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

**COMPUTER STUDIES**

**FORM 3 END TERM 2 EXAMINATION- 2024**

**SECTION A (40 MARKS)**

***Answer all questions in this section***

1. Classify computers according to their functionality. Explain each classification. (6 marks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..

1. (a) State four data types used in MS excel. (4 marks)

…………………………………………………………………………………………………………………………………………

…………………………………………………………………………………………………………………………………………

…………………………………………………………………………………………………………………………………………

…………………………………………………………………………………………………………………………………………

1. State any four applications of electronic spread sheet. (2 marks)

...............................................................................................................................................

………………………………………………………………………………………………………………………….………………

………………………………………………………………………………………………………………………..…………………

…………………………………………………………………………………………………………………………………………..

1. Give the functions of the following special memories. (2 marks)
2. Buffers

……..………………………………………………………………………………………………………………………….

1. Cache

………………….………………………………………………………………………………………………………………

1. (a) Define the term ergonomic. (2 marks)

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

(b) Explain the importance of good ergonomic in a computer lab. (2 marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. Distinguish between the following
2. CRT and TFT monitor (2 marks)

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….……………………………………………………………………………………………………………………………….

1. OBR and OMR (2 marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. (a) In reference to word processor, define the following terms. (3 marks)
2. Word wrap

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. Justification

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

1. Drop cap

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. State three editing tools available in most standard word processor software. (3marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. (a) state three hardware consideration that need to be made before installing an operating system. (3 marks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. State four factors one should consider when acquiring computers Software. (4marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

1. (a) Define the term internet. (1 mark)

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

(b) Explain the following internet related terms

1. Sign in (1mark)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. Search engine (1mark)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..

1. Surf (1mark)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. Sign up (1mark)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

**SECTION B (60 MARKS)**

**Answer all questions in this section**

1. **(a) Sta**te and explain three coding schemes used in computing. (6 marks)

**………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………**

(b) Use two’s compliment to work out 9 **10** – 4 **10.** (4 marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

(c) Convert 3.75 **10** to binary. (3 marks)

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

(d) State four number system used in computing. (2 marks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..............................................................................................................................................................

1. (a) Distinguish between data security and data privacy as used in computer system. (2marks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..

(b) State five ways in which data security can be compromised. (5marks)

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. Discuss 5 solutions to data loss. (5 marks)

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..

1. Explain the following terms: (3 marks)
2. Data encryption

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. Fire wall

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………….

1. Audit trail

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. Before the end of every month, an electricity service provider sends out field officers to take consumer meter reading, the data collected by the officer is then keyed into the computer, the system then generate utility bills which are printed and sent to consumer.
2. (i) Identify this type of data processing mode. (1 mark)

……………………………………………………………………………………………………………………

1. Give three other data processing modes used during data processing. (3 marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

(B) Explain each of the following types of errors. (3 marks)

1. Transcription errors

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. Truncation errors

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. Rounding errors …………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………..

(c) Distinguish the following file organization methods.

1. Random and indexed sequential (2marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. Logical file and physical file (2marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

(d) Using an illustration describe **four** data processing stages. (4 marks)

1. (a) Define the following terms as used in programming. (4 marks)
2. Algorithm

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. Pseudocode

…………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. Interpreter

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. Compiler

……………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. Draw **four** common symbols used in a flow chart and state their purpose. (4 marks)

(c) Write a pseudocode for a program that would prompt the user to enter length and width of a rectangle. The program then calculates and display the area and perimeter. (4 marks)

1. Give three disadvantages of low-level programming languages. (3 marks)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

………………………………………………………………………………………………………………………………………

………………………………………………………………………………………………………………………………………