

Marking Scheme

NAME.....ADM.....CLASS.....

ANESTAR SCHOOLS
AGRICULTURE
FORM 4
END TERM 1 EXAM
TIME:

Answer all questions in the spaces provided

1. Distinguish between Apiculture and aquaculture as used in animal production. (2mks)

Apiculture is rearing of bees in special structures called bee hives while aquaculture is rearing of fishes in structure called ponds

2. Name animal disease that it is transmitted by the following parasite

i. Brown ear tick

East Coast fever ECF

(½mk)

ii. Tse tse fly

Nagana (Trypanomiasis)

(½mk)

3. State the secondary and intermediate host for liver fluke (Fasciola hepatica)

(1mk)

Secondary - Pigs

Intermediate - Water snails

4. State four breeds of goats.

(2mks)

Toggenberg

Ango-Nubian

Sannen

5. Outline the function of the Crop in the digestive system of hen.

(1mk)

→ Stores food temporarily before moving it to the stomach

→ Moistens the food.

6. Give reasons why animal are restrained.

(2mks)

Animals are restrained for safety of handling person
To avoid injuring themselves

7. Outline four viral disease in livestock.

(2mks)

Rinderpest Anthrax
Blue tongue
Foot and mouth disease

8. State three methods of selection in livestock.

(2mks)

Mass selection
Contemporary Comparison
progeny testing

9. Explain how to prevent cannibalism among poultry.

(3mks)

Correct any practice which may have led to cannibalism
Darken the room by adjusting light intensity
Cull the aggressive birds
Regulate the temperatures

10. Give the importance of additives in livestock feeds.

(2mks)

They ensure feed is palatable
Enhance the flavour to meet the needs
They are anti-boders

11. Outline three types of calf pen.

(2mks)

Movable calf pen
Permanent calf pen
Concrete floor calf pen

12. State four advantages of movable calf pen.

(2mks)

Reduces mortality rate among calf.
No build-up of pest and diseases.
Evenly distribution of manure.

13.

i. Explain mating in livestock.

(3mks)

This is the process of introduction of sperm into female reproduction for eggs to be fertilised.

- ii. Outline three methods of mating in livestock. (3mks)

Natural Mating
Artificial insemination

14. Explain the reason why scrotal sac should distend an contract in various temperature state. (2mks)

The production of sperm requires a temperature which is slightly lower than the body temperature

15. Define the following terms (1mk)
i. Mothering ability.

This is animal with good natural instincts towards their young ones. Rearing their young ones upto weaning successfully

- ii. Prolificacy in livestock. (1mk)

This is ability of animal to give birth to large number of viable litter in a given time

16. Explain what is pre-disposing factor. (1mk)

These are both internal and external factors characterise that are able to cause disease in animals

17. Name four pre-disposing factors that pre-disposes livestock to diseases. (2mks)

Injuries on the skin
Age of the animal
Colour of the animal
Changes in climate condition.

18. Give functional differences between rumen and abomasum. (2mks)

In rumen fermentative and breakdown of feed occurs while in abomasum mixing of feed occurs

19. Which equipment is used to administer: (1mk)
i. Solid tablet during deworming.

Bolus gun

- ii. Liquid drug during deworming.

(1mk)

Strenching gun

SECTION B(30MKS)

20.

- i. Briefly explain how three-host tick completes its life cycle.

(4mks)

They feed on three different hosts. They drop to the ground and lay eggs after mating; the egg hatches into larvae which moult into nymphs. The nymph climbs on the first host, feeds, engorges and drops. It moults into a young adult and climbs on the second host, feeds, engorges and drops again. It again climbs on the third host where it moults into an adult, feeds and mates and drops again to lay eggs.

- ii. Why is controlling ticks using acaricides not efficient in hand-in-hand spraying method.

(2mks)

*The chemicals cannot reach all hidden parts of the animals.
Not efficient in spraying large herds of cattle.*

21. Name the common parts of an animal that ticks are likely to be found.

(2mks)

*The neck region
The armpits region
Inside ~~the~~ between the hooves
Around the udder region*

22. State the diseases that ticks cause in livestock.

(2mks)

*East Coast fever
Anaplasmosis disease*

23.

- i. State the process of ascertaining whether eggs are viable for incubation.

(1mk)

Egg candling.

- ii. Briefly explain the procedure of the named process above.

(4mks)

A candling lamp consisting of a strong electric bulb covered by plastic or aluminium container that has a viewing aperture is used.

24.

- i. Give a reason why should calf pen have slatted floor.

(2mks)

To avoid accumulation of animal waste.
Makes cleaning process easy.

- ii. Outline the features of calf pen.

(4mks)

Draught free
Well ventilated
Should be leak proof.
Should be singly.

25. Explain the reason why calf houses should be singly.

(2mks)

→ To avoid calf from licking it each other - This might cause accumulation of hair balls.
→ To avoid spread of diseases among the calves.

26.

- i. Explain what is milk secretion process.

(1mk)

This is a process of lactogenesis, which involves initiating milk production process.

- ii. Identify the structure of the mammary gland of a cattle.

(4mks)

Alveolus
Lobule containing alveoli
Gland cistern
Teat cistern
Teat orifice

SECTION C (Answer any two questions)

27. (10mks)
i. Explain the process of milk-let down process in livestock. (5mks)
ii. Outline factors that influence milk let down in animals. (5mks)
iii. Outline factors that determine the cleanliness of milk.
28. (5mks)
i. Outline the signs of heat in cattle. (10mks)
ii. State five causes of stress in poultry.
iii. Using Pearsons square compute a ration with 20% DCP. (5mks)
Show your working.
29. (5mks)
i. Explain farming practices that contributes to minimum tillage. (5mks)
ii. Give the limitation of using artificial insemination in cattle.
iii. State and explain factors to be considered in selection of animals for breeding purposes. (10mks)

Q27 i) The process of milk letdown occurs naturally when animals are stimulated by either presence of calf or any stimulant. Milk secreted moves to the gland cistern through duct from the alveolar region. Oxytocin hormone causes contraction of the udder muscle forcing milk down the teats. The hormone last for about 7-10 minutes - cow should be milked while the hormone last.

ii) Presence of calf
Presence of milk person
Rattling of milking vessel
Massaging the udder with warm water

iii) A healthy lactating cow
Clean milk person
Hygiene in milking parlour
Clean equipments
Proper handling of milk

28 i) Restlessness

Mooring too much

Mounting on other animal

Standing still when mounted

Slightly increase body heat

iii) Presence of predator in the house

Uproot changes made of provision of feed

Inhumane handling of the birds

Presence of intruders in the chicken house

29 i) Use of biological methods to control pest

Use of organic fertilizer

Using herbicides

Mulching and using a cover crop

Timely cultivation to prevent weeds growth

Strip cultivation

Slashing and uprooting

ii) Harmful characteristics can be spread easily by one bull

Requires skilled personnel to perform

Low chances of conception - semen may die

It is labourious.

iii) Age

Level of performance

Fertility

Physical fitness

Body conformation

Suitability of the animal.