

THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

A Committee of the Council of ICPAU

ATC(U) EXAMINATIONS

LEVEL TWO

INFORMATION SYSTEMS – PAPER 8

TUESDAY, 18 JUNE 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 B

Question 1

- (i) Which of the following is not a component of the Central Processing Unit?
 - (a) Control unit.
 - (b) Arithmetic and logic unit.
 - (c) Main store (memory).
 - (d) Front end processor (multiplexor).

- (ii) Which of the following is not a feature of Electronic Mail?
 - (a) Manual redirection of messages if the recipient has moved.
 - (b) Notification to sender if a message cannot be delivered.
 - (c) Automatic accounting and billing of users.
 - (d) Multiple addressing.

- (iii) A large amount of microcomputer business software is now on the market. It includes; spreadsheets, database management, word processing and desktop publishing.
 This software is sometimes called horizontal software because;
 - (a) it is aimed at specific types of companies.
 - (b) it is massively available on the market.
 - (c) it is affordable to most business users.
 - (d) it runs across a wide range of business users and applications.

- (iv) Which of the following best explains why it is important to involve users when developing a new information system?
 - (a) Users already have knowledge of how the new system will be like.
 - (b) The users know the failures of the old system and what to expect out of the new one.
 - (c) To let them get used to the new system as it is developed.
 - (d) To give advice to programmers and analysts during system development.

- (v) Which of the following is not a network topology?
 - (a) Ring Network.
 - (b) Bus Network.
 - (c) Tree Network.
 - (d) Local Area Network.

- (vi) Online shopping is one area of e-commerce that is still under developed in Kampala. This is mainly because;
- (a) People in Kampala prefer buying goods they can touch and feel before paying their money.
 - (b) Delivery of goods bought online normally takes too long.
 - (c) Consumers in Kampala are still ignorant about this kind of facility.
 - (d) Internet use in Kampala is still limited.

- (vii) Prices of computer systems and printers are going down every other month to such an extent that some consumers are reluctant to buy computer systems well knowing tomorrow there will be cheaper and better systems.

Which of the following best explains this trend of events?

- (a) There is low demand for computers and the suppliers are too many forcing the prices to go down.
 - (b) The computer manufacturers have intentionally reduced the prices to capture consumers from poor countries.
 - (c) Most people these days buy computer components from different suppliers and assemble them to make cheaper computers.
 - (d) The cost of making computer chips used to make processors is dropping and continues to drop.
- (viii) Which of the following operating systems is suitable for a network environment?
- (a) Win 98.
 - (b) Windows Millennium.
 - (c) Windows NT.
 - (d) Windows XP.
- (ix) Which of the following is not so important when determining specifications of a computer?
- (a) Hard disk size.
 - (b) Random Access Memory (RAM) size.
 - (c) V.G.A. Card type.
 - (d) Processor speed.
- (x) Which of the following is not a Database Management Software?
- (a) Ms Excel.
 - (b) Ms Access.
 - (c) Oracle.
 - (d) SQL Server.

- (xi) Which of the following programming languages is now commonly used for web page designing?
- (a) Turbo C.
 - (b) Java.
 - (c) Qbasic.
 - (d) C++.
- (xii) Which of the following statements is true about Spreadsheets and Business Graphics?
- (a) Column widths in spreadsheets are fixed.
 - (b) Another name for the active cell is the cell reference.
 - (c) A disadvantage of business graphics is that they depict data in a manner that is hard to grasp.
 - (d) In a spreadsheet a label cannot be used for calculations.
- (xiii) A person who gains illegal access to a computer system is called:
- (a) zapper.
 - (b) software pirate.
 - (c) hacker.
 - (d) worm.
- (xiv) Another name for an anti virus is:
- (a) Vaccine.
 - (b) Worm.
 - (c) Trojan Horse.
 - (d) DES.
- (xv) Which of the following statements is false?
- (a) Decision support systems help managers in non-routine decision-making.
 - (b) Simulation uses a model to answer real-life situations.
 - (c) Communication of information is most efficient through the traditional management pyramid.
 - (d) The information centre typically offers users training and assistance.
- (xvi) In multiprogramming, two or more programs can be executed
- (a) by optimizing compilers.
 - (b) with two computers.
 - (c) simultaneously.
 - (d) concurrently.

(xvii) The time between the user's request and the computer's reply is called:

- (a) concurrent time.
- (b) allocation time.
- (c) response time.
- (d) event time.

(xviii) The process of converting from analog to digital is called:

- (a) modulation.
- (b) line switching.
- (c) telecommuting.
- (d) demodulation.

(xix) The speed with which a disk can find data being sought is called:

- (a) access time.
- (b) direct time.
- (c) seek time.
- (d) data transfer time.

(xx) The technique whereby part of the program is stored on disk and is brought into memory for execution as needed is called:

- (a) memory allocation.
- (b) interrupts.
- (c) virtual storage.
- (d) prioritized memory.

SECTION B**Question 2**

The way people perceive and process information (Human Information Processing) is of vital importance in trying to communicate information.

Required:

State and briefly explain the factors one should consider in order to effectively communicate information. Use of good examples will be rewarded.

(20 marks)**Question 3.**

- (a) What do you understand by the term “system tools” as far as a computer is concerned?

(2 marks)

- (b) The main software components found in system tools are:

- (i) Scan disk.
- (ii) Disk defragmenter.
- (iii) Disk clean up.
- (iv) Scheduled tasks.

Briefly explain the functions of each of the above.

(16 marks)

- (c) How would you protect your computer system from unauthorized users.

(2 marks)**(Total 20 marks)****Question 4.**

- (a) Networking has become a common practice especially in organizations that have many users like a bank.

Give four advantages an organization with networked computers enjoys over one that uses stand-alone computers?

(12 marks)

- (b) What risks are involved in using a network and how can these risks be avoided?

(8 marks)**(Total 20 marks)**

Question 5.

- (a) Distinguish between utility software and application software.
(2 marks)
 - (b) State and briefly explain the main functions of an operating system.
(10 marks)
 - (c) State any **four** quality factors of a software product.
(8 marks)
- (Total 20 marks)**

Question 6.

- (a) What do you understand by the following terms?
 - (i) TCP/IP.
 - (ii) Backup.
 - (iii) Multi-tasking.
 - (iv) Boot.(8 marks)
 - (b) Give reasons why organizations like a bank should maintain a Data Backup System.
(6 marks)
 - (c) Give four examples of hardware devices used to backup data.
(4 marks)
 - (d) What kind of backup device would you recommend to a business like a bank and why?
(2 marks)
- (Total 20 marks)**

Question 7.

Outsourcing has become an acceptable and fashionable way of providing services in both public and private sector organizations.

- (a) What is meant by outsourcing?
(2 marks)
 - (b) Give and explain any four advantages of outsourcing.
(8 marks)
 - (c) Give and explain five disadvantages of outsourcing.
(10 marks)
- (Total 20 marks)**