**OPENER EXAM**

**FORM THREE AGRICULTURE**

**TERM 1 2023**

**TIME: 1 1/2  HOURS**

**NAME ………………………..……………………………ADM…………………………..CLASS…**

***Answer all the questions in the spaces provided.(50mks)***

1. Give one way in which crossbreeding improves livestock production. (2mks)
2. State four signs that are likely to be observed when a cow is on heat (4mks)
3. State four disadvantages of natural mating as a method of breeding in dairy cattle management (2mks)
4. Explain the term hybrid vigour as used in livestock production. (2mks)
5. (a) Define the following terms as used in livestock breeding. (2mks)

 (i) Inbreeding

 (ii) Out crossing

(b) Outline three disadvantages of artificial insemination in cattle management (3mks)

1. Describe the life cycle of a three- host tick. (8mks)
2. (a) What is crop rotation? (1mk)

 (b) State three advantages of crop rotation. (3mk)

1. (c) State three factors considered when designing a crop rotation programme (3mks)
2. Calculate the plant population per hectares of a maize crop planted at a spacing of 100cm x 50cm. Show your working (3mks)
3. Name two crop production practices carried after planting to achieve optimum plant population. (2mks)
4. State four qualities of the mother plant which should be considered when selecting vegetative materials for planting. (4mks)
5. Study the diagram **below** then answer the questions that follow.

A

B

C

D

 (i) Name **one** farm animal which has the above digestive system. (1 mark)

 (ii) Label the following parts. (2mks)

 **A**

 **B**

 (iii) Give the functions of each of the parts named: ( 2mks)

 **C**

 **D**

1. State three reasons of treating water in the farm. (3mks)
2. Give three ways through which HIV/AIDS affect agriculture. (3mks)