MCQ: Unit -2: Operation processes

1. What type of process would a Cement plant be most likely to use?
   a. Continuous flow  
   b. Project  
   c. Job shop  
   d. Flow shop

2. Process selection is primarily considered during:
   a) Planning  
   b) Organizing  
   c) Leading  
   d) Controlling

3. What type of process would a fertilizer plant be most likely to use?
   a. Continuous  
   b. Project  
   c. Job  
   d. Flow shop

4. The type of operation being carried out by an organization depends upon:
   a) Degree of standardization  
   b) Volume of output  
   c) Demand  
   d) Both (a) and (b)

5. Repetitive processing results in output that is:
   a) Highly standardized  
   b) Highly customized  
   c) Partially customized  
   d) None of the given options

6. Construction of fertilizer plant is
   a. Continuous  
   b. Project  
   c. Job  
   d. Flow shop

7. The inputs to a transformation process include all of the following except:
   a. Material  
   b. People  
   c. Information
8. Job shop and batch processing are differentiated on the basis of:

   a) **Job requirements**
   b) Degree of standardization
   c) Volume of output
   d) Both (b) and (c)

9. Automation is preferred because it:

   a) Offers lesser dependence on workers
   b) Results in reduction in variable cost
   c) Offers easy handling of repetitive work
   d) **All of the given options**

10. Product layout is preferably used for:

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

11. What are the two basic types of production systems?

    a. Automated and manual
    b. **Intermittent and non-intermittent process**
    c. Normal and continuous process
    d. Continuous process and batch

12. Process layout is used for:

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

13. The most significant advantage of U-shaped layout is:

    a) Cost minimization
    b) Easy handling of process
    c) **Increased flexibility in work**
    d) All of the given options

14. The goal of motion study is to achieve:

    a) Cost minimization
    b) **Maximum efficiency**
    c) Profitability
15. Location decisions are viewed primarily as part of:

   a) Marketing strategy
   b) Growth factors
   c) Financial aspect
   d) Both (a) and (b)

16. Regional factors for location planning include all of the following except:

   a) Raw materials
   b) Markets
   c) Labor considerations
   d) Attitudes

17. Transportation method is a __________ approach.

   a) Quantitative
   b) Qualitative
   c) Scientific
   d) All of the given options

18. Poor quality adversely affects:

   a) Costs
   b) Productivity
   c) Profitability
   d) All of the given options

20. A product performing consistently refers to which of the following dimensions of quality:  a) Safety

   b) Conformance
   c) Durability
   d) Reliability

21. What type of process would a paper mill be most likely to use?

   a. Continuous flow
   b. Project
   c. Job shop
   d. Flow shop

22. Which of the following is not a type of operations?

   a) goods production
   b) storage/transportation
   c) entertainment
   d) all the above involve operations

23. Technology choices seldom affect:
a) Costs.
b) Productivity.
c) Union activity.
d) quality

24. Measurements taken at various points in the transformation process for control purposes are called:

a) plans  
b) directions  
c) controls  
d) feedback

25. Which of the following would not be an operations activity in a fast-food restaurant?

a. Advertising new salad dishes  
b. Purchasing tomatoes  
c. Planning the layout of the serving areas  
d. Cooking paneer palak and dal makhani

26. Budgeting, analysis of investment proposals, and provision of funds are activities associated with the _______ function.

a) operation  
b) marketing  
c) purchasing  
d) finance

27. Which one of the following would not generally be classified under the heading of transformation?

a) assembling  
b) teaching  
c) staffing  
d) farming

28. Manufacturing work sent to other countries is called:

a) downsized  
b) outsourced  
c) internationalization  
d) vertical integration

29. What name is often given to processes which involve the manufacture of a unique item from beginning to end?

a. Jobbing processes  
b. Continuous processes.  
c. Lean production processes.
30. Product design and process selection are examples of ______ decisions. a) financial
   b) tactical
   c) system design
   d) system operation

31. The responsibilities of the operations manager are:
   a) planning, organizing, staffing, procuring, and reviewing
   b) **planning, organizing, staffing, directing, and controlling**
   c) forecasting, designing, planning, organizing, and controlling
   d) forecasting, designing, operating, procuring, and reviewing

32. Which of these layouts is most suitable for processing sugar from sugar beets or sugar cane?
   a. process-oriented layout
   b. fixed-position layout
   c. focused factory
   d. product-oriented layout

33. Which of the following is not true about systems approach?
   a) A systems viewpoint is usually beneficial in decision making.
   b) A systems approach emphasizes interrelationships among subsystems.
   c) **A systems approach concentrates on efficiency within subsystems.**
   d) A systems approach is essential whenever something is being redesigned or improved.

34. What is credited with gains in industrial productivity, increased standards of living and affordable products?
   a) personal computers   b. the internet
   c. mass transportation
d. **assembly lines**

35. Which of the following is an example of a Service Business?
   a. Law firm
   b. Hospital
c. Bank
d. Retail store
e. **All of the above**

36. Production systems with customized outputs typically have relatively:
   a) high volumes of output
   b) low unit costs
   c) high amount of specialized equipment
d. **skilled workers**

37. According to the Chase and Dasu (2001) study which of the following are behavioral concepts that should be applied to enhance customer perceptions of a service encounter?
a. Flow of the service experience  
b. Flow of time  
c. Judging encounter performance  
d. All of the above  
e. None of the above  

38. Which is not a significant difference between manufacturing and service operations?  
a) cost per unit  
b) uniformity of output  
c) labor content of jobs  
d) **Measurement of productivity.**  

39. Which of the following is not a characteristic of service operations?  
a) intangible output  
b) high customer contact  
c) high labor content  
d) **easy measurement of productivity**  
e) low uniformity of output  

40. Which of the following is a recent trend in business?  
a) pollution control  
b) total quality management  
c) **supply chain management**  
d) competition from foreign manufacturers  
e) technological change  

41. Farming is an example of:  
a) an obsolete activity  
b) a virtual organization  
c) non-manufactured goods  
d) a growth industry  
e) customized manufacturing  

42. Service strategy development begins by selecting which of the following as an operating focus or performance priority?  
a. Price  
b. Quality  
c. Variety  
d. Treatment  
e. **All of the above**
43. Dealing with the fact that certain aspects of any management situation are more important than others is called:
   a) analysis of tradeoffs
   b) sensitivity analysis
   c) recognition of priorities
   d) analysis of variance
   e) decision table analysis

44. The fact that a few improvements in a few key areas of operations will have more impact than many improvements in many other areas is consistent with the:
   a) Irwin phenomenon
   b) Pareto phenomenon
   c) Stevenson phenomenon
   d) Tellier phenomenon
   e) Adam Smith phenomenon

45. Which of the following “best practices emphasized by service executives” had the highest mean emphasize rating?
   a. Leadership
   b. Accessibility
   c. Quality values
   d. Customer orientation
   e. Listening to the customer

46. The process of comparing outputs to previously established standards to determine if corrective action is needed is called:
   a) planning
   b) directing
   c) controlling
   d) budgeting
   e) disciplining

47. Which of the following does not relate to system design?
   a) altering the system capacity
   b) location of facilities
   c) inventory management
   d) selection and acquisition of equipment
   e) physical arrangement of departments

48. Based on the Service-System Design Matrix, which of the following has a lower level of “production efficiency”?
   a. Face-to-face loose specs
   b. Phone contact
   c. Internet and on-site technology
d. Face-to-face tight specs  
e. Mail contact

49. Taking a systems viewpoint with regard to operations in today's environment increasingly leads decision-makers to consider _____________ in response to the ____________.

   a) flexibility; pressure to be more efficient  
   b) off shoring; need to promote domestic production  
   c) sustainability; threat of global warming  
   d) technology; impact of random variation  
   e) forecasting; stabilization of demand

50. Which of the following is not a benefit of using models in decision-making?

   a) They provide a standardized format for analyzing a problem.  
   b) They serve as a consistent tool for evaluation.  
   c) They are easy to use and less expensive than dealing with the actual situation.  
   d) All of the above are benefits.  
   e) None of the above is a benefit.

51. Modern firms increasingly rely on other firms to supply goods and services instead of doing these tasks themselves. This increased level of _____________ is leading to increased emphasis on ____________ management.

   a) outsourcing; supply chain  
   b) off shoring; lean  
   c) downsizing; total quality  
   d) optimizing; inventory  
   e) internationalization; intercultural

52. Operations and sales are the two-__________ functions in businesses.

   a) strategic  
   b) tactical  
   c) support  
   d) line

53. Marketing depends on operations for information regarding ____________.

   a) productivity  
   b) lead time  
   c) cash flow  
   d) budgeting  
   e) corporate intelligence

54. Two widely used metrics of variation are the ____________ and the ____________.

   a) mean; standard deviation  
   b) productivity ratio; correlation  
   c) standardized mean; assignable deviation  
   d) randomized mean; standardized deviation  
   e) normal distribution; random variation
55. Which one is not generally considered an advantage of using models for decision-making?
   a) Providing a systematic approach to problem solving.
   b) Emphasizing quantitative information
   c) **Providing an exact representation of reality.**
   d) Enabling managers to answer "what if" questions
   e) Requiring users to be specific about objectives.

56. Which came last in the development of manufacturing techniques?
   a) Lean production.
   b) Division of labor.
   c) Mass production.
   d) **Interchangeable parts.**

57. The operating characteristic (OC) curve shows the probability of
   a) rejection for every possible true percentage of defectives
   b) **acceptance for every possible true percentage of defectives**
   c) making type I errors for various percentages of defectives
   d) none of the above

58. If an artificial variable remains in the solution with a positive value after the stopping criterion
    has been reached, the problem
   a) **is infeasible**
   b) is optimal
   c) needs a new basis
   d) has more than one solution

59. What are the two sources of costs in queuing analysis?
   a) Arrivals and departures
   b) Arrivals and idleness
   c) **Waiting customers and capacity**
   d) Equipment breakdowns and departures

60. Which of the following statements about variation is FALSE?
   a) Variation prevents a production process from being as efficient as it can be.
   b) Some variation can be prevented.
   c) Variation can be either assignable or random.
   d) **Any variation makes a production process less productive.**
   e) Random variation generally cannot be influenced by managers.

61. Which of the following is essential to consider with respect to managing a process to meet demand?
   a) strategy
   b) demand forecasts
   c) capacity
   d) **all of the above**

62. Which one of the following would not generally be considered an aspect of operations management?
a) Schedule work
b) **Secure financial resources**
c) Maintain quality
d) Oversee the transformation process
e) Manage inventories

63. Which one of these was not mentioned in the list of recent trends in operations management?

a) Total quality management
b) Worker involvement
c) Global competition.
d) **Automation.**
e) Environmental issues.

64. Which came last in the development of manufacturing techniques?

a) **Lean production.**
b) Division of labor.
c) Mass production.
d) Craft production.
e) Interchangeable parts.

65. Which of the following is not a type of operations?

a) goods production
b) storage/transportation
c) entertainment
d) **price reduction**

66. Which of the following is not true about a lean production system?

a) It puts emphasis on quality, flexibility, and time reduction.
b) It puts emphasis on reducing a company's labor force.
c) It is involved in maintaining and improving the system with lower amounts of inventory.
d) **It relies on buffers against unforeseen occurrences.**

67. Which one of the following is not a typical question dealt with by operations managers?

a) How much capacity will be needed in the months ahead?
b) What is a satisfactory location for a new facility?
c) Which products/services should be offered?
d) **All are typical of operations decisions.**

68. Which one does not use operations management?

a) A CPA firm.
b) A bank.
c) A hospital
d) **They all use it.**
69. The transportation model method that is used to evaluate location alternatives minimizes total.
   a) sources
   b) destinations
   c) capacity
   d) shipping costs

70. What is simulation?
   a) A quick solution method to problem-solving
   b) A formalized deterministic approach to problem-solving
   c) A graphical method to problem-solving
   d) A trial-and-error approach to problem-solving

71. Moving from the aggregate plan to a master production schedule requires
   a) rough cut capacity planning
   b) sub-optimization
   c) disaggregation
   d) strategy formulation

72. Which of the following statements is true of Lean-Six Sigma?
   a) Lean principles focus on advanced statistical methods.
   b) Lean principles and Six-Sigma are separate bodies of knowledge
   c) Lean principles have been developed over a lengthy period.
   d) Lean principles include the 5Ss framework and practices.

74. When the flow of materials is variable,
   a) layout by process is most suitable
   b) layout by product is most suitable
   c) layout by fixed position is most suitable
   d) line balancing is most suitable

75. A fixed interval system
   a) adds the same predetermined amount to inventory each time replenishment occurs
   b) is suitable for joint replenishment items
   c) is triggered at the reorder level
   d) requires perpetual monitoring of inventory records

76. Which of the following terms best defines the nature of Total Quality Management? a) An art
   b) A philosophy
   c) A science
   d) A social activity

77. Which of the following terms reflects Japanese view of continuous improvement?
   a) Kaizen
   b) Poka-yoke
   c) Six sigma
   d) Control limits
78. Which of the following is NOT an element of TQM?
   a) Leadership
   b) **Perceived quality**
   c) Employee empowerment
   d) Customer focus

79. Which of the following is an example of appraisal cost?
   a) Rework costs
   b) Returned goods
   c) **Testing labs**
   d) Quality improvement programs

80. Warranty cost is an example of which of the following?
   a) Internal failure cost
   b) **External failure cost**
   c) Prevention cost
   d) Appraisal cost

81. Refer to the stage of PDCA (Plan, Do, Check, Act) cycle that involves evaluating the improvement plan.
   a) Plan
   b) Do
   c) **Check**
   d) Act

82. Which of the following refers to a continuous measurement of an organization’s products and processes against a company recognized as a leader in that industry?
   a) **Benchmarking**
   b) Gap analysis
   c) Statistical process control
   d) Continuous improvement

83. Which of the following is the focus of statistical process control?
   a) Determining the efficiency of an operations system
   b) Measuring the amount of re-work required to rectify faulty goods
   c) Identifying the security needs of an operations system
   d) **Measuring and controlling process variations**

84. Which of the following is a measure of how closely a product or service meets the specifications?
   a) **Quality of Conformance**
   b) Continuous improvement
   c) Competitive benchmarking
   d) Statistical process control

85. Which of the following is not a type of operations?
a) goods production
b) storage/transportation
c) entertainment
d) **all the above involve operations**

86. Technology choices seldom affect:
   a) Costs.
   b) Productivity.
   c) **Union activity.**
   d) Quality.

87. Measurements taken at various points in the transformation process for control purposes are called:
   a) Plans
   b) Directions
   c) Controls
   d) **Feedback.**

88. Budgeting, analysis of investment proposals, and provision of funds are activities associated with the ______ function.
   a) Operation
   b) Marketing
   c) Purchasing
   d) **finance**

89. Which one of the following would not generally be classified under the heading of transformation?
   a) Assembling
   b) Teaching
   c) **staffing**
   d) Farming
   e) consulting

90. Manufacturing work sent to other countries is called:
   a) Downsized
   b) **Outsourced**
   c) Internationalization
   d) vertical integration
   e) entrepreneurship

91. Product design and process selection are examples of ______ decisions. a) Financial
   b) Tactical
   c) **system design**
   d) system operation
   e) Forecasting.