higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE (VOCATIONAL)

ANIMAL PRODUCTION
NQF LEVEL 2

(1011022)

19 February 2025 (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

Various options are given as possible answers to the following questions. Choose the answer and write only the letter (A–D) next to the question number (1.1–1.10) in the ANSWER BOOK.

1.1 The fusion of male and female gametes to form a zygote:

A Fertilisation
B Pregnancy
C Implantation
D Mating

1.2 Feed given to young goats after weaning:

A Roughage
B Concentrate
C Creep feed
D Kid meal

1.3 True stomach of a goat:

A Rumen
B Omasum
C Abomasum
D Reticulum

1.4 Where fertilisation takes place in a female animal:

A Uterus
B Fallopian tube
C Vagina
D Vulva

1.5 Breed of goat kept for milk production:

A Angora
B Merino
C Karakul
D Anglo-Nubian

1.6 Which ONE of the following represents the importance of feathers?

A To repel parasites
B For identification
C For beautification and attraction
D To keep body temperature and for protection

1.7 Process whereby chickens lose their feathers:

A Dressing
B Moulting
C Defeathering
D Plucking

1.8 Blood cells concerned with the immune system of the body:

A Red blood cells
B Phagocytes
C Lymphocytes
D Platelets

1.9 … are living organisms that cause disease in livestock.

A Host animals
B Sucking pests
C Pathogens
D Vectors

1.10 Diseases passed from one animal to another through contact:

A Airborne diseases
B Respiratory diseases
C Infectious diseases
D Contagious diseases

(10 × 1) **[10]**

QUESTION 2

Indicate whether the following statements are TRUE or FALSE by writing only 'True' or 'False' next to the question number (2.1–2.10) in the ANSWER BOOK.

2.1 Lipids are compounds that are soluble in water.

2.2 Minerals required in small quantities are called trace minerals or micronutrients.

2.3 Proteins are made from simple molecules called glucose.

2.4 Catabolism refers to the building of complex substances such as muscle tissue from simple materials (such as amino acids) from the digestion of proteins.

2.5 Nutrients are chemical substances used by animals to produce products like meat and eggs; to repair worn-out tissues; and to keep them healthy.

2.6 A saddle joint allows movement back and forth and up and down, but does not allow for rotation like a ball-and-socket joint.

2.7 Newcastle disease attacks chickens, turkeys, geese and ducks.

2.8 The rut period is not important in the breeding cycle of male goats.

2.9 Pivot joints allow radial or circular movement in almost any direction, similar to a ball-and-socket joint.

2.10 Mastitis is a disease that affects the udder of milking goats.

(10 × 1) **[10]**

QUESTION 3

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

COLUMN A		COLUMN B	
3.1	Broiler	A	Affects young birds (up to 6 weeks old) by destroying immune system cells in the bursa of Fabricius – an organ crucial for developing antibodies
3.2	Battery cage	B	Part where cellulose is broken down in ruminant animals
3.3	Coccidiosis	C	Indigenous goat breed resistant to high temperatures and parasites
3.4	Metabolism	D	Breeding system controlled by day length
3.5	Gumboro disease	E	Moving food back from the stomach to the mouth for proper chewing
3.6	Rumen	F	How the food is liked or disliked by animals
3.7	Savanna goat	G	Goat breed that can breed any time of the year
3.8	Seasonal breeding	H	Chemical process that occurs in living organisms where nutrients are changed into easily absorbed forms
3.9	Regurgitation	I	Intensive system of housing layer chickens
3.10	Palatability	J	Parasitic disease that affects the intestines of many birds including chickens, turkeys and ducks
		K	Fast-growing domesticated bird bred for meat production
		L	Bird flu
		M	Goat breed kept for mohair
		N	True stomach of a goat
		O	Chickens kept for egg production

(10 × 1) **[10]**

QUESTION 4

4.1 Define each of the following terms:

4.1.1 Roughage

4.1.2 Castration

4.1.3 Parasite

4.1.4 Digestion

4.1.5 Rumination

(5 × 2) (10)

4.2 Give TWO functions of each of the following reproductive parts of a goat:

4.2.1 Epididymis

4.2.2 Testes

4.2.3 Fallopian tube

4.2.4 Ovaries

4.2.5 Cervix

(5 × 2) (10)
[20]

TOTAL SECTION A: 50

SECTION B

QUESTION 5

5.1 Give FOUR advantages and FOUR disadvantages of feeding chickens with crumbled feeds. (4 + 4) (8)

5.2 List 10 key factors that influence the choice and quantity of feed ration for optimal poultry production. (10)

5.3 Explain the importance of vitamin A in the diet of animals. (10)

5.4 Explain the importance of biosecurity in livestock production. (2)
[30]

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QUESTION 6

6.1 Name THREE types of housing used in poultry production. (3)

6.2 Give 10 advantages of free-range poultry farming. (10)

6.3 Give SEVEN disadvantages of semi-intensive poultry housing. (7)
[20]

QUESTION 7

7.1 A goat is a ruminant animal with four stomach chambers.

Give the functions of each of the following compartments:

7.1.1 Rumen (4)

7.1.2 Reticulum (2)

7.1.3 Abomasum (4)

7.2 Give FIVE characteristics of a boer goat. (5)

7.3 List FOUR roles of microorganisms in the rumen of a goat. (4)

7.4 Give SIX advantages of a rotational grazing system in livestock production. (6)

7.5 Explain FIVE key factors that farmers should consider when deciding on a veld management system suitable for goat production. (5)
[30]

QUESTION 8

8.1 List SIX symptoms of foot abscesses in goats. (6)

8.2 How can a farmer minimise the risk of infections in a herd of goats? (10)

8.3 List FOUR symptoms of parasite infestations in goats. (4)
[20]

TOTAL SECTION B: 100
GRAND TOTAL: 150

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