TEST BANK

CHAPTER 2: LOGISTICS AND INFORMATION TECHNOLOGY

Multiple Choice Questions (correct answers are bolded)

1. Which of the following is not a benefit to utilizing information in logistics?

     a. greater knowledge and visibility across the supply chain
     b. greater awareness of customer demand via point-of-sale data
     c. better coordination of manufacturing, merchandising, and distribution through enterprise resource planning (ERP) tools
     d. **lower costs**

[LO 2.1: To explain the importance of effective and efficient utilization of information for logistics management; Difficult; Synthesis; AACSB Category 3: Analytical thinking]

2. How do data and information differ?

     a. Data are a body of facts in a format suitable for decision making whereas information is simply facts.
     b. Data and information are the same.
     c. **Data are simply facts; information is a body of facts in a format suitable for decision making.**
     d. Data are associated with decision support systems; information is associated with enterprise resource planning (ERP) systems.

[LO 2.1: To explain the importance of effective and efficient utilization of information for logistics management; Difficult; Synthesis; AACSB Category 3: Analytical thinking]

3. _____ refers to the collection of large amounts of near-real-time data collected through a variety of sources such as sensors and smart phones.

     a. Cloud computing
     b. **Big data**
     c. Data warehousing
     d. Decision support systems

[LO 2.1: To explain the importance of effective and efficient utilization of information for logistics management; Easy; Concept; AACSB Category 3: Analytical thinking]

4. _____ provide effective ways to process organizational business data, to perform calculations, and to create documents.

     a. Enterprise resource planning (ERP) systems
     b. Transaction processing systems

c. Decision support systems
d. **Office automation systems**

[LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Concept; AACSB Category 3: Analytical thinking]

5. The most relevant general software package for logisticians is _____.

    a. **spreadsheets**
    b. word processing
    c. presentation packages
    d. email

[LO 2.2: To distinguish between the general types of information systems and their logistical applications; Easy; Application; AACSB Category 3: Analytical thinking]

6. _____ help various stakeholders—employers, suppliers, customers—work together by interacting and sharing information in many different forms.

    a. Decision support systems
    b. **Communication systems**
    c. Office automation systems
    d. Transaction processing systems

[LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Concept; AACSB Category 3: Analytical thinking]

7. What has emerged as the measuring stock for logistics information technology in the twenty-first century?

    a. Facebook
    b. the Internet
    c. **wireless communication**
    d. enterprise resource planning (ERP) systems

[LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Application; AACSB Category 3: Analytical thinking]

8. Which of the following refers to a network of satellites that transmits signals that pinpoint the exact location of an object?

    a. **Global positioning systems (GPS)**
    b. Cloud computing
    c. Internet of things
    d. Electronic data interchange (EDI)

9. Electronic data interchange (EDI) represents what general type of information management system?

        a. communication system
        b. **transaction processing system**
        c. decision support system
        d. office automation system

10. _____ refers to the computer-to-computer transmission of business data in a structured format.

        a. Big data
        b. Enterprise resource planning (ERP) systems
        c. **Electronic data interchange (EDI)**
        d. Data mining

11. Automatic identification systems are an essential component in _____.

        a. every warehouse
        b. **point-of-sale systems**
        c. a logistics information system (LIS)
        d. dual distribution

12. The most popular automatic identification system currently in use is _____.

        a. voice-data entry
        b. radio-frequency identification (RFID)
        c. magnetic strips
        d. **bar code scanners**

13. Which of the following statements about radio-frequency identification (RFID) is false?

a. **RFID only offers read capabilities.**
b. Walmart has been a major catalyst for RFID usage in logistics.
c. RFID can store large quantities of data.
d. RFID has helped to reduce the occurrence of inventory stockouts.

[LO 2.2: To distinguish between the general types of information systems and their logistical applications; Difficult; Synthesis; AACSB Category 3: Analytical thinking]

14. A logistics information system (LIS) begins with _____.

a. **a logistics manager requesting information**
b. a good computer system
c. a lot of money
d. a customer order

[LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Application; AACSB Category 3: Analytical thinking]

15. All of the following statements about logistics information systems (LIS) are true except:

a. "Timely" can refer to the up-to-date status of information.
b. **Internal sources of logistics information are relatively plentiful.**
c. "Timely" can refer to how quickly a manager receives requested information.
d. A logistics information system (LIS) must be concerned with the nature and quality of data.

[LO 2.2: To distinguish between the general types of information systems and their logistical applications; Difficult; Synthesis; AACSB Category 3: Analytical thinking]

16. The primary advantage of _____ is that it enables a firm to test the feasibility of proposed changes at relatively little expense.

a. data mining
b. application-specific software
c. **simulation**
d. artificial intelligence

[LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Application; AACSB Category 3: Analytical thinking]

17. Which of the following is not a logistics-related decision support system?

a. simulation
b. application-specific software
c. transportation management systems (TMS)

d. **electronic data interchange (EDI)**

[LO 2.2: To distinguish between the general types of information systems and their logistical applications; Difficult; Synthesis; AACSB Category 3: Analytical thinking]

18. Warehouse management systems (WMS) represent an example of what general type of information management system?

      a. communication system
      b. transaction processing system
      c. **decision support system**
      d. office automation system

[LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Application; AACSB Category 3: Analytical thinking]

19. Which of the following is not a potential benefit of transportation management systems (TMS)?

      a. **fewer stockouts**
      b. reduced fuel consumption
      c. decreased empty vehicle miles
      d. reduced transportation expenditures

[LO 2.2: To distinguish between the general types of information systems and their logistical applications; Difficult; Synthesis; AACSB Category 3: Analytical thinking]

20. _____ refers to the application of mathematical tools to large bodies of data in order to extract correlations and rules.

      a. Fuzzy logic
      b. Factor analysis
      c. **Data mining**
      d. Linear regression

[LO 2.2: To distinguish between the general types of information systems and their logistical applications; Easy; Concept; AACSB Category 3: Analytical thinking]

21. _____ refers to a computer-based discipline that leverages algorithms that can "learn" from data.

      a. Artificial intelligence
      b. The Internet of things (IoT)
      c. Expert systems
      d. **Machine learning**

22. _____ create and maintain consistent data processing methods and an integrated database across multiple business functions.

       a. Logistics information systems (LIS)
       b. **Enterprise systems**
       c. Decision support systems
       d. Transaction processing systems

23. The origins of contemporary enterprise resource planning (ERP) systems can be traced back to logistics and _____.

       a. **manufacturing**
       b. marketing
       c. purchasing
       d. finance

24. Which of the following statements about enterprise resource planning (ERP) is false?

       a. In recent years, ERP vendors have begun to provide high-quality application-specific logistic capabilities.
       b. ERP implementation costs can easily reach tens of millions of dollars.
       c. **ERP's origins can be traced back to finance and manufacturing.**
       d. ERP glitches often have a logistical component to them.

25. A general rule of thumb is that the actual time to implement enterprise resource planning (ERP) systems may range from _____ to _____ times longer than the time specified by the ERP vendor.

       a. 2;3
       b. **2;4**
       c. 2;5
       d. 3;4

26. Approximately _____ percent of the world's population currently uses the Internet.

      a. 53
      b. **49**
      c. 42
      d. 35

27. Which of the following statements is false?

      a. Orders associated with online retailing tend to be for smaller quantities than in-store retailing.
      b. Online retailing is characterized by open-case, rather than full-case, picking.
      c. Online retailers are challenged by last-mile considerations.
      d. **Online retailing and in-store retailing experience similar rates of product return.**

28. What has emerged as the most popular application of on-demand logistics software (cloud computing)?

      a. warehouse management systems (WMS)
      b. **transportation management systems (TMS)**
      c. inventory optimization
      d. collaborative forecasting

29. Which of the following is not a type of benefits that comes from electronic procurement?

      a. transactional benefits
      b. management information benefits
      c. compliance benefits
      d. **production benefits**

30. In a reverse auction, _____.

a. multiple sellers invite bids from multiple buyers
b. one buyer invites bids from one seller
c. **one buyer invites bids from multiple sellers**
d. multiple sellers invite bids from one buyer

[LO 2.5: To report how companies are using electronic procurement to drive purchasing efficiency; Easy; Concept; AACSB Category 3: Analytical thinking]

31. The Internet of things (IoT) is expected to drive value in the supply chain and logistics disciplines through enhanced customer interactions and _____.

a. improved order management techniques
b. faster transit times
c. reduced warehousing requirements
d. **improvements in employee productivity**

[LO 2.6: To explain how the Internet of things is affecting the information available to logistics managers; Moderate; Application; AACSB Category 3: Analytical thinking]

32. _____ has been identified as the biggest information technology challenge that companies face today.

a. Software viruses
b. **Information security**
c. The cost of technology
d. Employee resistance

[LO 2.7: To identify contemporary information technology issues; Moderate; Application; AACSB Category 3: Analytical thinking]

True-False Questions

1. The effective and efficient use of information allows organizations to either reduce costs or improve customer satisfaction. (False) [LO 2.1: To explain the importance of effective and efficient utilization of information for logistics management; Moderate; Application; AACSB Category 3: Analytical thinking]

2. "Data" and "information" are synonymous terms. (False) [LO 2.1: To explain the importance of effective and efficient utilization of information for logistics management; Easy; Application; AACSB Category 3: Analytical thinking]

3. Big data refers to large amounts of near-real-time data collected through a variety of sources such as sensors and smart phones. (True) [LO 2.1: To explain the importance of effective and

efficient utilization of information for logistics management; Easy; Concept; AACSB Category 3: Analytical thinking]

4. Office automation systems provide effective ways to process personal and organizational business data, to perform calculations, and to create documents. (True) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Easy; Concept; AACSB Category 3: Analytical thinking]

5. A transaction processing system helps people work together by interacting and sharing information in many different forms. (False) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Application; AACSB Category 3: Analytical thinking]

6. The Internet has emerged as the measuring stick for logistics information technology during the first decade of the twenty-first century. (False) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Application; AACSB Category 3: Analytical thinking]

7. Transportation companies that have implemented global positioning systems (GPS) have reported increased worker productivity, reduced operating costs, and improved customer relations. (True) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Difficult; Synthesis; AACSB Category 3: Analytical thinking]

8. Electronic data interchange (EDI) is an example of a logistics-related transaction processing system. (True) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Application; AACSB Category 3: Analytical thinking]

9. Electronic data interchange (EDI) is no longer an important logistics technology in the twenty-first century. (False) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Easy; Application; AACSB Category 3: Analytical thinking]

10. The idea behind point-of-sale systems is to provide data to guide and enhance managerial decision making. (True) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Application; AACSB Category 3: Analytical thinking]

11. Radio-frequency identification (RFID) is the most popular automatic identification system currently in use. (False) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Application; AACSB Category 3: Analytical thinking]

12. One prominent drawback to radio-frequency identification (RFID) involves privacy concerns. (True) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Synthesis; AACSB Category 3: Analytical thinking]

13. A logistics information system (LIS) begins with a logistics manager requesting information and ends with the manager receiving regular and customized reports. (True) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Application; AACSB Category 3: Analytical thinking]

14. "Timely" information can refer to its nature and quality. (False) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Synthesis; AACSB Category 3: Analytical thinking]

15. The primary advantage of simulation is that it enables a firm to test the feasibility of proposed changes at relatively little expense. (True) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Application; AACSB Category 3: Analytical thinking]

16. Application-specific software is a type of decision support system. (True) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Application; AACSB Category 3: Analytical thinking]

17. One benefit to transportation management systems (TMS) is fewer stockouts. (False) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Synthesis; AACSB Category 3: Analytical thinking]

18. Activities that can be controlled by a warehouse management system (WMS) include inventory management, determination of storage locations, and order shipping. (True) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Synthesis; AACSB Category 3: Analytical thinking]

19. Correlation analysis uses sophisticated quantitative techniques to find "hidden" patterns in large volumes of data. (False) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Easy; Concept; AACSB Category 3: Analytical thinking]

20. Walmart and its vendors make extensive use of data mining to improve supply chain efficiency and effectiveness. (True) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Easy; Application; AACSB Category 3: Analytical thinking]

21. Artificial intelligence refers to a computer-based discipline that leverages algorithms that can "learn" from data. (False) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Easy; Concept; AACSB Category 3: Analytical thinking]

22. The attractiveness of enterprise resource planning (ERP) systems comes from their potential for lower costs as well as increased productivity and customer satisfaction. (True) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Application; AACSB Category 3: Analytical thinking]

23. The origin of enterprise resource planning (ERP) systems can be traced back to finance and manufacturing. (False) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Application; AACSB Category 3: Analytical thinking]

24. A general rule of thumb is that the actual time to implement an enterprise resource planning (ERP) system may range from 1.5 to 2 times longer than the time period specified by the ERP vendor. (False) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Application; AACSB Category 3: Analytical thinking]

25. In recent years, enterprise resource planning (ERP) vendors have begun to provide high-quality application-specific logistical capabilities. (True) [LO 2.2: To distinguish between the general types of information systems and their logistical applications; Moderate; Application; AACSB Category 3: Analytical thinking]

26. About 25 percent of the world's population currently uses the Internet. (False)[LO 2.3: To review how logistics supports online retailing; Moderate; Application; AACSB Category 3: Analytical thinking]

27. There are few logistical similarities between online and in-store retailing. (False) [LO 2.3: To review how logistics supports online retailing; Easy; Application; AACSB Category 3: Analytical thinking]

28. The smaller order quantities occasioned by online retailing tend to favor transport companies with extensive delivery networks and expertise in parcel shipments. (True) [LO 2.3: To review how logistics supports online retailing; Moderate; Synthesis; AACSB Category 3: Analytical thinking]

29. The return rates associated with online retailing are quite similar to those associated with other kinds of retailing. (False) [LO 2.3: To review how logistics supports online retailing; Easy; Application; AACSB Category 3: Analytical thinking]

30. In response to a study that indicated that 35 percent of avid online shoppers desire locations with extended hours and not at their homes, UPS plans to install self-service parcel lockers in approximately 300 locations across the United States. (True) [LO 2.3: To review how logistics supports online retailing; Moderate; Application; AACSB Category 3: Analytical thinking]

31. One reason for the popularity of on-demand software is that is pay-per-use formula allows customers to avoid high capital investment costs. (True) [LO 2.4: To illustrate how cloud computing is being used to support logistics software usage; Moderate; Synthesis; AACSB Category 3: Analytical thinking]

32. Cloud-based software allows for a great deal of customization. (False) [LO 2.4: To illustrate how cloud computing is being used to support logistics software usage; Easy; Application; AACSB Category 3: Analytical thinking]

33. The Internet is the primary transaction medium for cloud-based software. (True) [LO 2.4: To illustrate how cloud computing is being used to support logistics software usage; Easy; Application; AACSB Category 3: Analytical thinking]

34. Electronic procurement uses the Internet to make it easier, faster, and less expensive for an organization to purchase goods and services. (True) [LO 2.5: To report how companies are using electronic procurement to drive purchasing efficiency; Moderate; Synthesis; AACSB Category 3: Analytical thinking]

35. In a reverse auction, one seller invites bids from multiple buyers. (False) [LO 2.5: To report how companies are using electronic procurement to drive purchasing efficiency; Easy; Concept; AACSB Category 3: Analytical thinking]

36. The Internet of things (IoT) refers to the sensors and data-communication technology that is built into physical objects that enables them to be tracked and controlled over the Internet. (True)[LO 2.6: To explain how the Internet of things is affecting the information available to logistics managers; Moderate; Application; AACSB Category 3: Analytical thinking]

37. The Internet of things (IoT) is expected to drive value in the supply chain and logistics disciplines through faster transit times and enhanced customer interactions. (False) [LO 2.6: To explain how the Internet of things is affecting the information available to logistics managers; Moderate; Application; AACSB Category 3: Analytical thinking]

38. Information technology should be regarded as a tool to help managers address organizational problems. (True) [LO 2.7: Information technology challenges; Moderate; Application; AACSB Category 3: Analytical thinking]

39. Software viruses are viewed as the most important information technology issue that companies face today. (False) [LO 2.7: To identify contemporary information technology issues; Moderate; Application; AACSB Category 3: Analytical thinking]

40. People-related factors, such as employee resistance, have been identified as a major cause of information technology implementation failure. (True) [LO 2.7: To identify contemporary information technology issues; Moderate; Synthesis; AACSB Category 3: Analytical thinking]