

**THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD**  
*A Committee of the Council of ICPAU*

**INFORMATION TECHNOLOGY - PAPER 5(i)**

**DECEMBER 1998**

**INSTRUCTIONS TO CANDIDATES**

1. Time allowed: 2 hours 30 minutes.
2. Attempt all questions in Section A, and any three questions from Section B.
3. Section A has ten compulsory questions each carrying 1½ marks.
4. Section B has <sup>Six</sup> five questions and only three questions are to be attempted. Each question carries 15 marks.
5. Please read further instructions on the answer book.

SECTION A

Question 1

- (i) Which of the following task is NOT part of the "What - If Analysis" carried out by spreadsheet programs
- (a) Seeking a value that solves a formula.
  - (b) Projecting figures using substitute input values to a formula
  - (c) Optimisation and resource allocation facility to determine best use of scarce resources .
  - (d) Enquiries on how basic calculation on a worksheet can be performed.
- ii) One of the major crimes in Information Technology is the recording of transmitted signals through a radio transmitter and replaying them through an appropriate terminal or printer with the intention of causing fraud. What term best describes the above crime?
- a) Piracy.
  - b) Conspiracy.
  - c) Electronic eavesdropping.
  - d) Hacking.
- (iii) Which of the following is not an operating system?
- a) Utilities programme.
  - b) Microsoft DOS.
  - c) Windows 95.
  - d) Novell Netware.
- (iv) Which of the following storage media have the same mode of access to the data stored in them:-
- 1) Optical Disk.
  - 2) Magnetic Disk.
  - 3) RAM.
  - 4) Magnetic Tape.
- a) (1) & (4)
  - b) (1) & (2)
  - c) (2) & (4)
  - d) (2) & (3)

- (v) An important aspect of a DBMS is the database organisation. Which of the following is NOT a classification of database organisation?
- a) File inversion.
  - b) Relations.
  - c) Indexed file organisation.
  - d) Networks.
- (vi) Which of the following is NOT one of the elements of the WINDOWS operating system?
- a) Pointers.
  - b) Icons.
  - c) Mouse.
  - d) Scanner.
- (vii) What name is given to the kind of computer system where some of the hardware is dedicated to providing a particular service to other computers (stations) with interconnections for data communications?
- a) Client - Server computing.
  - b) Networked computer.
  - c) Distributed computing.
  - d) Local Area Network.
- (viii) Which of the following programmes can be classified as translators?
- (a) Utilities programmes.
  - (b) High level languages.
  - (c) Low level languages.
  - (d) Compilers.
- (ix) Which of the following devices serves the purpose of both input and output of data/information to a computer?
- a) VDUs.
  - b) Trackballs.
  - c) Printers.
  - d) Keyboards.
- (x) Which of the following printers is NOT a character printer?
- (a) Star Dot - Matrix Printer.
  - (b) Epson Dot - Matrix Printer.
  - (c) IBM Laser Printer.
  - (d) Canon Inkjet Printer.

**SECTION B**

**Question 2**

Green Boat Ltd is a firm of shipping agents which uses PCs for various aspects of the business, including maintenance of ledgers, control of goods in transit, and management accounting. Staff at Head Office are experiencing serious delays in response time. When making enquiries you ascertain that the disk house-keeping is poor, and that the hard disks on several PCs are over 90% full. It is clear that other Backing Storage devices, besides floppy disks and the hard disks themselves, must be required soon.

- (a) Explain why it is necessary to divide computer storage into Main Memory and Backing Storage. *(5 marks)*
  
- (b) Draw a table showing different of types of computer storage media, both primary and secondary, indicating how each type stores information and including details of other features such as speed, cost, and capacity. *(10 marks)*

**Question 3**

Explain what is meant by “user - friendly” in connection with computer systems. *(15 marks)*

**Question 4**

Many accountants say that the most beneficial software tool which is available for use on small computers is the ‘Spreadsheet’.

- a) Explain the features and functions of a typical spreadsheet program. *(10 marks)*
  
- b) While spreadsheets are relatively easy to use, they should also be used with care. Give two reasons why this is so. *(5 marks)*

**Question 5**

The typical electronic office may be built around the installation of a Local Area Network which provides access to a Wide Area Network. Explain what is meant by these two network terms.

*(15 marks)*

**Question 6**

- a) In relation to information systems outline the phases of Implementation, Maintenance, and Review. *(5 marks)*
- b) Describe briefly the role of users in Information Technology systems development. *(10 marks)*

**Question 7**

- a) The “Year 2000” problem commonly known as the “Millenium Bug” problem or the “Y2K” problem is one of the most important Information Technology issues facing us all over the coming months and years.  
  
Explain what is meant by the “Y2K” or “Millenium Bug” problem. *(5 marks)*
- b) What is a computer “virus”? What problems does it pose to a computer system and how can these problems be minimised? *(10 marks)*