Seat No.:	Enrolment No.
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GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V • EXAMINATION – SUMMER • 2014

Sul	bject	Code: 150801 Date: 13-06-2014 Name: Electrical Power Engineering	
Time: 10.30 am - 01.00 pm Instructions: Total Marks: 7			
IIISt	1. 2.		
Q.1	(a) (b)	State factors affecting selection of site and location of Nuclear power plant. Draw schematic arrangement of Thermal power plant. Also state function of each block.	07 07
Q.2	(a) (b)	Classify the Underground cables. Also describe the general construction of an underground cable with neat sketch. State different methods of power factor improvement. Explain any one in	07 07
	(D)	details.	07
	(b)	OR State the factor affecting on site selection of hydro power station. Also write the advantages and disadvantages of hydro power plant.	07
Q.3	(a) (b)	Derive the ABCD parameter for Nominal Π medium transmission line. Explain single line diagram of 33 KV / 11 KV substations. OR	07 07
Q.3	(a) (b)	Explain different equipments used in substations with its symbols. State different methods to improve String efficiency.	07 07
Q.4	(a) (b)	Write a note on Tap changing Transformer (ON load). State and explain different types of tariff. OR	07 07
Q.4	(a) (b)	Describe briefly the different types of A.C. distributors. What is Corona? Explain its advantages and disadvantages. Also state factors affecting it.	07 07
Q.5	(a) (b)	Explain (1) Diversity factor (2) Plant capacity factor (3) Load factor. Explain briefly different types of insulators used in power system. OR	07 07
Q.5	(a) (b)	State the types of unsymmetrical fault analysis & explain any one in detail. Explain FACTS devices.	07 07
