Name:……………………………………………………………………………Class:…………AdmNo:……..

**Computer Studies**

**FORM 4 JANUARY 2023 TERM 1 OPENER EXAM**

**Time: 2Hours**

**Section A (40 marks)**

**Instructions: Answer All The Questions On the Space Provided**

1. State the meaning of the term computer software. [2]

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2. State three features of fifth generation computers. [3]

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3. differentiate between home page and web page as used in the internet. [2] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. State three characteristics of mainframe computers. [3]

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5. The management of an organisation intends to buy a printer. State three factors that they should consider during the purchase. [3]

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6. Describe each of following computer cable:

Parallel cable [2] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Serial cable [2] \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. A computer technician has observed a lot of dust on computers in the laboratory. State three precautions that need to be put in place to avoid this. [3]

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8. Explain the term proofreading as used in word processing. [2]

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9. State the function of each of the following computer keyboard when using a word processor.

I. End [1]

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II. Insert [1]

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

III. Backspace [1]

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10. Explain two problems associated with the computer hard disk. [4]

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11. List three electronic data processing modes used in computers. [3]

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12. State four ways in which a programmer can make program code easy to follow. [2]

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13. List four examples of utility software. [2]

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14. List four types of publications that can be designed by using desktop publishing software. [2]

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15. State two benefits of having the advert uploaded on the Internet. [2]

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**SECTION B (60mks)**

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

16. a) State two advantages of using low level programming languages. [2]

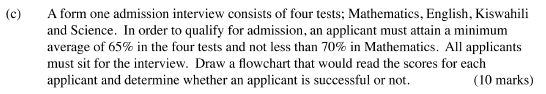
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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b) Other than flowcharts, state three tools that can be used to present an algorithm. [3]

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17. Describe three arithmetic errors that may occur during data processing. [6]

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b) Describe three types of validation checks as used in data processing. [6]

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c) State three ways in which barcode readers may be used in school. [3]

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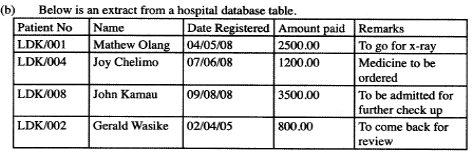
\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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18. a) Using two examples, explain the term field properties as used in database design. [2]

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i) State with reasons the most suitable data types for the following fields: [8]

Patient No;

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Date registered;

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Amount paid

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Remarks

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ii) Which would be the most appropriate primary key for the above table. [1]

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iii) What is the purpose primary key in database design. [1]

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iv) Describe how information about patients who registered after 9/08/06 can be extracted from the database. [3]

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19. a) Briefly describe the three main coding schemes. [6]

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b) Convert the following numbers to binary number.

i) B2.AA16

[3]

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base 10 [3]

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c) Using 8 bit notation, find the 2’s complement of the following operation [3]

4+(-7)

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20. a) i) Define a system. [2]

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ii) Explain system entropy. [2]

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b) State three circumstances that can lead to development of information systems. [3]

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c) Distinguish parallel changes over from straight change over as used in system implementation.

[2]

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d) Discuss three fact finding methods. [6]

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