

## SEVENTH SEMESTER B.TECH. (ENGINEERING) EXAMINATION, NOVEMBER 2013

ME 09 702 - OPERATIONS MANAGEMENT

Time: Three Hours

Maximum: 70 Marks

## Part A

Answer all questions.

- 1. What do you mean by product life cycle?
- 2. What is productivity index?
- 3. What are the types of material handling equipments used in a facility?
- 4. What are the different types of inventory cost?
- 5. How economic aspects influence the selection of maintenance type?

 $(5 \times 2 = 10 \text{ marks})$ 

## Part B

Answer any four questions.

- 1. Briefly describe different types of forecasting techniques used.
- 2. Write a note on different types of process planning.
- 3. What is meant by assembly line balancing?
- 4. What is the importance of purchase management?
- 5. How safety stock is calculated in a continuous review system?
- Write a short note on different types of methods used for replacement of equipment.

 $(4 \times 5 = 20 \text{ marks})$ 

## Part C

Answer all questions.

Write a note on types of production system.

Or

Describe procedure followed while designing a product.

2. Briefly describe about general framework for planning and scheduling within a production environment

Or

What are the factors influencing facility layout? How layout design process is carried out?

3. Derive an expression for decision variables for different models of deterministic inventory models.

Or

How is scheduling of operations done?

4. What are the different types of maintenance used? What are the factors affecting selection of maintenance technique?

Or

Write a note on various techniques used for project management. How tradeoffs between costs are balanced?

 $(4 \times 10 = 40 \text{ marks})$