

NAME: ADM NO: CLASS:

443/2
AGRICULTURE
PAPER 2
FORM 3
END OF TERM 2 EXAM
TIME: 2 HOURS

INSTRUCTIONS:

This paper consists of 3 sections; A, B and C.
Answer all questions in section A and B and any two in section C.

1. State four reasons for castration in rams. (2 mks)
 - Control breeding
 - control breeding diseases
 - faster growth
 - increase quality of meat
 - make them docile
 - fatten them

2. List any four conditions that pre-dispose an animal to disease or injury. (2 mks)
 - **Age of the animal**
 - **Sex**
 - **Colour**
 - **Breed**
 - **Environmental conditions**
 - **Physiological conditions**
 - **Heredity**
 - **Overcrowding**

3. State four functions of vitamins in Livestock. (2 mks)
 - **Help in blood clotting**
 - **Act as organic catalyst**
 - **Prevent diseases in livestock**
 - **Help in bone formation**
 - **Help in muscular activities**

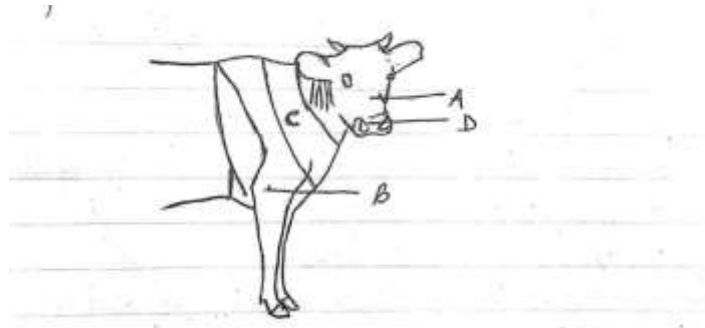
4. State four factors one would consider when choosing feed
 - **Availability of food**

- **Cost**
 - **Nutrient composition**
 - **Type of livestock**
 - **Age of the animal**
5. State four factors that may lead to dip wash being exhausted or weakened while in the dip tank. (2 mks)
- **Getting diluted by e.g rainwater**
 - **Evaporation**
 - **Leakage at the bottom**
 - **Dirt/impurities from animal's body.**
6. Give two reasons why walls of dairy shed should be white washed instead of painting with oil paints.
- **To avoid poisoning by lead in paints**
 - **Discourage insects**
 - **To avoid tainting of milk.**
7. List four tools used in laying concrete blocks. (2 mks)
- **Trowel**
 - **Plumb bob/line**
 - **Mason's square**
 - **String line**
 - **Spirit level**
 - **Wood flat**
8. State four reasons for treating timber used for fencing. (2 mks)
- **To prevent warping**
 - **To prevent rotting/damage by fungi**
 - **Reduce damage by insects**
 - **To enhance strength**
9. State four harmful effects of ticks to livestock (2 mks)
- **Transmit diseases**
 - **Cause anaemia**
 - **Cause irritation**
 - **Lower quantity and value of skin**
10. State four symptoms of liver fluke attack, that may be observed in animals (2 mks)
- **Digestive upsets**

- **Swollen abdomen**
 - **Emaciation**
 - **Recumbency leading to death**
 - **Anaemia**
 - **Oedema in joints**
11. Outline four methods of controlling the fresh water snail. (2 mks)
- **Drain stagnant water**
 - **Physically killing the snail**
 - **Routine drenching of animals**
 - **Spray pasture with lime**
 - **Burning pasture during the dry season**
12. State four ways of preparing the low for furrowing. (2 mks)
- **Deworming the sow**
 - **Wash the sow**
 - **Reduce feeding gradually**
 - **Move the sow to the furrowing pen**
13. Give two factors that may lead to conception failure after service in heifers. (2 mks)
- **Poor timing of service**
 - **Poor nutrition**
 - **Infertility(heifer/bull) – Formation/femation.**
14. Give two causes of soft shell in eggs. (2 mks)
- **Lack of calcium**
 - **Some diseases e.g Newcastle**
15. State four management practices that would ensure maximum harvest of fish from fish pond. (2 mks)
- **Control stocking rate**
 - **Control water pollution**
 - **Supply of fish food**
 - **Aerating water**
 - **Maintaining appropriate depth of water.**

SECTION B: (20 MARKS)

16. Use the diagram below to answer the questions that follow.



(a) Name the parts labeled A - D (2 mks)

A - Nose -bridge

B - Elbow

C - Wuthers

D - Muzzle

(b) Name the breed of dairy cattle with the highest butter fat content in milk. (1 mk)

Jersey

(c) Distinguish between a large white and a landrace breeds of pigs (8 mks)

- **Large white: White, broad and slightly dished snout and has upright ears .**
- **Landrace: White, straight snout and long drooping ears.**

17. Use the diagram below to answer the questions that follow

(a) Name the disease or disorder that makes the animal behave as shown above. (1 mk)

- **Milk fever**
- (b) State three prevention measures of the above problem. (3 mks)
- **Partial milking**
 - **Feeding an animal with ration rich in phosphorous and calcium**
 - **Allow animal to sunlight**
- (c) Define the term Pica as used in livestock nutrition. (1 mk)
- **Deprived appetite when phosphorus is missing in an animal's diet.**

18. Use the diagram below to answer the questions that follow

- (a) Name the structure shown above. (1 mk)
- **Queen excluder**
- (b) State the importance of the above structure where it's used. (1 mk)
- **Prevents the queen bee from laying eggs in all combs.**
- (c) State three pests that affect organisms that use the above structure. (3 mks)
- **Ants**
 - **Wax moth**
 - **Bee louse**

19. (a) State 3 systems involved in outbreeding (3 mks)

- **Outcrossing**
 - **Cross breeding**
 - **Upgrading (grading up)**
- (b) State two advantages of natural mating. (2 mks)
- **More accurate**
 - **Less laborious (No need of checking heat signs)**
 - **Useful when heat period is not easily detected.**

SECTION C: (40 MARKS)

20. (a) Discuss the factors considered during selection of a breeding stock. (10 marks)

- **Level of performance**
- **Body conformation**
- **Temperament or behavior**
- **Adaptability**
- **Fertility/prolificacy**
- **Hereditary defects**
- **Health**
- **Age: Select young animals**
- **Mothering ability**
- **Quality of products.**

(NB: Consider the relevance of explanation on each. Award a whole mark for a well explained point)

(1 x 10)

- (b) Discuss five methods used during identification of animals.(10 mks)
- **Branding: Involves marking of animals on the skin with permanent marks using a hot iron with inscriptions.**
 - **Neck strap or chain: Involves hanging metal plates bearing shapes or numbers around the neck of an animal using canvas leather strap or metal chain.**

- **Ear tagging:** It employs use of plastic or metal tags bearing numbers or letters fixed through a hole on the ears of the animal.
- **Tattooing:** Employs use of permanent ink or dye on the skin of the animal.
- **Ear notching:** Ears of the animal are cut to make different shapes each standing for a certain value.

21. (a) Discuss the mechanical methods used to control ticks. (10 mks)

- **Burning the infested pastures:** involves deliberate burning of pastures aiming at reducing tick population.
- **Interfering/altering the tick environment:** Can be done through ploughing or top dressing pasture using lime or acaricide to make the environment less conducive for ticks.
- **Fencing:** Controls interaction of the animal with others.
- **Starving the ticks:** Achieved by keeping animals away from infested pastures through rotational grazing.
- **Hand picking/deticking:** Involves manual removal of ticks from the animal and killing them. (2 x 5)

(b) Discuss the general effects of parasites on livestock. (10 mks)

- **Cause anaemia:** Its brought by sucking parasites which take large volumes of blood from the host animal.
- **Deprive the host animal food:** Compete for food with host animals leading to emaciation.
- **Cause injury and damage to tissues and organs:** They break the skin of animal exposing it to secondary infection. Others affect internal organs.
- **Disease transmission:** Some parasites act as vectors of some diseases spreading them from one animal to another.
- **Cause irritation:** External parasites irritate animals through bites. Animals rub against objects – destruction of skin, fur or wool.
- **Obstruction to internal organs:** parasites cause mechanical obstruction/blockage of internal passage – malfunctioning of organs. (2 x 5)

22. (a) Discuss the structural requirements of a calf pen. (14 mks)

[DOWNLOAD MORE RESOURCES LIKE THIS ON ECOLEBOOKS.COM](http://EcoleBooks.com)

- **Concrete floors:** for easy cleaning
- **Adequate space:** allows room for exercise, feeding and watering
- **Single housing:** prevents licking each other and spread of worms and diseases.
- **Proper lighting:** Allows enough light to help in synthesis of vit D.
- **Proper drainage:** Area should be well drained to prevent dampness.
- **Draught free:** Construction should not allow cold wind into the structure.
- **Leak proof roof:** Should not allow water through the roof.

(2 x 7)

(b) State six methods employed in parasites and disease control in livestock. (6 mks)

- **Vaccination**
- **Deworming**
- **Hoof trimming**
- **Docking**
- **Dipping and spraying**
- **Dusting**