higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE (VOCATIONAL)

ANIMAL PRODUCTION
NQF LEVEL 2

(1011022)

21 November 2023 (Y-paper)
13:00–16:00

This question paper consists of 8 pages.

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DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE (VOCATIONAL)
ANIMAL PRODUCTION
NQF LEVEL 2
TIME: 3 HOURS
MARKS: 150

INSTRUCTIONS AND INFORMATION

1. Answer all the questions.
2. Read all the questions carefully.
3. Number the answers according to the numbering system used in this question paper.
4. Start each section on a new page.
5. Use only a black or blue pen.
6. Write neatly and legibly.

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SECTION A

QUESTION 1

Indicate whether the following statements are TRUE or FALSE by writing only 'True' or 'False' next to the question number (1.1–1.10) in the ANSWER BOOK.

1.1 A chick when hatched is covered with down feathers.

1.2 The pulmonary circulatory system transports blood from the lungs to the limbs.

1.3 Chickens do not have teeth.

1.4 The Australorp chicken breed is used for both meat and egg production.

1.5 Footbaths used for dipping boots when entering a chicken house should be filled with water only.

1.6 Drinkers are containers that are used to supply feeds for birds.

1.7 Carbohydrates are a source of energy for animals.

1.8 Temperate goat breeds can breed throughout the year.

1.9 Boer goats are large, stocky animals with white body and a red head.

1.10 Angora goats produce long hair that can sold .

(10 × 1) **[10]**

QUESTION 2

Various options are given as possible answers to the following questions/statements. Choose the answer and write only the letter (A–D) next to the question number (2.1–2.10) in the ANSWER BOOK.

2.1 Which ONE of the following is not a chicken disease?

A Bluetongue
B Fowl pox
C Gumboro
D Avian influenza

2.2 … is a feed type that can be used as finisher feed for broiler chickens.

A Pullets
B Mash
C Mixture
D Crumbles

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2.3 Replacement of stale or hot contaminated air with fresh, clean air by fans in a closed chicken house.

A Drying
B Blowing
C Ventilation
D Liveability

2.4 The gestation period for a female goat is approximately … months.

A 7
B 3
C 5
D 4

2.5 The period of time when a buck experiences a surge of hormones and is ready to breed.

A Rot
B Rat
C Rut
D Ret

2.6 Goats are called … animals because they chew their cud.

A ruminant
B monogastric
C non-ruminant
D double-stomached

2.7 A dairy goat breed that is not docile as compared to other dairy goats but can produce milk which is rich in protein and butter fat.

A Alpine
B Lamancha
C Nubian
D Toggenburg

2.8 All vertebrates on land breath air into their …

A blood.
B aorta.
C cage.
D lungs.

2.9 A large dilation in the oesophagus of a chicken.

A Proventriculus
B Crop
C Ventriculus
D Abomasum

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2.10 The accumulation of fluids in the abdominal cavity, which causes swelling:

A Duodenum
B Omasum
C Cannibalism
D Ascites

(10 × 1) **[10]**

QUESTION 3

Choose a term from COLUMN B that matches a description in COLUMN A. Write only the letter (A–L) next to the question number (3.1–3.10) in the ANSWER BOOK.

COLUMN A		COLUMN B	
3.1	Dehorning of goats is not necessary in this type of system	A	duodenum
3.2	A dairy goat breed that produces large quantities of milk	B	ducklings
3.3	Supplemented to goats in the form of salt licks	C	30%
3.4	Found at the entrance of the small intestines of the abomasum of a goat	D	cannibalism
3.5	In a new-born kid, rumen just make out … of the total stomach area.	E	extensive
3.6	These cells are concerned with the body's immune system	F	25%
3.7	Young ducks	G	phosphorus
3.8	Birds eating each other	H	stocking density
3.9	Number of birds kept within a given space	I	cardiac cycle
3.10	Pumping of the heart	J	intensive
		K	lymphocytes
		L	alpine

(10 × 1) **[10]**

TOTAL SECTION A: 30

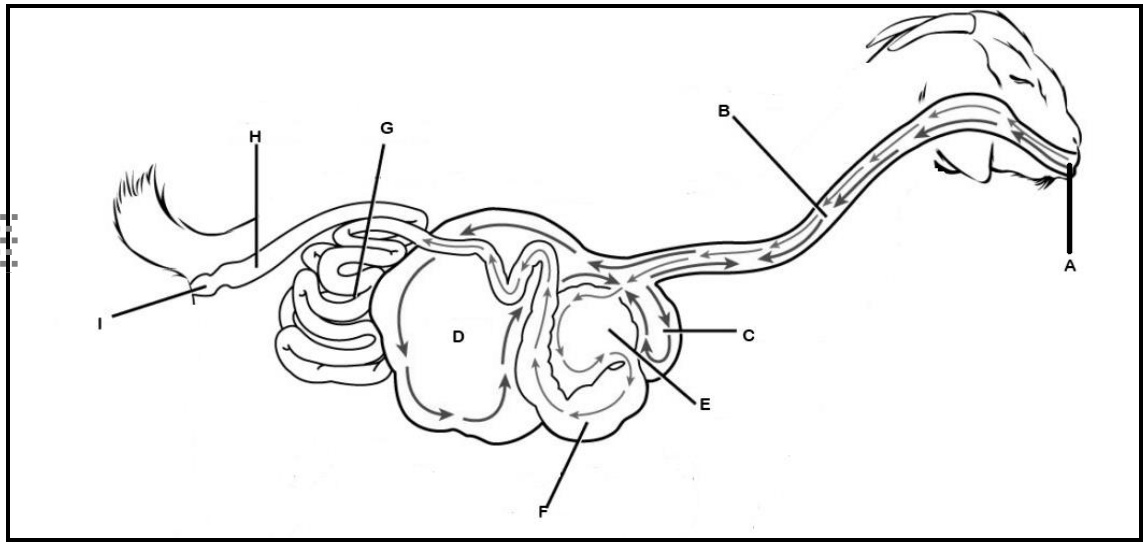
SECTION B

QUESTION 4

4.1 Indicate THREE parts of the cardiovascular system. (3)

4.2 What is the name of the blood that has been enriched with oxygen in lungs? (1)

4.3



[Source: *https://s3-us-west-2.amazonaws.com/courses-images/wp-content/uploads/sites/1223/2017/02/07184942/Figure_34_01_07-1024x714.jpg*]

4.3.1 Identify the type of farm animal with the digestive system shown above. (2)

4.3.2 Is the animal identified in QUESTION 4.3.1 a ruminant or non-ruminant? Give a reason for the answer. (2 × 2) (4)

4.3.3 Name the labels that represent stomach chambers in the diagram. (4)

4.3.4 Explain how the stomach of the farm animal identified in QUESTION 4.3.1 differs from the stomach of poultry. (2 × 2) (4)

4.3.5 Briefly explain the symbiotic relationship between microbes and component D in the diagram. (3)

4.4 Outline the importance of biosecurity in poultry farming. (2)

4.5 Differentiate between the following concepts/terms:

4.5.1 Coronary and Pulmonary blood circulation

4.5.2 Left lung and the right lung

4.5.3 Arteries and Vein

4.5.4 Fibrous and cartilaginous joint

(4 × 4) (12)

[35]

QUESTION 5

5.1 State FIVE signs of sick chicken. (5 × 1) (5)

5.2 Explain THREE factors that affect the quality of day-old chicks. (3 × 2) (6)

5.3 Name THREE types of feed given to broiler chickens according to their ages. (3)

5.4 Newcastle disease is a contagious disease that affects chickens, turkeys, geese and ducks.

5.4.1 Give FIVE symptoms of Newcastle disease in poultry. (5 × 1) (5)

5.4.2 How does Newcastle disease spread from one chicken to another? (3 × 2) (6)

5.5 Why is it necessary to provide a poultry house for chickens? (5)

5.6 Briefly explain FIVE factors that must be considered when constructing poultry houses. (5 × 2) (10)

5.7 Complete the following table about the characteristics of good-quality day-old broiler chicks by writing only the answer next to the question number (5.7.1–5.7.3) in the ANSWER BOOK.

CHARACTERISTICS OF DAY-OLD BROILER CHICKS	GOOD QUALITY
Navel	Completely healed
Feathers	(5.7.1) …
Beak	(5.7.2) …
Size	Normal
Behaviour	(5.7.3) …

(3 × 1) (3)

[43]

QUESTION 6

6.1. List SIX breeds of goats that are used for the production of milk. (6)

6.2. Describe the economic characteristics of the Kalahari red breed of goats. (6)

6.3 Define each of the following:

6.3.1 Dehorning

6.3.2 Drenching

6.3.3 Tethering

6.3.4 Colostrum

6.3.5 Weaning

(5 × 2) (10)

6.4 Explain THREE methods used in castrating goats. (3 × 2) (6)

6.5 Which FIVE hygienic practices should goat farmers use to protect their animals against diseases? (5 × 2) (10)

6.6 Differentiate between concentrates and roughages. (2 × 2) (4)

[42]

TOTAL SECTION B: 120
GRAND TOTAL: 150

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