

AMERICAN UNIVERSITY OF BEIRUT
SCHOOL OF BUSINESS
OPIM 210: Management Information Systems (Fall 2001)



Midterm Examination

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Instructions: Start by filling in your name and student ID number, section and the name of your instructor. You are also expected to sign the honor code statement. This midterm is worth 100 points and you are given 100 minutes to finish it. Good Luck!

Name: _____

ID Number: _____ Section: _____ Instructor: _____

Honor Statement: I have neither given nor received any unauthorized assistance on this exam.

Signature: _____

True/False Questions

Directions: Answer the questions below by circling the choice that best describes the answer. (T) for True and (F) for False. Each question is worth one (1) point.

- T F 1. In order to be successful, it is important that top executives and their managers have a detailed knowledge of complex technologies, abstract behavioral concepts, and specialized applications involved in the field of information systems.
- T F 2. According to your text, a dynamic system can be defined as a group of interrelated components working together toward a common goal by accepting inputs and producing outputs in an organized transformation process.
- T F 3. In the context of the information systems model, data by itself is never subjected to any type of "value-added" process (data processing or information processing) as it rarely meets the needs of the end users.
- T F 4. Michael Porter developed the value chain concept which views a firm as a series, chain, or network of basic activities that add value to its products and services, and thus add a margin of value to the firm. This concept divides the activities of a firm into a set of primary activities, and a set of support activities.
- T F 5. One of the most popular competitive strategies being used today by organizations is the concept of business process reengineering (BPR), most often simply called reengineering. Reengineering is a fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in costs, quality, speed, and service.
- T F 6. When discussing the major changes and trends that have occurred during the major stages or generations of computers, it is evident that computers in general have become smaller, faster, more reliable, and more costly to purchase and maintain.

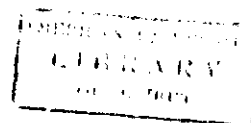


- T F 7. One of the major disadvantages with network computers is their high cost of purchase, upgrades, maintenance, and support compared to full-featured PCs. Other disadvantages to business include the difficulty of software distribution and licensing.
- T F 8. When discussing the various categories of computers, midrange computers are generally larger and more powerful than most microcomputers but are smaller and less powerful than most large mainframe computer systems.
- T F 9. Your text indicates that there has been an accelerated trend recently towards multipurpose software suites for microcomputers with web-enabled networking capabilities and collaboration features. The major reason for this trend is the increased use of the Internet and corporate intranets and extranets.
- T F 10. Your text outlines many trends currently transpiring in computer software. It outlines that there has been a steady trend toward more use of technical, machine-specific programming languages using binary-based symbolic codes, and procedural languages that use brief statements and mathematical expressions.
- T F 11. One of the major disadvantages of using software suites such as Microsoft Office, Lotus SmartSuite, Corel WordPerfect Office, and Sun's StarOffice is the lack of tools provided within the packages that can be used to increase your productivity, collaborate with your colleagues, and access intranets, extranets, and the Internet.
- T F 12. According to your text, data may be logically organized into characters, fields, records, files, and databases. A database consolidates records previously stored in separate files into a common pool of data records that provides data for many applications.
- T F 13. The major drawback of database management systems (DBMS) is that they do not allow end users to get information from a database using a query language or a report generator. For example, users cannot receive an immediate response in the form of video displays or printed reports.

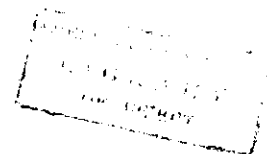
Multiple Choice Questions

Directions: Answer the questions below by circling the choice that best describes the answer. Each question is worth one (1) point.

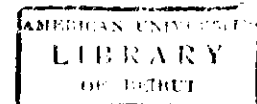
14. Which one of the following statements does NOT apply to the systems concept?
- A) In exercising the control function, feedback about performance is compared to standards of performance.
 - B) Management is the control component of an organizational system.
 - C) When organizational performance does not meet standards, it is the responsibility of managers to make the decisions required to adjust performance to meet organizational goals.
 - D) Standards of performance are established by elements in the environment of the organization.
15. A system that has the ability to change itself or its environment in order to survive is best known as a(n):
- A) Adaptive system.
 - B) Open system.
 - C) Dynamic system.
 - D) Environmental system.



16. Which one of the following statements about knowledge workers would NOT be considered correct?
- A) Professionals such as accountants and engineers are knowledge workers.
 - B) Knowledge workers are people who spend most of their workday creating, using, and distributing information.
 - C) Knowledge workers make up an increasing proportion of the workforce.
 - D) Most manufacturing production workers are knowledge workers.
17. Software resources would typically be categorized as:
- A) Media on which data are recorded for use by computer devices.
 - B) Programs used to instruct the computer to perform operations.
 - C) Programs and procedures used by end users to perform their work.
 - D) Media, programs and procedures.
18. Which one of the following would NOT be considered a good example of information?:
- A) The company's forklift operator's social security number is 456-38-1276.
 - B) The retail price of blue widgets is \$28.99.
 - C) The company owes \$3,847 to vendor number 10782.
 - D) The numbers 12367892, 436897458, and 837621984.
19. Electronic commerce is defined as:
- A) The buying and selling, and marketing and servicing of products, services, and information over a variety of computer networks.
 - B) The electronic representation of cash.
 - C) The direct computer-to-computer transfer of transaction information contained in standard business documents, such as invoices and purchase orders.
 - D) The electronic passing of funds (money) among businesses and banks and their customers.
20. Your text outlines five basic competitive strategies a firm can use to counter the threats of competitive forces that shape the structure of competition in its industry. The development of new products and services that are fundamentally different from the way business has been conducted in an industry is:
- A) Cost leadership.
 - B) Innovation.
 - C) Product differentiation.
 - D) Strategic dominance.
21. Citibank's development and use of automated teller machines is an example of the way in which a firm can use strategic information systems technology. Citibank's primary strategic role was:
- A) Establishing cost leadership.
 - B) Improving operational efficiency.
 - C) Promoting business innovation.
 - D) Building strategic information resources.
22. The concept of "leveraging investment in information systems technology" is associated with information systems whose strategic role is:
- A) Improving operational efficiency.
 - B) Establishing product differentiation and cost leadership.
 - C) Promoting business innovation.
 - D) Building strategic information resources.
23. For many companies, the chief business value of becoming a customer-focused E-business DOES NOT depend on:
- A) Helping them keep customers loyal.
 - B) Anticipating their customers' future needs.
 - C) Responding to customers' concerns.
 - D) Creating barriers to entry for competitors.



24. Agility in competitive performance is the ability of a business to prosper in rapidly changing, continually fragmenting global markets for:
- A) High-quality, high-performance, customer-configured products and services.
 - B) Continuous improvements in quality, productivity, flexibility, timeliness, and customer responsiveness.
 - C) Exceeding the requirements and expectations of customers for a product or service that include such features and attributes as performance, reliability, durability, responsiveness, aesthetics and reputation.
 - D) All of the above.
25. Which one of the following statements would best describe the circuitry of the fourth generation of computers?
- A) Vacuum tubes for their processing and memory circuitry.
 - B) Transistors wired to circuit boards.
 - C) Integrated circuits with thousands of transistors etched on tiny chips.
 - D) LSI and VLSI technologies.
26. Which one of the following would NOT apply to the concept of network computers (NCs)?:
- A) Designed primarily for use with the Internet and corporate intranets by clerical workers, operational employees, and knowledge workers with specialized or limited computing applications.
 - B) They are low-cost sealed, networked microcomputers with no or minimal disk storage.
 - C) Users of NCs depend primarily on Internet and intranet servers for their operating system and web browser, Java-enabled application software, and data access and storage.
 - D) They are used primarily as intelligent terminals to process detailed stock portfolio analysis.
27. The storage function of computer systems takes place in:
- A) The arithmetic-logic unit.
 - B) The control unit.
 - C) The output devices.
 - D) Primary and secondary storage devices.
28. Which one of the following statements best describes smart card technology?:
- A) It is a form of data entry that helps computers read credit cards.
 - B) It is a form of computing where debit and credit cards have an embedded microprocessor chip.
 - C) It enables you to shoot, store, and download still photos or full-motion video with audio into your computer system.
 - D) It is commonly used in banks in order to magnetically read checks and deposit slips.
29. Your text classifies computer software as being either application software or system software. Which one of the following is usually considered application software?:
- A) Operating system software.
 - B) A graphics package.
 - C) System utility programs.
 - D) File management programs.



30. Which one of the following statements would NOT be considered a characteristic of software suites?
- A) They are the least-used productivity packages in most business environments.
 - B) They contain software tools that can help increase productivity, collaborate with colleagues, and access intranets, extranets, and the Internet.
 - C) They integrate software packages for web browsing, word processing, spreadsheets, presentation graphics, database management, and personal information management.
 - D) They cost less than the total cost of buying their individual packages separately.
31. Electronic spreadsheets allow you to enter data and to perform calculations and then to manipulate the data to:
- A) Control the data communications of the operating system.
 - B) Control the data management of the operating system.
 - C) Use it as a decision making tool to answer "what-if" questions.
 - D) Merge text, data, and graphics to produce professional-looking documents.
32. The most basic and smallest logical unit of information is a:
- A) Character.
 - B) Field.
 - C) Record.
 - D) File.
33. A database is composed of
- A) Information only.
 - B) Information and procedures that act on that information.
 - C) Two-dimensional tables or files.
 - D) Information and the logical structure of the information.
34. Which one of the following statements is false?
- A) The database administrator normally maintains the data dictionary.
 - B) Changing the data dictionary can automatically modify data elements in the database itself, if it is an active data dictionary.
 - C) The data dictionary contains the name and description of each data element, as well as information about the relationships among data elements.
 - D) Normally the data dictionary is a tool used exclusively by the database administrator, and its contents are never made available to casual users.
35. A DBMS query language is designed to:
- A) Support information systems professionals in the development of complex application software.
 - B) Support end users that wish to interrogate the database using English-like or natural language commands.
 - C) Provide efficient processing of the database in the batch mode.
 - D) Specify the content, relationships, and structure of a database.
36. Your text discusses several major types of databases. Organizations commonly replicate and distribute copies or parts of databases to network servers at a variety of sites. These databases are referred to as:
- A) Operational databases.
 - B) Local databases.
 - C) Distributed databases.
 - D) External databases.

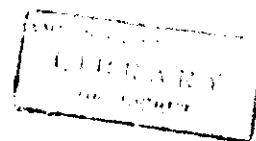


37. Which one of the following statements is true?
- A) Hierarchical databases provide more flexibility than network databases.
 - B) Network databases are the most recently developed of the major types of database management systems.
 - C) Object-oriented databases utilize a root record and any number of subordinate levels called branches.
 - D) Relational DBMS cannot process large amounts of routine business transactions as rapidly as DBMS based on the hierarchical and network models.

Fill in the Blank Questions

Directions: Answer the questions below by filling out the term that best fits the statement. Each question is worth two (2) points.

38. An information system uses the resources of _____, hardware, software, data, and networks to perform input, processing, output, storage, and control activities that convert data resources into information products.
39. Telecommunications _____ consist of computers, workstations, and communications processors, and other devices interconnected by a variety of telecommunications media, which provide computing power throughout an organization.
40. Transaction processing systems are an important example of operations support systems that record and process data resulting from business transactions. Transaction processing systems process transactions in two basic ways: batch processing and _____ processing.
41. Your text outlines an important conceptual framework that firms are using to understand and apply competitive strategies. For example, a firm can survive and succeed in the long run if it successfully develops strategies to confront the five _____ that shape the structure of competition in its industry.
42. Customers or suppliers become dependent on the continued use of an innovative and mutually beneficial information system developed by a firm. The costs in time, money, effort, and inconvenience that it would take a customer or supplier to move its business to a firm's competitors is referred to as _____.
43. These hand-held microcomputer devices enable you to manage information such as appointments, to-do lists, and sales contacts, send and receive E-mail, access the Web, and exchange such information with your desktop PC or network server. These devices are referred to as _____.
44. Computer terminals are undergoing a major conversion to networked computer devices. Intelligent terminals can perform data entry and some information processing tasks independently. _____ terminals are being widely used in banks, retail stores, factories, and other work sites.
45. In a computer system, data and programs are typically stored in _____ storage devices, such as magnetic disk and tape units, which greatly enlarge the storage capacities of computer systems.
46. These types of software packages (_____) are used extensively to convert numeric data into displays such as line charts, bar graphs, and pie charts. Most of the top packages also help users prepare multimedia presentations.



47. The user interface is the part of the operating system that allows you to communicate with it so you can load programs, access files, and accomplish other tasks. There are three main types of user interfaces: graphical user interface, command-line, and menu-driven.
48. Your text discusses a number of fundamental database structures. The relational data structure is a logical structure in which all data elements within the database are viewed as being stored in the form of simple tables. DBMS packages based on this model can link data elements from various tables as long as the tables share common data elements.
49. In accessing databases, it is important to remember that data must be accessed rapidly so information can be produced in response to end user requests. To ensure this, all database records usually contain one or more identification fields, or keys, that identify the record so it can be located.
50. In many companies, developing and managing large corporate databases are the primary responsibilities of the database administrators and database design analysts who work with end users and systems analysts to model business processes and the data they require.
51. When doing data planning and database design, database administrators and design workers will use Data Query Language to graphically display the logical relationships between entity classes and their relationships.

Open-ended

Directions: Use your booklet to answer the following question. This question is worth fifteen (15) points.

Question: "Uncle Nader's Bookshop" is a local family-run small operation company that has been in the business of selling books since 1932. Uncle Nader and his son Elias have been successful in running this business until Virgin Bookstore opened up 14 branches in Lebanon. "Uncle Nader's Bookshop" started to feel the pinch due to obvious competition. You have been assigned the IT strategist for "Uncle Nader's Bookshop." Explain how you would go about fighting back using information systems resources and strategies.

