

# INDUSTRIAL ENGINEERING & MANAGEMENT

## TH-01



BRANCH-AUTOMOBILE ENGINEERING

SEMESTER-6<sup>th</sup>

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## **CHAPTER-1**

### **PLANT ENGINEERING**

#### **QUESTION OR 2 MARK**

- 1.** Define plant layout
2. Explain process layout
3. What is plant maintenance
4. Write down the brake maintenance
5. Write down Scheduled maintenance.
6. What is Preventive maintenance.?

#### **QUESTION FOR 10 MARK**

1. Describe the objective and principles of plant layout.
2. Explain Process Layout, Product Layout and Combination Layout.
3. Principles of material handling equipment.
4. Write down the Importance of plant maintenance.

## **CHAPTER-02**

#### **QUESTION FOR 2 MARK**

- 1.** Define linear programming.
2. Define CPM.
3. Define PERT.
4. Write down the application of cpm
5. write down the application of pert

#### **QUESTION FOR 10**

#### **MARK**

1. Explain the differences between CPM and PERT networks
2. The following table use the activities in a construction projects and relevant information Draw the network for the project, calculate the earliest start time, earliest finish time, latest start time and latest finish time of each activity and find the critical path. Compute the project duration

## **CHAPTER-03**

### **QUESTION FOR 2 MARK**

- 1.What is inventory?
- 2.Classification of inventory
- 3.Define ABC.
- 4.What is terminology?
- 6.Write down the benefits of inventory control

### **Question for 10 mark**

- 1.Define and explain of ABC analysis .
2. Explain and Derive economic order quantity for Basic model.
3. Describe the functions of inventories.
4. Classification of inventory.

## **CHAPTER-04**

### **QUESTION FOR 2 MARK**

1. Define Quality.
2. List objectives of Quality control.
3. State the meaning of Quality of Design.
4. State the meaning of Quality of Conformance.
5. State the meaning of Quality of Performance.
6. Define reliability.
7. List down advantages of Quality assurance.
8. List down objectives of Quality Circle.
9. List down advantages and disadvantages of Quality Circle.
10. List down objectives of Quality audit.
11. Define TQM and List down its principles.
12. List down objectives of TQM.
13. Explain the importance of TQM.
14. State the belt used in Six Sigma.
15. List the tool used in Kaizen.
16. Define Cost of quality and value of quality
17. List down advantages of Quality function deployment.

18. List down applications of Quality function deployment.
19. Define Frequency distribution.
20. State different SQC tools.
21. Define Inspection.
22. State the objectives of Inspection.

### **QUESTION FOR 10 MARK**

- 1) Classify Quality control charts.
- 2) Differentiate between Attribute chart and Variable chart.
- 3) Differentiate between assignable and chance causes.
- 4) State characteristics of normal distribution.
- 5) Explain procedure to draw X-bar and R chart.
- 6) Explain procedure for plotting P-chart
- 7) Explain Following trends of X bar control chart
  - a. Extreme Variation
  - b. Shift
  - c. Erratic Fluctuation
  - d. Indication of trend
- 8) Differentiate between P chart and nP chart.
- 9) Compare Single sampling and Double sampling plan.
- 10) State advantages of sampling inspection over 100% Inspection.
- 11) Compare acceptance sampling with 100% Inspection.
- 12) Explain Double sampling plan
- 13) Differentiate between AQL and IQL in O. C curve.
- 14) Draw a neat sketch of an actual O.C curve.
- 15) Explain producer risk and consumer risk with neat sketch
- 16) Explain producer risk and consumer risk with suitable example.
- 17) Eight Samples of size 5 each have been collected with following observations,  
Given  $A_2 = 0.577$ ,  $D_3 = 0$ ,  $d_2 = 2.326$  and  $D_4 = 2.114$ .  
Draw proper control chart & conclude.

### **CHAPTER-05**

### **QUESTION FOR 2 MARK**

- Define production planning and control
- 2 List the objectives of PPC
- 3 What are the phases of production planning and control
- 4 List various functions of PPC
- 5 What is production system
- 6 List the types of production system
- 7 What are the objectives of product analysis?
- 8 List the various factors that influence the product design.
- 9 What is meant by standardization
- 10 What is meant by simplification
- 11 Define job
- 12 Define batch
- 13 State the aims and advantages of standardization
- 14 What do you understand by break even analysis
- 15 What is Break Even Point
- 16 Write the significance of BEP
- 17 List out the managerial uses of break even analysis
- 18 How the plant layouts are related to type of production
- 19 Differentiate between product design and product development
- 20 List out the assumptions in Break even analysis

### **QUESTION FOR 10 MARK**

- 1. a What do you understand by production planning and objective of 8 production planning.
- b Formulate the levels of production planning and Factors determining 8 production planning
- 2. a What do you understand by production control and objective of 8 production control.
- b Formulate the scope of production control and Factors determining 8

production control.

3 a Compare the Relationship between production planning and production control with neat block diagrams.

b Explain the function of production planning and control with help of neat sketch.

4 Explain the phases of production planning and control .

5 List out the function of Production planning and control

6. a List out the limitation of break even analysis .

b Enumerates the margin of safety and angle of incidence .

7 Tabulate the Comparison between types of Production .

8 a Enumerates job shop and batch production systems. .

b Enumerates mass and continuous production systems. .

9 Annual fixed costs at a small textile shop are Rs. 50000 and variable costs .are estimated at 50% of the Rs. 40 / unit selling price. (a) find the BEP.

(b) what profit (or loss) would result from a volume of 3250 units

10 a Explain the product design and product development .

b Explain the marketing aspects of product design 8.

11 a Explain the functional and operational aspects of product design.