

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma Semester –Vth Examination December - 2010

Subject code:355505

Subject Name: Welding Inspection & Testing

Date: 30 /12 /2010

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.

- Q.1** (a) Justify need and Application of ‘WELDING INSPECTION & TESTING’ in Fabrication Industries giving suitable example. **07**
- (b) Give names of SEVEN ‘Third Party Inspection Agencies’. State role of Inspection Engineer before, during and after welding. **07**
- Q.2** (a) Differentiate between Weld-plan, Test-plan and QA/QC plan giving suitable example. **07**
- (b) Prepare list of SEVEN DT methods. Describe any TWO with neat sketches. **07**
- OR**
- (b) Give names and numbers of FOUR sections of ASME used in Fabrication and Welding. Prepare WPS giving reference code detail. **07**
- Q.3** (a) Explain sequential procedure of L.P.T. with neat sketches. State details of its ‘Acceptance Standard’ giving reference code detail. **07**
- (b) Draw neat sketch and Explain Single Wall R.T. technique. State its ‘Acceptance Standard’ giving reference code detail. **07**
- OR**
- Q.3** (a) Draw neat sketches of SEVEN ‘Weld Defects’. State its Causes, Remedies and NDT methods suitable to detect it. **07**
- (b) Draw neat sketch and Explain Double Wall R.T. technique. State its ‘Acceptance Standard’ giving reference code detail. **07**
- Q.4** (a) Draw neat sketch of typical U.S.T. display showing presence of defect therein. Describe meaning of different stages of it. **07**
- (b) Draw neat sketch and explain M.P.T. procedure as per ASME code. **07**
- OR**
- Q. 4** (a) Explain meaning of A, B and C Scan in U.T. with neat sketches. State its applications. **07**
- (b) Describe ‘Acceptance Standard’ of M.P.T. as per ASME code. **07**
- Q.5** (a) Prepare ‘Comparison Chart’ of different NDT methods. **07**
- (b) Draw neat sketch and explain E.T. Principle. State its Advantages, Limitations and Applications. **07**
- OR**
- Q.5** (a) Differentiate between DT and NDT . **07**
- (b) Write brief notes on ‘Acoustic Emission Testing’ with neat sketch. **07**
