

2425/302
ANIMAL PRODUCTION III
Oct./Nov. 2022
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

DIPLOMA IN AGRICULTURE

MODULE III

ANIMAL PRODUCTION III

3 hours

INSTRUCTIONS TO CANDIDATES

You should have the following for this examination:

Answer booklet;

Non-programmable scientific calculator.

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. Explain the prevention of each of the following nutritional disorders:
- (a) calcium and phosphorous; (6 marks)
 - (b) bloat. (14 marks)
2. (a) Highlight the attributes of Boran cattle that make them ideal beef breeds. (10 marks)
- (b) Describe the characteristics of a cow with the following scores in 1 - 5 score scale:
- (i) emaciated;
 - (ii) moderate. (10 marks)
3. (a) Describe swarming in bees under the following:
- (i) meaning;
 - (ii) signs of swarming;
 - (iii) control of swarming. (10 marks)
- (b) Describe the methods used in determining pregnancy in rabbit. (10 marks)
4. Describe wildlife management under the following:
- (a) harvesting of game products; (8 marks)
 - (b) strategic provision of water. (12 marks)
5. Explain the factors that are considered when selecting sheep and goats for breeding. (20 marks)
6. Explain the management practices that can assist in oestrus detection in a dairy herd. (20 marks)
7. (a) Highlight **four** characteristics of good quality raw milk. (4 marks)
- (b) Describe the following milk quality tests:
- (i) organoleptic tests;
 - (ii) clot on boiling test. (16 marks)

8. (a) Explain body condition scoring under the following:

(i) visual scoring;

(ii) physical scoring.

(4 marks)

(b) Explain the meaning of each of the following:

(i) dressed carcass;

(ii) killing out / dressing percentage.

(4 marks)

(c) A steer weighing 450 kg on pasture was slaughtered and found to have a killing out percentage of 52%. The steer can lose up to 5% of its body weight if held off feed for 16 hours with no effect on dressed carcass weight. Calculate:

(i) dressed carcass weight in less than 16 hours;

(ii) live weight after 16 hours;

(iii) killing out percentage after 16 hours.

(iv) Explain the possible cause of the difference in killing out percentage of 52% and that calculated in c (iii).

(12 marks)

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