**NAME:……………………………………………CLASS:……..ADMNO:……**

**COMPUTER STUDIES 451/1**

**FORM 4 END TERM 2 2024**

**SECTION A (40 MARKS)**

***ANSWER ALL QUESTIONS IN THIS SECTION***

1. State two reasons for the increased use of Laptop computers in modern workplaces. (2marks)

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2. Give two precautions would you take in the computer laboratory incase users are complaining of overheating and suffocation? (2marks)

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3. Convert the decimal number 15.37310 to its binary number system equivalent (3marks)

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4. With an aid of a diagram describe the difference between Repeat Until and While Do. (3marks)

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5. State three circumstances which may force an individual to acquire an impact printer instead of non-impact printer. (3marks)

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6. Sam prepared a five-page brochure of Maseno School using Ms-publisher. He wanted to insert a school badge in each page of the publication. State two methods he need to apply to execute this task. (3marks)

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7. State the difference between one’s complement and two’s complement. (2marks)

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8. State the function of each of the following features of an email software.

Spam (1mark)

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Trash (1mark)

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9. State four benefits of cloud storage in computing. (4marks)

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10. Describe the functions of the following disk management operations.

Defragmentation (1mark)

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Partitioning (1mark)

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11. Describe four ways through which an organization can minimize threats to it data integrity. (4marks)

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12. Study the following three sections of code and name accordingly. (3marks)



13. Identify how the operating system will label the following drives in case a computer has one floppy drive, one hard disk partition into two and a DVD. (3marks)

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14. Five students Jane, Beryl, Baroness, Linda, and Jael scored the following marks in mathematics: 45, 76, 34, 65 and 45. The marks were recorded in cell C3 to C7. Write down the most appropriate function that can be used to give them positions so that they can be awarded in descending order. (3marks)

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15. Using an example explain two main parts of an URL. (2marks)

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***SECTION B (60 marks)***

***Answer question 16 (Compulsory) and any other 3 questions in this section***

16. a) State any three activities that occur in a program compilation process (3 marks)

b) Study the pseudocode below and draw a flowchart for it. (10 marks)

|  |
| --- |
| *START* |
| *SUM = 0* |
| *COUNT = 0* |
| *PRINT “ENTER AGE”* |
| *READ AGE* |
| *WHILE AGE<>999 DO* |
| *SUM = SUM + AGE* |
| *COUNT = COUNT + 1* |
| *PRINT “ENTER AGE”* |
| *READ AGE* |
| *ENDWHILE* |
| *AVERAGE = SUM / COUNT* |
| *PRINT COUNT* |
| *PRINT AVERAGE* |

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c) Give two types of errors that may be detected during program testing (2 marks)

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17. a) Using two’s complement subtract 7310 from 11510 leaving your answer in binary notation. (6 marks)

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b) Explain the following basic operations of the machine cycle in the control unit. (3 marks)

Fetching

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Decoding

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Execution

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c) i) Name the two files commonly used in mail merge. (2marks)

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18. a) In databases, the field properties specify finer details related to the fields and the entries expected. List and explain four field properties. (4 marks)

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b) Interfaces enable computer users to interact with the operating system. State four advantages for using a graphical user interface in loading programs and files. (4marks)

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c) State any three data access methods that can be used to retrieve a patient record in a computerized system.

 (3marks)

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d) State any four reasons that may lead to information system change in an organization. (4marks)

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**19.** (a) Define the following terms as used in networking. (3marks)

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Intranet

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Browser

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b) The World Health Organization is global entity that deals with health issues around the world. It has

computer networks linking its regional and continental offices using internet. State **two** importance of the Internet to such organization. (2 marks)

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c) Mr. Zuma, the Principal of a school wishes his school to have an internet connection in a bid to improve its service delivery. Mention **four** internet connectivity requirements that must be present to enable the

connection. (4 marks)

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d) i) Failure of information systems is a major concern in the security of data in computing systems. State **three** causes of such failure. (3marks)

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ii) State **three** reasons why most network technicians prefer using command line operating systems to configure networking equipment. (3 marks)

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20. a) State the purpose of each of the following memories in a computer system. (2marks)

(i) ROM

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(ii) RAM

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b) State three standard coding scheme used computing and electronic systems. Avoid abbreviations. (3marks)

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c) Explain THREE roles of a programmer in system development life cycle (6 marks)

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d) State four activities that may be carried out when disposing off an old system in an

organization. (4 marks)

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