

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- SEMESTER-VII (NEW) EXAMINATION – WINTER 2024****Subject Code:3172016****Date:11-12-2024****Subject Name: Process Planning and Cost Estimation****Time:10:30 AM TO 01:00 PM****Total Marks:70****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) Mention the factor affecting process planning.	03
	(b) Explain basic steps involve in process planning.	04
	(c) Enlist the common approaches in CAPP system and state their advantages and limitations.	07
Q.2	(a) Define overhead cost.	03
	(b) What are the factors to be considered in the selection jigs and fixtures?	04
	(c) Explain in detail about the retrieval type CAPP system	07
	OR	
	(c) Explain the various quality assurance methods in detail.	07
Q.3	(a) What are the functions of jig and fixture?	03
	(b) What is manufacturing logic?	04
	(c) Briefly explain the various elements of cost.	07
	OR	
Q.3	(a) Distinguish cost estimation and cost accounting.	03
	(b) What is Break even Analysis? Also define aims of Costing.	04
	(c) What is time study? Explain briefly its benefits.	07
Q.4	(a) Brief on cost accounting.	03
	(b) Define 'tool approach' and 'tool over travel.'	04
	(c) Discuss in detail ERP.	07
	OR	
Q.4	(a) What are the losses in forging?	03
	(b) Explain Detection Strategy and Prevention strategy.	04
	(c) Explain how to develop manufacturing logic and knowledge.	07
Q.5	(a) What are the most influential factors in terms of tool performance?	03
	(b) Write down classifications of Engineering Materials.	04
	(c) Write down classifications of polymeric Materials.	07
	OR	
Q.5	(a) Define continuous production.	03
	(b) Briefly discuss about estimation of welding shop.	04
	(c) Discuss the different costs associated with inventory.	07
