

**Roll No.**

**Total No. of Pages : 02**

**Total No. of Questions : 08**

**M.Tech.(ME) (PT) (Sem.-5)**

# PRODUCTION PLANNING & CONTROL

**Subject Code : MME-523**

**M.Code : 38217**

**Time : 3 Hrs.**

**Max. Marks : 100**

**INSTRUCTION TO CANDIDATES :**

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWENTY marks.

1.
  - a) Discuss the functions of production planning and control. State the principles of good production planning and control.
  - b) Differentiate between the production planning and production control. Briefly explain the prerequisites of production planning and control
2.
  - a) What is pre-planning? Why is it important to run the manufacturing plant smoothly and what activities does pre-planning cover?
  - b) How do organizations plan the following aspects while planning and designing products?
    - (i) Product characteristics,
    - (ii) Durability and dependability,
    - (iii) Aesthetics & ergonomic aspects
3.
  - a) Write short notes on any one of the following :
    - (i) 3 S's technique for product development.
    - (ii) Safety stocks in inventory and their objectives.
  - b) What are different types of inventory costs? Bring out their role and importance in inventory models.

4. a) A company needs 6000 units of a product per month. The product is purchased from outside for which the set-up cost is Rs 2000 per order. The cost of holding inventory, in terms of capital tied up amounts to Rs 1.50 per unit per month. How frequently should the company place orders for the product?  
  
b) What is an ABC and VED control policy? Describe in detail.
5. a) Define the following and what role do they play in production planning and control?
  - (i) Product groups,
  - (ii) Route sheet,
  - (iii) Scheduling  
b) Distinguish between cost, price and value and reflect their significance in competitive performance of a firm.
6. a) What is value analysis? Explain its phases in detail. How does it differ from value engineering?  
  
b) Define routing and its significance. Explain about the important components of routing sheets?
7. a) Why is scheduling important? What are the scheduling techniques? Explain the project scheduling techniques a project manager should be aware of.  
  
b) Explain the need of dispatching function in production control. Explain the duties of the dispatching function. How is dispatching of production orders executed?
8. a) What is the difference between routing and scheduling functions? Explain with an example, the purpose of a route sheet.  
  
b) Explain the terms-forward scheduling and backward scheduling.

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**