**AGRICULTURE PAPER 2**

**MARKING SCHEME**

SECTION A (30MRKS)

1. Appropriate tools for

a)removing metal chipping s in the files

 -wire brush (1x1) (1mrk)

b) Cutting wood along grains

 -rip saw 1x1(1mrk)

c) Branding

 - Branding iron 1x1=1mrk

2. Characteristic of boran cattle

-Compact, deep and wide body

- Long, wide, dropping rump

-Large hump and dewlap

-Usually white in colour hence radiates heats

-Slow growth rate and late maturity

-Resistant to high temperature

-Cows weigh 410-450kg, bulls 550-650 kg (4x1/2 =2mrks

Used to improve zebu

3. Function of useful bacteria in livestock production

-Digestive of grass and fibre in the rumen

-Fermentation of yoghurt/milk products

 2x ½ =1mrk

4. Function of lipids

-Consistuent of body cell/part of body cell

-carries far soluble vitamins A,D,E, K

-Insulate body /prevent body heat loss

-Provide energy stored in reserves 4x ½ (2mrks

5. Ways of reducing friction in moving parts of farm tools

-oiling

-Greasing

2x ½ =(1mrk)

6. Types of fences used n mixed farm

-Electric

-plain wire

-Barbed wires

-Wooden fence

-Woven wire fence/chain link

-Stone /brick fence/block fence

7. Method of out breeding

-out crossing

-Cross breeding

- Grading up /Up grading 3x1/2=1 ½ mrK

8. Reason for tailing in sheep production

-Prevent blowfly infection

-Prevent sailing of wool with urine and feces

- Facilitate even distribution of fat in the body

 2x ½ =(1mrk)

9. Parts of cow s udder

- Lobule

- alveolus

-lobe

- teat cisterm

-teat canal

-gland cistern

-teat sphiricter muscles

-annular fold

10. Ways of transmitting livestock diseases

-open wounds

- Body contact with affected animals

-Inhalation of pathogens

-Insect vectors

-Ingestion of contaminated food and water

-Contaminated surgical instruments

 5x ½ =2mrks

11. Features of improved grain bin

-Raised above ground

-Have rat guard on supporting posts

-Have impermeable wall to guard against rain water .

-Proper ventilation to control variations.

-Have proper roofing to protect grain from sunlight and rain 4x1/2=(2mrks)

12. Types of calving complications (3x1/2 =1 1/2mrks)

-Breech presentation

-One or both forelegs bent backward

-head twisted backward to either side

-Whole reproductive trait twisted

13. Advantages of zero grazing

-high milk yield

-quick accumulation of manure

-easy control of parasite and diseases

-less wastage of feed

-Large number of animals reared in a small area/allow high stocking rate .

 4x1/2=(2mrks)

14. Function of queen bee

-lay eggs

-Production of pheromone which keeps colony together

 2x ½ =(1mrk)

15 Symptoms of anaplasmosis

-constipation/hard dung

-fever

-paleness of gum eye lips --Fast breathing and heart beat

-yellow urine, animal do not chew cud

-No milk flow from udder

 4x1/2=(2mrk)

16 Terms

a) Caponisation -sterilizing male bird

 b)bullock –mature castrated male cattle

c)Epislasis-a combination of inferior gene which individually could express themselves

 **SECTION B**

A)Type of cooling system

-Air cooled system 1x1=1mrk

b) parts

J-Finned cylinder

K-crank case

L-metal cowling

M-fly wheel(blower)

 4x ½ =(2mrk)

c) Problem associated

-uses heavy lubricating oil which are expensive

-get hot quickly

- Cooling not adequate when carrying heavy load

 2x1(2mrks)

18. Method of extracting honey

a) heat method

b) Why x should not be heated directly

-To prevent destroying honey by heat 1x1=(1mrk)

c) Parts

W-Honey combs

Y-water

 2x1=(2mrks)

d) Other method of honey extraction

-Crushing and straining

-Centrifugal method 1x1=1mrk

 1x1=(1mrk)

19 a) practice illustrated

-Ear notching 1x1=1mrk

b)Illustration for number 37

 

c) Other method of identifying piglet

-Ear tagging

-Ear tattooing

2x1=(2mrks)

20a) activity shown

-Hand milking

1x1=(1mrk)

b) Activity carried out before the operation

-Restraining animal

-Providing food

-Washing udder of animal

-wiping udder dry

-Testing for mastitis

1x1=(1mrk)

c)Procedure of carrying out practice

(i) -Assemble milking equipments

 (ii)- Provide food

 (iii) -Put cow in milking shed and restrain it

 (iv)-Wash udder using warm water

 (v)-dry the udder with clean towel

 (vi)-Use strip cup to test mastitis

 (vii)-Milk animal /strip the teat dry

 (viii)-Dip teats in antimastitis solution

 (ix)-apply milking jelly /milk salve on teats

 (x)-Release cow

 3x1=(3mrks)mark as whole

 Stop marking where procedure is broken

SECTION C (40 MRKS)

21. a)Management practice on a fish pond to ensure maximum fish harvest

-Control stocking rate

-Control water pollution

-Supply adequate food regularly

-Provide appropriate feed

-Ensure constant in flow and out flow of water /aerate water

-Control predators

-Harvest fish at the correct maturity age .

-Maintain appropriate water level always

 7x1=7mrks

b)Importance of farm mechanization

-Farm operation are achieved on time

-Large areas can be covered within short time

-Reduce drudgery /makes work easier and enjoyable

-Increased efficiency /better job done mechanically

-High yield due to timely operation

-Pest and disease outbreak controlled in a shorter time

-Encourage farmer to consolidate land

-Farmer benefit from economic of scale

-Uses less labour

 6x1=6mrks

c) Short term maintenance practice on a tractor7x1=(7mrks)

-Check level of engine oil using a dip stick

-Check fuel tank to ensure there is enough fuel

-Check level of electrolyte in battery and adjust accordingly

-Check level of water in radiator and top if necessary .

-Grease /oil moving parts

- Check for belt tension and condition and adjust accordingly

-Check the air cleaner to ensure there is no dirt /check level of oil

-Check the tyre pressure before work and adjust accordingly

-Tighten loose nuts ,bolt and pins

-Remove dirt from sediment bowl

22a)Features of a piggery unit

-Farrowing pen; to ensure safe farrowing and safety of piglet; hence should be provided with farrowing crates and heat source;

-Gilt pen; for keeping young female up to service age

-Boars pen; for breeding boar should be spacious for exercise

-Weaners pen; to house piglet after weaning

-In pig pen; for pregnant sow awaiting farrowing

-Running yard; for sunbathing and dunging

-Feed store for storing pig feed

-Water tough; for watering pigs

-Record room; for keeping feed and weight records

-Roofing; for their protection against extreme weather conditions.

- Feed troughs; for feeding pigs.

 -10x1=(10mrks)

b)Factors that influences the work of the output of a draught animal

-Age of the animal –very young and very old have lower out put compared to mature animal

-Level of training –Well trained animals are more efficient than poorly trained ones –They are able to follow simple instructions

-Method or harnessing –Well harnessed animal are more efficient than poorly harnessed animal

Body condition – A well fed draught animal is strong and healthy hence it has a higher work output compared to one that is poorly fed

-Weather condition –Adverse temperature (very high ,very low reduces the work output of draught animal .The animal work best under suitable weather condition

-Duration/ hours of work –Overworked animals tend to have a low work output ,draught animal should be given sufficient time to rest

-Condition of working implement, well maintained Implement are easy to work with and this improves the work output of the animal

 Any 5x2=(10mrks)

23a)Methods of controlling tick (10x1=(10mrks)

-Use of natural enemies e.g. ants and birds

-self licking to dislodge ticks

--Burning infected pastures land to expose eggs to the sun

-Top dressing pastures with lime

-Fencing off pasture land.

- Keeping animals away from infected pasture to stave ticks .

--Rotational grazing help to break life cycle .

-Deticking from livestock and killing them .

-Spraying with acaricides or dipping in acaricides

-Hand dressing using pye-grease.

b)The management of grower up to the point of lay

-Feed the grower on adequate growers mash per bird per day .

- Supplement the grower s mash with grains and greens .

-Introduce soluble grit /oyster shells at 20th week

-Provide adequate clean water and libitum.

-Adjust floor space; allowance; as the bird age appropriately

-Give a booster vaccine against new castle disease at 20 weeks of age at the 18th week ,vaccinate against fool pox

- Drench the birds regularly against internal parasites.

-Dust the bird with the appropriate pesticides against external pests .

-Control predator such as rat /cats .

-Feeders and waterier should be cleaned and disinfected daily .

-Maintain foot bath at the entrance of the poultry house .

-Keep the litter as dry as possible /turning it regularly .

-Introduce the layer mash from the 18th week and increase gradually .

-Provide roosts /perches for the birds to perch on from the 9th week .

-Birds start laying at 18-21 weeks of age depending on the breed .

 Any 12x1=12mrks)