

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA ENGINEERING – SEMESTER – V • EXAMINATION – SUMMER 2016

Subject Code: 355505**Date: 23/05/2016****Subject Name: Welding Inspection and Testing****Time: 02:30 PM TO 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. Each question carry equal marks (14 marks)

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|------------|-----|---|-----------|
| Q.1 | (a) | Define the term Welding Inspection and Explain its scope in Fabrication Industries. | 07 |
| | (b) | Describe necessity of inspection Before, During and After Welding. | 07 |
| Q.2 | (a) | Describe “Certification of Welding Inspection”. | 07 |
| | (b) | State and Explain Responsibilities of Welding Inspection Engineer. | 07 |
| | | OR | |
| | (b) | Describe Importance & Meaning of Metallographic Testing. | 07 |
| Q.3 | (a) | State SEVEN Weld defects with their sketch, causes and remedies. | 07 |
| | (b) | Prepare list of Fifteen NDT methods and State its scope and application. | 07 |
| | | OR | |
| Q.3 | (a) | Differentiate between DT and NDT. | 07 |
| | (b) | Draw neat sketches showing steps of LPT and Explain each steps. | 07 |
| Q.4 | (a) | Describe Principle of MPT with neat sketch. | 07 |
| | (b) | Describe Principle of UT with neat sketch. | 07 |
| | | OR | |
| Q.4 | (a) | Describe steps of MPT with neat sketch. | 07 |
| | (b) | Describe working of Ultrasonic Transducer with neat sketch. | 07 |
| Q.5 | (a) | Describe Tensile Testing Procedure with neat sketch. | 07 |
| | (b) | Describe Principle of Film Radiography with neat sketch. | 07 |
| | | OR | |
| Q.5 | (a) | Describe Bend Testing Procedure with neat sketch. | 07 |
| | (b) | State Advantages, Disadvantages & Application of RT. | 07 |