

GUJARAT TECHNOLOGICAL UNIVERSITY
Diploma Engineering - SEMESTER – V • EXAMINATION – WINTER 2012

Subject code: 355505**Date: 29/12/2012****Subject Name: Welding Inspection and Testing****Time: 10.30 am - 01.00 pm****Total Marks: 70****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. English version is considered to be Authentic.
5. Give Point-wise Answers with neat figures wherever possible.

- Q.1** (a) Describe Ethical and Essential qualities of a 'Welding Inspector'. **07**
 (b) Explain in brief : - 'QA Plan' and 'QC Plan'. **07**
- Q.2** (a) Write names of SEVEN 'TPI agencies' with their fields of services. **07**
 (b) Describe selection criteria of Suitable NDT method to detect Welding Defects. **07**
- OR**
- Q.3** (b) Describe Need, Benefits and related Codes and Standards of NDT. **07**
 (a) Explain in brief with neat sketch : - Principle and process of LPT . **07**
 (b) state names of different Techniques of RT and Describe ANY ONE with neat sketch. **07**
- OR**
- Q.3** (a) Explain in brief : - Role of ASME code for LPT examination. **07**
 (b) Describe importance of Exposure Time and SFD calculation in RT giving suitable example. **07**
- Q.4** (a) Describe weld examination procedural steps of UT with neat sketch. **07**
 (b) Explain in brief : - Magnetization and De-Magnetization process for MPT . **07**
- OR**
- Q. 4** (a) Explain in brief with neat sketch :- Different types of UT Transducers with neat sketches. **07**
 (b) Describe Procedural steps of MPT with neat sketch. **07**
- Q.5** (a) Write Advantages, Limitations and Application of AET. **07**
 (b) List out the different type of DT methods and Describe Tensile Test with neat sketch. **07**
- OR**
- Q.5** (a) Describe different techniques of AET. **07**
 (b) Explain in brief : - Impact Test with neat sketch. **07**
