Candidate's Name……

Signature……..

Personal Number		

840/1
COMPUTER STUDIES
Paper 1
July. August 2023
$2^{1}/_{2}$ hours

ICT TEACHERS' ASSOCIATION OF UGANDA

Uganda Certificate of Education

COMPUTER STUDIES

Paper 1

2 hours 30 minutes

INSTRUCTIONS TO CANDIDATES:

Write your name, signature and personal number 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** *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 equally weighted practically-theory questions. Answer only* ***one*** *question. Answers to Section* **C** *must be written on the answer sheet(s) provided.*
Any additional question(s) answered will not be marked.

For Examiners' Use only

MCQ	Q21	Q22	Q23	Q24	Q25	Q26	Q27	Q28	Q29	TOTAL

SECTION A (20 MARKS)

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

1. Which one of the following is **not** a specification considered when buying a new laptop computer?

A. Amount of RAM available
B. Cost of the computer
C. Hard disk capacity
D. Battery life

2. The feature of word processing that allows a user to type continually without pressing the Enter Key at the end of each line is called?

A. Drop cap
B. Find and replace
C. Word Wrap
D. Mail merge

3. A battery powered device that provides enough power to the computer to prevent unsaved work from being lost when there is a power failure is called?

A. Surge protector
B. Power stabilizer
C. Solar panel
D. Uninterruptible Power Supply

4. The loss/weakening of signal strength in networking cables or connections can be referred to as

A. Attenuation
B. Demodulation
C. Modulation
D. Packet switching

5. Which **one** of the following is **not** an advantage of using presentation software

A. Multimedia can be incorporated into the presentation slides
B. The slides can be used to perform calculations
C. The timing of slides can be set to run automatically
D. Provides a variety of presentation formats and layouts.

6. Charles Babbage the father of computers is popularly best known for inventing the……?

A. Analytical and Difference Engine
B. Slide rule
C. Jacquard's Loom
D. Abacus

7. A diagnostic process that a computer runs to determine if the hardware is working properly when the computer is switched on is

A. Trouble shooting
B. Power on self-test
C. Loading of the operating system
D. Debugging

8. Which **one** of the following is **true** about impact printers?

(i) They are very noisy
(ii) Produce high quality graphics and very expensive
(iii) They use laser, spray of special ink or tonner powder
(iv) Physical contact between the paper and ink ribbon
(v) They tend to be slow
(vi) They do not print on transparencies

A. (i), (ii) and (iii) only
B. (ii), (iii) and (vi) only
C. (i), (iv, (v) and (vi) only
D. All of them are true about impact printers.

9. The following are data types of a database table **except**

A. Number
B. Date/Time
C. Lookup Wizard
D. OLE Object

10. The keyboard button that enables a computer user to take a screenshot of the current screen.

A. Backspace button
B. Escape button
C. Windows button
D. PrintScreen button

11. The type of transmission mode that allows data to flow in both directions but only one way at a time is called?

A. Half duplex mode
B. Multiplex mode
C. Full duplex mode
D. Simplex mode

12. The following are categories of utility software except?

A. Anti-virus utility
B. Web browsers
C. Disk scanners
D. Disk defragmenters

13. The act of attempting to require sensitive information like user names, passwords and credit card details by disguising as a trusted source is called

A. Hacking
B. Cracking
C. Spamming
D. Phishing

14. The type of volatile memory that provides high speed data access to a processor and stores frequently used computer programs, applications and data.

A. Cache Memory
B. Read Only Memory
C. Random Access Memory
D. Flash Memory

15. A professional who is responsible for the upkeep, configuration and reliable operations of computers like servers in an organization.

A. Database Administrator
B. Systems Administrator
C. Network administrator
D. Web Designer

16. A stationery pointing device with a ball mechanism on its top that the user rolls to direct and control the movement of the pointer on the screen.

A. Trackball
B. Joystick
C. Digital pen
D. Mouse

17. The standard protocol for transferring file between computers and webservers over a network such as the internet

A. Simple Mail Transfer Protocol
B. Domain Name Transfer Protocol
C. File Transfer Protocol
D. Internet Protocol

18. A collection of several applications that are bundled together and sold or distributed as a single package.

A. Systems software.
B. Special software.
C. General purpose software.
D. Software suite.

19. The file extension for all web pages on the website should be

A. .xls
B. .doc
C. .pub
D. .html

20. A grid of columns (indicated by letters) and rows (indicated by numbers) in a spread sheet software is called

A. Functions
B. Labels
C. Worksheet
D. Workbook

SECTION B (60 MARKS)

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

Answers must be written in the spaces provided

21. (a) Explain the following categories of computers by function.

(i) **Stand-alone computers**. *(02 marks)*

……

……

…….

(ii) **Networked computers**. *(02 mark*

……

……

……..

(iii) **Real time systems**. *(02 marks)*

……

……

……..

(b) Identify **two** ways how viruses are spread on computers. *(02 marks)*

(i) ……

……..

(ii) ……

……

(c) Suggest **two** possible solutions to prevent the spread of viruses as identified in (b) above. *(02 marks)*

(i) ……

……..

(ii) ……

……

22. (a) What is solid-state storage media? *(02 marks)*

……

……

……

(b) Name **two** examples of solid state media. *(02 marks)*

(i) ……

(ii) ……

(c) Give **two** reasons why a computer user would prefer to use solid-state storage media over magnetic storage media. *(02 marks)*

(i) ……

……

(ii) ……

……..

(d) Distinguish between **disk partioning** and **disk formatting**. *(02 marks)*

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……

(e) Give **two** benefits of partitioning a disk in a computer. *(02 marks)*

(i) ……

……..

(ii) ……

……

23. (a) What is a **function** in Microsoft Excel? *(01 mark)*

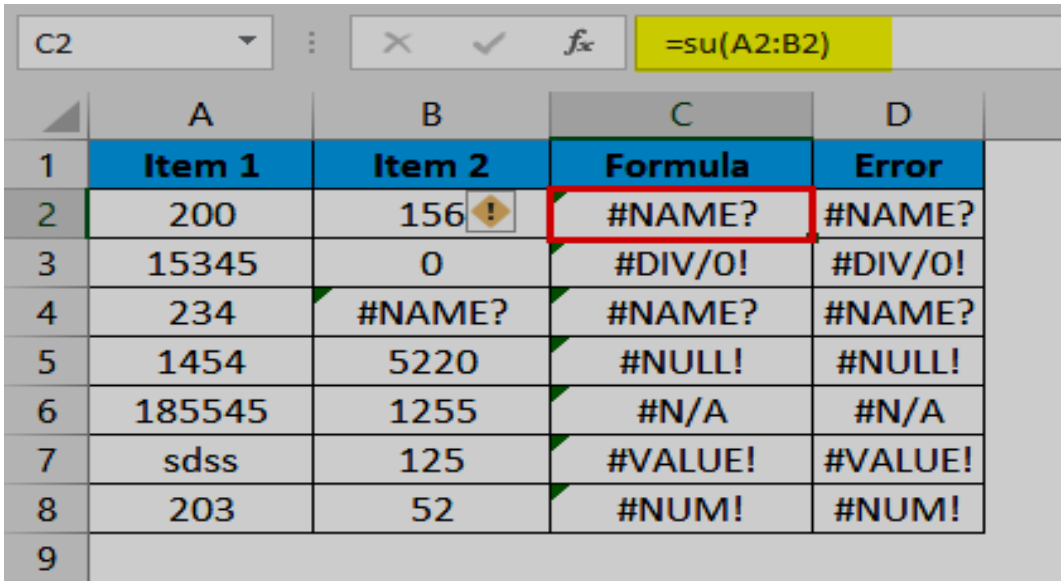
……

……

……

……

(b) Read the following information carefully and answer the questions that follow.



	A	B	C	D
1	**Item 1**	**Item 2**	**Formula**	**Error**
2	200	156	#NAME?	#NAME?
3	15345	0	#DIV/0!	#DIV/0!
4	234	#NAME?	#NAME?	#NAME?
5	1454	5220	#NULL!	#NULL!
6	185545	1255	#N/A	#N/A
7	sdss	125	#VALUE!	#VALUE!
8	203	52	#NUM!	#NUM!
9				

Explain the meaning following errors as commonly encountered when using Microsoft excel. *(03 marks)*

(i) **#NAME?** Error

……

……

(ii) **# DIV/0!** Error

……

……

(iii) **# VALUE!** Error

……

……

(iv) How would you rectify the error in cell **D3**? *(01 mark)*

……

……

(c) Distinguish between **Text** and **Memo** as used in databases. *(02 marks)*

……

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……

(d) The table below shows a database table extracted from Platinum Investment Limited. Read it and answer the question that follows.

Emp.Number	Surname	Sex	District	Date Of Birth	Paid
KS/001	Duwonge	Male	Wakiso	01-Mar-1962	125,000
KS/002	Dayaga	Female	Kampala	05-Mar-1963	170,000
KS/003	Muwanga	Female	Jinja	01-May-1977	132,000
KS/004	Kibuuka	Male	Wakiso	05-Jul-1976	125,000
KS/005	Nakintu	Female	Kampala	01-Nov-1976	120,000

(i) How many records are shown in the table above? *(01 mark)*

…….

(ii) Which field would you choose to act as your primary key? *(01 mark)*

…….

(iii) Give **one** reason to support your answer in d (ii) above. *(01 mark)*

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24. (a) Distinguish between a **hub** and a **switch**. *(02 marks)*

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……

(b) State **three** advantages of using wireless networks. *(03 marks)*

(i) ……

……..

(ii) ……

……

(iii) ……

……

(c) Name **one** example of physical transmission media. *(01 mark)*

……

(d) Explain the meaning of the following views as used with web authoring software.

(i) **Normal view**. *(01 mark)*

……

……

(ii) **Code View**. *(01 mark)*

……

……

(iii) **Split View** *(01 mark)*

……

……

(e) Identify **one** example of a web authoring software. *(01mark)*

……..

25. (a) State **two** documents that be created by a word processor. *(02 marks)*

(i) ……

(ii) ……

(b) Give the **function** of the following features of a word processor.

(i) **Spelling checker**. *(01 mark)*

……

……

(ii) **Grammar checker**. *(01 mark)*

……

……

(iii) **Thesaurus**. *(01 mark)*

……

……

(c) What is meant by **hand outs** as used in Microsoft PowerPoint? *(02 marks)*

……

……

(d) Give the function of the following features of presentation software.

(i) **Action buttons**. *(01 mark)*

……

……

(ii) **Speaker notes**. *(01 mark)*

……

……

(iii) **Placeholders**. *(01 mark)*

……

……

26. (a) What is meant by operating system software? *(02 marks)*

……

……

……

(b) Outline any **four** functions of operating system software to the computer. *(04 marks)*

(i) ……

……..

(ii) ……

……..

(iii) ……

…….

(iv) ……

…….

(c) Define the term **Off-shelf** software applications. *(02 marks)*

……

……

(d) State **two** advantages of **Off-shelf** software. *(02 marks)*

(i) ……

……..

(ii) ……

……..

SECTION C (20 MARKS)

*Answer only **one** question in this section*

Answers to the question must be written in the answer booklet provided

27. (a) Explain any **four** types of computer networks. *(10 marks)*

(b) Describe any **five** benefits of networking computers. *(10 marks)*

28. Describe any **five** computer error messages and possible solutions. *(20 marks)*

29. (a) Explain any **five** emerging technologies as of today. *(10 marks)*

(b) Discuss **five** negative implications of the emerging technologies identified in 29 (a) above. *(10 marks)*

END