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Department of Mechanical Engineering



SUB CODE / NAME: **IE6605 / PRODUCTION PLANNING AND CONTROL**

MULTI CHOICE QUESTIONS – UNIT I

1. A graphical device used to determine the breakeven point and profit potential under varying conditions of output and the cost is known as
 - a. Gantt chart
 - b. Flow chart
 - c. Break even chart
 - d. Pert chart
2. The breakeven point represents
 - a. The most economical level of operation of any industry
 - b. The time when can run without loss and profit
 - c. Time when industry will undergo loss
 - d. Time for overhauling a plant
3. Break even analysis shows profit when
 - a. Sales revenue less than total cost
 - b. Sales revenue equal to total cost
 - c. Sales revenue greater than total cost
 - d. None of the above
4. Break even analysis consists of
 - a. Fixed cost
 - b. Variable cost
 - c. Fixed and variable cost
 - d. Operation cost
5. Breakeven point shows that
 - a. Sales revenue less than total cost
 - b. Sales revenue equal to total cost
 - c. Sales revenue greater than total cost
 - d. None of the above
6. What are the Phases of PPC
 - a. Pre-planning phase
 - b. Planning phase
 - c. control phase
 - d. all the above
7. What types of plant layouts are suitable for job shop production?
 - a. Process of functional layout
 - b. cellular layout
 - c. line layout
 - d. none of the above



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8. Which type of production is suitable for line layout?
 - a. job production
 - b. batch production
 - c. continuous production
 - d. none of the above
9. Fixed position layout is also known as
 - a. analytical layout
 - b. synthetic layout
 - c. static product layout
 - d. none of these
10. Process layout is also known as
 - a. analytical layout
 - b. synthetic layout
 - c. static product layout
 - d. none of these
11. Which of the following layout is suitable for mass production?
 - a. process layout
 - b. product layout
 - c. fixed position layout
 - d. plant layout
12. Actual performance of a task is called
 - a. an event
 - b. an activity
 - c. a duration
 - d. none of these
13. Bar charts are suitable for
 - a. minor works
 - b. major works
 - c. large projects
 - d. all of the above
14. 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 the above
15. The Interchangeability can be achieved by
 - a. standardization
 - b. better process planning
 - c. bonus plan
 - d. better product planning



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16. Which of the following statement is wrong?
 - a. an activity consumes time and resources whereas an event does not consume time
 - b. the performance of a specific task is called an activity
 - c. the turning of a job on lathe is an event whereas job turned is an activity
 - d. none of these
 17. Templates are used for
 - a. a planning layout
 - b. flow of material
 - c. copying complicated profiles
 - d. none of these
 18. The type of layout used for manufacturing steam turbines, is
 - a. product layout
 - b. process layout
 - c. fixed layout
 - d. any one of these
 19. Break even analysis can be used for
 - a. short run analysis
 - b. long run analysis
 - c. there is no such criterion
 - d. none of these
 20. A company spends considerable amount on publicity to promote sales. This expenditure in break even chart is shown below the
 - a. fixed cost line
 - b. variable cost line
 - c. total cost line
 - d. sales revenue line
-
1. 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
 2. 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 above
 3. A systematic job improvement sequence will consist of
 - A. motion study
 - B. time study



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- C. job enrichment
 - D. all of these
4. The determination of standard time in a complex job system is best done through
- A. stop watch time study
 - B. analysis of micromotions
 - C. grouping timing technique
 - D. analysis of standard data system
5. Work study involves
- A. only method study
 - B. only work measurement
 - C. method study and work measurement
 - D. only motion study
6. Queuing theory is associated with
- A. Inventory
 - B. Sales
 - C. waiting time
 - D. production time
7. Sampling method of determining standard time is profitable for long cycle operation.
- A. Correct
 - B. Incorrect
8. 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
9. 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
10. Merit rating is the method of determining the
- A. relative values of a job
 - B. worker's performance on a job
 - C. worth of a machine
 - D. value of overall production
11. Standard time is equal to
- A. normal time minus allowances
 - B. normal time plus allowances
 - C. representative time multiplied by rating factor
 - D. normal time taken by an operation



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12. 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 above
13. Acceptance sampling is used in
- A. job production
 - B. batch production
 - C. mass production
 - D. all of these
14. 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
15. The bonus increases in proportion to the increase in efficiency. This statement applies to
- A. Halsey plan
 - B. Ganttplan
 - C. Emerson's efficiency plan
 - D. Rowan plan
16. Abbreviated work factor data is applied for
- A. material handling operation
 - B. maintenance operation
 - C. packing and shipping operation
 - D. all of these
17. In time study, normal time is more than the standard time.
- A. Yes
 - B. NO
18. According to Rowan plan of wage incentive system, bonus is paid to a worker
- A. whose output exceeds 67% efficiency
 - B. on the percentage of time saved
 - C. on the percentage of time worked
 - D. on the percentage of standard time



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19. The time taken by a trained worker to perform an operation, while working a steady pace, is known as
- A. standard time
 - B. normal time
 - C. representative time
 - D. none of these
20. Normal time is the ratio of representative time to the rating factor.
- A. True
 - B. False
21. A good planning system must consider:
- e. What are we going to make?
 - f. What does it take to make it?
 - g. What do we have and need?
 - h. All of the above
22. _____ is the capability of manufacturing to produce goods and services.
- a. Capacity
 - b. Priority
 - c. Planning
 - d. Control
23. _____ is responsible for analyzing the marketplace and deciding the firm's response, the markets to be served, the products supplied, and desired levels of customer service.
- a. Marketing
 - b. Finance
 - c. Production
 - d. Engineering
24. _____ must satisfy the demands of the marketplace. It does so by using plants, machinery, equipment, labor, and materials as efficiently as possible.
- a. Marketing
 - b. Finance
 - c. Production
 - d. Engineering
25. A _____ strategy means producing the amounts demanded at any given time.
- a. production leveling
 - b. chase
 - c. subcontracting
 - d. TQM



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26. _____ is the first step in a manufacturing planning and control system
- Production planning
 - Achieving the forecast
 - Maintaining the required inventory levels
 - Maintaining the planned backlog
27. The cost of a _____ that is too large equals the cost of turning away business.
- production plan
 - backlog
 - resource plan
 - capacity plan
28. Which of the following is true for 'Routing'?
- It is flow of work in the plant
 - Route sheets include list of machine tools that are to be followed
 - It depends upon material handling facilities
 - All of the above
29. Loading may be defined as
- Sending the raw material to the machine
 - Sending the finished material to the store
 - Assign the work to the facilities
 - Uploading a software in machine control panel
30. Procurement cycle time is time consumed for
- Receiving of raw material
 - Inspection of various raw materials
 - Inspection of purchased components parts
 - All of the above
31. The transit time consist of
- Time taken by raw material from machine to machine
 - Time consumed in moving the work between various departments
 - Time taken by a worker to machine a component
 - None of the above
32. Centralized and decentralized are the types of
- Routing
 - Dispatching
 - Scheduling
 - Follow up



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33. Which is not correct for an active channel?

- a) Studying User to detect problems
- b) Awards
- c) Eliciting ideas through surveys, focus groups
- d) Evaluating product strengths, needed features etc

34. Which of these are incorrect for the product plan?

- a) No need to revise product plan frequently
- b) Product plan guides the launch of various product development activities
- c) All of the mentioned
- d) None of the mentioned

35. The most popular type of organisation used for Civil Engineering Constructions is

- (a) Line organization
- (b) Line and staff organization
- (c) Functional organization
- (d) Effective organization

36. Identify the best definition of planning.

- a) Setting an organisation's objectives and the means of reaching them.
- b) Devising ways of achieving the objectives of an organisation.
- c) The core activity of planners and planning departments.
- d) An integrated process in which plans are formulated, carried out and controlled.

37. What is the planning horizon?

- a) The time ahead for which there is no information.
- b) The maximum time for which managers can make plans.
- c) The distance ahead for the forecasts on which plans are made.
- d) The time between making a plan and putting it into effect.
- e) The time period within which uncertainty is very low

38. What three problems commonly hindering successful planning did we identify?

- a) Lack of planning expertise; little top management support; misuse of planning specialists.
- b) Procedures unsuited to change; negative organisational culture; poor interpersonal relationships.
- c) Conflict among objectives; impossibility of measuring outcomes; confusion between means and ends.
- d) An oversized planning department; poor co-operation between managers and planners; managers with little time to gather information.



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39) Earle model is

- a) Design procedure
- b) Design Methodology
- c) Manufacturing Methodology
- d) Manufacturing procedure

40) Process layout is used for:

- a) Repetitive processing
- b) Intermittent processing
- c) Both (a) and (b)
- d) Neither (a) nor (b)

41. Master Schedule is prepared for

- e. Single product continuous production
- f. Multi product batch production
- g. Assembly product continuous production
- h. Single product batch production

42. Gantt Chart is mostly used for

- e. Routing
- f. Scheduling
- g. Follow up
- h. Inspection and Quality control

43. Centralized process and Decentralized process are types of

- i. Routing
- j. Dispatching
- k. Scheduling
- l. Follow up

44. The Correct sequence of increasing production volume is

- a. Batch, Job, Flow and mass
- b. Flow and Mass, Batch and Job
- c. Job, Flow and mass, Batch
- d. Job, Batch, Flow and Mass

45. Dispatching authorizes the start of production operation by

- 1. Releasing of material and component from stores to the first process
- 2. Releasing of material from process to process



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46. Issuing of drawing and instruction sheets
- 1 and 2 only
 - 1 and 3 only
 - 2 and 3 only
 - 1,2 and 3
47. In production planning and control, the document which authorizes the start of an operation on the shop floor is the
- Dispatch Order
 - Route Plan
 - Loading Chart
 - Schedule
48. Dispatching function of production planning and control is
- The dispatch of finished goods on order
 - The movement of in-process material from shop to shop
 - Authorizing a production work order to be launched
 - The dispatch of bill and invoice to the customer
49. Routing in production planning and control refers to
- Balancing of load on machine
 - Authorization of work to be performed
 - Progress of work performed
 - Sequence of operation to be performed
50. In manufacturing management in production control the term “dispatching” is used to describe
- Dispatch of sales order
 - Dispatch of factor mail
 - Dispatch of finished product to user
 - Dispatch of work order through shop floor
51. The _____ is plan for production of individual end item
- MPS
 - JIT
 - MRP
 - MRP II
52. The Bill of Materials does not consists of
- Part number
 - Specification of the part
 - Name of the part
 - Price of the part



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53. Purchasing and _____ represents the implementation and control phase of PPC system
- Production Activity Control (PAC)
 - MRP
 - JIT
 - Marketing
54. Time period between placing an order and its receipt in stock is known as
- Lead time
 - Carrying time
 - Over time
 - Shortage time
55. MRP means aggregate planning in a batch production system
- True
 - False
56. Which of the following method is used for identifying the total resource requirement for meeting market demand?
- Capacity Planning
 - MRP – I
 - MRP – II
 - Inventory management
57. Which scheduling techniques should be employed when due dates are important for job order
- Forward scheduling
 - Loading
 - Dispatching
 - Backward Scheduling
58. Loading on schedule system may be defined as
- Sending the raw material to the machine
 - Sending the finished material to the store
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59. Procurement cycle time is time consumed for

- a. Receiving a raw material
- b. Inspection of various raw material
- c. Inspection of purchased component part
- d. All of the above

60. Key to chart is provided in

- a. Man Machine Chart
- b. The Load Chart
- c. The Progress Chart
- d. Gantt Chart

61. MRP resulting in _____

- a. Reduce lead time
- b. Minimize inventory and increase productivity
- c. Faster response
- d. All of the above

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- h. Gantt Chart

80. MRP resulting in _____

- e. Reduce lead time
- f. Minimize inventory and increase productivity
- g. Faster response
- h. All of the above

81. In inventory control, the economic order quantity is the

- m. optimum lot size
- n. highest level of inventory
- o. capability of a plant to produce
- p. none of these

82. Queuing theory is used for

- m. Inventory problems
- n. Traffic congestion studies
- o. Job shop scheduling
- p. All of the above

83. In ABC control policy, maximum attention is given to

- q. Those items which consume money
- r. Those items which are not readily available
- s. Those items which are more in demand
- t. Those items which consume more money

84. Inventory management consists of

- e. Effective running of stores
- f. State of merchandise methods of storing and maintenance etc
- g. Stock control system
- h. All the above



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85. Which of the following statement is correct
- A-B-C analysis is based on pareto's principle
 - simulation can be used for inventory control
 - economic order quantity formula ignores variation in demand pattern
 - None of the above
86. In the perpetual inventory control, the material is checked when it reaches
- minimum value
 - maximum value
 - average value
 - alarming value
87. The most important function of inventory control is
- stock control system
 - to run the stores effectively
 - technical responsibility for the state of materials
 - all of the above
88. Salvaging means
- writing off the assets
 - adjusting losses against assets
 - mortgaging property
 - disposing off property which is no longer useful in present situation
89. Inventory control in production planning and control aims at
- achieving optimisation
 - ensuring against market fluctuations
 - acceptable customer service at low capital investment in inventory
 - none of these
90. Tick the odd man out
- taylor
 - drucker
 - galileo
 - none of these
91. The two bin system is concerned with
- ordering procedure
 - forecasting sales
 - production planning
 - none of the above
92. MIS stands for
- military inspection scheme
 - management information system
 - management intelligence system
 - management information service



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93. Free trade zone means trade between
a. two countries without tariff
b. two manufacturers without tax liability
c. two traders
d. all of the above
94. Gross national product means
a. total earning of all citizens
b. total tax paid
c. total value of goods produced in a country
d. all the above
95. The first free trade zone in india was established at
a. cochin
b .goa
c. bombay
d. delhi
96. ABC analysis deals with
a. Analysis of process chart
b. flow of material
c. ordering schedule of job
d. controlling inventory costs money
97. A-B-C analysis is used in
a. CPM
b. PERT
c. Inventory control
d. none of these
98. A-B-C analysis
a. Is a basic technique of materials managment
b. Is meant for relative inventory control
c. does not depend upon the unit cost of the item but on its annual consumption
d. all of the above
99. In A-B-C analysis, which class of items are generally large in number
a. A
b. B
c. C
d. none of these
100. Material handling and plant location is analyzed by
a. Gantt chart
b .bin chart
c. Emerson chart
d. travel chart



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1	C	21	D	41	D	61	81	A
2	B	22	D	42	A	62	82	D
3	A	23	D	43	A	63	83	D
4	C	24	D	44	C	64	84	D
5	C	25	C	45	B	65	85	A
6	D	26	C	46	A	66	86	A
7	A	27	A	47	B	67	87	D
8	C	28	D	48	D	68	88	D
9	C	29	C	49	C	69	89	C
10	B	30	B	50	D	70	90	C
11	B	31	B	51	B	71	91	A
12	B	32	D	52	B	72	92	B
13	A	33	C	53	B	73	93	A
14	D	34	C	54	A	74	94	C
15	A	35	C	55	A	75	95	C
16	C	36	D	56	A	76	96	D
17	A	37	B	57	D	77	97	C
18	C	38	C	58	A	78	98	D
19	A	39	A	59	C	79	99	C
20	B	40	B	60	A	80	100	D