

TERM: 2ND TERM

SESSION: 2020/2021 SESSION

WEEK: ONE

DATE: 18/01 – 22/01/2021

CLASS: JS 2

SUBJECT: PVS- AGRICULTURE

LESSON TITLE: REVISION

PERIOD: 1st & 2nd

DURATION: 80 min

LEARNING OBJECTIVES: At the end of the lesson students should be able to recapitulate on all the topics taught in the previous term.

KEY VOCABULARY WORDS

TEXTBOOKS/ REFERENCE MATERIALS: Pre-Vocational Studies for Junior Secondary Schools Book 2, Oluyemi Oke et al, 2015 (Revised Edition), Lagos, De- Initiative Publications, Pp. 9-10.

INSTRUCTIONAL MATERIALS: PowerPoint presentation slides on some of the topics treated, 1st term examination question paper.

BUILDING BACKGROUND: Students were taught all the topics for the first term.

1st Term Topics are as follow:

- Farm structures
- Farm buildings
- Maintenance of farm structures and buildings
- Planning of farmstead
- Farming systems
- Cropping systems

STRATEGIES AND ACTIVITIES

Step 1: Teacher interacts with the students by welcoming them into the new term and the new year, encouraging them to improve on their performance for the term by working harder and staying more focused.

Step ii: He involves the students in recapitulating on the previous term's works, mentioning the topics and asking them few questions on those topics.

Step iii: Teacher allows the students to ask questions and he gives adequate answers to their questions.

WRAP-UP/ASSESSMENT: Teacher summarizes the lesson content by mentioning and emphasizing the cogent points. He uses the 1st term examination questions as a guide to evaluating the students. He corrects their mistakes where and when necessary.

ASSIGNMENT: Give the scheme of work for the term and ask the student to pick the most liked topic and write 5 points on it.

VP/HOD's Comment/Endorsement:

TERM: 2ND TERM

SESSION: 2020/2021 SESSION

WEEK: TWO

DATE: 25/01 – 29/01/2021

CLASS: JS 2

SUBJECT: PVS- AGRICULTURE

LESSON TITLE: ANIMAL FEED AND FEEDING

PERIOD: 1st & 2nd

DURATION: 80 min

LEARNING OBJECTIVES: At the end of the lesson students should be able to:

- i. Define the terms feed and feeding in livestock production,
- ii. Define other related terminologies in animal nutrition and
- iii. Mention various equipment used in feeding farm animals.

KEY VOCABULARY WORDS: livestock feed, feeding, nutrition, diet, ration, malnutrition etc.

TEXTBOOKS/ REFERENCE MATERIALS: Pre-Vocational Studies for Junior Secondary Schools Book 2, Oluyemi Oke et al, 2015 (Revised Edition), Lagos, De- Initiative Publications, Pp.

INSTRUCTIONAL MATERIALS: PowerPoint presentation slide for the lesson, samples of animal feed such as poultry mash, fish pellet etc. Also, pictures of various feeding related equipment for livestock.

BUILDING BACKGROUND: Students had been taught branches of agriculture, which include animal science. Some of them have some pets and livestock in their homes, which they used to feed.

CONTENT

ANIMAL FEED AND FEEDING

Definition of Terminologies

1. Livestock feed: Food given to farm animals.
2. Feeding: act of consuming food or act of supplying food and nourishment
3. Feed stuff: Various food materials or ingredients combined to make feed for livestock.
4. Animal nutrition: the science of feeding farm animals with balanced ration in relation to the wellbeing of the animals.
5. Diet: Amount of feed regularly given to or consumed by an animal.
6. Ration: the total supply of feed given to an animal per day or in twenty four hour period.
7. Malnutrition: An unhealthy condition caused by feeding farm animals with unbalanced nutrients.

Feeding Kits or Equipment

These include:

- Feed trough
- Feed tray
- Feed fountain
- Hay rack
- Water trough
- Water fountain
- Water nipple
- Self feeder
- Bucket
- Bowl
- Spade/shovel etc.

STRATEGIES AND ACTIVITIES

Step 1: Teacher interacts with the students by asking them how many of them have pets or livestock at home and to explain how they take care of them, especially in the aspect of feeding.

Step ii: He lists out and guide the students in giving the meaning and definition of some common terminologies related to animal nutrition. He gives definite definitions after each of their submissions.

Step iii: He lists out the names of various feeding equipment with their corresponding pictures on Power point slides for students to identify and state the main use of each of them.

Step iv: Teacher allows the students to ask questions as he gives adequate answers to their questions.

WRAP-UP/ASSESSMENT: He summarizes the lesson content by mentioning and emphasizing the cogent points. He asks the following questions to evaluate the students:

1. Define the following: Livestock feed, Feeding, Animal nutrition, Ration, Diet and Ration.
2. List six feeding equipment for farm animals.

ASSIGNMENT: List six important nutrients found in the feed of farm animals.

VP/HOD's Comment/Endorsement:

TERM: 2ND TERM

SESSION: 2020/2021 SESSION

WEEK: THREE

DATE: 01/02 – 05/02/2021

CLASS: JS 2

SUBJECT: PVS- AGRICULTURE

LESSON TITLE: **CLASSIFICATION OF LIVESTOCK FEED**

PERIOD: 1st & 2nd

DURATION: 80 min

LEARNING OBJECTIVES: At the end of the lesson students should be able to:

- i. mention some examples of feed stuff of ingredients of livestock feed,
- ii. list the various classes into which feed ingredients are grouped,
- iii. describe or explain each group mentioned in ii above with appropriate examples.

KEY VOCABULARY WORDS: basal, concentrates, roughages, succulent, supplement, sweetener etc.

TEXTBOOKS/ REFERENCE MATERIALS: Pre-Vocational Studies for Junior Secondary Schools Book 2, Oluyemi Oke et al, 2015 (Revised Edition), Lagos, De- Initiative Publications, Pp.

INSTRUCTIONAL MATERIALS: PowerPoint presentation slide for the lesson, samples of animal feed such as poultry mash, fish pellet etc. Also, pictures of various feeding related equipment for livestock.

BUILDING BACKGROUND: Students had been taught meaning of feed and feeding alongside some related terminologies.

CONTENT

CLASSIFICATION OF LIVESTOCK FEED

Various kinds of feed stuff or ingredients are used to formulate or make feed for farm animals. These feed stuffs are classified as follows:

1. Basal or Energy feed: They are ingredients that supply mainly carbohydrates in the feed. They are rich in carbohydrate, low in protein and fibre. Examples include maize millet, guinea corn, wheat, rice, cassava flake, potato flake, etc.
2. Concentrates: these are ingredient rich in one major ingredient. Here they are ingredients rich in mainly protein. They are low in energy and fibre. Examples include fish meal, blood meal, groundnut cake (GNC), soybean meal, groundnut cake, cotton seed meal, palm kernel cake (PKC), meat meal, feather meal etc.
3. Roughages: They are feed ingredients that are high in fibre, low in energy and protein. Examples are rice bran, wheat offals, brewer's dry grains, forages etc.
4. Supplement: These are ingredients with one major nutrient and such nutrients are added in order to make up or supplement the deficient or inadequacy of a particular nutrient in the feed being formulated. Examples include common salt, salt lick, vitamin supplement, protein supplement etc.
5. Succulents: E.g. young forages, yam tubers, cassava root, carrot, water melon, pumpkin etc.
6. Sweeteners: These are ingredients used for adding or improving the taste or flavor of the formulated feed. They also contain one major nutrient which may be of benefit to the animal. Examples are common salt, sugar, molasses etc.
7. Oils and fats: Oils contain very high content of energy. They used in reducing the dustiness of feed. E.g. palm oil, palm kernel oil, cotton seed oil, animal fat, etc.

STRATEGIES AND ACTIVITIES

Step 1: Revise the previous lesson with the following questions:

1. Define the following: Livestock feed, Feeding, Animal nutrition, Ration, Diet and Ration.
2. List six feeding equipment for farm animals.

Also ask them to mention some common food stuff for human's food.

Step ii: Pass a sample of poultry mash round the students and ask them to mention some ingredients they saw in the sample. List out as many livestock feed ingredients as possible. Explain to them that animal feed contains several ingredients or feed stuff as found in human food.

Step iii: List and explain each class of livestock feed, emphasizing their major characteristics in terms of what they contain and give examples of feed ingredients in each group

Step iv: Teacher allows the students to ask questions as he gives adequate answers to their questions.

WRAP-UP/ASSESSMENT: He summarizes the lesson content by mentioning and emphasizing the cogent points. He asks the following questions to evaluate the students:

1. List any five ingredients used for making livestock feed.
2. Mention the seven classes into which the feed ingredients are grouped.
3. Describe basal feed
4. Give two examples each of : a) concentrate b) roughage c) succulent d) sweetener

ASSIGNMENT: Mention the six classes of food nutrients and give at least two examples in each case.

VP/HOD's Comment/Endorsement:

TERM: 2ND TERM

SESSION: 2020/2021 SESSION

WEEK: FOUR

DATE: 08/02 – 12/02/2021

CLASS: JS 2

SUBJECT: PVS- AGRICULTURE

LESSON TITLE: **NUTRIENTS OF LIVESTOCK FEED**

PERIOD: 1st & 2nd

DURATION: 80 min

LEARNING OBJECTIVES: At the end of the lesson students should be able to:

- i. list the various nutrients found in livestock feed
- ii. state the composition, sources and functions of each of the identified nutrients.

KEY VOCABULARY WORDS: nutrient, carbohydrates, proteins, fats and oils, vitamins, minerals etc.

TEXTBOOKS/ REFERENCE MATERIALS: Pre-Vocational Studies for Junior Secondary Schools Book 2, Oluyemi Oke et al, 2015 (Revised Edition), Lagos, De- Initiative Publications, Pp.

INSTRUCTIONAL MATERIALS: PowerPoint presentation slide for the lesson, samples of animal feed such as poultry mash, fish pellet etc.

BUILDING BACKGROUND: Students had been taught meaning of feed and feeding as well as classification of livestock feed stuffs.

CONTENT

NUTRIENTS OF LIVESTOCK FEED

Nutrient is any substance needed by plants or animals for growth and performance. These are some of the major nutrients found in livestock feed:

	Nutrient	Composition	Sources	Function
1	Carbohydrates	Carbon, Hydrogen and Oxygen (CHO)	Maize, millet, wheat, rice, cassava, guinea corn, yam, potato, etc.	*Source of energy. *Excess energy stored as fats in the body
2.	Proteins	Carbon, hydrogen, oxygen, nitrogen, sulphur and phosphorus	fish meal, blood meal, groundnut cake(GNC), soybean meal, groundnut cake, cotton seed meal, palm kernel cake (PKC), meat meal, feather meal etc.	*Body building *Tissue repair *Hormones production * Excess protein is de-aminated and stored as fats in the body tissues.
3.	Fats and oils (Lipids)	Same as for carbohydrates.	Palm oil, animal fat, full fat soya, pkc, castor oil seed, etc.	*Provides energy *Transport vitamins *Maintains body temperature.
4.	Vitamins		Most feed ingredients, especially proteins	Body metabolism *Good sight *Blood clotting *Fertility *Absorption of certain nutrients in the body.
5.	Minerals	In form of molecules of elements	Common salt, bone meal, oyster shell limestone etc.	*Bone and teeth formation *Egg shell formation *Blood formation *Influence protein synthesis and formation.
6.	Water	Hydrogen and	Direct intake, fresh forages,	*Involved in excretion and

		Oxygen.	fruits etc.	secretions *Needed for respiration * for blood circulation *For reproduction *Osmo-regulation *Ingestion *Digestion *Nutrient absorption and assimilation.
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STRATEGIES AND ACTIVITIES

Step 1: Revise the previous lesson with the following questions:

1. List any five ingredients used for making livestock feed.
2. Mention the seven classes into which the feed ingredients are grouped.
3. Describe basal feed
4. Give two examples each of : a) concentrate b) roughage c)succulent d) sweetener

Step ii: Guide the students to list the nutrient found in the food. Explain to them that the same nutrients are required by the animals, and are contained in the feed given to the farm animals.

Step iii: Lead the students to discuss each type of food nutrient listed, stressing on the composition, sources and the functions of each nutrient in the body of the animals.

Step iv: Teacher allows the students to ask questions as he gives adequate answers to their questions.

WRAP-UP/ASSESSMENT: He summarizes the lesson content by mentioning and emphasizing the cogent points. He asks the following questions to evaluate the students:

- i. list six nutrients found in livestock feed
- ii. state the composition, sources and functions of each of the identified nutrients.

ASSIGNMENT: The compounded feed for poultry fowls is called mash. List 5 different types of mash given to different categories of poultry fowls.

TERM: 2ND TERM

SESSION: 2020/2021 SESSION

WEEK: FIVE

DATE: 15/02 – 19/02/2021

CLASS: JS 2

SUBJECT: PVS- AGRICULTURE

LESSON TITLE: FACTORS TO BE CONSIDERED WHEN FORMULATING ANIMAL FEED

PERIOD: 1st & 2nd

DURATION: 80 min

LEARNING OBJECTIVES: At the end of the lesson students should be able to:

- i. define ration formulation correctly,
- ii. state the various factors to be considered when formulating animal feed.

KEY VOCABULARY WORDS: physiological, specie, weaner, objective etc.

TEXTBOOKS/ REFERENCE MATERIALS: Pre-Vocational Studies for Junior Secondary Schools Book 2, Oluyemi Oke et al, 2015 (Revised Edition), Lagos, De- Initiative Publications, Pp.

INSTRUCTIONAL MATERIALS: PowerPoint presentation slide for the lesson, samples of animal feed such as poultry mash, fish pellet etc.

BUILDING BACKGROUND: Students had been taught meaning of feed and feeding as well as classification of livestock feed stuffs.

CONTENT

FACTORS TO BE CONSIDERED WHEN DECIDING ANIMAL FEED

Ration formulation is the practice of combining different feed ingredients in the right proportion and quantities to provide the animals with the needed nutrient requirement.

The following factors are to be considered when formulating feed:

- ✓ The physiological state of the animal e.g. new born, weaner, pregnant, lactating etc.
- ✓ Availability of feed ingredients.
- ✓ Composition of the ingredients
- ✓ Age of the animal
- ✓ Farmer's objective
- ✓ Specie and type of the animal
- ✓ Cost of feed ingredient etc.

STRATEGIES AND ACTIVITIES

Step 1: Revise the previous lesson with the following questions:

- i. list six nutrients found in livestock feed
- ii. state the composition, sources and functions of each of the identified nutrients.

Step ii: Guide the students to give the meaning of ration/feed formulation.

Step iii: List and give detailed explanations on various factors to be considered during ration formulation.

Step iv: Teacher allows the students to ask questions as he gives adequate answers to their questions.

WRAP-UP/ASSESSMENT: He summarizes the lesson content by mentioning and emphasizing the cogent points. He asks the following questions to evaluate the students:

- i. Define ration formulation.
- ii. State five factors to be considered when formulating animal feed.

ASSIGNMENT: 1. What is malnutrition?

2. State five effects of malnutrition on farm animals.

H.O.D/V.Ps COMMENT:

TERM: 2ND TERM

SESSION: 2020/2021 SESSION

WEEK: SIX

DATE: 22/02 – 26/02/2021

CLASS: JS 2

SUBJECT: PVS- AGRICULTURE

LESSON TITLE: ANIMAL DISEASES

PERIOD: 1st & 2nd

DURATION: 80 min

LEARNING OBJECTIVES: At the end of the lesson students should be able to:

- i. define diseases in farm animals
- ii. list the factors that predispose farm animals to diseases.

KEY VOCABULARY WORDS: deviate, ill-health, sickness

TEXTBOOKS/ REFERENCE MATERIALS: Pre-Vocational Studies for Junior Secondary Schools Book 2, Oluyemi Oke et al, 2015 (Revised Edition), Lagos, De- Initiative Publications, Pp.

INSTRUCTIONAL MATERIALS: PowerPoint presentation slide for the lesson, pictures of sick animals and healthy animals.

BUILDING BACKGROUND: Students are familiar with issues of health and sicknesses.

CONTENT

ANIMAL DISEASE

Disease can be defined as any condition that deviates from the normal functioning of the animal, resulting in ill-health or sickness and reducing the performance and productivity of the animal.

The following factors may lead or predispose farm animals to disease conditions.

1. Malnutrition
2. Harsh weather condition
3. Injury
4. Poorly treated wound
5. Overcrowding or wrong stocking
6. Improper use of equipment
7. Uncontrolled mating
8. Allergies
9. Improper handling of the animal
10. Poor sanitation
11. Poor housing
12. Consumption of toxic substances
13. Improper use of drugs/medications
14. Inbreeding depression

STRATEGIES AND ACTIVITIES

Step 1: Revise the previous lesson with the following questions:

- i. Define ration formulation.
- ii. State five factors to be considered when formulating animal feed.

Also ask one or two students to share their experiences of sometimes when they took ill with the class.

Step ii: Guide the students to give the meaning of animal disease.

Step iii: Lead the students to identify various factors that can make an animal to fall sick or affected by diseases. Moderate their submissions and add the ones they might not mention to the list. Show them pictures of healthy and sick animals.

Step iv: Allow the students to ask questions and give adequate answers to their questions.

WRAP-UP/ASSESSMENT: He summarizes the lesson content by mentioning and emphasizing the cogent points. He asks the following questions to evaluate the students:

- i. define diseases in farm animals
- ii. list eight factors that can predispose farm animals to diseases.

ASSIGNMENT: Write the names of five common diseases in farm animals.

TERM: 2ND TERM

SESSION: 2020/2021 SESSION

WEEK: SEVEN

DATE: 01/03 – 05/03/2021

CLASS: JS 2

SUBJECT: PVS- AGRICULTURE

LESSON TITLE: ANIMAL DISEASES

SUB TITLE: Classes of Animal Diseases

PERIOD: 1st & 2nd

DURATION: 70 min

LEARNING OBJECTIVES: At the end of the lesson students should be able to:

- i. mention various classes of diseases that affect farm animals
- ii. give examples of diseases caused by various causal agents.
- iii. discuss some selected bacterial diseases of farm animals such as mastitis and fowl typhoid.

KEY VOCABULARY WORDS: pathogen, protozoa, virus, fungi, bacteria, inflammation, udder, antibiotic, contagious, foetus, abortion etc.

TEXTBOOKS/ REFERENCE MATERIALS: Pre-Vocational Studies for Junior Secondary Schools Book 2, Oluyemi Oke et al, 2015 (Revised Edition), Lagos, De- Initiative Publications, Pp.

INSTRUCTIONAL MATERIALS: PowerPoint presentation slide for the lesson, pictures of sick animals.

BUILDING BACKGROUND: Students had been taught the meaning of diseases as well as factors that predispose farm animals to diseases.

CONTENT

CLASSES OF ANIMAL DISEASES

Diseases of farm animals are classified into two main groups namely Pathogenic and non-pathogenic diseases.

Pathogenic (caused by pathogens) Pathogens are disease-causing organisms.

Animal pathogens are classified as follows:

- i. Bacteria: They cause bacterial diseases such as mastitis, pullorum, anthrax etc.
- ii. Fungi: They cause fungal diseases such as ring worm, aspergillosis etc.
- iii. Virus: These pathogens cause viral diseases such as Newcastle disease, fowl pox etc.
- iv. Protozoa: They cause protozoan diseases such as coccidiosis, trypanosomiasis, etc.
- v. Metazoa: They are mainly parasites. They cause diseases such as helminthiasis , taeniasis, babesiosis etc.

Non- pathogenic diseases are traced to environmental factors, mostly nutritional imbalances and weather extremes. Such diseases include Bloat, Ricket, Anaemia, Osteomalasia, Ketosis etc.

SELECTED BACTERIAL DISEASES OF FARM ANIMALS

1. **MASTITIS:** It affects the udder of farm animals, causing inflammation or sore of teat of female cattle, sheep and goats. It is transmitted by air-borne bacteria entering the udder through the teat or injuries. Symptoms include swollen udder with pus coming out of it, watery yellowish smelling milk, drop in yield of milk etc. Treatment is done by injecting with antibiotics, after which the udder is well massaged.

2. FOWL TYPHOID: A disease that causes high mortality when there is outbreak. It affects poultry birds such as fowls, duck, turkey, goose etc. It is transmitted by ingestion of infected droppings, introduction of infected eggs, chicks or adult carrier, contaminated feed, water or equipment and free flying birds e.g. vulture. Symptoms include the chicks dying in the shell before hatching, anorexia (loss of appetite), greenish-yellow diarrhea etc. It can be treated with furazolidone drug. Prevention through clean environment, separating older stock from younger stock and avoidance of contamination of feed and water from faeces.

STRATEGIES AND ACTIVITIES

Step 1: Revise the previous lesson with the following questions:

- i. define diseases in farm animals
- ii. list eight factors that can predispose farm animals to diseases.

Step ii: Give detailed explanation on the topic, to include the two types of diseases, meaning of pathogens, types of pathogenic diseases, as well as discussion on mastitis and fowl typhoid.

Step iii: Allow the students to ask questions and give adequate answers to their questions.

WRAP-UP/ASSESSMENT: He summarizes the lesson content by mentioning and emphasizing the cogent points. He asks the following questions to evaluate the students:

- i. list the two major groups of diseases in farm animals.
- ii. What are pathogens?
- iii. Mention the four disease pathogens of farm animals.
- iv. List three animals affected by mastitis.
- v. Mention two symptoms of fowl typhoid.

ASSIGNMENT: Discuss the following animal diseases under such headings as animals affected, symptoms, mode of transmission and prevention/control.

H.O.D/V.Ps COMMENT:

TERM: 2ND TERM

SESSION: 2020/2021 SESSION

WEEK: EIGHT

DATE: 08 – 12/03/2021

CLASS: JS 2

SUBJECT: PVS- AGRICULTURE

LESSON TITLE: ANIMAL DISEASES

SUB TITLE: Selected Diseases of Farm Animals

PERIOD: 1st & 2nd

DURATION: 70 min

LEARNING OBJECTIVES: At the end of the lesson students should be able to:

- i. mention various examples of fungal, viral and protozoan diseases.
- ii. give examples of fungal, viral and protozoan diseases.
- iii. discuss some selected fungal, viral and protozoan diseases of farm animals such as ringworm, aspergilosis, foot and mouth disease, Newcastle disease and coccidiosis.

KEY VOCABULARY WORDS: protozoa, virus, fungi, somersault, respiratory disorder, communicable, vaccination, inoculation etc.

TEXTBOOKS/ REFERENCE MATERIALS: Pre-Vocational Studies for Junior Secondary Schools Book 2, Oluyemi Oke et al, 2015 (Revised Edition), Lagos, De- Initiative Publications, Pp.

INSTRUCTIONAL MATERIALS: PowerPoint presentation slide for the lesson, pictures of sick animals suffering from some of the diseases being discussed.

BUILDING BACKGROUND: Students had been taught the meaning of diseases as well as factors that predispose farm animals to diseases.

CONTENT

Lesson 1

SELECTED FUNGAL DISEASES OF ANIMALS

1. RINGWORM: A skin disease that affects cattle, sheep, goat, rabbit, pig and even human beings.

It is transmitted by contact with infected animals and their utensils.

It is characterized by spreading ring-shaped patches or lesions on the surface of the skin with unpleasant and uncontrolled irritation.

Loss of hair and weight.

Treatment is done by scraping the affected part with razor, add iodine and then add sulphur drugs e.g. penicillin for seven days.

Disinfect all pens and equipment

enforce good sanitation measures.

2. ASPERGILLOSIS: A disease that affects poultry, pig, cattle and their by-products.

It is transmitted by inhalation of and ingestion of mouldy feed, contaminated incubator and through wounds.

Symptoms include skin irritation, respiratory disorder, loss of weight, general weakness, rotten feed, greenish threadlike structure spread over the feed substance.

Treatment: Apply sulphur based drugs, good sanitation, avoidance of giving mouldy feed to animals.

SELECTED VIRAL AND PROTOZOAN DISEASES

Animals viral diseases include rinderpest, new castle disease, foot and mouth disease, fowl pox, chronic respiratory diseases etc.

Foot and mouth disease: is an acute and highly communicable viral disease which attacks cattle , sheep and goat.

It is transmitted through body contact

Contaminated feed and water.

Symptoms: It is characterized by high fever ,
blister on the mouth , tongue , udder and feet;
lameness
refusal to eat.

Prevention/Control: It can only be prevented through
vaccination ,
isolation
culling of infected animal.

Newcastle disease: A viral disease that affects poultry animals especially poultry fowls.

Symptoms: These include:

- Neck twisting and somersaulting (torti colis)
- Difficulty in breathing
- Greenish droppings
- Soft shelled eggs

Mode of transmission:

- Contact with infected droppings
- Contact with nasal discharge

Prevention and control measure:

- ↗ Good sanitation
- ↗ Vaccination
- ↗ Culling of infected birds
- ↗ Inoculation

Lesson 2- Protozoan Diseases

1. Coccidiosis: A fatal protozoan disease of poultry and rabbits.

Mode of Transmission: It is transmitted through

- contaminated feed
- contaminated water
- contaminated faeces
- wet or damp litter or beddings.

Symptoms:

- Blood-stained faeces
- diarrhea ,
- ruffled feathers
- frequent closing of eyes

Treatment: It can be treated with Amprolium.

Preventive measures include:

- ☞ good sanitation
- ☞ avoidance of wet litter.

Other protozoan disease include trypanosomiasis or sleeping sickness and babesiosis or red water disease.

STRATEGIES AND ACTIVITIES

Step 1: Revise the previous lesson with the following questions:

- i. List three animals affected by mastitis.
- ii. How can mastitis be treated?
- ii. Mention two symptoms of fowl typhoid.

Step ii: Give detailed explanation on the topic, using the available learning resources.

Step iii: Allow the students to ask questions and give adequate answers to their questions.

WRAP-UP/ASSESSMENT: He summarizes the lesson content by mentioning and emphasizing the cogent points. He asks the following questions to evaluate the students:

- i. Mention two examples of: (a) Fungal diseases (b) Viral diseases (c) Protozoan diseases
- ii. How can ringworm be transmitted among farm animals?
- ii. Name two animals affected by coccidiosis.
- iii. List three symptoms of Newcastle disease.

ASSIGNMENT: List five parasites of farm animals.

H.O.D/V.Ps COMMENT:

TERM: 2ND TERM

SESSION: 2020/2021 SESSION

WEEK: NINE

DATE: 15 – 19/03/2020

CLASS: JS 2

SUBJECT: PVS- AGRICULTURE

LESSON TITLE: FARM ANIMAL PARASITES

SUB TITLE: Meaning and types of animal parasites.

PERIOD: 1st & 2nd

DURATION: 70 min

LEARNING OBJECTIVES: At the end of the lesson students should be able to:

- i. define animal parasites correctly,
- ii. list and describe the two types of animal parasites,
- iii. give appropriate examples of each type of animal parasite.

KEY VOCABULARY WORDS: endo-parasite, ecto-parasite

TEXTBOOKS/ REFERENCE MATERIALS: Pre-Vocational Studies for Junior Secondary Schools Book 2, Oluyemi Oke et al, 2015 (Revised Edition), Lagos, De- Initiative Publications, Pp.

INSTRUCTIONAL MATERIALS: PowerPoint presentation slide for the lesson, pictures of some parasites such as tick, lice, fleas, roundworm, tapeworm, liver fluke etc.

BUILDING BACKGROUND: Students had been taught the meaning of diseases as well as causes of diseases in farm animals.

CONTENT

Lesson 1

ANIMAL PARASITES

An animal parasite is a visible organism living, plant or animal, that lives in or on another and takes its nourishment from that organism.

Parasite causes diseases in its hosts in the process of feeding on the hosts, sucking their blood. Diseases caused by parasites are called parasitic diseases. These may be in categories of protozoa or helminths.

Types of Animal Parasites

There are two major types of animal parasites. These are ecto-parasites and endo-parasites.

Ecto-parasites live on the body of their hosts, thereby attacking them from the outside mostly through their skin. Examples include tick, lice, flea, tsetse fly, mosquito etc.

Endo-parasites live inside the body of their hosts, that is, in their internal organs such as intestines. Examples are worms such as round worm, tape worm, hook worm, liver fluke, etc.

STRATEGIES AND ACTIVITIES

Step 1: Revise the previous lesson with the following questions:

- i. define animal disease.
- i. Mention two examples of: (a) Fungal diseases (b) Viral diseases (c) Protozoan diseases

Step ii: Give detailed explanation on the topic, using the available learning resources.

Step iii: Allow the students to ask questions and give adequate answers to their questions.

WRAP-UP/ASSESSMENT: He summarizes the lesson content by mentioning and emphasizing the cogent points. He asks the following questions to evaluate the students:

- i. Define animal parasites.
- ii. Diseases caused by animal parasites are called ----- diseases.
- iii. Name two types of animal parasites.
- iii. Give three examples each of farm animals' ecto-parasites and endo-parasites.

ASSIGNMENT: Draw the diagrams of the following parasites:

- i. Tick
- ii. Tsetse fly
- iii. Round worm
- iv. Tape worm
- v. Liver fluke