CANDIDATE'S NAME:…………………………SIGNATURE:………………………………

840/1
COMPUTER STUDIES
Paper 1
2½ hours

MATIGO MOCK EXAMINATIONS
UGANDA CERTIFICATE OF EDUCATIONS 2022
COMPUTER SCIENCE 2022
PAPER 1
Time: 2½ hours

INSTRUCTIONS TO CANDIDATES

Write your name, signature in the space above.

This paper consists of three sections, **A, B** *and* **C**.

Section **A** *contains* **20** *compulsory objective-type of questions. The correct alternative* **A, B, C** *or* **D** *must be written in the box provided on the right hand side of each question.*

Section **B** *contains* **six compulsory** *structured questions.*

Answers to section **B** *must be written in the spaces provided in the question paper.*

Section **C** *contains* **three** *essay questions. Answer only* **one**. *Answers to section* **C** *must be written in the answer booklet provided.*

For examiner's use only

MCQ	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	TOTAL

Turn over

1.   RAM is ....

   A.   Permanent memory

   B.   Programmable memory

   C.   Read only memory

   D.   Working memory

2.   Sound stored and produced by a computer is ....

   A.   Animation

   B.   Video

   C.   Synchronization

   D.   Audio

3.   The invention of the ....defines the second generation.

   A.   Magnetic core

   B.   Transistor

   C.   Relay

   D.   Vacuum tubes

4.   The ....is an electrical path for data to flow from one point to another in a circuit.

   A.   System clock

   B.   Buffer

   C.   Bus

   D.   ALU

5.   Spreadsheets are mainly used to perform...........

   A.   Calculations

   B.   What-else analysis

   C.   Functions

   D.   What-if analysis

Turn over

6. The slide sorter command is associated with …………..program.

    A.   Word processing

    B.   Spreadsheets

    C.   Presentation

    D.   Database

7. A unique field used to identify a record in a database is called a ……………..

    A.   Field key

    B.   Foreign key

    C.   Primary key

    D.   Record key

8. The ………..is an example of system software that uses command line interface.

    A.   DOS

    B.   Macintosh

    C.   Windows

    D.   Novell

9. Backup of the data files will help to prevent

    A.   Loss of confidentiality

    B.   Duplication of data

    C.   Virus infection

    D.   Loss of data

10. ……………..languages are low level language.

    A.   Machine and assembly

    B.   Assembly and third generation

    C.   Third generation and fourth generation

    D.   Fourth generation and fifth generation

Turn over

11. Which one of the following is not a component of a computer system?

A. Hardware

B. Software

C. End user

D. Memory

12. The interconnection of two or more computers to enable communication is called …………….

A. Protocols

B. Processing

C. Browsing

D. Networking

13. Which printer uses a combination of laser-beam & electro photographic techniques?

A. Laser printers

B. Dot-Matrix

C. Line printer

D. Daisy wheel

14. The unit of a computer system that executes program, communicates with and often controls the operation of other subsystems of the computer is known as……………

A. CPU

B. Control Unit

C. I/O unit

D. Peripheral unit

15. Backing storage is so named because it

A. is always kept at the back of the CP.U.

B. is slow and backward

C. backs up the computer's main memory

Turn over

D. lags behind the main memory

16. What is meant by a dedicated computer?

    A.   Which is used by one person only

    B.   Which is assigned one and only one task

    C.   Which uses on kind of software

    D.   Which is meant for application software only

17. The two kinds of main Memory are……………

    A.   Primary and secondary

    B.   Random and sequential

    C.   ROM and RAM

    D.   All of the above

18. Which of the following holds data and processing instructions temporarily until the CPU needs it?

    A.   ROM

    B.   control unit

    C.   main memory

    D.   coprocessor chips

19. A high speed device used in CPU for temporary storage during processing is called

    A.   A register

    B.   A bus

    C.   A data bus

    D.   All of the above

20. The first electronic digital computer contained?

    A.   Electronic valves

    B.   Vacuum tubes

    C.   Transistors   **Turn over**

    D.   Semiconductor memory

SECTION B: (60 MARKS)

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

*All the working **must** be done in the spaces provided.*

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

(i)……………………………………………………………………………………………

(ii)…………………………………………………………………………………………..

(b) Differentiate between the following terms

(i) **Analog** and **digital computers** *(02 marks)*

……………………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

(ii) **Main frame** computers and **micro-computers** *(03 marks)*

……………………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

……………………………………………………………………………………………

(c) List any **three** types of micro-computers

(i) ……………………………………………………………………………………

(ii) ……………………………………………………………………………………

(iii) ……………………………………………………………………………………

(22). A senior four class in Nakitenga High School has formed a club. A file named
CLUBMATES is to be kept by the sectary of the club. The design of the
CLUBMATE has the following fields: **NAME, MEMBERSHIP-NUMBER,
SEX, AGE and TELEPHONE.**

(a) Suggest the primary key for **CLUBMATE**. Explain why it is chosen as the primary key. *(04 marks)*

…………………………………………………………………………………………

…………………………………………………………………………………………

(b) Suggest the appropriate data type for the following fields and give the reason

(i) MEMBERSHIP-NUMBER *(02 marks)*

…………………………………………………………………………………………

Reason…………………………………………………………………………………

(ii) NAME *(02 marks)*

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

Reason ………………………………………………………………………..

(iii) TELEPHONE NUMBER *(02 marks)*

…………………………………………………………………………………..

Reason ………………………………………………………………………..

23. Michael suspects his laptop to be carrying a computer virus because it has reduced its functionality speed. He however chooses to continue using it without servicing because it still functions anyway.

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

....

....

(b) Give **three** possible risks that Michael is exposed to. *(03 marks)*

(i) …………………………………………………………………………

(ii) ....

(c) List down **three** types of computer virus `   *(02 marks)*

(i)   ……………………………………………………………………………

(ii)   ……………………………………………………………………………

(iii) ……………………………………………………………………………

(d) As a computer science student, explain any **three** safe computer practices to guard against computer viruses.   *(02 marks)*

(i)   ....

(ii)   ....

24. **(a)** In relation to computer networking, explain the meaning of the following terms

(i) **LAN**   *(02 marks)*

……………………………………………………………………………………

……………………………………………………………………………………

(ii) **WAN**   *(02 marks)*

……………………………………………………………………………………

……………………………………………………………………………………

Outline the **three** merits of networking computers   *(03 marks)*

(i)   ……………………………………………………………………………………

(ii)   …………………………………………………………………………………

(iii) …………………………………………………………………………………

Outline the **three** demerits of networking computers   *(03 marks)*

(i)   ……………………………………………………………………………………

(ii)   ……………………………………………………………………………………

(iii) ……………………………………………………………………………………

25. a) A system unit is one of the main components found in a computer system. List any **four** components that make up a system unit. *(04 marks)*

(i) ....

(ii) ....

(iii) ....

(iv) ....

(b) Briefly explain the function of any **three** components you have given in (a) above.

(06 marks)

(i) ....

....

(ii) ....

....

(iii) ....

....

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

(i) ....

(ii) ....

(ii) ....

(ii) ....

(b) List any **two** types of operating system commonly used in computers. *(02 marks)*

(i) ....

(ii) ....

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

....

....

....

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

(02 marks)

....

....

....

SECTION C: (20 MARKS)

*Answer any **one** question from this section*

Answers must be done in the answer booklet provided.

27.   Describe the nature and the features of the **four** computer generations.   *(20 marks)*

28.   **(a)**   Describe any **four** ways in which computer crimes are committed. *(08 marks)*

        (b)   Explain the ways of safeguarding against computer crimes.   *(12 marks)*

29.   Explain the merits and demerits of using internet.   *(20 marks)*

END