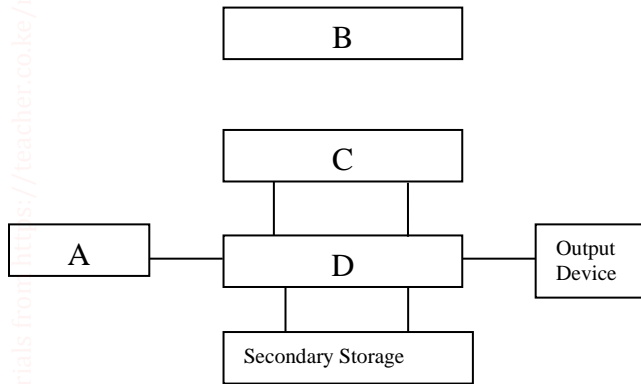


**FORM THREE
COMPUTER STUDIES
HOLIDAY ASSIGNMENT
APRIL, 2024**

1. The diagram below represents the essential features of a computer system. Study the diagram and answer the questions that follow.



- i. Name the components [2 marks]

A _____

B _____

C _____

D _____

- i. On the diagram above, indicate the direction of data flow using arrows. [2 mark]
- ii. Describe the **three** types of buses in a computer system. [3 marks]
2. Describe the functions of the following computer hardware components. [2 marks]
- i. Mouse
- ii. Scanner
3. State any **two** features of a user-friendly program. [2 marks]
4. Differentiate between COM ports and LPT ports. [3 marks]
5. Give **three** features of a computer virus. [3 marks]
6. a) What is a computer laboratory? [1 mark]
- b) State **three** measures put in place to ensure security of computer hardware in the computer laboratory. [3 marks]
7. Define the following terms. [3 marks]
- a) Program
- b) Computer program
- c) Programming Language
8. List four devices under the control of the operating system. [2 marks]
9. Differentiate between source code and object code [2 marks]
10. i) State **three** differences between a compiler and an interpreter [3 marks]
- ii) Describe **four** disadvantages of Low-level Languages. [4 marks]

11. (a) Using the **place value method**, convert 23_{10} binary (2marks)
- (b) Using two's complement, subtract 14_{10} from 27_{10} and give the answer in binary notation. (4 marks)
- (c) Convert
- i) $91C_{16} \longrightarrow X_{10}$ (3marks)
- ii) $377_8 \longrightarrow X_{10}$ (3marks)
- iii) $254.05_{10} \longrightarrow X_2$ (3marks)

