**St**u**d**e**nt's Name..........................................................................................................**

**Signature .....................................................Personal Number................................**

**(*Do not write your School / Centre Name or Number anywhere on this booklet.*)**

**840/1**

**COMPUTER STUDIES**

**Paper 1**

**June 2019**

21*/*2 hours

**EQUATORIAL COLLEGE SCHOOL**

**Uganda Certificate of Education**

**COMPUTER STUDIES**

**Paper 1**

2 hours 30 minutes

**INSTRUCTIONS TO CANDIDATES:**

*Write your signature, Random number, Name and subject code in the spaces provided 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. Totaling to20 marks.*

*Section* **B** *contains* **six compulsory** *structured questions*. *Each question takes 10 marks totaling to 60 marks Answers to section* **B must** *be written in the spaces provided in the question paper.*

*Section* **C** *contains* **three** *essay type questions. Answer only* **one** *question that takes 20 marks*.

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

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

**For Examiners’ Use only**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **MCQ** | **Q21** | **Q22** | **Q23** | **Q24** | **Q25** | **Q26** | **Section C** | **TOTAL** | **Grade** |
|  |  |  |  |  |  |  |  | **Turn Over** |  |

**SECTION A (20 MARKS)**

1. To connect a computer to a network, a user’s machine should have a (n).
2. NIC
3. RJ45
4. IP
5. ISP
6. The ability of a computer to automatically configure peripheral devices is known as ………………………
7. Supervision
8. Drivers
9. Registering
10. Plug and play
11. When system peripherals stop working suddenly, computer users can be advised to start by ………………..
12. Identifying the cause of the fault
13. Buying a new peripheral device
14. Changing the version of the peripheral
15. Going to another computer
16. Which of the following program development stage is for starting to develop a program to solve user’s needs?
17. Need identification
18. Problem coding
19. Program design
20. Program testing
21. System device configurations checked during the booting process are generally kept in the?
22. RAM
23. BIOS
24. CMOS
25. POST

**Turn Over**

1. Which of the following computer generations represents the invention of the operating system?
2. First generation
3. Second generation
4. Fourth generation
5. Third generation
6. A real system development process contains
7. System analysis
8. System design
9. Testing
10. Coding
11. (i) only
12. (i) and (ii) only
13. (ii) and (iv) only
14. (i), (ii) and (iv)
15. Which of the following components is an element of the central processing unit?
16. CMOS
17. RAM
18. Accumulators
19. Pixels
20. The program that loads operating system into memory during computer system start-up is……………………..
21. DOS
22. Boot strap
23. BIOS
24. POST

**Turn Over**

1. Which one of the following practices would slow down the speed of the computer system?
2. Increasing the amount of RAM
3. Running several software applications at the same time
4. Using a smaller screen or monitor
5. Using a very small mouse
6. In computer studies troubleshooting refers to a form of
7. Problem solving
8. Data security measures
9. Protecting the computer
10. Crime preventing
11. A local area network that uses World Wide Web standards transmissions, uploads and downloads is referred to as………………………..
12. Extranet network
13. Closed network
14. Intranet network
15. SOHO network
16. Which of the following statements is correct about mail merge feature of word processors?
17. It is used to develop multiple copies of the same letter for different recipients
18. It is used to send multiple copies of the same letter to different recipients.
19. It is used to import multiple copies of the same letter
20. It is used to export multiple copies of the same letter
21. In program coding a term used to represent one or several variables, operators, constants, or values is referred to as?
22. An expression
23. A source code
24. A statement
25. A function

**Turn Over**

1. At what stage of programming is the programmer involved in checking for the code errors for correction?
2. Program debugging and testing stage
3. Program coding stage
4. Program Analysis stage
5. Program correcting and clearing stage
6. Computer ethics would best be described by …………………………...
7. Being polite on line
8. Trade names
9. Trade marks
10. Copyrights
11. A ……………… is a preliminary working version of a software product for demonstration and evaluation by end users.
12. Version
13. Release
14. Prototype
15. System life cycle
16. Which one of the following wild card is used to represent any string of text from nothing up to an entire paragraph or more?
17. Asterisk (\*)
18. Double asterisk (\*\*)
19. Question Mark (?)
20. Two question marks (??)
21. Which of the following hardware devices is an input component?
22. Monitor
23. CPU
24. Keyboard
25. CD ROM

**Turn Over**

1. Which of the following is correct about electronic spreadsheets?
2. One can perform calculations in spreadsheets.
3. One can create a letter using a spreadsheet.
4. A student can type an essay using a spreadsheet.
5. A student can download information using spreadsheets.

**SECTION B (60 MARKS)**

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

1. (a) Define the phrase of “**computer generations**” (2 marks)

b) Give **two** reasons to support the study of the history of computers. (2 marks)

(C) If a DVD has a capacity of 21GB. How many CD-Rs of 650MB would be required to store information on the DVD? (3 Marks)

1. (a) Briefly explain the following technologies used in data storage and information.
2. **Optical technology** (2 marks)
3. **Solid state technology** (2 marks)

**Turn Over**

(b) Give **two** uses of a mouse on a computer system. (2 marks)

(c) Give **four** stages involved in the booting process of a computer (4 marks)

1. (a) Give **three** arithmetic functions found in electronic spread sheets (6 marks)

(b) Give **two** examples of electronic database software. (2 marks)

(c) Give **two** uses of query objects created in electronic databases. (2 marks)

1. (a) In relation to computer communication and networks, explain the meaning of the following terms
2. **Server** (2 marks)

1. **Client**

**Turn Over**

(b) (i) State **three** advantages of depending on computer networks (3 marks)

(ii) Write the acronym **MODEM** in full (1 mark)

(iii) Give **two** advantages a school would enjoy having a website (2 marks)

1. (a) Give **three** features of an electronic word processor interface. (3 marks)

(b) Give ***two*** publications that can be created using desktop publishing (DTP) software. (2 marks)

(c) Give **one** use of each of the following electronic presentation features

(i) **Slide master**: (1 mark)

(ii) **Slide sorter view**: (1 mark)

**Turn Over**

(d) State **three** uses of electronic presentation software (3 marks)

1. (a) State **three** ways of error detection in a program code (3 marks)

(b) Briefly explain the following categories of program codes

(i) **Source code:** (1 mark)

(ii) **Object code:** (1 mark)

(c) Name **two** categories of operating systems (2 marks)

(d) Supposing a computer user installed Windows 7 software on his/her computer. Give **three** functions the software can perform in the computer system. (2 marks)

**Turn Over**

**SECTION C (20 MARKS)**

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

1. (a) You are provided with the following computer hardware parts and other electrical accessories:
2. Monitor power cable
3. AC main socket outlets
4. System Unit power cable
5. Keyboard
6. HDMI cable
7. Extension Cable with six ports
8. System Unit
9. Monitor
10. Mouse

Describe how they can be assembled to make a complete functioning computer **(06 marks)**

**(b)** Assuming that you have been provided with the following tools; anti-virus utility tools kit, five CCTv cameras, cable seals, Alarm alert devices, device engraving tool, burglar proof set, ten automatic security lights, G7 model Firewalls kit, and a security guard. Demonstrate how you would use the above mentioned tools to enhance computer systems security. ***(09 marks)***

**(c)** Identify **five** technical problems which can hinder computer use and suggest a solution to each. ***(05 marks)***

1. **(a)** Explain the process of program development cycle. ***(08 marks)***

**(b)** Mountain Biking wants an application that allows the store clerk to enter an item’s price and the quantity purchased by a customer, but every item is charged a tax of 200. The application should calculate the total amount the customer owes by multiplying the price by the quantity purchased plus the tax. It should then display the total amount owed.Using ***C*** or ***VB*** programming language help Mountain Biking to achieve their needs. ***(12 marks)***

1. **(a)** Explain **five** computer professions in Uganda. ***(10 marks)***

**(b)** Due to the increasing technology around the globe, various computer crimes have been committed by various categories of people. Explain some of these crimes. ***(10 marks)***

***END***

**NAME …………………………………………………...…SIGNATURE…….…………NO……….**