

一、選擇題（50 分，每題 2 分）

1. The shared information technology resources for the organization are called its:
 - a. MIS plan.
 - b. network.
 - c. operational network.
 - d. IT infrastructure.
 - e. business infrastructure.
2. Office systems are:
 - a. strategic-level systems.
 - b. management-level systems.
 - c. operational-level systems.
 - d. knowledge-level systems.
 - e. transaction-level systems.
3. Labor relations and training are functions of:
 - a. finance/accounting systems.
 - b. human resources systems.
 - c. manufacturing/production systems.
 - d. sales marketing systems.
 - e. decision support systems.
4. Managers as planners, organizers, coordinators, decision makers, and controllers describe the principles of the:
 - a. classical model of management.
 - b. interpersonal model of management.
 - c. transactional model of management.
 - d. virtual organization.
 - e. Mintzberg model of management.
5. The virtual storefront Internet business model:
 - a. generates revenue from advertising or from directing buyers to sellers.
 - b. saves users money and time by processing online sales dealings.
 - c. provides a digital environment where buyers and sellers can establish prices for products.
 - d. creates revenue by providing digital content over the Web.
 - e. sells physical products directly to consumers or individual businesses.
6. Thanks to the Web, _____ have become powerful business tools for testing and improving products and services.
 - a. customers
 - b. sales personnel
 - c. pop-up advertisements
 - d. collaborative competitors
 - e. virtual communities

7. Advances in data analysis techniques for large pools of data make it easy for companies to:
 - a. protect themselves from data theft.
 - b. create congressional interest in evolving laws to protect them.
 - c. create more secure data banks.
 - d. use information systems for their core production processes.
 - e. derive detailed personal information about individuals.
8. Machine language:
 - a. is the language the computer executes.
 - b. is a set of programs written for specific functions performed by end-users.
 - c. is special system software that translates a high-level language into machine language for execution by the computer.
 - d. is written in a high-level language that must be translated into machine language to be executed by the computer.
 - e. is a set of generalized programs that manage the computers resources.
9. UNIX:
 - a. is an earlier version of the Windows operating system for home users.
 - b. can be modified by software developers.
 - c. has its own graphical user interface and desktop and server versions.
 - d. is a 16-bit operating system.
 - e. supports multitasking, multiuser processing and networking.
10. The logical view:
 - a. shows how data are organized and structured on the storage media.
 - b. presents an entry screen to the user.
 - c. allows the creation of supplementary reports.
 - d. presents data as they would be perceived by end users.
 - e. provides only one view of the data.
11. The join operation:
 - a. combines relational tables to provide the user with more information than is otherwise available.
 - b. creates a subset consisting of columns in a table.
 - c. organizes elements into segments.
 - d. identifies the table from which the columns will be selected.
 - e. creates a subset consisting of all records in the file that meets stated criteria.
12. A multiplexer is a:
 - a. specialized computer that supervises communications traffic between the CPU and the peripheral devices in the telecommunications system.
 - b. device that carries the telecommunication message in analog form for packet distribution.
 - c. device that enables a single communications channel to carry data transmissions from multiple sources simultaneously.
 - d. special purpose computer dedicated to managing communications for the host computer in the network.
 - e. telecommunications computer that collects and temporarily stores messages from terminals for batch transmission to the host computer.

13. The bottom layer of TCP/IP is:
 - a. the network interface.
 - b. the IP.
 - c. the application.
 - d. the physical net.
 - e. the TCP.

14. A(n) TV Internet receiver:
 - a. provides Web surfing and e-mail capabilities using a television set, receiver, and a wireless keyboard.
 - b. has a small screen and keyboard for browsing the Web and exchanging e-mail in addition to providing voice communication.
 - c. is a network computer with minimal local storage and processing capability.
 - d. is a wireless handheld personal digital assistant with e-mail and Internet service.
 - e. is a general purpose computing platform that can perform many tasks, but is often unreliable or complex to use.

15. Those who primarily process and disseminate information are called:
 - a. group collaborators.
 - b. knowledge workers.
 - c. information workers.
 - d. librarians.
 - e. data workers.

16. GDSS are most useful for tasks involving:
 - a. session planning, organizational memory, personal productivity, and enterprise analysis.
 - b. idea generation, complex problems, and large groups.
 - c. idea generation, idea organization, prioritizing, and policy development.
 - d. session planning, prioritizing, policy development, and organizational memory.
 - e. idea generation, personal productivity, enterprise analysis, and policy development.

17. Executives need a wide range of _____ as well as internal data.
 - a. executive support systems
 - b. training in using ESS
 - c. system functionality
 - d. enterprise systems
 - e. external

18. The introduction of the new information system includes changes in:
 - a. the design process.
 - b. difficulties in implementation.
 - c. the acquisition cycle.
 - d. the organization.
 - e. anticipated future demands.

19. Organizations can potentially obtain very large payoffs from their investments in information technology if they:
 - a. rethink and radically redesign their business processes before applying computing power.
 - b. seek paradigm shifts.
 - c. use systems analysis techniques.
 - d. pursue reengineering strategies to transform how the organization carries out its business.
 - e. replace a sequential approach with a "work cell" or team approach.

20. The present value is found by the formula:
- (Total benefits – Total cost – Depreciation)/Useful life
 - Present value of cash inflows/Investment
 - $\text{Payment} * (1 - (1 + \text{interest})^{-n}) / \text{Interest}$
 - Net benefit/Total initial investment
 - Original investment/Annual net cash inflow = Number of years for repayment
21. The introduction or alteration of an information system:
- creates new opportunities for management.
 - primarily benefits customers.
 - disrupts the IT function.
 - is never acceptable to the rank-and-file.
 - has a powerful behavioral and organizational impact.
22. Data security controls:
- are unique to each computer program.
 - ensure that data files on either disk or tape are not subject to unauthorized access, change, or destruction.
 - establish a framework for controlling the design, security, and use of computer programs throughout the organization.
 - audit the systems development process.
 - are formalized standards, rules, procedures, and disciplines that ensure that the organization's controls are properly executed and enforced.
23. Online transaction processing requires:
- more processing time.
 - a large server network.
 - fault-tolerant computer systems.
 - a dedicated phone line.
 - high-availability computing.
24. In terms of global business strategy and structure, a domestic exporter will use a policy of:
- mixed sales and marketing, with centralized production, accounting, human resources, and strategic management.
 - coordinated production, accounting, marketing, human resources, with strategic management.
 - coordinated production, accounting, human resources, with centralized strategic management, and marketing.
 - dispersed production and marketing, with centralized accounting, human resources and strategic management.
 - coordinated production, marketing, human resources, and strategic management, with dispersed production.
25. Transnational companies have tended to use a _____ systems configuration, but seem now to be switching to _____ systems.
- duplicated, decentralized
 - centralized, decentralized
 - networked, networked
 - decentralized, networked
 - decentralized, networked

二、問答題（50 分，每題 5 分）

1. Define and discuss the information value chain.
2. Without digital technology, collaborative commerce would not be possible. Do you agree with this statement? Support your answer.
3. List and describe at least five different Internet business models. Which of these models do you think is the most risky for a dot-com business? Support your answer.
4. Describe how a cookie works.
5. Distinguish between and describe the uses of and advantages/disadvantages in HTML, XML, and XHTML.
6. In the telecommunications world, what is meant by centralization and decentralization? What types of companies do you think are likely to subscribe to each philosophy? Give a real-world example of each.
7. What are at least six factors to consider in establishing the business requirements of an enterprise information portal? Which do you think should be addressed first? Why?
8. Provide an explanation of the five layers of the TCP/IP reference model.
9. Of what does systems analysis consist? What does the systems analyst do to achieve these goals?
10. How are encryption, authentication, digital signatures, and digital certificates each used to ensure security in electronic commerce?