

GUJARAT TECHNOLOGICAL UNIVERSITY**DIPLOMA ENGG.- Vth SEMESTER-EXAMINATION – JUNE- 2012****Subject code: 355505****Date: 08/06/2012****Subject Name: Welding Inspection & 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 to be Authentic

- Q.1** (a) Explain in brief final testing and certification fab. Job. **07**
- (b) Explain briefly the Responsibility of welding inspector. **07**
- Q.2** (a) Explain in brief :- Fabrication job Drawing Reading . **07**
- (b) Explain the need importance of parameter of ship. **07**
- OR**
- (b) Explain briefly the selection criteria of NDT methods. **07**
- Q.3** (a) Define the term NDT. **07**
- Explain in brief the Codes & Standards used in NDT methods.
- (b) Explain in brief :- The need and application of NDT. **07**
- OR**
- Q.3** (a) Compare between the “DT and NDT “ Testing methods. **07**
- (b) Explain in brief :- The basic principle of visual inspection. **07**
- Describe the defects that can be detected by visual inspection.
- Q.4** (a) Explain the procedure for LPT as per ASME Sec-V **07**
- Describe the Related Standards of LPT.
- (b) Differentiate between X-ray & Gamma ray testing methods. **07**
- State the Advantages, Limitations, & Application of RT.
- OR**
- Q. 4** (a) Explain in brief with reference to RT **07**
1. Exposure Time
 2. SFD calculation
 3. Safety calculation
- (b) Explain in brief with reference to UT : **07**
1. Standard Test Block
 2. Evaluation of flow size.
- Q.5** (a) Explain the Ultrasonic Thickness measurement. **07**
- State the advantages, Limitations and Applications of UT.
- (b) Define the term Magnetic particle test and state it’s principal. **07**
- Explain in brief the different Magnetizing Techniques.
- OR**
- Q.5** (a) Explain in brief with neat sketch :- , principal, Equipment, Procedure, **07**
- specimen as per codes & Standard of Bend Test.
- (b) Explain in brief: **07**
- Advantages, Limitation & Application of ECT.
