

LAIKIPIA



UNIVERSITY

UNIVERSITY EXAMINATIONS

2ND SEMESTER 2023/2024 ACADEMIC YEAR

THIRD YEAR EXAMINATIONS FOR BACHELOR OF SCIENCE IN AGRICULTURAL EXTENSION AND EDUCATION

AGED 324: PERENIAL CROPS

STREAM: R

TIME: 2 HRS

DAY: TUESDAY (11.30-1.30PM)

DATE: 9/4/24

THIS QUESTION PAPER CONSISTS OF FOUR (4 PAGES)

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INSTRUCTIONS: Answer question **ONE** and any other **TWO** questions.

QUESTION ONE (30 MARKS)

(a) Explain the following observations:

- (i) Pyrethrum grown in high altitude areas will earn more money per kilogramme, than the ones grown in low altitude areas. **(2 marks)**
- (ii) Burnt sugarcane has low sucrose content **(2 marks)**
- (iii) Management of tea plucking rounds is important to every tea farm manager **(2 marks)**
- (iv) Sisal bundles in the field are made in the morning or evening **(2 marks)**

(b) A coffee farmer has reported to you the following symptoms on his farm: Pale yellow spots on the underside of the leaves, some spots had changed to yellow orange powdery mass, and affected leaves fall off prematurely. Using the above symptoms, advice the famer on the following:

- (i) Identify the cause of the problem **(2 marks)**
- (ii) Formulate a control strategy for the problem **(5 marks)**
- (c) Discuss 3 importance of brushing sisal fibres before baling **(3 marks)**
- (d) Explain 4 ways to control Zebra disease in sisal production **(4 marks)**
- (e) Outline 3 importance of pruning in cashew nut plants **(3 marks)**
- (f) Discuss 5 qualities of a good Copra (dried coconut meat) **(5 marks)**

QUESTION TWO (20 MARKS)

- (a) Describe one top working procedure in coffee production **(5 marks)**
- (b) Describe 3 ways to ensure a successful change of cycle in a capped system in coffee Production **(6 marks)**

(c) Assuming you are Agriculture officer in Rift valley where main flowering of coffee plants is in March and April. Prepare a coffee nutrition programme to be used by farmers in your area using a table below: (9 marks)

Major element	Importance in coffee (Roles)	Stage of Application	Time of Application (Month)
Nitrogen			
Phosphorus			
Potassium			
Zinc			
Boron			
Iron			

QUESTION THREE (20 MARKS)

(a) Pyrethrum board of Kenya intends to hire an Agriculture extension officer with objective of improving the quality of pyrethrum flowers produced by their contacted farmers. Explain to the board 5 ways you intend to achieve this objective. (10 marks)

(b) County government of Nakuru has been promoting pyrethrum production for five years. However, report indicate low adoption among farmer groups. Assuming you have been appointed as the new CEM of Agriculture, outline 5 strategies you intend touse to change this trend (10 marks)

QUESTION FOUR (20 MARKS)

(a) Explain one way to control striga weed in sugarcane production (2 marks)

(b) Discuss how to commercially use three major by-products of sugarcane processing (3 marks)



(c) Describe 5 ways of treating sugarcane planting materials (5 marks)

(d) As an Agriculture extension expert and a member of task force appointed to revive Mumias Sugar Company by county government of Kakamega. Outline 5 factors that has led to the collapse of most sugar factories in Kenya which the committee should consider (10 marks)

QUESTION FIVE (20 MARKS)

- a) Discuss 2 reasons why tea pruning is done at regular interval of 3 years (4 marks)
- b) Discuss two methods of frame formation (6 marks)
- c) Outline 2 causes of moribund in tea fields (4 marks)
- d) Explain 3 classification of processed tea based on fermentation (6 marks)

