

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

BVOC - SEMESTER-IV EXAMINATION – WINTER 2022

Subject Code:1140303

Date:15-12-2022

Subject Name: Metal Forming 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.

		Marks
Q.1	(a) What is Metal Forming? Provide the classification of metal forming processes.	05
	(b) Differentiate between hot working and cold working	05
Q.2	(a) Enlist different types of rolling mills and explain any one in brief.	05
	(b) Write a short note on tandem rolling mill.	05
	OR	
	(b) Explain rolling defect with neat sketch.	05
Q.3	(a) What is Extrusion? Explain with neat sketch.	05
	(b) Discuss open die and closed die forging in detail with neat sketch.	05
	OR	
Q.3	(a) State difference between direct and indirect extrusion.	05
	(b) What are the advantages and disadvantages of cold working over hot working?	05
Q.4	(a) Explain wire drawing with neat sketch.	05
	(b) Explain spinning process in detail with neat sketch.	05
	OR	
Q.4	(a) Write the steps in wire drawing operation.	05
	(b) Explain tube drawing with neat sketch.	05
Q.5	(a) Describe the process of extrusion of tube	05
	(b) Discuss the method used for the production of pipes and tube.	05
	OR	
Q.5	(a) Describe the Mandrel Mill Process	05
	(b) How welded pipes and tubes are manufactured?	05
