



ICM

SEPTEMBER 2015

COMPUTER APPRECIATION & APPLICATIONS

Instructions to candidates:

- a) Time allowed: Three hours (plus an extra ten minutes' reading time at the start – do not write anything during this time)
 - b) Answer ALL sections of Question 1 and any THREE questions chosen from 2 to 6
 - c) Question 1 carries 40 marks and each other question carries 20 marks. Marks for sections of questions are shown in []
 - d) The number of marks allocated for each section should determine the length of your answer and the amount of time you spend on it. Generally ONE point gains ONE mark and is rarely achieved by one-word answers
 - e) Note carefully that where some questions require details of how hardware or software achieves its task, descriptions of user actions will NOT earn marks
 - f) No computer equipment, books or notes may be used in this examination
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1.
 - a) A program produces visual output. Describe an output situation for EACH of the following:
 - i Where a visual display unit would be more appropriate than a printer
 - ii Where a printer would be more appropriate than a visual display unitIn EACH case, explain why. [4]
 - b) Describe the steps undertaken by the hardware and software (not the user) for making a copy of a picture and saving it onto a disk file using a scanner. [4]
 - c) Describe FOUR characteristics of a LAN that would distinguish it from a WAN. [4]
 - d) Draw a configuration diagram showing how the main parts of a computer are linked and how data moves between them. Show only the flow of DATA and its directions. [4]
 - e) A user creates a new email and then presses SEND. Explain fully what happens to this email immediately after the sender presses SEND to transmit it to a remote receiver. [4]
 - f) Select a particular TYPE of printer (not a brand name) and describe briefly how it works. [4]
 - g) Distinguish clearly between ROM and RAM. [4]
 - h) List FOUR advantages of coding data, particularly numeric data. Ignore aspects of privacy. [4]
 - i) List FOUR different input devices, giving a particular application for which EACH would be MOST suitable. [4]
 - j) List FOUR significantly different tasks undertaken specifically by a programmer. [4]
 2. Select and name a currently available commercial word processing package. Explain, in GENERAL TERMS, how EACH of the following tasks can be achieved. Avoid answers like 'press F5'.
 - a)
 - i Describe FULLY all the options available AFTER a user has selected the spelling checker.
 - ii Give and explain TWO examples where the spelling checker may not be able to detect an error. [8]
 - b) Define the terms **superscript** and **subscript**. Give a specific example of the use of EACH. Select ONE of these two and describe how to implement it. [5]
 - c) Describe carefully how a block of text can be MOVED from one part of a document and placed in another position of the same document. [4]
 - d) A word processing document includes some text that has been underlined. This document is saved onto a disk file. Much later, the document is retrieved. Explain how the word processing program itself is able to identify those words that had been underlined as it is loading and displaying the file. [3]
 3.
 - a) Distinguish clearly between SYSTEM software and APPLICATION software. Give a typical example of EACH. [4]
 - b) Describe how the newer operating systems are different from the older ones. [4]
 - c) Describe FOUR different services provided by a current operating system. [8]
 - d) Explain what is meant by the term **EXPERT SYSTEM**. Briefly describe a situation where it would be useful. [4]

continued overleaf

4. a) Name a particular type of plotter. [4]
i With the aid of a diagram, describe how it works. [4]
ii Briefly describe TWO different applications that need a plotter, explaining in EACH case why a printer would not be adequate. [6]
- b) Explain how a laser printer achieves its output. [6]
- c) Compare the performance of a laser printer with a dot-matrix printer. [6]
5. a) Explain what constitutes a LOCAL AREA NETWORK. [4]
- b) Discuss the advantages of a company or institution upgrading its computer equipment to a LAN. Do not discuss email in this part. [6]
- c) Discuss IN DETAIL the advantages and disadvantages of internal and external email systems for a company or institution. [10]
6. a) List, in their natural order, the stages of a system life cycle. [6]
- b) Choose any ONE of these stages and explain in detail what happens during that stage. [8]
- c) Although many people now own a computer, many still do not. State the benefits that computerisation brings to these people. [6]