

FORM TWO COMPUTER STUDIES, TERM 1 2023

TIME: 2HOURS

1. Define the following terms

Computer (2mks)

Electronic device capable of receiving data and performs a sequence of operations to produce output also known as information.

Data (2mks)

Raw facts such as numbers, letters and symbols that have no meaning to the user.

Information (2mks)

Processed data that is meaningful to the user.

Processing (2mks)

Is manipulation of data to turn into information.

Program (2mks)

Is a set of instructions that a computer uses to perform a specific function.

2. State the different physical parts that make up a computer. (4mks)

- i. Central processing unit
- ii. Monitor
- iii. Mouse
- iv. Keyboard
- v. printer

3. Why is a mobile phone regarded to be a computer? (5mks)

It is electronic, has a screen, keypad, memory and is programmable.

4. State and explain 4 characteristics of a computer. (4mks)

- Speed. A computer works with much higher speed and accuracy compared to humans while performing mathematical calculations. ...
- Accuracy. Computers perform calculations with 100% accuracy. ...
- Diligence. ...
- Versatility. ...
- Reliability. ...
- Memory.

5. Classify computers. (3mks)

We classify according to:

Physical size

Purpose

Functionality

6. Why the screen is also called monitor? (3mks)

Because it enables the user to monitor or see what is going on in the computer system.

7. Match the following generations of computers with the technology used to develop them.(4mks)

- | | |
|----------------------|--------------------------------------|
| a. First generation | Very large scale integrated circuits |
| b. Second generation | Thermionic valve (vacuum tubes) |
| c. Third generation | Transistors |
| d. Fourth generation | Integrated circuits |

1. First generation –thermionic valve (vacuum tubes)
2. Second generation- transistors
3. Third generation-integrated circuits
4. Fourth generation-very large scale integrated circuits.

8. Identify five areas where computers are used. (5mks)

- Supermarkets*
- Offices*
- Banks*
- Industries*
- Health institutions*
- Transport*
- Law enforcement*
- Education*
- Domestic and entertainment*
- Library services*
- Communication*

9. What were the characteristics of the first generation computers? (6mks)

- a) *Use of vacuum tubes to make circuits*
- b) *Use of magnetic drums*
- c) *Use of machine language and symbols in instructions*
- d) *Very small amount of storage space*
- e) *Use of punch cards as I/O devices*
- f) *Huge in size and poor in mobility*
- g) *Very slow and less reliable output*
- h) *Use of high electricity*
- i) *Generates too much heats*
- j) *Complex and expensive to maintain*

10. Who developed the analytical engine? (2mks)

Charles Babbage

11. Define the term artificial intelligence. (4mks)

Is the ability of a computer or a robot controlled by a computer to do tasks that are usually done by humans because they require human intelligence and discernment?

12. With the aid of a diagram differentiate between tower and desktop types of system unit. (6mks)

13. Write the following acronyms in full: (6mks)

- a. ENIAC-electronic numeric integrator and calculator
- b. VLSI-very large scale integrated
- c. IC-integrated circuits

14. Match the following computer application areas with the role played by computers in each case: (8mks)

- | | |
|-------------------|-------------------------------|
| A. Supermarket | Matching fingerprints |
| B. Hospital | Entertainment |
| C. Bank | Stock control |
| D. Hotel | Booking Rooms |
| E. Home | Analyzing academic data |
| F. School | manufacturing process control |
| G. Industry | Life support machines |
| H. Police station | Processing cheques |