

Candidate's Name:

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Signature:.....

Random no.						Personal No.		

840/1  
**COMPUTER  
STUDIES**  
**Paper 1**  
**Nov./Dec. 2020**  
2½ hours



**WAKISO-KAMPALA TEACHERS' ASSOCIATION (WAKATA)**  
**WAKATA MOCK EXAMINATIONS 2020**

**Uganda Certificate of Education**  
**COMPUTER STUDIES**  
**Paper 1**

2 hours 30 minutes

**INSTRUCTIONS TO CANDIDATES:**

*Write your name and your signature in the spaces above.*

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

*Section **A** contains **20 compulsory objective-type** questions. Write your best alternative: **A, B, C** or **D**, in the table provided below.*

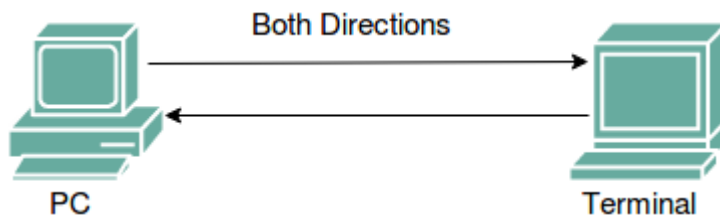
*Section **B** contains **06 compulsory structured** questions. Answers must be written in the spaces provided. Section **C** contains **three** essay questions. Attempt any **one** on papers provided*

TABLE FOR SECTION A ANSWERS									
1.		5.		9.		13.		17.	
2.		6.		10.		14.		18.	
3.		7.		11.		15.		19.	
4.		8.		12.		16.		20.	

## SECTION A (20 Marks)

Attempt **all** questions in this section

- Which of the following uniquely identifies each record in a database  
A. Primary Key      B. Key Record      C. Unique Key      D. Field Name
- Data made up of pictures, sound and video is **best** described as  
A. Graphics      B. Multimedia      C. Hardcopy      D. Softcopy
- A network model with a dedicated device/computer that manages network resources and requests is called:  
A. a peer to peer network      B. an internet network  
C. a wide area network      D. a client server
- Your holiday package was uploaded on the school website, upon downloading it, you identified it was named "Holiday.pdf". Identify a suitable program that can be used to open and view the holiday work downloaded.  
A. Microsoft word      B. Win rar      C. Mozilla Firefox      D. Adobe reader 10
- The part of a processor that interprets instructions issued by a programme is called:  
A. control unit      B. arithmetic/logic unit      C. register      D. data bus
- The ability of a computer to perform a particular task repeatedly without getting bored is called:  
A. multi-processing      B. multi-tasking      C. diligence      D. versatility
- Which data communication mode is illustrated in the diagram below?



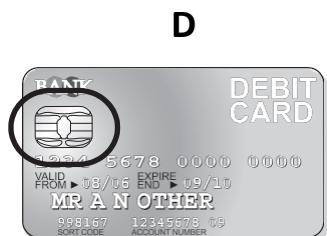
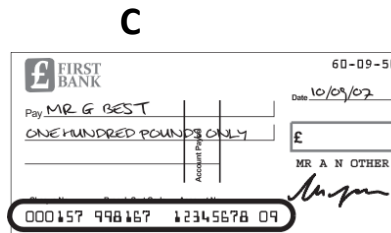
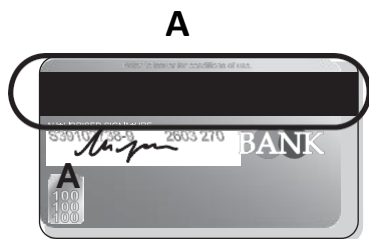
- A. Simplex      B. Half Duplex      C. Full Duplex      D. Multiplex
- Which one of the following correctly describes the steps involved in a machine cycle  
A. Fetch-store-execute-decode      B. Fetch-decode-execute-store  
C. Fetch-store-decode-execute      D. Fetch-decode-store-execute
- Which of the following scientist developed the first program that worked with the analytical engine machine?  
A. Ada Bryon      B. Charles Babbage      C. Harman Hollerith      D. Joseph Marie Jacquard.
- An organization's network that not only used by members of the organization but also provide controlled access to authorized users is known as.  
A. Internet      B. Intranet      C. Extranet      D. VPN

11. As a computer student, you were formatting your work in Ms Word program and later find out that the last formatting steps have errors and you wish to undo the last formatting step. Which of the following shortcuts can best carry out the above task?  
 A. Ctrl + Z      B. Ctrl + B      C. Ctrl + Alt + Z      D. Ctrl + w
12. Which of the following is not an example of a windows operating system?  
 A. Ms Dos      B. Linux      C. XP      D. VISTA
13. Computer programs that are used to perform specific user tasks are known as.  
 A. Customized software      B. System Software  
 C. Application software      D. Utility program software
14. Which of the following storage device can have the biggest storage capacity?  
 A. Floppy disk      B. Compact disk      C. Hard disk      D. Flash drive
15. What is "POST" in full as relates to computer booting.  
 A. Power On Self Test      B. Power Off Service Test  
 C. Process On Self Test      D. Processes Off Service Test.
16. Which of the following symbol is started with when formulas and function in a spread program.  
 A. (\*)      B. (:)      C. (=)      D. (" ")
17. Which one of the following is the lowest level of programming language that is directly understood by a computer?  
 A. BASIC      B. 5GLs      C. FORTRAN      D. Machine Code.
18. Which of the following device would be most suitable for examiners while marking objective type of question?  
 A. MICR      B. SCANNER      C. OMR      D. Magnetic strip reader.
19. A Unique number that identify a computing device on network is known as  
 A. NIC      B. IP      C. ISP      D. RJ45
20. Which is the weight in (KB) of the word "COMPUTER"  
 A. 64kb      B. 0.008kb      C. 0.064kb      D. 8kb

**SECTION B (60 Marks)**

Attempt **all** questions in this section

21. (a) Name the hardware device used to read data and information on A, B, C and D. (04 marks)



A: .....

B: .....

C: .....

D: .....

(b) The **Central Processing Unit** is a core component of a computer system, identify any three of its parts (03 marks)

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(c) As a computer student in charge of media, you want to distribute a video file that was recorded at your hand over ceremony, How 700 MB CDs will you need to share a 20GB video file with 50 students of your class. (03 marks)

22. (a) Distinguish between **Animations** and **Transitions** as applied to Microsoft power point. (02 marks)

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(b) Mention any **two** features that can be inserted into a power point presentation to make it more attractive and meaningful. (02 marks)

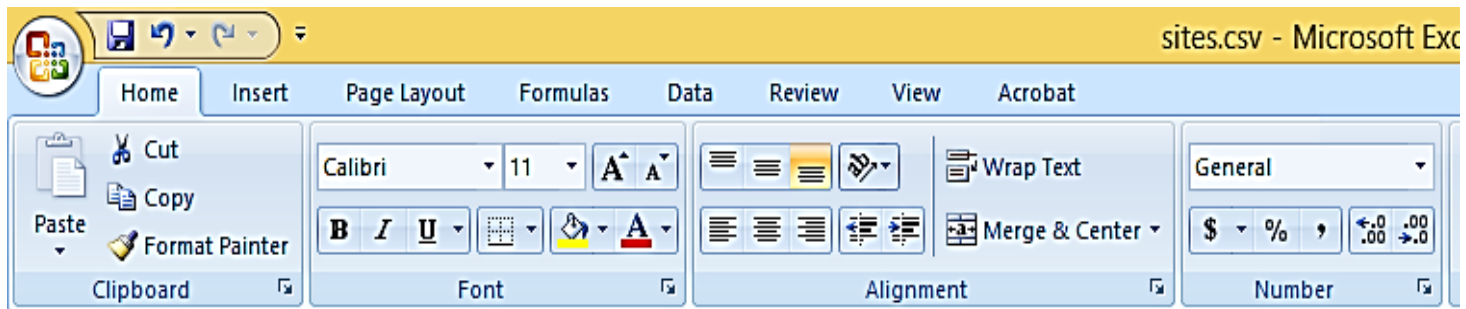
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(c) Define an electronic spread sheet

(01 mark)

(d) Study the diagram below and answer questions that follow



	A	B	C	D	E	F	G	H	I	J
1	Code	Reference	Country	Current area	Potential area	Owned	Region			
2	EU	1	England	3200	3200	Y				
3	EU	2	England	0	16000	N				
4	EU	3	England	0	1515	N				
5	EU	4	Ireland	0	2540	N				
6	EU	5	Ireland	2000	14000	Y				
7	EU	6	Poland	0	3825	N				
8	EU	7	Poland	0	90000	N				
9	EU	8	Bulgaria	0	4275	N				
10	EU	9	Bulgaria	0	720	N		Code	Region name	
11	EU	10	Bulgaria	0	6750	N		AF	Africa	
12	EU	11	Germany	0	2025	N		AM	America	
13	EU	12	France	0	50000	N		AS	Asia	
14	EU	13	Netherlands	0	36000	N		EU	Europe	
15	EU	14	Italy	0	20000	N		ME	Middle East	
16	EU	15	Italy	0	1525	N		OC	Oceania	
17	EU	16	Italy	0	3625	N				

(i) Name any **one** computer program where the above picture would have been extracted from  
(01 mark)

(ii) How many columns are captured in the above extract have  
(01 mark)

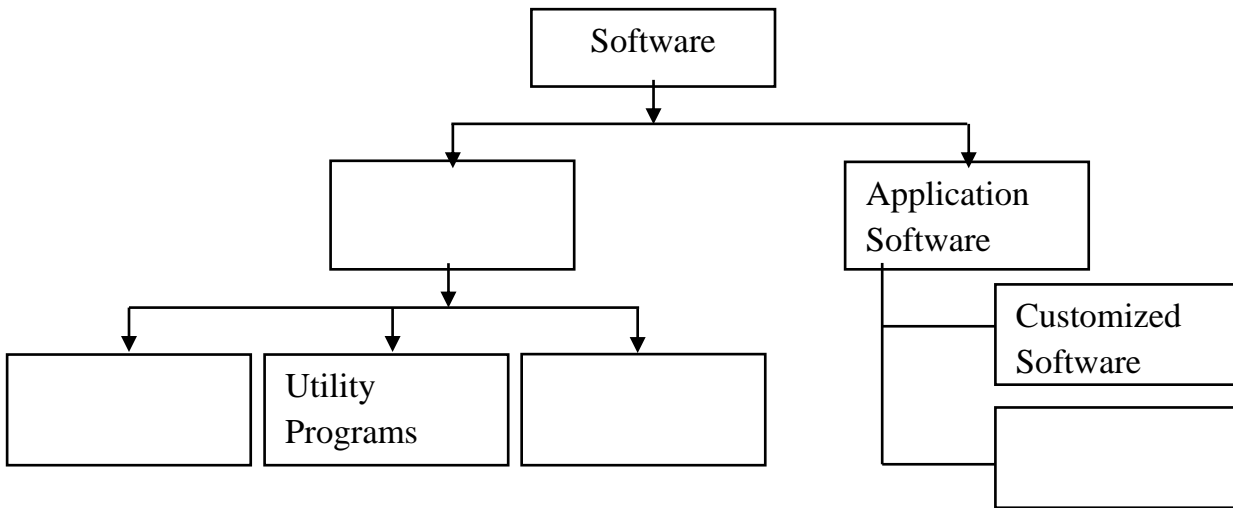
(iii) Write the formula that can be entered in cell **G1** to look for region in which each country is found.  
(02 marks)

(iv) The formula in d (iii) above can be replicated to other cells without re entering it, Describe steps how this can be done.  
(01 mark)

23. (a) Differentiate between **custom** and **off the shelf** software packages.

(02 marks)

(b) Below is the software flow structure, fill in the missing information about software. (04 marks)



(c) Give **two** differences between graphical user interface and command line interface.

(02 marks)

Graphical user interface	Command line interface

(d) Identify the applications associated with the following file extension.

(02 marks)

(i) .pdf: .....

(ii) .doc: .....

24. (a) Write the following abbreviations in full



(i) CCTV (01 mark)

(ii) CD-RW (01 mark)

(iii) FTP (01 mark)

(b) A S.4 non computer student wants to transfer work from a flash drive to a computer's desktop and change its name to **My Revision Work**, As a computer student describe clearly the steps through which you can do it. (03 marks)

(c) Name and give one function of each of the following keys on a QWERTY keyboard. (04 marks)

Key	Name	Function
		
		

25. (a) Define DBMS

(01 mark)

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(b) Give **three** advantages of using relational databases over flat file databases.

(03 marks)

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(c) Identify any **two** data types that can be used in an electronic DBMS.

(02 marks)

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(d) Below is a database table that contains student data in a certain school. Study it and answer questions that follow.

Student Index No.	Name	Date of Birth	Gender	Test Scores
U1025/501	Nampijja Annet	01/05/2000	F	95
U1025/502	Nambasa Irene	24/12/2001	F	70
U1025/503	Maganda Andrew	22/01/1999	M	82
U1025/504	Olupot John	14/07/2003	M	75
U1025/505	Lunkuse moreen	29/05/2000	F	88

(i) How many records are in the database above

(01 mark)

(ii) What is the suitable primary key for the Date of birth

(01 mark)

(iii) Identify any **one** computer program that effectively manages the above data.

(01 mark)

(iv) Identify any **one** field that best fits to be the primary key of the above data.

(01 mark)

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26. (a) Define a web page as applied to internet (01 mark)

(b) Give **three** reasons why it is very important for a business to own a website. (03 marks)

(c) Identify any **one** field and one button that are found on an emailing program (01 mark)

Field (01 mark)

Button (01 mark)

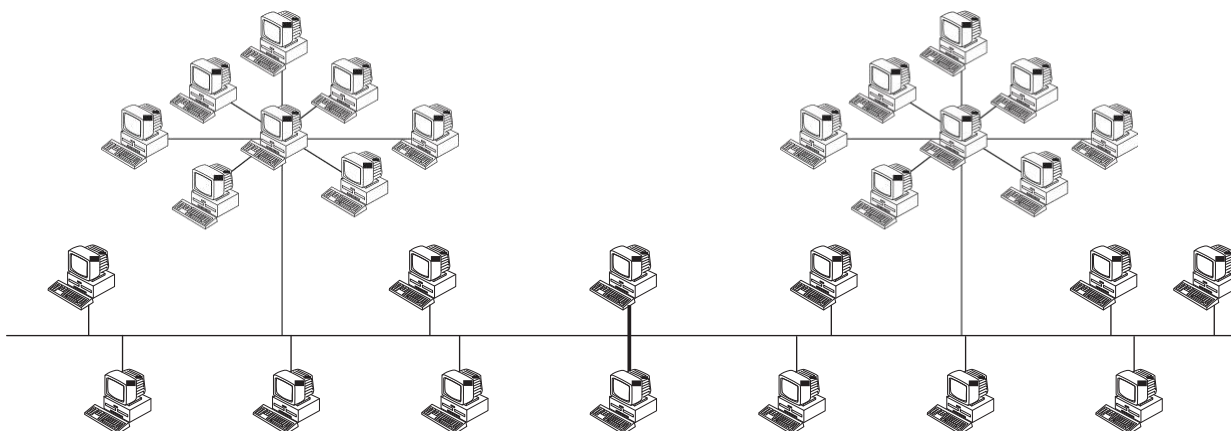
(d) Give **four** advantages of sending information using emails other than using postal office messengers (04 marks)

### SECTION C (20 MARKS)

Attempt only **one** question from this section

27. (a) Distinguish between a **network** and a **network topology**. (02 marks)

(b) Two types of network topology have been combined to form a larger network.



(i) Give the name of the type of the larger network topology (01 mark)

(ii) Give the names of the other two types of topology in this network. (01 mark)

(iii) Apart from the 3 three network topologies shown in the diagram above, with the aid of diagrams describe any other two network topologies you know. (06 marks)

- (c) Today the world is known as a Global village because of the network between computing devices. Explain the advantages and disadvantages of having computers and related devices networked. (10 marks)

28. (a) Assuming that your parent has bought a computer set with the specifications below. As a student of computer studies help him/her to understand these specifications as you answer the questions that follow;

Specifications:

- Intel(R) Core (TM) i5 M520 @ 3.20 GHz (4 CPUs)
  - 4 GB of DDR2 SDRAM
  - 500GB HDD, 7200 rpm
  - Super Multi DVD+/-RW (+R DL) / DVD-RAM
  - 10/100/1000 Base-T network interface and 56K modem
  - Intel ® HD Graphics. 1280 X 800 (32 bit) LCD Display.
  - Lenovo model 25184HU.
  - Windows 7 Ultimate 64-bit (6.1, Build 7800)
- Norton Internet Security (3 years subscription), Microsoft Works (OEM), NTI CD-Maker Gold (OEM), Acer Empowering Technology, Adobe Acrobat Reader 7, Microsoft Office 2007 Home and Student Edition (Trial), & Acer Arcade Live.

- (i) What is the processing speed of this computer? (01 mark)
- (ii) What do you understand by the specification Super Multi DVD+/-RW (+R DL) / DVD-RAM and what is its importance. (02 marks)
- (iii) Which specification provides evidence that this computer can connect to a network. (01 mark)
- (iv) The above computer has specifications below: 4 GB of DDR2 SDRAM and Intel ® HD Graphics. 1280 X 800 (32 bit) LCD Display. Write DDR and HD in full? (02 marks)
- (v) Give two reasons why you think it was advisable for your parent to buy the computer with **1280 X 800 (32 bit) LCD Display** monitor other than CRT monitor. (02 marks)
- (vi) What is the name of the Operating system supplied with this computer system and give one reason why you may recommend it. (02 marks)
- (vii) Identify **one** utility and one application programs supplied by the above computer. (02 marks)
- (b) As a student who has been working with computers, explain to your parent at least five observation symptoms you would base on to conclude that a computer has a malware. (05 marks)

(c) Describe any **three** measures that you would put in place to safe guard computers against malware. (03 marks)

29. (a) Differentiate between a **source code** and an **Object code**. (02 marks)

(b) Give **two** differences between low level and high level programming languages. (04 marks)

(c) (i) Identify **two** types of errors that can be encountered when testing a code.

(02 marks)

(ii) State **two** ways of error detection in a program code

(02 marks)

(d) Study the program code below and use it to answer the questions.

```
#include <stdio.h>
Int main ( )

{
    int a, l, w;

    Printf ("Enter value l \n");
    Scanf ("%d", &l);

    Printf ("Enter value w\n"0);
    Scanf ("%d", &w);

    a = l x w;

    Printf ("Area of rectangle is = %d\n", a);

    return 0;

}
```

Describe the following parts of the program code above

(10 marks)

- (i) < stdio.h >
- (ii) Main
- (iii) int a, l, w
- (iv) Printf
- (v) Scanf

END