Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

DIPLOMA ENGINEERING – SEMESTER – IV-EXAMINATION – WINTER 2015

Subject Code: 3345503 **Date: 04/12/2015**

Subject Name: Plant Equipment Erection & Maintenance

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.**
4. **Each question carry equal marks (14 marks)**

Q.1	(a)	Prepare Classification chart of different types of Plants. Draw Product type plant lay out.	**07**
	(b)	Draw neat sketch of thermal Power Plant. State functions of each element.	**07**
Q.2	(a)	Describe meaning of the term IBR. State factors affecting selection of Boiler.	**07**
	(b)	Draw neat sketch of Cochran Boiler. State functions of each element.	**07**
		OR	
	(b)	Draw neat sketch of Heat Exchanger. State functions of each element.	**07**
Q.3	(a)	Draw neat sketch of Centrifugal Pump. Prepare classification chart form of Pumps.	**07**
	(b)	Define the term "Valve". State its function and application.	**07**
		OR	
Q.3	(a)	Describe working of Reciprocating Compressor with neat sketch.	**07**
	(b)	Draw neat sketch of Globe Valve. State its functions and application.	**07**
Q.4	(a)	State and explain factors affecting selection of Material Handling Equipment.	**07**
	(b)	Describe Working of Agitator with neat sketch.	**07**
		OR	
Q. 4	(a)	Defferntiate between Fan and Blower with neat sketch.	**07**
	(b)	Describe Filter and State its functions with neat sketch.	**07**
Q.5	(a)	Find Center of Gravity for the T-section having following dimensions: Flange:- 60mm×40mm Web :-70mm×30mm	**07**
	(b)	Define the term "Maintenance". List different types of Maintenance. State functions of Maintenance Department.	**07**
		OR	
Q.5	(a)	State meaning of the term "Corrosion". Describe Methods of its Prevention.	**07**
	(b)	Describe installation procedure for a Machine/Equipment with neat sketch.	**07**

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