

Time: One Hour

Max. Marks: 50

instructions

solve any 25 questions from Q.1 to Q.30

solve any 25 questions from Q.31 to Q.60

- 1 The production cost per unit can be reduced by  
 (A)Producing more with increased inputs (B)Producing more with the same inputs (C)Eliminating idle time (D)Minimizing resource waste
- 2 At the break-even point,  
 (A)Total cost is more than the sales revenue (B)Total cost is less than the sales revenue (C)Total cost is equal to sales revenue (D)Fixed cost is equal to variable cost
- 3 Performance rating is equal to  
 (A)Observed performance + normal performance (B)Observed performance - normal performance (C)Observed performance  $\times$  normal performance (D)None of the mentioned
- 4 Which of the following layouts is suited for mass production?  
 (A)Process layout (B)Product layout (C)Fixed position layout (D)Plant layout
- 5 Basic tool in work study is  
 (A)Graph paper (B)Process chart (C)Planning chart (D)Stop watch
- 6 Work sampling is applied for  
 (A)Estimation of the percentage utilization of machine tools (B)Estimating the percentage of the time consumed by various job activities (C)Finding out time standards, specially where the job is not repetitive and where time study by stop watch method is not possible (D)All of the mentioned
- 7 One of the basic essentials of an incentive plan is that  
 (A)A differential piece rate system should exist (B)Minimum wages should be guaranteed (C)Provide incentive to group efficiency performance (D)All standards should be based on time studies
- 8 Inventory control in production, planning and control aims at  
 (A)Achieving optimization (B)Ensuring against market fluctuations (C)Acceptable customer service at low capital investment in inventory (D)Discounts allowed in bulk purchase
- 9 The allowed time for a job equals standard time plus  
 (A)Policy allowance (B)Interference allowance (C)Process allowance (D)Learning allowance
- 10 Value engineering aims at finding out the  
 (A)Depreciation value of a product (B)Resale value of a product (C)Major function of the item and accomplishing the same at least cost without change in quality (D)Break-even point when machine requires change
- 11 Gantt charts are used for  
 (A)Forecasting sales (B)Production schedule (C)Scheduling and routing (D)Linear programming
- 12 Work study is concerned with  
 (A)Improving present method and finding standard time (B)Motivation of workers (C)Improving production capability (D)Improving production planning and control
- 13 Which of the following layouts is suited to job production?  
 (A)Process layout (B)Product layout (C)Fixed position layout (D)Plant layout
- 14 The product layout  
 (A)Lowers overall manufacturing time (B)Requires less space for placing machines (C)Utilizes machine and labour better (D)All of these
- 15 Father of time study was  
 (A)F.W. Taylor (B)H.L. Gantt (C)F.B. Gilbert (D)R.M. Barnes
- 16 Work study comprises following main techniques  
 (A)Method study and work measurement (B)Method study and time study (C)Time study and work measurement (D)Method study and job evaluation
- 17 P.M.T.S. (Predetermined Motion Time Systems) include  
 (A)M.T.M. (Method Time Measurement) (B)W.F.S. (Work Factor Systems) (C)B.M.T.S. (Basic Motion Time Study) (D)All of these
- 18 Which of the following organization is preferred in automobile industry?  
 (A)Functional organization (B)Line organization (C)Staff organization (D)Line and staff organizations
- 19 Process layout is employed  
 (A)Where low volume of production is required (B)Where similar jobs are manufactured on similar machines (C)Where machines are arranged on functional basis (D)All of the mentioned

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- 20 The type of organization preferred for a steel industry, is  
(A)Line organization (B)Functional organization (C)Line and staff organization (D)Line, staff and functional organization
- 21 In which of the following layouts, the lines need to be balanced  
(A)Process layout (B)Product layout (C)Fixed position layout (D)Plant layout
- 22 The salient feature of functional organisation is  
(A)Strict adherence to specification (B)Separation of planning and design part (C)Each individual maintains functional efficiency (D)All of the mentioned
- 23 What does symbol 'O' imply in work study?  
(A)Operation (B)Inspection (C)Transport (D)Delay/temporary storage
- 24 What does symbol 'T' imply in work study?  
(A)Operation (B)Inspection (C)Transport (D)Delay/temporary storage
- 25 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
- 26 Military organization is known as  
(A)Line organization (B)Line and staff organization (C)Functional organization (D)All of the mentioned
- 27 In a functional organisation  
(A)Quality of work is better (B)Wastage of material is minimum (C)Specialized knowledge and guidance to individual worker is provided (D)All of the mentioned
- 28 PMTP (predetermined motion time systems) include  
(A)MTM (method time measurement) (B)WFS (work factor systems) (C)BNTS (basic motion time study) (D)All of the mentioned
- 29 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
- 30 The type of layout used for manufacturing steam turbines, is  
(A)Product layout (B)Process layout (C)Fixed position layout (D)Any one of these
- 31 Motion study involves analysis of  
(A)Actions of operator (B)Layout of work place (C)Tooling and equipment (D)All of the mentioned
- 32 The average time recorded by work study man for an operation is called  
(A)Standard time (B)Normal time (C)Representative time (D)None of these
- 33 Indirect expenses include  
(A)Factory expenses (B)Selling expenses (C)Administrative expenses (D)All of these
- 34 Time study is carried out to determine the time required to complete job by  
(A)A slow worker (B)A fast worker (C)An average worker (D)An apprentice
- 35 The technique for establishing and maintaining priorities among the various jobs of any project is known as  
(A)Event flow scheduling technique (B)Critical ratio scheduling (C)Slotting technique for scheduling (D)Short interval scheduling
- 36 In time study, the rating factor is applied to determine  
(A)Standard time of a job (B)Merit rating of the worker (C)Fixation of incentive rate (D)Normal time of a worker
- 37 What does symbol 'D' imply in work study?  
(A)Inspection (B)Transport (C)Delay/temporary storage (D)Permanent storage
- 38 The purpose of micro-motion study is to  
(A)Assist in finding out the most efficient way of doing work (B)Train the individual operator regarding the motion economy principles (C)Help in collecting the motion time data for synthetic time standards (D)All of the mentioned
- 39 What does symbol 'V' imply in work study  
(A)Operation (B)Inspection (C)Delay/ temporary Storage (D)Permanent storage
- 40 Routing prescribes the  
(A)Flow of material in the plant (B)Proper utilization of man power (C)Proper utilization of machines (D)Inspection of final product
- 41 The main objective of work measurement is to  
(A)Plan and schedule of production (B)Formulate a proper incentive scheme (C)Estimate the selling prices and delivery dates (D)All of the mentioned
- 42 Micro-motion study is  
(A)Enlarged view of motion study (B)Analysis of one stage of motion study (C)Minute and detailed motion study (D)Subdivision of an operation into therbligs and their analysis
- 43 Time study is carried out  
(A)By finding all the significant informations regarding the job, work place and machine tool etc (B)By breaking up each operation into small elements which are measurable with the help of the measuring device accurately (C)By observing and recording the time taken by the operator for an operation (D)All of the mentioned
- 44 The most suitable incentive plan for the maintenance section of an industry will be

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- (A) Piece rate system (B) Group incentive plan (C) Profit sharing plans (D) Simplification
- 45 Micro-motion study involves following number of fundamental hand motions 8  
(A) 8 (B) 12 (C) 16 (D) 20
- 46 Frederick W. Taylor introduced a system of working known as  
(A) Line organization (B) Line and staff organization (C) Functional organization (D) Effective organization
- 47 According to Muther, the basic principle of best layout is  
(A) Principle of overall integration (B) Principle of flow (C) Principle of flexibility (D) All of these
- 48 Work study is mainly aimed at  
(A) Determining the most efficient method of performing a job (B) Establishing the minimum time of completion of a job (C) Developing the standard method and standard time of a job (D) Economizing the motions involved on the part of the worker while performing a job
- 49 Standard time as compared to normal time is  
(A) Greater (B) Smaller (C) Equal (D) There is no such correlation
- 50 The technique of value analysis can be applied to  
(A) Complicated items only (B) Simple items only (C) Crash programmer items only (D) Any item.
- 51 String diagram is used when  
(A) Team of workers is working at a place (B) Material handling is to be done (C) Idle time is to be reduced (D) All of the mentioned
- 52 Works cost implies  
(A) Primary cost (B) Factory cost (C) Factory expenses (D) Primary cost + factory expenses
- 53 The chart which gives an estimate about the amount of materials handling between various work stations is known as  
(A) Flow chart (B) Process chart (C) Travel chart (D) Operation chart
- 54 Direct expenses include  
(A) Factory expenses (B) Selling expenses (C) Administrative expenses (D) None of these
- 55 Work study is most useful  
(A) Where production activities are involved (B) In judging the rating of machines (C) In improving industrial relations (D) In judging the output of a man and improving it
- 56 Percent idle time for men or machines is found by  
(A) Work sampling (B) Time study (C) Method study (D) Work study
- 57 Which of the following charts are used for plant layout design?  
(A) Operation process chart (B) Man machine chart (C) Travel chart (D) All of these
- 58 The determination of standard time in a complex job system is best done through  
(A) Stop watch time study (B) Analysis of micro-motions (C) Grouping timing technique (D) Analysis of standard data system
- 59 Job evaluation is the method of determining the  
(A) Relative worth of jobs (B) Skills required by a worker (C) Contribution of a worker (D) Contribution of a job
- 60 Merit rating is the method of determining the  
(A) Relative values of a job (B) Workers performance on a job (C) Worth of a machine (D) Value of overall production