

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-VIII EXAMINATION – SUMMER 2016****Subject Code:182501****Date:10/05/2016****Subject Name:Production and Operations Management****Time:10:30 AM to 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) Write objectives and functions of production planning and control. **07**
 (b) Discuss how break even analysis can be helpful for production and operations management in detail. **07**
- Q.2** (a) Write short note on process planning. Discuss steps involved in it. **07**
 (b) Discuss in detail based on which criteria make or buy decision depends? **07**
- OR**
- (b) What steps are needed to find out individual machine capacity? What kinds of input data are required to for machine selection? **07**
- Q.3** (a) Write short note on dimensional analysis. **07**
 (b) Write in detail how concept of location and geometric control can be helpful in workpiece control? **07**
- OR**
- Q.3** (a) Discuss: (1) The strategic role of forecasting in supply chain management. **07**
 (2) Demand behavior.
 (b) Compare difference between Mean absolute deviation and mean absolute percent deviation. **07**
- Q.4** (a) What are the objectives of scheduling? **07**
 Discuss in detail about following:
 (1) Drum-buffer-rope.
 (b) Write in detail about sequencing jobs through one process. **07**
- OR**
- Q.4** (a) What is meaning of level production chase demand, peak demand, overtime/under time, subcontracting, backlogs, backordering? **07**
 (b) Write short note on pure strategies used for aggregate planning. Write ingredients of MRP. **07**
- Q.5** (a) What are objective of assembly line balancing? Discuss rank positional weight method. **07**
 (b) How material management and inventory control is helpful in Production and operation management? What do you mean by costs trade-off? **07**
- OR**
- Q.5** (a) Explain purchase model with instantaneous replenishment and without shortages. **07**
 (b) Write short note on the ABC classification system. **07**
