
	(b)	Explain the factors affecting cooling tower performance. OR	07	
Q.4	(a) (b)	Explain the energy conservation opportunities in a pumping system. Discuss the factors that affect the energy efficiency in air compressor.	07 07	
Q.5	(a) (b)	Explain the energy conservation by soft starter. Discuss how the overall efficiency of Thermal Power Station can be improved.	07 07	
0.5	(-)	OR	07	
Q.5	(a) (b)	List down the duties and responsibility of an energy manager in industry. Explain electrical utility structure in deregulated system.	07 07	
