



**FORM 3 COMPUTER STUDIES**  
**CAT 3 TERM 1 2016**  
**TIME: 2 HOURS**

<i>Date done</i>	
<i>Invigilator</i>	
<i>Date returned</i>	
<i>Date revised</i>	

**Instructions**

- Write your name and admission number in the spaces provided above.
- This paper consists of two sections A and B.
- Answer ALL the questions in section A.
- Answer question 16 (compulsory) and any other three questions from section B.

**FOR EXAMINER'S USE ONLY**

SECTION	QUESTIONS	MAX. SCORE	CANDIDATE'S SCORE
A	1 – 15	15	
	16	15	
B	17	15	
	18	15	
	19	15	
	20	15	
	<b>TOTAL SCORE</b>	<b>100</b>	

**SECTION A**

**Answer all questions in this section.**

1. (a) Define the following terms as used in data processing. (4mks)
  - (i) Data
  - (ii) Information
  - (iii) Data processing
  - (iv) Data processing cycle
- (b) What is the difference between data input and data output? (2mks)
2. Explain any four ways in which threats to data integrity can be minimized. (4mks)
3. What is a computer file? (2mks)
4. State the advantages of computerized filing system. (4mks)

5. Define the following terms:- (2mks)

(i) Keyboard

(ii) Mouse

6. Discuss four common mouse operations. (2mks)

7. (a) What is booting? (1mk)

(b) Differentiate between cold booting and warm booting. (2mks)

8. Explain the term system unit and name some of the components found on it. (4mks)

9. What precaution would you take in the computer room in case: (2mks)

(a) The humidity falls below normal for prolonged period due to weather change.

(b) Users complain of backaches after long periods of using the computer.

10. Define the following terms:- (3mks)

(a) Hardwares

(b) Softwares

(c) Live wares

11. State two differences between flexible keyboard and ergonomic keyboard. (2mks)

12. Discuss three types of mouse. (3mks)

13. State the type of scanner that is used to perform the following functions. (3mks)

(a) Analyses responses to structured questionnaires

(b) Read barcode in products

(c) Used to read cheques in banks

14. Define the term digitizer. (1mk)

15. State two functions of a joystick. (2mks)

**SECTION B**

**Answer question 16 (compulsory) and any other 3 questions form this section.**

16. Discuss errors in data processing. (15mks)

17. (a) Differentiate between logical files from physical files. (3mks)

(b) Explain six types of computer processing files. (12mks)

18. (a) Name three parts that make up a central processing unit. (3mks)

(b) Give four differences between Read Only Memory and Random Access Memory. (4mks)

(c) Define the following terms:- (3mks)

(i) Buffer

(ii) Cache

(iii) Registers

(d) (i) Define the term bus. (2mks)

(ii) Explain three types of buses found in the central processing unit. (3mks)

19. (a) Define an output device. (2mks)

(b) State the difference between softcopy and hardcopy output devices. (2mks)

(c) Discuss the three types of monitors. (6mks)

(d) Differentiate between impact printers and non-impact printers. (4mks)

(e) What is a plotter? (1mk)

20. (a) Define the term secondary storage device. (2mks)

(b) Distinguish between the following terms:-

(i) Octal numbers

(ii) Hexadecimal numbers

(iii) Decimal numbers

(iv) Binary numbers

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(e) What is a plotter? (1mk)

20. (a) Define the term secondary storage device. (2mks)

(b) Distinguish between the following terms:-

(i) Octal numbers

(ii) Hexadecimal numbers

(iii) Decimal numbers

(iv) Binary numbers



(c) Convert the following binary numbers to decimals. (6mks)

(i)  $101_2$

(ii)  $1101_2$

(iii)  $111001_2$

(d) Convert 6410 to its binary equivalent. (3mks)