Subject Code: 2720813

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

## ME SEMESTER II EXAMINATION – SUMMER 2017

Date: 29/05/2017

Subject Name: Computer Aided Process Planning Time:02:30 PM to 05:00 PM  Instructions:  1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks			al Marks: 70	
Q.1	(a)	Discuss the importance of Computer Aided process planning related to the manual process planning procedure. Differentiate Generative and Retrieval type of CAPP procedures.	07	
	<b>(b)</b>	Explain the following:  1. Group technology  2. Concurrent Engineering	07	
Q.2	(a)	Explain the KANBAN system in brief. "A push type of KANBAN system is	07	
	<b>(b)</b>	better than pull type". Evaluate.  Explain the concept of Composite part with a suitable example. Relate its significance to a GT system.	07	
	<b>(b)</b>	OR Explain the structures used in the parts classification and coding system	07	
Q.3	(a)	Discuss the concept of Rank Order Clustering in relation to Production flow analysis with a suitable example.	07	
	<b>(b)</b>	Differentiate between Hollier method – I and Hollier method – II with a suitable illustration.	07	
		OR		
Q.3	(a)	Explain the factors to be considered in successful implementation of a JIT system.  "Inst in Time leads to zero value of inventors." Evaluate	07	
	<b>(b)</b>	"Just in Time leads to zero value of inventory". Evaluate.	07	
Q.4	(a) (b)	Discuss the OPITZ and MICLASS classification and coding system.  Explain the steps used in "Work Cell Design". Also mention the benefits obtained due to "Work cell balance"	07 07	
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Q.4	(a) (b)	Discuss Process Capability Analysis with a suitable illustration. List down the activities carried out by the planning engineers in the foundry environment that forms the basis of CAPP.	07 07	
Q.5	(a) (b)	Discuss the role of process planning in CAD/CAM integration Explain the CAPP process for deep drawing.	07 07	
		OR		
Q.5	(a) (b)	Discuss: TIPPS and Expert Process planning Write in brief:  1. MIPLAN 2. APPAS 3. AUTOPLAN	07 07	

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