

AGRICULTURE

FORM 2

END TERM 2 2025 EXAMINATION

MARKING SCHEME

SECTION A (30 Marks)

1. **Three ways agriculture contributes to industrial development** (3 marks – 1 mark each)

- Provides raw materials to industries (e.g., cotton to textile industries)
- Creates market for industrial goods
- Provides employment which increases purchasing power
- Generates income to buy industrial products

2. **Three factors that influence shifting cultivation** (3 marks – 1 mark each)

- Soil fertility
- Availability of land
- Climate (rainfall and temperature)
- Type of crops grown
- Population pressure

3. **Two maintenance practices for each tool** (4 marks – 1 mark each)

a) Wheelbarrow

- Lubrication of wheel axle
- Repair or replace flat or damaged tires
- Cleaning after use
- Tightening loose nuts and bolts

b) Wool shear

- Sharpening blades regularly
- Oiling moving parts
- Cleaning after use
- Safe storage to avoid rusting

4. **Two reasons for land preparation before planting** (2 marks)

- To loosen the soil for better root penetration

- To remove weeds and pests
 - To improve aeration and water infiltration
 - To mix manure/fertilizers with the soil
5. **Two methods of preparing compost manure** (2 marks)

- Pit composting
- Heap composting
- Pit or heap composting with layering

6. **Two uses of farm records** (2 marks)

- To monitor farm activities and production
- To plan and budget for farm resources
- To provide information for decision making
- For legal and tax purposes

7. **Meaning of N.P.K in fertilizers** (3 marks – 1 mark each)

- N = Nitrogen
- P = Phosphorus
- K = Potassium

8. **Differences between** (2 marks – 1 mark each)

- Straight fertilizer: Contains one major nutrient (e.g., CAN contains Nitrogen only)
- Compound fertilizer: Contains two or more nutrients combined (e.g., NPK fertilizers)

9. **Calculate amount of Nitrogen applied per ha** (3 marks)

Given:

- Amount of CAN = 180 kg/ha
- %N in CAN = 21%

Calculation:

Amount of N = $180 \times 0.21 = 37.8$ kg N/ha

10. a) **Two advantages of using seeds as planting materials** (2 marks)

- Seeds are easy to store and transport
- Seeds are disease free (if certified)
- Seeds produce uniform crops

b) **Two methods to break seed dormancy** (2 marks)

- Scarification (scratching or nicking the seed coat)

- Stratification (exposing seeds to cold treatment)
 - Soaking seeds in water
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SECTION B (Answer all questions)

11. *(Diagram question - no text provided; mark accordingly)*
12. **Three types of information written on a soil sample before lab testing** (3 marks)
- Date of collection
 - Location or farm name
 - Depth of soil sample
 - Crop previously grown or intended crop
13. **Use of materials in manure preparation** (4 marks – 1 mark each)
- a) Wood ash – Provides potassium and helps to reduce acidity
 - b) Rotten manure – Provides nutrients and improves soil structure
 - c) Stick – Used for mixing materials during composting
 - d) Top soil – Contains microorganisms that aid decomposition
14. **Importance of soil testing** (2 marks)
- To determine soil fertility status and nutrient deficiencies
 - To recommend appropriate fertilizer types and rates
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SECTION C (Answer all questions)

15. **Five methods of applying fertilizer** (5 marks – 1 mark each)
- Broadcasting
 - Spot application
 - Band placement
 - Side dressing
 - Top dressing
16. **Factors affecting rooting of cuttings in vegetable propagation** (5 marks – 1 mark each)
- Type/age of cutting
 - Moisture content in the soil
 - Temperature
 - Light intensity

- Use of rooting hormones

17. Five reasons for maintaining farm tools (5 marks – 1 mark each)

- To increase tool lifespan
- To ensure tools work efficiently
- To prevent injuries to users
- To reduce repair costs
- To maintain productivity on the farm

18. Five farming methods (5 marks – 1 mark each)

- Mixed farming
- Crop rotation
- Intercropping
- Mono-cropping
- Agroforestry

19. Five importance of keeping livestock in Kenya today (5 marks – 1 mark each)

- Source of meat and milk
- Source of income through sale of animals/products
- Provide manure for fertilizer
- Draught power for cultivation
- Cultural and social functions

20. Planting materials for given plants (5 marks – 1 mark each)

- a) Pineapples – Suckers
- b) Sugarcane – Stem cuttings
- c) Sisal – Bulbils or slips
- d) Sweet potatoes – Vine cuttings or tubers
- e) Banana – Suckers or pups