KAPSABET HIGH SCHOOL

Kenya Certificate of Secondary Education

COMPUTER STUDIES FORM 3 END TERM EXAM

TERM 1, 2025
TIME: 2 Hours

NAME: _____ ADMNO: _____

CLASS: _____

Question	Marks
1-11	
12	
13	
14	
TOTAL	

INSTRUCTIONS:

(Answer all the questions inside the textboxes ONLY), Once done$ ready to summit....

Previous Marks_____

Save your work as PDF (Name= Class_AdmNo_FirstNameLastName **eg** 3A_15001_KylianMbappé**)**

SECTION A (25 MARKS)

1. Define the following terms as used in Computer studies:

   (i) Nibble **(1mark)**

   (ii) Word **(1mark)**

2. State the difference between Batch and real time processing then give an example in each case **(2marks)**

3. Mr. Omambia games teacher at Star High School wants to invite several schools for the hockey tournament. He was advised to use mail merging technique to create invitation letters for the respective schools identified. State **four** benefits of this technique **(2marks)**

4. The final activity in data processing cycle is producing the desired output. Mention three ways of disseminating the desired output (**3marks**)

5. Convert ADAEFH to Octal number system **(2marks)**

6. A company has decided to computerize their operations. They have decided to purchase packages standard software instead of developing their own programs. Give three advantages of standard software. **(3marks)**

7. State the functions of the following disk management operation.

   (i) Partitioning **(1mark)**

   (ii) Disk defragmentation **(1mark)**

8. List two limitation of low-level programming languages **(2marks)**

9. Demonstrate three ways in which -21_{10} can be represented in a binary form **(3marks)**

10. Describe the concept of binary search method as used in sequential file organization **(2marks)**

11. Describe **two** ways of resolving windows related problem like missing operating system **(2marks)**

SECTION B: (45 MARKS)

12.

(a) Define the following terms

    i.   Amplitude **(1mark)**

(b) Use twos compliment to subtract 20_{10} from 10_{10} and write your answer in decimal notation **(4marks)**

(c) Mention three attributes of a Machine language (**3marks**)

(d) State two functions of a language translator in program development (**2marks**)

(e) State 3 Examples of 4GLs and 3 Examples of 5GLs (**3marks**)

4GLs	5GLs
1.	1.
2.	2.
3.	3.

13.

(a)

(i) Briefly describe two functions of a query as used in database   (**2marks**)

(ii) Explain the following features of a DBMS

(i)   Macro   (**2marks**)

(ii)   Module   (**2marks**)

(b) Describe two types of controls used when designing a form as a user interface in a databases   (**2marks**)

(c)

A database was used to keep results for a class of students. Part of the database is shown below in Table called MARKS.

Name	School Number	Math	English	Science	History	Geography
Paul	017	70	55	65	62	59
Ravi	0009	29	34	38	41	44
Chin	0010	43	47	50	45	52
John	0013	37	67	21	28	35
Diana	001	92	88	95	89	78
Rosanna	0016	21	13	11	27	15

i) Suggest how you can set an input mask for the name field such that data entered in the field is automatically change to title case   (**2marks**)

ii)Show how the dynaset will appear if the following parameters are set as shown in the query extract below
                                                                                        (**3marks**)

Field Name	Name	History	Geography	Science	Math
Table	MARKS	MARKS	MARKS	MARKS	MARKS
Sort					
Show	√	√	√		
Criteria		>60			
Or			>60		

(d) Write an expression that when typed at the builder will compute total marks per subject for the students

(2marks)

14.

(a) Describe how the operating system handles the following in a computer system:
   (i) Data and program protection **(1mark)**

   (ii) Interrupt **(1mark)**

   (iii) Deadlock **(1mark)**

(b) Kingjames saved a document in his computer during the lesson. At the end of the lesson the teacher instructed him to delete the document, Kingjames looked for the document and was not able to locate the document. Describe **three** parameters that would help him located the document **(3marks)**

(c) Mention three factors to consider when choosing data processing mode **(3marks)**

(d) Describe two parameters used to measure data integrity **(2marks)**

(e) Masala Complex is a small financial institution based in a rural in Kisumu County. The institution carries out transactions with both international and local financial organization. State four measures that the institution needs to adopt to minimize threats to its data integrity **(4marks)**