

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

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

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**Diploma Engineering Semester –V Examination Dec'11- Jan'12**

**Subject code: 355505**

**Date: 30/12/2011**

**Subject Name: Welding Inspection and Testing**

**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 Authentic.

- Q.1** (a) Justify Importance of Welding Inspection and Testing in Fabrication Industries. **07**
- (b) Differentiate between 'Weld Plan' and 'Test Plan'. **07**
- Q.2** (a) What do you mean by 'TPI'. State its role in Fabrication Industries. **07**
- (b) State SEVEN Welding Defects with Sketch, Causes, Remedies and suitable NDT method to detect it. **07**
- OR**
- (b) Compare DT with NDT giving names of them. **07**
- Q.3** (a) Explain basic Principles and type of defects detected by Visual Inspection and LPT. **07**
- (b) Explain basic Principles and type of defects detected by RT with neat sketch. **07**
- OR**
- Q.3** (a) Describe Procedural steps of LPT with neat sketches. **07**
- (b) Compare X-Rays with Gamma Rays. **07**
- Q.4** (a) Give brief introduction and Explain Principle of UT. **07**
- (b) Draw neat sketch and Describe MPT Equipment. **07**
- OR**
- Q. 4** (a) Draw neat sketch and Describe Normal Beam Inspection. **07**
- (b) Write Advantages, Limitations and Applications of MPT. **07**
- Q.5** (a) Describe Principle of ET with neat sketch. **07**
- (b) Explain in brief Hardness Testing with neat sketch. **07**
- OR**
- Q.5** (a) Write Advantages, Limitations and Applications of AET. **07**
- (b) Explain in brief Bend Test with neat sketch. **07**

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