Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VI • EXAMINATION – SUMMER • 2014

Subject Code: 162502 **Date: 21-05-2014**

Subject Name: Welding Technology

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.**

Q.1	**(a)**	Define Welding Process. Classify the welding Processes with Advantages and disadvantages.	**07**
	(b)	Discuss working principle of arc welding with neat sketch.	**07**
Q.2	**(a)**	Explain types of flames of gas welding with neat sketch	**07**
	(b)	Define terminology of weld joints and types of joints.	**07**
		OR	
	(b)	Explain Sub Merged Arc Welding with neat sketch.	**07**
Q.3	**(a)**	Explain the Spot Welding with neat sketch and merits, demerits and application.	**07**
	(b)	Explain any one thermo chemical welding process with neat sketch.	**07**
		OR	
Q.3	**(a)**	Explain type of welding defects its causes and remedies	**07**
	(b)	Explain any one solid state welding process with neat sketch.	**07**
Q.4	**(a)**	Explain the process of Plasma Arc Welding Process with its merits and demerits	**07**
	(b)	Explain the process of Upset welding process.	**07**
		OR	
Q.4	**(a)**	Write short note on source of power supply of welding processes.	**07**
	(b)	Differentiate TIG and MIG welding.	**07**
Q.5	**(a)**	Explain the Ingredients of coating and their functions	**07**
	(b)	Explain the process of selection of electrodes.	**07**
		OR	
Q.5	**(a)**	Discuss hydrostatic pressure testing and hydraulic pressure testing for leakage of weld joint.	**07**
	(b)	What are the functions of flux and filler material at different welding processes?	**07**

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