Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

ME- SEMESTER II - EXAMINATION - SUMMER 2015

	·	Code: 2720813 Date: 30/05/20	15
	•	Name: COMPUTER AIDED PROCESS PLANNING	
		:30 PM - 5:00 PM Total Marks: 7	70
Insu		Attempt all questions. Make suitable assumptions wherever necessary.	
Q.1	(a)	What are the functions of Process planning? Compare manual and Computer aided process planning procedures.	07
	(b)	What do you understand by the term Group Technology? Briefly describe the concept of GT with respect to Design and Manufacturing.	07
Q.2	(a)	Define cellular manufacturing. Explain the types of machine cells and layouts.	07
	(b)	Explain the concept of Concurrent Engineering discussing its Merits. OR	07
	(b)	Describe the concept of Composite Part and its importance in designing machine cells.	07
Q.3	(a)	Differentiate between Retrieval and Generative types of Process planning procedures.	07
	(b)	With the aid of an example, explain OPITZ parts classification and coding systems OR	07
Q.3	(a) (b)	With a suitable example, describe the concept of Production Flow Analysis? What are the structures used in Part classification and coding schemes?	07 07
Q.4	(a)	Explain the significance of Quantitative analysis of cellular manufacturing system.	07
	(b)	Describe the process of Rank order clustering using a suitable example. How are the bottlenecks resolved?	07
Q.4	(a)	OR Differentiate Hollier method ó I and Hollier method ó II giving suitable example.	07
	(b)	õJust In Time (JIT) leads to zero inventoryö Evaluate.	07
Q.5	(a)	Discuss the criteria and the implementation issues in selecting a proper CAPP system.	07
	(b)	Explain the Pull type and Push type KANBAN system. OR	07
Q.5	(a)	Discuss the forward and backward planning procedures related to process planning.	07
	(b)	Explain the following i) MIPLAN ii) APPAS iii) AUTOPLAN	07

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