



# Fact Sheet

## MANAGEMENT INFORMATION SYSTEMS

### TEST INFORMATION

This test was developed to enable schools to award credit to students for knowledge equivalent to that, which is learned, by students taking the course. The school may choose to award college credit to the student based on the achievement of a passing score. The passing score for each examination is determined by the school based on recommendations from the American Council on Education (ACE®). This minimum credit-awarding score is equal to the mean score of students in the norming sample who received a grade of C in the course. Some schools set their own standards for awarding credit and may require a higher score than the ACE recommendation. Students should obtain this information from the institution where they expect to receive credit.

### CONTENT

The following topics, which are commonly taught in courses on this subject, are covered by this examination.

	Approximate <u>Percent</u>
I. Foundations	7%
A. Basic terminology	
B. Computer literacy and information systems literacy	
C. Components of MIS	
D. Attributes of information as a resource	
II. Systems Theory	10%
A. Characteristics	
B. Relevance to information systems	
C. Hardware and Software	11%
D. History and evolution of hardware and software	
E. Terminology Information architecture	
IV. System level	12%
A. Individual	
B. Work group	
C. Enterprise	
D. Interorganizational	
E. Database Management	8%
F. Hierarchy of data	
G. Data models	
H. Organizing data	
I. Data query and update	
VI. Telecommunications	12%
A. Terminology	
B. Networks	
C. Relevance to business	
VII. Analysis and Design of Systems	15%
A. Traditional systems development life cycle (SDLC)	
B. Contemporary approaches	
C. End-user computing	
VIII. Management of the MIS Functional Area	8%
A. Organization of MIS	
B. Relationship of MIS to the enterprise	
C. Value of the MIS function	
D. MIS administration and management	

	Approximate <u>Percent</u> <b>10%</b>
IX. Informational Support	
A. System types	
B. Dimensions of management support	
X. Issues	7%
A. Security	
B. Ethics	
C. Privacy	

Questions on the test require candidates to demonstrate the following abilities. Some questions may require more than one of the abilities.

Knowledge of basic facts and terms  
(about 55 - 60% of the examination)

Understanding of concepts and principles  
(about 25 - 30% of the examination)

Ability to apply knowledge to specific cases, situations, or issues  
(about 10 - 15% of the examination)

### SAMPLE QUESTIONS

- A computer-based information system consists of which of the following elements?
  - Computers, keyboards, display monitors, hard disks, and printers
  - People, procedures, data, programs, and computers
  - Input, processing, storage, and output
  - Planning, programming, organizing, and evaluating
- Which of the following characteristics of a system reflects the fact that all systems are comprised of subsystems?
  - Synergy
  - Differentiation
  - Regulation
  - Hierarchy
- The particular form that information technology takes to achieve selected goals of an organization is known as information
  - policy
  - architecture
  - management
  - portability
- Which of the following is NOT a benefit of electronic data interchange (EDI)?
  - It reduces errors.
  - It reduces the volume of invoices or orders.
  - It reduces transaction processing costs.
  - It saves time.
- A database management system must include which of the following components?
  - A data definition language
  - A data manipulation language
  - A data dictionary
  - A data redundancy protocol
  - I only
  - I and II only
  - I, II, and III only
  - I, II, III, and IV
- Which of the following terms is used to describe the transmission of data one character at a time?
  - Synchronous
  - Asynchronous
  - Half-duplex
  - Full-duplex
- Multiplexors and concentrators are used in telecommunication systems to do which of the following?
  - Perform high-speed arithmetic operations
  - Increase utilization of the communication lines
  - Store and retrieve data
  - Display data on the monitor

8. Which of the following systems development approaches involves a highly iterative process of building, using, evaluating, and refining?
- (A) System development life cycle (SDLC)
  - (B) Top-down analysis (TDA)
  - (C) Prototyping
  - (D) Critical-path analysis
9. The process by which workers develop their own applications, with or without the help of professional MIS staff, is called
- (A) decentralized computing
  - (B) distributed computing (C) end-user computing
  - (D) client/server computing
10. In MIS the concept of "outsourcing" can be best defined as which of the following?
- I. An option that some organizations use to control data processing costs.
  - II. A process of releasing an organization's computer operations to an external vendor.
  - III. A data support and retrieval system that organizations can access electronically.
- (A) I only
  - (B) I and II only (C) II and III only (D) I, II, and III
11. Which of the following is NOT a characteristic of a decision support system (DSS)?
- (A) It produces final solutions for wide-ranging managerial problems.
  - (B) It offers users flexibility, adaptability, and quick responses.
  - (C) It uses sophisticated analysis and modeling tools.
  - (D) It assists users with unstructured decisions.

## STUDYING FOR THE EXAMINATION

The following is a list of reference publications that were being used as textbooks in college courses of the same or similar title at the time the test was developed. Appropriate textbooks for study are not limited to those listed below. If you wish to obtain study resources to prepare for the examination, you may reference either the current edition of the following titles or textbooks currently used at a local college or university for the same class title. It is recommended that you reference more than one textbook on the topics outlined in this fact sheet. You should begin by checking textbook content against the content outline included on the front page of this Fact Sheet before selecting textbooks that cover the test content from which to study. Textbooks may be found at the campus bookstore of a local college or university offering a course on the subject.

Sources for study material suggested but not limited to the following:

Cash Jr., James I., F. Warren McFarland, and James L. McKenney. *Corporate Information Systems Management: The Issues Facing Senior Executives*. Homewood, IL: Irwin, current edition.

Kroenke, David and Richard Hatch. *Management Information Systems*. New York, NY: Mitchell McGraw-Hill, current edition.

Laudon, Kenneth C. *Essentials of Business Information Systems*. **658.4038 LAD, 7th ed., 2007**

Laudon, Kenneth C., and Jane Price Laudon. *Management Information Systems: Organization and Technology*. New York: Macmillan College Publishing Company, current edition. **658.4038 LAD, 6th ed., 2000**

McLeod, Raymond, Jr .. *Management Information Systems: A study of Computer-Based Information Systems*. Englewood Cliffs, NJ: Prentice Hall, Inc., current edition. **658.4038 MCL, 2007**

Laudon, Kenneth C. *Management of Information Systems: Managing the Digital Firm*. **658.4038 LAD, 8th ed., 2004**

O'Brien, James A. *Management Information Perspectives End-User* Homewood, IL: Irwin, current edition. **658.4038 OBR, 13th ed., 2007**

Zwass, Vladimir. *Management Information Systems*. Dubuque, IA: Wm. C. Brown Publishers, current edition.

**Footnote: These materials can be located at Little Rock Air Force Base Library - 976 Cannon Dr. /501-987-6979**

Current textbook used by a local college or university for a course on the subject.

### CREDIT RECOMMENDATIONS

The American Council on Education (ACE) has reviewed and evaluated the DSST examination development process. The American Council on Education has made the following recommendations:

Area or Course	
Equivalent:	Management Information Systems
Level:	Upper-level baccalaureate
Amount of Credit:	Three (3) semester hours
Source:	ACE Commission on Educational Credit and Credentials

### INFORMATION

Colleges and universities that would like additional information about the national norming, or assistance in local norming or score validation studies should write to: DSST Program, Mail Stop II-P, Thomson Prometric, 664 Rosedale Road, Princeton, New Jersey 08540.

It is advisable that schools develop a consistent policy about awarding credit based on scores from this test and that the policy be reviewed periodically. Thomson Prometric will be happy to help schools in this effort.

Correct responses to sample questions: 1.B; 2.D; 3.B; 4.B; 5.C; 6.B; 7.B; 8.C; 9.C; 10.B; 11.A.