**Unit 3: Work Measurements**

|  |
| --- |
| Questions |
| 1.Per cent idle time for men or machines is found by  (a) work sampling  (b) time study  (c) method study  (d) work study  (e) ABC analysis.  Ans: a |
| 2.TMU in method time measurement stands for  (a) time motion unit  (b) time measurement unit  (c) time movement unit  (d) technique measurement unit  (e) time method unit.  Ans: b |
| 3.Time study is  (a) the appraisal, in terms of time, of the value of work involving human effort  (b) machine setting time  (c) time taken by workers to do a job  (d) method of fixing time for workers  (e) method of determining the personnel Requirement.  Ans: a |
| 4.Work sampling observations are taken on the basis of  (a) detailed calculations  (b) convenience  (c) table of random numbers  (d) past experience  (e) fixed percentage of daily production.  Ans: c |
| 5.Basic motion time study gives times for basic motions in ten thousandths of  (a) second  (b) minute  (c) hour  (d) day  (e) none of the above.  Ans: b |
| 6.Choose the wrong statement. Motion study is used for  (a) improving a work method  (b) improvising a work method  (c) designing a work method  (d) providing a schematic framework  (e) reducing inventory costs  Ans: e |
| 7.The standard time for a job is  (a) total work content  (b) base time + relaxation time  (c) total work content + basic time  (d) total work content + delay contingency allowance  (e) total work content + relaxation time.  Ans: d |
| 8.Choose the wrong statement Time study is used to  (a) determine overhead expenses  (b) provide a basis for setting piece prices or incentive wages  (c) determine standard costs  (d) determine the capability of an operator to handle the number of machines  (e) compare alternative methods.  Ans: a |
| 9.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  (e) effectiveness of various alternatives.  Ans: a |
| 10.Per cent idle time for men or machines is found by  (a) work sampling  (b) time study  (c) method study  (d) work study  (e) ABC analysis.  Ans: a |
| 11.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  (e) none of the above.  Ans: a |
| 12.The grouping of activities into organisational units is called  (a) corporate plans  (b) higher level management  (c) functional authority  (d) departmentatidn  (e) company policy.  Ans: d |
| 13.Works cost implies  (a) primary cost  (b) factory cost  (c) factory expenses  (d) primary cost + factory expenses  (e) none of the above.  Ans: d |
| 14.Motion study involves analysis of  (a) actions of operator  (b) layout of work place  (c) tooling and equipment  (d) all of the above  (e) none of the above. |
| 15.Standard time as compared to normal time is  (a) greater  (b) smaller  (c) equal  (d) there is no such correlation  (e) none of the above.  Ans: a |
| 16.Pick up the incorrect statement about advantages of work sampling  (a) permits a fine breakdown of activities and delays  (b) simultaneous study of many operators may be made by a single observer  (c) calculations are easier, method is economical and less time consuming  (d) no time measuring devices are generally needed  (e) as operators are not watched for long periods, chances of obtaining misleading results are less.  Ans: a |
| 17.Current assets include  (a) manufacturing plant  (b) manufacturing plant and equipment  (c) inventories  (d) common stock held by the firm  (e) all of the above.  Ans: a |
| 18.An optimum project schedule implies  (a) optimum utilization of men, machines and materials  (b) lowest possible cost and shortest possible time for project  (c) timely execution of project  (d) to produce best results under given constraints  (e) realistic execution time, minimum cost and maximum profits.  Ans: b |
| 19.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 optimum standards of production  (e) all standards should be based on time studies.  Ans: e |
| 20.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  (e) value analysis and work measurement.  Ans: a |
| 21 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 (e) all of the above. Ans: a |
| 22. Basic tool in work study is (a) graph paper (b) process chart (c) planning chart (d) stop watch (e) analytical mind. Ans: d |
| 23. What does symbol ‘O’ imply in work study (a) operation       (b) inspection (c) transport (d) delay/temporary storage (e) none of the above. Ans: a |
| 24. What does symbol ‘D’ imply in work study (a) inspection (b) transport (c) delay/temporary storage (d) permanent storage (e) none of the above. Ans: c |

|  |
| --- |
| 5. What does symbol ‘V’ employ in work study (a) operation (b) inspection (c) delay/ temporary Storage (d) permanent storage (e) none of the above. Ans: d |
| 6. Material handling in automobile industry is done by (a) overhead crane (b) trolley (c) belt conveyor (d) all of the above (e) none of the above.  Ans: a |
| 7. 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 above (e) none of the above. Ans: a |
| 8. 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 (e) where men are biggest contributor to success of a project. Ans: a |
| 9. 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 (e) motion study of small components upto mirco-seconds. Ans: d |
| 10. In micro motion study, therblig is described by (a)  a symbol       (b)  an event (c)  an activity     (d)  micro motions (e)  standard symbol and color. Ans: e |
| 11. The allowed time for a job equals standard time plus (a) policy allowance (b) interference allowance (c) process allowance (d) learning allowance (e) unforeseen allowance. Ans: a |
| 12. Micro motion study involves following number of fundamental hand motions (a) 8 (b) 12 (c) 16 (d) 20 (e) 24 Ans: c |
| 13. The standard time for a job is (a) total work content (b) base time + relaxation time (c) total work content + basic time (d) total work content + delay contingency allowance (e) total work content + relaxation time. Ans: d |
| 14. Work study is done with the help of (a) process chart (b) material handling (c) stop watch     (d) all of the above (e) none of the above. Ans: c |
| 15. Scheduling gives information about (a) when work should start and how much work should be completed during a certain period (b) when work should complete (c) that how idle time can be minimized (d) proper utilization of machines (e) none of the above. Ans: a |
| 16. Expediting function consists in keeping a watch on (a) operator’s activity (b) flow of material and in case of trouble locate source of trouble (c) minimizing the delays (d) making efficient dispatching (e) none of the above. Ans: b |
| 17. Choose the wrong statement Time study is used to (a) determine overhead expenses (b) provide a basis for setting piece prices or incentive wages (c) determine standard costs (d) determine the capability of an operator to handle the number of machines (e) compare alternative methods. Ans: a |
| 18. 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 (e) effectiveness of various alternatives. Ans: a |
| 19. 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 (e) scientific, analytically procedure for determining optimum work method. Ans: a |
| 20. Per cent idle time for men or machines is found by (a) work sampling (b) time study (c) method study (d) work study (e) ABC analysis. Ans: a |
| 21. TMU in method time measurement stands for (a) time motion unit (b) time measurement unit (c) time movement unit (d) technique measurement unit (e) time method unit. Ans: b |
| 22. Time study is (a) the appraisal, in terms of time, of the value of work involving human effort (b) machine setting time (c) time taken by workers to do a job (d) method of fixing time for workers (e) method of determining the personnel Requirement.  Ans: a |
| 23. Work sampling observations are taken on the basis of (a) detailed calculations (b) convenience (c) table of random numbers (d) past experience (e) fixed percentage of daily production. Ans: c |
| 24. One time measurement unit (TMU) in method time measurement system equals (a) 0.0001 minute (b) 0.0006 minute (c) 0.006 minute (d) 0.001 minute (e) 0.06 minute. Ans: b |
| 25. Basic motion time study gives times for basic motions in ten thousandths of (a) second (b) minute (c) hour (d) day (e) none of the above. Ans: b |
| 26. Choose the wrong statement. Motion study is used for (a) improving a work method (b) improvising a work method (c) designing a work method (d) providing a schematic framework (e) reducing inventory costs. Ans: e |
| 27. Gnatt chart provides information about the (a) material handling (b) proper utilization of manpower (c) production schedule (d) efficient working of machine (e) all of the above. Ans: c |
| 28. ABC analysis deals with (a) analysis of process chart (b) flow of material (c) ordering schedule of job (d) controlling inventory costs money (e) all of the above. Ans: d |
| 29. Process layout is employed for (a)  batch production (b) continuous type of product (c) effective utilization of machines (d) all of the above (e) none of the above. Ans: a |
| 30. For a product layout the material handling equipment must (a) have full flexibility (b) employ conveyor belts, trucks, tractors etc. (c) be a general purpose type (d) be designed as special purpose for a particular application (e) arranging shops according to specialization of duties. Ans: d |