

**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: **07**  
Flange:- 60mm×40mm  
Web :-70mm×30mm  
(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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