

國立屏東科技大學 九十三年 學年度 碩士班 甄試招生考試  
計算機概論與資管導論 試題

一、 選擇題 (單選題, 每題 5 分, 答錯倒扣 1 分)

1. One type of a knowledge base:
  - a. is a collection of rules
  - b. is a collection of facts
  - c. is a collection of cases
  - d. is program to search rules and facts
  - e. is a relationship between 2 concepts
2. A detail data flow diagram may include a process specification that:
  - a. contains information about individual pieces of data in the diagram
  - b. is a graphic description of the data flow
  - c. shows the logic for the process depicted in the diagram
  - d. is an abstraction of the major functions of system
  - e. all of the above
3. User-developed systems are more likely to:
  - a. be adequately tested and documented
  - b. lack proper quality assurance standards and controls
  - c. have a lengthy conversion period
  - d. be controlled and have audit trails
  - e. all of the above
4. Prototyping is all of the following except:
  - a. a method that can reduced the time, cost and efficiency in specifying requirements
  - b. a working model of a system
  - c. a refined version of the final system
  - d. more explicitly iterative than the conventional "life cycle"
  - e. no exceptions – it is all of the above
5. The post-implementation step in the system life cycle involves:
  - a. maintaining and updating the system
  - b. hooking up the PCs and minis to the mainframe computer
  - c. using the new system and evaluating it after it is installed
  - d. paying for the system and using it for the first time
  - e. all of the above
6. A project with a high level of risk is one where:
  - a. structure is high, technology level is high and size is large
  - b. structure is low, technology level is high and size is small
  - c. structure is low, technology level is low and size is large
  - d. structure is low, technology level is low and size is small
  - e. all projects should be considered as high risk
7. A data warehouse is a database, where:
  - a. data are stored on a single platform
  - b. it contains recent data as well as historical data
  - c. data are stabilized for decision making
  - d. data are organized around major business informational subjects
  - e. all of the above

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8. Structured query language is a:
  - a. application program
  - b. system program
  - c. data manipulation language
  - d. data definition language
  - e. data dictionary
9. Which of the following statement is true about Java:
  - a. Java is an object oriented programming language
  - b. Java can run on any computer and operating system
  - c. Java was specifically developed for use on the Internet
  - d. Java will change the way software is distributed
  - e. all of the above
10. Dividing the processing work for transaction-based application among mainframes and microcomputers is known as:
  - a. downsizing
  - b. parallel processing
  - c. central processing
  - d. cooperative processing
  - e. none of the above
11. Unstructured decisions are those in which the decision maker must:
  - a. discover a routine solution to the problem
  - b. execute repetitive analyses
  - c. provide judgment, evaluation, and insight into the problem
  - d. establish a definite procedure for handling the problem
  - e. none of the above
12. Organizational culture generally refers to:
  - a. the central values and norms of the organization
  - b. the organization's principal division between management and labor
  - c. the ethnic backgrounds of the company's employees
  - d. the types of television programs and museum events that the organization sponsors
  - e. the psychological profile of top management
13. Under the value chain model, the following are all primary activities except:
  - a. human resources
  - b. outbound logistics
  - c. sales and marketing
  - d. operations
  - e. none of the above
14. The search for opportunities to develop strategic information systems should be initiated by:
  - a. clerical personnel
  - b. technical staff members
  - c. middle management
  - d. senior managers
  - e. consultants

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15. If the recursive formula  $f(n, m) = f(n-1, m) + f(n, m-1)$ ,  $f(n, 1) = 1$ ,  $f(n, n) = n$ , then  $f(3, 2) = ?$
- 3
  - 4
  - 5
  - 6
  - none of the above

二、 Explain the following terms in details. (每題 5 分)

- Knowledge Management
- Object-Oriented Programming
- Internet Protocol

三、 請比較 Bucket Sort, Insertion Sort, Mergesort, Quicksort, Heapsort 五種排序方法之特性。(10 分)