

1405/312
ANIMAL PRODUCTION
Oct./Nov. 2022
Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL
CRAFT CERTIFICATE IN GENERAL AGRICULTURE

ANIMAL PRODUCTION

3 hours

easyvet.com

INSTRUCTIONS TO CANDIDATES

*This paper consists of SIXTEEN questions in TWO sections; A and B.
Answer ALL questions in section A and any FOUR questions from section B in
the answer booklet provided.
Each question in section A carries 4 marks while each question in section B carries 15 marks.
Maximum marks for each part of a question are indicated.
Candidates should answer the questions in English.*

This paper consists of 4 printed pages.

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

SECTION A (40 marks)

Answer ALL questions in this section.

1. Explain each of the following terms as used in animal genetics:
 - (a) variation; (2 marks)
 - (b) heredity. (2 marks)

2. Define each of the following terms:
 - (a) animal production; (2 marks)
 - (b) animal husbandry. (2 marks)

3. The following are feedstuff used in feeding livestock:
Dry maize stalk, dairy meal, antibiotics and sweet potato vines.
Classify them into:
 - (a) roughages; (1 mark)
 - (b) succulents; (1 mark)
 - (c) concentrates; (1 mark)
 - (d) feed additives. (1 mark)

4. (a) Name **one** example of each of the following:
 - (i) trematode; (2 marks)
 - (ii) cestode. (2 marks)

(b) Define the term 'zoonotic disease'. (2 marks)

5. State **four** factors that determine choice of a dairy breed by the farmers. (4 marks)

6. Give **four** economic considerations made in feeding beef cattle. (4 marks)

7. Explain the meaning of the following as used in sheep and goats production:
 - (a) controlled mating system; (2 marks)
 - (b) accelerated mating system. (2 marks)

8. Explain the feeding of the following classes of pigs:
- (a) piglets; - *Creep feeding with hay* (2 marks)
 - (b) weaners. (2 marks)
9. Give **four** benefits of egg candling. (4 marks)
10. State **four** characteristics of California breed of rabbits. (4 marks)
- The have white ears, they have white feet, they have white tails, they have white hocks.*

SECTION B (60 marks)

Answer any FOUR questions from this section.

11. Explain overgrazing under the following:
- (a) meaning; *Overgrazing is the excessive grazing of land by livestock* (2 marks)
 - (b) characteristics of overgrazed rangelands; *Overgrazed rangelands are characterized by a decrease in the number of plants, a decrease in the height of the plants, a decrease in the quality of the plants, and a decrease in the amount of forage available.* (5 marks)
 - (c) methods of controlling overgrazing. *Methods of controlling overgrazing include: 1. Rotational grazing, 2. Strip grazing, 3. Controlling the number of animals, 4. Controlling the length of the grazing period, 5. Using guard animals, 6. Using fencing, 7. Using water control, 8. Using fire, 9. Using chemical control, 10. Using biological control.* (8 marks)
12. Describe disease and parasite control under the following:
- (a) routine control measures; *Routine control measures include: 1. Vaccination, 2. Deworming, 3. Ear tagging, 4. Identification, 5. Record keeping, 6. Quarantine, 7. Isolation, 8. Disinfection, 9. Biosecurity, 10. Hygiene.* (5 marks)
 - (b) hygiene on the farm. *Hygiene on the farm includes: 1. Hand washing, 2. Foot washing, 3. Disinfection, 4. Biosecurity, 5. Quarantine, 6. Isolation, 7. Identification, 8. Record keeping, 9. Vaccination, 10. Deworming.* (10 marks)
13. Describe forage utilization under the following:
- (a) cut and carry; *Cut and carry is a method of forage utilization where the forage is cut and carried to the animals.* (5 marks)
 - (b) grazing. *Grazing is a method of forage utilization where the animals graze on the forage.* (10 marks)
14. Explain the causes and symptoms of the following diseases:
- (a) milk fever; *Milk fever is caused by a deficiency of calcium in the diet.* (5 marks)
 - (b) anthrax; *Anthrax is caused by the bacterium Bacillus anthracis.* (5 marks)
 - (c) three-day sickness. *Three-day sickness is caused by a viral infection.* (5 marks)

15. (a) Explain feeding rabbit under the following:
- (i) pellet feeding;
 - (ii) dry forage hay. (5 marks)
- (b) Explain the socioeconomic benefits of camels, oxen and donkeys. (10 marks)
16. (a) State six reasons for liming a fish pond. (6 marks)
- (b) Describe absconding bee behaviour under the following:
- (i) meaning;
 - (ii) reasons for absconding;
 - (iii) signs of absconding. (9 marks)

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