

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VI (NEW) EXAMINATION – SUMMER 2023****Subject Code:2162506****Date:20-07-2023****Subject Name: Metal Joining Technology****Time:10:30 AM TO 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.
4. Simple and non-programmable scientific calculators are allowed.

		MARKS
Q.1	(a) Define welding.	03
	(b) Compare welding with riveting.	04
	(c) Write principle of arc welding and explain edge preparation in detail.	07
Q.2	(a) What do you mean by polarity in welding?	03
	(b) Differentiate between straight and reverse polarity.	04
	(c) Explain welding distortion.	07
OR		
	(c) Explain welding defects.	07
Q.3	(a) What is solid state welding?	03
	(b) Brief the process of arc ignition.	04
	(c) Explain atomic hydrogen welding in detail.	07
OR		
Q.3	(a) Define arc.	03
	(b) Classify welding electrode as per American standard.	04
	(c) Explain friction welding in detail.	07
Q.4	(a) What is oxy acetylene gas welding?	03
	(b) Draw different types of gas welding flames.	04
	(c) Explain left ward technique for gas welding.	07
OR		
Q.4	(a) What is inert gas welding?	03
	(b) Explain role of high frequency unit in TIG welding.	04
	(c) Explain metal inert gas welding in detail.	07
Q.5	(a) What is non destructive testing?	03
	(b) What is principle of magnetic particle test?	04
	(c) Draw neat sketch of standard location of welding symbol.	07
OR		
Q.5	(a) What is pre weld and post weld heat treatment?	03
	(b) What is principle of radio graphy test?	04
	(c) Draw different weld joints.	07
