Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

DIPLOMA ENGINEERING – SEMESTER – V-EXAMINATION – WINTER 2015

Subject Code: 3355505 **Date: 14/12/2015**

Subject Name: Welding Inspection and Testing

Time: 10:30 AM TO 1:00 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)**

Q.1	(a)	Define the terms "DT" and "NDT". Prepare classification chart of Discontinuity.	**07**
	(b)	Define the term "Discontinuities". Explain FOUR Weld Ment & Related discontinuities with neat sketches.	**07**
Q.2	(a)	Draw neat sketches of Acceptable and unacceptable Fillet weld profiles.	**07**
	(b)	Describe the Term "Preheating" & "Post Heat Treatment".	**07**
		OR	
	(b)	Draw and Describe Basic Elements of Testing symbols as per AWS A2.4.	**07**
Q.3	(a)	Describe NINE steps of LPT with neat sketch.	**07**
	(b)	Describe Important Characteristic of Welding Inspector.	**07**
		OR	
Q.3	(a)	Describe Advantages and Disadvantages of LPT.	**07**
	(b)	Prepare WPS format with suitable example.	**07**
Q.4	(a)	Prepare List of different DT methods for weld. Describe Impact Test with neat sketch.	**07**
	(b)	Explain Principle of Acoustic Emission Testing with neat sketch.	**07**
		OR	
Q. 4	(a)	Draw neat sketch of Tensile Test specimen. Describe method of Tensile Testing.	**07**
	(b)	Describe Principle of Magnetic Particle Testing with neat sketch.	**07**
Q.5	(a)	Draw neat sketch of Ultra sonic Testing equipment. Describe steps of UT.	**07**
	(b)	Describe principle of Eddy Current Testing with neat sketch.	**07**
		OR	
Q.5	(a)	Describe THREE types of Transducers with neat sketch.	**07**
	(b)	Describe Principle of Radiography Testing with neat sketch.	**07**

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