SECTION A (40 MARKS)

1. State the meaning of the term computer software.   (2 marks)
2. State three features of fifth generation computers   (3 marks)
3. Differentiate between home page and web page as used in the internet   (2 marks)
4. State three characteristics of mainframe computers   (3 marks)
5. The management of an organization intends to purchase a printer. State three factors that they should consider during purchase.   (3 marks)
6. Describe each of the following computer cables:
   a.) Paralel cables;   (2 marks)
   b.) Serial cables;   (2 marks)
7. A computer technician has observed a lot of dust on the computers in computer laboratory. State three precautions that need to be put in place to avoid this.   (3 marks)
8. Explain the term proofreading as used in word processing.   (2 marks)
9. State the function of each of the following computer keyboard keys when using a word processor:
   a.) End   (1 mark)
   b.) Insert   (1 mark)
   c.) Backspace   (1 mark)
10. Explain two problems associated with the computer hard disk.   (4 marks)
11. State the spreadsheet function that can be used to obtain each of the following values in a worksheet:
    a.) Number of cells with values in a column.   (1 mark)
    b.) Mean of values in a range of cells.   (1 mark)
12. A school intends to install wireless media in their communication system. State advantages of this mode of communication media.   (3 marks)
13. State two ways in which one can create a password which cannot be easily accessed by hackers.
                                                                       (2marks)
14. State two ways through which a computer user can minimize Repetitive Strain Injuries (RSI) associated with the use of a computer.   (2 marks)
15. Identify four tasks that can be achieved using a Desktop Publishing program from the following list of tasks.   (2 marks)
    i.)   Managing students records in school
    ii.)   Creation a calendar
    iii.) Designing a building structure
    iv.)   Creating a banner
    v.)   Creating a book cover
    vi.)   Processing of examination results
    vii.) Creating business cards.

SECTION B. (60 marks)

16. (a.) state two qualities of a good pseudo code   (2marks)
    (b.) With the aid of flowchart diagrams, describe each of the following program control structures:
         (i.) Sequence   (3 marks)
         (ii.) Section   (3 marks)
    (c.) Draw a program flowchart that would accept three numbers and find their sum. If the sum is greater than 200, it add 30 to the sum, otherwise subtracts 20 from the sum. The program should then display the results.   (7 marks)
17. (a.) Describe three arithmetic errors that may occur during computerized data processing (6 marks)

(b.) Arnold a programmer intends to create a user input interface for a system. State three factors that he should consider. (3 marks)

(c.) With the aid of an example in each case describe the following types of maintenance.

       i.) adaptive; (2 marks)

       ii.) perfective; (2 marks)

       iii.) Corrective. (2 marks)

18. (a.) Distinguish between a Microwave transmission and Radio transmission. (4 marks)

    (b.) Figure 1 shows a computer network topology. Use it to answer the questions that follow.

       i.) Identify the type of topology. (1 mark)

       ii.) State the function of each of the parts labeled A and B. (4 marks)

    (c.) A computer laboratory experiences power supply problems. Describe three power related problems that should be addressed. (6 marks)

19. (a.) A school has been advised to employ a database administrator. State three responsibilities of this personnel in the school. (3 marks)

    (b.) Explain two ways in which computers can be used in transport industry (4 marks)

    (c.) Mary was advised to partition a hard disk for her computer. Explain two reasons that may have necessitated this. (4 marks)

    (d.) Explain a reason for conducting each of the following studies in systems development:

       i.) Schedule feasibility; (2 marks)

       ii.) Technical Feasibility. (2 marks)

20. (a.) Explain three functions of an information system in an organization. (6 marks)

    (b.) Explain two benefits that a company would gain from using batch processing method for data processing. (4 marks)

    (c.) ………………………………………..