

Name of School:.....

Candidate's Name:.....

Centre No./Index No: Signature:.....

P515/1
AGRICULTURE
Paper 1
July/August

2 Hours



ELITE EXAMINATION BUREAU MOCK 2019

Uganda Advanced Certificate of Education
PRINCIPLES AND PRACTICES OF AGRICULTURE
Paper 1
2 Hours

INSTRUCTIONS TO CANDIDATES

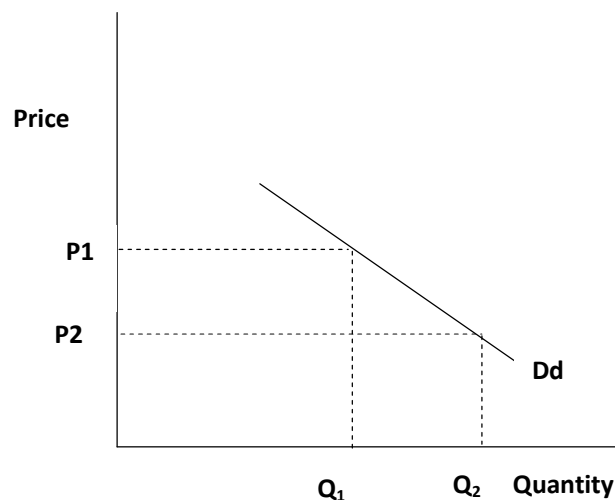
- Answer all questions in both sections.
- *Answers to section A must be written in the answer sheet provided at the end of this section.*
- Write answers to section B in the spaces provided.
- No additional sheet of paper should be attached to the question paper.

FOR EXAMINERS USE ONLY

SECTION		MARKS
A		
	31	
	32	
B	33	
	34	
	36	
	37	
TOTAL		

SECTION A (30MARKS)

- Which of the following are products of anaerobic respiration in plants?
 - Ethanol, carbondioxide, energy
 - Lactic acid, carbondioxide
 - Carbondioxide, water, energy
 - Ethanol, carbondioxide, water
- Cattle belongs to the family of Bovidae because.
 - They have a back bone.
 - They have even toes.
 - They have hooves.
 - They have hollow horns.
- Which one of the following is the least important factor to consider when putting up farm structures for livestock?
 - Cost of the materials.
 - Durability of the materials
 - Siting of the structure.
 - Panorama of the structure.
- The figure below shows the type of demand in market.



- The type of demand illustrated is
- Elastic demand.
 - Inelastic demand.
 - Unitary demand
 - Perfectly elastic demand.
- The feeding relationship among organisms in an ecosystem is referred to as
 - Food chain
 - Food web
 - Trophic level
 - Ecological pyramid.

6. Phosphate fertilizers are applied by band placement because
 - A. They are mobile.
 - B. They are soluble.
 - C. They are easily fixed.
 - D. They easily get lost in gaseous form

7. Which one of the following is not an effect of oxytocin hormone in a cow?
 - A. Promotion of milk letdown
 - B. Facilitation of sperm transport up the uterus
 - C. Induced labour during parturition.
 - D. Induce milk synthesis.

8. Land reforms refer to measures aimed at.....
 - A. changing land ownership
 - B. improving land management and use
 - C. ensuring that everybody owns land
 - D. government's intentions to transfer people

9. Systemic pesticides are effective against pests because
 - A. They are toxic to pests
 - B. They cover all parts of the plant
 - C. They remain protected on the plant
 - D. They repel pests from the plant.

10. Which of the following is not a function of the Golgi body and vesicles in a plant cell?
 - A. Production of glycoproteins
 - B. Packaging and secretion of enzymes
 - C. Destruction of lysosomes
 - D. Formation of cell walls in plant cells.

11. In which parts of the animal body are the alveoli found?

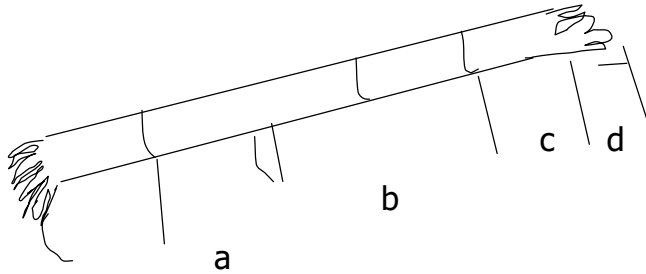
A. Udder and pancreas.	B. Lungs and udder.
C. Pancreas and lungs.	D. Udder and liver.

12. Which one of the following organisms are primary producers in a food chain.

A. Plants and algae.	B. Mammals and mollusks.
C. Birds and algae.	D. Bacteria and worms.

13. Marginal product refers to
- A. Product obtained from unit of input.
 - B. Extra product obtained from extra unit of input.
 - C. Output obtained from all the inputs used.
 - D. Total output divided by total input.

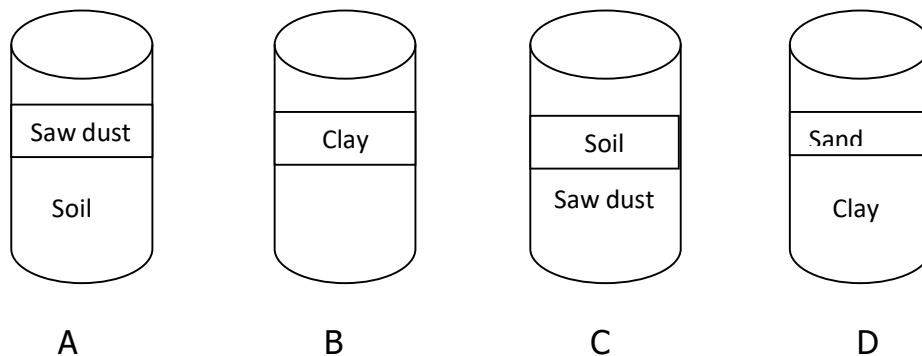
14. The figure below shows the parts of the plant



Which portion can be used for propagation?

- A. b
 - B. c
 - C. d
 - D. a
15. It is the advisable to feed mash rather than pellets in poultry management because mash is
- A. More digestible than pellets
 - B. More palatable than pellets.
 - C. Cheaper than pellets
 - D. Prolongs the time for feeding
16. Which of the following is an effect of moisture stress in crops
- A. Delayed maturity
 - B. Hastened maturity
 - C. Delayed flowering
 - D. Lack of fruiting
17. Which one of the following maintenance practice is very important on an ox-plough that is frequently used?
- A. Oiling moving parts
 - B. Sharpening the digging point
 - C. Replace worn out parts
 - D. Apply antirust paint on the body of the plough
18. Which one of the following is a reason for docking in sheep?
- A. Mating becomes easier.
 - B. It discourages breeding of blow flies.
 - C. There is production of better quality meat.

- D. It encourages faster growth.
19. The main reason for including legumes in a crop rotation is to:
- A. improve the level of nitrogen in the soil
 - B. maintain useful bacteria in the soil
 - C. prevent soil erosion
 - D. improve farming methods
20. Which of the following is a facilitating marketing function
- A. Transportation
 - B. Storage
 - C. Processing
 - D. Grading
21. Which of the following methods is most suitable for conserving water for crop production in low rainfall areas?
- A. Growing cover crops.
 - B. Controlling weeds by cultivation
 - C. Covering the soil with organic mulches
 - D. Burning all vegetation cover.
22. Which one of the following is a proper potting medium for coffee cuttings?



23. The percentage of population of animals at a risk of becoming sick with a disease in an outbreak is.....
- A. mobility rate
 - B. epizootic rate
 - C. mortality rate
 - D. population mortality rate
24. Which of the following occurs when dissolved oxygen concentration in a fish pond falls?
- A. Fish swim to the bottom of the pond
 - B. Fish swim to the water surface gasping
 - C. Fish take in more water to get oxygen
 - D. Swimming activity of fish increases.

25. The minority of bees in a bee hive are
 A. Workers B. Drones
 C. Queen D. Stingless bees
26. The following are reasons for hanging green plants in a poultry house **except**
 A. Keeping birds busy
 B. Controlling pests and diseases
 C. Controlling cannibalism.
 D. Providing vitamins to birds.
27. Njeru stock farm has an average daily temperature of 98.6°F. Evaluate its temperatures in centigrade.
 A. 26.72°C C. 37°C
 B. 37.9°C D. 92.5°C
28. Which of the following is not an adaptation of leaves for photosynthesis
 A. Broad lamina
 B. Numerous chloroplasts in palisade cells
 C. Airspaces between leaf cells.
 D. Thick lamina.
29. Which one of the following is not fencing material?
 A. Wood B. Wire strainer C. Barbed wire D. Fencing nails
30. Which of the following is the normal presentation of a calf at parturition
 A. Hind legs appear first
 B. Hind legs and fore legs appear together
 C. Fore legs appear first with the head
 D. One foreleg appears first

Answer sheet for section A

Qn.	Answer	Qn.	Answer	Qn.	Answer	Qn.	Answer	Qn.	Answer
1		6		11		21		26	
2		7		12		22		27	
3		8		13		23		28	
4		9		14		24		29	

5		10		15		25		30	
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SECTION B (70MARKS)

31(a). State the factors hindering the success of most agricultural policies and programs in Uganda. (04 marks)

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(b). Briefly explain the effect of land use policies on agricultural production in Uganda. (06 marks)

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32. (a) Describe any six causes of wetness of litter in (a). (06 marks)

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(b). Outline any four disadvantages of deep litter system of poultry management. (04 marks)

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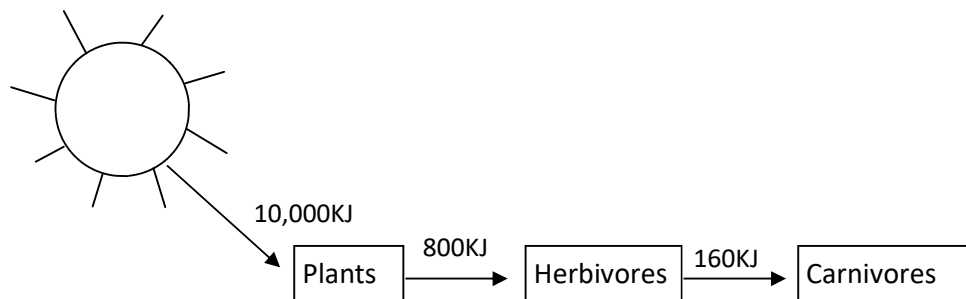
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33. The figure below illustrates energy flow through a grazing food chain. Study it carefully and answer the questions that follow.



(a) Assuming a 10% energy loss at each trophic level, calculate the energy retained by herbivores. (3 marks)

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(b) Explain why energy transfer from herbivores to carnivores is more efficient than from producers to herbivores. (3 marks)

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(c) Despite the transfer from herbivores being more efficient, it is not readily 100%. Suggest reasons for this fact. (2 marks)

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(d) State factors that limit the number of trophic levels in a food chain.

(2 marks)

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34 (a) State and explain the factors to consider when selecting wood for constructing farm structures. (04mks)

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- (b) Give advantages and disadvantages of using wood compared to metals. (06marks)

Advantages

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Disadvantages

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- 35 (a) Define the term Damping off. (02marks)

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- (b) Outline any 4 environmental factors that may predispose seedlings to dumping off. (04marks)

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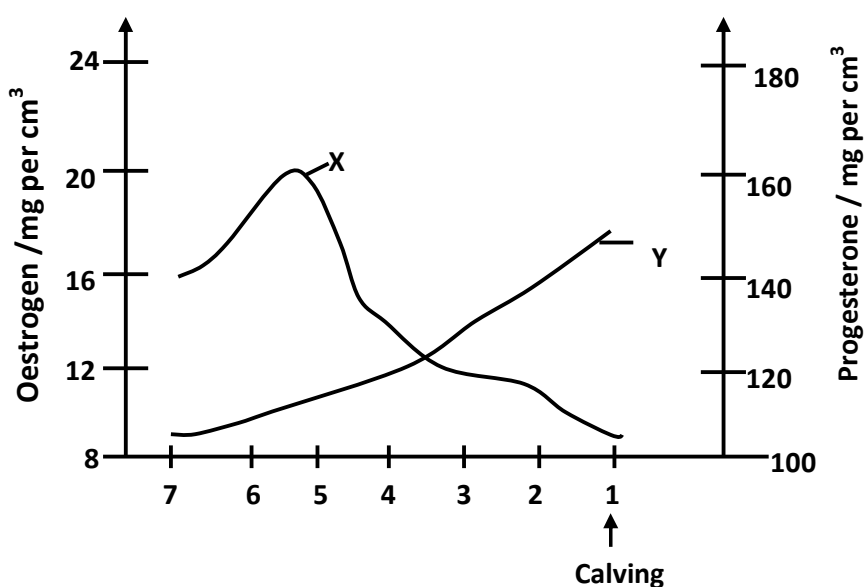
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(c) State any 4 signs of diseases in crops caused by viruses. (04marks)

36. The graph below shows the mean concentrations of progesterone and oestrogen hormones in blood of 33 in-calf dairy cows during the seven weeks before calving down.



(a) Name the hormones represented by the letters X and Y (01 mark)

X.....

Y.....

(b) (i) Briefly describe the changes shown on the graph (03 marks)

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(ii) Give reasons for the changes described in (i) above. (02 marks)

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(c) What is the role of the placenta to an in-calf cow?(04 marks)

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37 (a) Distinguish between soil reaction and cation exchange capacity.

(02mks)

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(b) Explain the effects of applying compost manure which is not properly rotten to soil.

(04marks)

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(c) Explain the effect of low and high pH on phosphorous availability in the soil. (04marks)

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END