KAJUBI PATRICK

WAKISSHA JOINT MOCK EXAMINATIONS
MARKING GUIDE
Uganda Advanced Certificate of Education
AGRICULTURE P515/3
July/August 2024

1 (a)

Specimen	Observation	Deduction
A Sand	Blue to red / Solution turns red/yellow	Acidic
B Clay	Red to blue / Solution turns blue/purple	Alkaline

Acidic
Alkalie
e x 4 (2 marks) =02

(b) Effects on plant growth.

A -
- Kills certain plants (those require Alkaline conditions)
- Limits certain type of crops to be grown.
- Makes some minerals un available for plants eg phosphorous.
- Prevalence of plant dzz such fungal dzz

B -
- Limit prevalence of soil living organisms like bacteria
- Hinders certain mineral unavailable.
- Enables certain diseases prevalence eg bacterial dzz
- Limits plants that grow in acidic soils.
- Stunted growth in plants.
- Clears prevalence of soil living organisms

(3 marks)

(c) Possible causes of conditions.

A- Use off acidic fertilizers.
- Leaching of cations.
- Soils made from acidic rocks
- Dissolved CO_2 in rain water.
- Addition of acidic organic matter / manures
- e - uptake of bases by the plant. 1½

(3 marks)

B – Addition of alkaline fertilizers
- Soil from alkaline rocks.
- Up take of cations from the soils.
- Addition of lime
- Absence of sulphates
- Mineralogical Composition of soil

1½

(d) Possible crops that can be grown

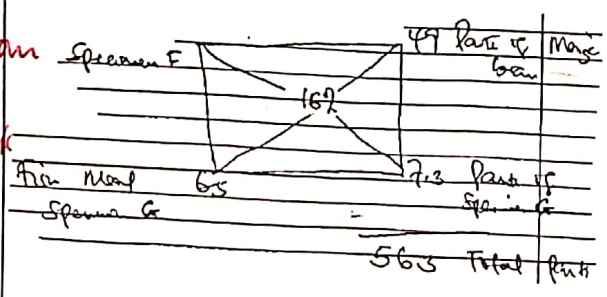
A. Tea, blue berries, coffee, sugar canes. Pineapples e ½ x 4

B. Onions, cabbage, cauliflower, beans

(2 marks)

2(a) Maize bran

F - Maize bran
G - Fish meal
H - oyster shell
J - Vit premix



Proportion of specimen F
$= {}^{49}/_{56.3} \times 100\%$ 1e
$= 87\%$ 1½

Proportion of specimen G
$= \frac{7.3}{56.3} \times 100\%$
$= 13\%$ 1 1 mark

(2½ marks)

(b)	- Clean the floor. - Get the required ~~ingredients~~. Specimens. - Measure the specimens. - Put F ~~fifth~~ First on the floor. - Add G on the top of F - Add H on the top of G - Add I on the top H. - Get a spade and mix them while maintaining a conical shape until when they are mixed. uniformly.	(5 marks) *Eg direct names of specimens
(c)	- The animal ~~pours~~ goats faster. - The animal damaged tissues and cells are repaired. - If gives energy to the animal when carbohydrates are absent. - It's a component of animal products like eggs. - It builds animal body immunity. - ~~The animal grows faster and larger.~~	($2\frac{1}{2}$ marks)
Q3	Specimen M. drenching gun N. Rope. (a) Describe how specimens are used. - Restrain the animal using specimen N. - Use specimen M and draw oral drugs into it from the bucket. - Administer oral drugs through the mouth using specimen M. - Remove specimen M from the mouth. - Remove specimen N from the animal and release it. 3X1@	(3a) Adaptations - Has calliberated scale to indicate the right dose - Has a long nozzle to deliver oral drugs into mouth. - Has transparent barrel - Has a barrel to store / keep / contain the drug - Has a trigger for release the drug - Has a piston to force the oral drugs Any (3 marks) 4X½ =02
(c)	Precautions taken while using specimen M. - Restrain animals to avoid disturbance. - Ensure that the barrel has no damages on it. - Use long nozzle with no leakages. - Pass it via the diastema of the cow to allow proper delivery of drugs. - Sterilise it before use to avoid contamination. - Raise the head of the animal to avoid choking	(3 marks) 3X1@
(d)	Operations carried out by N: Used while carrying out the following; - Dehorning — Deworming - Grazing / Tethering — Identification - Milking - Slaughtering — Treatment diagnosis — Artificial insemination	4X½ =02 (2 marks)
Q4.	U - Its very fine powder dark grey in colour. V - Vey fine particles, very hard and of varying sizes. W - Small stones of irregular shape and varying sizes. X - It's mixed with cement, sand and gravel with water.	(2 marks)

Cement
Sand
Aggregates
Concrete
RPC — Y

	Y - It's impervious to water. - It is smooth and ~~black~~ rough in colour. - It's a hard sheet.	½ x 5 = 2½
(b)	U - Its used as binder when making mortar / concrete. - Can be mixed with water to finish floor during construction. V - Can be mixed with cement to form ~~mostar~~ mortar used in brick laying. - Can be mixed with cement and gravel to form concrete for making foundations, beams and floors. W - It's mixed with sand and cement to make concrete used in making foundations, floor and beams. X - It's used in making foundations, floor, walls and beams. Y - It is placed on foundations wall to prevent upward movement of water from the ground, into the wall. by capillarity	3 (~~3~~ marks) ~~5~~ 5 x 1@
(c)	- Clean the ground. - Pour a measured amount of V ~~fish~~ first on the ground. - Pour measured amount of U and V. - Mix the two very well. - Spread the mixture on the ground. - Pour W onto the mixture and spread. - Pour water as you mix to form ~~concrete~~ Specimen X - Transfer ~~the~~ for construction ~~at~~ at the site after mixing well ~~Site after mixing well.~~	2½ ~~(3 marks)~~ e x 5 = 2½
Q5. (a) (i)	Specimen. C- Fleshly prepared poultry manure. D- Well prepared compost manure. E- Fleshly prepared cow dung. Effects of applying each specimen on crops. C - Scorch/ burn the plant. - Crops will be yellow. - Crops will grow poorly. D - Crops will grow well and healthy. - No scorching of the plant. - Crops will have better yields until green colour. E - Crops may be scorched / burnt - Crops will be yellow and grow poorly.	1 x 3 ~~(2½ marks)~~ 3 x 1@
(a) (ii)	Comment on the suitability. C- Not suitable because it's fresh and not well decomposed. D- It's suitable because it's well decomposed. E- Not suitable because it's fresh can scorch the plants.	½ for mark, ½ for reason ~~(2 marks)~~ 1 x 3

(b)	How specimen C and E can be improved. C - Heaped in one place. - Covered and allowed to rot before it's applied to crops. E - Gathered and heaped on the concrete floor. - Covered with soil. - Allowed to rot before it's applied to crops.	1 X 2 = 02 mrks
(c)	How specimen D can be applied in the garden. - Put around the plant in a ring and work it into the soil. - Worked into the soil before planting the crops. - Put in planting holes or mixed with top soil during planting. - Broad casting and top dressing / side dressing.	(2 marks) 2 X 1 @

END