



COMPUTER APPRECIATION & APPLICATIONS

September 2019

Time allowed

Three hours

Instructions

- Write the question number next to each answer in your answer booklet.
- You are not required to rewrite the question in your answer booklet.
- Ensure that you pay particular attention to words in **bold**.

Information

- Different questions may carry a different number of marks.
- Marks for each question are shown in [].

Advice

- Read each question carefully before you start to answer it.
- Use the full time permitted and check all your answers.

Materials

- No other computer equipment, notes or books are permitted.
- For those exams for which numeracy skills are required:
 - a) Non-programmable calculators are permitted.
 - b) Data tables are included at the back of the paper if necessary.



ANSWER ALL SECTIONS OF QUESTION 1 AND ANY THREE QUESTIONS CHOSEN FROM 2 TO 6.

Question 1 carries 40 marks and each other question carries 20 marks.

Note carefully that where some questions require details of how hardware or software achieves its task, descriptions of user actions will NOT earn marks

1. (a) Describe how command line and GUI interfaces allow users to interact with the computer. [4 marks]
- (b) Define **special purpose software** and give an example. [2 marks]
- (c) A product code 42167 has a check process applied and becomes 42167X.
 - (i) State the checking type that has been applied.
 - (ii) Explain what the X would stand for in this case. [2 marks]
- (d) Cell A31 in a spreadsheet contains the average of the figures in A23 to A30 in the column above. Write the formula that would be used in A31. [2 marks]
- (e) Explain the following types of computer files:
 - (i) Master file [4 marks]
 - (ii) Transaction file [4 marks]
- (f) Explain what is meant by a **composite** or **compound key** in a database. [3 marks]
- (g) Explain the purpose of the following accountancy documents:
 - (i) Invoice
 - (ii) Purchase order
 - (iii) Receipt [3 marks]
- (h) Describe the purpose of **each** of the following: [6 marks]
 - (i) Translator program
 - (ii) Antivirus program
 - (iii) File compression program
- (i) List the **five** stages of the systems life cycle in correct sequential order. [6 marks]
- (j) Explain **two** ways a systems analyst could find out what regular customers thought of a new billing system. [4 marks]

2. (a) Explain the following features of a word processing package:
- (i) Word wrap [3 marks]
 - (ii) Search and replace [4 marks]
- (b) State **five** advantages of using a **word processor package** on a PC over a **typewriter**. [5 marks]
- (c) Draw the following table and complete. Tick the most appropriate package for **each** task: [4 marks]

Task	Spreadsheet	Word-processing	Database	Desktop Publishing
Monthly sales figures				
Student information records				
Monthly newsletter				
Application for a loan				

- (d) A user has a spreadsheet. They wish to use a formula to determine the largest value in a list of figures. All the figures are stored in column F between rows 27 and 35.
- The result will be shown in row 36 of the same column.
- (i) State the cell reference of this calculation.
 - (ii) Write a formula that makes use of a function to determine the highest number in the given range. [4 marks]

3. (a) Explain the difference between a **WAN** and a **LAN**. [4 marks]
- (b) Define the term **network protocol**. [2 marks]
- (c) State **three** advantages of connecting a computer into a LAN. [3 marks]
- (d) PCs/devices and cables are required as part of a network. State **two** additional hardware items that would be needed to create a LAN using a star topology. [4 marks]
- (e) Describe how two devices communicate across a LAN. [5 marks]
- (f) Define the term '**internet**'. [2 marks]

4. In 1989 Kodak employed 145,000 people. In 2013 the company filed for bankruptcy. Discuss the role of computers and digital devices in the downfall of this photography company. [20 marks]

5. (a) Explain **each** of the following data types and give an example for **each**:
- (i) Integer
 - (ii) Decimal
 - (iii) Character
 - (iv) Logical [8 marks]
- (b) Put the following (on a PC) in order of access speed. The fastest should be first. [4 marks]
- RAM Processor Virtual Memory Cache**
- (c) Explain why unsaved work is lost if the power goes out while you are working. [2 marks]
- (d) Explain the differences between a **keyboard** and a **concept or specialised keyboard**. [4 marks]
- (e) State the type of storage use by a 'Hard Drive' (HDD). [1 mark]
- (f) State a device which uses optical storage media. [1 mark]
6. A company selling sports equipment uses a database to maintain details of its stock.
- (a) Define the terms **field**, **file** and **record** and give an example of **each** for this company. [6 marks]
- (b) The owner wants to know if the stock level of an item is 50 or fewer.
- (i) List **three** fields that would be needed on the database to perform **this** search. [3 marks]
 - (ii) Describe how the search would be executed and a printout of the results produced. [4 marks]
- (c) The company needs to increase the retail price of all swimming products by 4%. Describe how the company would change the database values automatically. [7 marks]

END OF QUESTIONS