

GUJARAT TECHNOLOGICAL UNIVERSITY**BVOC - SEMESTER-IV EXAMINATION – SUMMER 2022****Subject Code:1140303****Date:06-07-2022****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 are the two main metal forming classification?	05
	(b) Define the following terms: 1) Forging, 2) Rolling, 3) Extrusion, 4) Drawing, 5) Spinning	05
Q.2	(a) Explain the principle and operation of rolling process.	05
	(b) Explain rolling defect with neat sketch.	05
OR		
	(b) Enlist different types of rolling mills and explain any one in brief.	05
Q.3	(a) How welded pipes and tubes are manufactured?	05
	(b) Explain types of forging method with neat sketch.	05
OR		
Q.3	(a) Describe the mandrel mill Process.	05
	(b) Difference between cold working and hot working	05
Q.4	(a) Discuss the method used for the production of pipes and tube.	05
	(b) Explain wire drawing with neat sketch.	05
OR		
Q.4	(a) Explain the process of extrusion of tube.	05
	(b) Explain drawing die with neat sketch.	05
Q.5	(a) Difference between direct and indirect extrusion.	05
	(b) Explain V bending and edge/wipe bending process.	05
OR		
Q.5	(a) What is Extrusion? Explain with neat sketch.	05
	(b) Explain spinning process in detail with neat sketch.	05
