Seat No.:	Enrolment No.

## 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 **07** Strategies. (b) Explain different forecasting errors. 07 Q.2Explain the concept of capacity planning. 07 (a) Describe the application of software packages for queuing models. (b) **07** OR (b) Explain the concept of facility planning. 07 Explain rules of Network construction in PERT/CPM. **Q.3** (a) 07 Explain the concept of Time-Cost trade off. (b) 07 OR Q.3Explain Resource allocation. 07 (a) Information on the activities required for a project is as follows: 07 (b) Draw the network and calculate the earliest start/finish and latest start/finish Time of each of the activity. Name В C E F K A D G Η Ι 1-2 1-3 1-4 3-5 4-6 5-7 Activity 2-5 3-6 3-7 6-8 7-8 Node Duration 2 7 8 3 6 6 2 5 10 4 6 days **Q.4** Explain the concept of Just in Time. **07** (a) Explain Group Technology. 07 **(b)** OR Explain the concept of Master Production Schedule. 07 **Q.4** (a) **(b)** Explain Line of Balancing concept with suitable example. 07 **Q.5** Explain Enterprise Resource Planning (ERP). 07 (a) Explain Box Zerkins method of sales forecasting. **07 (b)** OR Write short note on different simulation packages. **Q.5** (a) 07 Explain decision support system. 07 **(b)** 

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