

- Q.27 What is a SIMO chart? Discuss?
- Q.28 Write few applications of Ergonomics?
- Q.29 Define standard data and its type in detail?
- Q.30 Write short note on stop watch time study procedure?
- Q.31 What is EOQ model? How carrying cost is calculated?
- Q.32 What is Gantt chart? Explain order control chart?
- Q.33 Differentiate b/w PERT and CPM.
- Q.34 Write the objectives and importance of costing?
- Q.35 What are the objectives of Material and store management?

#### SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Explain PPC. Its advantages & various stages.
- Q.37 What is the purpose of work measurement? Mention and explain the steps involved in the work measurement process.
- Q.38 Write short note on any two:
- Process planning
  - Different layout used in Store
  - Route sheet

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**6th Sem / Auto, Mech, T&D, Prod, GE, CNC, CAD  
/CAM, Mech. Engg. (Fabrication Tech.). Mech ( CAD/  
CAM Design & Robotics)**

**Subject:- Industrial Engineering**

Time : 3Hrs.

M.M. : 100

#### SECTION-A

**Note:** Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 In product layout
- 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
- 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
- Inventory control
  - Material handling
  - Production schedule
  - Machine repair schedules

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- Q.4 Micro-motion study is
- Analysis of one stage of motion chart
  - Motion study, when seen on a time chart
  - Subdivision of an operation into therbligs and their analysis
  - Enlarged view of motion study
- Q.5 In manufacturing management, the term 'Dispatching' is used to describe
- 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
- An average worker
  - A fast worker
  - A slow worker
  - An apprentice
- Q.7 In time study, the rating factor is applied to determine
- 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?
- Process layout
  - Product layout
  - Fixed position layout
  - Plant layout
- Q.9 Bin card is used in
- Workshop
  - Stores
  - Foundry shop
  - Administrative wing

- Q.10 Basic tool in work study is
- Graph paper
  - Process chart
  - Planning chart
  - Stop watch

### SECTION-B

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

- Q.11 Define Bin cards.
- Q.12 Define Routing
- Q.13 Define Critical Time
- Q.14 Define Wage Payment
- Q.15 Define Financial Incentive
- Q.16 Define Basic time
- Q.17 Define Therblig
- Q.18 Define Method study
- Q.19 Define Productivity
- Q.20 Define Work study

### SECTION-C

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

- Q.21 How the productivity is measured? Explain.
- Q.22 Explain the causes of low productivity?
- Q.23 How work study help in improving productivity?
- Q.24 Explain the objectives and scope of work study?
- Q.25 Explain Operation Process Chart
- Q.26 Explain the procedure of method study?