GUJARAT TECHNOLOGICAL UNIVERSITY
BE- SEMESTER–VI (NEW) EXAMINATION – WINTER 2020

Subject Code:2162506   Date:20/01/2021
Subject Name:Metal Joining Technology
Time:02:00 PM TO 04:00 PM   Total Marks: 56

Instructions:
1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

			MARKS
Q.1	(a)	Define Welding Process.	03
	(b)	Compare welding joint with Riveting Joint	04
	(c)	Briefly classify the various types of Welding Process.	07
Q.2	(a)	Write down the function of inert gas?	03
	(b)	Draw rightward technique and leftward technique.	04
	(c)	Explain the various equipment used in the gas welding.	07
Q.3	(a)	Enlist types of arc welding.	03
	(b)	Write down the full form of following welding processes (i) TIG (ii) MIG (iii) CAW (iv) SAW	04
	(c)	Explain Flue Shielded Metal Arc Welding (FSMAW) with advantages and neat sketch.	07
Q.4	(a)	What is the difference between thin plate and thick plate in welding terminology?	03
	(b)	Explain the difference between electro gas and electro slag welding.	04
	(c)	Explain SAW with advantages, disadvantages neat sketch.	07
Q.5	(a)	Enlist different types of filler road.	03
	(b)	Explain Direct current Straight Polarity (DCSP) with neat sketch.	04
	(c)	Explain "Thermit Welding" with neat sketch, process, advantages and applications.	07
Q.6	(a)	Enlist various defect occur in the weld joints.	03
	(b)	Explain Direct Current Reverse Polarity (DCRP) with neat sketch..	04
	(c)	Explain "Atomic Hydrogen Welding Process" with neat sketch, process, advantages and applications.	07
Q.7	(a)	What is weld pool, explain with neat sketch.	03
	(b)	Enlist different resistance welding processes.	04
	(c)	Briefly Explain spot welding process with neat sketch.	07
Q.8	(a)	Explain the types of distortion.	03
	(b)	Explain Seam welding process with neat sketch.	04
	(c)	Explain the preventive action carried for reducing distortion during welding process.	07

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