Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

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

Subject Code: 2720725 **Date: 14/12/2015**

Subject Name: Economics of Energy Generation & Supply

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)**	Define following terms. (i) Diversity factor (ii) Load factor (iii) Plant Capacity factor (iv) Plant use factor (v) Demand factor (vi) Max. demand (vii) Connected load	**07**
	(b)	Explain load curve. Give its important.	**07**
Q.2	**(a)**	Explain the econometric approach for energy demand forecasting and difficulties associated with it.	**07**
	(b)	Explain base and peak load on power station.	**07**
		OR	
	(b)	Explain energy security.	**07**
Q.3	**(a)**	Explain three stage decision making process on energy demand.	**07**
	(b)	Explain different energy demand forecasting techniques.	**07**
		OR	
Q.3	**(a)**	Explain direct & indirect load control.	**07**
	(b)	Explain demand-side management	**07**
Q.4	**(a)**	Explain supply forecasting.	**07**
	(b)	What do you mean by End use method of forecasting? Explain its features.	**07**
		OR	
Q.4	**(a)**	Explain Economic Dispatch.	**07**
	(b)	Explain Unit Commitment.	**07**
Q.5	**(a)**	Explain various technologies of Renewable Energy Generation.	**07**
	(b)	Explain Incremental cost method.	**07**
		OR	
Q.5	**(a)**	Discuss various drivers of Renewable Energy.	**07**
	(b)	Define hot reserve, cold reserve, quick start reserve and spinning reserve.	**07**

****