**NAME…………………………………………..ADM. NO…………**

**DATE……………………….CLASS………………………………**

**MWAKICAN FORM 3 JOINT EXAMINATION -2017**

**KENYA CERTIFICATE OF SECONDARY EDUCATION**

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**END OF TERM I EXAMINATIONS 2017**

**AGRICULTURE**

**443/1**

**PAPER 1**

**TIME: 2 HOURS**

**INSTRUCTIONS TO CANDIDATES**

1. Answer all the questions in section A and B

2. Answer only 2 questions in section C

**SECTION A ( 30 MARKS) - ( Answer all questions)**

1. State four advantages of mixed farming (2mks
2. State four importance of agriculture. (2mks)
3. State four negative effects of wind in crop production. (2mks)
4. State four aspects of rainfall that influence agricultural production. (2mks)
5. State three tertiary operations that are carried out in the farm (1 1/2mks)
6. State three importance of carrying out minimum tillage. (1 1/2mks)
7. Give three ways in which soil PH influences crop production. (1 1/2mks)
8. a) Give one reason why top soil is added during preparation of compost manure. (1mk)

b) State four the characteristics of a good green manuring crop. (2mks)

9. State four advantages of timely planting. (2mks)

10. List four post-harvest practices that are carried out in maize production. (2mks)

11. State four cultural practices of weed control in beans. (2mks)

12. State four ways in which soil loses fertility. (2mks)

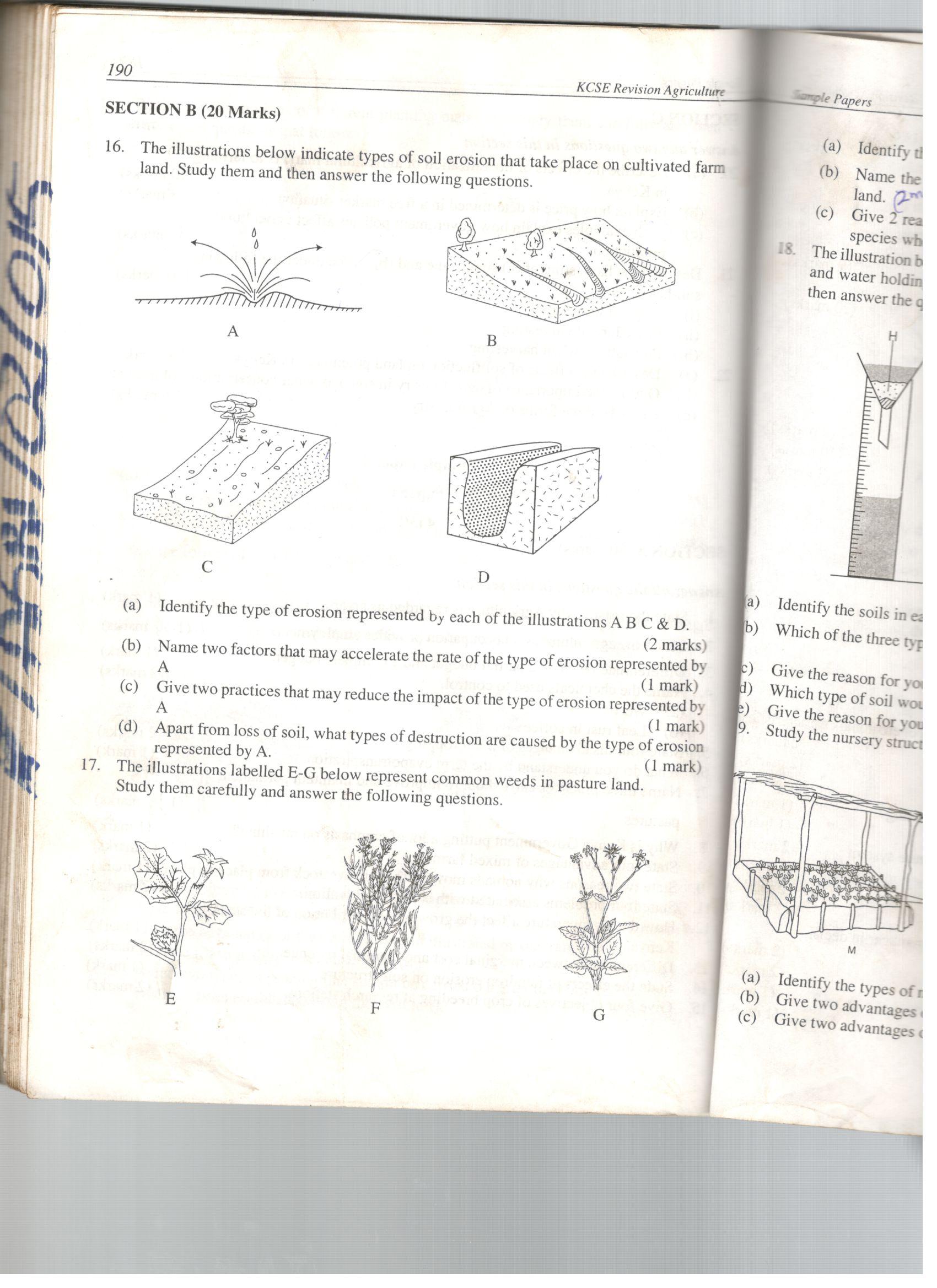
13. Give four pieces of information contained in a land title deed. (2mks)

14. State four advantages of land consolidation. (2mks)

15. Give five advantages of adding organic matter in soil. (2 1/2mks)

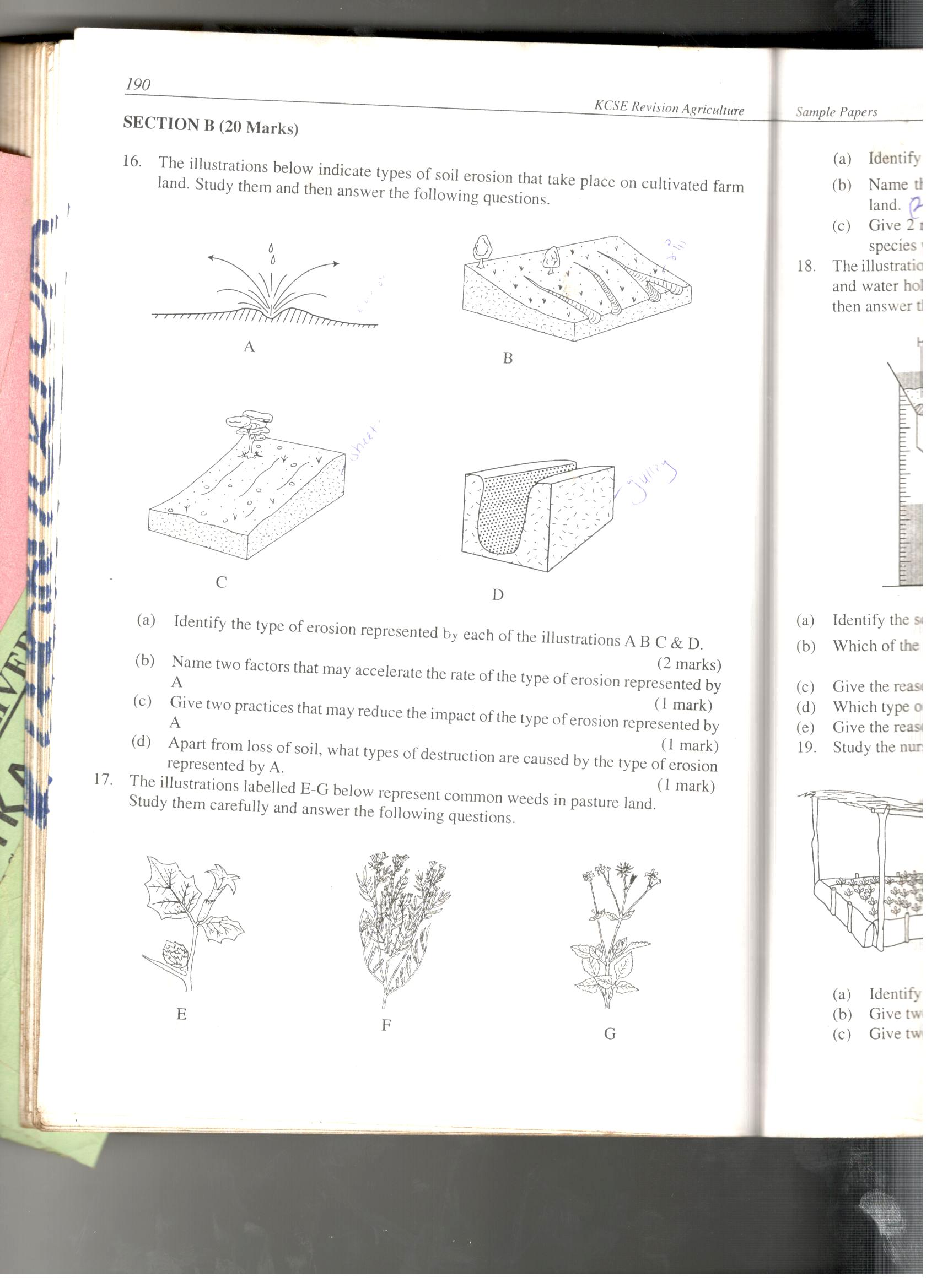
**SECTION B**

16. The illustrations below indicate types of soil erosion that take place on cultivated farm land. Study them and then answer the following questions.



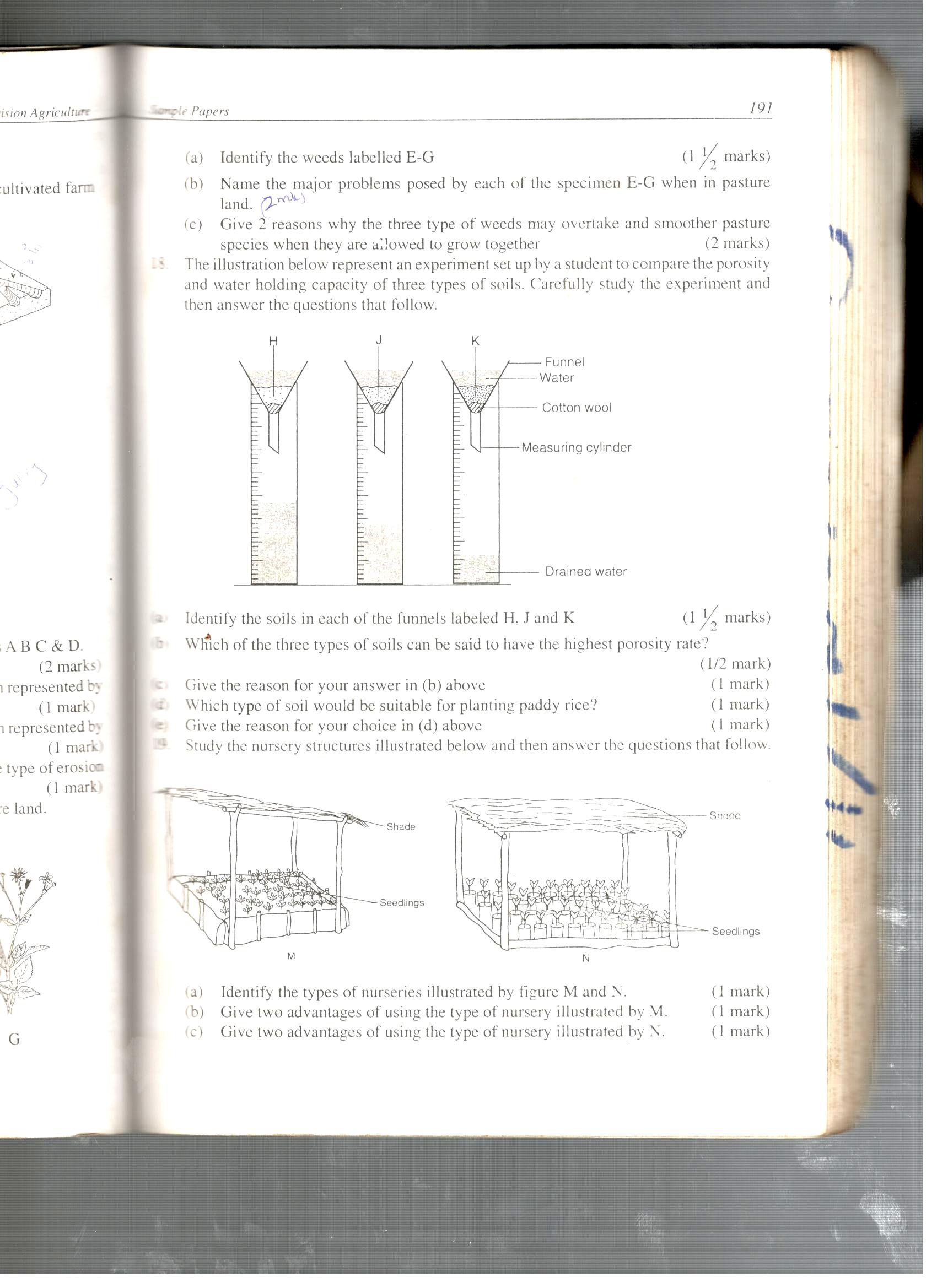
1. Identify the type of erosion represented by each of the illustrations ABCD. (2mks)
2. Name two factors that may accelerate the rate of the type of erosion represented by A (1mk)
3. give two practices that may reduce the impact of the type of erosion represented by A (1mk)
4. Apart from loss of soil, what types of destruction are caused by the type of erosion represented by A. (1mk)

17. The illustration labeled E-G below represent common weeds in pasture land. Study them carefully and answer the following questions.

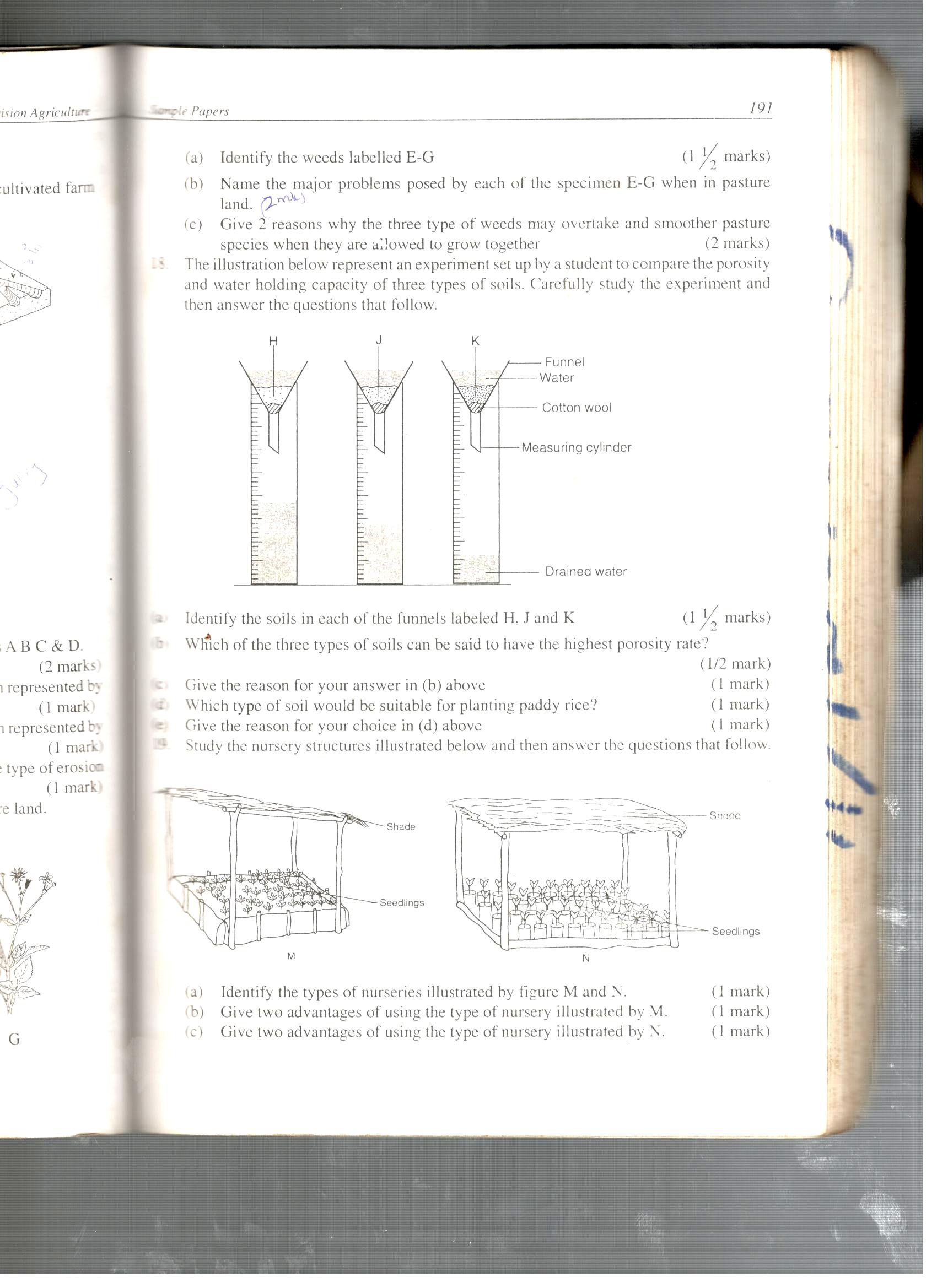


1. Identify the weeds labeled E-G (1 ½ mks)
2. Name the major problems posed by each of the specimen E-G when in pasture land. (1½mks)
3. Give 2 reasons why the three type of weeds may overtake and smoother pasture species when they are allowed to grow together. (2mks)

18. The illustration below represent an experiment set up by a student to compare the porosity and water holding capacity of three types of soils. Carefully study the experiment and then answer the questions that follow.



1. Identify the soils in each of the funnels labeled H,J and K (1 1/2mks)
2. Which of the three types of soils can be said to have the highest porosity rate? (½mks)
3. Give the reason for your answer in(b) above (1mk)
4. Which type of soil would be suitable for planting paddy rice? (1mk)
5. Give the reason for your choice in (d) above (1mk)
6. Study the nursery structure illustrated below and then answer the questions that follow.



1. Identify the nurseries illustrated by figure M and N. (1mk)
2. Give two advantages of using the type of nursery illustrated by M. (1mk)
3. Give two advantages of using the type of nursery illustrated by N. (1mk)
4. State two management practices done in the nursery during last two weeks before transplanting the seedlings (2mks)

**SECTION C (40MKS) ANSWER ONLY 2 QUESTIONS**

1. a) state five advantage of landlordism and tenancy system of land tenure (5mks)

b) State five factors which determine the spacing of any crop (5mks)

c) State and explain five cultural methods of controlling soil erosion (10mks)

1. Describe the cabbage production under the following headings
2. Ecological requirement (2mks)
3. Nursery management (6mks)
4. Transplanting (5mks)
5. Field practices (5mks)
6. Harvesting 2mks
7. a) State and explain any five cultural methods of controlling weeds (10mks)

b) Outline ten harmful effects of pests