

# SOLUTIONS MANUAL

BIDGOLI

Copyrighted Material

STUDENT EDITION

# MIS

## WHAT'S INSIDE:

A Student-Testing,  
Faculty-Approved Approach  
to Learning Management  
Information Systems

• **PLUS** •  
ACCESS ONLINE INTERACTIVE  
QUIZZING, FLASH CARDS,  
AND MORE WITH EVERY  
NEW BOOK!

A NEW APPROACH  
TO LEARNING BUILT  
WITH YOU IN MIND



\$59.95 Suggested Retail Price

ISBN-10: 013-2-122-127-7

ISBN-13: 978-0-13-2-122-12-7



ONLINE RESOURCES AVAILABLE ONLY WITH THE PURCHASE OF A NEW BOOK

## Chapter 1

### *Review Questions*

1. Give an example of an information technology used in a grocery store.

Answer—Point of sale systems.

2. What are the functions of social networking sites?

Answer—Connect people with similar interest.

3. What are some examples of information technologies used for telecommuting?

Answer—E-mail, the Internet, and computer networks.

4. What is a transaction processing system?

Answer—For the past 60 years, transaction processing systems (TPSs) have been applied to structured tasks such as record keeping, simple clerical operations, and inventory control. Payroll, for example, was one of the first applications to be automated. TPSs focus on data collection and processing, and the major reason for using them is cost reduction.

5. What's the purpose of the process component of an information system?

Answer—The process component of an information system generates the most useful type of information for decision making, including transaction-processing reports and models for decision analysis.

6. List some examples of external data used by an information system.

Answer—

- Customers, competitors, and suppliers.
- Government agencies and financial institutions.
- Labor and population statistics.
- Economic conditions.

7. List two examples of decisions that could be improved by a personnel/human resources information system.

Answer—

- Choosing the best job candidate.
  - Scheduling and assigning employees.
8. Explain the difference between buyer power and supplier power in the Five Forces Model.

Answer—Buyer power is high when customers have many choices and low when they have few choices. Supplier power is the opposite.

9. List three likely trends for the future of information systems.

Answer—

- Hardware and software costs will continue to decline, so processing information will be less expensive in the future. These cost savings should make information systems affordable for all organizations, regardless of their size and financial status.
- Artificial intelligence and related technologies will continue to improve and expand, which will have an impact on information systems. For example, further development in natural language processing should make information systems easier to use.

### *Projects*

For these projects, use the material in this chapter as well as other sources you find from Internet research.

1. Log on to the Microsoft Web site ([www.microsoft.com](http://www.microsoft.com)). What are some software and hardware products this company offers, and what are some unique features of these products? Who are some of Microsoft's competitors?
2. Identify five applications of computers and information systems in a university, a grocery store, and a bank.

3. Log on to the IBM Web page at [http://www-01.ibm.com/software/success/cssdb.nsf/CategoryL1ViewFM?ReadForm&Site=dmmain\\_industryL1VW&cty=en\\_us](http://www-01.ibm.com/software/success/cssdb.nsf/CategoryL1ViewFM?ReadForm&Site=dmmain_industryL1VW&cty=en_us). This Web site lists several information systems and information management case studies used in industries and government agencies. Review some industries in which you're interested in seeking employment in the future. Do you see similarities among these information systems?

*Multiple Choice Questions*

1. Which of the following is *not* an application of transaction processing systems?
  - a. Payroll
  - b. Inventory
  - c. ATMs
  - d. They all are
2. A typical information system includes which of the following components? (Choose all that apply.)
  - a. Data entry system
  - b. Database
  - c. Process
  - d. Information
3. In an information system, information must have which of the following qualities? (Choose all that apply.)
  - a. Accuracy
  - b. Timeliness
  - c. Formality
  - d. Relevance

4. Which of the following is *not* one of the four Ms of resources?
  - a. Materials
  - b. Machinery
  - c. Marketplace
  - d. Money
5. Which of the following is *not* one of Porter's competitive strategies?
  - a. overall cost leadership
  - b. overall service leadership
  - c. differentiation
  - d. focus
6. Which of the following is one of Porter's five forces? (Choose all that apply.)
  - a. Buyer power
  - b. Technological skill
  - c. Supplier power
  - d. Threat of substitute products or services

*True/False Questions*

7. Buyer power is high when customers have many choices and low when they have few choices. True or False?
8. Threat of substitute products or services is low when many alternatives for an organization's product or service are available. True or False?
9. Amazon.com's personalized recommendations are an example of using a focus strategy. True or False?
10. Forecasting models are part of an information system's process component. True or False?

**Answers**

1. D
2. B,C,D
3. A,B,D
4. C
5. B
6. A,C,D
7. TRUE
8. FALSE
9. FALSE
10. TRUE

**Chapter 2***Review Questions*

1. How is computer speed measured?

Answer—Typically, computer speed is measured as the number of instructions performed per the following fractions of a second:

- Millisecond: 1/1000 of a second
- Microsecond: 1/1,000,000 of a second
- Nanosecond: 1/1,000,000,000 of a second
- Picosecond: 1/1,000,000,000,000 of a second

2. What are the unique technologies of each generation of computer hardware?

Answer—

- First—Vacuum tube
- Second—Transistors
- Third—Integrated circuits
- Fourth—Miniaturization
- Fifth—Parallel processing, gallium arsenide

3. Which input device is often used on notebook computers?

Answer—Trackballs.

4. What is the most popular input device? Why?

Answer—Keyboard, because it has been around for a long time and it performs different functions.

5. What are some common data codes for transferring data in computers?

Answer—American Standard Code for Information Interchange (ASCII), Unicode, and Extended Binary Coded Decimal Interchange Code (EBCDIC).

6. What types of decision could be improved by spreadsheet software?

Answer—A spreadsheet is a table of rows and columns, and spreadsheet software is capable of performing numerous tasks with the information in a spreadsheet. For example, you can prepare a budget and even perform “what-if” analysis on the data.

7. What are some examples of decisions that could be improved by financial-planning software?

Answer—Financial planning software, which is more powerful than spreadsheet software, is capable of performing many types of analysis on large amounts of data. These analyses include present value, future value, rate of return, cash flow, depreciation, retirement planning, and budgeting.

8. What kinds of decisions could be improved by project management software?

Answer—The goal of project management software is to help project managers keep time and budget under control by solving scheduling problems, planning and setting goals, and highlighting potential bottlenecks.

9. Who are the main users of CAD software?

Answer—It’s used extensively in architecture and engineering firms, but because of major price reductions and increases in PC power, small companies and home users can now afford this software.

### *Projects*

For these projects, use the material in this chapter as well as other sources you find from Internet research.

1. Log on to the IBM Web site ([www.ibm.com](http://www.ibm.com)). Write a brief report, listing some features of IBM’s OS/2 operating system. How does this operating system compare with Microsoft Windows and with Linux?
2. Visit a computer lab. What kinds of input and output devices do you see? Ask your instructor or the lab supervisor to tell you how multiple-choice and

true/false questions are graded. Besides speed, what are some other advantages of using computers to grade tests?

3. List three ways you could use database software for your personal use, and describe what kind of operations you'd want to be able to perform on these databases.
4. Compare inkjet and laser in speed and cost, and list two manufacturers of each type of printer.
5. Compare memory sticks and flash memory cards, including storage capacity, advantages, and disadvantages. Describe some applications for both types of storage devices.
6. Write a one-page report on Microsoft Project's features, including a list some of its top competitors.
7. Using the classifications of computers discussed in this chapter, what types of computers are available on your campus or workplace? If mainframe computers are included, which OS do they use?

#### *Multiple Choice Questions*

1. Which of the following is a component of a CPU? (Choose all that apply.)
  - a. Data management unit
  - b. Arithmetic logic unit
  - c. Memory unit
  - d. Control unit
2. Which of the following is a distinguishing factor in computer power? (Choose all that apply.)
  - a. Speed
  - b. Accuracy
  - c. Storage and retrieval capabilities
  - d. BIOS



3. Miniaturization occurred in which generation of computer hardware?
  - a. First generation
  - b. Fifth generation
  - c. Fourth generation
  - d. Third generation
4. Which of the following is an example of an input device? (Choose all that apply.)
  - a. Keyboard
  - b. Light pen
  - c. Mouse
  - d. Printer
5. Which of the following is an example of an output device? (Choose all that apply.)
  - a. CRT
  - b. Scanner
  - c. Printer
  - d. Plotter
6. Computers are classified based on which of the following factors? (Choose all that apply.)
  - a. Cost
  - b. Type of CPU case
  - c. Speed
  - d. Amount of memory
7. Java and C++ are examples of which type of computer language?
  - a. High-level languages
  - b. Assembly languages

- c. 4GLs
- d. NLP

*True/False Questions*

- 8. An operating system is a set of programs for controlling and supervising computer hardware and software. True or False?
- 9. What-if analysis is a key feature of spreadsheet software. True or False?
- 10. CAD software is used only by large corporations. True or False?
- 11. DVD-ROMs can store a minimum of 4.7 GB. True or False?

*Answers*

- 1. B,C,D
- 2. A,B,C
- 3. C
- 4. A,B,C
- 5. A,C,D
- 6. A,C,D
- 7. A
- 8. TRUE
- 9. TRUE
- 10. FALSE
- 11. TRUE