Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

ME - SEMESTER– I (OLD course)• EXAMINATION – SUMMER 2015

Subject Code: 715001 Date: 11/05/2015

Subject Name: Production and Operations Management

Time: 10:30 am to 1:00 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)**	Explain **OPITZ** classification system with a suitable example.	**07**
	(b)	Why aggregate production planning is required? Differentiate between Chase Strategy and a Level Strategy.	**07**
Q.2	**(a)**	Explain the concept of Just in Time.	**07**
	(b)	Explain the Application and Importance of simulation. Explain different simulation packages.	**07**
		OR	
	(b)	Explain different forecasting errors.	**07**
Q.3	**(a)**	Define the term ñManagement Information Systemò. Explain the role of Decision making in designing MIS.	**07**
	(b)	What is a generative process planning? Compare variant and generative process Planning methodologies.	**07**
		OR	
Q.3	**(a)**	Explain Different Facility Layouts.	**07**
	(b)	Explain the concept of Line of Balancing with a suitable example.	**07**
Q.4	**(a)**	Define the terms ñProjectò and ñProject managementò. Explain the various Stages of project life cycle with sketch.	**07**
	(b)	Explain different ERP Modules.	**07**
		OR	
Q.4	**(a)**	What is a ñKanbanò? Why is this system called a ñPullò or demand system of Inventory control?	**07**
	(b)	Explain different Advanced Forecasting Methods.	**07**
Q.5	**(a)**	Explain the concept of Work System Design.	**07**
	(b)	Explain Open and Close channel Queuing networks.	**07**
		OR	
Q.5	**(a)**	What is a Resource Allocation? Explain the algorithm for Resource Allocation.	**07**
	(b)	Information on the activities required for a project is as follows: Draw the network and calculate the earliest start/finish and latest start/finish Time of each of the activity.	**07**

Name	A	B	C	D	E	F	G	H	I	J	K
Activity Node	1-2	1-3	1-4	2-5	3-5	3-6	3-7	4-6	5-7	6-8	7-8
Duration Days	3	8	9	4	7	11	5	7	3	6	7

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