

1405/312

ANIMAL PRODUCTION

June/July 2020

Time: 3 hours



THE KENYA NATIONAL EXAMINATIONS COUNCIL

CRAFT CERTIFICATE IN GENERAL AGRICULTURE

ANIMAL PRODUCTION

3 hours

INSTRUCTIONS TO CANDIDATES

This paper consists of 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. (a) Define the term 'animal production'.
It is the rearing for keeping of animal for domestic purpose (1 mark)
- (b) State three factors that affect livestock distribution in a grazing land.
Weather, Disease and pests, it depends on the factors. (3 marks)
2. (a) Define each of the following terms:
Genotype
(i) genotype;
(ii) phenotype.
(2 marks)
- (b) State two factors that affect the production potential of farm animals.
Diseases and parasites attack the animals (2 marks)
3. State four signs of good health in an animal.
Lack of feed, proper feeding, high productivity, highly economic (4 marks)
4. (a) Define the term 'range rehabilitation'.
To help farmer (1 mark)
- (b) Identify three range rehabilitation programs.
Range Management (3 marks)
5. State four factors that influence the nutritive value of forages.
Soil, Climate, Management (4 marks)
6. List the four broad categories of livestock feedstuffs.
Dry matter, High protein, High energy, High mineral content (4 marks)
7. State four possible causes of bloat.
High oxygen accumulation in rumen, Static feed eaten by cattle, overeating, dry pasture (4 marks)
8. (a) Define the term 'zoonotic disease'.
It is the study of animal attack disease (1 mark)
- (b) State three principles of internal parasite control.
- Proper animal nutrition, housing, treatment through deworming (3 marks)
9. Name the four stages of lactation in a dairy cow.
Initial, peak, decline, end of lactation (4 marks)
10. List four beef production systems found in Kenya.
Commercial feedlot, Nomadic pastoralism (4 marks)

SECTION B (60 marks)

Answer any **FOUR** questions from this section.

11. In reference to sheep, highlight each of the following:

- (a) management of pregnant ewes; (7 marks)
(b) management at lambing. (8 marks)

12. (a) State seven characteristics of large white pig breed. (7 marks)

- (b) Highlight eight signs of farrowing. (8 marks)

13. (a) Figure 1 shows the brooder arrangement.

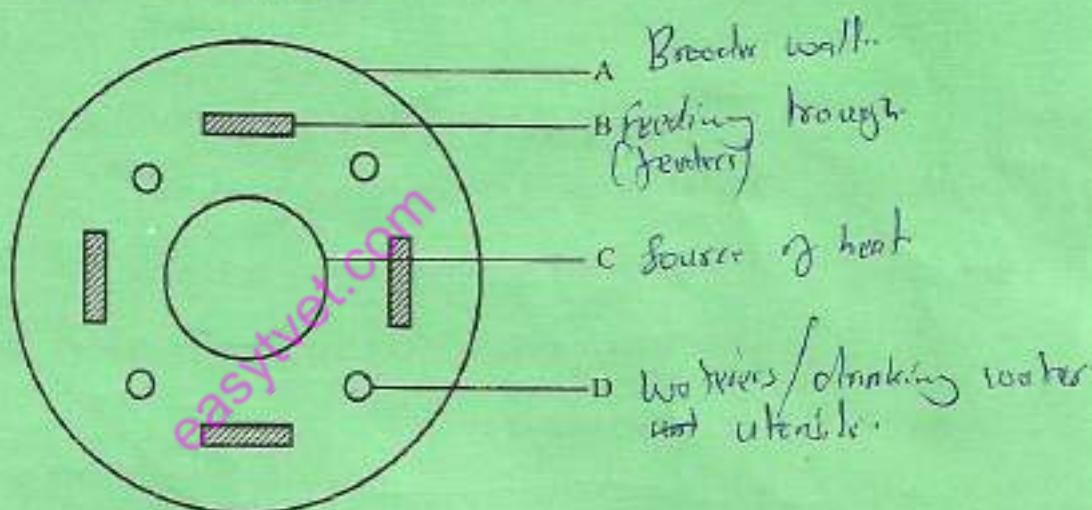


Fig. 1

Identify the equipment labelled A, B, C and D. (4 marks)

- (b) Describe the behaviour of chicks in a brooder under each of the following conditions:
- (i) too cold;
 - (ii) too hot;
 - (iii) draughty;
 - (iv) ideal warmth. (4 marks)
- (c) (i) Define the term 'natural incubation'.
(ii) Highlight six conditions for successful egg incubation. (7 marks)

14. (a) Highlight the characteristics of each of the following rabbit breeds:

(i) New Zealand white. ~~has a hairy skin~~

- White in colour
- Does not breed

(ii) California white. ~~Highly productive~~

~~Highly productive~~
~~Highly productive~~
~~Highly productive~~
~~Highly productive~~
~~Highly productive~~

(6 marks)

- (b) Describe the characteristics of a healthy breeding male rabbit under each of the following:

(i) hair coat;

(ii) eyes;

(iii) ears; well covered in fur

(iv) testicles. well spread

(4 marks)

- (c) Highlight five recommended features of a hutch.

(5 marks)

15. (a) Explain the role of donkeys in rural communities.

(5 marks)

- (b) Highlight four functions of a harness in donkeys.

(4 marks)

- (c) Describe each of the following breeding behaviour of a male camel:

(i) aggressiveness;

(ii) urine spraying;

(iii) female seeking.

(6 marks)

16. (a) Describe swarming in bees under each of the following:

(i) definition; ~~Running away of bees from bee hives~~

(ii) causes; ~~Bee smell - lack of nectar~~

~~- lack of food~~

~~- lack of humidity~~

~~the tree~~

(9 marks)

- (b) Highlight six reasons for regular monitoring of fish in a pond.

~~water condition - feeding~~

~~- health of the fish~~

(6 marks)

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