

# THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

*A Committee of the Council of ICPAU*

## ATC(U) EXAMINATIONS

### LEVEL TWO

#### INFORMATION SYSTEMS – PAPER 8

**TUESDAY, 14 DECEMBER 2004**

#### INSTRUCTIONS TO CANDIDATES

1. Time allowed: **3** hours.
2. Attempt **all** questions in Section **A**, and any **four** questions from Section **B**.
3. Section **A** has **twenty** compulsory multiple-choice questions, each carrying 1 mark.
4. Section **B** has **six** questions and only **four** questions are to be attempted. Each question carries 20 marks.
5. Please read further instructions on the answer book.

## SECTION A

### Question 1

- (i) Soft (qualitative) data, describes the:
  - (a) data characteristics of an object.
  - (b) characteristics of an object without the use of data.
  - (c) qualitative characteristics of a person's opinion.
  - (d) qualitative information when making decisions.
- (ii) Lack of information clarity or too much information is:
  - (a) signal.
  - (b) distortion.
  - (c) noise.
  - (d) variance.
- (iii) The area of contact between linked systems is called:
  - (a) interface.
  - (b) interdependence.
  - (c) interrelation.
  - (d) Inter-department.
- (iv) The term peripherals commonly refers to the:
  - (a) processor of a computer.
  - (b) network connections of a computer.
  - (c) input, output and communications hardware.
  - (d) communication channels of a computer.
- (v) Which of the following is a not hardware element in a client server system?
  - (a) Client workstation
  - (b) Utilities package workstation
  - (c) Departmental server.
  - (d) Corporate server.
- (vi) Which of the following is an example of graphical user interface?
  - (a) Windows.
  - (b) Operating systems pioneered by Apple.
  - (c) Linux.
  - (d) WIMP interface.

- (vii) End user developed software is written:
- (a) and developed from scratch by an IS professional.
  - (b) by a non IS professional.
  - (c) and designed to satisfy the end user.
  - (d) by an IS professional but improved by the end user.
- (viii) A database refers to:
- (a) A collection of records for a smaller entity.
  - (b) All information for one business application.
  - (c) All information relating to a single entity.
  - (d) An attribute of the entity.
- (ix) Batch systems involve processing:
- (a) of many transactions in sequence.
  - (b) which follows each transaction.
  - (c) to achieve a required number of transactions.
  - (d) aimed at determining the correct transactions.
- (x) Which of the following does not fall under quality software?
- (i) Reasonably bug free.
  - (ii) Delivered on time.
  - (iii) Written within budget.
  - (iv) Meets initial specifications.
  - (v) Meets quality control standards.
- (a) (i) and (iv).
  - (b) (i), (ii), (iii) and (v)
  - (c) (i), (ii), (iii) and (iv)
  - (d) (ii), (iv) and (v)
- (xi) What is meant by big bang changeover?
- (a) A slow change from the old to the new system with a big bang.
  - (b) Certain sections of the old system are banged to the new system.
  - (c) A new system becomes operational immediately from the previous system.
  - (d) Departments of the old system are abandoned and new ones created.
- (xii) Coupling in systems theory refers to how:
- (a) closely linked the subsystems are.
  - (b) closed a system is compared to another.
  - (c) interrelated systems are.
  - (d) different systems react to changes.

- (xiii) Payback period refers to the period after:
- (a) the initial investment when the projects pays back.
  - (b) the initial investment when the owner pays back his debtors.
  - (c) initial investment before a company achieves a net benefit.
  - (d) all debtors have been paid.
- (xiv) Which of the following components make up a computer interface?
- (i) Terminal, screen layout and the system.
  - (ii) Keyboard design and screen.
  - (iii) The dialogue between the user and the screen.
- (a) (i) and (ii).
  - (b) (i).
  - (c) (i), (ii) and (iii).
  - (d) None.
- (xv) Encryption provides:
- (a) A security check on who is doing what on a computer.
  - (b) A defence to enhance physical security measures.
  - (c) A guard against the introduction of computer viruses.
  - (d) Accessibility to sensitive data by only one person.
- (xvi) Corrective maintenance of a system refers to maintenance:
- (a) to enable a system adjust to its environment.
  - (b) to improve the efficiency of a system.
  - (c) to eliminate bugs from a system.
  - (d) in order to develop new techniques.
- (xvii) A password is a sequence of characters that:
- (a) Accesses a system through a rare identification code to the system.
  - (b) Assist to identify individuals only.
  - (c) Is presented to a computer system to allow access to the system.
  - (d) Opens and closes a system by the user.
- (xviii) A server is a powerful computer used to:
- (a) Maintain security by restricting access to information.
  - (b) Share peripheral devices connected to the computer.
  - (c) Share applications such as word processors.
  - (d) Share hardware resources such as printers.

- (xix) What is a firewall?
- (a) Specialised software mounted on a server at the point of connection to the internet.
  - (b) Used to enable employees to share information on the web when the server is connected to the internet.
  - (c) Formed by extending the intranet beyond a company's computer system to other users.
  - (d) Provides access to the company's sensitive information via the internet.
- (xx) A stealth virus is one which is:
- (a) Specifically designed to avoid detection.
  - (b) Intended to detect and safely remove viruses from the computer systems.
  - (c) Capable of altering its form in order to perform various functions.
  - (d) Constantly controlling access to a computer system.

## SECTION B

### Question 2

- (a) Define is a system. (2 marks)
  - (b) Briefly explain four characteristics of a system. (8 marks)
  - (c) Give four means of communicating information through appropriate channels. (4 marks)
  - (d) Distinguish between analytical decision-making and heuristic decision-making? (6 marks)
- (Total 20 marks)**

### Question 3

- (a) What is meant by critical success factors of a business? (4 marks)
  - (b) What are bespoke applications? (2 marks)
  - (c) Give two advantages of bespoke applications? (2 marks)
  - (d) Give two disadvantages of bespoke applications. (2 marks)
  - (e) What is online real time processing? (2 marks)
  - (f) Give four advantages and four disadvantages of online real time processing? (8 marks)
- (Total 20 marks)**

#### Question 4

- (a) Explain three techniques for controlling computer based information systems. (6 marks)
  - (b) Give three ways of reducing the risk of virus infection in a computer system. (3 marks)
  - (c) Define end user computing. (2 marks)
  - (d) Give three factors which led to the development of end user computing (3 marks)
  - (e) Explain four end user services given by the Information Systems Manager. (6 marks)
- (Total 20 marks)**

#### Question 5

An organization can incur many different costs in delivering information to its staff. These costs can be classified as one off and on going.

- (a) Give five examples of one off costs. (5 marks)
  - (b) Give five examples of on going costs. (5 marks)
  - (c) Explain five considerations in selecting a data collection method. (10 marks)
- (Total 20 marks)**

#### Question 6

- (a) Explain the term facilities management? (4 marks)
  - (b) Give three advantages of facilities management? (3 marks)
  - (c) Give three problems of facilities management. (3 marks)
  - (d) Before carrying out a feasibility study, the people responsible must know the terms of reference. Explain five contents of the terms of reference. (10 marks)
- (Total 20 marks)**

#### Question 7

- (a) What is meant by prototyping? (2 marks)
  - (b) Give three advantages of prototyping. (3 marks)
  - (c) Give three disadvantages of prototyping. (3 marks)
  - (d) Distinguish between dynamic software testing and static software testing (4 marks)
  - (e) Define quality assurance. (2 marks)
  - (f) Explain three processes involved in quality assurance. (6 marks)
- (Total 20 marks)**