

所別：工業管理研究所碩士班 乙組 科目：生產作業與管理

(1~25為是非題，26~50為選擇題)(答案卷上請標明題號，每列一個答案)(每題2分)

1. Effectiveness means doing the right things to create the most value for the company.  
A) True      B) False
2. In a multifactor measure of productivity the numerator of the ratio would include all resources used or all inputs.  
A) True      B) False
3. Cycle time is the ratio of the time that a resource is actually activated relative to the time that it is available for use.  
A) True      B) False
4. A product-process matrix shows the relationship between process structures and product volume and variety characteristics.  
A) True      B) False
5. The "service blueprint" is a classification of services.  
A) True      B) False
6. One of the tools of a quality control department that is used in a TQM program is leadership.  
A) True      B) False
7. Design quality in products refers to the degree to which a product or service design specifications are met.  
A) True      B) False
8. Reengineering is about achieving a significant improvement in processes so that contemporary customer requirements of quality, speed, innovation, customization, and service are met.  
A) True      B) False
9. The phenomenon that magnifies the variability in order quantities for goods as orders move through the supply-chain from the customer to the producer is called the bullwhip effect.  
A) True      B) False
10. The capacity utilization rate ratio is found by dividing best operating level by capacity used.  
A) True      B) False
11. In solving a decision tree problem, calculations start at the ends of the "branches" of the tree and work backwards to the base "trunk" of the tree.  
A) True      B) False
12. The main purpose of the aggregate production plan is to specify the optimal combination of production rate, workforce level and inventory on hand.  
A) True      B) False
13. An inventory system is a set of policies and controls that monitors levels of inventory and determines what levels should be maintained, when stock should be replenished, and how large orders should be.  
A) True      B) False
14. One of the basic purposes of inventory analysis in manufacturing and stockkeeping services is to determine the level of quality to specify.  
A) True      B) False
15. Safety stock can be defined as the amount of inventory carried in addition to the expected demand.  
A) True      B) False
16. MRP stands for Manufacturing Requirements Planning.  
A) True      B) False
17. One of the biggest complaints by users of MRP systems is that MRP is too flexible in making changes in schedules when the need arises.  
A) True      B) False
18. A work center is a physical area of the business in which productive resources are organized and work is completed.  
A) True      B) False
19. In infinite loading no consideration is given directly to whether there is sufficient capacity at the resources required to complete the work, nor is the actual sequence of the work as done by each resource in the work center considered.  
A) True      B) False
20. Synchronous manufacturing refers to the entire production process working together in harmony to achieve the goals of the firm.  
A) True      B) False
21. Smaller transfer batches give lower work-in-process inventory and faster product flow.  
A) True      B) False
22. JIT requires vendors to be located nearby. When compared to synchronous manufacturing this is viewed as an advantage of JIT.  
A) True      B) False
23. The critical path of activities in a project is the sequence of activities that form the shortest chain in a project network of activities.  
A) True      B) False
24. One of the many JIT techniques that have been successfully applied in service firms is the eliminating of unnecessary activities.  
A) True      B) False

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25. A central premise of exponential smoothing is that more recent data is less indicative of the future than data from the distant past.  
 A) True                      B) False
26. Which of the following is not a general category for categorizing transformation processes in production systems?  
 A) Exchange, as in retailing      B) Physical, as in manufacturing  
 C) Insulation, as in inventory      D) Location, as in transportation  
 E) Physiological, as in health care      F) Informational, as in telecommunications
27. A total systems approach to managing the flow of information, materials and services from raw material suppliers to the end customer is called what?  
 A) Electronic commerce      B) Total quality productivity      C) Total service quality  
 D) Supply chain management      E) Business Process engineering
28. Capabilities of a service organization that are derived from activities that transform material or information and tend to provide low cost and high quality advantages are classified as which of the following?  
 A) Process-based capabilities      B) Systems-based capabilities  
 C) Organization-based capabilities      D) Globally-based capabilities  
 E) Market-based capabilities
29. Which of the following is a total measure of productivity?  
 A) Output / Materials      B) Output / (Labor + Capital + Energy)  
 C) Output / Labor      D) Output / Inputs      E) All of the above
30. What is a work breakdown structure?  
 A) A list of the activities making up the higher levels of the project  
 B) A definition of the hierarchy of project tasks, subtasks, and work packages  
 C) A depiction of the activities making up a project  
 D) A Gantt chart  
 E) A structure that is incompatible with the Critical Path Method
31. A simple project listing of five activities, their predecessors and their respective time estimates are presented below:
- | Activity | Immediate Predecessor | Time in Days |
|----------|-----------------------|--------------|
| A        | None                  | 2            |
| B        | A                     | 2            |
| C        | A                     | 1            |
| D        | B and C               | 3            |
| E        | D                     | 1            |
- Using the Single Time Estimate CPM procedure, which activities have slack in this project?  
 A) A      B) B      C) C      D) D      E) C and E
32. Which following production process term best describes the situation when activities in a stage of production must stop because there is no work?  
 A) Blocking      B) Buffering      C) Starving      D) Buffer      E) Setup time
33. To reduce process throughput time you might try which of the following actions?  
 A) Perform activities in parallel      B) Change the sequence of activities  
 C) Reduce interruptions      D) Acquire additional equipment      E) All of the above
34. Which of the following is not considered a major process flow structure?  
 A) Job shop      B) Batch shop      C) Assembly line      D) Virtual Factory      E) Continuous Flow
35. A reason that firms must develop more new products than ever is which of the following?  
 A) Product life cycles are shorter      B) Commitments to joint venture partners  
 C) They are replacing old customers with new ones  
 D) To amortize heavy investments in development labs  
 E) The increased difficulty of defending patents and trade names
36. In the service-system design matrix, a face-to-face total customization service encounter is expected to have which of the following?  
 A) Low sales opportunity      B) Low production efficiency  
 C) High production efficiency      D) Low degree of customer/server contact  
 E) None of the above
37. Which of the following is not a characteristic of a well-designed service system?  
 A) Robust      B) Cost-effective      C) Puts customers in charge  
 D) User-friendly      E) Effectively links "front office" with "back office"
38. Which of the following is the cost of quality classification for costs such as scrap, rework, or repair?  
 A) Appraisal costs      B) Prevention costs      C) External failure costs  
 D) Internal failure costs      E) None of the above

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39. Which of the following is not a principle of reengineering?  
A) Treat geographically dispersed resources as though they were centralized  
B) Link parallel activities instead of integrating their results  
C) Capture information many times, at the source and where it is interpreted  
D) Organize around outcomes not tasks  
E) Merge information processing work into the work that produces the information
40. Which of the following is an organizationally-driven reason for outsourcing?  
A) Enhance effectiveness by focusing on what you do best  
B) Turn fixed costs into variable costs  
C) Generate cash by transferring assets to the provider  
D) Give employees a stronger career path  
E) None of the above
41. Which of the following terms best describes the ability of a company to deliver highly customized products and services to different customers around the world?  
A) Customization B) High customization C) Mass customization  
D) Global sourcing E) None of the above
42. Compared with a service operation, a manufacturing operation's capacity is which of the following?  
A) More dependent on time and location  
B) Subject to more volatile demand fluctuations  
C) Utilization more directly impacts quality  
D) Demand can be smoothed by inventory policies  
E) More capable of reacting to demand fluctuations
43. Which of the following are elements that address elimination of waste under JIT?  
A) Production ahead of demand B) Group plant loading technology  
C) Kanban production control system D) Minimized run times  
E) Full capacity utilization
44. Group technology (GT) is credited with which of the following benefits?  
A) Reducing waiting time between process operations  
B) Improving inventory discipline C) Reducing required workforce skills  
D) Improved labor relations E) Improved small group functioning
45. Which of the following forecasting methodologies is considered a qualitative forecasting technique?  
A) Simple moving average B) Market research C) Linear regression  
D) Focus forecasting E) Multiple regression
46. Which of the following forecasting methods requires highly sophisticated personnel?  
A) Box Jenkins B) Winter's exponential smoothing  
C) Time series decomposition D) Regression trend models  
E) Focus forecasting
47. Which of the following methodologies is used to verify that production and warehouse facilities, equipment, and labor are available when needed?  
A) Rough-cut capacity planning B) Materials requirement planning  
C) Capacity requirements planning D) Order scheduling  
E) Process planning
48. From an operational perspective yield management is most effective under which of the following circumstances?  
A) Demand cannot be segmented by customer B) Inventory is perishable  
C) Fixed costs are low and variable costs are high  
D) The customer is a "captive" of the system  
E) The firm doing yield management is very profitable
49. Which of the following files allows us to retrace a material requirement upward in the product structure through each level, identifying each parent item that created the demand?  
A) Planning bill of materials file B) Modular bill of materials file  
C) Super bill of materials file D) Exception report file E) Peg record file
50. Which of the following is not one of the major functions of shop-floor control?  
A) Measure efficiency, utilization, and productivity of manpower and machines  
B) Assign a priority to each shop order C) Load machine hours into work stations  
D) Track WIP quantity by location by shop order to accounting  
E) Convey shop order status information to the office