

**K.C.S.E 2008 AGRICULTURE**

**PAPER 2 (443/2)**

**SECTION A (30 marks)**

*Answer ALL the questions in this section in the spaces provided.*

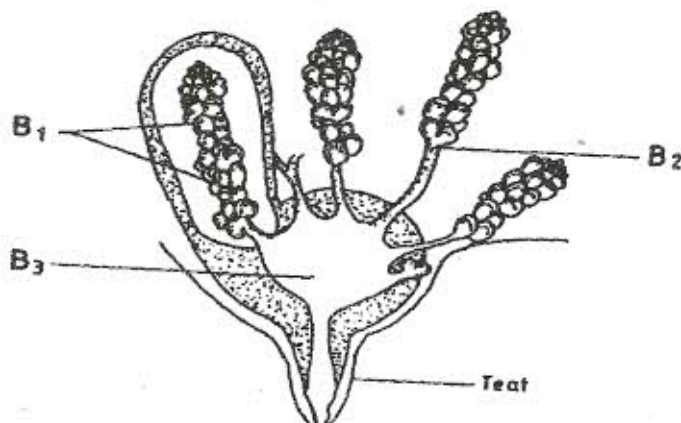
1. State **four** factors that determine the amount of water required by livestock. (2 marks)
2. State **three** factors that would determine the effectiveness of an acaricide. (1½ marks)
3. Name a breed of goat kept for hair production. (½ mark)
4. Differentiate between homogenization and pasteurization in milk processing. (1 mark)
5. Name a tool used for tightening barbed wire during fencing. (½ mark)
6. State **one** use of a sledge hammer on the farm. (½ mark)
7. What is dry cow therapy? (1 mark)
8. What is heterosis in livestock breeding? (1 mark)
9. State **four** factors that would contribute to the depreciation of a farm equipment. (2 marks)
10. What is the function of the draw bar of a tractor? (½ mark)
11. Name the **two** types of air cleaners used in tractors. (1 mark)
12. What is the reason for turning eggs regularly during incubation? (1 mark)
13. Name the part of poultry digestive system in which cellulose is digested. (½ mark)
14. State **four** practices that should be carried out on wooden fencing posts to make them last long. (2 marks)
15. Name **four** structures which would assist in the control of livestock parasites on a farm. (2 marks)
16. Differentiate between mothering ability and prolificacy in livestock breeding. (1 mark)
17. Give **two** reasons for flushing in sheep management. (1 mark)
18. Give **three** uses of biogas on a farm. (1½ marks)
19. Name the causative agent of Gumboro disease in poultry. (½ mark)
20. State how the following practices can be used to control livestock diseases:
  - (a) Quarantine; (1 mark)
  - (b) Prophylactic measures. (1 mark)

21. State two reasons why proper nutrition is important in animal health. (1 mark)
22. State four predisposing factors to mastitis in dairy cattle. (2 marks)
23. Give two harmful effects of Keds (*Melophagus Orinus*) in sheep. (2 marks)
24. Name the breeds of livestock described below: (2 marks)
- (a) A pig breed which is white in colour, with straight snout and long ears drooping over the face; (1 mark)
- (b) A beef cattle breed, deep red in colour; the face and part of the legs below the knees and hocks are always white. (1 mark)

### SECTION B (20 marks)

Answer **ALL** the questions in this section in the spaces provided.

25. The diagram below shows a cross section of an udder. Study it and answer the questions that follow.



- (a) Identify the parts labelled  $B_1$ ,  $B_2$  and  $B_3$ . (3 marks)
- (b) Give one function of the part labelled  $B_1$ . (1 mark)
- (c) Name the part of the teat which is likely to be injured by poor hand milking technique. (1 mark)

26. (a) Below are diagrams of fences C and D. Study them carefully and illustrate on diagram C how diagonal wire braces and on diagram D how horizontal wooden braces are used to reinforce the fencing posts. (2 marks)

Diagram C

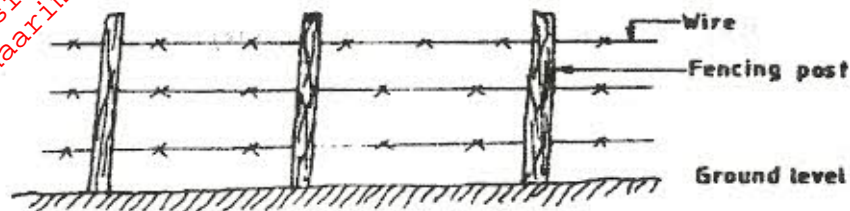
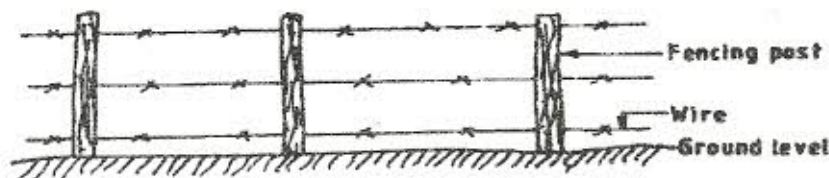


Diagram D



- (b) The diagrams below show a set of equipment used in livestock management. Study them and answer the questions that follow.



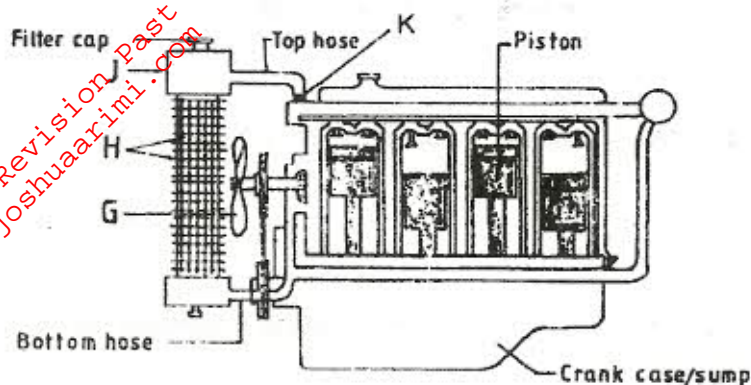
E



F

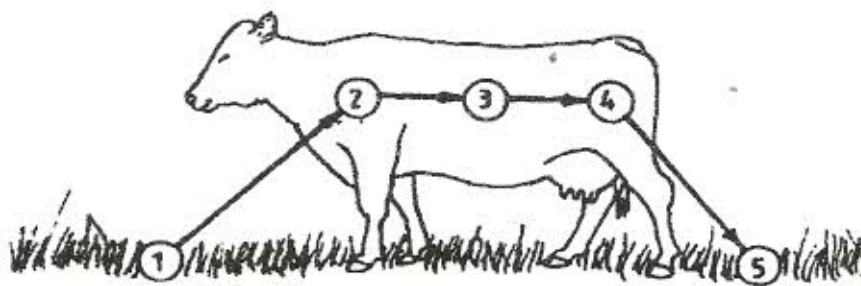
- (i) Identify the equipment labelled E and F. (1 mark)
- (ii) State the appropriate use of the set of equipment illustrated above. ( $\frac{1}{2}$  mark)
- (iii) Describe the appropriate procedure followed when using the equipment. (2 marks)

27. The diagram below shows the cooling system of a tractor engine. Study it carefully and answer the questions that follow.



- (a) Name the parts labelled G, H, J and K. (2 marks)
- (b) State the functions of the parts labelled G, J and K in the cooling system. (3 marks)

28. The diagram below illustrates the stages of life cycle of a tick. Study the diagram and answer the questions that follow.



- (a) Describe the development of ticks at 1, 2, 3 and 4. (4 marks)
- (b) Classify the tick on the basis of the life cycle. (½ mark)

**SECTION C (40 marks)**

Answer any **TWO** questions in this section in the spaces provided at the end of the section.

29. (a) Describe the use of various hand tools required for the construction of a wooden rabbit hutch. (10 marks)
- (b) What factors should a farmer consider when selecting materials for constructing a dairy cattle shed. (10 marks)
30. (a) Describe the feeding practices carried out on a calf from birth to weaning. (10 marks)
- (b) Describe management practices that would ensure clean milk production in a dairy farm. (10 marks)
31. (a) Describe how the following tractor components are used to attach implements to the tractor:
- (i) Three (3) point linkage / hitch. (6 marks)
- (ii) Power Take Off shaft (P.T.O) (4 marks)
- (b) Describe how the ignition system of a tractor petrol engine works. (10 marks)