

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-VI(NEW) – EXAMINATION – SUMMER 2019****Subject Code:2162506****Date:10/05/2019****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.

		MARKS
<b>Q.1</b>	(a) Define welding.	<b>03</b>
	(b) List advantages of welding over riveting.	<b>04</b>
	(c) Classify welding as per AWS.	<b>07</b>
<b>Q.2</b>	(a) Define gas welding.	<b>03</b>
	(b) List characteristics of flux in welding.	<b>04</b>
	(c) Sketch different gas welding flames.	<b>07</b>
	<b>OR</b>	
	(c) List gas welding equipments and their applications.	<b>07</b>
<b>Q.3</b>	(a) What is an arc?	<b>03</b>
	(b) What is carbon active welding?	<b>04</b>
	(c) Describe GMAW.	<b>07</b>
	<b>OR</b>	
<b>Q.3</b>	(a) What is polarity?	<b>03</b>
	(b) What is submerged arc?	<b>04</b>
	(c) Describe GTAW.	<b>07</b>
<b>Q.4</b>	(a) What is solid state welding?	<b>03</b>
	(b) List any 2 welding defects (other than distortion) and their causes.	<b>04</b>
	(c) Explain friction inertia welding in detail.	<b>07</b>
	<b>OR</b>	
<b>Q.4</b>	(a) What is chemical welding?	<b>03</b>
	(b) Which are the causes of welding distortion?	<b>04</b>
	(c) Explain thermit welding in detail.	<b>07</b>
<b>Q.5</b>	(a) What is NDT?	<b>03</b>
	(b) Explain MPT.	<b>04</b>
	(c) Classify welding electrode.	<b>07</b>
	<b>OR</b>	
<b>Q.5</b>	(a) What is resistance welding?	<b>03</b>
	(b) Write down principles of Radiography Testing.	<b>04</b>
	(c) Draw a neat sketch of standard location of elements of welding symbols.	<b>07</b>

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