BRAINWARE UNIVERSITY

Term End Examination 2021 - 22
Programme – Diploma in Mechanical Engineering
Course Name – Industrial Engineering
Course Code - DME601
(Semester VI)

Time allotted : 1 Hrs.15 Min. **Full Marks : 60**

[The figure in the margin indicates full marks.]

Group-A

(Multiple Choice Type Question) 1 x 60=60

Choose the correct alternative from the following :

(1) The aim of value engineering is to
  a) find the depreciation value of a machine
  b) determine the selling price of a product
  c) minimise the cost without change in quality of the product
  d) all of the above

(2) The main object of scientific layout is
  a) to produce better quality of product
  b) to utilise maximum floor area
  c) to minimise production delays
  d) all of these

(3) Production cost refers to prime cost plus
  a) factory overheads
  b) factory and administration overheads
  c) factory, administration and sales overheads
  d) factory, administration, sales overheads and profit

(4) Fixed position layout is also known as
  a) analytical layout
  b) synthetic layout
  c) static product layout
  d) none of these

(5) Probabilistic time for completion of any activity can be found out from
  a) optimistic time
  b) pessimistic time
  c) most likely time
  d) all of these

(6) A diagram showing the path followed by men and materials while performing a task is known as
  a) string diagram
  b) flow process chart
  c) travel chart
  d) flow diagram

(7) In a line organisation

a) responsibility of each individual is fixed
b) discipline is strong
c) quick decisions are taken
d) all of these

(8) Work study involves

a) only method study
b) only work measurement
c) method study and work measurement
d) only motion study

(9) PERT analysis is based upon

a) optimistic time
b) pessimistic time
c) most likely time
d) all of these

(10) Simplex method is the method used for

a) value analysis
b) network analysis
c) linear programming
d) queuing theory

(11) Job evaluation is the method of determining the

a) relative values of a job
b) worker's performance on a job
c) worth of the machine
d) value of overall production

(12) String diagram is used

a) for checking the relative values of various layouts
b) when a group of workers are working at a place
c) where processes require the operator to be moved from one work place to another
d) all of the above

(13) Queuing theory is associated with

a) inventory
b) sales
c) waiting time
d) production time

(14) Which of the following statement is correct?

a) A-B-C analysis is based on Pareto's principle.
b) Simulation can be used for inventory control.
c) Economic order quantity formula ignores variations in demand pattern
d) all of the above

(15) Break even analysis is a

a) short term analysis
b) long term analysis
c) average of short and long term analysis
d) any one of these

(16) The purpose of micromotion 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 above

(17) Micromotion study is

a) analysis of one stage of motion chart
b) motion study, when seen on a time chart
c) subdivision of an operation into therbligs and their analysis
d) enlarged view of motion study

(18) 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

(19) Gantt chart gives information about

a) scheduling and routing
b) sales

c) production schedule
d) machine utilisation

(20) PERT stands for

a) Programme Estimation and Reporting Technique
b) Process Estimation and Review Technique
c) Programme Evaluation and Review Technique
d) Planning Estimation and Resulting Technique

(21) A dummy activity in a net work diagram

a) is represented by a dotted line
b) is an artificial activity
c) does not consume time or resources
d) all of these

(22) The product layout

a) lowers overall manufacturing time
b) requires less space for placing machines
c) utilises machine and labour better
d) all of these

(23) Product layout is best suited where

a) one type of product is produced
b) product is standardised
c) product is manufactured in large quantities
d) all of the above

(24) Line organisation is suitable for

a) sugar industries
b) oil refining industries
c) spinning and weaving industries
d) all of these

(25) PERT is applied for

a) marketing programmes and advertising programmes
b) installation of machinery
c) research and development of products
d) all of these

(26) In product layout

a) specialised and strict supervision is required
b) machines can not be used to their maximum capacity
c) manufacturing cost rises with a fall in the volume of production
d) all of the above

(27) Indirect expenses include

a) factory expenses
b) all of these
c) selling expenses
d) administrative expenses

(28) Service time in queuing theory is usually assumed to follow

a) normal distribution
b) Poissons distribution
c) Erlang distribution
d) exponential law

(29) 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

(30) Time study is used to

a) determine standard costs
b) determine the number of machines a person may run
c) provide a basis for setting piece price or incentive wages
d) all of the above

(31) The work study is done by means of

a) planning chart
b) process chart
c) stop watch
d) any one of these

(32) The type of organisation preferred for an automobile industry, is

a) line organisation
b) line, staff and functional organisation
c) functional organisation
d) line and staff organisation

(33) Linear programming can be applied successfully to

a) oil industry
b) banks
c) chemical industry
d) all of these

(34) Process layout is also known as

a) analyticallayout
b) synthetic layout
c) static product layout
d) none of these

(35) CPM requires

a) single time estimate
b) double time estimate
c) triple time estimate
d) none of these

(36) Actual performance of a task is called

a) an event
b) an activity
c) a duration
d) none of these

(37) he value engineering technique in which experts of the same rank assemble for product development is called

a) Delphi
b) brain storming
c) morphological analysis
d) direct expert comparison

(38) .....is the reverse process of differentiation

a) differential equation
b) integration
c) determinant
d) none of these

(39) When the values of two variables move in the same direction, correlation is said to be .....

a) positive
b) Negative
c) linear
d) non-linear

(40) The quantitative measure of correlation between two variables is known as.....

a) coefficient of correlation
b) coefficient of regression
c) coefficient of determination
d) none of the above

(41) Coefficient of correlation lies between .....

a) 0 and 1
b) 0 and -1
c) +1 and -1
d) none of these

(42) An analysis of the covariance between two or more variables is called .....

a) regression analysis
b) correlation analysis
c) testing of hypothesis
d) none of these

(43) Coefficient of correlation is independent of .....

a) origin
b) scale
c) both
d) none

(44) Coefficient of concurrent deviation depends on .....

a) magnitude of deviation
b) direction of deviation
c) both a and b
d) none of these

(45) Scatter diagram of the various values of (X, Y) gives the idea about .....

a) regression model
b) distribution of errors
c) functional relationship
d) none of the above

(46) Which of the following is not a part of Five M's?

a) Material
b) machine
c) Motion
d) Method

(47) Which of the below is not a popular production system?

a) Continuous production
b) Job order production
c) Batch production
d) Project production

(48) Procurement cycle time is time consumed for

a) Receiving of raw material
b) Inspection of various raw materials
c) Inspection of purchased components parts
d) All of the above

(49) Which of the following organisation is preferred in automobile industry?

a) Functional organization
b) Line organization
c) Staff organization
d) Line and staff organizations

(50) Gantt chart is mostly used for

a) Routing
b) Scheduling
c) Follow up
d) Inspection and quality control

(51) Finance must keep investment and costs low. This can be done by___

a) Increasing inventory so inventory investment is at a maximum
b) Decreasing the number of plants and warehouses
c) Producing small quantities
d) Using short production runs

(52) ___ is the capability of manufacturing to produce goods and services.

a) Capacity
b) Priority
c) Planning
d) Control

(53) A _____ strategy means producing the amounts demanded at any given time

a) production leveling
b) chase
c) subcontracting
d) TQM

(54) The cost of a _____ that is too large equals the cost of turning away business.

a) production plan
b) backlog
c) resource plan
d) capacity plan

(55) A schedule is satisfactory when

a) Capacity is greater than the production plan
b) It doesn't specify to the plant when to start production
c) Capacity is consistent with the production plan
d) It doesn't specify to the plant when to stop production

(56) The first step in preparing an MPS is

a) Resolve differences between the preliminary MPS and the capacity available
b) Check the preliminary MRP against available capacity
c) Develop a preliminary MRP.
d) Develop a rough-cut capacity plan

(57) The sides, ends, legs, and tops of tables are _____ demand items

a) dependent
b) independent
c) forecast
d) calculated

(58) The bill of materials shows all the parts required to make _____

a) one item
b) the MPR
c) work-in-process inventory
d) raw materials inventory

(59) The risks in carrying inventory are

a) Obsolescence and damage
b) Damage and pilferage
c) Pilferage and deterioration
d) Obsolescence, damage, pilferage, and deterioration

(60) _____ lists all the parts needed to make one complete assembly

a) summarized parts list
b) indented bill
c) multilevel bill
d) single-level bil