

Time Allowed : 3 Hrs.

MM:100

Section –A

Note: Multiple Choice questions. All questions are compulsory.**10x1=10**

- Q1. Work study involves
(A) Only method study
(B) Only work measurement
(C) Method study and work measurement
(D) Only motion study (CO 3)
- Q2. PERT has following time estimate
(A) One time estimate
(B) Two time estimate
(C) Three time estimate
(D) Four time estimate (CO 7)
- Q3. The time required to complete a task is established and a bonus is paid to the worker for every hour he saves from the established time required. This type of incentive plan is known as
(A) Rowan Plan
(B) Taylor Differential Piece rate system
(C) Halsey Premium plan
(D) Day work plan (CO 4)
- Q4. The disadvantage of product layout is
(A) High initial investment for the specialized facilities
(B) Skilled labour to operate machines
(C) Production time is longer, requiring more goods in inventory
(D) High cost of inspection (CO 8)
- Q5. In manufacturing management, the term 'Dispatching' is used to describe
(A) Dispatch of sales order
(B) Dispatch of factory mail
(C) Dispatch of finished product of the user
(D) Dispatch of work orders through shop floor (CO 5)
- Q6. Standard time is defined as
(A) Normal time + allowances
(B) Normal time + idle time + allowances
(C) Normal time + idle time
(D) Only normal time for an operation (CO 2)
- Q7. Micro motion study is
(A) Analysis of a man-work method by using a motion picture camera with a timing device in the field of view
(B) Motion study observed on enhanced time intervals
(C) Motion study of a sequence of operations conducted systematically
(D) Study of man and machine conducted simultaneously (CO 8)
- Q8. Bin card is used in
(A) Administrative wing
(B) Workshop
(C) Foundry shop
(D) Stores (CO 9)
- Q9. Which one of the following techniques is used for determining allowances in time study?
(A) Acceptance sampling
(B) Linear regression (CO 2)

- (C) Performance rating
(D) Work sampling
- Q10. What does symbol 'O' imply in work study? (CO 2)
(A) Operation
(B) Inspection
(C) Transport
(D) Delay/temporary storage

Section-B

Note: Objective type questions. All questions are compulsory.

10x1=10

- Q11. Define Production? (CO 1)
Q12. Name the techniques of work study? (CO 3)
Q13. Draw the symbol of transportation. (CO2)
Q14. What is the purpose of micro motion study? (CO 8)
Q15. PMTS stands for (CO 2)
Q16. Work sampling is based upon the law of..... . (CO 2)
Q17. Name different types of Incentives. (CO 4)
Q18. PERT isoriented. (CO 7)
Q19. Gantt chart was developed by..... (CO 7)
Q20. E.O.Q stands for..... (CO 9)

Section –C

Note: Short answer type Questions. Attempt any twelve questions out of fifteen questions.

12x5=60

- Q 21 Write the internal factor which affect productivity? (CO 1)
Q 22 Write the objectives of work study. (CO 3)
Q 23 Explain the procedure of method study. (CO 2)
Q 24 Explain SIMO chart with an example. (CO 8)
Q 25 Explain the procedure of work measurement. (CO 2)
Q 26 Define work sampling. Explain its procedure. (CO 2)
Q 27 Define incentive. What are its different types? Explain. (CO 4)
Q 28 Explain Halsey plan. (CO 4)
Q 29 Explain routing and its procedure. (CO 5)
Q 30 Differentiate between PERT and CPM. (CO 7)
Q 31 What is inventory? What are its different types? Explain. (CO 9)
Q 32 Explain the human aspect of work study. (CO 3)
Q 33 Explain the causes of low productivity. (CO 1)
Q 34 What is standard data? What are its different types? Explain. (CO 2)
Q 35 Write the factors which are taken into consideration while planning the store layout. (CO 9)

Section-D

Note: Long answer type questions. Attempt any two questions out of three questions.

2x10=20

- Q 36 Define ergonomics. Explain the application of ergonomics. (CO 8)
Q 37 Explain the factors which are considered for selecting a job for work study. (CO 3)
Q 38 Explain: (CO 4)
i) Taylor's differential piece rate system
ii) Merrick's differential piece rate system