# NYAMBARIA HIGH SCHOOL

# END OF YEAR EXAMS

**Paving Way For Kenya Certificate of Secondary Education Success**

Name …….. Admission no…….

Candidate's Signature…… Date…….

**FORM 3**

**COMPUTER**

**PAPER 1**

**TIME: 2Hours**

INSTRUCTION TO CANDIDATES

- *Write your name and admission number in the spaces provided above*
- *All answers should be written in the spaces provided on the question paper*

FOR EXAMINER'S USE ONLY

| SECTION | QUSTIONS | CANDIDATE'S SCORE |
|---|---|---|
| A | 1 -15 | |
| B | 16 | |
| | 17 | |
| | 18 | |
| | 19 | |
| | 20 | |
| | **TOTAL SCORE** | |

**SECTION A (40 MARKS) Answer ALL the questions in SECTION**

1.

**(a)** State two emerging issues that affect email technology **(2marks)**

**(b)** Describe three advantages of using computers in banking **(3marks)**

2. Describe why a programmer might prefer to read the instructions in hexadecimal rather than in binary **(2marks)**

3. Mention four things that are likely to cause strain- in the computer room **(2marks)**

4. Describe two types of programming errors **(2marks)**

5. Describe how binary search technique is used in sequential file organization to access records **(2marks)**

6. James is a system analyst for Jami Bora group of companies. The company management automated their operations to have a competitive advantage over other companies in the same field, after one year of operation James received a memo from the CEO requesting him to consider changing the current computer based system. State three things that might have necessitate this **(3marks)**

7. Explain the function of a master page as used in desktop publishing software **(2marks)**

8. Give two reasons to justify why most programmers prefer using compilers instead of interpreters **(2marks)**

9. With an aid of a diagram, state the difference between While ..... Do and Repeat.... Until **(3marks)**

10.

(a) State three causes of data loss in computing **(3marks)**

(b) List three precaution taken against crashing of hard disk **(2marks)**

11. What is mnemonics in computer programming **(1mark)**

12. Explain the following terms in relation to database **(2marks)**

(i) Tuple

(ii) Dynaset

13. State main functions of the graphic adapters **(2marks)**

14.

(i) Write the equivalent R1C1 reference for F17 **(2marks)**

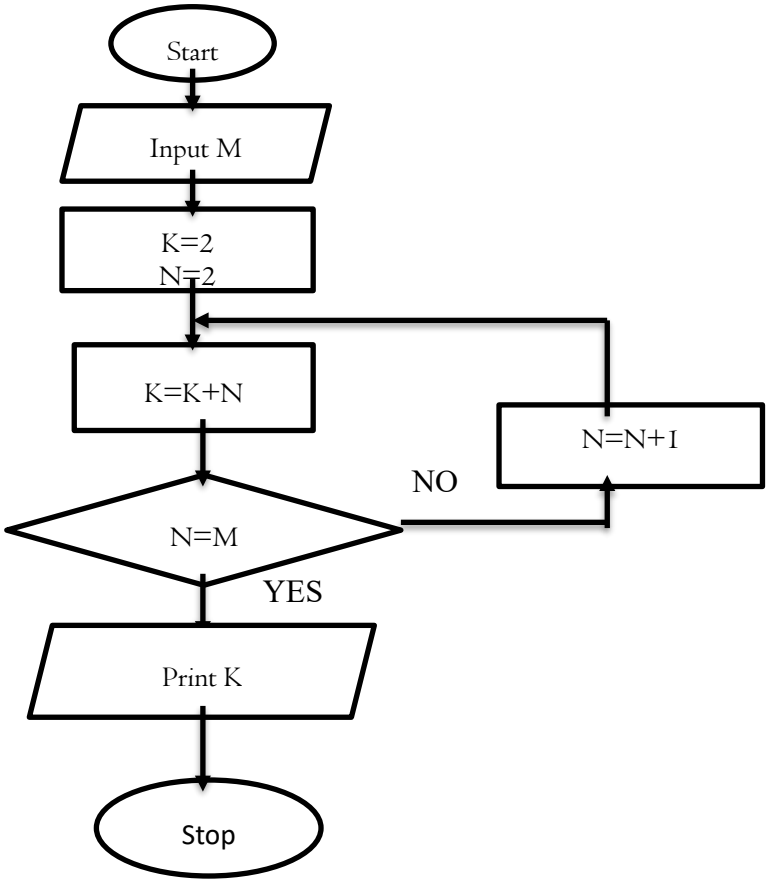
(ii) The formula **=$A1+C2** is initially typed in cell D1. What will it be when copied to cell E1 **(2marks)**

15. Briefly describe three ways in which a financial institution like Kenya Commercial Bank can minimize threat to its data integrity **(3marks)**

## SECTION B (60 MARKS)

**Answer Question 16 (Compulsory) and Any other THREE in this Section**

16. Study the flowchart below answer the questions that follow




(a) What would be the output if the value of M at input was

(i) 4 **(2marks)**

(ii) 8 **(2marks)**

(b) Write a pseudo code for the flowchart **(7marks)**

(c) Modify the flowchart to sum up all the values of K calculated **(4marks)**

17.

(a) If ASCII-7 represent letter B as 1000010 suggest how letter P will be represented **(3marks)**

(b) Convert **$57.125_{10}$** to its Binary equivalent **(3marks)**

(c) Determine the value of X in this equation **(3marks)**

**$X_2 + 1101_2 = 16_8$**

(d) Convert **7AH** to a decimal number **(3marks)**

(e) Use twos compliment to subtract $15_{10}$ from $7_{10}$ **(3marks)**

18.

(a) Use the diagrams below to explain the types of relationships depicted by each in a database design



**(2marks)**



**(2marks)**

(b) Describe the following data types as used in Ms-Access**(3marks)** (a) Calculated

(b) Text

(c) Attachment

(c) Mention three functions of Database Management Software (DBMS) **(3marks)**

(d) Explain any three types of database models **(3marks)**

(a) Explain the term proofreading as used in word processing **(2marks)**

19.

(a) Highlight three qualities that a system analyst must have to enable him/her develop a reliable computer based system **(3marks)**

(b) Describe three factors that cause system entropy **(3marks)**

(c) Outline three factors that should be considered when sourcing for hardware and software resources required for a new system **(3marks)**

(d) Name three circumstances in which it is better to use a Questionnaire than an Interview for gathering information **(3marks)**

(e) State three reasons why users may resist the introduction of an information system in their place of work **(3marks)**

20.

(a) Describe each of the following computer cable

(i) Parallel cables **(2marks)**

(ii) USB cable **(2marks)**

(b) Mention three ways of acquiring a computer software **(3marks)**

(c) Describe three ways in which spread of computer virus may be controlled **(3marks)**

(d) Describe three ways in a which a computer based system can be maintained **(3marks)**

(e) State the difference between uploading and downloading **(2marks)**