KENYA NATIONAL EXAMINATION COUNCIL
REVISION MOCK EXAMS 2016
TOP NATIONAL SCHOOLS

PRECIOUS BLOOD RIRUTA
AGRICULTURE
PAPER 2
MARKING SCHEME

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PRECIOUS BLOOD KCSE TRIAL AND PRACTICE EXAM 2016

AGRICULTURE
PAPER 2 / 443/2
MARKING SCHEME.

1. **(i) Tapeworm** - Cattle /pigs *(½ mrks)*
   (ii) **Liver flukes** – Fresh water snail/ Limnoleatruncatula *(½ mrks)*
2. Mass selection
   Progeny testing
   Contemporary comparison**.** *(½ x2 =1mrk)*
   3. (i) 3months 3 wks 3 days (113 – 117 days)
   (ii) 27 -32 days *(½ x 2 = 1mrk)*
4. (i) Artificial insemination
   (ii) Treatment
   (iii) Proper selection. *(½ x 2mrks)*
5. Block nostrils / suffocates hatched chicks; *(1mrk)*
6. Garden trowel is used for lifting seedlings in the nursery while the measures trowel is used for applying mortar when planting. *(1mrk)*
7. (i) - Deflate / inflate as recovery.
   - Replace if worm out. *(1x1=1mrk)*
   (ii) - Remove carbon deposit on the spark plug.
   - Replace if necessary. *(1x1=1mrk)*
8. (i) To prevent warping / bending.
   (ii) To prevent rotting / damage by fungi.
   (iii) To reduce by insects / vermin.
   (iv) To make the timber durable. *(½ x4 =2mrks)*
9. (a) (i) Protein concentrate (Rj concentrated alone)
   (ii) Succulent roughage (Rj roughage alone) **(½ x2 =1mrk)**
10. (i) Hereford
    (ii) Galloway
    (iii) Aberdeen Angus
    (iv) Charolais
    (v) Beef shorthorn
    (vi) Boran *(½ x 4=2mrks)*
11. (i) Mountain the colony.
    (ii) Encourage multiplication.
    (iii) Supplement what bees get from foraging.
    (iv) Provide food to bees during drought. *(½ x 4 =2mrks)*
12. (i) Must be fertilized
    (ii) Free from abnormalities e.g. blood spots.
    (iii) Medium size / 55gm- 60gm.
    (iv) Smooth shelled.
    (v) Oral shape
    (vi) Free from crack
    (vii) Clean
    (viii) Fresh i.e not more than 10days old. *(½ x 6 =3mrks)*
13. (i) Anthrax (v) Mastitis
    (ii) Preumonia (vi) Blackquater

(iii) Scours (vii) Brucelloris
(iv) Fruit rot (viii) Folwl typhoid ***(½ x 4=2mrks)***

14. (i) Highly digestible
(ii) Highly nutritious
(iii) High in antibodies
(iv) Has a laxative effects**.** ***(1x3=3mrks)***

15. (i) Inductive stroke ⟶ Compression stroke ⟶ Power stroke ⟶ Exhaust stroke
(½ x 4 =4mrks) (under imported)

16. **(a)** **Share:** cuts the furrow slice horizontally.

(b) **Mouldboard:** Turns inverts furrow slices.
(c) **Landside:** Stabilizes the plough by absorbing side thrust.
(d) **Disc coulter:** Cub the furrow slice separating them from unploughed**.**
(*1x4=4mrks)*

SECTION B

17. (a) **P** - Reflector
Q - Plywood / cardboard wall
R - Water / water trough
S - Feeder / feed trough
T - Lantern / electric bulb. ***(½ x 5 = 2 ½ mrks)***

(b) (i) To confine the clicks within the heat source.
(ii) To conserve / maintain heat within the broader. ***(1x1=1mrk)***

(c) (i) By raising the wick / using a higher wall bulb.
(ii) By adding another Lantern in the broader / adding more bulbs.
(iii) By lowering the reflection. ***(1x2 = 2mrks)***

(d) (i) Sawdust
(ii) Wood shavings
(iii) Cereal lurks
(iv) Dry cropped grains / coffee Lurks. ***(½ x 1= ½ mrk)***

18. (a) Tapeworm / Taemia ssp. ***(1mrk)***

(b) Small intensity ***(1mrk)***

(c) (i) Pig
(ii) Cattle ***(1mrk)***

(d) (i) Starring / rough coat
(ii) Oedematous selling under the fowl bottle jaw.
(iii) Presence of parasite segments / proglottides.
(iv) Excessive / ravenous appetite.
(v) General emaciation
(vi) Constipation
(vii) Obstruction / blockage of intesting
(viii) Anaemia
(ix) Pot belly. ***(1x4 =4mrks)***

(e) (i) Maintainingproper farm hygiene.
(ii) Practising rotational grazing to starve the larvae to death.
(iii) Regular deworming.
(iv) Proper sewage disposed
(v) Eating property cooked meat. ***(½ x2 =1mrk)***

19. (a) (i) Accessibility
(ii) Security
(iii) Drainage
(iv) Direction of wind

(v) Soil type
(vi) Proximately to social amenities
(vii) Beauty. **(1x3=3mrks)**

(b) (i) Lubricate the moving parts.
(ii) Maintain correct type pressure
(iii) Clean after use.
(iv) Store property /keep under shed
(v) Tighten loose nut / bolts.
(vi) Paint unpainted metallic parts to avoid rusting. ***(1x2=2mrks)***

(c) (i) Wind power
(ii) Biogas power
(iii) Water power.
(iv) Solar power.
(v) Electrical power.
(vi) Tractor power
(vii) Petroleum power
(viii) Human power
(ix) Animal power
(x) Wood fuel (firewood/ charcoal). ***(½ x2=1mrk)***

SECTION C

20. (i) On arrival give chicks water mixed with glucose;
(ii) Provide a source of heat.
(iii) Maintain temperature within the required levels.
(iv) Provide dim light.
(v) Provide adequate chick mash.
(vi) Check birds for weakness and treat.
(vii) Provide clean and adequate water.
(viii) Debeak on the tenth day.
(ix) Vaccinate against common diseases.
(x) Withdraw the heat source after 4^{th} week.
(xi) Remove dead chicks and dispose of the properly.
(xii) Control external parasites.
(xiii) Introduce sand and grit in the sixth week.
(xix) Introduce growers mash in the 7^{th} week.
(xx) From the 6^{th} week reduce chick mash gradually.
(xxi) Place chicks in the main house from 9^{th} week.
(xxii) Feed them on growers mash only.
(xxiii) Having some green vegetation in the house.
(xxiv) Provide soluble grit / oyster shells towards
(xxv) Introduce layers mash during 16^{th} – 19^{th} week.
(xxvi) Ensure litter is kept dry.
(xxvii) Provide plenty of clean water at all times.
(xxviii) Keep records. ***(1x20=20mrks)***

21. (a) Brucellosis Disease.

(i) Cause: - Bacterium / Brucellaabortus. ***(1x1=1mrk)***

(i.) Symptoms:-

(1.) - Spontaneous abortion / premature birth;
(2.) - Retained afterbirth after abortion during later stages of pregnancy.
(3) - Cow may become barren;
(4) - Bulls have low libido; and inflamed testis (Orchitis)
(5) - Yellowish , brown , slimy, odourless discharge from the vulva may occur after abortion.

(iii) Control:

(1.) - Use artificial insemination;
(2.) - Cull and slaughter affected animals;
(3.) -Vaccinate against the disease;
(4.) - Attendants should avoid contract with aborted foetus.
(5.) - Carry out blood tests for breeding animals in order to detect the infected ones;
(6.) - Cleanliness in the animals house must be maintained;
(7.) - There is no effective treatment: ***(1x5)=5mrks)***

(b) Importance of keeping livestock healthy:

1.) High quality product; fetches high market prices;
2.) Fast growth / Early maturity; ensure long productive life;
3.) Economic to keep, saves on expenditure on veterinary services and drugs;
4.) Produce healthy products; hence no risks of transmitting zoonotic diseases;
5.) High yields; hence high returns;
6.) Fetch good market prices ; hence high returns;

(Any 5 correctly explained (2x5) =10mrks)

22. (a) Factors to considered when selecting livestock:

(i) **Age:-** Young animals should be selected since they have a long productive life.
(ii) **Level of productive:** Select animals with the highest level of production;
(iii) **Quality of products:** Select from those producing high quality produce:
(iv) **Health:** - Select animals that are healthy and disease resistant. Should also be free from physical deformities:
(v) **Body confirmation:** - Select according to their proper body confirmation e.g. wedge shape in dairy cattle;
(vi) **Temperature / Behaviour** : - Selected animals should have good temperament and behaviour e.g. docile;
(vii) **Prolificacy:** - Should have history of producing a large litter at a time e.g. in pigs;
(viii) **Mothering ability:-** Should be able to rear their young ones successfully upto wearing;
(ix) **Fertility: -** Should be fertile and able to bread regularly;

(x) **Adaptability:-** to the environment ;
(xi) **Growth Rate:-** Should have a fast growth rate and early maturity;
(xii) True ti type / conformity to breed characteristics;

(Any 10 correctly explained – (1x10=10mrks)

(b) Management during parturition in cattle:

1.) - Watch for signs of parturition;
2.) - Separate the animals and put it in a parturition pen;
3.) -Watch for breed presentation, and seek the assistance of a veterinarian;
4.) - Remove mucus around the muzzle of young one to allow for efficient breathing;
5.) - Administer artificial respiration to the young one if breathing is delayed;
6.) - Allow the young one to suckle colostrums;

7.) - Allow the mother to lick the young one/ wipe the calf using a clean piece of cloth if the mother does not lick it;
8.) - Tie and cut the navel cord; arid
9.) - Disinfect the navel cord wound using iodine;
10.) - Check and ensure the placenta comes out, if not consult a veterinarian;
11.) - Record the weight of the calf; to help monitor growth;
12.) - Take orphaned,/ disowned / weak calf to a warm place to avoid chilling.
13.) - Separate the calf from the dam after it has been licked and take it to a warm calf pen;