

GUJARAT TECHNOLOGICAL UNIVERSITY**Diploma Engineering - SEMESTER-IV • EXAMINATION – SUMMER • 2014****Subject Code: 3345503****Date: 29-05-2014****Subject Name: Plant Equipment Erection and Maintenance****Time: 10:30 am - 01:00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. English version is considered to be Authentic.

- Q.1** (a) Prepare Classification chart of different types of Plants. Draw Product type plant lay out. **07**
(b) Describe Thermal Power Plant with schematic diagram. **07**
- Q.2** (a) Describe meaning of the term “IBR”. Explain working of Cochran Boiler with neat sketch. **07**
(b) State and Explain factors affecting selection of Boiler. **07**
OR
(b) Describe functions of Heat Exchanger with its constructional figure. **07**
- Q.3** (a) Define the term “Pump”. Prepare its classification chart. **07**
(b) Define the term “Valve”. State its function and application. **07**
OR
- Q.3** (a) Describe working of Centrifugal Pump with neat sketch. **07**
(b) Describe working of Reciprocating Compressor with neat sketch. **07**
- Q.4** (a) Differentiate between Fan and Blower with neat sketch. **07**
(b) State and explain factors affecting selection of Material Handling Equipment. **07**
OR
- Q. 4** (a) Explain Working of Agitator with neat sketch. **07**
(b) Draw neat sketch of Filter and State its functions. **07**
- Q.5** (a) Find Center of Gravity for the T-section having following dimensions:
Flange:- 40mm×20mm
Web :-50mm×20mm **07**
(b) Describe installation procedure for a Machine/Equipment. **07**
OR
- Q.5** (a) List different types of Maintenance. State functions of Maintenance Department. **07**
(b) Define the term “Corrosion”. Describe Methods of its Prevention. **07**
