

GUJARAT TECHNOLOGICAL UNIVERSITY**BVOC - SEMESTER-IV EXAMINATION – SUMMER 2022****Subject Code:1140301****Date:02-07-2022****Subject Name:Mass Production Devices****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) How to select cutting tools?	05
	(b) Explain various tool holding devices.	05
Q.2	(a) Explain various types of locators in detail.	05
	(b) Explain 3-2-1 location principle with a neat sketch.	05
OR		
	(b) State merits of power clamping over mechanical clamping.	05
Q.3	(a) Explain screw clamp with neat sketch.	05
	(b) What are the main advantages of using jigs and fixtures?	05
OR		
Q.3	(a) Explain strap clamp with neat sketch.	05
	(b) Write a short note on Jig bushes.	05
Q.4	(a) Differentiate between jigs and fixtures.	05
	(b) Classify the Jigs in detail.	05
OR		
Q.4	(a) Describe the design principles for jigs and fixtures.	05
	(b) Explain fool proofing?	05
Q.5	(a) Explain Plate jig with a neat sketch.	05
	(b) List the design steps for jigs and fixtures.	05
OR		
Q.5	(a) Explain channel jig with a neat sketch.	05
	(b) Classify the Fixtures in detail.	05
