

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

## GUJARAT TECHNOLOGICAL UNIVERSITY

DIPLOMA ENGINEERING - SEMESTER-V • EXAMINATION – SUMMER • 2015

**Subject Code: 355505**

**Date: 15-05-2015**

**Subject Name: Welding Inspection and Testing**

**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) State and Explain Responsibilities of Welding Inspection Engineer. **07**  
(b) Describe general steps of Welding Inspection. **07**
- Q.2** (a) State procedure for qualifying a welding inspector as per ASME. **07**  
(b) Prepare list of different TPI agencies with their field of working in Fabrication. **07**
- OR
- (b) Differentiate between Weld Plan and Test Plan. **07**
- Q.3** (a) State SEVEN Weld defects with their sketch, causes and remedies. **07**  
(b) Define the term “NDT”. State and Explain its benefits. **07**
- OR
- Q.3** (a) Differentiate between DT and NDT. **07**  
(b) Describe procedure of LPT with neat sketches. **07**
- Q.4** (a) Describe principle of RT with neat sketch. **07**  
(b) Describe Principle of UT with neat sketch. **07**
- OR
- Q.4** (a) Describe procedure of Calculating Exposure Time and SFD with its formula. **07**  
(b) Explain Principle of AET with neat sketch. **07**
- Q.5** (a) Describe any one type of MPT procedure with neat sketch. **07**  
(b) Describe Impact Testing Procedure with neat sketch. **07**
- OR
- Q.5** (a) Describe Principle of ET with neat sketch. **07**  
(b) Describe Bend Testing Procedure with neat sketch. **07**

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