GUJARAT TECHNOLOGICAL UNIVERSITY

ME – SEMESTER II– EXAMINATION – WINTER - 2016

Subject Code: 2720813 Date: 19/11/2016

Subject Name: Computer Aided Process Planning

Time: 2:30 pm to 5:00 pm Total Marks: 70

Instructions:

- 1. Attempt all questions.
- 2. Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks

Q.1	(a)	What is the need and importance of computer aided process planning technique? Explain giving a suitable illustration. Also explain the different	07
	(b)	types of CAPP techniques. Define Group technology and the basis of classifying the parts based on GT. Also explain the Composite part concept using a suitable example.	07
Q.2	(a)	Explain in brief: (i) PFA (ii) OPITZ	07
	(b)	What do you understand by Concurrent Engineering? Explain the different parts and elements related to it.	07
	(L)	OR Explain the Rank order clustering technique using a suitable example.	07
	(b)		
Q.3	(a) (b)	Differentiate between Hollier method –I and II Describe cellular manufacturing. What are the issues to be handled when designing or implementing a cellular manufacturing concept? OR	07 07
Q.3	(a) (b)	"Just in Time leads to reducing the inventory level to zero" Evaluate.	07 07
Q.4	(a) (b)		07 07
Q.4	(a)	"When CAM is integrated with CAD to form CAD/CAM systems, CAPP becomes a direct connection between design and manufacturing." Evaluate.	07
	(b)		07
Q.5	(a)	Describe work cell design and explain how work cell balance is achieved. Also brief the benefits of work cell balance.	07
	(b)		07
		OR	
Q.5	(a)	Explain the significance of process capability analysis using a significant example.	07
	(b)	Describe in brief (i) MIPLAN (ii) AUTOPLAN	07