**BUTULA SUBCOUNTY
AGRICULTURE PP2
MARKING SCHEME**

1. **i. jersey cattle can survive on poor pasture**

**ii. more tolerant to tropical diseases
iii. More tolerant to heat
 (2×1=2mks)**

1. **i. support hind quarter with one hand and steady by holding ears
ii. Grasp loose skin over shoulder with hands (2×0.5=1mk)**
2. **i. high libido
ii. Fertile
iii. Free from hereditary defect
iv. High feed conversion rate
v. fast growth rate
vi. good body conformation
vii. Free from physical defect
viii. Suitable to environment condition
ix. Be mature
x. be healthy (4×0.5=2mks)**
3. **i. Canular-trocar
ii. Elastrator -rubber ring (2×0.5=1mks)**
4. **i. bulky
ii. High fibre content
iii. Low nutrient content
iv. Low digestibility
v. plant origin (4×0.5=2mks)**
5. **i. spray race
ii. Housing/shed
iii. Fences
iv. Crush
v. plunge dip (4×0.5=2mks)**
6. **i. wessex saddleback acc. Saddle back
ii. Large white (2×0.5=1mk)**
7. **i. prevent nutrient deficiency diseases
ii ensure resistance against diseases (2×0.5=1mk)**
8. **i. cross breeding
ii. Outcrossing
iii. Upgrading (2×0.5=1mk)**
9. **i. painting to avoid rusting
ii. Lubricating moving parts
iii. Clean after use rej. washing
iv. Replace worn out wheel
v. repair broken parts (4×0.5=2mks)**
10. **i. panting/open beak
ii. Drooping wings/wings away from the body
iii. Chicks make a lot of noise
iv. Chicks move away from heat source
v. drinking excess amount of water(4×0.5=2mks)**
11. **i. lack of fibre in the diet
ii. Feeding on succulent feeds
iii. Rapid gas production
iv. Fermentation of feed in the rumen
v. obstruction of the esophagus by food (2×0.5=1mk)**
12. **i. donkey
ii. Oxen accept bull
iii. Camels(2×0.5=1mk)**
13. **i. to remove dirt
ii. Stimulates milk let down (2×1=2mks)**
14. **a) cropping-removal of market size fish from the pond to provide more space for
 those left behind.
 harvesting- removal of all the fish from the pond during pond
 cleaning/maintenance. (1×1=1mk)
b) i. shortage of food
 ii. Lack of adequate ventilation
 iii. Damage of the brood comb
 iv. Outbreak of diseases
 v. infertile queen(4×0.5=2mks)**
15. **i. to determine the growth rate
ii. To evaluate weight gain in relation to age
iii. To plan for proper feeding regime
iv. To determine the management level of the mother during gestation(4×0.5=2mks)**
16. **i. ignition system
ii. Fuel system
iii. Power transmission
iv. Electrical system
v. cooling system(4×0.5=2mks)**
17. **i. reliable water source
ii. Secure from predators and thieves
iii. Accessible site
iv. Soil type/preferable clay soil
v. topography/ gentle sloping land(4×0.5=2mks)**

**SECTION B

19. a) x-ovary (1×1=1mk)
 y- cervix (1×1=1mk)
b) i. produce ovum/female gametes
 ii. Produce hormones/ progestrones
 c) i. Brucellosis/contagious abortion
 ii. Trichonomiasis
 iii. Campilobacteriosis
 iv. Vibriosis (1×1=1mk)
20. a) spraying (1×1=1mk)
 b) spray race (1×1=1mk)
 c) i. convenient for sick/pregnant animals
 ii. Its less laborious
 iii. Economical in spray use
 iv. Faster than plunge dip
 v. animals cant swallow the acaricide (3×1=3mks)
 21. a) A-branding
 B- bloodless/closed castration rej. Castration (2×1=2mks)
 b) i. lowers hide quality
 ii. Wounds which act as pathway for secondary infection
 iii. Inflicts pain to the animal (2×1=2mks)
 c) i. control breeding
 ii. Avoid bad smell in goats hence improve meat quality
 iii. fast growth rate (1×1=1mks)**

 **22. a) egg candling (1×1=1mk)
 b) confirm the presence of a chick/embryo (1×1=1mk)
 c) –displaced air space
 - excessively large air space
 - meat and blood spot
 - displaced yoke
 - hair cracks (3×1=3mks)**

**SECTION C**

**23. a) i. clear the site to be fenced
 ii. Use a string to lay out the fence line
 iii. Determine the position of the posts using a tape measure
 iv. Dig the holes using a hole digger/claw bar
 v. use a ruler to determine the right hole depth
 vi. Obtain the right length of the post using a tape measure
 vii. Obtain the right depth using soil auger
 viii. Put concreate at the bottom of the hole
 ix. Place the posts in the hole
 x. ensure posts are vertical and at right angles
 xi. Fill the holes with soil/concrete
 xii. Firm the soil/concrete using a ramming rod
 xiii. Heap soil/concrete at the base of the of the post (10×1=10mks)**

 **b) i. ovary-produces ovum
 ii. Funnel/infundibulum- chalazae are added and the egg moves to the magnum,
 fertilization takes place here, receives ovum.
 iii. Magnum- the light albumen is added and the yoke moves into the isthmus

 iv. Isthmus- water and mineral salts are added/vitamins
 - shell membrane is added to uterus/ albumen addition is completed
 v. uterus/shell gland- shell is added around the egg/ contains calcium deposits
 shell pigmentation occurs here. Egg takes 22hrs.**

 **vi. vagina- egg is temporarily stored
 - egg is inverted to be laid with the broad end first
 -egg is lubricated (6×1=6mks)**

**c. i. dirty and filthy milking sheds that encourage breeding of the bacteria
 ii. In large and pendulums under hanging below hock/genetic factor
 iii. Incomplete/partial milking
 iv. Old age/old animals
 v. high yielding cows
 vi. Stress
 vii. Injury of udder/ teats (4×1=4mks)**

**24. a) i. control breeding diseases/parasites
 ii. Control breeding
 iii. It’s easier to transport semen to and from an area
 iv. Semen from a superior bull can be used to serve so many cows
 v. farmers who cannot afford a superior bull get the service at a lower cost
 vi. Bulls that cannot serve naturally due to injuries/defects are utilized
 vii. Prevent injuries to the cows by heavy bulls
 viii. Semen can be stored for long periods even after the death of the bull
 ix. Saves the cost of rearing a bull
 x. controls in breeding
 xi. Useful research tools (7×1=7mks)**

 **b) i. age of animal
 ii. Type of animal whether ruminant or non-ruminant
 iii. Nutrient required of the animal
 iv. Cost of the feed stuff
 v. availability of the feed stuff (5×1=5mks)**

 **c) i. causes anemia
 ii. Deprive food
 iii. Cause injury and damage to tissue and organs.
iv. Transmit diseases
 v. causes irritation
 vi. Obstruction of internal organs
vii. Causes wounds
viii. Lowers quality of hides and skins (8×1=8mks)**

**25. a) - construct a brooder
 - clean the brooder
 - disinfect the brooder
 - place litter on the floor
 - provide heat source
 - ensure enough feeders
 - ensure enough drinkers
 -place newspapers on the litter
 - provide dim light to prevent toe pecking (8×1=8mks)**

**b) pneumonia in calves
 symptoms
 - loss of appetite
 - rough hair coat
 - abnormal lung sound/whizzing
 - dullness
 - nosal discharge
 - fluctuating body temperature(4×1=4mks)**

 **ii) control
 -proper sanitation
 - hygiene
 - isolation of sick animals
 -avoid overcrowding
 - treat with appropriate antibiotics
 - keep animal house warm (4×1=4mks)**

 **c) i. poor health
 ii. Poor selection
 iii. Poor nutrition
 iv. Incorrect timing of service
 v. irregular heat signs
 vi. Type of breed
 vi. Poor breed methods (4×1=4mks)**