

2425/102
ANIMAL PRODUCTION I
June/July 2017
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

**DIPLOMA IN AGRICULTURE
MODULE I**

ANIMAL PRODUCTION I

3 hours

INSTRUCTIONS TO CANDIDATES

*This paper consists of EIGHT questions.
Answer any FIVE questions in the answer booklet provided.
All questions carry equal marks.
Maximum marks for each part of a question are indicated.
Candidates should answer the questions in English.*



This paper consists of 3 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

1. (a) Define the following terms:

- (i) epistasis; -
- (ii) pleiotropy; -
- (iii) dominance; -
- (iv) recessive; -
- (v) phenotype; -

(5 marks)

(b) Explain progeny testing with respect to:

- (i) situations in which it is used;
- (ii) requirements for effective testing.

(9 marks)

(c) Describe the individual selection method.

(6 marks)

2. (a) Highlight any **five** sanitary measures taken to protect a healthy herd from diseases.

(10 marks)

(b) Describe anthrax in cattle with respect to:

- (i) causative agent;
- (ii) symptoms;
- (iii) control.

Bacillus anthracis
 good housing
 proper feeding
 good hygiene
 regular vaccination

(10 marks)

3. (a) Explain how a calf is trained for bucket feeding.

(10 marks)

(b) Outline good hand milking procedure.

(10 marks)

4. (a) Give the importance of livestock to man.

(6 marks)

- (b) (i) Define the term 'production system'.
- (ii) Name **four** livestock production systems.

(6 marks)

(c) Explain the grazing management in a sown pasture land in rangelands.

(8 marks)

5. Describe any **five** preventive measures in disease control on the farm.

(20 marks)

6. (a) Explain the term 'feeding standards'.

Statements that guide the farmer in feed formulation

(5 marks)

(b) Describe any **five** factors necessary for an animal to meet its nutritional requirement from a feedstuff.

(15 marks)

*Physiological - Prog
 size/ Age of animal
 Type/ sex of animal
 level of prod.*

*Isolation
 Quarantine
 Vaccination
 Good sanitation & hygiene
 Proper feeding*



7. (a) Figure 1 shows the stage of growth of established pasture to be grazed on site.

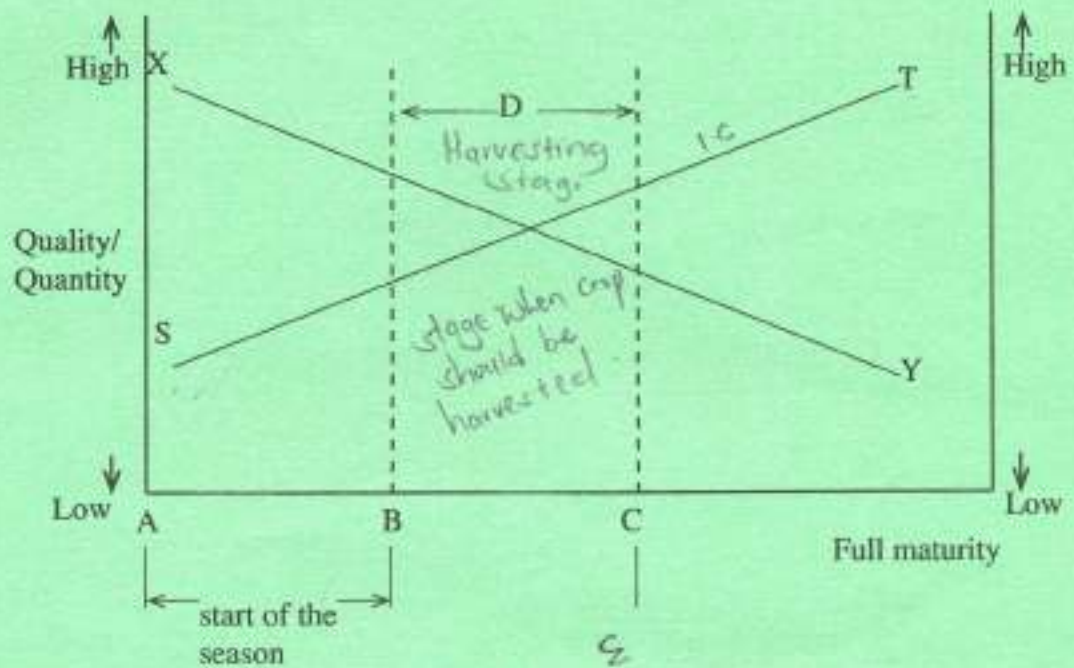


Figure 1

Identify the curves:

- (i) ST;
- (ii) XY.

(b) Name stage D.

stage when crop should be harvested

(c) Explain the relationship between quality/ quantity of pasture and age.

(d) (i) State any five causes of waste on the established pasture.

(ii) Give any five ways of preventing pasture waste.

*Silage making
Hay making
Standing forage*

8. Discuss the observable animal attributes that a stockman should look for to ascertain the health status of farm animals.

- Urination - colour
- Behaviour - Dullness
- Defecation - quantity
- Reddened skin - temperature
- Pulse rate - range
- Skin - range
- Flushing - loss of appetite
- Loss of appetite
- Temperature

Limp - Black quarks

THIS IS THE LAST PRINTED PAGE.

