**COMPETENCE BASED CURRICULUM**

Kenya Junior Secondary Education Assessment

 FORMATIVE ASSESSMENT

TIME

2 HRS

 ENDTERM 1

 **AGRICULTURE AND NUTRITION**

G8

 2024

 **SCHOOL:** ……….……………………………………………………..……

 **NAME:** ……………….…………………..………………………...………..

 **SIGNATURE: ………………ASSESSMENT NO…………………………..**

 ***RUBRICS (for official use)***

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| **MARK SCORE RANGE** | ***Below 40*** | ***40-59*** | ***60-79*** | ***80-100*** |
| **PERFORMANCE LEVEL** | *Below expectation* | *Approaching expectations* | *Meeting expectations*  | *Exceeding expectations* |
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|  |  |
| --- | --- |
| **OUT OF** | **100%** |
| **LEARNERS SCORE** |  |
| **PERCENTAGE SCORE** |  |
| **PERFORMANCE LEVEL** |  |

**FOR FACILITATOR’S USE ONLY**

 **Answer all Questions**

1. State two components of agriculture and nutrition. (2 mks)
2. Agriculture
3. Home science/ nutrition
4. List four effects of soil pollution. (4mks)
* It causes production of crops that are not safe for consumption or use by human beings. This poses health risks.
* Soil pollution also affects soil fertility and soil pH affecting agricultural production. This affects food security.

### Outline five Safe Soil pollution Control measures include the following methods:(5 mks)

* 1. Reusing of plastic materials such as using bottles for drip irrigation.
	2. Use of correct types and amount of artificial fertilizer and agrochemicals.
	3. Safe disposal of used agricultural chemical containers.
	4. Safe disposal of plastic wastes, containers and straws.
	5. Recycling waste materials into other useful products.
	6. Practicing organic farming which is the growing of crops and rearing livestock without using artificial fertilisers and agricultural chemical.
	7. Planting trees and cover crops to reduce surface run-off than carry contaminants and distribute over the soil surface.
1. Surface run off is conserved or collected in structures such as:(3 mks)
2. Water retention ditches.
3. Earth basins.
4. Water retention pits.
5. Identify the following method of soil conservation in farming. (5 mks)



Grassed water ways

Strip cropping



Stone lines



Soil bunds

Trash lines

#### What is a Farm Layout? (2 mks)

* A farm layout is a drawn plan that shows various farm enterprises and where they are placed in the farm.
* A farm layout is a plan of how various farm components (enterprises) are arranged and set up on the farm.
1. Name four importance of conserving water in Farming.(4 mks)
2. Surplus or excess water can be conserved and used during the times of water scarcity in the farm.
3. Conserving water reduces the cost of farming. This is because money that would be used to buy water in the farm is saved.
4. Conserving water ensures availability of water for human life and livestock.
5. A lot of water is wasted during rainy season.
6. Rain water which forms surface run-off after heavy downpour is prevented from damaging property.
7. Match the following methods of planting ( 3mks)



Broadcasting



Dibbling

Drilling



1. Restricted cultivationWhat are Soil conservation measures? (2 mks)

 Refers to a combination of practices done or taken to prevent the loss of soil through soil erosion.

#### Mention four importance for Soil conservation. (4 mks)

1. To keep top soil in its place.
2. To maintain fertility in the soil.
3. To maintain soil productivity.
4. Helps to increase agricultural production promotes food security.

#### State two importance of Farm layout. (2 mks)

1. It helps in maximum utilization (use) of land.
2. Farm enterprise are orderly arranged.

#### Mention four Local available material that can be used to make a farm model in school. (4 mks)

1. Cartons.
2. Cardboards.
3. Soil.
4. Papier mache.

#### State three Uses of water harvested and stored on the farm.(3 mks)

##### Watering /irrigating crops.

##### Watering animals.

1. Domestic uses such as washing, cleaning items etc.

#### In Kenya we have various types of water tanks made from various materials. Mention three types of water storage tanks.(3mks)

* 1. Plastic.
	2. Metallic.
	3. Concrete.
1. What is a Kitchen garden?(2 mks)

 It is any convenient size of a plot, space or structure located in a home where a variety of crops are grown mainly for family consumption.

1. State five roles of a kitchen garden in food and nutrition security.(5 mks)
2. To produce safe, fresh food that is accessible to the family.
3. It is a reliable source of green leafy vegetables, herbs, fruits, legumes and cereals for home consumption.
4. Growing of both seasonal and off-season crops that ensures steady supply of nutritious food.
5. Help family to meet their nutritional needs and promotes healthier lifestyles.
6. Generates income from sale of surplus (excess) produce.
7. Helps to save family income direct towards purchase of vegetables, fruits and others.
8. Provide alternative when staple foods are not in stock.
9. Helps to increase food production.
10. Some form of kitchen gardening use recycled materials like plastics hence contributes to environmental conservation.

##### State four examples of innovative kitchen gardens. (4 mks)

1. Container.
2. Wick.
3. Hanging pots.
4. Tyre.
5. Multi-storey gardens.
6. Simple drip.
7. Organic sack garden.
8. Grade 8 learners wanted to start an innovative gardens at home, state five ways in which the innovative gardens would benefit them. (5 mks)
9. Use locally available materials.
10. Requires little amount of water.
11. Easy to manage because less labour is required.
12. Makes good use of little space.
13. Some are portable-can be moved from one area to another.
14. High productivity or yields.
15. Aesthetic value around the compound.
16. Ideal for urban areas and congested homesteads.
17. State five methods of harvesting and storing water for farming purposes. (5 mks)
	1. Use of rooftops.
	2. Use of diversion channels. (directs water into water ponds and water tanks.)
	3. Water ponds.
	4. Shallow water pans.
	5. Tanks.

#### Outline five Factors to consider when setting up a water harvesting and storage unit at home or at school.(5 mks)

* 1. Location.
	2. Accessibility.
	3. Type of crop to be irrigated using water.
	4. Size of the farm.
	5. Dimension of the storage unit.
	6. The slope of the land.
	7. The cost of the work.

#### State five Importance of harvesting and storing water.( 5mks)

1. Harvesting and storing water helps to supplement other sources of water.
2. It provides water during shortage and in dry seasons.
3. Water is available through out.
4. Reduces cost of farming.
5. Excess water from the rain is utilized.
6. Helps to prevent destruction of infrastructures such as buildings and roads by surface runoff.

#### State four Maintenance practices of water harvesting and storage structures.(4 mks)

* 1. Plant grass around the water pans and water ponds to control soil erosion and sedimentation and to stabilize the embankments.
	2. Remove foreign material in water found in water pans, ponds and tanks.
	3. Structures such as water pans and water pons should be fenced.
	4. Water tanks should be cleaned and foreign materials such as gravel, twigs, leaves sieved out during water entry.
	5. Clean the gutters to remove accumulated materials.
1. FARM LAYOUT

