

國立交通大學 94 學年度碩士班入學考試試題

科目名稱：資訊管理概論(0401) 考試日期：94 年 4 月 16 日 第 2 節

系所班別：資訊管理研究所 組別：乙組 第 1 頁, 共 4 頁

*作答前, 請先核對試題、答案卷(試卷)與准考證上之所組別與考試科目是否相符!!

一. Multiple Choice (you may only select one, the closest answer possible) 35%

Problems 1-5: 1 point per problem

Problems 6-20: 2 points per problem

Points awarded for correct answers. No penalty for wrong answers. Guessing is OK.

1. AI (Artificial Intelligence) is an important domain for support DSS (Decision Support System). Which technology is not treated as the major term in AI field?
 - A) Executive Information System.
 - B) Neural Network.
 - C) Swarm Particle.
 - D) Classifier System.

2. Traditionally, the area of _____ has been neglected in systems design and analysis activities.
 - A) change management
 - B) end-user training
 - C) organizational impact analysis.
 - D) procedural documentation

3. Networked DBMS depict data logically as:
 - A) many-to-one relationships.
 - B) one-to-many relationships.
 - C) many-to-many relationships..
 - D) hierarchical relationships.

4. Someone must be able to verify that the digital signature actually belongs to whoever sent the data and that the data were not altered after being "signed" in order for/to:
 - A) the private key to be transferred to the sender.
 - B) the public key encryption to be transferred to the private key.
 - C) the signature to be legally binding.
 - D) make sure the correct private key is used.

5. Expert systems are expensive and time-consuming to maintain because:
 - A) they require a different level of programming knowledge.
 - B) their rule base is so complex.
 - C) only the person who created the system knows exactly how it works and may not be available when changes are needed.
 - D) their rules must be reprogrammed every time there is a change in the organizational environment.

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6. A data mart usually can be constructed more rapidly and at lower cost than a data warehouse because:
- A) all the information is historical.
 - B) all the data is correct and clean.
 - C) a data mart is usually maintained completely at the Web site of the organization.
 - D) a data mart typically focuses on a single subject area or line of business.
7. Forward chaining is:
- A) a strategy for searching the rule base in an expert system that begins with information entered by the user.
 - B) the programming environment of an expert system.
 - C) a method of organizing expert system knowledge into chunks.
 - D) a strategy for searching the rule base in an expert system that begins with a hypothesis.
8. The four basic components of the computer system within an Information System are _____.
- A) input, process, output, storage
 - B) input, memory, printing, storage
 - C) memory, output, ALU, registry
 - D) none of the above
9. TPSs is called _____.
- A) Transfer point of sales
 - B) Technology processing systems
 - C) Transaction processing systems
 - D) None of the above
10. Periodic or ad hoc reports that flag facts or numbers that deviate from preset standards are called
- A) Easy reports
 - B) Informative reports
 - C) Exception reports
 - D) Difficult reports
11. In ESs, which is the most popular form of representing knowledge?
- A) IF-THEN rules
 - B) semantic frames
 - C) semantic networks
 - D) fuzzy logic

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12. ____ are programs that automatically wade through massive amounts of data and select and deliver the most suitable information for the user.
- A) Decision systems
 - B) Intelligent agents
 - C) Genetic algorithms
 - D) Neural networks
13. Which protocol is NOT used for Information Security?
- A) SSL.
 - B) PCT.
 - C) SOAP.
 - D) SET.
14. Which statement regarding to Encryption technology is correct?
- A) The public key is associated in certificate by the standard of X.509.
 - B) DES is a famous encryption algorithm with asymmetric key.
 - C) RSA is a famous encryption algorithm with asymmetric key and more efficient than DES in terms of process performance.
 - D) 2 parties are enough for constructing SET operation.
15. Which statement is correct?
- A) TCP/IP is constructed with OSI 7-layers structure.
 - B) In packet switching network, the connection between 2 terminals is built by virtual circuit.
 - C) TDMA is the major standard in 3rd generation of mobile communication.
 - D) In ADSL the upload speed rate normally equal to the download speed rate.
16. Which statement regarding to data warehousing is incorrect?
- A) The data in data warehouse is gathered from many data sources.
 - B) The historical data in data warehouse can be updated if necessary.
 - C) The data in data warehouse can be represented in different dimension.
 - D) The consequence information derived from basic information can be generated.
17. Data mining is the technology of knowledge discovery. It can be categorized in terms of the problems the user may confront. Which is NOT the major characteristic in the categories mentioned above?
- A) Classification problem.
 - B) Discrimination problem.
 - C) Association Problem.
 - D) Customization Problem.

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18. ERP is an important factor to help constructing enterprise IT system. Which object is not considered in ERP development?

- A) Inventory Management.
- B) Finance Management.
- C) Customer Care Management.
- D) Human Resource Management.

19. Which factor is NOT considered as major point in SCM (Supply Chain Management)?

- A) Re-engineering.
- B) Just-In-Time.
- C) Build To Order.
- D) Efficient Consumer Response.

20. Which term is NOT considered in Porter's 5 - Competitive - factors?

- A) New Comer.
- B) Supplier.
- C) Product.
- D) Substitution.

二. Explain the main difference between EFA and CFA; and the appropriate usage of each in the study of information systems. 30%

(1) EFA: Exploratory Factor Analysis

(2) CFA: Confirmatory Factor Analysis;

三. 試述高科技產業企業電子化其主要之資訊系統與生產執行系統有那些? 並舉例說明其相關性? 10%

四. 試述 POS 系統與 EOS 系統 之架構圖, 並說明其關係? 10%

五. 高科技產業在導入 ERP 之前須做企業流程再造試說明其理由? 5%

六. 試說明 Knowledge Economics 與 Knowledge Management 其差異? 5%

七. 試舉一例說明高科技產業在 EDI 的應用? 5%