

AGRICULTURE

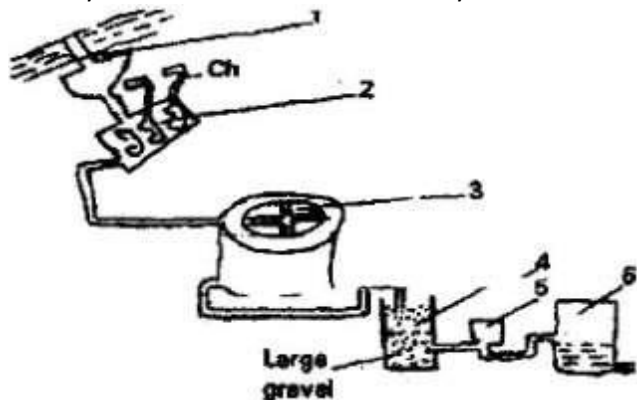
TERM 2 2022 OPENER EXAM FORM 2

MARKING SCHEME

1. a) Define the term agricultural economics (1mk)
 - ✓ is branch of agriculture that deals with the utilization of scarce resources
- b) State six reasons why agriculture is important in Kenya's economy (3mks)
 - ✓ source of food
 - ✓ source of income
 - ✓ source of employment
 - ✓ source of raw materials for industries
 - ✓ market for industrial goods
 - ✓ tax to government
 - ✓ foreign exchange

2. calculate the number of plants in a half an acre of maize given that the spacing is 90cm by 25 cm(3mks)

3. Differentiate between olericulture and pomoculture (2mks)
 - ✓ Olericulture is the growing of vegetables while pomoculture is the growing of fruits
4. List four biotic factors that affect crops in Kenya. (2mks)
 - ✓ Parasites
 - ✓ Pest
 - ✓ Predators
 - ✓ Pollinators
 - ✓ Nitrogen fixing bacteria
5. State two ways by which wind affects the growth of crops. (2mks)
 - ✓ Agent of pollination
 - ✓ Leads to lodging
 - ✓ Agent of soil erosion
6. Give two roles of micro-organisms in the soil that are beneficial to crops (2mks)
 - ✓ Nitrogen fixation
 - ✓ decomposition
7. Study the illustration below carefully and answer the questions which follow River



- a) Identify the illustration (1mk)

chemical water treatment
- b) Name part 1 -6 (3mks)
 1. filtration at the intake
 2. coagulation and sedimentation
 3. chlorination
 6. storage
 5. softening
 4. second filtration

c) Why is it important to treat water in the farm

(3mks)

- ✓ kill germs
- ✓ remove chemical impurities
- ✓ improve taste
- ✓ remove solid sediments

8. State four factors to consider when choosing a nursery site

(2mks)

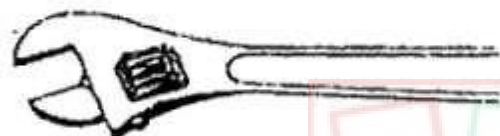
- ✓ near water
- ✓ gentle sloping area
- ✓ previous crop
- ✓ well sheltered place
- ✓ safe
- ✓ fertile soil

9 a) Diagrams represent some farm tools. Identify the tools

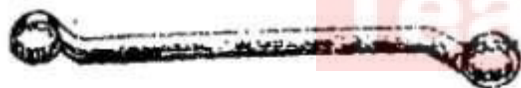
(11/2marks)



N1-----



NII



NIII

NII adjustable spanner

NIII round spanner

b) Give any maintenance practice on tool N1 above

(1/2mk)

store well

clean after use

10.a) Differentiate between macro – nutrients and micro – nutrients

(2mks)

- ✓ macro are nutrients needed in large amounts
- ✓ micro nutrients needed in small amounts

b): List four ways of applying fertilizers in crops

(2mks)

- ✓ placement
- ✓ sidedressing
- ✓ foliar
- ✓ drip

11. State three advantages of using vegetative materials for crop production.

(3mks)

- ✓ uniformity
- ✓ fast maturity
- ✓ easy to establish seedless crops

12.a) Give two advantages of growing cereal crops in rows instead of broadcasting

(2mks)

- ✓ easy routine practices
- ✓ easy to establish plant population
- ✓ lower seed rates

(b) Give two reasons for planting crops at correct spacing (2mks)

- ✓ avoid competition of nutrients, water and space
- ✓ reduce spread of diseases
- ✓ quality produce

(c) Give two factors that determine the depth at which seeds should be planted. (2mks)

- ✓ size of seeds
- ✓ implement used

13. Calculate the amount of K₂O contained in 400kg of a compound fertilizer 25:10:5. (3mks)

14.a) List any four types of records a farmer should keep. (2mks)

- ✓ health record
- ✓ inventory records
- ✓ production records
- ✓ feeding record
- ✓ labor records

b). State four reasons for keeping records in farm (2mks)

- ✓ detect loss
- ✓ control diseases
- ✓ share profits
- ✓ insurance claims
- ✓ history of the farm
- ✓ compare enterprises

c) State the conditions under which the opportunity cost is Zero in a farming enterprise. (2mks)

- ✓ goods are free
- ✓ no choice

15.a) Name four major characteristics of indigenous cattle breeds kept in Kenya (2mks)

- ✓ high resistance to tropical diseases
- ✓ high resistance to temperature
- ✓ low producers of both milk and meat
- ✓ can walk long distance in search of water and pasture
- ✓ long calving interval
- ✓ slow growth rates

b) Give the major features of exotic beef breeds (2mks)

- ✓ opposite of number 15(a)

16. (a) Give three reasons why it is advantageous to use farm yard manure instead of straight fertilizer (3mks)

- ✓ manure buffers the soil
- ✓ manure improves soil structure
- ✓ offers food and shelter for micro organisms
- ✓ moderates soil pH

(b) State three factors that determine the quality of farm yard manure. (3mks)

- ✓ type of animal
- ✓ type of litter used
- ✓ method of storage

- ✓ age of the manure

17. a) Define soil fertility (1mk)

Ability of the soil to provide all required nutrients in their right proportions

b) State three ways by which plant nutrients may be lost from the soil. (3mks)

- ✓ crop uptake
- ✓ soil erosion
- ✓ volatilizations
- ✓ leaching

c) List four major characteristics of a fertile soil. (2mks)

- ✓ correct PH
- ✓ good drainage
- ✓ enough nutrients
- ✓ free from pest and diseases

18. a) State reasons why use of fire in clearing land is discouraged. (3mks)

- ✓ kills micro organisms
- ✓ spread to other farms
- ✓ loss of nutrients
- ✓ destroys humus

b) Outline three main reasons for secondary tillage. (3mks)

- ✓ improve soil tilth
- ✓ kill weeds
- ✓ make planting easy
- ✓ improve water penetration

