

GUJARAT TECHNOLOGICAL UNIVERSITY
ME - SEMESTER-II • EXAMINATION – SUMMER 2015

Subject Code: 2722810**Date: 01/06/ 2015****Subject Name: Production & Operation Management****Time: 2:30-5:00 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) Define Operations management. Explain the key concepts of Operations management. **07**
(b) Classify Production system. Explain any one in detail. **07**
- Q.2** (a) Which factors causes line balancing problem? Write steps to solve line balancing problem. **07**
(b) Explain factors affecting make or buy decision. **07**
- OR**
- (b) What are functional aspects of make or buy decision. **07**
- Q.3** (a) Explain main function of Production Planning and Control. **07**
(b) What are Aggregate Planning and Master Scheduling? Explain Aggregate Planning strategies. **07**
- OR**
- Q.3** (a) Explain need of Production Planning and Control with objectives. **07**
(b) What are the major inputs to Master schedule? What determines the planning horizon length of Master schedule? **07**
- Q.4** (a) Explain objectives of maintenance. Explain cost associated with maintenance. **07**
(b) Explain preventive maintenance system. Differentiate it with breakdown maintenance. **07**
- OR**
- Q.4** (a) Explain various types of maintenance with their relationship. **07**
(b) Explain condition based maintenance with its benefit. **07**
- Q.5** (a) Classify inventory models. Explain any one inventory model. **07**
(b) Explain basic elements of Just in Time. **07**
- OR**
- Q.5** (a) What is inventory control? What is objectives and benefits of inventory control? **07**
(b) Explain Just in Time system of manufacturing with diagram. **07**
