WAKISSHA JOINT EXAMINATIONS
SCORE GUIDE
End of year Assessment
Senior Three
November 2023
AGRICULTURE 527/1

1. **A BRIEFING TO POULTRY FARMERS IN MY COMMUNITY FOR SUSTAINABLE BENEFIT**

**Competency:** ***The learner understands and describes different systems of poultry rearing.***

Welcome all community members to this briefing. Focus on rearing of domesticated birds which can be referred to as poultry rearing which involves keeping bird for their products like **meat eggs, feathers** among others. It's true the activity can be a bank due to its flexibility.

These birds are grouped into different types basing on the products they produce. For example, **Layers** are kept for eggs, **Broilers** for meat and **Dual purpose** for both products. However, in reference to the scenario, the system identified in ***figure 1 part d*** is **Extensive system or a "free range system".** Of poultry management.

**In** this system, birds move freely which exposes them to a number of associated disadvantages of the system like: Birds are exposed to diseases, can be stolen; can be eaten by predators among others. All these factors lower the productivity of this birds and hence discouraging you from the most beneficial enterprise.

***Award 4 scores to a clear introduction***

**However,** regardless of the above, you should not lose hope since there are other systems that you can employ in rearing of these birds and can benefit from them more profitably. Such methods may include the intensive systems of poultry management like "**deep liter system**".

In this system, Birds are confined in a house on litter of about 20 cm deep which has to absorb moisture from the droppings. And also has the following advantages:

- It requires a small area of land to raise large number of birds.
- Its easy to control birds since they are confined in one place
- Birds are protected from predators and thieves.
- It gives comfort to both attendant and the birds since there is little wastage of energy and time in feeding and collection of eggs.
- Manure obtained under this system is of high quality
- Records of stock and egg production are easy to keep under this system.
- It's easy to observe sick birds in the flock hence easy to cull out such birds.
- Spread of disease from the neighborhood is easily controlled since birds are confirmed

***Award any 3x1= 3 scores***

However this system also has some challenges like,

- It encourages the buildup of parasites in the litter unless turned, treated and replaced regularly.
- Its may require more Labour in terms of feeding and collection of eggs as compared to the free range system.
- Its difficult to control diseases in case of an outbreak within the deep litter house.
- Birds easily develop vices more especially due to overcrowding within the deep litter house.
- It's difficult to keep individual production records.
- It's expensive to establish since money is needed for the construction of houses and purchase of the necessary equipment.

Feeders, waterers, and nesting boxes are easily contaminated with litter and droppi which may lead to disease.

***Award any 3x1= 3 score.***

Therefore for you to avoid the above challenges when managing birds in this system, to ensure maximum production, ensure the following:

- Provide enough space in the house to control overcrowding that result into vices and disease outbreak
- Keep the litter dry by continuous raking and removal of wet spots to control dampness that encourages disease outbreak
- Provide enough perches for the birds and they should be well spaced
- Provide enough water and feed troughs to reduce overcrowding at the feeding and drinking place which increase feed and water contamination
- Provide clean drinking water at all times for proper bird health and high production
- Keep feeders and drinkers clean to reduce disease outbreaks due unhygienic conditions
- Provide adequate feeds to birds to maintain a high production level
- Collect the eggs regularly to reduce chances of breaking and occurrence of egg eating vice
- Supply grit in feeds to help birds to digest grains in the feeds provided
- Cull poor layers and diseased birds to reduce wastage of feeds and disease spread in poultry
- Vaccinate birds against killer diseases in time to reduce losses
- Spray birds with pesticides to control external parasites like mites and ticks that may lower production
- Avoid stressing factors that may affect bird production
- Repair equipment and house to reduce accidents
- Provide enough feeds to ensure high production from birds
- Isolate and treat sick birds to reduce disease spread in poultry
- Keep proper records for easy management of poultry
- Promptly dispose off dead birds by burying or burning to reduce disease spread and vices
- Maintain a disinfectant at the door for anybody entering the poultry house to disinfect him/her self.

In conclusion, if you follow the above routine activities poultry will become more enjoyable and you will no longer complain of any lose.

***Award any 10x1=10 scores***

2. **Competency:** ***The learner rears and markets dairy animals and their products profitably***

➢ **Address, date, heading (ref)** ***Award 3 Scores***

Dear ladies and gentlemen,

**RE: A CIRCULAR TO BE DISSEMINATED TO HOMESTEADS IN MY SUBCOUNTY SO THAT THEY CAN BENEFIT FROM DAIRY PROJECT**

Today marks the beginning of the dairy project for this sub county. I would like to extend my sincere thanks to the members who have endeavored to register and participate actively.

This project had earlier on been established by some people in other sub counties but they did not benefit much from it due to a number of challenges as seen below.

***(01 scores)***

**Challenges:**

In reference to the scenario, the farmer faced a number challenges after the second parturition which affected the production potential of the cows for instance,

- They cows emaciated as a result of poor feeding leading to low milk production.
- These animals also showed a sign of internal parasite infestation as their skins were seen rough.
- The cows started passing constant hard dung as a result of insufficient water given to lactating cows.
- Generally the farmers failed to provide proper housing to the cows and the animals were exposed to harsh environmental conditions like hot temperatures and rainfall
- The farmers also failed to deworm the animals against internal parasites resulting to competition between the host animals and parasites for food.

***Award any 1x4=4 scores***

However, besides that since the ministry is intending to donate these cows to our sub county. I would like us to be very careful so that we benefit from this project by avoiding to falling to be victims of the previous groups.

**Management:**

So, for us to achieve this we should carry out the following management practices on these cows to maintain their production efficiency.

- Provide clean water to the animal without any restriction
- Carry out pregnancy diagnosis two month after service to confirm pregnancy
- Dry off the animal at the 7th month of pregnancy to prepare it for the next lactation
- After drying carry out dry cow therapy to control mastitis
- Provide good housing to the animals to protect them from adverse weather conditions.
- Regularly deworm the animal to control internal parasites that may affect the unborn calf
- Provide adequate feeds throughout the period to cater for high nutrient demands
- Steam up in the last 2 month of pregnancy to prepare the animal for lactation
- Regularly control external parasites by spraying at least twice a week
- Vaccinate the animal against killer diseases so as to protect the un born calf
- Isolate the animal in the last 2 month from the general herd and put it in a nurse paddock
- Provide a clean dry calving pen for the cow
- During calving, assist the animal with difficulties
- Milk the animal a little to reduce the udder pressure

**Conclusion:** once again I would like to thank you for participating actively in government Programmes.

Thanks

Yours sincerely

.....

Name.

***Award any 1x10=10scores***

***Award any 1x4=2 scores***

3. **A WRITE UP TO JAMES AND HIS PARENTS ABOUT THE GENESIS AND EXISTENCE OF SOIL.**

**Competency:** *[illegible] soil is formed from rocks through the process of weathering.*

Greetings to you James and the parents, from the context of the scenario, I would like cut this argument short but before that let me take you people though the meaning of soil:

**SOIL** is the mixture of weathered rock materials, air, water and organic matter. It's a medium in which plants roots and nutrients are contained. **OR**

It is the outer most layer of the earth's crust where plants grow and derive nutrients

***Award 2x1=2***

On the other hand, the existence of soil came through the processes of ***"weathering" and decomposition*** of decayed organic matter aided by living organisms and favourable climatic conditions.

**Weathering** is the breaking down or the disintegration of rocks into small particles when subjected to different agents of weather to form soil. Its sub divided into three categories or types which include physical weathering, chemical weathering and Biological weathering.

***Award 1x1=1***

i. **Physical Weathering:** This is the mechanical disintegration of rocks mainly due to expansion and contraction as a result of extreme temperature changes.forexample James grand father used to do stone quarrying.

ii. **Chemical Weathering:** This is the chemical decomposition of parent rock due to chemical reaction between rocks, mineral, water and atmospheric gasses like oxygen and carbon dioxide .e.g hydration, oxidation, hydrolysis, carbonation, reduction etc.as seen by James the water from the river entering the fractured rock.

iii. **Biological Weathering:** This is the weathering which is influenced by living organisms such as the burrowing animals like termites, trees, rabbits, squirrels' etc. A part from decomposing dead animals and plants to form soil, Bacteria, fungi, viruse, protozoa, produce acids which act on rock minerals and weaken it.e.g the tree roots penetrated the rock and it fractured.

***Award 2x3=06 scores***

However, for all those process to take place in rocks resulting to soil formation, there must contributing factors like;

- ***Parent Material*:** These are rocks from which the soil is formed by weathering, They influence the physical and chemical properties of the soil formed here e.g texture, chemical and mineral composition of the soil.
- Soils developing from limestone are usually fine textured and higher in inorganic matter than those formed from coarse textured material.
- ***Topography (Relief):*** this influences the amount of rainfall received in an area, Surface and erosion which determines soil depth by removal and deposition of soil Water infiltration into the soil. It also influences vegetation through its influence on rainfall hence affecting soil formation.
- ***Climate*:** The development of soil profile is largely controlled by temperature and precipitation (rainfall). Enough moisture in the soil encourages micro organisms to carry out decomposition while in the soil. It influences vegetation and therefore type of soils formed; High temperatures discourage microbial activities of organism in the soil. Varying environmental temperature can cause breaking up of rocks to form soil.
- ***Living Organisms*: Living organisms like bacteria and fungi carry out decomposition** of dead plants and animals remain leading to soil formation. The termites are able to convert wood into soil because they have the cellulose enzymes in their guts which act on cellulose in wood. The vegetative cover protects the soil surface from soil erosion

hence minimizing soil loss. Living organisms die and decompose to form soil Leaves from trees fall and provide organic matter. Earth worms grind up mineral particles important in soil formation.

- ***Human Influence***: Humans tend to disrupt soil formation through disturbing soil profiles during the construction of buildings, roads and dams and stone quarrying. Their practice of bush burning destroys organic matter and raises soil temperature, slowing down the process of soil formation
- *Time:* It requires a lot of time for a soil to develop up to full maturity. A mature soil will contain all the required nutrients needed by plants. Conditions which speed up soil formation are; warm humid climate, flat topography, forest vegetation, the factor flowing down soil formation are cold or hot day climate, grass vegetation, slopping topography

***Award any 5x2=10 scores well explained***

So in conclusion, James has experienced all the above processes and activities taking place during his stay with his grandparents but with little knowledge. Therefore, with the experience we have shared above, urgue no more about the genesis and existence of soil.

Thank you for your time

4. **EXPLANATIONS TO THE YOUTH ON HOW THEY CAN USE THE LOCALLY AVAILABLE REASOURCES TO BENEFIT IN VEGETABLE GROWING.**

**Competency:** ***The learner selects the suitable vegetable for a locality and carries out all the processes required to grow the vegetable.***

A vegetable is any annual or perennial herbaceous plant whose edible parts have very high moisture content like ***sukumawiiki***.

I would like to encourage the youth not to halt the plan but instead go ahead to grow your intended crop. You are lucky that you have a number of locally available resources which you can use in the production process without spending much money. Among the resources include;

- Land
- Labour
- Plant diversity
- Livestock wastes
- Tools and
- Seeds for planting.

Let me take you through on how you can use those resources meangfuly in the production process

- You as the youth can provide the necessary labour required in the production than hiring labour.
- The land you secured using PDM money can be cultivated to make nurseries and a seed bed where your crop can grow.
- You can select a flat, fertile and well drained site within the land you have to establish a nursery bed.
- You can use the tools given to you by the NGO to cultivate the land to raise the nursery bed by removing all roots, grass and tree stumps and deeply cultivated.
- After raising the nursery bed, you can plant the seeds given to you by NAADS in the nursery.
- [illegible] soil.

- Get some mulch materials from the plant diversity to place over the bed to encour germination.
- Get reasonable sticks from lantana camara to establish the temporal shed made of grass
- Use one of the tools given to you to water the bed twice each day preferably early in the morning or late in the evening.
- When the seedlings emerge, remove the mulch.
- Prick out your seedlings to decongest them and provide ample space.
- Uproot all the weeds growing in the nursery bed to reduce competition for nutrients.
- Two weeks to transplanting, harden off the seedlings by reducing water supply or removing the shade gradually.
- Transplant the seedling to the main field where they will grow up to harvesting time. When they are at the height of 10-15cm or one month.
- In case of pest and disease attack, get rabbit urine from the neighbor and mix with red pepper then spray to the crop.
- Harvesting is done when the crop is about 2-3 month depending on the variety.

Therefore, after you can do post harvest activities like,

- Sorting Grading basing on the quality
- Packing
- Processing
- Standardization.
- Storage
- Transportation
- Advertising and marketing.

5. **AN ARTICLE TO MOTIVATE FRUIT FARMERS IN KAMWENGE DISTRICT**

Challenges faced by fruit famers during marketing:
*Case* study kamwenge district

***By: David Livingstone,***

[**ABSTRUCT:** Fruit growing is one of the crop production enterprises that can persistently survive harsh environmental conditions. This has prompted most farmers in kamwenge to get involved in the activity. The district has a population of over 15,000 people and out of that a total of about 280 have registered for fruit growing as the major economic activity. This is because of the suitable climatic conditions like optimum temperatures of about 24-27$^0$c, high humidity that promotes rapid fruit growth, well distributed rainfall and as well as deep fertile soils. All these factors have resulted to higl yields and now a need for market].

***Award 4 scores for a clear introductio***

However, as a result of high production the farmers have faced a number of challenges in marketing of their fruits to the reliable markets which can fetch them more money to keep them in the production process. Some of the challenges they have faced include the following.

- The farmers lack market information on the prevailing market prices therefore relying on the middlemen who buy at a low price.
- There's also inadequate and poor transport system in the district only one lorry in whole sub county.
- inadequate storage facilities where farmers can store their produce when prices are low hence forcing them to sell them cheaply.
- lack of the processing plants in fact in the whole district not even one where farmers can add value to their fruits so that they can fetch highly.
- Perishability of the fruits being agricultural products. This has discouraged the farmers despite high yields of passion fruits.

***Award any 3 x 2 = 06 scores***

Therefore, the manager Soroti fruit factory advised the farmers not to lose hope but instead continue with the activity but they need to improve on the marketing strategy by:

- Grading or sorting of their fruits after harvesting in terms of quality in order to ensure consumers satisfaction.
- Carrying out market research by collecting and analyzing market information in terms of price, taxes and risks involved.
- Packaging their fruits before marketing to reduce bulkiness and ease handling.
- Standardization by identifying and establishing set qualities a fruit must possess in order to belong a certain grade.
- Processing the fruits to add value by improving their quality and prolong their shelf life.
- Improving storage facilities of the fruits to reduce loss of value and keep the supply of fruits constant.
- Advertisement to creat awareness about the existence of fruits in kamwenge district.
- Lastly the manager encouraged the farmers to form a cooperative society which will help to strengthen their bargaining power and axcess to loans for buying processing equipments.

Challenges Faced By Fruit Famers during **MARKETING:**
Case **STUDY KAMWENGE DISTRICT 20/03/2023**

***Award any 5x2=10 scores***

## MY ADVICE TO THE TRADER DEALING IN MEAT ROASTING.

Greetings to you sir/madam. I am here today to advice you about the success of your business in reference to what happened to you as shown in the scenario. From the context of the scenario, roasting meat is a very good enterprise which can fetch high profits if managed well.

***Meat*** is a skeletal muscle associated with tissue which is derived from animals for human consumption. Or animal flesh that is eaten as food. .

So in reference to your business, you should know that Meat is one of the perishable products like any other agricultural products therefore much care and attention must be drawn when dealing with such products.

I would advise you to always do the following in order for you to benefit more from it.

***Award 5 scores to the clear introduction***

- **Proper storage**: You can store your meat in a refrigerator in absence of your customers. Always keep your meat in a cool dry place away from flies which can carry germs to spoil the meat.
- **Proper preservation method**: This can be done though salting.sundrying and smocking which keeps away flies before selling it to customers.
- **Proper transportation**: You should get other means of transporting your meat from the abattoir to the selling point. Relying on a wheelbarrow will not be convenient for transporting such a product.
- **Ensure proper hygiene**: This can be attained by proper washing of hands with soap and clean water before handling meat and its products and the utensils used for carrying the meat.
- **Good sanitation**: always ensure that you operate in a clean and tidy environment that cannot attract flies to spoil the meat.
- **Value addition**: you can introduce new products to your customers which have prolonged shelf life of the product. This can be done by tinning or canning of meat.

***Award any 5x2=10 scores***

However, still you need to do some marketing strategies of your product. In order to achieve that you can do the following.

- Advertising
- Carry out market research
- Processing
- Packaging
- Branding
- Sales promotion

***Award any 5x1=5 scores***

**END**