

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

Subject Code: 3355505**Date: 23/05/2016****Subject Name: Welding Inspection and Testing****Time: 02:30 PM to 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. Use of programmable & Communication aids are strictly prohibited.
5. Use of only simple calculator is permitted in Mathematics.
6. English version is authentic.

- Q.1** (a) Define the terms “DT” and “NDT”. Prepare classification chart of Discontinuity. **07**
(b) Describe Important Characteristic of Welding Inspector. **07**
- Q.2** (a) Draw neat sketches of Acceptable and unacceptable Fillet weld profiles. **07**
(b) Describe the Term “Preheating” & “Post Heat Treatment”. **07**
OR
(b) Draw and Describe Basic Elements of Testing symbols as per AWS A2.4. **07**
- Q.3** (a) Describe NINE steps of LPT with neat sketch. **07**
(b) Classify welding related Discontinuities. Draw neat sketches of Acceptable and Unacceptable Butt weld Profiles. **07**
OR
- Q.3** (a) Describe Advantages and Disadvantages of LPT. **07**
(b) Describe Mechanical and Chemical weld metal properties. **07**
- Q.4** (a) Prepare List of different DT methods for weld. Describe Impact Test with neat sketch. **07**
(b) Describe Principle of MPT with neat sketch. **07**
OR
- Q. 4** (a) Describe method of Band Testing with neat sketch. **07**
(b) Explain Principle of AET with neat sketch. **07**
- Q.5** (a) Draw neat sketch of Ultra sonic Testing equipment. Describe steps of UT. **07**
(b) Describe principle of Eddy Current Testing with neat sketch. **07**
OR
- Q.5** (a) Describe THREE types of Transducers with neat sketch. **07**
(b) Describe Principle of Radiography Testing with neat sketch. **07**
