

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI (NEW) EXAMINATION – WINTER 2018****Subject Code:2162506****Date:16/11/2018****Subject Name:Metal Joining Technology****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.

		MARKS
Q.1	(a) Define “Welding Process”	03
	(b) Difference between Riveting Joint and Welding Joint	04
	(c) Classify the welding Processes	07
Q.2	(a) Define Gas Welding processes	03
	(b) Enlist different types of flames produced by gas welding.	04
	(c) Explain rightward and leftward technique with neat sketch.	07
	OR	
	(c) Explain various equipment used in gas welding.	07
Q.3	(a) Define Arc Welding Process	03
	(b) Explain Direct current straight polarity (DCSP) and Direct current Reverse polarity (DCRP).	04
	(c) Explain the Tungsten Inert gas welding with neat sketch, advantages, limitations and applications.	07
	OR	
Q.3	(a) Define Submerged Arc Welding (SAW)	03
	(b) Enlist different types of electrodes used in welding processes	04
	(c) Difference between TIG and MIG.	07
Q.4	(a) Define Resistance Welding Process	03
	(b) Explain the role of Inert gas in welding processes.	04
	(c) Explain Spot Welding process with neat sketch, advantages, limitations and applications.	07
	OR	
Q.4	(a) Explain the limitation of Carbon Arc welding	03
	(b) Explain the role of Filler rod in welding processes.	04
	(c) Explain Seam Welding process with neat sketch, advantages, limitations and applications.	07
Q.5	(a) Enlist different types of solid- state welding processes.	03
	(b) Explain Pre welding processes.	04
	(c) Explain Thermit Welding with neat sketch, advantages, and applications.	07
	OR	
Q.5	(a) Difference between destructive and non-destructive testing	03
	(b) Explain Post welding processes.	04
	(c) Enlist different types of NDT explain any one of them with neat sketch.	07
