

SECTION A (40 marks)

Answer **ALL** the questions in this section in the spaces provided.

1. Describe **two wireless communication media** that could be used in a computer network. (4 marks)

2. Differentiate between *impact* and *non-impact* printers. (4 marks)

3. State the function of each of the following computer keyboard keys: (1 mark)
- (a) Page Up;

- (b) Esc; (1 mark)

- (c) Num lock; (1 mark)

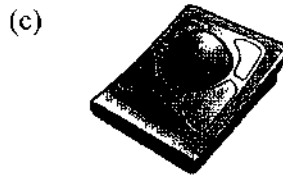
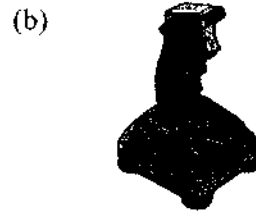
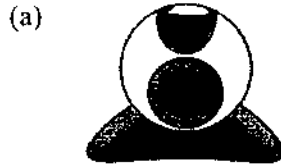
- (d) Home. (1 mark)

4. Distinguish between *data* and *information* giving an example in each case. (4 marks)

5. Outline four functions of an *operating system* in a computer. (4 marks)

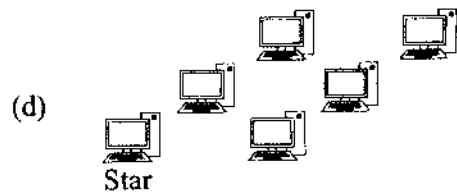
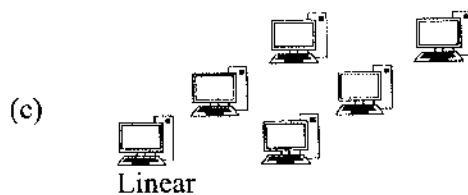
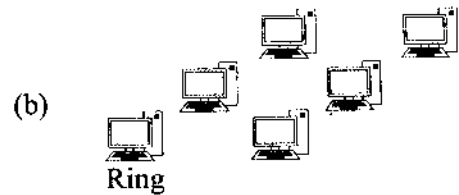
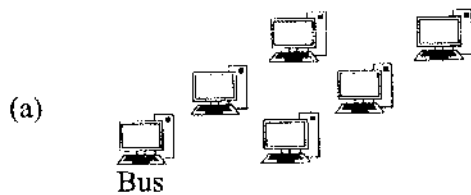
6. Explain two circumstances that may lead to uninstalling software from a computer. (4 marks)

7. State the purpose of each of the following devices in a computer. (4 marks)



8. Classify each of the following as either *secondary* or *primary* storage devices.
Read only Memory, Floppy disk, Magnetic disk, Zip disk, Random access memory (4 marks)

9. Draw the communication lines in each of the following diagrams to make the topology indicated: (4 marks)



10. Outline **four** ways in which local area networks are used in organisation. (4 marks)

SECTION B (60 marks)

Answer ANY FOUR questions from this section

11. (a) Explain **two** challenges that the introduction of computers may pose to an organisation. (4 marks)

- (b) Jane has acquired a computer and she would like to use it to process and store valuable data.

- (i) Explain **two** procedures she would take to protect the computer from getting viruses. (4 marks)

- (ii) Other than viruses, outline **three** other possible forms of threats on her files (3 marks)

- (c) Many people nowadays use their computers to do on-line shopping. Outline **two** challenges of this form of shopping. (4 marks)

12. (a) Jane was setting up a LAN in her office. Explain the function of each of the following tools that she may use: (6 marks)



Crimping pliers



Tester



Punch Down Tool

- (b) Mwamuko Bank is a small bank with few branches and the management would like to introduce an on-line banking system using the Internet. At the moment, all deposits and withdrawal documents are gathered together in the course of the day and are processed in batches overnight. Statements are only sent to customers at the end of each month.

- (i) Outline **three** benefits that the bank gains from using batch processing system. (3 marks)

- (ii) State **four** benefits of using on-line banking system introduced. (3 marks)

(iii) Describe **three** items that a bank customer should have in order to access an account details using the on- line banking system. (3 marks)

13. (a) With the aid of a diagram, illustrate a data hierarchy. (4 mark)

(b) Agnes an IT officer in her organisation has been mandated to acquire software that would be used in the organisation.

(i) State **three** factors that she would consider when selecting the computer software. (3 marks)

(ii) Explain **three** methods that she would use to acquire the software. (6 marks)

- c) Describe computers that are classified as *general purpose*. (2 marks)

14. (a) Explain **three** ways in which computers may be used in a hospitals. (6 marks)

- (b) With the aid of a diagram, illustrate a structure of a magnetic disk showing tracks and sectors. (4 marks)

- (c) A college intends to introduce an automated registration system. Students will carry a card which will be read automatically by an input device every morning so that the college administration will know that they are present.

- (i) Name a suitable input device that would be used read a card. (1 mark)

- (ii) Instead of using the card-based system the management suggests using biometrics. Describe two ways that the college would benefit from this approach system. (4 marks)

15. (a) State three differences between a *local area network* and a *wide area network*. (6 marks)

- (b) In order to enforce ethical issues relating to personal data, the government should introduce *data protection act*.

- (i) Outline **three** principles that the *data protection act* may contain. (3 marks)

- (ii) Outline **three** ways through which an employee in an organisation might break laws governing data protection. (3 marks)

- (c) With the aid of a labelled diagram, outline a *Client-Server* network as used in data communication. (3 marks)
