

THE SUCCESS PATH EXAMINATION COUNCIL (SPEC)**Paving the Way to Success****443/1 AGRICULTURE****FORM 4 PRE-MOCK 2026****March 2025****Time: 2 hours****Paper 1**

443/1 4992104

Name Admission Number

School Class

Candidate's Signature Date

Instructions to candidates:

- (a) Write your name and admission number in the spaces provided above.
- (b) Sign and write the date of examination in the spaces provided above.
- (c) This paper consists of three sections A, B and C.
- (d) Answer all questions in Section A and B.
- (e) Answer any two questions in section C.
- (f) Answers should be written in the spaces provided.
- (g) This paper consists of 13 printed pages.
- (h) Candidates should check the question paper to ascertain that all the pages are printed as indicated and no questions are missing.
- (i) Candidates should answer the questions in English.

For Examiner's Use Only

Section	Questions	Maximum Score	Candidate's Score
A	1 – 17	30	
B	18 – 21	20	
C		20	
		20	
Total Score		90	

SECTION A (30 Marks)

Answer all the question in this section in the spaces provided.

1. State **two** types of labour records. (1mark)

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2. List **four** climatic factors that influences crop production. (2marks)

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3. Name **three** types of pipes used to convey water in the farm. (1¹/₂marks)

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4. Give **five** causes of land fragmentation in Kenya. (2¹/₂marks)

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5. State **four** important objectives of land tenure reforms. (2marks)

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6. State **four** reasons why burning of vegetation when clearing land should be discouraged.

(2marks)

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7. Outline **four** importance of good soil profile in crop production.

(2marks)

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8. Give **three** ways of achieving minimum tillage.

(1½marks)

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9. Differentiate between the following terms;

(a) Over sowing and under sowing.

(1mark)

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(b) Hardening off and pricking out.

(1mark)

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10. List **four** environmental factors that influences the effectiveness of herbicide. (2marks)

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11. State **three** importance of mulching in crop production. (1½mark)

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12. State **two** disadvantages of basin irrigation. (1mark)

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13. Give **four** effects of soil erosion. (2marks)

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14. Give **four** reasons for pasture conservation. (2marks)

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15. State **four** characteristics of a fertile soil. (2marks)

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16. State **four** roles of calcium in crop production. (2marks)

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17. Give **two** reasons why polythene sheet is used in vegetative propagation nursery unit. (1mark)

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SECTION B (20 Marks)

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

18. A student was to apply a compound fertilizer 5:20:10 at the rate of 200kg per hectare on her Agriculture project plot measuring 3m by 4m.

(a) What do the figures 5 and 10 in the compound fertilizer stand for? (2mark)

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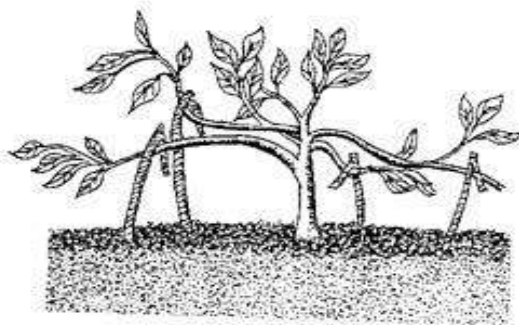
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(b) Calculate the amount of fertilizer she would require for the plot. (3 marks)

19. Study the diagram below and answer the following questions.



(a) Identify the practice above. (1mark)

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(b) State **two** reasons for carrying out the practice above. (2marks)

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(c) State **two** disadvantages with the practice above. (2marks)

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20. The following is an illustration of an infected Irish potato plant. Study it carefully and answer the questions below.



(a) Identify the disease which may have caused the condition shown in the Illustration.

(1mark)

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(b) Name any other crop which may be affected by the disease identified illustrated above.

(1/2mark)

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(c) Mention **three** other factors which can lead to the same condition as shown by the illustration.

(1 1/2marks)

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(d) State **two** measures that can be used to control the disease illustrated above.

(2marks)

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21. The diagram below shows a common weed. Study it carefully and answer the questions the follows.



(a) Identify the weed. (1mark)

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(b) Give **one** reason why the weed illustrated above is referred to as parasitic weed. (1mark)

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(c) Name **two** crops that the weed illustrated above commonly attack. (2marks)

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(d) State **one** cultural method of controlling the weed above. (1mark)

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SECTION C (40 marks)

*Answer **only two** questions in this section in the spaces provided after question 22.*

22. a) Describe the production of carrots under the following subheadings.
- (i) Land preparation. (3marks)
 - (ii) Planting. (3marks)
 - (iii) Field management practices. (4marks)
- b) State and explain the factors that determine the stage and time of harvesting crops. (5marks)
- c) State **five** effects of HIV/AIDS on Kenya’s agricultural production. (5marks)
23. a) Outline **7** importance of pruning in coffee production. (7marks)
- b) Explain the precautions that should be observed during the harvesting of pyrethrum. (3marks)
- c) Give **ten** uses of farm records in the farm. (10marks)
24. a) State and explain **five** factors that determine seed rate. (10marks)
- b) Describe the procedure of transplanting a vegetable seedling. (7marks)
- c) Give **three** reasons for processing agricultural produce. (3marks)

