**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)***

1. Ability to tolerate/withstand high temperature consumes less feed due to small size

* Can survive on low/poor quality pastures (***½ x 2 = 1mark)***
* 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)***

1. (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)***

1. (i)Pig rej cattle ***(½ x 1 = ½ mk)***

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

1. (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)***
* 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)***
* 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)***
* 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)***
* 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)***

* 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)***
* Value of nutrient
* Percentage of nutrients content/concetration
* Age of the animal
* Type of ration ***(½ x 2 = 1mk)***
* Miracidium
* Metacerceria ***(½ x 2 = 1mk)***
* Freezing
* Salting
* Sundrying
* Smoking ***(½ x 4 = 2mks)***
* Cross breeding with high yielding breeds
* Proper selection
* Proper feeding
* Proper control of parasite and diseases **(½ x 3 = 1½ mks)**

1. (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)***

1. Poor branding

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

1. Allow sufficient air circulation

* Prevent dampness
* Controls temperature in the house ***(½ x 4 = 2mks)***

1. Health

* Age
* Training
* Water and food availability ***(½ x 4 = 2mks)***

**SECTION B**

1. (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)***

1. 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

1. (i) Brooder ***(1mark)***
2. To avoid flocking of chicks at the corners which may lead to suffocation and eventually death ***(1mark)***
3. Hot
4. The chicks have moved away fro the heat source.
5. It clogs the gizzard of the birds leading to indigestions and death ***( 1mark)***
6. (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**

1. (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)***

1. 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.

1. (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)***

1. (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)***