

MARKING SCHEME

- 1.(a) Explain the emerging trends in Microcomputer technology in relation to size ✓*Computers have become smaller and fast and efficient from desktop to laptops to palmtop computers.*
 (b) Give two reasons why smaller computers like Laptops tend to be more expensive than Desktop computers. ✓*Laptops have rechargeable batteries* ✓*laptops are portable.* ✓*laptops have higher memory than desktops*
3. Identify three facilities that will ensure proper ventilation in a room. ✓*Large windows and doors* ✓*Installation of fans* ✓*Room should have vents* ✓*Installation of conditioners*
4. Explain the following software terms:
 (i) Authenticity. ✓*Genuiness of a software*
 (ii) Portability. ✓*ability of a software to be installed in more than one computer*
 (ii) Modularity.

5. Differentiate between bolding and highlighting text. ✓*Bolding makes text appear more darker* ✓*highlighting is selection of a block of text, when selected text appear with blue background*

6. Describe the procedure to be followed when entering
 (a) a negative number in a cell
 (b) a fraction in a cell.

7. The cells K3 to K10 of a worksheet contain remarks on students’ performance such as *Very good, Good, Fair and Fail* depending on the average marks. Write a formula that can be used to count all students who have the remark “*Very good*”. ✓*COUNTIF(K3:K10,"Very good")*

8. A student’s database comprises of students’ details table and fees received table as shown below:

Students’ details table	Fees Received table
Surname	Date
Middle Name	Amount
First Name	Receipt Number
Admission Number	
Course	

- (i) State the primary key field for each table. ✓*student table- Admn no* ✓*Fees table Receipt No*
 (ii) State the field which should serve as the linking field for the two tables. ✓*Admno.* ✓*Receipt no*
 (iii) Highlight the name of the relationship formed when the 2 tables are linked ✓*One to one*

9. Explain the following as used in DTP:

- (a) Master pages. ✓*a page used in designing the general layout that is to be replicated in all other pages*
 (b) Tracking ✓*changing the spacing between all text characters by either reducing or increasing the spaces*
 (c) Kerning ✓*changing the spacing between two specific text characters.*

10. Give four examples of search engines you know. ✓*Chrome.* ✓*opera* ✓*Google* ✓ *Mozilla fire fox*

11. State five possible ways of preventing data loss from a computer.

- ✓*Reinforcing weak access points.* ✓*Encryption of data transmitted through network .* ✓*keeping backup in different locations to avoid data loss* ✓*Installing updated antivirus .* ✓*Save your work regulary*

12. Write out what A, B, C and D represent in the table below. (4mrks)

Number System	Values
A	0, 1 – <i>Binary number system</i>
B	1, 2, 3, 4, 5, 6, 7 8, 9 <i>Decimal number system</i>
C	0, 1, 2, 3, 4, 5, 6, 7, <i>Octal number system</i>
D	0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E,F <i>Hexadecimal</i>

b). Use Two’s compliment to perform the following Binary subtraction: (2mrks)

$$10111_2 - 10001_2 = 22_{10} - 17_{10} = 6_{10}$$

8 BIT – 00010001

Complement =11101110

Add 1 + 1

-17₁₀ 11101111

 +

Add to 22₁₀ 00010111

 (1)00000110

=00000110

13. In Real-time systems, Front-End Processors are quite useful. State any three reasons why you think they are important. ✓provides immediate feedback. ✓accurate upto date information is provided ✓quick response

14. What does the following abbreviations stand for: (2mrks)

- i) FORTRAN ✓FORmula TRANslator
- ii) COBOL ✓Common Business Oriented Language
- iii) OOP ✓Object Oriented Program
- iv) BASIC ✓Beginners All purpose Symbolic Instruction Code

b) Define the following types of computer program errors: (2mrks)

- (i) Syntax error. ✓Error emanating from improper use of language rules
- (ii) Logical error ✓Errors that prevent the program from doing what its expected to do

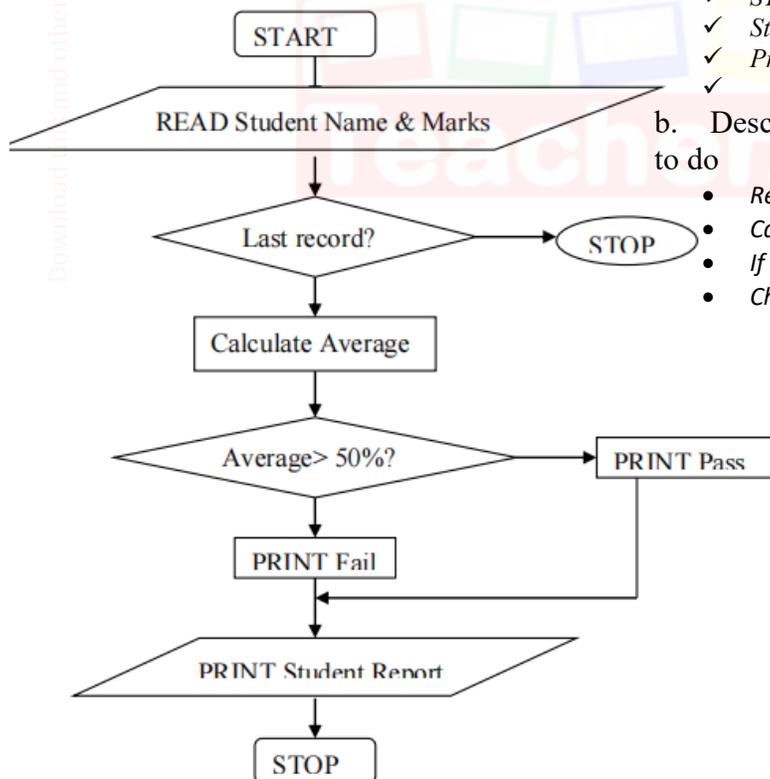
14. The flowchart below was designed by a form three student.

a. Identify three problems in this flowchart

- ✓ STOP is in the middle of the flow chart
- ✓ Stop is after a decision has been made
- ✓ Print symbol is supposed to be a parallelogram
- ✓

b. Describe briefly what this program is supposed to do

- Read student name and marks
- Calculate the average
- If average is >50% output pass Else output fail
- Check the last record and produce student report



15. State and explain two purposes of information systems in organizations

- ✓ Chance to improve quality of internal processes and service delivery in an organization

- ✓ *Facilitated sharing of information*
- ✓ *Helps in decision making by collecting operational data analyzing and generating reports*

