Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-VII • EXAMINATION – WINTER 2013

	•	t Code: 172103 Date: 07-12-	2013
Tir	•	t Name: Metal Joining Processes 10:30 TO 01:00 Total Mark	s: 70
	1. 2.	. Attempt all questions.	
Q.1	(a) (b)	List metal joining processes. Explain their importance. What is Arc welding? Explain SMAW with neat sketch.	07 07
Q.2	(a) (b)	Discuss different types of gas welding flames with neat sketch. Explain edge preparation and weld joints with sketches. OR	07 07
	(b)	Explain mode of metal transfer in arc welding.	07
Q.3	(a) (b)	Explain characteristics of welding arc. Discuss principle and working of resistance welding. OR	07 07
Q.3	(a) (b)	Explain briefly submerged arc welding. Define weldability. Explain factors affecting weldability.	07 07
Q.4	(a) (b)	What is brazing? How it differs from welding. List brazing techniques a explain any one technique. Discuss Metal Inert Gas (MIG) welding.	nd 07
		ŌR	
Q.4	(a) (b)	Discuss Soldering process. Discuss Tungsten Inert Gas (TIG) welding.	07 07
Q.5	(a) (b)	List welding defects. Explain their causes and remedies. Explain laser beam welding.	07 07
Q.5	(a) (b)	OR Write a note on ultrasonic welding. Explain Electron Beam welding with figure.	07 07
