NAME:………………………………………………………………………………………

STREAM:………………

840/1
Computer studies
Paper 1
March/April, 2020
2½ hours

ST. HENRY'S COLLEGE KITOVU

MID-TERM 1 Part 2 ONLINE COMPUTER STUDIES

Paper 1

2 Hours 30 Min

INSTRUCTIONS TO CANDIDATES:

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

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

Section B consists of six **compulsory structured** questions. Answers to this section **must be** written in the spaces provided on the question paper.

Section C consists of **three** essay questions. Attempt only **One**. Answers to this section **must be written** in the answer booklets provided.

Note: Attempt this paper and send it on my email: turinawevian10@stud.must.ac.ug before 6th, April, 2020 at Mid-night.

For Examiner's Use only

Sec A	Q21	Q21	Q22	Q23	Q24	Q25	Q26	Sec C	TOT

1. The utility program which was designed with intention of preventing images from being permanently etched on the monitor screen 9**burn-outs)** is called……………
   A. BackUp Utility
   B. Scan Disk
   C. Screen Saver
   D. Debugger

2. The type language processor which works along side a high level language and converts it int machine language, one line at a time is known as…………………..
   A. Assembler
   B. Interpreter
   C. Object oriented language
   D. Compiler

3. One of these applications is used in the editing of video clips and compilation of videos.
   A. Adobe CS
   B. Adobe Movie Maker
   C. Adobe Premier
   D. Adobe Illustrator

4. When creating a table in Microsoft Access, the data type most suitable for static values which already exist in another table or list is ……………….
   A. Yes/No
   B. Memo
   C. OLE Object
   D. LookUp Wizard

5. One of the function s of a Primary Key field in a database is ……………………
   A. To identify unique records in the database
   B. To ensure that there is no duplication of records in the database
   C. To enable the designer to relate tables
   D. To prevent error messages from appearing on the screen during design process.

6. ……………………..is the process of comparing data entered into the database with the pre-defined rules or values of the database before processing the data.
   A. Querrying
   B. Data verification
   C. Data Validation
   D. Referencing

7. The Part of the Microsoft PowerPoint window which allows one to insert, edit or delete reminder notes on each slide is known as ………………………..
   A. The Outline pane
   B. The Outline View
   C. The Slide View
   D. The Notes Pane

8. The text which identifies the entry/entries in a particular column, row or cell on a worksheet is called a ………………………
   A. Column header
   B. Label
   C. Row Header
   D. Value

9. Susan's uncle is an Architect who graduated from the University a few years ago. He is such an IT enthusiast and he likes using the computer to do almost all his work. Which of the programs below would be most suitable for the type of job for which he qualified?
    A. Microsoft Visual Basic
    B. QuarkXpress
    C. PaintShop Pro
    D. Microsoft Visual Technical

10. During the booting process of a Window machine, what process follows after the POST has been successfully completed?
    A. The Kernel of the OS is loaded into RAM
    B. The BIOS checks for the BOOT program so that it can load the OS
    C. The CPU resets itself and looks for ROM
    D. The computer displays the "**log-on**" screen

11. ………………………….is a type of memory which holds data which is frequently requested by the CPU.
    A. Buffer
    B. Cache
    C. RAM
    D. SDRAM

12. *'IRQ Conflict'* is a term related to …………………….
    A. Internet communication tools and services
    B. Software installation
    C. Configuration of hardware devices/peripherals
    D. Memory management on the computer

13. A computer system which allows a user to run more than one application at the same time is said to be a …………………………….
    A. Multi-processing system
    B. Multi-user system
    C. Multi-tasking system
    D. Decentralized Processing system

14. The speed of a computer's processor is measured in units known as …………….
    A. Bits per second
    B. Pixels
    C. Megahertz
    D. Million Instructions per second (MIPS)

15. The use of bar codes and bar code readers is becoming wide spread in most supermarkets, retail shops and departmental stores; which of the following statements are **NOT** true about bar coding?
    A. Saves time
    B. Reduces input errors
    C. Assists in stock recording
    D. Uses Voice recognition systems

16. The buying and selling of products over the internet and other computer networks is referred to as …………………………………
    A. e- government
    B. e- selling
    C. e-commerce
    D. e-shopping

17. Which of the following is **NOT** true about selling of video games on-line (on the side of the company).
    A. It gives the company access to a world wide market
    B. Gives the company's customers 24-hour access
    C. It is cheaper because no rent or shop equipment costs are incurred
    D. Gives customers a variety of sources/brands to choose from.

18. All these are data storage devices except……………………..
    A. Floppy diskettes
    B. Super disks
    C. Control Unit
    D. Zip tapes

19. The data cable of a computer is specified as 32-bit, this means that ………………
    A. It can transfer 32 bytes at a time
    B. It can transfer 4 bits at a time
    C. It can transfer 16 bytes at a time
    D. It can transfer 8 characters at a time

20. A…………………………… is a unique address used to locate a particular webpage on the WWW.
    A. Hyper link
    B. URL
    C. Home page
    D. HTML tag

SECTION B

21. Birungi Tracy, Lubwama and Ssekitooleko are students of the S4 computer class, recently, they were asked to create personal user accounts on the computer which they were going to share during their Mock practical exam: The following were the passwords set by the respective students

Student Name	**Password**
(i) Birungi Tracy	birukiat
(ii) Lubwama Joshua	964w (he is in 4W, his RegNo is 96N/MNS/05)
(iii) Ssekitooleko Andrew	Qs7an54W

(a) Which of these students chose the most secure password?

……………………………………………………………………… (1 Mark)

(ii) Give **two** reasons for your answer

…………….…………………………………………………………………………………
…………….…………………………………………………………………………………
(2 Marks)

(b) Which of the passwords is least secure?
………………………………………….. (1 Mark)

(ii) Give **two** reasons for your answer.
…………..…………………………………………………………………………………
…………..…………………………………………………………………………………
(2 Marks)

(c) Apart from the use of passwords, state any other **three** electronic security measures which can be instituted by an organization to restrict access of their computer systems by unauthorized users:
(i) …………………..…………………………………………
(ii) ……….…………………………………………………
(iii) …………..……………………………………………………… (3 Marks)

(d) Give any one reason for which an individual or a company would illegally attempt to access another company's network/information system.

…………………………………………………………………………………………………
(1 Mark)

- -

22. A Graphics Design Company intends to buy a computer to replace one of the computers which was bought about 6 years ago. One of the major functions of this computer is to produce detailed designs of a wide range of products. The Senior Graphics Designer of the company presented a requisition to the Manager with the following specifications:-
    - Atleast 1GB of RAM
    - 21-inch high resolution colour monitor
    - Atleast 200 GB hard disk
    - Atleast 3Ghz processor
    - A CD-RW$^+$ drive

(a) **Precisely** explain one reason as to why the Graphics Designer quoted the above specifications for the new computer. (*make reference to the kind of work done by this company*)
(i) Atleast 1GB of RAM
…………..…………………………………………………………………………………
…………..…………………………………………………………………………………
(1Mark)

(ii) 21-inch high resolution monitor
…………..…………………………………………………………………………………
…………..…………………………………………………………………………………
(1Mark)

(iii) Atleast 200 GB hard disk
…………..…………………………………………………………………………………

……………………………………………………………………………………………………
(1Mark)

    (iv) Atleast 3Ghz processor
……………………………………………………………………………………………………

……………………………………………………………………………………………………
(1Mark)

    (v) A CD-RW$^+$ drive
……………………………………………………………………………………………………

……………………………………………………………………………………………………
(1Mark)

(b) As a computer student, explain when a **warm boot** is performed:
……………………………………………………………………………………………………

……………………………………………………………………………………………………
(1Mark)

(ii) State any **two** different methods which you would se to perform a warm boot
        …………………………………………………………………….

        …………………………………………………………………..(2 marks)

(c) In not more than 2 statements, describe how each of the Input devices listed below works.
    (i) OMR
……………………………………………………………………………………………..

……………………………………………………………………………………………..

……………………………………………………………………………………………..
(1 Mark)

(ii) A Scanner
……………………………………………………………………………………………..

……………………………………………………………………………………………..

……………………………………………………………………………………………..
(1 Mark)

(iii) Touch Screen
……………………………………………………………………………………………..

……………………………………………………………………………………………..

……………………………………………………………………………………………..
(1 Mark)

- -

23. Define the term **bandwidth**.
……………………………………………………………………………………………..

……………………………………………………………………………………………..

……………………………………………………………………………………………..
(2 Marks)

(b) With regard to computer networks and communication, distinguish between physical and non-physical communication media.

…………………………………………………………………………………………..

…………………………………………………………………………………………..

…………………………………………………………………………………………..

(2 Marks)

(ii) List two examples of each of the following:

Physical Communication Media   Non-physical communication media

………………………………..   …………………………………………

…………………………………   …………………………………………

(2 marks)

(c) Define the following terms:

   (i) Intranet

…………………………………………………………………………………………..

…………………………………………………………………………………………..

…………………………………………………………………………………………..

(1 Mark)

(ii) Topology

…………………………………………………………………………………………..

…………………………………………………………………………………………..

…………………………………………………………………………………………..

(1 Mark)

(iii) Protocol

…………………………………………………………………………………………..

…………………………………………………………………………………………..

…………………………………………………………………………………………..

(1 Mark)

(d) Distinguish between a LAN and a WAN

…………………………………………………………………………………………..

…………………………………………………………………………………………..

…………………………………………………………………………………………..

(1 Mark)

- -- -- -

24. Define the term '**Computer Generation'**

…………………………………………………………………………………………..

…………………………………………………………………………………………..

…………………………………………………………………………………………..

(1 Mark)

(b) For each of the computer generations stated below, mention the major technological innovation of that generation.

(i) Third Generation

…………………………………………………………………………………………(1 Mark)

(ii) Fourth Generation

………………………………………………………………………………………..(1 Mark)

(c) Give any **two** examples of computers invented during the **'Mechanical era'**

    (i) …………………………………………………………..

    (ii) ……………………………………………………   (1 Mark)

(iii) Mention one example of a *First Generation Computer* (write its name in full)

…………………………………………………………………………………………..

…………………………………………………………………………………………..

                                (1 Mark)

(d) '**Balyannaka Metal Fabricators and Carpenters'** is a firm in one of the suburbs of Kampla; until last January, the firm had been using Typewriters and other manual systems to process and store most of their docucments. On realizing how much profit the firm had make over the years, the manager has ordered for 3 new computer to improve efficiency amongst workers.

(i) State 3 reasons as to why this development may cause worry among some of the staff of this firm.

…………………………………………………………………………………………..

…………………………………………………………………………………………..

…………………………………………………………………………………………..

                                (3 Marks)

(ii) A few months after the computers had been introduced to the Accounts department and 2 secretaries, they discovered that their work had become much easier. State reasons as to why the staff in the 2 respective departments found their work much easier

    Accounts

…………………………………………………………………………………………..

…………………………………………………………………………………………..

                                (1 Mark)

    Secretaries

…………………………………………………………………………………………..

…………………………………………………………………………………………..

                                (1 Mark)

- -

25. Below is part of a database for a new supermarket in Kireka trading centre.

Product ID	Number of Stock	Unit Price	Category	Brand Name	Capacity or Size
PR005	2	700	Toiletry	Geisha	50gm
PR007	1	1300	Toiletry	Close-Up	150gm
PR014	1	1600	Beverage	Mukwano_Tea	Pkt
PR009	1	1000	Cosmetics	Movit_Soap	120gm
PR012	2	1400	Merchandise	Sesaco_Peanut	250gm
PR003	3	2000	Beverage	Star Coffee	250gm

PR016	1	3600	Merchandise	Azam_BFlour	1kg
PR010	1	2200	Beverage	Mukwano_TBags	500gm

(i) What name is given to the Microsoft Access tool which is used to enter and arrange this data in a series of rows and columns as shown? ………………………

(1 Mark)

(ii) With reference to the above database, clearly define the following terms:
   Record

……………………………………………………………………………………………..

……………………………………………………………………………………………..

(1 Mark)

   (iii) Field

……………………………………………………………………………………………..

……………………………………………………………………………………………..

(1 Mark)

(iv) Which is the **primary key field** of this database?..
(v) Give reasons to the answer you have given in a (iv) above:

……………………………………………………………………………………………..

……………………………………………………………………………………………..

(1 Mark)

(b) Mr. Mutyaba has a chain of hardware shops in Kampala, below is part of a worksheet showing returns from the different shops on a monthly basis:

	A	B	C	D	E	F	G
1		0.05%	0.1%				
2	Name of Shop	**Monthly sales in Millions**					
3		**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**TOTAL**
4	KATENDE.A Hardware shop	6.1					
5	NALWEYISO.S Hardware Store	3.4					
6	KATO & WASSWA'S Hardawre Shop	0.2					
7	NABATANZI.S Hardware Shop	2.5					
8	**TOTAL**						

(i) Basing on the previous year's performance, it is projected that sales for 'KATENDE.A' will grow by 10% every month: Write a formular which can be entred in cell **C4** and when copied to the cell range (**D4: F4)** it automatically generates the correct forecasted sales for the rest of the months…………………………………………

(1 Mark)

(ii) The sales for the rest of the shops are expected to grow only by 5% each month due to the location the shops in the city. Write a formular which can be entered in cell **C5** and when copied to the cell range (**C5:F7**), it automatically generates the correct forecsted ssales for all the shops for all the months. ………………………………….

(1 Mark)

(iii) Which formular would produce the **total sales** for KATENDE .A shop?

……………………………………….. (1 Mark)

(iv) Which formular would give the total sales for the month of May?

……………………………………………. (1 Mark)

Mention **two** examples of software (application programs) which can be used to design and manage such a worksheet.

………………………………………….

………………………………………….. (1 Mark)

- - - - - - - - - - - - - - - - - - -- -- -

26. Define the following terms:
    (i) Home Page

……………………………………………………………………………………..

……………………………………………………………………………………..

(1 Mark)

(ii) Website

……………………………………………………………………………………..

……………………………………………………………………………………..

(1 Mark)

(iii) Hyperlink

……………………………………………………………………………………..

……………………………………………………………………………………..

(1 Mark)

(iv) URL

……………………………………………………………………………………..

……………………………………………………………………………………..

(1 Mark)

(v) E-mail

……………………………………………………………………………………..

……………………………………………………………………………………..

(1 Mark)

(b) The following features are available with E-mail software and Web-based E-mail readers. Explain what each of them enables the user to do while communicating via E-mail:
    (i) **Compose:**

……………………………………………………………………………………..

……………………………………………………………………………………..

(1 Mark)

    (ii) **Cc:**

……………………………………………………………………………………..

……………………………………………………………………………………..

(1 Mark)

    (iii) **Forward**

…………………………………………………………………………………………..

…………………………………………………………………………………………..

(1 Mark)

(c) State any **two** advantages of **'Telecommuting'**.

(i) ………………………………………………………………………………..

(ii) ………………………………………………………………………………..

(2 Marks)

SECTION C

27. It's the season for your school's bi-annual **Open Day** event. As a member of the Computer Club, you are required to make a presentation to the visiting Norwegian Team who have just donated computers to your school on the topic - How ICT is being used to improve the **teaching, learning** and **assessment** of students in Mengo Senior School. Give a detailed flow of activities and processes which you would go through to create, design and finally deliver the presentation to the guests.

NOTE: *Mention the various topics /issues you intend to discuss in the presentation and how you would explain each.*   **(20 Marks)**

28. What are the merits and demerits of learning using computers and Internet other than exclusively using textbooks and teacher's notes.   **(20 Marks)**

29. Computers are more of tools which are used to enhance efficiency and delivery of output in the various professions/trades than an occupation from which individuals earn a living : **Discuss**   **(20 Marks)**