NAME: ----------Candidate No:

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840/1
COMPUTER
STUDIES
Paper 1
MAY-JUNE 2023

ACEITEKA JOINT MOCK EXAMINATIONS 2023

Uganda Certificate of Education

COMPUTER STUDIES

Paper 1

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

(Read all instructions in this paper carefully)
Write your name, stream and Personal No. in the spaces above
*This paper is made up of **three** sections **A, B** and **C***
*Section **A** is made up of **20 compulsory** multiple-choice questions (objectives).*
*Section **B** contains **six** structured questions: Attempt any ALL. Select the correct objective by encircling it. e.g.,* Ⓐ or Ⓒ
*Answers to Section **B mus**t be written in the spaces provided in the question paper.*
Section C contains three essay questions. Answers to section C must be written in the answer booklets provided.

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MCQs	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	Total

Section A (20 marks)

Compulsory Questions

1. _____ ***computers are also called personal computers***
   A) Mainframe Computer
   B) Mini Computers
   C) Micro Computers
   D) Super Computers

2. ***Which of the following is not input unit device?***
   A) scanner
   B) camera
   C) plotter
   D) digitizer

3. ***Communication channel is shared by all the machines on the network in***
   A) unicast network
   B) multicast network
   C) Anycast network
   D) broadcast network

4. ***The first machine to successfully perform a long series of arithmetic and logical operations was:***
   A) ENIAC
   B) Mark-I
   C) Analytic Engine
   D) UNIVAC-1

5. ***Which one is the largest space?***
   A) megabyte
   B) petabyte
   C) terabyte
   D) gigabyte

6. ***Analog computer works on the supply of***
   A) Continuous electrical pulses
   B) Electrical pulses but not continuous
   C) Magnetic strength
   D) Binary digits only

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7. ***Which printer is very commonly used for desktop publishing?***
A) Laser printer
B) Inkjet printer
C) Daisywheel printer
D) Dot matrix printer

8. ***Most of the first generation computers were***
A) Special purpose computers
B) General purpose computers
C) Both General and Special purpose computers
D) Military purpose computers

9. ***Operating system, editors, and debuggers comes under?***
A) System Software
B) Application Software
C) Utilities
D) Programming tools

10. ***A computer has very low failure rate because it uses electronic components. It produces very consistent results. This is highlighted by which of the feature of computer?***
A) Accuracy
B) Reliability
C) Versatility
D) Automatic

11. ***What is the first stage in software development?***
A) Specification and design
B) Testing
C) System Analysis
D) Maintenance

12. ***Which of the following is a read only memory storage device?***
A) Floppy Disk
B) CD-ROM
C) Hard Disk
D) CD –RW

13. ***Symbolic logic was discovered by***
A) George Boole
B) Herman Hollerith
C) Van Neumann
D) Basic Pascal

14. ***Which of the following have the fastest access time?***
A) Compact Disks
B) Magnetic Disks

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C) Magnetic Tapes
D) Semiconductor Memories

15. ***One of the main feature that distinguish microprocessors from micro-computer is***
A) Words are usually large in microprocessors
B) Words are shorter in microprocessors
C) Microprocessor does not contain I/O device
D) Exactly the same as the machine cycle time

16. **Which of the following database object hold data?**

A) Forms

B) Reports

C) Queries

D) Tables

17. ***Which field type can store photos in Microsoft Access Application?***

A) Hyperlink

B) Access tables can't store photos

C) Both of these can be used

D) OLE

18. ***A _____ is a device that forwards packets between networks by processing the routing information included in the packet***.

A) Bridge
B) Firewall
C) Router
D) Switch

19. ***Which one of the following extends a private network across public networks?***

A) local area network
B) enterprise private network
C) storage area network
D) virtual private network

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20. Bluetooth is an example of

A) local area network
B) virtual private network
C) Wide Area Network
D) personal area network

Section B (60 marks)

Answer all questions from this section.

21. (a) Explain why Analytic Engine designed by Charles Babbage made him the father of modern computers?

.....

.....

....(02 marks)

(b) Give one good reason for the following innovations:

i. Vacuum tubes were replaced by transistors in the second generation of computer.

.....

.....

..... (02 marks)

ii. Computers in the second generation consumed great deal of heat than in third generation.

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.....(02 marks)

(c). Suggest any one main innovation which describes feature of:

i. Fourth Generation Computers

.....

..... (02 marks)

ii. Fifth Generation Computers

.....

.....(02 marks)

22. (a) Explain any three main areas in sports where computer systems are used.

i. .....

..... (02 marks)

ii. .....

..... (02 marks)

iii. .....

..... (02 marks)

(b)State the use of VGA Port in a computer system.

(02 marks)

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.....

.....

(c). Identify the colors typically used for the following ports:

i. PS/2 Mouse:.....(01 mark)

ii. Microphone (input):.....(01 mark)

23. List and describe any five factors in choosing the computer case:

(a) ....(02 marks)

(b) ....(02 marks)

(c) ....(02 marks)

(d) ....(02 marks)

(e) ....(02 marks)

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24. Match the definition on the left with each of these terms: **Active partition, Formatting, Partitioning, Registry,** and **Windows Explorer.**

a) The process of assigning part or all of the drive for use by the computer is ……. (02 marks)

b) ……..is a central information database for Windows 2000 and Windows XP organized into a structured hierarchical database to hold hardware, operating system, and application settings and configuration. (02 marks)

c) ……..allows a user to manage files and directories from a single graphical interface.

(02 marks)

d) The partition used by the operating system to boot the computer is ……. ……..(02 marks)

e) ……..Prepares a file system in a partition for files to be stored.

(02 marks)

25. (a) Describe the best method to keep the laptop computer cool.

…….

…….

……..(02 marks)

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(b)Describe the best method to clean the following components:

i. Laptop keyboard:

.....

.....

.....

.....(02 marks)

ii. LCD**:**

.....

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.....(02 marks)

iii. Touch pad:

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.....

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(02 marks)

iv. CD:

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.....(02 marks)

26. (a) Explain the term authentication as applied to computer systems.

.....

....(02 marks)

(b) Outline any four common methods of computer authentication today.

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i. .....
.....(02 marks)

ii. .....
.....(02 marks)

iii. .....
.....(02 marks)

iv. .....
.....(02 marks)

Section C (20 marks)

Answer one question from this section

27. Given a quadratic equation in the form: $ax^2 + bx + c = 0$, where a, b, and c are constant.

(a) Design an algorithm to compute the roots of quadratic equation. (05 marks)

(b) Draw a flowchart for determination of the roots of quadratic equation. (05 marks)

(c) Write the Pseudo codes for quadratic equation. (05 marks)

(d) Develop a C program that can compute any quadratic equations in the form: $ax^2 + bx + c = 0$. (05 marks)

28. (a) Why is it important to perform periodic maintenance of a computer system? (04 marks)

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(b) Why is it important to follow a troubleshooting model?

(04 marks)

(c). What are the six main steps in troubleshooting a Personal Computer

(PC) System?

(12

marks)

29. (a) Outline any five benefits of Networking computers and telecommunication devices.

(10

marks)

(b) With a well labeled diagram, describe how you can design a computer network in a room.

(05 marks)

(c). Explain any five methods of protecting computers and networks against social engineering.

(05 marks)

END

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