

Candidate's name.....

Signature.....

840/1  
**COMPUTER  
STUDIES**  
Paper 1  
**Oct./Nov 202**  
2 ½ hours

Random No						Personal No.		

**Uganda Certificate of Education**

**COMPUTER STUDIES**

**Paper 1**

2 hours 30 minutes

**INSTRUCTIONS TO CANDIDATES**

Write your name and signature in the spaces above.

This paper consists of three Sections A, B, and C

Section **A** contains **20 compulsory** objective-type questions.

The correct alternative **A, B, C** or **D** against each question must be written in the box provided on the right-hand side of each question.

Section **B** consists of **six** structured questions. **Attempt all.**

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

Section C contains **three** essay questions. **Attempt only one.**

Answers to section C must be written in the answer booklet provided.







*Any additional question(s) answered will not be marked.*

**For examiner's only**

MCQ	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	TOTAL

## SECTION A

*Answer all questions in this section.*

1. The computers of .....generation replaced vacuum tubes with transistors.  
A. 1<sup>st</sup>  
B. 2<sup>nd</sup>  
C. 3<sup>rd</sup>  
D. 4<sup>th</sup>  

2. A mechanical calculator that performs the four arithmetic operations is  
A. the slide rule  
B. the abacus  
C. the calculator  
D. Pascal machines  

3. Programs needed to bring life to the computer when it is started are stored in the  
A. ROM  
B. Floppy disk  
C. RAM  
D. Hard disk  

4. Which is not true regarding I/O devices  
A. Provide means of communication between a computer and outer world.  
B. Also called peripheral devices.  
C. Input devices are used to supply data to the outside world into primary storage.  
D. Output devices supply results of processing from primary storage to users.  

5. Which of the following is non-impact printer  
A. Dot matrix  
B. Ink Jet  
C. Drum  
D. Chain  

6. The.....is an example of system software that uses a command line interface.  
A. DOS  
B. Macintosh  
C. windows  
D. Novell  


7. John typed the following text using his manual keyboard  $X^2 + 2 = 40$   
Which term is given to the word processing feature that was applied on the value  $X^2$ ?
- A. Strike through
  - B. Superscript
  - C. Hidden
  - D. Highlighter
8. A keyboard shortcut used to view a power point presentation in slide show is
- A. F1
  - B. F2
  - C. F4
  - D. F5
9. Laser beam is used to store data on
- A. Optical Disk.
  - B. Tape.
  - C. Memory.
  - D. Hard disk.
10. Access rights to a database is controlled by
- A. Top management
  - B. System designer
  - C. System analyst
  - D. Database administrator
11. How many CD'S700MB capacity are needed to transfer data from a hard disk of 2GB for purposes of data backup.
- A. 2
  - B. 3
  - C. 4
  - D. 1
12. What is the meaning of the term range as used in spreadsheets?
- A. Intersection of rows and columns
  - B. a reference to a particular cell
  - C. a group of adjacent cells
  - D. a collection of worksheets

13. All files ending with the following extensions are executable except.....

- A. .bat
- B. .com
- C. .exe
- D. .doc

☐

14. Which of the following statements are correct?

- i) Each web browser has a unique IP address
- ii) HTTP is a communication protocol
- iii) An internet domain may be referred to as HTML
- iv) The internet is a network of networks

- A. I & II only
- B. I, II & III only
- C. II & IV only
- D. II, III & IV only

☐

15. An area of artificial intelligence that simulates certain experiences using headgear, gloves and software that translates data into images is.....

- A. Collaborative technology
- B. virtual reality
- C. hypermedia
- D. shell

☐

16. A system program that combines separately compiled modules of a program into a form suitable for execution is called?

- A. Assembler
- B. Linking loader
- C. Cross compiler
- D. Load and go

☐

17. A private network protected from public visits by a firewall is called...

- A. Internet.
- B. Intranet.
- C. Email.
- D. Usenet.

☐

18. The basic use of a primary key in a database is to;

- A. uniquely identify a record.
- B. act as an alternative identifier.
- C. sort records.
- D. modify a file Structure.

☐

19. A (n) ....., which is used almost exclusively by banking industry, can read text printed with magnetic ink.

A. Bar code scanner  
B. Optional character recognition reader (OCR)  
C. Optional mark recognition reader (OMR)  
D. Magnetic-ink character recognition character recognition Reader (MICR)

☐

20. Exclusive rights given to software authors/developers to produce, duplicate and sell their software is referred to as .....

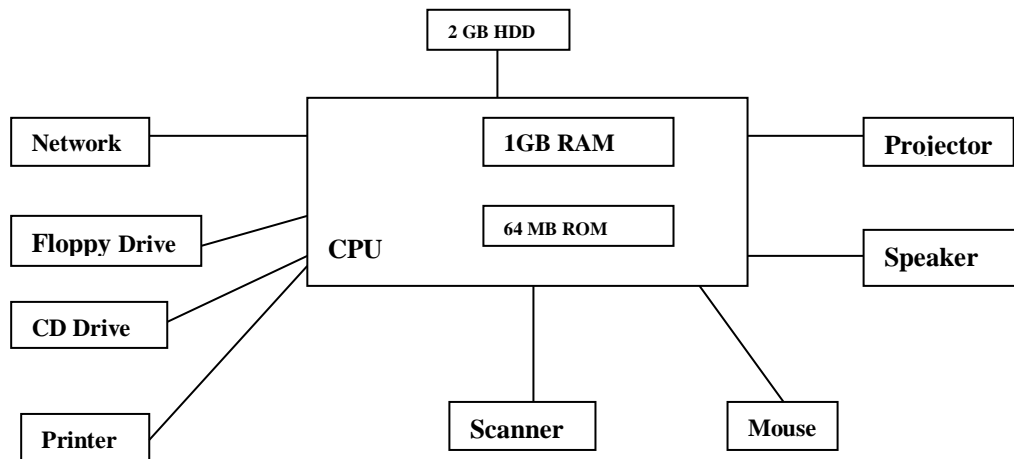
A. Intellectual Property  
B. Copyright  
C. Trade mark  
D. Memoranda

☐

### SECTION B

Answer **all** questions in this section. All the working **must** be done in the space provided.

21. (a) Study the diagram below and answer the questions that follow.



From the diagram:

- (i) Name **two** devices that are used for long term storage. (02 marks)

.....  
.....

- (ii) Name **three** peripheral devices shown on the diagram that are used for output. (03 marks)

.....

.....

.....

- (iii) Give **two** uses of input hardware shown on the diagram above. (02 marks)

.....

.....

- (b) Explain any **two** reasons why a computer may fail to boot? (02 marks)

.....

.....

.....

- (c) Outline any **one** techniques you may apply to solve problems listed in (b) . (01 mark)  
above.

.....

.....

.....

22. (a) Give **three** advantages of creating a primary key field in any Database table. (03 marks)

- (i) .....
- (ii) .....
- (iii) .....

- (b) The two tables **Product** and **Supplier** form a relational database used by a Johns Retail shop. Use it to answer the questions that follow:

Table 1 :**Product Table**

Product Code	Product Name	Product Cost	Supplier Code	Quantity
P001A	WStar	Shs 800	X001	15
P001B	Nomi	Shs 700	X002	85
P001C	Omo	Shs 400	X003	63
P001D	Ariel	Shs 450	X004	12

Table 2: **Supplier Table**

Supplier Code	Name	Post Code
X001	MukwanoIndutries	U256
X002	KyaptyaNyotaIndutries	U255
X003	Kamumaku Industries	U271

- (i) State the primary Key of the product table .....(01 mark)
- (ii) Give the name of the field in the supplier table that should be named the foreign key.  
.....(01 mark)
- (iii) What kind of relationship that should be suitably created by John to suite his database integrity. ....(02 marks)
- (iv) List the result from a particular field of executing the following query using the Product table above.
- (i) Like \*O .....(01 mark)
- (ii) <= shs 500 .....(01 mark)
- (iii) Like \*m\* .....(01 mark)

23. A programmer wants to develop a large piece of software to enable users interact more freely when using social networking sites such as Twitter.

(a) Outline **two** possible software development lifecycle models He/she could use. (02 marks)

.....  
.....

(b) Outline any **two** qualities of good computer software? (02 marks)

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

(c) Explain the meaning of the following.

(i) Software bug (02 marks)

.....  
.....

(ii) Service programs (02 marks)

.....  
.....

(iii) Application programs (02 marks)

.....  
.....

24. (a) What is meant by the term **computer software**? (02 marks)

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

(b) Explain with examples the following types computer application software.

(i) Freeware (02 marks)

.....



- .....
- .....
- (ii) Tailored software (02 marks)
- .....
- .....
- .....
- (c) State the roles played by the following utilities in a computer.
- (i) Anti-virus (01 mark)
- .....
- .....
- (iii) Disk defragmenter (01 mark)
- .....
- .....
- (iv) Screensaver (01 mark)
- .....
- .....
- (v) System monitors (01 mark)
- .....
- .....

25. (a) Explain the meaning of **computer communication**. (02 marks)

.....

.....

.....

(b) Write the following in full as used in computer communication. (03 marks)

- (i) WWW.....
- (ii) ATM.....
- (iii) MODEM.....

(c) Give any **three** hindrances to full internet use in Uganda. (03 marks)

(i) .....

(ii) .....

(iii) .....

(d) Outline **two** factors that you would consider before choosing an ISP for a school.

(02 marks)

(i) .....

(ii) .....

26. (a) What is meant by a **computer program**? (02 marks)

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

(b) Mention **two** examples of high level computer programming languages.

(02 marks)

(i) .....

(ii) .....

(c) List down **three** threats faced by computer programmers today. (03 marks)

(i) .....

(ii) .....

(iii) .....

- (d) Identify any **three** emerging technologies in the field of modern computing today. (03 marks)

(i) .....

(ii) .....

(iii) .....

### SECTION C

*Answer only **one** question from this section. Answers to this section must be done on the answer booklet provided.*

27. (a) The control panel of any windows operating system performs a number of functions. Identify any five features within the control panel that enables you to manage your computer system. (10 marks)

- (b) You have been given a printer which does not print. As a computer student, prepare a step by – step process you would carry out to have both the hardware (printer) and the software (printer drivers) work again. (10 marks)

28. Using any programming language of your choice (Visual Basic or C), write a small Program which gives a product of two numbers. (Remember to add programmer's comments where necessary) (20 marks)

29. (a) Describe any **five** network topologies applicable in any Local area communication network. (10 marks)
- (b) Outline the benefits and draw backs of wireless communication networks. . (10 marks)

**END**