

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

DIPLOMA ENGG.- IVth SEMESTER-EXAMINATION – JUNE- 2012

Subject code: 345503

Date: 19/06/2012

Subject Name: Plant Equipment Maintenance & Erection

Time: 02:30 pm – 05:00 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) Define the term ‘Plant’. Give classification of ‘Plant Equipments’. Draw typical ‘Plant Lay out’. **07**
- (b) Prepare list of different type of ‘Valves’. Draw neat sketch and explain Gate Valve’. **07**
- Q.2**
- (a) Draw neat sketch of ‘Centrifugal Pump’ and describe its working. **07**
- (b) Give classification of ‘Compressors’. Describe working of ‘Reciprocating Compressor’ with neat sketch. **07**
- OR**
- (b) Differentiate between ‘Centrifugal Pump’ and Reciprocating Pump’ with neat sketch **07**
- Q.3**
- (a) Differentiate between ‘Fan’ and ‘Blower’ with neat sketch. **07**
- (b) Define the term ‘Pipe’. Draw neat sketch and state functions of SEVEN ‘Piping Elements’, **07**
- OR**
- Q.3** (a) Draw neat sketch of ‘Simple Vertical Boiler’. State functions of each part. **07**
- (b) State functions of ‘Expansion Joint’ and draw neat sketches of its SEVEN types. **07**
- Q.4**
- (a) Draw neat sketch of ‘Steam Power Plant’. State functions of its elements. **07**
- (b) Write Meaning, Principal, Benefits and Applications of TPM. **07**
- OR**
- Q.4** (a) Draw neat sketch of ‘Diesel Power Plant’. State functions of its elements. **07**
- (b) Define the term ‘Corrosion’. Tabulate its Types, Sketch, Causes and Remedies. **07**
- Q.5** (a) Define the term ‘Tribology’. Tabulate Types, Causes and Remedies of ‘Wear’. **07**
- (b) Define the term ‘Erection’. Write steps for erection of ‘Heat Exchanger’ in a plant. **07**
- OR**
- Q.5** (a) Define the term ‘Foundation’. State its types and Functions. **07**
- (b) Describe procedure of using ‘Transparent Water Tube’ for erection of an Equipment in a Plant. **07**
