

**GUJARAT TECHNOLOGICAL UNIVERSITY****B.VOC - SEMESTER- II EXAMINATION – SUMMER 2024****Subject Code: 21120301****Date:24-05-2024****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) What is manufacturing? Explain with examples.	<b>05</b>
(b) Explain classification of manufacturing processes with diagram.	<b>05</b>
<b>Q.2</b> (a) What is Pattern? What are Different Types of patterns?	<b>05</b>
(b) Describe the centrifugal casting process with a neat sketch?	<b>05</b>
<b>OR</b>	
(b) Write down the different types of furnaces used for casting. Explain the construction and operation of Cupola furnaces with a neat sketch?	<b>05</b>
<b>Q.3</b> (a) Give the advantages of MIG welding.	<b>05</b>
(b) Explain brazing and its types.	<b>05</b>
<b>OR</b>	
<b>Q.3</b> (a) Give the advantages and limitations of gas welding.	<b>05</b>
(b) Explain Soldering and its types.	<b>05</b>
<b>Q.4</b> (a) Write down the advantages and limitations of tube extrusion.	<b>05</b>
(b) Write down comparison between hot working and cold working.	<b>05</b>
<b>OR</b>	
<b>Q.4</b> (a) What is cold working and explain any three cold working processes.	<b>05</b>
(b) What is cold working and explain any three cold working processes.	<b>05</b>
<b>Q.5</b> (a) Explain the forming operations in sheet metal operations with a neat sketch.	<b>05</b>
(b) Explain any four sheet metal characteristics.	<b>05</b>
<b>OR</b>	
<b>Q.5</b> (a) Explain squeezing with a neat sketch.	<b>05</b>
(b) Explain the cutting operation in sheet metal operations with a neat sketch.	<b>05</b>

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