Seat No.:	Enrolment No.

Subject Name: ELECTRICAL POWER GENERATION

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-IV (New) EXAMINATION - WINTER 2015 Subject Code:2140908

Date:30/12/2015

		2:30pm to 5:00pm Total Marks: 7	'0
Ins	2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a)	Enlist different types of nuclear reactors. Explain working of pressurized water nuclear reactor with suitable diagram.	07
	(b)	· · · · · · · · · · · · · · · · · · ·	02 05
Q.2	(a) (b)	1 7 1	07 07
	(b)	Determine load factor at which the cost of supplying a unit of electricity from a	02 05
Q.3	(a)	1 1	07
	(b)	diameter of turbine rotor. Explain concept of green building using solar energy. OR	07
Q.3	(a) (b)	Explain various components of wind energy conversion system with diagram.	07 07
Q.4	(a)	Explain in brief geared, direct drive and hybrid Wind Power Plant and give their comparison.	07
	(b)	•	07
Q.4	(a) (b)	Enlist different types tarrif and explain any three types of tariff.	07 07
Q.5	(a)	Explain functions of the following in relation to nuclear power station: (i) Control rod (ii) Moderator (iii) Coolant (iv) Heat exchanger	07
	(b)	Enlist various equipments used in substation & explain function of each in brief.	07
0.5	(6)	OR Explain are suppression soil conthing in detail	07
Q.5	(a) (b)		07 07
