

**K.C.S.E 2008 AGRICULTURE  
PAPER 1 (443/1)**

**SECTION A (30 marks)**

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

1. Give **two** factors which characterise small scale farming. (1 mark)
2. State **two** effects of HIV/AIDS on agricultural production. (1 mark)
3. Give **two** reasons why farmers are encouraged to practice organic farming. (1 mark)
4. Distinguish between soil structure and soil texture. (1 mark)
5. State **two** effects of siltation in dams. (1 mark)
6. List **two** examples of working capital in crop production. (1 mark)
7. a) Define the term **land reform**. (½ mark)  
b) Give three methods of land reforms practised in Kenya. (1½ marks)
8. State **three** ways by which land as a factor of production could be made more productive. (1½ marks)
9. State **three** functions of the Coffee Board of Kenya. (1½ marks)
10. Differentiate between the following terms as used in agricultural economics:  
a) Fixed input and variable input. (1 mark)  
b) Journal and ledger book. (1 mark)
11. Give **two** methods used for seed treatment of tree species before planting in agroforestry. (1 mark)
12. Give **two** benefits of border planting form of agroforestry to a farmer. (1 mark)
13. State **three** factors which may affect the quality of hay. (1½ marks)
14. Give **four** factors to consider when choosing a nursery site. (2 marks)
15. State **three** methods of controlling insect pests in a crop nursery. (1½ marks)

16. Name **one** vegetative material used to propagate each of the following crops: (2 marks)

- a) Bananas .....
- b) Pineapples .....
- c) Irish potatoes .....
- d) Pyrethrum .....

17. Give **four** disadvantages of broadcasting as a method of planting. (2 marks)

18. State **four** factors that would determine the number of operations to be carried out on a seedbed before planting. (2 marks)

19. State **two** ways by which soil pH may affect crop production. (1 mark)

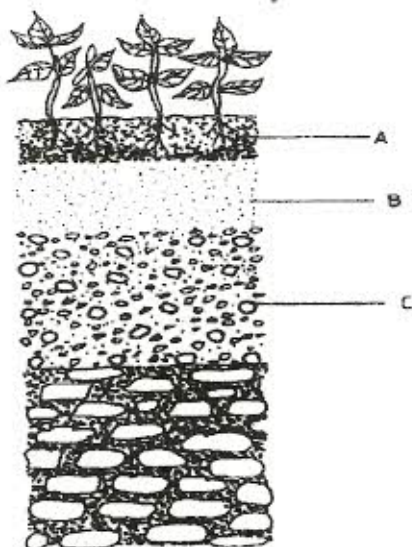
20. Give **two** conditions under which blossom end rot disease may occur in tomatoes. (1 mark)

21. State **four** factors that contribute to the competitive ability of weeds. (2 marks)

**SECTION B (20 marks)**

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

22. The diagram below illustrates a feature observed after digging the soil several metres deep. Study the diagram carefully and answer the questions that follow.

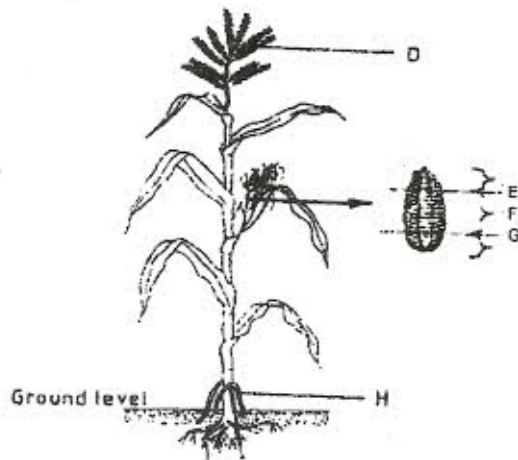


(a) Identify the feature that the diagram above represents in the study of soil. (1 mark)

(b) Name the parts of the diagram labelled A, B and C. (1½ marks)

(c) State two ways in which the knowledge of the above feature would be of benefit to a farmer. (2 marks)

23. The diagram below illustrates a cereal crop plant and its produce. Study the diagram carefully and answer the questions that follow.



(a) Name one disease that attacks the part of the plant labelled D in the diagram. (1 mark)

(b) From which section of the produce labelled E, F and G should seeds for planting be obtained. (½ mark)

(c) Give one reason for the answer given in (b) above. (1 mark)

(d) State two functions of the part labelled H in the diagram. (1 mark)

(e) A farmer has a piece of land measuring 90 m by 60 m to plant seeds selected in (b) above at the rate of one seed per hole and a spacing of 90 cm by 30 cm. Calculate the plant population in the whole field if all the seeds germinated. (show your working) (1½ marks)

24. The diagram below illustrates a parasitic weed. Study the diagram carefully and answer the questions that follow.



- (a) Identify the weed illustrated above. (½ mark)
- (b) Name **two** crops the weed illustrated above commonly attacks. (1 mark)
- (c) State **one** reason why the weed is referred to as a parasitic weed. (1 mark)
- (d) State **two** methods for controlling the weed illustrated above. (1 mark)

25. The following is a farm record Mrs. Sanda had kept as at 30th June 2006. Study it carefully and answer the questions that follow.

	Ksh
Cash in hand	20 000
Cash at bank	66 000
Buildings	50 000
Disc ploughs	16 000
Debtors	16 000
Working tools	12 000
Bank overdraft	24 000
Creditors	20 000
Loan	50 000
Cattle	40 000
Land	80 000

- (a) Prepare the balance sheet from the above information for Mrs. Sanda's farm. (6 marks)
- (b) State **two** benefits of the balance sheet to Mrs. Sanda. (1 mark)

**SECTION C (40 marks)**

Answer any **TWO** questions in this section in the spaces provided in this booklet.

26. (a) State and explain five roles of agriculture in economic development of Kenya. (10 marks)
- (b) Describe measures which should be taken to minimise water pollution on a farm. (10 marks)
27. State and explain:
- (a) Five advantages of crop rotation. (10 marks)
- (b) Five factors which may influence the spacing of crops. (10 marks)
28. (a) Explain why settlement schemes were established in Kenya soon after independence. (10 marks)
- (b) State and explain the various land tenure systems practised in Kenya. (10 marks)