PAVEMENT FORM 4 TRIAL 2 2021/22

AGRICULTURE PAPER 2 / 443/2
MARKING SCHEME
SECTION A

1. (a)Romney marsh
   - Corriedale
   - Hampshire down *(½ x 2 = 1mark)*

(b) Ability to tolerate/withstand high temperature consumes less feed due to small size
   - Can survive on low/poor quality pastures *(½ x 2 = 1mark)*

2.
   - Help in culling sickling animals (rej culling sick animals)
   - Help in selection of animals for breeding.
   - Help in calculation of veterinary/treatment cost
   - Assist the former in knowing the prevalent disease
   - Show when to vaccinate or deworm
   - Help show the health condition of the animals *(½ x 2 = 1mark)*

3. (a) Depraved appetite/where animals feed on nonfood materials
   (b
   - To increase quantity of livestock product/work output
   - To reduce cost of production
   - Prevent spread of diseases
   - To increase productive life of livestock
   - Regular breeding *(½ x 3 = 1 ½ marks)*

4. (i)Pig rej cattle *(½ x 1 = ½ mk)*

(ii)Water snail/mud snail rej snail alone *(½ x 1 ½ mk)*

5. (a)Upgrading/grading up *(½ x 1 = ½ mks)*

(b) Observable characteristics e.g coat colour, size and shape
   - Measurable characteristic eg body weight, milk yield etc *(½ x 2 = 1mk)*

6.
   - Control of stocking rate
   - Control of water pollution
   - Sufficient supply of fish food/nutrients for aquatic life
   - Aerating water/flowing water
   - Maintain appropriate depth of water in the pond. *(½ x 4 = 2mks)*

7.
   - Crutching - cutting wool around the reproduction organ of ewe *(½ x 1 = ½ mk)*
   - Ringing cutting wool around the sheath *(½ x 1 = ½ mk)*

8.
   - To allow for even fat distribution in the body
   - To avoid/prevent accumulation of dirt which world encourage blow fly infestation
   - To minimize fouling of wool with feaces
   - To facilitate easy mating later in adult life *(½ x 4 = 2mks)*

9.
   - Only a few chicks can be hatched at a time by one hen
   - The farmer cannot plan when to incubate
   - Diseases and parasites can easily be transmitted to the chicks from the hen when the hen is injected
   - Hens can only be used when broody *(½ x 3 = 1½ mks)*

(b) Aids in mechanical digestion/crushing of food in the gizzard *(½ x 1 = ½ mark)*

10.
- Should produce immunity
- should have a long keeping life
- should be a easy to administer
- should be compatible
- should have no side effects
- single dose should produce lifelong immunity *(½ x 2 = 2mks)*

11.
- Value of nutrient
- Percentage of nutrients content/concetration
- Age of the animal
- Type of ration *(½ x 2 = 1mk)*

12.
- Miracidium
- Metacerceria *(½ x 2 = 1mk)*

13.
- Freezing
- Salting
- Sundrying
- Smoking *(½ x 4 = 2mks)*

14.
- Cross breeding with high yielding breeds
- Proper selection
- Proper feeding
- Proper control of parasite and diseases **(½ x 3 = 1½ mks)**

15. (a) A gilt is a mature female pig which has not given birth while a sow is a mature female pig that has given birth/ A gilt is a female pig between weaning and first parturition *(½ x 2 = 1mk)*

(b) Marking gauge is used to mark single parallel lines to stock while mortise gauge ,marks two Parallel lines at the same time. *(½ x 2 = 1mk)*

16. Poor branding
- Skin diseases
- Parasite infestation
- Rough handling
- Scratching by hard/sharp objects *(½ x 3 = 1½ mks)*

17. Allow sufficient air circulation
- Prevent dampness
- Controls temperature in the house *(½ x 4 = 2mks)*

18. Health
- Age
- Training
- Water and food availability *(½ x 4 = 2mks)*

SECTION B

19. (i) A-Cold chisel *(1 mk)*
B -Tenon saw (back saw)

(ii) A -Used for cutting thick sheets of metal *(1mark)*
B- Fine sawing
- Joinery work

(iii) Sharpen the cutting edges

- Oil the metallic parts when the tool is to be stored foe a long time to avoid rusting
- Lubricate the moving part to minimize friction.
- Replace broken handles ***(2 x 1 = 2mks)***

20. i) Disc plough√ **1mark**

ii) part Function

- Depth control wheel
- stabilize plough (½)
- Rear/furrow wheel ½ mk
- control side thrust /control the depth Disc ½ mk
- cut and invert soil ½ mk

iii) Maintenance practices

- Tighten loose bolt &nuts
- Replace /repair worn out parts
- Grease /Lubricate moving parts
- Clean after use
- Proper storage ½ x4=2mks
- Painting

21. (i) Brooder ***(1mark)***

(ii) To avoid flocking of chicks at the corners which may lead to suffocation and eventually death ***(1mark)***

(iii) Hot

(iv) The chicks have moved away fro the heat source.

(v) It clogs the gizzard of the birds leading to indigestions and death ***(1mark)***

22. (a)(i)Steaming up ***(1mark)***

(ii)Lactation/milk production ***(1mark)***

(iii)Flushing ***(1mark)***

(b)Give the ewe good condition for parturition.

- Facilitates rapid foetal development
- Reduces incidences of twin lamp disease /pregnancy/toxaemia.
- Increases and maintains high milk yield after birth.
- Ensures birth of a healthy animal. ***(1 x 2 = 2mks)***

SECTION C

23. (a)Anaemia

- Starring coat/rough coat
- Pot belly
- Emaciation
- Retarded growth
- Excessive appetite/Loss of appetite
- Intestinal blockage due to large numbers of parasites
- Scouring/constipation
- Indigestion
- Presence of eggs/parasite segments (proglottides) in feaces
- Damage of liver tissues/liver ulcerations
- Dullness/depression
- Recumbency after death
- Liver hemorrhage

- Blood stained stools (dysentery) ***(10 x 1 = 10mks)***

(b) Direction of prevailing wind to keep off bad smells/to avoid draught effects
- Location of homesteads.
- Farmers taste preference
- Drainage well drained site
- topography
- Proximity to social amenities like schools, hospital.
- Size of the farm – to provide room for future expansion
- Security - livestock units require close supervision.

24. (a) Management practices for good health
- provide balanced ration to increase disease resistance
- select healthy breeding stock
- cull animals susceptible to certain diseases
- use appropriate breeding methods to avoid disease transmission
- Provide proper housing e.g. calf pens to avoid diseases.
- maintain high level of hygiene
- isolate or confine sick animals from healthy ones
- Treat sick animals
- impose quarantine in case of out breaks of modifiable diseases
- use prophylactic drugs e.g. dewormers
- carry out regular vaccination
- control vectors such as ticks
- Slaughter & dispose properly affected animal if cannot be cured. ***(10 x 1 = 10mks)***

(b) Proper feeding
- Vaccination
- Dusting poultry house with insecticides.
- Observe hygiene
- Disinfect houses before introducing new birds.
- Administer dewormers in food or water
- Replace litter every 6 months
- Collect eggs twice a day
- De beak perpetual egg eaters.
- Cull un productive birds
- Provide nesting boxes
- Provide clean water adlibitum
- Provide roosting perches
- Treat sick birds and suspect cases.
- hang greens (to keep birds busy)
- - Provide grit or oyster shelters. ***(10 x 1 = 10mks)***

25. (a) Concrete or slatted floors. For easy cleaning
- Dry litter to provide warm and dry conditions/dry and warm to discourage infections.
- Spacious (adequate space) to provide room for exercise, feeding and placement of waterers
- Well lit to enhance synthesis of vitamin D for strong bone development.
- Well drained to avoid dampness which may encourage infections (Accepts examples scours, pneumonia, navel illness.
- Draught free, to avoid chilly conditions that may induce infections.
- Well ventilated, fresh air circulation so as to drive a way bad smells emanating from feacal interacts or ‘droppings’.
- Single housing - to avoid spread of worms /diseases/prevent formulation of hair balls the rumen due

to licking of hair from one another.

- Movable (mobile)_ pens - Moving to fresh grounds to reduce fresh infections
- Stating - 1mk. Explanation - 1mk ***(5 x 2 = 10mks)***

(b) (i) Cows that have recently calved

- Goats and pigs that have recently calved.

(ii) Dullness

- Muscular – twitching
- Staggering
- Falls down and becomes unconscious
- Animal lies down on the side and the whole body stiffness
- Stomach contents are drawn into mouth (and lungs)
- Complete loss of appetite
- Sudden death. ***(5 x 1 = 5mks)***
- (ii) Intravenous injections of calcium borogluconate salts
- Partial milking for first 10 days
- Provide heavy nutrition with ratio containing calcium and phosphorous.
- Give doses of vitamin D/Parathyroid extractions.
- Keep sick animals in a comfortable position
- Give fresh water
- Mechanical removal of urine. ***(3 x 1 = 3mks)***