Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

ME – SEMESTER II (NEW) – • EXAMINATION – SUMMER 2016

Subject Code: 2723915 **Date: 31/05/2016**

Subject Name: Energy Audit and Management

Time:10:30 am to 01:00 pm **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Write short note on Efficient report writing and contents for the final report after energy Auditing.	**07**
	(b)	Write a short note on instruments needed for energy audit	**07**
Q.2	**(a)**	What are the types of lamps used in lighting system? Write down their features with typical applications.	**07**
	(b)	Explain in detail SSM (Supply side Management) and (Demand side Management).	**07**
		OR	
	(b)	Define following in context of Lightning. 1)Lumen 2)Lux 3)Installed load Efficiency 4)Lamp circuit Efficiency 5)Color Rendering Index(CRI)	**07**
Q.3	**(a)**	Discuss waste heat recovering options.	**07**
	(b)	Explain economic thickness of insulation.	**07**
		OR	
Q.3	**(a)**	Discuss control of furnace draft.	**07**
	(b)	Explain the mechanism of fluidized bed combustion.	**07**
Q.4	**(a)**	Write a short note on Energy Saving in Pumps & Pumping Systems.	**07**
	(b)	Discuss in brief cooling tower types and performance evaluation.	**07**
		OR	
Q.4	**(a)**	Explain in detail the working of Thermodynamic and Thermostatic type of steam trap?	**07**
	(b)	Give check list of energy conservation in refrigeration.	**07**
Q.5	**(a)**	Classify Cogeneration systems and explain in detail with relative merits and demerits.	**07**
	(b)	Write a short note on benefits of power quality analysis.	**07**
		OR	
Q.5	**(a)**	Write a short note on Energy Management Programs and EMIS (Energy management Information system).	**07**
	(b)	Explain performance evaluation of Air conditioner system.	**07**

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