April 2026

Time: 2 Hours

Code: CKEAB 004

LEARNER'S DETAILS

Name: _____School: _____

Assessment Number: _____School Code: _____ Date: _____Signature: _____

INSTRUCTIONS TO LEARNERS

   i.   Answer all questions in the spaces provided.

  ii.   All answers must be structured, with explanations and examples where necessary.

 iii.   Use diagrams, tables, and calculations where applicable.

  iv.   Show all workings for conversions or calculations.

   v.   Total marks: 80.

SECTION A: (80 MARKS)

1. A school project requires learners to investigate early computing machines and modern computers.

a) Identify FOUR early computing devices and give ONE use for each. (8 marks)

Early computing device	Use
i.	
ii.	
iii.	

b) Explain ONE reason why early mechanical computing devices led to the development of electronic computers. (1 mark)

_____.

_____.

c) Define a computer. (1 mark)

_____

_____

2. a) State the main technology used in each computer generation: (5 marks)

i) First generation: _____

ii) Second generation: _____

iii) Third generation: _____

iv) Fourth generation: _____

v) Fifth generation: _____

b) Explain THREE technological improvements that occurred across generations. (3 marks)

i. _____.

ii. _____.

iii. _____.

c) State TWO ways computer evolution has influenced modern society. (2 marks)

i. _____.

ii. _____.

3. a) Identify FIVE functional components of a modern computer system. (5 marks)

i. _____.

ii. _____.

iii. _____.

iv. _____.

v. _____.

b)Explain the relationship between CPU, memory, and input/output devices. (3 marks)

i. _____.

ii. _____.

iii. _____.

4. a) Convert the following numbers: (6 marks)

i) $45_{10} \rightarrow$ binary

ii) $11011_2 \rightarrow$ decimal

iii) $7A_{16} \rightarrow$ decimal

b) State TWO reasons why computers use the binary number system. (2 marks)

i. _____.

ii. _____.

5. a) Define: (2 marks)

i) RISC architecture:

_____

ii) CISC architecture:

_____

b) Highlight THREE differences between RISC and CISC architectures. (4 marks)

i. _____.

ii. _____.

iii. _____.

6. a) Classify the following as input or output devices and state their category: (5 marks)

i) Keyboard: _____

ii) Mouse: _____

iii) Scanner: _____

iv) Printer: _____

v) Touch screen: _____

b) State THREE factors to consider when selecting input/output devices. (3 marks)

i. _____.

ii. _____.

iii. _____.

c) State TWO advantages of touch screen technology. (2 marks)

i. _____.

ii. _____.

7. a) Differentiate between: (4 marks)

i) Primary storage and secondary storage

. _____.

. _____.

. _____.

. _____.

ii) RAM and ROM

. _____.

. _____.

. _____.

. _____.

b) Identify FOUR secondary storage devices and classify them as internal or external. (4 marks)

i) _____

ii) _____

iii) _____

iv) _____

8. a) Define the fetch-execute cycle. (2 marks)

. _____.

. _____.

b) Describe FOUR stages involved in the cycle. (4 marks)

i. _____.

ii. _____.

iii. _____.

iv. _____.

9. a) Differentiate between system software and application software. (4 marks)

. _____.

. _____.

. _____.

b) State TWO examples of each type of software. (4 marks)

i. _____.

ii. _____.

10. a) Explain TWO ways computers have transformed education and business. (4 marks)

i. _____.

ii. _____.

b) State TWO safety precautions to observe when using computers in a laboratory. (2 marks)

i. _____.

ii. _____.