

GUJARAT TECHNOLOGICAL UNIVERSITY**BVOC - SEMESTER-IV EXAMINATION – WINTER 2021****Subject Code: 1140303****Date: 03/01/2022****Subject Name: Metal Forming Processes****Time: 02:30 PM TO 04:30 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.

		Marks
Q.1	(a) Differentiate between Hot and Cold working processes.	05
	(b) What is Rolling? Classify Rolling process in detail.	05
Q.2	(a) State the advantages, limitations and applications of Forging process.	05
	(b) Classify Forging processes in detail.	05
OR		
Q.3	(b) Discuss the defects, causes and remedies in Forging.	05
	(a) State difference between direct and indirect Extrusion.	05
Q.3	(b) Explain various types of Rolling mills with neat sketch.	05
	OR	
Q.3	(a) Describe the process of Extrusion of tubes.	05
	(b) Explain Extrusion-Forging with neat sketch.	05
Q.4	(a) Explain wire drawing with neat sketch.	05
	(b) Explain deep drawing operation with neat sketch and state the application of deep drawing.	05
OR		
Q.4	(a) Explain spinning process in detail with neat sketch.	05
	(b) Explain tube drawing with neat sketch.	05
Q.5	(a) Discuss the methods used for the production of pipes and tubes.	05
	(b) Explain Strain Hardening in forming process.	05
OR		
Q.5	(a) How welded pipes and tubes are manufactured?	05
	(b) Explain Hot Piercing (Seamless tubing) with neat sketch.	05
