Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

DIPLOMA ENGINEERING - SEMESTER-IV • EXAMINATION - WINTER - 2016

Date: 22-11-2016 Subject Code: 3345503 **Subject Name: Plant Equipment Erection & Maintenance** Time: 02:30 PM TO 05:00 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 07 plant lay out. Draw neat sketch of thermal Power Plant. State functions of each element. 07 (b) **Q.2** (a) Describe meaning of the term IBR. State factors affecting selection of Boiler. 07 Draw neat sketch of Heat Exchanger. State functions of each element. (b) 07 Draw neat sketch of Cochran Boiler. State functions of each element. (b) 07 Describe Filter and State its functions with neat sketch. 0.3 07 (a) Defferntiate between Fan and Blower with neat sketch. (b) 07 0.3 Describe Working of Agitator with neat sketch. **07** (a) State and explain factors affecting selection of Material Handling Equipment. (b) 07 Draw neat sketch of Globe Valve. State its functions and application. 0.4 (a) 07 Describe working of Reciprocating Compressor with neat sketch. (b) 07 Define the term "Valve". State its function and application. **07** Q. 4 (a) Draw neat sketch of Centrifugal Pump. Prepare classification chart form of (b) 07 Pumps. Find Center of Gravity for the T-section having following dimensions: 0.5 (a) 07 Flange: - 50mm×30mm Web :-60mm $\times 20$ mm Define the term "Maintenance". List different types of Maintenance. State (b) **07** functions of Maintenance Department. OR State meaning of the term "Corrosion". Describe Methods of its Prevention. **Q.5** (a) **07** Describe installation procedure for a Machine/Equipment with neat sketch. (b) 07
