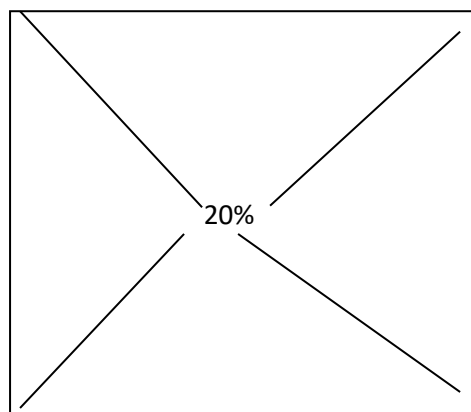


**ANESTAR SCHOOLS JOINT EXAMINATIONS**  
**AGRICULTURE (MARKING SCHEME) END YEAR EXAM – 2019 FORM TWO**

1. State four symptoms of liver fluke attack in sheep.  
(2mks)
  - **Loss of weight and emaciation**
  - **Pot- bellied condition due t watery swellings on the body of the affected animals.**
  - **The animal suffer indigestion**
  - **Damage to the liver tissues and haemorrhage due to movement of flukes within the liver**
  - **Anaemic condition due to sucking of blood**
  - **Dullness and the animal appearing depressed**
  - **Swollen and painful abdomen**
  - **Recumbency precedes death**
2. State four control measures of beef tape worm.  
(2mks)
  - **Use of prophylactic drugs such as anti helminthes**
  - **Keep animal houses clean and disinfected**
  - **Practice rotational grazing and rest pastures to starve larvae to death**
  - **Keep the feeding and watering equipment clean**
  - **Use of latrines by farm workers**
  - **Proper cooking of meat**
3. State four ways of controlling lice in poultry.  
(2mks)
  - **Smearing the affected perches with volatile insecticide**
  - **Dusting birds with appropriate insecticides**
  - **Keep poultry house clean**
  - **Picking and killing**
4. State four signs of infestations by external parasites in goats.  
(2mks)
  - **Presence of sores/wounds on the skin**
  - **Irritation / scratching by the animal**
  - **Loss of hair**
  - **Anaemia**
  - **Presences of various developmental stages of the parasite on the animal.**
5. State four characteristics of roughage livestock feeds.  
(2mks)
  - **High fibre content**
  - **High carbohydrate content**
  - **Low protein content**
  - **Low in feed value**
6. State two functions of the crop in digestive system.  
(2mks)
  - **Store food temporarily**
  - **Moisten food with water**
7. State four factors that affect the digestibility of a feed in dairy animals.  
(2mks)

- **Chemical composition of feed**
  - **Farm in which feed is offered**
  - **The ratio of energy to protein the higher the ratio the lower the digestibility.**
  - **Amount of feed already present in the digestive system**
8. State four functions of vitamins.  
(2mks)
- **Blood clotting**
  - **Help in muscular activity**
  - **Act as organic catalysts in various metabolic and physiological reactions**
  - **Promotes growth**
  - **Prevent diseases in animals**
  - **Help in bone formation**
9. Prepare 100kg of pig ration containing 20% D.C.P using cereal balancer 10% D.C.P and cotton seed cake 30% D.C.P show your working.  
(4mks)

Cereal balancer 10%



10 parts of cereal balancer

Cotton seed cake 30%

10/20 parts of cotton seed cake total parts

$$\text{Cereal balancer} - \frac{10}{20} \times 100 = 50\text{kg}$$

$$\text{Cotton seed cake} - \frac{10}{20} \times 100 = 50\text{kg}$$

10. Define the term Health in livestock.  
(1mk)

- **A state in which all the body organs or parts and systems are considered normal and are functioning normally.**

b. State four physiological parameters that can be used as indicators of ill health in livestock.

- (2mks)
- **Abnormal pulse rate**
  - **Abnormal breathing rate**
  - **Abnormal body temperature**
  - **Abnormal frequency of urination**
  - **Bloody urine**

- **Reduced production**
  - **Loss of appetite (anorexia)**
  - **Abnormal dung e.g. too hard or too loose**
11. What are infectious diseases in livestock? (1mk)
- **Diseases that can spread from one animal to another**
- b. Name the causes of infectious diseases in livestock. (1 ½ mks)
- **Virus**
  - **Bacteria**
  - **Protozoa**
- c. Explain two different ways through which good nutrition can help to control diseases in livestock. (2mks)
- **Improves body resistance against diseases**
  - **Keeps off nutrients deficiency diseases**
- d. Define the term Quarantine. (1mk)
- **Is the restriction of movement of animals and their products from and into the affected areas in the event of an outbreak of a notifiable disease.**
12. Identify the cabbage pest shown below. (1mk)
- b. Suggest three possible control measures for the pest. (3mks)
- **Scoop and destroy the pest**
  - **Use of suitable pesticides**
  - **Early planting**
  - **Field hygiene**
- c. Name two diseases of cabbage crop. (1mk)
- **Damping off**
  - **Black rot**
  - **Downy mildew**
  - **Dry rot canker (black leg)**
  - **Dark leaf spot**
13. State four factors considered when selecting a site for a tomato nursery bed. (2mks)
- **Nearness to the water source**
  - **Type of soil**
  - **Topography**
  - **Previous cropping**
  - **Security**
  - **Well sheltered place**

- 14.State three advantages of single stem pruning over multiple stem pruning. (1  
½ mks)  
- **Allows easy picking**  
- **Allows easy spraying**  
- **Minimizes breakage of branches**
- 15.State four qualities of an ideal grain store. (2mks)  
- **Leak proof**  
- **Rodent/vermin proof**  
- **Well ventilated**  
- **Easy to load and off load**  
- **Well secured to minimize theft**  
- **Easy to clean**  
- **Pest proof**
- 16.State four factors that determine the harvesting stage of a crop. (2mks)  
- **Purpose of the crop or the used for which the crop was intended.**  
- **Market demand**  
- **Concentration of the required chemicals**  
- **Weather conditions**  
- **Prevailing market price and profit margins**
- 17.Give the importance of carrying out the following in a nursery bed.  
a. Pricking out (1mk)  
- **To allow seedlings to grow strong and healthy without much competition.**  
b. Hardening off (1mk)  
- **To prepare seedlings to adapt to the ecological conditions prevailing in the seedbed.**
- 18.Study the illustration in the diagram below and answer the questions that follow. (1mk)  
a. Identify the practice being illustrated. (1mk)  
- **Transplanting/lifting of seedlings**  
b. State three activities that should be carried out for successful results in the practice shown above. (3mks)  
- **Watering thoroughly before lifting**  
- **Lifting seedlings with a ball of soil on roots**  
- **Lifting early in the morning/evening /cloudy day**  
c. At what stage should the practice be carried out in vegetable seedlings. (1mk)  
- **One month old / 4- 6 true leaves / 10-15cm in height**
- 19.State four advantages of row planting. (2mks)  
- **Machines can be used easily between rows**  
- **It is easy to establish the correct plant population**  
- **Lower seed rate is used than if broadcasting is adopted**

- ***It is easy to carry out cultural practices such as weeding, spraying and harvesting***
- 20.State four factors considered in timing planting. (2mks)
- ***The rainfall pattern***
  - ***Type of crop to be planted***
  - ***Soil type***
  - ***Market demand***
  - ***Prevalence of pest and diseases***
  - ***Weed control***
- 21.State four aspects of rainfall that influence agriculture. (2mks)
- ***Rainfall reliability***
  - ***Intensity of rainfall***
  - ***Amount of rainfall***
  - ***Distribution of rainfall***
- 22.State four effects of applying excessive nitrogen in crop production. (2mks)
- ***Lodging***
  - ***Excessive succulence***
  - ***Relayed maturity***
  - ***Blossom end rot in tomatoes***
  - ***Cracking of fruits before maturity***
  - ***Excessive vegetative growth***
- 23.State two causes of hard pans. (2mks)
- ***Constant shallow cultivation or ploughing***
  - ***Continued ploughing using heavy machines when wet***
- 24.Name three tertiary operations carried out in land preparation.(1 ½ mks)
- ***Ridging***
  - ***Rolling***
  - ***Leveling***
- 25.Name three types of pumps used by farmers. (1 ½ mks)
- ***Semi-rotary pumps***
  - ***Hydrams***
  - ***Centrifigual***
  - ***Piston/reciprocating***
- 26.Give four reasons for treating water before use. (2mks)
- ***Remove bad smell***
  - ***Kill diseases causing micro-organism/pathogen***
  - ***Remove solid particles / impurities***
  - ***Remove chemical impurities such as fluorides***
- 27.State four factors that affect the quality of farm yard manure. (2mks)
- ***Type of animal***
  - ***Type of food eaten***
  - ***Type of bedding material***
  - ***Method of storage***
  - ***Age of farmyard***

28. Name four breeds of dairy goats.

(2mks)

- **Toggenburg**
- **Saneen**
- **German alpine**
- **Anglo nubian**

29. Give two types of labour records.

(2mks)

- **Master roll**
- **Analysis on the use of labour**

30. Define agricultural economics.

(1mk)

- **Is an applied science carried out on maximizing the output and minimizing the cost of production by using scarce resources available.**