

2025 SHS2 END OF SEMESTER EXAM ANIMAL HUSBANDRY 2 SOLUTION

SECTION B

1. i. Ways of controlling ticks on livestock:

1. **Dipping:** Immersing the entire animal in a chemical solution (acaricide) to kill ticks.
2. **Spraying:** Applying acaricides directly onto the animal's coat using a sprayer.
3. **Pour-ons:** Applying a concentrated chemical solution along the animal's backline.
4. **Hand-picking:** Manually removing visible ticks from the animal's body.
5. **Pasture Management:** Practicing rotational grazing to break the tick's life cycle.
6. **Biological Control:** Using natural predators of ticks, like certain birds (eg. cattle egrets).

ii. Endo-parasites in the gut of livestock:

1. Tapeworms
2. Roundworms (Nematodes)
3. Flukes (Trematodes)

iii. Digestive juices in the small intestine:

1. **Bile:** Produced by the liver, it emulsifies fats.
2. **Pancreatic juice:** Contains enzymes like amylase, lipase, and trypsin.
3. **Intestinal juice (succus entericus):** Contains various enzymes to break down sugars, fats, and proteins.
4. **Trypsin:** Breaks down proteins into smaller peptides.
5. **Lipase:** Breaks down fats into fatty acids and glycerol.

2. i. Deficiency symptoms of carbohydrates in animals:

1. Loss of body weight and condition.
2. Reduced energy levels and lethargy.
3. Stunted growth in young animals.
4. Reduced milk production in lactating animals.
5. Ketosis (a metabolic disorder).

ii. Actions to control the spread of diseases on the farm:

1. **Quarantine:** Isolate new animals for a period before introducing them to the main herd.
2. **Vaccination:** Administer vaccines to prevent specific diseases.
3. **Biosecurity:** Control movement of people, vehicles, and equipment onto and off the farm.
4. **Sanitation:** Regularly clean and disinfect housing, feeding, and watering equipment.
5. **Proper Carcass Disposal:** Safely dispose of dead animals to prevent the spread of pathogens.

iii. Ways of maintaining floor litter:

1. **Keep it dry:** Ensure good ventilation and prevent water spillage.
2. **Regular Turning/Raking:** Turn the litter regularly to aerate it and prevent caking.
3. **Top-dressing:** Add a fresh layer of litter material on top when it becomes soiled.
4. **Remove Caked Litter:** Promptly remove wet or caked portions of the litter.
5. **Use Absorbent Material:** Start with a deep layer of high-quality, absorbent bedding like wood shavings or rice husks.

3. i. Distinct regions of the vertebrae column of a cow:

1. Cervical (Neck)
2. Thoracic (Chest/Withers)
3. Lumbar (Loin)
4. Sacral (Rump/Pelvic)
5. Caudal/Coccygeal (Tail)

ii. Poultry Production Terms:

- **Brooding:** This is the care and management provided to young chicks from one day old until they can control their own body temperature, typically for the first few weeks of life. It involves providing a source of heat, feed, water, and protection.
- **Sexing:** This is the process of identifying and separating male and female chicks, usually done shortly after hatching.

iii. Poultry vices in the brooder house:

1. Cannibalism (pecking each other)
2. Egg eating

4. i. Orientation in poultry housing:

Orientation refers to the positioning of the poultry house in relation to the sun and prevailing winds. In tropical climates like Ghana, an east-west orientation is recommended to minimize direct sunlight on the long sides of the building, keeping it cooler for the birds.

ii. Signs of ill-health in farm animals:

- Loss of appetite
- Dullness and isolation from the herd/flock
- Rough or dull coat/feathers
- Abnormal discharge from the nose, eyes, or mouth
- Diarrhea or abnormal feces
- Lameness or difficulty moving
- Reduced production (milk, eggs, etc.)

iii. The term "Ration":

A ration is the total amount of feed an animal is given during a 24-hour period. It is formulated to be balanced and provide all the necessary nutrients (water, protein, carbohydrates, fats, minerals, vitamins) required by the animal for maintenance, growth, and production.

5. i. Sources of minerals for farm animals:

1. Forages and pasture
2. Mineral supplements (e.g., salt licks, dicalcium phosphate)
3. Bone meal
4. Oyster shells

ii. The term "Pasture":

Pasture is land covered with forage crops like grasses and legumes, where farm animals can graze freely. It serves as a primary source of feed for ruminant animals.

iii. What is hatching?

Hatching is the process by which a young animal breaks out of an egg. In poultry, it's the emergence of a chick from the eggshell after the incubation period is complete.

iv. Differentiate between table eggs and fertile eggs:

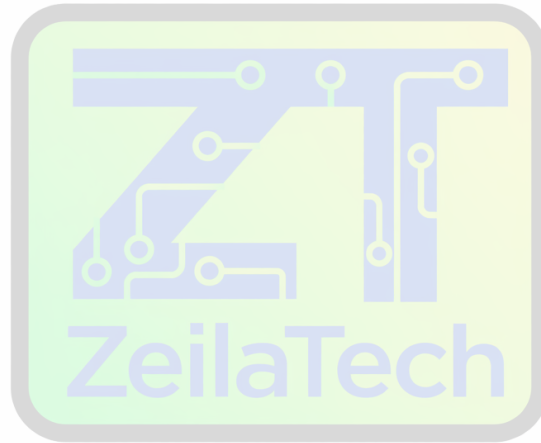
- **Table Eggs:** These are unfertilized eggs produced by hens that have not mated with a rooster. They are intended for human consumption and will not hatch.
- **Fertile Eggs:** These are eggs produced by hens that have mated with a rooster. They contain an embryo and have the potential to hatch into a chick if incubated under the correct conditions.

6. i. Causes of diseases in farm animals:

1. **Pathogens:** Bacteria, viruses, fungi, and protozoa.
2. **Parasites:** Both internal (worms) and external (ticks, lice) parasites.
3. **Nutritional Deficiencies:** Lack of essential nutrients in the diet.
4. **Metabolic Disorders:** Problems with the animal's metabolism, like milk fever or ketosis.
5. **Physical Injuries:** Wounds or trauma that can lead to infection.
6. **Poisons:** Ingestion of toxic plants or chemicals.

ii. Symptoms of worm infestation on animals:

1. Potbelly appearance, especially in young animals.
2. Rough hair coat or staring feathers.
3. Diarrhea (scouring).
4. Weight loss or poor growth.



Smart Learning Tools