

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING – SEMESTER –IV • EXAMINATION – SUMMER 2016

Subject Code: 3345503**Date: 17-05-2016****Subject Name: Plant Equipment Erection & Maintenance.****Time: 10:30 AM TO 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. Each question carry equal marks (14 marks)

- Q.1** (a) Describe working of Thermal Power Plant with schematic diagram. **07**
 (b) Give Classification of Foundation describe factor considered design of Foundation. **07**
- Q.2** (a) Draw neat sketch of Heat Exchanger. State functions of each element. **07**
 (b) Draw neat sketch and Describe working of Cochran Boiler. **07**
- OR
- (b) Draw neat sketch and Describe working of La- Mount Boiler. **07**
- Q.3** (a) Draw neat sketch of Centrifugal Pump. Prepare classification chart form of Pumps. **07**
 (b) Prepare list of different types of Valve. Describe working of Gate Valve with neat sketch. **07**
- OR
- Q.3** (a) Prepare Classification Chart of Air Compressor. Describe working of Centrifugal air Compressor with neat sketch. **07**
 (b) Defferntiate between Fan and Blower with neat sketch. **07**
- Q.4** (a) Draw neat sketch and Find Center of Gravity for the I-section having following dimensions:
 Top Flange:- 50mm×30mm
 Bottom Flange:- 55mm×25mm
 Web :-70mm×30mm **07**
 (b) Prepare list of different Equipment used for Erection work. Describe working of E.O.T. crane with neat sketch. **07**
- OR
- Q.4** (a) Define the term “Erection”. Describe Procedure of Erecting and Equipment with neat sketch. **07**
 (b) Draw neat sketch and describe working of Erecting mast. **07**
- Q.5** (a) Define the term “Corrosion”. Describe factor affecting Corrosion. **07**
 (b) Define the term “Maintenance”. Describe principal, Advantages and Limitation of C.B.M. **07**
- OR
- Q.5** (a) List Different types of Corrosion. Explain any ONE of them. **07**
 (b) Define the term “Maintainability”. Describe philosophy of T.P.M. with neat sketch. **07**
