



CHRISTIAN SOCIAL SERVICES COMMISSION

An Ecumenical Body of Tanzania Episcopal Conference and Christian Council of Tanzania

P.O. Box 9433, Dar es Salaam, Tanzania

CSSC-SOUTHERN ZONE FORM TWO JOINT EXAMINATION

034

AGRICULTURE

AUGUST 2024.

MARKING GUIDE SECTION A: (15 MARKS)

1.

i	ii	Iii	iv	v	vi	vii	viii	ix	x
B	C	C	A	D	B	C	B	D	C

1 marks @ = 10 marks

2.

LIST A	I	ii	iii	iv	v
LIST B	C	E	D	G	B

1 marks @ = 5 marks

Section B: (70 Marks)

3. (a) i) Cropping pattern suitable for maize and beans is **row cropping**
ii) Cropping pattern suitable for millet and paddy is **broadcasting**.

1 mark @ = 2 marks

(b)

- i) Advantages of the cropping pattern mentioned in 3(a)(i) above

Advantages of row cropping

- It enables the farmer to grow an optimum population of crop plants in the field
- Provide crops with adequate spacing hence reduce vulnerability to pest and disease.
- Reduce plant competition for nutrients, sunlight and water
- It facilitates mechanization for various farm operation
- It is easier for the farmer to perform different farm operations like weeding, spraying e.t.c

Any three points @1 mark = 3 marks

- ii) solution for plant population

Data

$$\text{Area} = 1\text{ha} = 10000\text{m}^2$$

spacing=50cm x 20cm=0.5m x 0.2m

plant population=area/spacing

Plant population= $10000\text{m}^2 \div 0.1\text{m}^2 = 100000$ plants

Plant population is 100000

(5 marks)

4. Five major factors influencing soil formation.

- i. Climate
- ii. The nature of parent materials
- iii. The length of time that parent materials are exposed to weathering agent
- iv. Relief or topography
- v. Living organisms

Any well explained point 2@ = 10 marks

5. a) Weeds as friends

- i. Some weeds are used as vegetable for human being
- ii. Some weeds have medicinal value
- iii. Weeds add organic matter and nutrient elements to the soil when they die and decomposed.
- iv. Legumes weeds help in nitrogen fixation
- v. Some dead dry weeds are used as mulches for crops

b) Weeds as enemies

- i. They compete with crop plants for nutrients, soil moisture, space and light thus reducing crop yield
- ii. Some weeds are parasitic to cultivated crops
- iii. Weeds lower the quality of agricultural produce
- iv. Some weeds harbour insect pests and disease causing organisms
- v. Some aquatic weeds can block irrigation channels

1 marks @ = 10 marks

6. (a) Ways of increasing land values

- i. Irrigation of an arid land
- ii. Application of manure and fertilizers to infertile soils
- iii. Drainage of swamps
- iv. Land reclamation
- v. Planting of trees in the areas with strong winds
- vi. Construction of terraces and contour strips on the land with steep slopes
- vii. Simple appreciation of the land
- viii. Provide with utilities like water and electricity
- ix. Provide access

Any five points @ 1 mark = 5 marks

(b) Five information a farmer should have about production

- i. available resources and their conditions
- ii. skills needed for each enterprise

- iii. inputs required for each enterprise
- iv. labour required for each enterprise
- v. appropriate technology for each enterprise

Any 5 points @ 1 marks = 5 marks

7. (a) five points to help the farmers in your village on the ways they can achieve practice of minimum tillage
- i. Restricting cultivation to the area where seeds are to be planted
 - ii. Drilling of seeds directly in to the stubble of the previous crop and then controlling the weeds by herbicides
 - iii. Cultivating only where there is a crop plant to remove weeds followed by slashing
 - iv. Slashing or uprooting weeds in perennial crops
 - v. Using mulch on the soil surface
 - vi. Planting of cover crops

Any five points @ 1 marks = 5 marks

(b) Five importance of minimum tillage

- i. It ensures least soil compaction
- ii. It does not destroy soil structure
- iii. It reduces loss of soil organic matter
- iv. It minimizes water loss through run off and erosion
- v. It promotes timely planting.
- vi. It prevents the exposure of humus to adverse condition such as the sun's heat
- vii. Its labour saving.

Any five points @ 1 marks = 5 marks

8.(a) soil erosion; Is the carrying away of the top soil by moving water or wind and being deposited in another place which was not intended hence the remaining soil become less fertile as the top soil is the most fertile one.

(b) Burning of vegetation cover: When the vegetation cover is burned on the surface of the soil, the organic matter is destroyed hence contributes the soil to loss its fertility.

(c) Water logging: This occurs when all the air spaces in the soil become filled up with water hence leads to failure of plant roots to get oxygen which is important for respiration thus poor growth.

(d) weeding: uprooting weeds and taking them away from the field leads to a loss of nutrients they had absorbed from the soil.

(e) Leaching: This is the loss of water soluble nutrients from the soil due to rain and irrigation water

2marks @ = 10 marks

8.a) The difference between Cross cut saw and Rip saw

Cross cut saw	Rip saw
It cuts the wood across the grains	It cuts the wood along the grain
It has small teeth	It has larger teeth
It has upright and close teeth	The teeth are set at an angle slant forward

(1 mark @ =6marks)

b) Five safety precautions in handling farm tools and equipment

- i. Wear goggles and use children when grinding or welding to protect eyes from intensive light and any resulting particles
- ii. Extra care should be taken when using electric power saws and other sharp equipment's that may cause injuries
- iii. Wear safety boots in order to avoid injuries that might be caused by sharp equipment which can be found in the floor
- iv. Wear overall garment to protect your skin, clothes and hand gloves to protect your hands.
- v. Machine with belt and gears should be fitted with guards to avoid accidents
- vi. Each tool should be used properly according to the intended work.

Any 4 points @ 1 mark = 4 marks

SECTION C: (15 Marks)

8. Six Importance of keeping livestock.
- Source of income and employment
 - Source of food
 - Source of raw materials for industries
 - A means of transport
 - Provision of farm power
 - Provision of manure and fuel
 - Social uses e.g. Payment of bride price

Any six points @ 2 marks = 12 marks

Any relevant introduction 1.5 marks

Any relevant conclusion 1.5 marks

Total of 15 marks