Seat No.:	Enrolment No.
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GUJARAT TECHNOLOGICAL UNIVERSITY ME - SEMESTER-II EXAMINATION – SUMMER 2015

Subject Code: 2723007 Date: 03/06/2 Subject Name: Energy Technology Time: 02:30 PM to 05:00 PM Total Marks:		Code: 2723007 Date: 03/06/2015	Date: 03/06/2015	
Inst		ns: Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q.1	(a) (b)	Discuss impact of energy on economy. Explain energy audit. How it helps in energy strategy and planning?	07 07	
Q.2	(a) (b)	Give classification of solar concentrating collectors. Also explain the compound parabolic concentrating briefly. Write a brief note on effect of various parameters on performance of flat plate collectors.	07 07	
		OR		
	(b)	Explain solar energy and solar constant.	07	
Q.3	(a)	Describe with a neat sketch the working of wind energy conversion system (WECS) with main components.	07	
	(b)	Explain analysis of coal & its calorific value. OR	07	
Q.3	(a)	With the help of a diagram (a) Discuss the power versus wind speed characteristic of a wind turbine (b) Discuss Cp versus to tip speed ratio.	07	
	(b)	Explain Fossil Fuel methods for production of Hydrogen.	07	
Q.4	(a)	Explain factors affecting on Biogas Generation.	07	
	(b)	Explain the classification of Biogas plants in brief. OR	07	
Q.4	(a) (b)	Compare Floating drum and Fixed dome type Biogas plants. Write a short note on Hydrogen-Oxygen Fuel cell.	07 07	
Q.5	(a) (b)	Write a short note on Molten Carbonate Cell. Explain Refining and Enrichment for nuclear fuel. OR	07 07	
Q.5	(a) (b)	Explain Storage & Transportation for nuclear fuel. With the help of block diagram explain open cycle Magneto Hydro Dynamic (MHD) power generation system.	07 07	
