Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

M.E –IIst SEMESTER–EXAMINATION – JULY- 2012

Subject code: 1722104 **Date: 14/07/2012**

Subject Name: Energy Conservation and Management

Time: 10:30 am – 13:00 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)**	Discuss Energy Management Techniques.	**07**
	(b)	What is the trend of power development in India in future?	**07**
Q.2	**(a)**	Discuss different methods used to improve the performance of Thermal Power Plants.	**07**
	(b)	Explain how power factor improvement helps to save energy.	**07**
		OR	
	(b)	Explain how Green House concept saves energy.	**07**
Q.3	**(a)**	Explain steps in Energy Audit.	**07**
	(b)	Explain Cogeneration Power Plant.	**07**
		OR	
Q.3	**(a)**	Discuss electricity saving techniques by category of end use.	**07**
	(b)	What is the role Energy Management?	**07**
Q.4	**(a)**	Explain with neat sketch various methods used for combustion of pulverized coal.	**07**
	(b)	What are the advantages of Hydro Power Plant?	**07**
		OR	
Q.4	**(a)**	With neat sketch explain Fluidized Bed Combustion.	**07**
Q.4	**(b)**	Discuss various factors affecting thermal performance of buildings.	**07**
Q.5	**(a)**	Discuss Wind Energy – As source of Energy.	**07**
	(b)	Discuss Solar Energy.	**07**
		OR	
Q.5	**(a)**	With neat sketch explain Biogas plant.	**07**
	(b)	Define Work, Power and Energy. Give unit of Each.	**07**

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