



STAREHE GIRLS' CENTRE MOCK EXAMINATION 2025

AGRICULTURE Paper 1

MARKING SCHEME

SECTION A 30 MKS

a) Four characteristics of extensive farming system

- (i) Practiced on large tract of land
- (ii) Low capital investment
- (iii) Low labour requirement per unit area
- (iv) Low yields per unit area.

 $4x \frac{1}{2} = (2mks)$

b) Disadvantages of small scale farming. 2x1 (2mks)

- (i) the yields of produce are low
- (ii) it offers less employment opportunities compared to large scale farming
- (iii) it may be difficult to market farm produce because of middlemen
- (iv) it does not enjoy economies of scale as it practiced on small land sizes

2. Two ways in which predators affect agricultural production.

- (i) some predators help control pests by feeding on them
- (ii) -predators that kill livestock impact negatively on agriculture. 2x ½ mks (1mk)

Factors that influence soil formation. $4x \frac{1}{2}$ mks (2mks)

- (i) parent rock material
- (ii) climate
- (iii) -topography
- (iv) time

3.

4. Farming practices that bring about minimum tillage. $2x \frac{1}{2}$ (1mk)

- (i) application of herbicide on controlling weeds
- (ii) -use of mulch on the soil surface
- (iii) -timing cultivation
- (iv) -establishing a cover crop on the field
- (v) uprooting or slashing weeds in perennial crop.
- 5 a) Alum to coagulate solid particles
 - b) soda ash for softing water being treated $2x \frac{1}{2}$ (1mk)

6. Importance of organic matter $2x^{1/2}$ (1mk)

- (i) Improves soil fertility
- (ii) encourage microbial activities in the soil
- (iii) Improves water infiltration etc

7. Reasons why green manure is not commonly used. $3x \frac{1}{2} (1 \frac{1}{2} \text{ mks})$

- (i) most of crop grown are food crops hence hard for farmers to use them as green manure
- (ii) most of nutrients are used up by micro-organism in process of decomposition
- (iii) it takes long for the green manure crop to decompose.

8. Uses of farm records.

- (i) they show the history of the farm
- (ii) help to detect losses or theft on the farm.
- (iii) make it easy to share profit and losses in partnerships
- (iv) helps to settle disputes among heirs $4x \frac{1}{2}$ (2mks)

9. <u>Importance of phosphorous in crop growth</u>

- (i) development of roots
- (ii) stimulates nodulation
- (iii) essential in cell division
- (iv) strengthens plant stem
- (v) hasten crop maturation

 $3x \frac{1}{2} = 1 \frac{1}{2} \text{ mks}$

10.	Significance	Λf	using	seeds as	nlanting	materials
TO.	Significance	UΙ	using	sccus as	pianung	illatel lais

- (i) seeds are easy to treat against soil borne pest and diseases
- (ii) they are not bulky hence easy to store
- (iii) easy to use machines while handling them
- (iv) possible to develop new varieties
- (v) easy to handle during planting

 $4x \frac{1}{2} = 2mks$

11. <u>Importance of tissue culture in crop propagation</u>

- (i) it is used in the mass production of propagules
- (ii) it is fast and requires less space
- (iii) easy to recover and establish pathogen free plants
- **12.** Rogueing- is the uprooting and destroying of infected plants Gapping- is the filling up or replacement of the dead seedling

13. Effcets of excess nitrogenous fertilizer.

- (i) prolonged maturity
- (ii) cracking of fruits before maturity
- (iii) blossom end rot
- (iv) too much vegetative growth hindering fruit formation $4x \frac{1}{2} = 2mks$

14. Disadvantages of communal land tenure system.

- (i) no individual has the responsibility of taking care of the land or develop it
- (ii) no incentive to manage and develop the land
- (iii) poor yields
- (iv) poor stock breeding programme
- (v) poor control of pest, parasite and diseases $4x \frac{1}{2}$ mks= 4mks

15. Precautions farmers should take when using agro chemicals

- (i) read manufacturer's instruction and follow them
- (ii) farmer should wear protective clothing
- (iii) avoid inhaling the herbicide
- (iv) the farmer must bath thoroughly after handling chemicals
- (v) the farmer must not blow or suck blocked nozzles. $4x \frac{1}{2} = 2mks$

16. Harmful effects of pests on crops

- (i) they damage crops hence low yields
- (ii) destroy crop leaves lowering photosynthesis
- (iii) result to retarded growth of crops
- (iv) lowering the quality and quantity of produce
- (v) transmit most of crop diseases etc $3x \frac{1}{2} = 1 \frac{1}{2}$ mks

17. Qualities of a good manager in a farm. $3x \frac{1}{2} = 1 \frac{1}{2}$ mks

- (i) should be knowledgeable on agricultural principles
- (ii) hard working and time conscious
- (iii) should be flexible in decision making
- (iv) should have practical farming skills
- (v) should be responsible, dynamic prudent, competent and ambitious.

18. Factors that influence the demand of a commodity. $2x \frac{1}{2} = 1$ mks

- (i) -population
- (ii) -income
- (iii) -price of related goods
- (iv) -advertisement
- (v) -level of taxation
- (vi) price of expenditure

- (vii) preference and taste
- (viii) -beliefs, customs and taboos

SECTION B 20 MKS

- 19 a) i) coppicing
 - ii) Pollarding 2mks

b) Sites for agro-forestry trees in the farm.

- (i) boundaries
- (ii) riverbanks
- (iii) Terraces
- (iv) slopes
- (v) homestead $4x \frac{1}{2} = 2mks$
- 20 = a) ledger book 1mk

b) Importance of keeping proper farm accounts records

- (i) helps to manage income and expenditure
- (ii) helps to know which enterprises are financially worth while
- (iii) help in working out the value of the farm
- (iv) important when seeking credit facilities
- (v) help in comparison of farm enterprises
- (vi) help in proper planning of the farm.
- $4x \frac{1}{2} = 2mks$

- 21. a) J-maize weevil
 - K -quelea /Sudan dioch
 - L- Americanbollworm

b) two ways of controlling pest labelled L

- (i) use of appropriate pesticide
- (ii) -crop rotation 2x1=2mks
- c) J maize, wheat, rice etc

K rice, sorghum 2x1=2mks

22. a) X double thorn

Y nut grass

Z coach grass 3x1 = 3mks

- b) i) X irritate the workers
 - ii) Z presence of underground rhizomes 2x1 = 2mks
- c) M datura is poisonous to livestock and human

SECTION C 40MKS

a) Cultural methods of weed control

- (i) mulching
- (ii) cover cropping
- (iii) crop rotation
- (iv) timely planting
- (v) use of clean planting materials
- (vi) proper spacing
- (vii) clean seed bed
- (viii) flooding
 - (ix) proper fertilizer placement 5x2=10mks

b) factors considered when siting a nursery bed.

- (i) -nearness to the water sources
- (ii) -type of soil
- (iii) -topography
- (iv) -previous cropping
- (v) -security
- (vi) -well sheltered place explained 5x2 = 10mks

24 a) ways in which farmer may adjust to uncertainty and risks

- (i) Diversion
- (ii) Selecting more certain enterprises
- (iii) Constructing
- (iv) Insurance
- (v) Input rationing
- (vi) Adopting in production
- (vii) Flexibility in production methods 5x2 = 10mks

b) physical methods of controlling crop pest

- (i) use of lethal temperature
- (ii) suffocation
- (iii)-flooding
- (iv)physical destruction f pest
- (v) proper drying of produce
- (vi)use of scarecrows
- (vii) use of physical barriers
- (viii) use of electromagnetic radiation 5x2=10mks

25 <u>a) Information contained in tittle deed.</u>

- (i) number of the title
- (ii) size of the land
- (iii) the name and identity number of the ownership
- (iv) type of ownership eg absolute, leasehold or free hold
- (v) condition of ownership if any
- (vi) seal and signature of the issuing officer
- (vii) date of registration 5x1 = 5mks

b) methods used to control soil and water pollution

- (i) fencing water sources
- (ii) enforcement of laws to those who pollute water
- (iii) planting grass along the river banks
- (iv) employing adequate storm control methods and disposal systems especially in areas with heavy rainfall
- (v) controlling erosion

 $5 \times 1 = 5 \text{mks}$

c) Ways used to improve labour productivity in a farm.

- (i) training
- (ii) farm mechanization
- (iii) improving terms and conditions of service
- (iv) labour supervision
- (v) assigning the workers according to their skills.
- (vi) Giving incentives to the workers

5x2 = 10mks

