

# THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

*A Committee of the Council of ICPAU*

## ATC(U) EXAMINATIONS

### LEVEL TWO

#### INFORMATION SYSTEMS – PAPER 8

**FRIDAY, 5 DECEMBER 2002**

#### 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) Negative entropy is the term used to describe:
  - a) uncertainty in a system.
  - b) disorganisation in a system.
  - c) reduction in uncertainty in a system.
  - d) how separate the system is from its environment.
- ii) The purpose of the operating system is to provide:
  - a) a set of instructions to the computer.
  - b) different ways of working on a computer.
  - c) software to support the computer.
  - d) software to run the computer.
- iii) The person who fills the role of change agent is the
  - a) Systems user.
  - b) Administrator.
  - c) Systems analyst.
  - d) Client.
- iv) Which of the following is not an input device?
  - a) Scanner.
  - b) Compact disk reader.
  - c) Smart card.
  - d) Touch screen.
- v) Which of the following best describes an exception report?
  - a) Excludes relevant information.
  - b) Shows only the relevant information.
  - c) Results when a measure exceeds a threshold.
  - d) Shows information that leads to good decision making.
- vi) Which of the following statements is false?
  - a) All operating systems move programs from backing store into main memory.
  - b) All operating systems allow users to access the time and date.
  - c) All operating systems support multi tasking.
  - d) Open operating systems are those which allow computers from different manufacturers to be connected.

- vii) Utility programs have many tasks including:
- a) differentiating between operating and applications programs.
  - b) allowing users to view data efficiently.
  - c) retrieving existing documents so they can be easily changed.
  - d) making extra copies of programs and data.
- viii) A data dictionary can hold information on data as well as:
- a) processing and promoting unity within a system.
  - b) helping in transforming data into information.
  - c) analysing computer programs.
  - d) safeguarding the security of the system.
- ix) An example of a field using application software is:
- a) electricity billing system
  - b) businesses or professionals
  - c) water supply billing
  - d) airline booking
- x) One of the dangers of decentralisation can be:
- a) increased use of computer resources.
  - b) reliance on specialists to do the work.
  - c) increased security risk.
  - d) not responding to individual problems.
- xi) In a decentralised system, control can be exercised over:
- a) selection of personnel.
  - b) division of responsibility.
  - c) departmental data processing staff.
  - d) cost control.
- xii) Financing control is aided by considering costs allocated to:
- a) service centres.
  - b) cost centres.
  - c) profit centres.
  - d) a combination of the above.
- xiii) Which of the following statements does not apply to data validation?
- a) Externally consistent.
  - b) Converts data onto the new system.
  - c) Uses check digits.
  - d) Reasonable within appropriate limits.

- xiv) Which of the following is not a method of system changeover?
- a) Parallel changeover.
  - b) Gradual changeover.
  - c) Complete changeover.
  - d) Direct changeover.
- xv) A data dictionary acts as an interface between:
- a) programmers and users.
  - b) workers of different departments and data entrants.
  - c) data processors and data controllers.
  - d) data controllers and data users.
- xvi) One of the problems associated with computer projects is:
- a) monitoring system activities.
  - b) quality of output not being sufficient.
  - c) communication among departments.
  - d) project exceeding budget time and money.
- xvii) Monitoring resource performance will include:
- a) expenditure and income on the system.
  - b) human and computer resources.
  - c) time as a resource.
  - d) how computer time is used.
- xviii) What is a project team?
- a) A group of representatives from user departments.
  - b) A group of people to undertake a specific task.
  - c) A group of people to communicate effectively at all levels.
  - d) A group of people carrying out the same job.
- xix) One drawback of the system development lifecycle approach can be:
- a) poorly defined user requirements.
  - b) effect on the standard of computer systems.
  - c) effect on the quality of system development.
  - d) chances of system failure.
- xx) Which of the following does not apply to communication between the system and its users?
- a) Input and output design.
  - b) Document and code design.
  - c) Dialogue design.
  - d) Database design.

**SECTION B**

**Question 2**

- (a) When studying an organisation, it is useful analyse what it does and how it behaves. In the context of systems theory:
- (i) define a system. (2 marks)
  - (ii) distinguish between an open and a closed system (4 marks)
- (b) Explain the following terms:
- (i) Goal congruence. (2 marks)
  - (ii) Sub optimisation. (2 marks)
  - (iii) Decoupling. (2 marks)
  - (iv) Entropy. (2 marks)
- (c) Describe the difference between positive and negative feedback. (6 marks)
- (Total 20 marks)**

**Question 3**

Data Protection Acts give individuals specific rights in respect of personal data held about them by others.

- (a) What is meant by personal data? (2 marks)
  - (b) Give three rights that relate to personal data. (6 marks)
  - (c) Explain what a data subject means. (2 marks)
  - (d) List three principles of any Data Protection Act. (6 marks)
  - (e) Distinguish between a data controller and a data processor. (4 marks)
- (Total 20 marks)**

**Question 4**

- (a) A new system may require the acquisition of new hardware.
- (i) Give two ways of financing this acquisition. (4 marks)
  - (ii) Give three advantages for each of the choices you have given. (6 marks)
- (b) Before a decision is made on whom to supply the software, an invitation to Tender document may be prepared.
- (i) Define an Invitation to Tender document. (4 marks)
  - (ii) State three types of information included in this document. (6 marks)
- (Total 20 marks)**

**Question 5**

- (a) (i) Define facilities management. (2 marks)  
(ii) Give two advantages of facilities management. (4 marks)
  - (b) (i) What is meant by centralisation of Information Technology? (2 marks)  
(ii) Give two reasons why a firm may decide to centralise. (4 marks)
  - (c) Information Technology expenditure is a significant item in budgets.  
(i) Distinguish between capital and revenue expenditure. (4 marks)  
(ii) Give two examples of each expenditure in (i) above in an Information Technology environment. (4 marks)
- (Total 20 marks)**

**Question 6**

- (a) (i) Distinguish between an intranet and an extranet. (4 marks)  
(ii) Give three benefits of each of the above. (6 marks)
  - (b) A internet address can be given as follows:  
<http://www.icpau.or.ug/atc/syllabus/contents.html>  
Explain the following parts of the above address:  
(i) icpau. (2 marks)  
(ii) or. (2 marks)  
(iii) ug. (2 marks)
  - (c) Give two examples of a web browser software. (4 marks)
- (Total 20 marks)**

**Question 7**

An organisation is considering changing from a manual information system to a computerised one.

Briefly explain five advantages and five disadvantages of the effect of a computerised system on an organisation.

**(20 marks)**