Seat No.: _____ **Enrolment No._____**

GUJARAT TECHNOLOGICAL UNIVERSITY

BE (SPFU) - SEMESTER–I-II (SPFU) - EXAMINATION – SUMMER 2017

Subject Code: TEE008 **Date: 17/06/2017**

Subject Name: ALTERNATIVE ENERGY SYSTEM

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)**	What is Renewable Energy? Explain fossil fuel system.	**07**
	(b	Different between Non Renewable and Renewable Energy.	**07**
Q.2	**(a)**	Explain Radiation Measurement System.	**07**
	(b	Explain application of solar photovoltaic systems.	**07**
		OR	
	(b	Explain any one types of Turbines use in Microhydel power plant.	**07**
Q.3	**(a)**	What is Solar Radiation? Explain application of Solar Thermal Systems.	**07**
	(b	Site Selection Criteria for set up Wind Mill Power Plant.	**07**
		OR	
Q.3	**(a)**	Describe operating principle, construction and working of Bio Gas Plant.	**07**
	(b	Write short note on Solar Photovoltaic systems.	**07**
Q.4	**(a)**	Advantage of Renewable Energy over Non Renewable Energy.	**07**
	(b	Scenario of Renewable Energy System in India.	**07**
		OR	
Q.4	**(a)**	Explain working of each component of windmill power plant.	**07**
	(b	Explain types of Windmill with neat sketch.	**07**
Q.5	**(a)**	Explain application of Biomass.	**07**
	(b	How Hybrid Fuel Cells works? Explain it.	**07**
		OR	
Q.5	**(a)**	Explain Life Cycle Costing.	**07**
	(b	Differentiate LCC between Wind system and Microhydel System.	**07**

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