

**GUJARAT TECHNOLOGICAL UNIVERSITY****B.VOC- SEMESTER-II EXAMINATION – SUMMER 2022****Subject Code:21120301****Date:26-07-2022****Subject Name:Manufacturing Processes****Time:10:30 AM TO 12:30 PM****Total Marks:50****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.

		<b>Marks</b>
<b>Q.1</b>	(a) Give the broad classifications of manufacturing processes	<b>05</b>
	(b) Explain why the understanding of manufacturing processes is essential for better products?	<b>05</b>
<b>Q.2</b>	(a) Describe the piercing and blanking processes.	<b>05</b>
	(b) Explain the drawing process with a neat sketch.	<b>05</b>
<b>OR</b>		
	(b) List the main advantages of casting process	<b>05</b>
<b>Q.3</b>	(a) Name the pattern allowances which can be quantitatively specified. Write a brief note on machining allowance.	<b>05</b>
	(b) Explain different types of cores used in casting process.	<b>05</b>
<b>OR</b>		
<b>Q.3</b>	(a) What metals are generally used for making patterns? Explain the reasons in brief for their selection	<b>05</b>
	(b) Discuss the defects, causes and remedies of casting defects.	<b>05</b>
<b>Q.4</b>	(a) Discuss the advantage and limitations of hot and cold working	<b>05</b>
	(b) State the difference between hot and cold working	<b>05</b>
<b>OR</b>		
<b>Q.4</b>	(a) Explain the following terms: 1. Strain hardening 2. Recrystallization	<b>05</b>
	(b) State difference between direct and indirect extrusion with sketch	<b>05</b>
<b>Q.5</b>	(a) Differentiate between soldering and brazing process.	<b>05</b>
	(b) What are differences between TIG and MIG welding processes?	<b>05</b>
<b>OR</b>		
<b>Q.5</b>	(a) Explain the different types of flame used in gas welding process.	<b>05</b>
	(b) Explain the of Arc welding with neat sketch.	<b>05</b>

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