Printed Pages: 1 Sub Code: RME-062
Paper Id 140271 Roll No.

#### **B TECH**

# (SEM-VI) THEORY EXAMINATION 2018-19 PRODUCTION PLANNING & CONTROL

Time: 3 Hours Total Marks: 70

Note: Attempt all Sections. Choose missing data suitably.

#### **SECTION A**

## 1. Attempt all questions in brief.

2x 7 = 14

- a. State the factors of production.
- b. Define the boundaries of production system.
- c. What is the organization of PPC?
- d. List out activities involved in production planning & control.
- e. Describe main function of enterprise resource planning.
- f. Explain move card.
- g. What is ABC analysis?

#### **SECTION B**

## 2. Attempt any three of the following:

7x3 = 21

- a. Distinguish between production and production system.
- b. What are the aims and objectives of production planning & control?
- c. List out the methods of sales forecasting and explain one method in detail.
- d. Explain function of sequential load statement with example.
- e. Write notes on the following topic:
  - i. Dispatching ii. Expediting.

#### **SECTION C**

#### 3. Attempt any one part of the following:

7x 1=7

- a. What are the functions of production planning & control?
- b. Explain the three basic time horizon for forecasts in detail.

## 4. Attempt any one part of the following:

7x 1=7

- a. Justify the suitability of cellular layout for the following:
  - i. Just-in-time manufacturing
  - ii. Flexible manufacturing
- b. Discuss routing and scheduling w.r.t. job order industry.

## 5. Attempt any one part of the following:

 $7x\ 1=7$ 

- a. Explain the objectives in a line balancing problem and define balancing delay and Line efficiency.
- b. Differentiate between loading & scheduling with example.

## 6. Attempt any one part of the following:

 $7x\ 1=7$ 

- a. What are the differences between PERT and CPM?
- b. The precedence relationship for nine activities is given below. Find critical path and different floats/ slack:

Activity	A	В	С	D	Е	F	G	Н	I
Duration(days)	9	9	10	4	7	3	8	7	0
Precedence	-	-	-	Α	В	С	D,E,F	С	G,H

## 7. Attempt any one part of the following:

7x 1=7

- a. Differentiate manufacturing resource planning and material resource planning on the basis of functionality.
- b. Explain the different costs involved in inventory model and purpose of maintaining inventory in any production unit.

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