

GUJARAT TECHNOLOGICAL UNIVERSITY
M. E. - SEMESTER – I • EXAMINATION – SUMMER • 2014

Subject code: 715001**Date: 13-06-2014****Subject Name: Production and Operation Management****Time: 02:30 pm - 05:00 pm****Total Marks: 70****Instructions:**

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

Q.1 (a) Explain different objectives for development of production and operation Strategies. **07**

(b) Explain different forecasting errors. **07**

Q.2 (a) Explain the concept of capacity planning. **07**

(b) Describe the application of software packages for queuing models. **07**

OR

(b) Explain the concept of facility planning. **07**

Q.3 (a) Explain rules of Network construction in PERT/CPM. **07**

(b) Explain the concept of Time-Cost trade off. **07**

OR

Q.3 (a) Explain Resource allocation. **07**

(b) Information on the activities required for a project is as follows: **07**

Draw the network and calculate the earliest start/finish and latest start/finish Time of each of the activity.

Name	A	B	C	D	E	F	G	H	I	J	K
Activity	1-2	1-3	1-4	2-5	3-5	3-6	3-7	4-6	5-7	6-8	7-8
Node											
Duration days	2	7	8	3	6	10	4	6	2	5	6

Q.4 (a) Explain the concept of Just in Time. **07**

(b) Explain Group Technology. **07**

OR

Q.4 (a) Explain the concept of Master Production Schedule. **07**

(b) Explain Line of Balancing concept with suitable example. **07**

Q.5 (a) Explain Enterprise Resource Planning (ERP). **07**

(b) Explain Box Zerkins method of sales forecasting. **07**

OR

Q.5 (a) Write short note on different simulation packages. **07**

(b) Explain decision support system. **07**
