Question (1): True or False:

1. By turning raw materials into finished goods, production creates form utility. (T)

2. Services are more tangible, more customized, and less storable than most products. (F)

3. Services are typically characterized by a high degree of unstorability. (T)

4. In a product layout, equipment and people are set up to produce one type of good in a fixed sequence of steps and are arranged according to its production requirements (T)

5. A process flow chart identifies the sequence of production activities, movements of materials, and work performed at each stage of the process. (T)

6. Staff schedules identify who and how many employees will be working, and when. (F)

7. Materials management involves the flow of materials inside of the production facility only. (F)

8. JIT production systems normally require large amounts of “safety stock” to be maintained in a firm’s warehouse. (F)

9. ISO 9000 originally was an attempt to standardize materials received from suppliers in such high-technology industries as electronics, chemicals, and aviation. (T)

10. The goal of supply chain management is to reduce the number of links in the channel. (F)

11. The relationship between business strategy and operations tends to vary widely between manufacturing companies and service firms. (F)

12. All of the following types of operations resources, if selected, should be compatible with a chosen operations capability: equipment, human resources, and production processes. (T)

13. Long-range capacity planning considers both current and future capacity requirements. (T)

14. Quality planning involves a push toward the continued improvement of both products and production methods. (T)

15. A detailed schedule will indicate how many employees will be working on a given shift. (F)
16. The biggest challenge of TQM is motivating employees throughout the company to achieve quality goals. (T)

17. Value-added analysis might focus on both the elimination of waste and cost minimization. (T)

18. A value chain includes an entire network of firms with the exception of those responsible for transportation. (F)

19. Because supply chain strategy is based on the collective effort of a number of firms, no one firm in the chain gains a competitive advantage. (F)

20. The goal of supply chain management is better value for customers. (T)

**Question (2): Multiple choice:**

1. When a company turns out costumes in time for Halloween, it creates _____ utility.
   a. ownership
   b. time
   c. form
   d. place

2. When a company makes products available where they are convenient for consumers, it creates _____ utility.
   a. time
   b. form
   c. place
   d. possession

3. Which of the following is NOT one of the kinds of utility goods and services provide to customers?
   a. time
   b. form
   c. place
   d. leisure

4. _____ draw up plans to transform resources into products, and they must bring together basic resources, such as knowledge, physical materials, equipment, and labor.
   a. CEOs
   b. Operations managers
   c. Quality managers
   d. Floor foremen

5. Which of the following statements is NOT true?
a. Both service and manufacturing operations transform raw materials into finished products.
b. Consumers use different measures to judge services and goods because services include intangibles, not just physical objects.
c. **A high-contact service system exists when the customer is not part of the system.**
d. In service operations, finished products or outputs are people with needs met and possessions serviced.

6. _____ is ensuring that a manufacturing firm’s capacity slightly exceeds the normal demand for its product.
   a. Measurement
   b. Determination
   c. **Capacity planning**
   d. Plant restructure

7. When considering a location for a manufacturing facility, which of the following do managers NOT necessarily have to consider?
   a. proximity to raw materials and markets
   b. availability of labor
   c. energy and transportation costs
   d. **proximity to customers**

8. The spatial arrangement of production activities designed to move resources through a smooth, fixed sequence of steps is _____.
   a. **product layout**
   b. location planning
   c. forecasting
   d. quality planning

9. _____ is defined as the combination of “characteristics of a product or service that bear on its ability to satisfy stated or implied needs.”
   a. **Quality**
   b. Production
   c. Satisfaction
   d. Clarification

10. Performance refers to _____.
    a. the principle that quality belongs to each person who creates it while performing a job
    b. the consistency of a product’s quality from unit to unit
    c. **how well the product does what it is supposed to do**
    d. the process by which a company analyzes a competitor’s products to identify desirable improvement
11. Managers can work to reduce waste, inefficiency, and poor performance by examining procedures on a step-by-step basis through _____.
   a. advance planning
   b. materials management
   c. **methods improvement**
   d. quality planning

12. Which of the following is NOT one of the areas of materials management?
   a. transportation
   b. warehousing
   c. purchasing
   d. **customer service**

13. In a _____ production system, all the needed materials and parts arrive at the precise moment they are required for each production stage.
   a. quality control
   b. process control
   c. **just-in-time**
   d. standardized

14. Total quality management is _____.
   a. the principle that quality belongs to each person who creates it while performing a job
   b. the consistency of a product’s quality from unit to unit
   c. **the sum of all activities involved in getting high-quality products into the marketplace**
   d. the process by which a company analyzes a competitor’s products to identify desirable improvements

15. Which of the following best describes total quality management?
   a. the principle that quality belongs to everyone on the job
   b. the consistency of a product’s quality from unit to unit
   c. **all activities involved in getting high-quality products into the marketplace**
   d. the performance features offered by a product

16. Quality ownership is _____.
   a. **the principle that quality belongs to each person who creates it while performing a job**
   b. the consistency of a product’s quality from unit to unit
   c. the sum of all activities involved in getting high-quality products into the marketplace
   d. the process by which a company analyzes a competitor’s products to identify desirable improvements

17. Which of the following best describes competitive product analysis?
a. the principle that quality belongs to each person who creates it while performing a job  
b. the consistency of a product’s quality from unit to unit  
c. **the process by which a company analyzes a competitor’s products to identify desirable improvements**  
d. the sum of all activities involved in getting a high-quality product into the marketplace.

18. Which of the following best describes value-added analysis?  
a. a TQM tool in which groups of employees work together to improve quality  
b. **the process of evaluating all work activities, materials flows, and paperwork to determine the value they add for customers**  
c. the process by which a company implements the best practices from its own past performance, and those of other companies to improve its own products  
d. none of the above

19. Which of the following best describes ISO 9000?  
a. the concept that all employees are valuable contributors to a firm’s business, and should be entrusted with decisions regarding their work  
b. the redesigning of business processes to improve performance, quality, and productivity  
c. **a program certifying that a factory, laboratory, or office has met the quality management standards of the International Organization for Standardization**  
d. a certification program attesting to the fact that a factory, laboratory, or office has improved environmental performance

20. Which of the following best describes ISO 14000?  
a. the concept that all employees are valuable contributors to a firm’s business, and should be entrusted with decisions regarding their work  
b. **a certification program attesting to the fact that a factory, laboratory, or office has improved environmental performance**  
c. a certification program attesting to the fact that a factory, laboratory, or office has met the quality management standards of the International Organization for Standardization  
d. none of the above

21. _____ is the fundamental rethinking and radical redesign of business practice to achieve dramatic improvements in performance.  
a. Supply chain management  
b. **Business process reengineering**  
c. Total quality management  
d. Quality ownership
22. Which of the following best describes business process reengineering?
   a. the redesigning of business processes to improve performance, quality, and productivity
   b. as program certifying that a factory, laboratory, or office has met the quality management standards of the International Organization for Standardization
   c. the principle of looking at the supply chain as a whole in order to improve the overall flow through the system
   d. a program certifying that a factory, laboratory, or office has developed pollution-control standards

23. Supply chain management is _____.
   a. the principle of looking at the supply chain as a whole in order to improve the overall flow through the system
   b. a limitation on the number of suppliers allowed to supply a particular company
   c. complete movement of raw materials throughout a manufacturing or service facility
   d. a cost-reduction program in which wholesalers and retailers are eliminated in an effort to entice consumers to purchase directly from manufacturers

24. Which of the following best describes supply chain management?
   a. the principle of looking at the supply chain as a whole in order to improve the overall flow through the system
   b. limiting the number of a company’s suppliers
   c. removing wholesalers and retailers from the distribution network in an attempt to gain better customer service
   d. none of the above

25. A _____ identifies the sequence of production activities, movements of materials, and work performed at each stage.
   a. methods plan
   b. production plan
   c. MPS
   d. process flowchart

26. Which of the following is true regarding quality management?
   a. TQM focuses on production to ensure that products are produced according to specifications.
   b. In controlling for quality, managers should establish specific standards and measurements.
   c. Because it sets the tone for everything that follows, planning for quality is the most important stage in quality management.
   d. TQM is sometimes called quality insurance.

27. _____ is the evaluation of all work activities, materials flows, and paperwork to determine the value that they add for customers.
   a. Value-added analysis
b. Benchmarking
c. Groupware
d. Quality management

28. _____ refers to a collaborative group of employees from various work areas who meet regularly to define, analyze, and solve common production problems.
   a. Supply chain management
   b. Business process reengineering
   c. Total quality management
   d. A quality circle

29. The _____ is the flow of information, materials, and services from raw-materials suppliers through stages in the operations process until the product reaches the end customer.
   a. distribution chain
   b. supply chain
   c. service channel
   d. distribution channel

30. The process by which a company analyzes a competitor’s product to identify desirable improvements in its own is called _____.
   a. competitive product analysis
   b. benchmarking
   c. performance quality analysis
   d. quality reliability analysis

Q3: Essay Questions

Q1: Explain time, place, and form utility.

1. Time utility is created when a company makes products available when consumers want them. Such as seasonal.

2. Place utility is created when a company makes product availability convenient for consumers. An example is the placement of routinely purchased items in convenience stores or conveniently located discount stores.

3. Form utility is created when a company combines materials to create products.
Q2: Describe the five elements of operations planning.

1. Capacity planning depends on how many people are employed and the number and size of the facilities and considers both current and future capacity requirements.

2. Location planning is crucial because location affects production costs and flexibility. Location often depends on the types of goods and services being produced, proximity to raw materials and supplies, and proximity to a skilled workforce.

3. Layout considers the placement of machinery, equipment, and supplies within the facility.

4. Quality planning involves all operations to ensure that products and services meet the firm’s quality standards.

5. Methods planning allows managers to identify each production step and the specific methods for performing it; waste and inefficiency can be reduced by production managers.

Best Wishes

Mr. Mohammed Alhato