SECTION B QUESTIONS:

1. a) Explain the term spreadsheet as used in computer studies.   (02 marks)

b) Name three types of data that can be placed in a spreadsheet cell. (03 marks)

c) What is the use of a formula in spreadsheet?   (01 mark)

d) Describe with illustrations, how a shopkeeper can use spreadsheets to keep records of her/his business.   (04 marks)

2. a) List four advantages of a hard disk over a compact disc(CD)   (04 marks)

b) Describe the following: (06 marks)

(i) Flash memory

(ii) Optical Character Recognition

(iii) Laser printer

3. (a)   (i) What is computer communication?   (02 marks)

(ii) State any two advantages of using e-mails.   (02 marks)

(b)   Explain the functions of the following:

(i)   Web server   (02 marks)

(ii)   FTP   (02 marks)

(iii)   HTTP   (02 marks)

4. A senior four class in Naluwelere S.S. has formed a club. A file named CLUBMATES is to be kept by the secretary of the club. The design of CLUBMATES has the following fields:

NAME,MEMBERSHIP-NUMBER, SEX, AGE and TELEPHONE.

a) Suggest a primary key for CLUBMATES. Explain why it is chosen as the primary key.
                                        (03 marks)
b) If the longest name in a class is Sangalyambogo, suggest the minimum field length.
                                        (01 mark)
c) Why is it not a good idea to use the field AGE?   Suggest an appropriate field name and type.
                                        (03 marks)
d) Suggest appropriate data types for the following fields.   (03 marks)
    (i) MEMBERSHIP-NUMBER
    (ii) SEX
    (iii)TELEPHONE

5. a)   Give any two ways of classifying computers.   (02 marks)

b)   Differentiate between the following terms:

(i)   Analog and digital computers   (02 marks)

(ii)   Mainframe computers and micro- computers   (03 marks)

c)   List any three types of micro- computers.   (03 marks)

6. a)   State any four functions of operating systems.   (04 marks)

b)   List any two types of operating systems commonly used in computers.

(02 marks)

c) (i)   What is a programming language?   (02 marks)

   (ii) Differentiate between machine language and high level languages. (02 marks)

   7. a) (i)   Define the term Mechanical computer?   (01 marks)

       (ii) Explain four features that make the modern computers unique from other machines in the society.   (04 marks)

      b)   The computer system unit is made of the central processing unit as one of the components. Name the major parts of the central processing unit.(03 marks)

      c)   Explain the importance of the two parts mentioned in (b) above. (02 marks)

   8. a) (i)   Define the term coding.   (02 marks)

(ii)   List down at least two commonly used coding schemes.   (02 marks)

b)   Convert the following:

(i) 256_{ten} to binary base.   (03 marks)

(ii) 10101010_2 to its decimal base   (03 marks)

   9. a) (i)   Write DOS in full.   (01 mark)

(ii)   State two differences between DOS and windows.   (02 marks)

b) (i)   Define utility software.   (01 mark)

(ii)   Give at least two examples of utility software.   (02 marks)

c)   Explain the importance of any two utilities mentioned above.   (04 marks)

   10. a)   Explain the following terms as used in data communication.   (02 marks)

       (i)   packet switching

       (ii)   bandwidth

       b) List down three components of basic model of data communication.(03 marks)

       c) i)   Give the difference between communication channel and transmission media.(02 marks)

       (ii)   Give three commonly used transmission media today.   (03 marks)

   11. a)   Distinguish between a value and a label as used in spreadsheet.   (02 marks)

       (iii)   List down any two examples of spreadsheet applications.   (02 marks)

b)   Study the table below and answer the questions that follow:

	A	B	C	D	E	F
1	SCORES OF SELECTED S.4 STUDENTS IN SLECTED SUBJECTS					
2	NAME	MATH	ENGLISH	COMPUTER STUDIES	TOTAL SCORE	AVERAGE SCORE
3	Apollo					
4	Bob					
5	Charles					
6	Harriet					
7	George					
8	David					
9	Teo					
10	Titus					
11	Zuth					

(i)   Give the cell reference for: (02 marks)
        "COMPUTER STUDIES:…………………………………………..

        "AVERAGE SCORE"…………………………………………..

(ii)   State the formula for getting the:

        -    Total score for all the candidates   (01 mark)

        -    Average score for Bob   (01 mark)

        -    Overall best candidate   (02 marks)

        -    Candidate with the least score   (02 marks)

12. a)   Describe the computer term below:

(i)   Line spacing   (02 marks)

(ii)   Changing Case   (02 marks)

(b)   Explain the following terms in presentation software:

(i)   Transition looping   (02 marks)

(ii)   Slide Master   (02 marks)

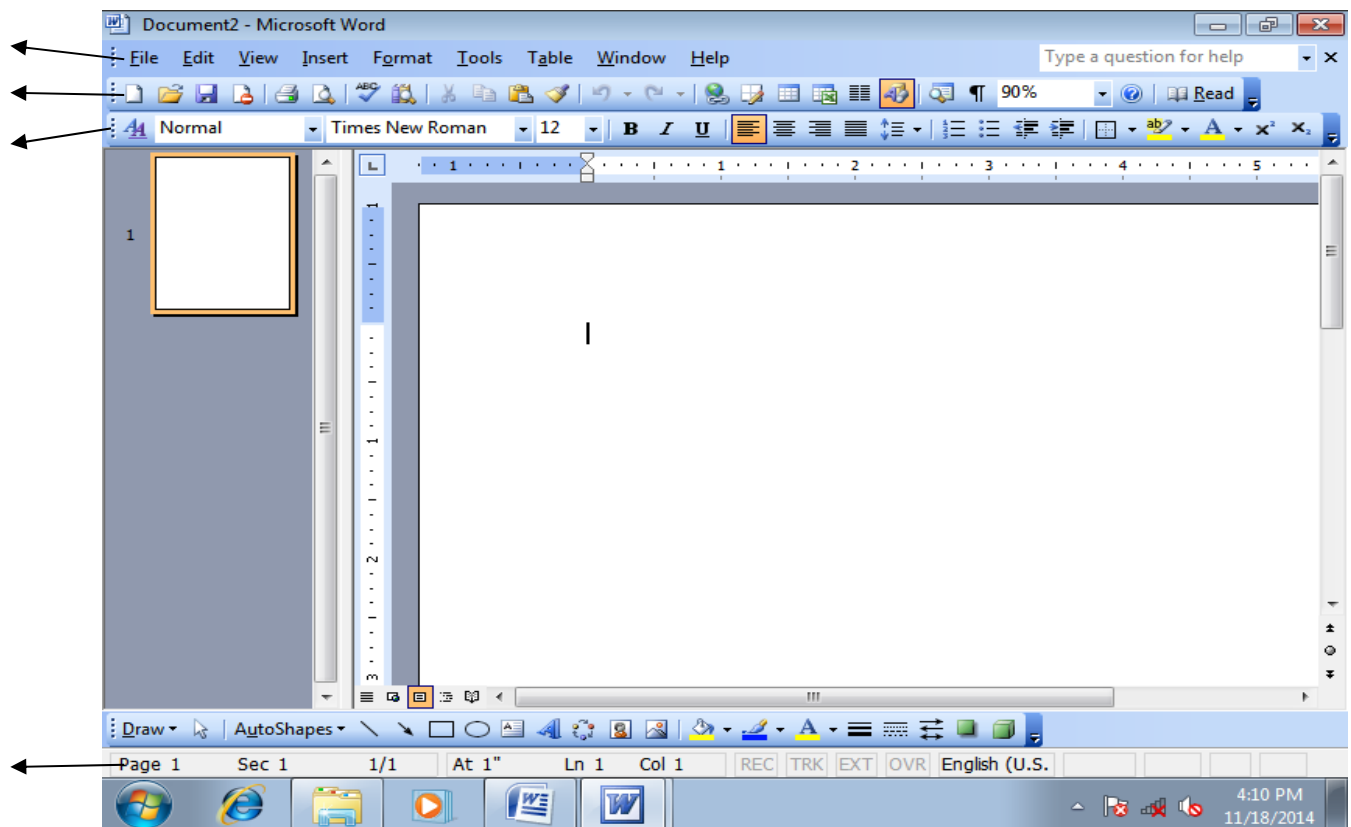(iii)   Slide Layout   (02 marks)

13. a)   State two functions of a Central Processing Unit (CPU).   (02 marks)

(b)   Define the following memory storage terms.

(i)   Bit   (01 mark)

(ii)   Byte   (01 mark)

(c)   State two categories of computer memory giving an example in each case.

(d)   Describe the major difference between the two categories of computer memory in(c).

14. a)   Describe a "relative address".   (02 marks)

(b)   Give four advantages of electronic spreadsheet over manual spreadsheets.

(04 marks)

(c)   A teacher keeps a class list containing the following data for each student: Name, student index number, Test scores.

(i)   State the data types for each of these fields: (03 marks)

Name…………………………………….

Students index number………………….

        Test scores

15. (a)   Explain the following terms and an example of each:

(i)   Off-the-shelf- software   (02 marks)

(ii)   Custom software   (02 marks)

(iii)   Application software   (02 marks)

(b)   State any four advantages of off-the shelf software.   (04 marks)

16. a)   (i)   Distinguish Internet and World Wide Web.   (02 marks)

        (ii)   Mention any four services offered by the internet.   (04 marks)

(b)   Name four basic items that are required to gain access to the internet.(04 marks)

17. a)   Explain briefly the following term in relation to spreadsheets.   (04 marks)

        (i)   Cell   (iii)   Label

        (ii)   Value   (iv)   Function

        (b)   (i)   State any three uses of spreadsheets in the business. (03 marks)

        (ii)   Give two examples of graphs that can be made in spreadsheet.   (02 marks)

18. a)   Give one example of the following storage device.   (02 marks)

        (i)   Optical storage device

        (ii)   Magnetic storage devices

        (b)   With the help of an example explain the meaning of the following: (06

        (i)   Storage hardware

        (ii)   Processing hardware

        (iii)   Communication hardware

        c)   Give three differences between mechanical mouse and optical mouse in their

        operation.   (03 marks)

19.   a) Define the following terms.   (02 marks)

        (i)   Stand alone computer

        (ii)   Network computer

(b)   Differentiate between a linear topology and a star topology.   (02 marks)

c)   Give three advantages of star topology over ring topology.   (03 marks)

d)   List down three advantages of using networked computers.   (03 marks)

20.a) (i)Give the difference between unauthorized access and un auth orized use.(01 mark)

        (ii)   List down two examples of un authorized use of computer system in an office.(02 marks)

        (b)   (i)   Suggest four guidelines of creating passwords.   (04 marks)

                    (ii)   Give three examples of biometric devices.   (03 marks)

21.a)   Distinguish between " system software" and "application software" in computer system.   (04 marks)

(b)   State four uses of presentation software in business.   (04 marks)

(c)   State the meaning of the following programming tools.   (02 marks)

(i)   Debuggers

(ii)   Assemblers

22.   Write the following abbreviations in full.   (04 marks)

(i)   ASCII   (iii)   CC

(ii)   EBCIDIC   (iv)   BCC

b)   What do you understand by the following terms?

(i)   What do you understand by the following terms?   (02 marks)

-       Computer file

-       Path

c)   Specify the file types associated with the following file extensions. (04 marks)

(i)   Exe

(ii)   Txt

(iv)   Doc

22.   a)   Explain the meaning of the following terms.   (04 marks)

(i)   Footer   (iii)   Radio button

(ii)   Cell address   (iv)   Primary key

b)   Write CLI and GUI in full   (01 mark)

c)   Mention three   functions of operating system.   (03 marks)

d)   Differentiate between multiprocessing and multi-user operating system. (02

23. a)   What do you understand by computer neighborhood?   (01 mark)

b)   Explain the meaning of the following internet services.   (04 marks)

(i)   E-mail   (iii)   www

(ii)   Chartroom   (iv)   telnet

c)   Describe briefly each of the following topologies and give one advantage in each.(04marks)

i)   Ring topology   (ii)   Bus topology

d)   Differentiate between a search engine and URL

24.a)   Below is part of an application window answer the questions that follow.(04 marks)

Name the parts A- D.

b)   Below is list showing some of the specifications of only 4 computers, study the list and answer questions that follow.

Model	Hard disk	RAM
A. Pentium IV ,2.5 GHz	300 GB	2 GB
B. 80586	900,567,753 bytes	64

C. Pentium IV, 300 MHz	100 MB	512MB
D. Pentium II	8,564,523,008 bytes	256

(i) Which computer has the highest processing speed? Give two reasons for your answer.

(ii) Which computer would you recommend for large storage of permanent data? Give reason for your answer?

(iii) Which computer can easily be upgraded for better performance? Advice on how it can be done (02 marks)

25. (a) Write the following terms in full. (05 marks)

(i) TCP/IP iv) HTTP

(ii) IRC (v) STMTP

(iii) URL

c) Explain any three factors required when choosing an ISP.

26. a) Define the term "computer virus" (03 marks)

(b) State any three characteristics of computer viruses. (03 marks)

c) (i) Mention any two precautions of safeguarding against computer viruses.

(02 marks)

(iii) State any two dangers of computers viruses to computer software (*02 marks*)

e) State any two lessons computer viruses teach computer users. (02 marks)

27. a) Define the term "computer hardware" (02 marks)

b) Mention any three basic parts of a personal computer. (03 marks)

c) State any two examples of personal computers. (02 marks)

d) State any three advantages of computer hardware to computer users.

(03 marks).

28.(a) Give any three safety rules that should be followed in a computer laboratory.

b) Define the following terms as used in computer.

(i) Directory (01 mark)

(ii) Modem (01 mark)

(c) (i) Name any five peripheral devices of a computer (05 marks)

(ii) Give the function of each device name in (c) (i) above. (05 marks)

29. a) What is an e-mail? (02 marks)

b) List two popular e-mail software commonly used. (02 marks)

c) State four advantages and two disadvantages of using e-mail. (06 marks)

30. a) Define the term "computer security risk"? (02 marks)

b) Give four common computer security risks. (04 marks)

c) For each of the computer security risk given above suggest one way to prevent it.

31. (a) What is a microprocessor? (02 marks)

(b) Describe the difference between a digital computer and an analog computer. Give an example of each. (04 marks)

(c) What a electronic technology characterized each of the four generations of computers? (04 marks).

    (i) First generation

    (ii) Second generation

    (iii) Third generation

(iv) Fourth generation.

SECTION. C: QUESTIONS

1.   a)   Define the term computer virus.   (02 marks)

     b)   Mention four ways through which you can tell that a computer has a virus.
          (04)

     c)   Explain four ways through which virus are spread.   (08 marks)

     d)   How would you protect your computer against viruses?   (08 marks)

2.   a)   Distinguish between input and output hardware.   (04 marks)

     b)   Explain the use of any five input hardware and any four output hardware used in
          a computer system.   (16 marks)

3.   "Protocols are very important factors without which communication may not be possible.
     Discuss the different protocols involved in communication.

4.   "A computer is a device which has hardware and software used to input, process,
     store and output data according to the instructions of the user".
     As a student's of computer studies, explain any two hardware components involved at
     e ach of the four stages above.
          (20 marks)

5.   a)   Outline the advantages of networking over stand alone computers.   (08
     marks)

     b)   Using illustrative diagrams, describe the various forms of LAN topologies
     (12)

6.   a)   Describe any four ways in which computer crimes are committed   . (12
     marks)

     b)   Explain the ways of safeguarding against computer crimes.   (08
     marks)

7.   Describe the nature and features of the f our computer generations.   (20
     marks)

8.   Some people believe that using computers will cause unemployment whilst others
     believe that the economic survival of a society depends on making even greater
     use of the computers. Describe how computers can;

     a) Cause unemployment   (10
         marks)

     b) Be the basis for economic survival.   (10
         marks)

9.   a)   Outline any four forms of secondary storage.   (04 marks)

b) Describe any four characteristics of each of the forms of secondary storage mentioned above. (16 marks)

10. Explain the merits and demerits of using for learning and communication.(20 marks)