## 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)

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

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

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

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

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

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

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

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**

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

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**

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

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

[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 origins of contemporary enterprise resource planning (ERP) systems can be traced back to logistics and \_\_\_\_\_\_\_\_\_\_\_.

 a. **manufacturing**

 b. marketing

 c. purchasing

 d. finance

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

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.

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

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

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

26. Approximately \_\_\_\_\_\_\_\_\_\_\_ percent of the world’s population currently uses the Internet.

 a. 53

 b. **49**

 c. 42

 d. 35

[LO 2.3: To review how logistics supports online retailing; Moderate; Application; AACSB Category 3: Analytical thinking]

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.**

[LO 2.3: To review how logistics supports online retailing; Difficult; Synthesis; AACSB Category 3: Analytical thinking]

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

[LO 2.4: To illustrate how cloud computing is being used to support logistics software usage; Moderate; Application; AACSB Category 3: Analytical thinking]

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**

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

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]