

國立虎尾科技大學九十七學年度研究所（碩士班）入學試題

所別：資訊管理系碩士班

科目：考試科目 2（管理資訊系統）

注意事項：

- (1) 本試題共有選擇題三十題，每題二分，共六十分；問答題五題，每題八分，共四十分，合計一百分。
- (2) 請依序作答在答案卷上並註明題號。

一. 選擇題（單選題，每題兩分）

1. Antivirus software is usually effective only against:
 - a. worm viruses.
 - b. viruses spread on the Internet.
 - c. macro viruses.
 - d. viruses known when the software is written.
 - e. script viruses.
 - f. none of the above.
2. Disaster recovery firms provide:
 - a. hot sites with spare computers where subscribers can run critical applications in an emergency.
 - b. backup facilities.
 - c. mainframe applications.
 - d. extra personnel in case of disaster.
 - e. new computers and data to replace the materials lost.
 - f. none of the above.
3. Software controls:
 - a. ensure that computer hardware is physically secure.
 - b. ensure that programmed procedures are consistently and correctly applied to the storage and processing of data.
 - c. ensure that data files are not subject to unauthorized access, change, or destruction while they are in use or in storage.
 - d. use formal standards, rules, procedures and control disciplines to ensure the organization's controls are properly executed and enforced.
 - e. perform overall control functions for the programs that directly process data and data files.
 - f. none of the above.

4. Computer operations controls:
- ensure that computer hardware is physically secure.
 - ensure that programmed procedures are consistently and correctly applied to the storage and processing of data.
 - ensure that data files are not subject to unauthorized access, change, or destruction while they are in use or in storage.
 - use formal standards, rules, procedures and control disciplines to ensure the organization's controls are properly executed and enforced.
 - perform overall control functions for the programs that directly process data and data files.
 - none of the above.
5. The primary tool of structured analysis is:
- linear methodology.
 - systems analysis.
 - packets of data.
 - phased hierarchies.
 - the data flow diagram (DFD).
 - none of the above.
6. To be used effectively, CASE tools require:
- tied data elements.
 - front-end systems.
 - organizational discipline.
 - a lot of time to implement.
 - large groups of personnel to work with them.
 - none of the above.
7. The formula: $(\text{Original Investment}/\text{Annual net cash flow}) = \text{number of years}$ is the one used for the:
- payback method.
 - profitability index.
 - net present value.
 - cost-benefit ratio.
 - internal rate of return.
 - none of the above.
8. A paradigm shift involves:
- rethinking the nature of the business itself.
 - rethinking the nature of the information systems process itself.
 - rethinking the nature of the organization itself.
 - a and b.
 - a and c.
 - none of the above.

9. Work flow and document management software:
- a. automates processes involved in routing documents.
 - b. allows two or more people to work simultaneously on the same document.
 - c. can affect the content of the document.
 - d. a and b.
 - e. a, b and c.
 - f. none of the above.
10. TQM focuses on:
- a. mid-level management.
 - b. a series of continuous improvements.
 - c. production employees.
 - d. eliminating design errors.
 - e. decreasing cycle times.
 - f. none of the above.
11. Unit testing:
- a. includes all the preparations for the trials.
 - b. tests the functioning of the system as a whole in order to determine if discrete modules will function together as planned.
 - c. tests each program separately.
 - d. provides the final certification that the system is ready to be used in a production setting.
 - e. asks end-users to evaluate the system.
 - f. none of the above.
12. The use of _____ is most likely to produce systems that fulfill user requirements.
- a. documentation
 - b. prototyping
 - c. a pilot study
 - d. a parallel strategy
 - e. a phased approach
 - f. none of the above.
13. In the systems lifecycle, the end product of programming is the:
- a. systems performance tests.
 - b. design specifications.
 - c. user sign-off.
 - d. program specifications and codes.
 - e. systems proposal report.
 - f. none of the above.
14. Object-oriented software is expected to:
- a. reduce the time and cost of writing software.

- b. reduce testing needs.
 - c. use the system life cycle.
 - d. develop IS plans.
 - e. fit the business paradigm better.
 - f. none of the above.
15. The types of information that can be garnered from datamining include:
- a. sequences, classifications, and clusters.
 - b. model-driven and data-driven.
 - c. associations and forecasts.
 - d. a and c.
 - e. a, b and c.
 - f. none of the above.
16. When a group interacts using a GDSS, prioritizing uses the following tools:
- a. policy formation, stakeholder identification.
 - b. enterprise analyzer, graphical browser, group dictionary.
 - c. idea organizer, issue analyzer, group writer.
 - d. brainstorming, topic commenter, group outliner.
 - e. vote selection, alternative evaluation questionnaire, group matrix.
 - f. none of the above.
17. "E-learning" is the term used to describe:
- a. training in network technologies.
 - b. surfing the Internet.
 - c. training delivered over a distance.
 - d. on-line instruction delivered over the Internet or private networks.
 - e. what companies are finding out about new technologies.
 - f. none of the above.
18. A relational DBMS model:
- a. combines the hierarchical model and the network model.
 - b. treats data as if they were stored in two-dimensional tables.
 - c. makes reports more difficult to program.
 - d. shares common data elements with application programs.
 - e. a and d.
 - f. none of the above.

19. Which of the following is the best way for a firm to sustain a competitive advantage?
- a. continuously improving the product or service
 - b. building alliances
 - c. creating standards
 - d. lowering prices
 - e. none of the above
20. One-click ordering was patented by ____.
- a. Amazon
 - b. Sabre
 - c. eBay
 - d. Priceline
 - e. none of the above
21. Which is not offered as a strategy to achieve sustainable competitive advantage?
- a. higher price
 - b. product differentiation
 - c. reduce costs
 - d. reduce costs
 - e. none of the above
22. PeopleSoft, Baan, and SAP all provide ____ software.
- a. graph processing
 - b. database
 - c. ERP
 - d. word processing
 - e. none of the above
23. Which of the following techniques finds patterns where one event leads to another later event?
- a. Sequence path analysis
 - b. Classification
 - c. Clustering
 - d. Forecasting
 - e. none of the above
24. Which of the following techniques finds groups of facts not previously known?
- a. Sequence path analysis
 - b. Classification
 - c. Clustering
 - d. Forecasting
 - e. none of the above
25. The combined storage of both data and the procedures that manipulate them is referred to as ____.

- a. encapsulation
 - b. inheritance
 - c. Redundancy
 - d. integrity
 - e. none of the above
26. The ____ describes the structure of the database being designed: the names and types of fields in each record type and the general relationships among different sets of records or files.
- a. model
 - b. schema
 - c. hierarchy
 - d. ER diagram
 - e. none of the above
27. ____ keys link one table to another within the database.
- a. Primary
 - b. Foreign
 - c. Composite
 - d. Related
 - e. none of the above
28. In a ____ conversion the old system is discarded and the new one takes over the entire business operation for which it was developed.
- a. parallel
 - b. phased
 - c. cut over
 - d. pilot
 - e. none of the above
29. A(n) ____ is an encrypted digest of the text that is sent along with a message, usually a text message, but possibly one that contains other types of information, such as pictures.
- a. digest signature
 - b. digital certificate
 - c. digital signature
 - d. digest manifest
 - e. none of the above
30. ____ is the process of ensuring that the person who sends a message to or receives a message from you is indeed that person.
- a. Naming
 - b. Authorization
 - c. Identification
 - d. Authentication
 - e. none of the above

二、問答題（共五題，每題八分）

1. *Discuss at least four ways in which information systems can contribute to the firm's commitment to total quality management. (8%)*
2. *Define the systems development model, listing the six steps to be taken using this model. Describe the activities engaged in at each step. (8%)*
3. *Discuss the uses of RAD and JAD. (8%)*
4. *List several advantages of outsourcing. (8%)*
5. *Explain how benchmarking can be a testing tool and provide an example of how it is used. (8%)*