

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

Subject code: 715001N**Date: 01-12-2014****Subject Name: Production and Operation Management****Time: 10:30 am - 01:00 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) Define the term "Management Information System". Explain the role of decision making in designing MIS. **07**
- (b) Explain different objectives for development of production and operation Strategies. **07**
- Q.2** (a) Enlist various Qualitative and Quantitative methods for forecasting. Discuss Box Jenkins method of forecasting with suitable example. **07**
- (b) Explain OPITZ classification system with suitable example. **07**
- OR**
- (b) Explain different forecasting errors. **07**
- Q.3** (a) Explain the concept of facility planning. **07**
- (b) Explain the concept of capacity planning. **07**
- OR**
- Q.3** (a) Explain the concept of Time-Cost trade off. **07**
- (b) Explain Resource allocation with a suitable example. **07**
- Q.4** (a) Explain the concept of Just in Time. **07**
- (b) Describe the application of software packages for queuing models. **07**
- OR**
- Q.4** (a) Explain the concept of Master Production Schedule. **07**
- (b) Explain decision support system. **07**
- Q.5** (a) Define the terms "Project" and "Project management". Explain the various stages of project life cycle with sketch. **07**
- (b) Explain Line of Balancing concept with suitable example. **07**
- OR**
- Q.5** (a) Explain the following Facility layouts: Job shop process layout, Product oriented layout, cellular layout and Group technology layout. **07**
- (b) Define a simulation model. Distinguish between deterministic and stochastic simulation models. **07**
