AGRICULTURE FORM FOUR TERM 1 2025 OPENER EXAMINATION



<u>INSTRUCTIONS:</u> Answer all the Questions

- 1. Name **two** diseases that affect female animals only (2mks)
- Mastitis
- Milk fever
- 2. What is a vaccine?(1mk)
- An active disease pathogen reduced in strength /virulence or killed and is introduced into an animal's body to induce immunity
- 3. a) Define the term notifiable disease in cattle(1mk)
- A disease that once noticed prompts an urgent need for informing the relevant authority.
 - b) Name **four** notifiable diseases of livestock (4mks)
- Rinderpest
- . Anthrax
- Rift valley fever
- New castle disease
- . mad cow disease
- Black quarter
- Foot and mouth diseases
- . **Lumpy skin disease**
- Rabies
- 4. State **three** signs of anthrax disease observed in the carcass of cattle (3mks)
- Blood does not clot
- No rigor mortis after death
- Stomach swells/ bloat
- Darkened blood oozes out through the natural opening
- 5. Differentiate between active immunity and acquired passive immunity(1mk)
- Active immunity animal producing antibodies

TIME: 1 HR 30 MIN

| | Acquired/ passive immunity – external source of immunity |
|-----|---|
| 6. | State one chemical used in relieving a ruminant animal of bloat(1/2mk) |
| | Epson Salt |
| | Methyl silicon |
| | Mixture of turpentine and vegetable oil |
| | |
| 7. | Name two diseases of poultry that are controlled by vaccination(2mks) |
| | New castle |
| | Fowl pox |
| | Fowl typhoid |
| | Gumboro |
| | Marek disease |
| | |
| 8. | Name the casual organism for foot rot disease(1/2mk) |
| Fu | siformis spp/ Fusiformis necrophorous/ Fusiformis nodosus |
| | |
| 9. | Give four pre disposing factors of foot rot disease in sheep (4mks) |
| | Overgrown / untrimmed hooves |
| | Tick infestation between hooves |
| | Muddy / filthy living / grazing areas |
| | Presence of sharp objects e.g. stones |
| | |
| 10. | Give two symptoms of foot rot in sheep(2mks) |
| | |
| | Swollen foot |
| | Lameness |
| | Pus and a rotten smell from the hoof |
| | A sheep kneels while grazing if the front feet are affected |



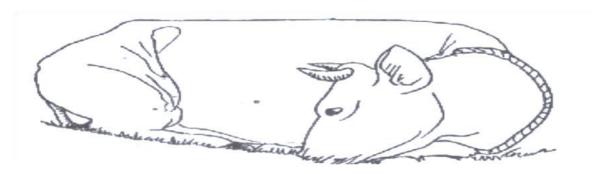
Sheep spends most of the time lying down if the hind feet are affected



- 11. Discuss black quarter under the following sub-headings:
 - a) Animal affected (1mk)
- cattle, sheep, goats
 - b) Casual organism(1mk)

Clostridium chauvei

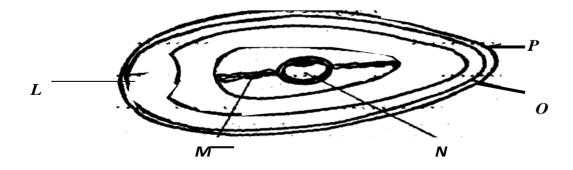
- c) Symptoms of disease(3mks)
- Rise in body temperature
- Lameness and swelling of upper part of limbs, making animals lie on side
- Swollen shoulders on either side of body, chest or back, formation of gas under skin
- Difficulties in breathing
- . Muscle appear black and spongy
- . Grunting and grinding of teeth
- . Failure to chew cud
- · On exposure to air, muscle of body rapidly darken
 - d) Control measures (2mks)
- Annual vaccination using black quarter vaccine
- Burning of carcass
- Carcass should not be skinned or opened
- Cleaning and treating of all wounds with antiseptics
- 13. The illustration below shows a dairy cow suffering from a disease three days after calving down. The cow went down with its head turned back and was unable to stand.



a) Which disease did the cow suffer from? (1mk)



- b) State **two** ways of preventing the disease you have identified in (i) above. (2mks)
 - Give feeds rich in minerals (Ca²⁺, P2O⁻5) starting from the last 2 months of gestation/steam up.
 - Give vitamin D injection a week before parturition.
 - Dry off the cow sufficiently.
 - **13.** Differentiate between antibiotics and antibodies. (1mk)
- Antibiotics are chemical substances (drugs) that kill biotic agents e.g. bacteria, protozoa while antibodies are proteinous chemical substances produced within the body that fight against the entry and multiplication of biotic factors
- 14. (a) List four routes through which pathogens can enter the body of an animal. (4 mks)
- Oral (mouth), broken skin (wounds), nasal, ocular (eyes), anal, ears, reproductive organs, umbilical cord
- 15. Give **two** conditions that reduce the quality of eggs for hatching. (2mks)
 - Poor candling qualities.
 - . ៉ Abnormal size
 - Cracks on the egg shell.
 - Over staying of the egg/poor storage
 - . 🗏 Dirt
 - Abnormalities e.g. double York
 - **16.** Study the diagram of an egg below and answer the questions that follow:



- a) Name the parts labeled M,L, N, O and P (5mks)
- M- Chalaza
- · L-Space

N- Yolk

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- O- Inner shell membrane
- . P- Shell
- b) State the functions of the parts M and L (2mks)
- M- Hold the yolk in position at centre of the egg.
- L- Air trapped in this space used by developing embryo
 - c) Why should the egg be turned during incubation(1mk)
 - · To avoid germinal disc sticking on the egg shell
 - d) State **three** abnormalities of eggs that can be detected during egg candling.(3mks)
 - . Absence of yolk.
 - . Double / triple yolk.
 - Air space in wrong position.
 - Excessively large air space.
 - Eracks on egg shell.
 - . = Blood / meat spots.
 - ≡ Deformed / broken yolk.



