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