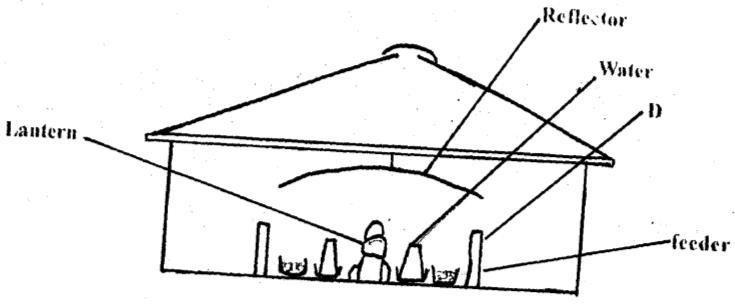
F4 workbook scheme

1. What is the role of a footbath in a poultry house? 1 mark

***Prevents the introduction of pathogens in the poultry house***

##### . Below is a diagram showing a house and a brooder set up for brooding chicks.



1. What is the purpose of the part labelled D.

***Confine the chicks around the source of heat.***

***Conserve/ maintain heat within the brooder***

1. State two ways in which the temperature in this brooder may be raised

***-Lower the reflector***

***-Add another source of heat/ lantern***

##### c) State two observations that would be made on the behaviour of chicks to determine when the temperature in the brooder is too high for chicks.

* + ***Frequent intake of water.***
  + ***Move away from heat source***
  + ***Lie on their belly with their wings spread***
  + ***Frequent gulping***

1. Give any five examples of joint product in livestock production. 5 mks

***Milk and butter***

***Beef and hide***

***Mutton and wool***

***Pork and bristle***

1. A deep litter poultry house measures 9m x 3m, Suppose the amount of space allowed for one bird is 0.27m2, calculate the number of birds that can be kept comfortably in this house. Show your working
2. State four pre-milking practices in a dairy herd.

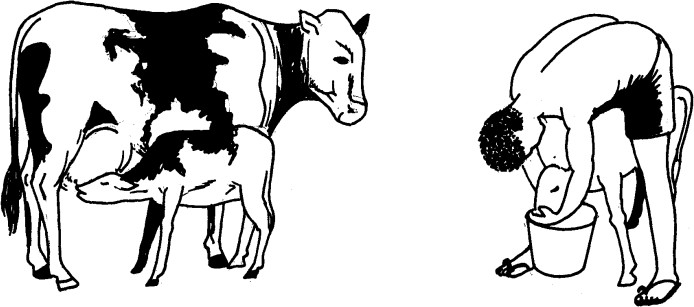
-***Restrain cow in a crush***

***-Assemble milking equipment***

***-Provide dairy meal feed***

***-Wash udder with warm water/dry udder***

***-Test presence of mastitis using strip cup. (4x ½ =2mks)***

1. The diagrams below show two methods of calf rearing. Study them carefully and answer the questions that follow.

A B

* 1. Identify method of feeding calf shown in the diagram A and B. 2 mks
     1. ***Natural***
     2. ***Artificial/Bucket feeding***
  2. Give three disadvantages of calf rearing using method A. 1 ½ mks

***Underfeeding of the calf***

***Can lead to overfeeding***

***No milk let down in case of absence of calf***

***Difficult to keep record***

1. Give two examples of one-host tick.

* ***The blue tick (boophilus decoloratus)***
* ***The Texas fever tick (Boophilus annulatus)***
* ***The cattle tick(Boophilus microplus)***

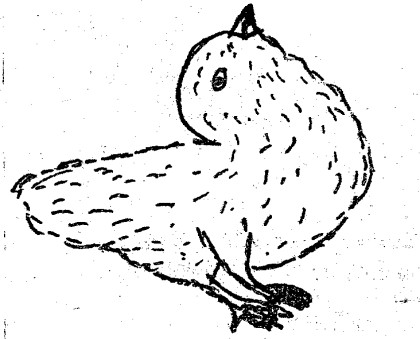
1. State two characteristics of a good acaricide
   1. ***be stable — should not react***
   2. ***persistent — last long after application***
   3. ***harmless to the animal — not cause damage to the skin of the animal ability to kill ticks***
2. Name three larval stages of a liverfluke
   1. ***sporocysts***
   2. ***rediae***
   3. ***cercaria***
3. Complete the following table; 4 mks

|  |  |  |  |
| --- | --- | --- | --- |
| ***Fixed input (Layers)*** | ***Variable input (layers mash)*** | ***Total Physical Product (eggs)*** | ***Marginal product*** |
| 100 | 0 | 140 | 0 |
| 100 | 10 | **155** | 15 |
| 100 | 20 | 180 | **25** |
| 100 | 30 | 240 | 35 |
| 100 | 40 | **340** | 100 |
| 100 | 50 | 470 | ***570*** |

#### Explain ways in which infectious diseases can be spread from one Livestock to another in a farm.

* 1. ***Through vectors***
  2. ***Through ingestion of contaminated food and water***
  3. ***Through contact / surface contact***
  4. ***Through inhalation of contaminated air. (3x1=3mks)***

##### Study the diagram of livestock below and answer questions that follow.



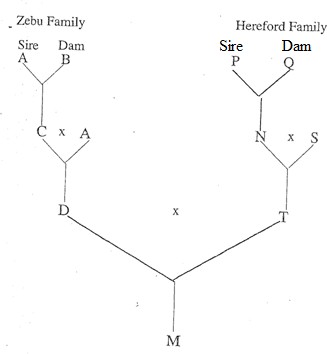
##### What has led to the above condition. 1 mark

**Lack of manganese**

##### State two effects of the above condition in poultry management.

* + ***Reduced shell thickness***
  + ***Sterility 2x ½ =1mk***

##### The diagram below shows two different livestock families. Use it to answer the following questions.



##### Identify the breeding system between:

##### C and A

. **Close breeding**

##### D and T

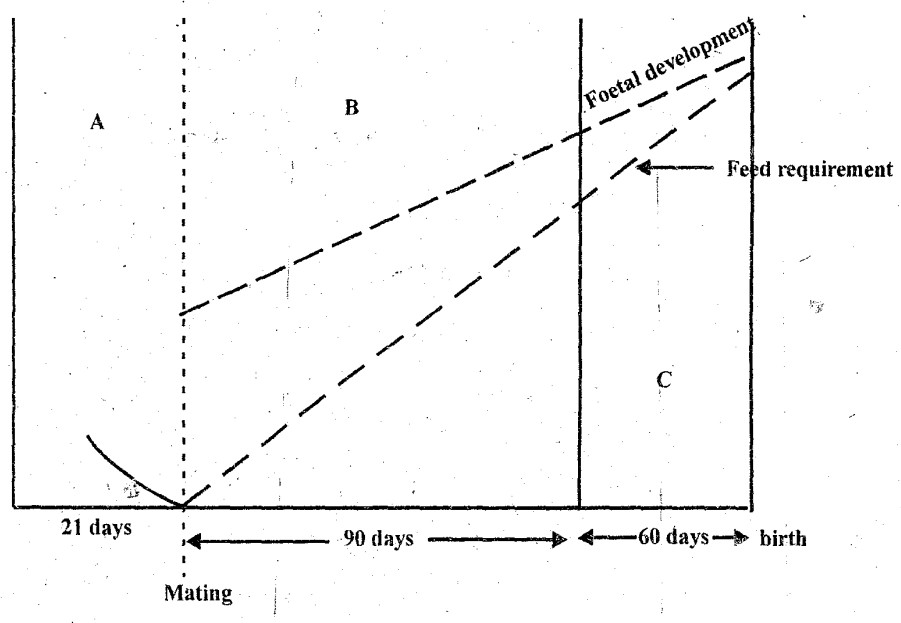
**Cross breeding**

##### State two advantages of breeding system identified in a (ii) above

-**Offspring exhibit hybrid vigour**

* + 1. Introduce new genes to the herd

1. The diagram below shows the relationship between feed requirements and foetal development in sheep. Use the graph to answer the questions.



1. What are the feeding management practices in sections A, B andC ? Give a reason for each.

***A- Flushing***

Reason;Ensure successful tupping/ enhancing twinning percentage/ induce ovulation.

***B- Maintenance Ration***

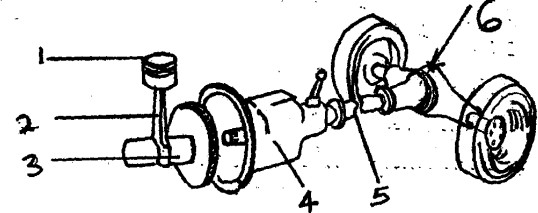
Reason; To maintain health condition

-Avoid complications at lambing

***C- Steaming up***

Reasons;- ***Ewes build body reserves for lambing***

* ***Encourage foetal development***
* ***Increase milk production/ colostrums production***

1. Use the graph to estimate the gestation period in sheep.
2. ***days + 60 days = 150 days***
3. Study the diagram below shows the power transmission mechanism of a tractor engine.
4. Name the parts

1-***Piston***

***2-Connecting rod***

***3-Cranshaft***

***4-Gear box***

***5-Propeller shaft.***

***6-Differential.***

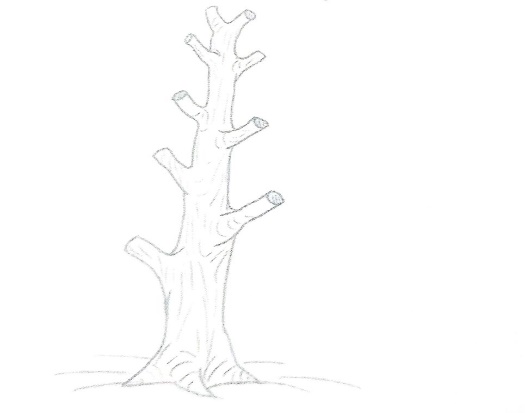
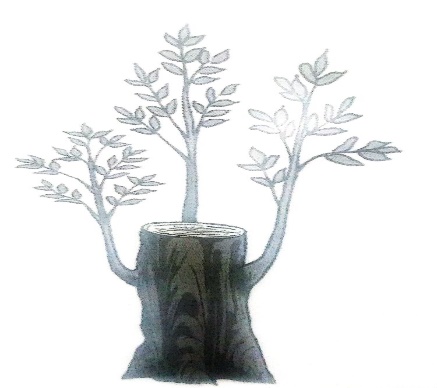
1. What technical term refers to attaching an implement to a tractor

***Hitching***

1. Distinguish between silvopasture and agrisilviculture as used in agroforestry.(1 mark)

………………………………………………………………………………………………………..

b) Identify the following methods of harvesting trees. (2 marks)

***A Pollarding B Coppicing***

1. State six ways in which a farmer can adjust to risks and uncertainties. (6 marks)

* ***Adopting modern methods of production***
* ***Having flexibility in production methods***
* ***Through input rationing***
* ***Taking insurance cover***
* ***Selecting more reliable enterprises***
* ***Through diversification of enterprises any 6 x 1 = 6 marks***