BOMET/CHEPALUNGU JOINT EVALUATION TEST- 2010
443/2
AGRICULTURE
PAPER 2
MARKING SCHEME.

1. - Select and breeding
- Pasture / nutritional improvement
- Control parasites and diseases
- Provision of clean water
- Proper housing / hygiene
- Restrict long distance movement. ***3 x ½ = 1 ½ mks***

2. - Body weight / body size
- Available feeds
- Nutrient composition of feedstuffs available
- Cost of feeds
- Ingredient required
- Level of production of the animal.
- Age / stage of growth
- Type of production e.g broiler. ***4 x ½ = 2mks***

3. - Ear notching
- Ear tagging ***2 x ½ = 1mk***

4. - Avoid poisoning by chemicals or lead that may be in paints.
- Discourage insects from inhabiting the shed
- To discourage/avoid tainting of milk if shed is used immediately after painting ***2 x ½ =1mk***

5. - Reduce wear and tear.
- Length /prolong life of implement.
- Avoid rust on surfaces ***2 x 1= 2mks***

6. **Harvesting**- removal of all the fish from the pond
Cropping – Removal of marketable size fish from the pond *(mark as a whole)* 2mks

7. a) - acarive
- American foul brood 2 *x ½* ***= 1 mk***

b) Smoker ***1 x ½ = ½ mk***

8. a) - Provides nutrients to developing chick
- Cushions small movement of the inner egg content *½ x 2 = ½ mk*

b) When two ova get to the magnum at the same time so the thick albumen added encloses the two. ***1 x ½ = ½ mk***

9. - Brucellosis (contagious abortion)
- Trichomoniasis
- Vibriosis
- Vaqinities ***2 x ½ = 1mk***

10. a) - Hormone e.g stilbestrol
- Antibiotics e.g tetramycin
- Medicants e.g coccidiostats ***2 x ½ = 1mk***

b) - To stimulate growth
- To improve food conversion efficiency.
- To guard against diseases & parasites. 2 ***x ½ =1mk***

11. Swollen glands above the vent
- Respiratory distress
- Low water intake
- Severe immune suppression
- High mortality in hot and humid weather
- Loss of appetite ***4 x ½ = 2mks***

12. - White leghorn
- Minorca
- Ancona
- Sykes ***4 x ½ = 2mks***

13. - Use of power take off shaft (PTO)
- Use of hydraulic system
- Use of drawbar 2 ***x ½ =1mk***

14. - Feed composition
- Amount of feed already present in the alimentary tract
- Feed consistency / size / form
- Species of animal
- Age
- Cooked or raw
- Hairiness of grass / presence of foreign bodies ***Any 4 x ½ = 2mks***

15. - Checking lubricating engine oil level and adding or change when necessary.
- Checking the water level in the radiator.
- Checking and changing worn out fan belts
- Replacing oil fitter after a given period of working. ***4 x ½ = 2mks***

16. a) - Slow- takes along time to complete a task
- Work output is generally low.
- Unreliable because of health of the worker.
- Relies on level of skill of the worker ***2 x ½ = 1mk***

b) - Safe to the environment
- Excellent source of manure
- Low maintenance costs
- Cheap to generate when the digests is installed. ***2 x ½ = 1mk***

17. - Spirit level
- Trowel
- Float
- Plump bob / plumb line
- Mason's square
- Tape measure / metre rule / string line ***½ x 4 = 2mks***

18. - Fermentation of food
- Synthesis of Vitamin B complex (B_1,B_2 B_6) and vitamin k
- Temporary storage of food.
- Action of microbial activities ***½ x 4 = 2mks***

19. a) Applying mortar / plaster when building
b) Cutting thin metal sheets
c) Loosening /tightening metal pipes ***3 x ½ = 1 ½ mk***

SECTION B(20MKS)

20. a) - D ***1 x 1 = 1mk***

b)i) - E – High pressure / excess pressure
- F- Low pressure / less pressure ***2 x ½ = (1mk)***

ii) E – Deflate to correct / optimum pressure
F- Inflate to the correct pressure ***2 x ½ = (1mk)***

21. i) E – Holding yard
F - Footbath ***2 x ½ = 1mks***

ii) - Lower evaporation of dip wash
- Avoid dilution of dipwash by rain water
- Avoid dirt (particles,leaves etc) from falling into the dip wash ***2 x 1 = 2mks***

iii)- Avoid contamination of pastures with acaricide
- Avoid wastage of acaricide. ***2 x 1= 2mks***

iv)- Ensure right concentration of acaricide

- Water the animals before dipping
- Group the animals i.e dip clean ones first
- Pass a few animals into the dipwash to mix it ***3 x 1 = 3mks***

22. a) P- Mason's square
Q- Spirit level
R – Cold chisel ***3 x 1 = 3mks***

b) P – Checks right angles during construction
Q – To check weather a surface is vertical /horizontal ***2 x 1 = 2mks***

23. a) - Roof of a house / farm structure ***1 x 1 = 1mk***

b) C – Rafter
D- Rafter batten
E- Tie ***3 x 1 =3mks***

SECTION C(40MKS)

24. a)i) – Causal organism – protozoa / Trypanesoma spp.
Animals attacked – cattle, sheep,goats,noises,pigs. ***2 x 1 = 2mks***

ii) Vector borne by tse tse flies ***1 x 1 = 1mk***

iii) **Symptoms**
- Intermittent fever
- Starry coat
- Anorexia
- Anaemia
- Abortion in females
- Oedema
- Enlarged lymph nodes
- Loss of hair at the tail end ***3 x 1 = 3mks***

iv) **Control**
- Treat sick animal with trypanocida drugs
- Confine game animals in parks
- Resistant breeds **2 x 1 = 2mks**

b)- General farm hygiene.
- Isolate sick animals – prevent spread .
- Deworm animals to control endoparasites
- Treat sick animals to prevent spread
- Vaccinate animals to give them resistance / immunity
- Control vectors to prevent spread.
- Routine administration of drugs / prophylasis to prevent infection
- Proper feeding to prevent nutriotional / deficiency diseases.
- Culling / mass slaughter of infected animals to prevent disease spread
- Proper selection and breeding to control breeding and inherited diseases.
- Proper housing to avoid predisposal to disease.
- Hoof trimming to minimize occurrence of foot rot disease.
- Imposition of quarantine is prevent spread. ***12 x 1 =12mks***

25. a)- Assemble all milking equipments such as buckets, milking can and towels.
- Put animals in milking shed and restrain appropriately
- Wash udder and teat using warm water mixed with an appropriate sanitizing agent.
- Dry the udder using a clean towel
- Use strip cup to test the first few drops of milk for mastitis.
- Carry out milking by squeezing out the milk / teats.
- Strip the udder dry
- Dip the teats in ant-mastitis solution after milking.
- Apply milking jelly(milk salve) on the teats
- Release the cow
- Weigh and record the milk

- Strain the milk into the milking can to cover immediately.
- Cool the milk rapidly to a temperature of 4ºC ***12 x 1 = 12mks***

b) keep cow healthy / free from diseases
- Wash cow flanks, udder and region around the udder using clean water then dry using clean towels.
- Milking shed should be clean, wash after every milking and disinfect.
- Clean and sterilize milking utensils
- Cool and filter milk after milking
- Keep milk in a dust free environment.
- Deliver milk to collecting centres
- Don't feed cows on feeds which may taint milk a few hours to milking .e.g Mexican marigold, silage, garlic etc.
- Do not expose milk to direct sun.
- Milk should be carried in aluminium container;
- Copper and iron containers may cause oxidation of milk fats. ***8 x 1 = 8mks***

26.a)

Petal engine	**Diesel engine**
- Uses petrol	- Uses diesel
- Spark ignition	- Compression ignition
- Has a carburetor	- No carburetor
- Has sparks plugs	- No spark plugs
- Compression ration is lower(8:1)	- Compression ratio is higher(10:1)
- Light in weight	- Heavier in weight
- Cheap	- Expensive
- Produce less smoke	- Produce more smoke
- Produce less noise	- Produce more noise
- Need less frequent maintenance	- Need more frequent maintenance

10 x 1 = 10mks

b) Reduces heat created by rubbing surfaces
- Acts as seal between rubbing surfaces
- Increased efficiency of the machine
- Reduces wear and tear of moving parts
- Acts as a cleaning agent by washing off all the dirt and metal chippings to the sump
- Prevent rusting of stationery machines. ***5 x 2 = 10mks***