Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER– 1st / 2nd EXAMINATION – SUMMER 2016

Subject Code: TEE010 **Date:14/06/2016**

Subject Name: Renewable Energy

Time:02:30 PM to 5:00 PM **Total Marks: 70**

Instructions:

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

Q.1	**(a)**	Discuss advantages and disadvantages of solar energy .	**07**
	(b)	Explain operating principle of solar photovoltaic system .	**07**
Q.2	**(a)**	Explain OTEC power plant.	**07**
	(b)	Explain advantages and disadvantages of wind energy. Also write applications of wind energy.	**07**
Q.3	**(a)**	Compare conventional energy sources with non conventional energy sources.	**07**
	(b)	Explain tidal energy with its advantages and applications	**07**
Q.4	**(a)**	Explain site selection procedure for wind mills for power generation	**07**
	(b)	Compare solar energy with wind energy with respect to electrical power generation	**07**
Q.5	**(a)**	Explain operating principle and components of microhydel power plant.	**07**
	(b)	Explain the components of a microhydel power plant.	**07**
Q.6	**(a)**	Explain wood gassifier with its advantages.	**07**
	(b)	Explain applications of bio-conversion system.	**07**
Q.7	**(a)**	Explain solar thermal systems as various aspects.	**07**
	(b)	What is the means of renewable energy source? Compare various renewable energy Sources.	**07**

****