

**B.TECH**  
**(SEM VIII) THEORY EXAMINATION 2017-18**  
**PRODUCTION AND OPERATION MANAGEMENT**

Time: 3 Hours

Total Marks: 100

**Note:** 1. Attempt all Sections. If require any missing data; then choose suitably.

**SECTION A**

**1. Attempt *all* questions in brief. 2 x 10 = 20**

- a. Distinguish between Production and Productivity.
- b. List the types of Production Systems.
- c. Distinguish MRP and MRP II.
- d. Write the scope of Materials management.
- e. What is capacity requirement planning?
- f. What is meant by operations Scheduling
- g. What is codification?
- h. What is the purpose of Motion Study? Give Example.
- i. Why aggregate planning is done?
- j. What are the various activities involved in Job Design?

**SECTION B**

**2. Attempt any *three* of the following: 10 x 3 = 30**

- a. Describe the primary inputs, outputs and conversion subsystems of the following :
  - (i) dry cleaning
  - (ii) electronic manufacturing
  - (iii) fire station
  - (iv) Employment office.
- b. Explain the various phases of project management.
- c. Describe the importance capacity planning concepts. What is the best operating level?
- d. Differentiate between Science, Technology, Industrial Management and Industrial Engineering.
- e. Classify plant layout with proper advantaged and disadvantages of each.

**SECTION C**

**3. Attempt any *one* part of the following: 10 x 1 = 10**

- (a) List and elaborate different ways and methods derived for meeting out competition at the global level. How do you feel that P&OM is an effective tool in meeting our competition and challenges at the global level?
- (b) Explain Operation strategies for competitive advantage.

**4. Attempt any *one* part of the following: 10 x 1 = 10**

- (a) Explain the resource levelling and resource allocation procedure in project management with examples.
- (b) Enumerate the steps in selection of facility location.

- 5. Attempt any *one* part of the following: **10 x 1 = 10****
- (a) What is meant by service design? Discuss various characteristics of service design. Also explain the factors influencing service design.
  - (b) Define CPM, Also explain its limitation. What is crashing of CPM networks?
- 6. Attempt any *one* part of the following: **10 x 1 = 10****
- (a) Compare developing of new products and developing new services. How they are different and how they are alike?
  - (b) Discuss the overview of Material management information system (MMIS).
- 7. Attempt any *one* part of the following: **10 x 1 = 10****
- (a) What is master production schedule? How does it differ from forecast? What is the lead time offsetting?
  - (b) Explain MRP II and its working (with example) through a flow diagram. Clearly show the outputs and inputs to MRP II in flow diagram.