Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

ME - SEMESTER– II(New course) • EXAMINATION (Remedial) – WINTER- 2015

Subject Code: 2721008 **Date: 14/12/2015**

Subject Name: Energy Economics & management

Time:2:30 pm to 5:00 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 the current energy scenario of India.	**07**
	(b)	Discuss principles and need of energy management.	**07**
Q.2	**(a)**	Explain various methods to find the furnace efficiency.	**07**
	(b)	Write short note on present worth analysis.	**07**
		OR	
	(b)	Explain method of calculating payback period.	**07**
Q.3	**(a)**	Explain cumulative and life cycle savings.	**07**
	(b)	Write short note on energy security.	**07**
		OR	
Q.3	**(a)**	Discuss the sources of waste heat and its potential applications.	**07**
	(b)	Make comparision between Internal Rate of Return and Net Present Value method.	**07**
Q.4	**(a)**	With a neat sketch explain gas turbine co-generation plant.	**07**
	(b)	Write short note on solar energy applications.	**07**
		OR	
Q.4	**(a)**	Give tips for energy saving in pumps.	**07**
	(b)	Give tips for energy saving in compressed air systems.	**07**
Q.5	**(a)**	Explain energy cost and energy performance.	**07**
	(b)	Give energy saving measures in lighting systems.	**07**
		OR	
Q.5	**(a)**	Give tips for energy saving in steam systems.	**07**
	(b)	Give tips for energy saving in refrigerator and air conditioners.	**07**

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