

4th Sem,

**Subject : Industrial Engineering****Time : 3 Hrs.****M.M. : 100****SECTION-A****Note :** Multiple choice questions. All questions are compulsory. (10x1=10)

- Q.1 In product layout (CO-6)
- Specialized and strict supervision is required.
  - Machines cannot be used to their maximum capacity.
  - Manufacturing cost rises with a fall in the volume of production.
  - All of the above.
- Q.2 Earliest finish time can be regarded as (CO-5)
- Earliest start time + duration of activity
  - Earliest start time duration of activity.
  - Latest finish time + duration of activity
  - Latest finish time duration of activity
- Q.3 Gantt chart is used for (CO-7)
- Inventory control
  - Material handling
  - Production schedule
  - Machine repair schedules
- Q.4 Micro-Motion study is (CO-3)
- Analysis of one stage of motion chart
  - Motion study, when seen on a time chart
  - Subdivision of an operation into therbligs and

their analysis

- d) Enlarged view of motion study
- Q.5 In manufacturing management, the term 'Dispatching' is used to describe. (CO-8)
- Dispatch of sales order
  - Dispatch of work orders through shop floor
  - Dispatch of finished product of the user
  - Dispatch of factory mail.
- Q.6 Time study is carried out to determine the time required to complete job by (CO-2)
- An average worker
  - A fast worker
  - A slow worker
  - An apprentice
- Q.7 In time study, the rating factor is applied to determine (CO-4)
- Standard time of a job
  - Merit rating of the worker
  - Normal time of a worker
  - Fixation of incentive rate
- Q.8 Which of the following layouts is suited for mass production? (CO-8)
- Process layout
  - Product layout
  - Fixed position layout
  - Plant layout
- Q.9 Bin card is used in (CO-9)
- Workshop
  - Stores
  - Foundry shop
  - Administrative wing
- Q.10 Basic tool in work study is (CO-1)
- Graph paper
  - Process chart
  - Planning chart
  - Stop watch

### SECTION-B

**Note :** Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Why productivity is important for an organization? (CO-2)
- Q.12 Define Production. (CO-1)
- Q.13 What is method study? (CO-3)
- Q.14 What are incentives? (CO-4)
- Q.15 Define Routing? (CO-5)
- Q.16 What is continuous type of production? (CO-6)
- Q.17 Define machine loading. (CO-7)
- Q.18 What do you understand by plant layout? (CO-8)
- Q.19 Give the name of different types of inventory. (CO-9)
- Q.20 Write any two advantages of a good incentive plan. (CO-4)

### SECTION-C

**Note :** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Write the various method of productivity measurement. Explain any two methods. (CO-1)
- Q.22 Describe the inter-relationship between method study and work study. (CO-3)
- Q.23 Write about the role of work study in improving productivity. (CO-2)
- Q.24 What is method study? Write down any two objective of method study. (CO-2,3)
- Q.25 Write short note on Cronocycle graph and cycle graph. (CO-3)
- Q.26 Explain standard time calculation for a job. (CO-3)

- Q.27 Discuss various types of incentives. (CO-4)
- Q.28 What is meant by Dispatching. (CO-5)
- Q.29 What are the major functions of Production planning and control? (CO-5)
- Q.30 Differentiate PERT and CPM. (CO-8)
- Q.31 How the plant layouts are related to type of production? (CO-8)
- Q.32 Explain Gantt chart. (CO-7)
- Q.33 Write the names of various techniques of work measurement. Explain any two. (CO-3)
- Q.34 Derive the basic EOQ model and list the various assumptions on which it works. (CO-9)
- Q.35 Write in brief about micro-motion study. (CO-3)

### SECTION-D

**Note :** Long Answer type question. Attempt any two questions. (2x10=20)

- Q.36 What do you understand by production planning and control? Discuss its main elements. (CO-5)
- Q.37 Describe work study. Write basic procedure for work study. (CO-3)
- Q.38 State principles of motion economy as related to human body. How they are related to design of tools and equipments. (CO-8)