Seat No.: _		Enrolment No		
		GUJARAT TECHNOLOGICAL UNIVERSITY		
		BE- VII th SEMESTER-EXAMINATION – MAY/JUNE- 2012		
Subject code: 172103		ode: 172103 Date: 09/06	Date: 09/06/2012	
Subje	ect N	lame: Metal Joining Processes		
1		30 pm – 05:00 pm Total Mar	Total Marks: 70	
Instr	ucti	ons:		
		empt all questions.		
		ke suitable assumptions wherever necessary.		
3.	rigi	res to the right indicate full marks.		
Q.1	(a)	With neat sketch explain various defects in welding with their causes and remedies.	07	
	(b)	Explain different types of gas welding flames.	07	
Q.2	(a)	Classify metal joining processes? Discuss importance of welding over	07	
	(b)	other fabrication processes. Discuss electron beam welding process with its advantages and limitations.	07	
		OR		
	(b)	With diagram show welding arc and discuss its characteristics.	07	
Q.3	(a)	Explain different modes of metal transfer in welding process.	07	
•	(b)	Explain electro slag welding process.	07	
		OR		
Q.3	(a)	What is submerge arc welding? Explain the process and give its advantages.	07	
	(b)	Explain LASER beam welding process.	07	
Q.4	(a)	Compare Metal Inert Gas welding process and Tungsten Inert Gas welding.	07	
	(b)	What is brazing process? Discuss it and give different brazing materials. OR	07	
Q.4	(a)	What is soldering? Explain soldering process and alloys.	07	
	(b)	Explain solid phase welding process in detail.	07	
Q.5	(a)	With neat sketch show different joint design and edge preparation.	07	
	(b)	Explain plasma welding process its advantages and limitations. OR	07	
Q.5	(a)	Define weldability and explain the test for weldability.	07	
	(b)	Write note on ultrasonic welding and explosive welding.	07	
