MARKING GUIDE CSSC 2025 AGRICULTURE FII

1.

i.	ii.	iii.	iv.	v.	vi.	vii.	viii.	ix.	x.
A	C	B	C	B	B	D	C	B	**D**

2.

i.	ii.	iii.	iv.	v.
D	B	A	C	E

3.

i. Rapid decomposition
ii. Leaching by heavy rainfall
iii. High temperature
iv. Accelerating decomposition
v. Frequent disturbance of soil and limited use of organic farming techniques.
vi. urning of vegetation
vii. Soil erosion
viii. Bad ploughing
ix. Volatilization

4. (a)(i)Market demand
(ii)Weather conditions at harvesting
(iii)Presence of pests and diseases
(iii)Soil moisture content
(iv)Type of the crop to be planted
(v)Temperature requirement
(vi) Cropping system used

Any five points @01mark

(b)(i)Maximum use of rainfall during the rainy season

(ii)Help to control pests and diseases

(iii)Crops are less affected with weeds

(IV) Leads to early harvesting

(v)It reduce competition on various farm operations

(vi)Crops benefit from nitrogen which is available at the beginning of the rainy season

Any five points @01 mark

5. (a)(i)Restricting cultivation as it kills the vegetation

(ii)Drilling of seeds directly into the suitable of the previous crops and then controlling the weeds using herbicides

(iii)Cultivating only where there is crop plant

(iv)Slashing or uprooting weeds in perennial crops

(v)Using mulching on the soil

(vi)Planting cover crops

Any five points@01mark

(b)(i)It ensure least soil compaction

(ii)It does not destroy soil structure

(iii)It reduces the loss of organic matter

(iv)It minimize water loss

(v)It promotes timely planting

(vi)It saves lab our costs

6. (a) Importance of farm records

i. Farm record enable the farmers to calculate profit and loss of the farm
ii. Enable farmer to get loan from the bank ***Each 1 mark***
iii. Enable farmer to get fair estimate of income taxes
iv. It is a facts and figures used to plan future production
v. Enable farmer to know the progress of each enterprise

(b) Balance sheet for Mr Kiboko farm on 30th march 2022

LIABILITIES (*½mark)*	**ASSETS (*½mark)***
Loan from CRDB bank: shs 120,000/= (unpaid) Account payable shs 12000/= Wages 20,000/= Total liabilities shs152,000/= (*1 mark)* NET WORTH shs 223,000/= (*½mark)*	Current assets Cash in hand shs 20,000/= Cash in bank shs 50,000/= Livestock worth shs 160,000/= Livestock feed shs 10,000/= Farm produce shs 40,000/= (*1mark)* Fixed assets Debt receivable shs 10,000/= Knapsack sprayer shs 5,000/= Building shs 80,000/= (*1mark)* Total assets 375,000/= (*½mark)*

7. **Methods of Drainage (2x5=10 Marks)**

i. Use of Cambered Beds
Cambered beds are raised beds constructed on poorly drained soils. Water drains into the spaces between the beds by gravity, allowing crops to grow on well-aerated soil. This method is cheap and effective for swampy areas but requires high maintenance due to constant repairs and can harbor weeds and mosquitoes.

ii. Use of Open Ditches
Open ditches (U or V-shaped) allow excess water to flow by gravity into waterways, lowering the water table. They are cost-effective but require frequent desilting, interfere with mechanization, and may cause erosion if poorly designed.

iii. Use of Underground Drain Pipes
Perforated pipes are laid underground to collect and redirect excess water. This method does not interfere with farming operations but is expensive to install.

iv. Pumping Out Excess Water
Pumps are used to remove water from low-lying areas. This method is effective where other drainage methods fail but is costly due to fuel and maintenance expenses.

v.Bio-Drainage
Deep-rooted, fast-growing plants (e.g., eucalyptus) absorb and transpire

large amounts of water, reducing soil moisture. This method is sustainable but may compete with crops for nutrients if not managed properly.

8. (a) Five ways in which soil loose its fertility

i. Soil erosion – wind and water erosion can remove the top soil which contain essential
ii. nutrients
iii. Nutrients depletion- the continuous cropping without proper nutrient management essential nutrient from the soil can be depleted
iv. Soil compaction- the use of heavy machine can compact the soil hence reducing air and water infiltration
v. (iv)Soil salinization- excessive irrigation in arid regions can leads to the accumulation of salt in the soil hence make it unsuitable for crop growth
vi. Soil acidification- acidic rain or excessive use of acidic fertilizers can lower the soil pH and finally affecting nutrients availability ***Each 1 marks***

(b)

Data given

Amount of Phosphorus 40kg/ha

Fertilizer Y 48% Phosphorus

Rate of fertilizer Y=?

Solution

Formula

$$\text{Amount of fertilizer} = \frac{\text{recommended rate (kg)}}{\text{Percentage of phosphorus in fertilizer Y}}$$ ***1 mark***

$$40\text{Kg/ha} = \frac{Y \times 100}{48}$$ ***2 mark***

$$Y = \frac{48 \times 40}{100}$$

$$Y = \mathbf{192kg/ha}$$ ***1 mark***

9. Factors to consider when selecting the draught animal for successful oxenizatin

i. Age of the animals, exotic breed should be 1.5 – 2 years, local breeds 2-3 years
ii. Healthy status of the animal. The animal should be healthy and strong
iii. Should be castrated male animal
iv. The animal should be docile

v. The animal should have hump against which the yolk can rest

vi. the animal should be with short horns

SECTION C (15 Marks)

10(a) (i) The use of local breeds

(ii)Poor tools used in Agriculture

(iii)Lack of enough market

(iv)Poor storage facilities

(v)Lack of agricultural extension services

(vi)Presence of pests and diseases

(vii)Poor infrastructures especially during rainy season. **Any six points @2marks**

Introduction 1.5 marks

Conclusion 1.5