

B.TECH.
THEORY EXAMINATION (SEM–VIII) 2016-17
PRODUCTION & OPERATIONS MANAGEMENT

Time : 3 Hours

Max. Marks : 100

Note : Be precise in your answer. In case of numerical problem assume data wherever not provided.

SECTION – A

1. **Explain the following:** **10 x 2 = 20**
- (a) Explain the evolution of operations management.
 - (b) Enlist the factors considered for designing products.
 - (c) State four significance of good plant layout.
 - (d) What are the elements of project management?
 - (e) Explain the term: Operations scheduling.
 - (f) What are the dimensions of quality?
 - (g) Why aggregate planning is done.
 - (h) Name the work measurement techniques.
 - (i) What are plant location decisions?
 - (j) List out the various activities involved in Job design.

SECTION – B

2. **Attempt any five parts of the following questions:** **5 x 10 = 50**
- (a) What are the primary and secondary factors taken in to account while choosing an appropriate site for a manufacturing plant.
 - (b) Give the classification of plant layout with relative merits and demerits.
 - (c) Explain the various phases of project management.
 - (d) What do you understand by production Scheduling. Why it is done. Also explain the Master Production Scheduling.
 - (e) Identify the differences between manufacturing resource planning (MRP II) and materials requirements planning (MRP). Explain each difference clearly.
 - (f) Explain the various strategies involved in aggregate planning.
 - (g) “Don’t inspect quality, quality should be inbuilt”. Comment.
 - (h) Briefly explain the TQM concept. Also discuss the dimensions of quality in terms of goods and services.

SECTION – C

- Attempt any two parts of the following questions:** **2 x 15 = 30**
- 3 What do you understand by service design? Discuss the various characteristics of service design. Also explain the factors influencing service design.
 - 4 Explain the various operations strategies applied for gaining competitive advantage by a manufacturing firm.
 - 5 “World class manufacturing is a collection of concepts, which set standard for production and manufacturing for another organization to follow”. Comment. Also explain the principles and techniques of world class manufacturing.