**Candidate’s Name:…………………………………………………………………**

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| **ESC.NO** | **788H5197** | **2109UNE876** | **CAD** |

**840/1**

COMPUTER STUDIES

**Paper 1**

**Oct,/Nov …………**

**2½ hours**

**Uganda Certificate of Education**

COMPUTER STUDIES

**Paper 1**

**2 Hours 30 minutes**

**INSTRUCTIONS TO CANDIDATES:**

* *Write your name on the space provided*
* *This paper is made up of three sections: A, B and C respectively.*
* *Section A contains 20 compulsory objective- type questions. Write your best alternative in the box provided*

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **For Examiners’ Use Only** | | | | | | | | | | |
| **MCQ** | **21** | **22** | **23** | **24** | **25** | **26** | **27** | **28** | **29** | **Total** |
|  |  |  |  |  |  |  |  |  |  |  |

* *Section B contains structured questions. Answer all of them from the space provided*
* *Section C contains three essay questions. Answer only one*

1. Application software programs on request by an auditing firm are shown below with there application. Which of them is the most relevant for this firm?
2. Microsoft Power Point, Corel Presentation –Presenting work on slides
3. Word Pad, Microsoft Word 2007 – Typing text
4. SQL, Oracle, Microsoft Access – Database Management
5. Tally, QuickBooks, Microsoft Excel – Computerized Accounting
6. Samuel created a simple database management system for his car parking lot. Which record has invalid data entries?

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **NAME** | **CAR PLATE** | **CAR TYPE** | **TIME IN** | **TIME OUT** |
| A | JJUKO | UBB 234F | IPSUM | 7:43 PM | 8:05AM |
| B | APENDI | UAE 775D | SUBARU | 6:45PM | 9:17AM |
| C | 0P0ND0 | UBC IIIK | BENZ | Evening | Morning |
| D | Kagoya | UAZ 671T | CANTER | 4:24 PM | 10:51 AM |

1. Which computer generation first made computers available for commercial purchase to individuals?
2. Second Generation
3. Third Generation
4. First Generation
5. NONE of the Above.
6. The following are multimedia file extensions except
7. .exe
8. .gif
9. .mp4
10. .jpeg
11. Which of the following imaging input device is used purposely for security issues?
12. Digital camera
13. Video Camera
14. Closed Circuit Television Camera
15. Camcorder.
16. The best illustration to show Kispang Sending his application letter to Akirapa via email would be?

KISANG

AKIRAPA

1. .
2. .

AKIRAPA

KIPSANG

1. .

AKIRAPA

KIPSANG

1. .

KIPSANG

AKIRAPA

1. (i) and (iv)
2. (iv) only
3. (iii) and (ii)
4. (i) only
5. Choose the operating system which is not suitable to be used on school computers.
6. Disk Operating System (DOS)
7. Windows O/S (XP)
8. Windows O/S (VISTA)
9. Windows 2007
10. The software needed by a laser jet printer to be recognized by the computer is.
11. Anti virus
12. Screen saver
13. Device driver
14. Winrar
15. Last stage in System Development Life Cycle (SDLC) is
16. Testing
17. Documentation
18. System Design
19. System Analysis
20. What is the keyboard shortcut for creating a new page?
21. Ctrl + U
22. Ctrl + N
23. Ctrl + C
24. Ctrl + V
25. Lower case formatting feature has been expressed in which of the following typed text?
26. **COMPUTER**
27. COMPUTER
28. COMPUTER
29. computer
30. Automatic Teller Machine used in the banking industry uses …………….. mode of communication.
31. Full duplex
32. half duplex
33. Simplex
34. Bank duplex
35. A wrong match can be observed in which of the following measurements?
36. Screen – resolution
37. Image – Pixel
38. Hard disk – dot per inch
39. Processor speed – GHZ
40. Avast, Screen saver, Winrar can be classified under
41. Audio Editing software
42. Video Editing software
43. Programming languages
44. Utility programs
45. The table below shows links recommended by Video Jokers in Central and Eastern parts of Uganda

|  |  |  |
| --- | --- | --- |
|  |  |  |
| **[www.munnowatch.com](http://www.munnowatch.com)** | **[vjjuniorjingo@yahoo.com](mailto:vjjuniorjingo@yahoo.com)** | **GOOGLE** |

**Use the table above and choose the best corresponding links with the table below**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| A | email | Search engine | website |
| B | website | email | Search engine |
| C | Search engine | website | email |
| D | email | website | Search engine |

1. It is advisable not to bring magnets near the …………………….. storage media
2. Flash disk
3. DVD-ROM
4. Pen Drive
5. Floppy disk.

The device above was used in the ancient computers as a typical input device. It is referred to as

1. Magnetic Drum
2. Vacuum tube
3. Punched Card
4. Integrated Circuit
5. Remotes use …………………………to change from one TV station to another wirelessly.
6. Infra red waves
7. Radio waves
8. Bluetooth technology
9. Satellite technology
10. Hacking, Phishing, Spamming, Eavesdropping are examples of
11. Computer viruses
12. Computer professions
13. Computer crimes
14. Computer Characteristics
15. Which of the following statement is false about emerging Social Media sites in the technological world today?
16. You can send an excel file as an attachment on WhatsApp
17. Access to face book can be achieved after signing up for an account or logging in incase you already have an account
18. We can send and receive money via WhatsApp virtually
19. You can post a video on your WhatsApp status or on your face book page.

**SECTION B (60 MARKS)**

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

1. **(a)** Fill in the following **countries of origin** of the important personalities in the history of computers. (*5 marks*)

|  |  |
| --- | --- |
| **PERSONALITY** | **COUNTRY OF ORIGIN** |
| CHARLES BABBAGE | ………………………………. |
| HERMAN HOLLIRETH | ………………………………. |
| JOHN NAPIER | ……………………………….. |
| BLAISE PASCAL | ……………………………….. |
| LEIBENIZ | ……………………………….. |

**(b)** Explain the causes of the following **features** in the history of computer generations

(i) **Decrease in computer size** in second generation (*2 marks*)

………………………………………………………………………………………………………………………………………………………………

(ii) Third Generation computers could now **fit on a table** (*2 marks*)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

(ii) First generation Programming language was **not user friendly** (*1 mark*)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

1. (a) With an example, State the major difference between **digital computers** and **Hybrid computers**. (*6 marks*)

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

………………………………………………………………………………………………………………………………………………………………………………………………………………………………………………

(b) The following illustrations describe computers categorized according to size. Name them **according to size** (*4 marks*)

……………… ………………… ……………… …..………

1. (a) Identify **two** application software where simple calculations can be done.

(*2marks*)

………………………………………………………………………………………………………………………………………………………………

(b)Explain the following features as used in **presentation software**

(i) Slide hiding. (*2 marks*)

………………………………………………………………………………………………………………………………………………………………

(ii) Clip Art (*2 marks*)

………………………………………………………………………………………………………………………………………………………………

(c) What is a **wild card** as used in Database management system?(*2 marks*)

………………………………………………………………………………………………………………………………………………………………

(d) With example, state **two** functions of wild cards in a computerized database. (*2 marks*)

………………………………………………………………………………………………………………………………………………………………

1. (a) Distinguish between **cyber crime** and **cyber ethics**. (*4 marks*)

………………………………………………………………………………………………………………………………………………………………

………………………………………………………………………………………………………………………………………………………………

(b) Outline **two** cyber ethics teachers entering student’s marks in school computers should exhibit. (*2 marks*)

………………………………………………………………………………………………………………………………………………………………

………………………………………………………………………………………………………………………………………………………………

(c) Explain how following physical control measures are used to ensure computer and data security in an organization.

(i) Smart Card (*2 marks*)

………………………………………………………………………………………………………………………………………………………………

(ii) Iris scanner (*2 marks*)

………………………………………………………………………………………………………………………………………………………………

1. (a) What are **boot files**? (*2 marks*)

………………………………………………………………………………………………………………………………………………………………

(b) Explain why the following activities are important during the booting of a computer (*2 marks*)

|  |  |
| --- | --- |
| ***Power On Self Test*** | ***Switch User Screen*** |
| …………………………………………  ………………………………………..  ……………………………………….. | ……………………………………  ……………………………………  …………………………………… |

(d) State **three** advantages of the **Power Supply System** in the booting of the computer. (*3 marks*)

………………………………………………………………………………………………………………………………………………………………

………………………………………………………………………………

(e) Describe the functions of the following devices in **electric- management** of computers in a computer laboratory.

(i) Power Stabilizer (*1 marks*)

………………………………………………………………………………………………………………………………………………………………

(ii) Power Surge Protector (*1 marks*)

………………………………………………………………………………………………………………………………………………………………

(iii) Un interruptible Power Supply (**UPS**) (*1 mark*)

………………………………………………………………………………………………………………………………………………………………

1. (a) Differentiate between **Cloud computing** and **Cyber Storage** (*4 mark*)

………………………………………………………………………………………………………………………………………………………………

………………………………………………………………………………………………………………………………………………………………

(b) Study the diagram representing a **star topology** and answer corresponding questions.



A

C

D

(c) Name devices labeled (*3 marks*)

(i) **A**…………………………………………………………………….

(ii) **C**…………………………………………………………………….

(iii)**D**…………………………………………………………………….

(d) State the functions of part labeled **D** (*1 mark*)

………………………………………………………………………………………………………………………………………………………………

(e) Identify one example of device **C** (*1 mark*)

………………………………………………………………………………

(f) State the **network model** illustrated in the diagram (*1 mark*)

………………………………………………………………………………

**SECTION C (20 Marks)**

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

1. As a senior programmer, You have been tasked by the Electoral Commission department of Bukwo District to design a program that will ease the commission to know and declare winners and losers in the forth coming National elections in 2021 at different posts using the following criteria

* If contestant gets **51%** of votes or Above He/She is declared **WINNER**
* If Contestant gets **50%** of Votes, He/She is declared **RE-COUNTER** and the voting process will have to be repeated among the contestants
* If Contestant gets below **50%** of votes, He/She is declared **LOSER**

1. Design a simple system interface (***use pen***) on how your system will look like for user interaction (*5 marks*)
2. Draw a **flow chart** for your program (*9 marks*)
3. Write a **pseudo code** for your program (*6 marks*)
4. (a) Differentiate between a **tag** and a **link**. (*4 marks*)

(b) A school is willing to adopt e-learning services to its students during the corona virus pandemic so that students are not left out with learning.

(i) Briefly explain how the e-learning services will be used by students

(*4 marks*)

(ii) Explain **three** advantages and **three** disadvantages of these services.

(*12 marks*)

1. Mutebi has audio songs of **8GB** on his flash disk.
2. If each song contains **4000 KBs**, how many songs are on the flash disk?

(*5 marks*)

1. If the flash disk has a memory capacity of **2.8 TB**. Calculate the space left on the flash disk. (*Give your answer in* **MBs**) (*10 marks*)
2. He wanted to transfer the songs to a DVD – RW discs of **700MBs** each. How many discs would he require for storing the songs? (*5 marks*)

**END**