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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.