

**GUJARAT TECHNOLOGICAL UNIVERSITY****Diploma Engineering - SEMESTER-IV • EXAMINATION – SUMMER 2013****Subject Code: 345503****Date: 07-06-2013****Subject Name: Plant Equipment Maintenance and Erection****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.

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|-------------|-----|-------------------------------------------------------------------------------------------------|-----------|
| <b>Q.1</b>  | (a) | State meaning of the term “Process plant”. Draw block diagram of any one type of process plant. | <b>07</b> |
|             | (b) | Prepare list of Rotary and Static equipments of process plant. (seven each)                     | <b>07</b> |
| <b>Q.2</b>  | (a) | Draw neat sketch of Gate valve and State its applications.                                      | <b>07</b> |
|             | (b) | Draw neat sketch of Rotary Compressor and explain its working.                                  | <b>07</b> |
|             |     | OR                                                                                              |           |
|             | (b) | Give classification of Compressors and Explain any one type with sketch.                        | <b>07</b> |
| <b>Q.3</b>  | (a) | Differentiate between Fans and Blowers with neat sketch.                                        | <b>07</b> |
|             | (b) | Write sample specifications of a Valve and explain it.                                          | <b>07</b> |
|             |     | OR                                                                                              |           |
| <b>Q.3</b>  | (a) | Draw neat sketch of Industrial Fan and State its applications.                                  | <b>07</b> |
|             | (b) | Draw neat sketch of Ball Valve and explain its working.                                         | <b>07</b> |
| <b>Q.4</b>  | (a) | Give classification of Pumps. Explain Working of Centrifugal Pump with neat sketch.             | <b>07</b> |
|             | (b) | Draw neat sketch of Industrial Blower and State its applications.                               | <b>07</b> |
|             |     | OR                                                                                              |           |
| <b>Q. 4</b> | (a) | Explain Working of Reciprocating Pump with neat sketch.                                         | <b>07</b> |
|             | (b) | Draw neat sketch of Expansion joint and state its application in industrial piping.             | <b>07</b> |
| <b>Q.5</b>  | (a) | Draw neat sketch of Thermal Power Plant and explain its working.                                | <b>07</b> |
|             | (b) | Define the term “Foundation”. Give classification of foundation.                                | <b>07</b> |
|             |     | OR                                                                                              |           |
| <b>Q.5</b>  | (a) | Draw neat sketch of Diesel Power Plant and explain its working.                                 | <b>07</b> |
|             | (b) | Describe effects and functions of foundation.                                                   | <b>07</b> |

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