

THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

A Committee of the Council of ICPAU

INFORMATION TECHNOLOGY – PAPER 5(i)

JUNE 2000

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 **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 categories of viruses describes viruses designed like legitimate programs?
 - a) File Viruses
 - b) Boot Sector Viruses
 - c) Trojan Horses
 - d) Macro Viruses

- ii) Which of the following offers fool-proof increased security in computer authentication systems?
 - a) Use of passwords.
 - b) Biometric devices.
 - c) Personal identification numbers.
 - d) Identification cards.

- iii) The recording surfaces of floppies are kept clean by:
 - a) Liners.
 - b) Shutters.
 - c) Magnetic coating.
 - d) Diskette shell.

- iv) The formatting process of a disk involves the following except:
 - a) Defining tracks.
 - b) Analysing recording surfaces for defects.
 - c) Creating File Allocation Tables.
 - d) Storing file names and sizes.

- v) From the following list, choose what constitutes the Central Processing Unit of a Computer.
 - 1. Control Unit.
 - 2. Main Memory.
 - 3. Logic Unit.
 - 4. Optical Readers.
 - 5. Multiplexer.

- (a) 1, 2 and 3.
 - (b) 1, 3 and 4.
 - (c) 1, 3 and 4.
 - (d) 1 and 4 only.
- vi) Which of the following programming languages bears the features of a fourth generation language (4GL).
- a) Oracle
 - b) Pascal
 - c) BASIC
 - d) COBOL
- vii) Which of the following is not an application of the Internet?
- a) E-mail
 - b) The World Wide Web
 - c) File Transfer
 - d) CD-ROM
- viii) Which of the following is unlikely to determine the access for a disk?
- a) Storage capacity
 - b) Seek time
 - c) Latency
 - d) Data transfer rate
- ix) Which of the following programming techniques is used to perform a group of statements repetitively?
- a) Sub-routines
 - b) Branching
 - c) Looping
 - d) Coding
- x) Which of the following dBase commands would remove a set of records from an active data base file?
- a) DELETE
 - b) PACK
 - c) APPEND
 - d) EDIT

SECTION B

Question 2:

- a) Describe the main components of a computer based information system. (9 Marks)
- b) Explain why computer based information systems may be preferred in modern commercial businesses. (6 Marks)

(Total 15 Marks)

Question 3:

- a) Briefly distinguish between low level and high level programming languages and give two examples of the latter. (5 Marks)
- b) Explain the basic features, disadvantages and advantages of fourth generation languages (4GK).

(10 Marks)

(Total 15 Marks)

Question 4:

- a) With an example, explain what you understand by the phrase “an intelligent peripheral”. (3 Marks)
- b) State four examples of computer peripherals. (2 Marks)
- c) Explain the Laser, Inkjet and Dot Matrix Printers giving advantages and disadvantages of each. (10 Marks)

(Total 15 Marks)

Question 5:

- Discuss the advantages of a Winchester Disk and the explain the factors that influence the choice of a storage medium. (15 Marks)

Question 6:

- a) Define the term “ Database” (2 Marks)
- b) Explain the main requirements of creating an efficient database. (10 Marks)
- c) Outline the disadvantages redundancy in a database design. (3 Marks)

(Total 15 Marks)