443/2



***Turn Over***

AGRICULTURE PAPER 2

JULY/AUGAST

PREMOCK 1 2021 SECTION A (30 MARKS)

1. Imposition of restrictions regarding the movement of animals from endemic areas to other areas to prevent transmission of diseases. (1/2 mk)
2. Promotion of growth

Help in blood clotting

Help in bone formation

Help in muscular activities

Prevent diseases in livestock

Act as organic catalyst

(Any 2 x = lmk)

1. Cross breeding

Outcrossing

Upgrading

(any 2 x 1/2 mk)

1. Sensing bad smells within the hive and move away

Detection of changes in environmental temperatures hence regulating it (2 x sit = 1 mk)

5. (a) It's a disease that once noticed prompts an urgent need for informing the relevant authority (1 mk)

(b) Anthrax

East coast fever/ECF

Foot and mouth

Finder pest

(Any 2 x = lmk)

1. To stimulate the milk let down/ flow of milk

To avoid contamination of milk by dirt and germs from the udder

1. Level of production

Body size / weight

Age of animal

Work/activity done by animal

Weather conditions

Physiological conditions

Animal health status

(Any 4 x 1/2 = 2mks)

1. Holding pipes during plumbing

Tightening and loosening metallic pipes

(2 x 1/2 = Mk)

***This paper consists of 5 printed pages***

1. Suitable for sick and pregnant animals

Animals do not swallow dip wash

Spraying is faster

Less labour required

Dip wash is not wasted since it is recycled in the process. (Any 3 x 1 = 3mks)

1. Self-pecking throughout

Feather shedding

Reduced feeding, growth rate and production (3 x 1/2 = 1 1/2 mks)

1. Avoid disease transmission

Discourage licking each other

Avoid spread of parasites (Any 2 x 1 =2mks)

1. (i) New Zealand white ( 1 x ½ = ½ mk)

(ii) California white ( 1 x ½ = ½ mk)

1. Suitable flaying knife with rounded tip

Hoisting rails to hold the carcass in position

Proper timing of flaying

Making proper cuts (4 x 1/2 = 2mks)

1. Unhygienic conditions in the horse of young ones

Overfeeding calves on cold milk

Lack of colostrum

Feeding at irregular intervals (4 x ½ = 2mks)

1. Crutching is the cutting of wool around the external reproductive organ is of a female sheep

Raddling is the practice of fitting rams with breeding chutes painted in different colours underside the breast to identify the ewe mated. (2 x 1 = 2mks)

1. Possible to implant embryo from a high quality female

Stimulate milk production

Highly productive female can spread over and benefit many farmers

Easier to transport

Embryos can be stored for a long period (4 x ½ = 2mks)

1. Only the marketable size fish are caught

Fish are not injured

Ensures a large number of fish are caught (Any 2 x ½ = 1 mk)

1. To prevent injury on teats

To prevent piglets hurting each other

Controls mastitis (Any 2 x 1/2 = 1 mk)

1. Weak

Home for rats, termites

Dirty

Weather destroyed (windy conditions)

Not easy to paint (2 x 1 = 2mks)

**SECTION B**

1. (a)

J — Rafter

K — Crosstie

L — Purlin

N — Gutter (4 x 1/2 = 2mks)

(b) To support roofing materials

To ensure that the roofing materials are firmly held after nailing on to the iron sheets (2 x 1/2 = lmk)

(c) To collect water to be stored in water tanks

To prevent rain water from splashing directly onto the walls

1. (a) (i) C — Louse

D — Flea

E — Liverfluke

F — Roundworm

(ii) C and D are external parasites

E and F are internal parasites.

(b) Retarded growth/malnutrition/emaciation

Diarrhea/constipation

Damage to internal organs

Pneumonia

Blindness

1. (a) (i) L — Vagina

M — Uterus

(ii) J — Where fertilization takes place

K — Produces the egg/lava

- Produces hormone that controls the oestrus cycle

(b) Restlessness

Loss of appetite

Enlargement of udder

Enlargement of vulva

Cow isolates herself from the rest of the herd

Pelvic muscles relax

Mucous discharge from the vulva

Presence of thick milk if teats are squeezed / pressed

1. (a) Insulate floor preventing heat loss Absorbs moisture avoiding dampness

(b) Wood shaving

Straw

Saw dust

Rice husks

(c) Reflect radiation heat back to concentrate it within the brooder

Prevent chicks from straying far from heat source

(d) Chicks receive natural warmth from the mother

The hen protects the chicks until they are old enough

The mother hen feeds the chicks until they are old enough to feed themselves

**SECTION C**

1. (a) Factors considered when siting farm structures

Accessibility to the structure

Type of soil

Relationship with existing structures

Government policy on building and construction

Topography of the land or drainage

Space for future expansion

Position/direction of the sun/orientation

Availability of social amenities

Drainage of the area

Farmers tastes and preferences (10 x 1 = 10mks)

(b) Benefits of live fences

They provide security to the farm

Aesthetic value/beauty of the farm

Provide feeds for livestock

Act as wind breaks

Provide firewood/mulch materials (5 x 1 = 5mks)

(c) Advantages of Artificial insemination

Semen of one bull can serve many cows

Controls the transmission of breeding diseases

Eliminates the expenses of keeping a bull as regards food and drugs

Semen can be stored for long period of time

Controls in breeding in the farm

An effective research tool

Timely breeding

Eliminates fighting and injury during mating (Any 5 x 1 = 5mks)

1. (a) (i) Advantages of animal power

It does not require skilled workers as compared to engine power

Animals are cheaper to buy and maintain

Their work output is higher than that of human beings

They can work in areas where tractor can not

They work better in small holdings than tractors (5 x 1 = 5mks)

(ii) Provide adequate and nutritious diet

Provide appropriate workload

Avoid injury caused by harmer or yoke

Handle the animal gently and allow enough rest

Provide proper housing where necessary

Hoof trim the animals to minimize injury (5 x 1 = 5mks)

(b) (i) The generator fan belt should always be functional to ensure the battery is always charged

Repair radiator leakages

Refill water in the tractor

Clear the radiator frequently

Lubricate the water pump weekly

Fit all pipes tightly to avoid leakage

Click and adjust the fan belt accordingly 5 x 1 = 5mks

(ii) It prevents rusting

It acts as a cleaning agent to wash off dust and dirt

Reduces wear and tear of moving parts

It reduces heat created by rubbing surfaces 4 x 1 = 4mks

1. (a) (i) Brucella abortus 1 x 1 = lmk

(ii) Cattle, sheep, goats and pigs any 4 x 1/2 = 2mks

(iii) Premature birth 5th month - 7th month

Retained placenta

Barrenness in cows while bulls have low libido

Inflamed testes

Yellowish brown slimy odourless discharge from the vulva Any 4 x 1 = 4mks

(iv) Control measures

- Use of artificial insemination

- Culling and slaughter of affected animals

- Vaccination

- Cleanliness in animal houses

- Attendant to avoid contact with aborted fetus

- Blood test for all breeding animals to detect the disease. Any 4 x 1 = 4mks

(b) (i) - Causes of swarming of bees

- Damage of brood combs

- Lack of adequate ventilation

- Dampness in the hive Bad smell/odour in the surrounding

- Overcrowding

- Outbreak of pests and diseases

- Shortage of food and water in their surrounding Any 6 x 1 = 6mks

(ii) Materials collected by bees

- Nectar — juice collected from flowers for honey making

- Pollen — powder like substance collected from flowers used to feed the broad

- Propolis — a product collected from trees and used by bees to fill cracks in the hive

- Water — used by bees for honey preparation Any 3 x 1 = 3mks