

Candidate's Name: .....  
Name of School:.....Reference No:.....

515/1  
Agriculture  
Paper 1  
July/August  
2023  
 $2\frac{1}{2}$  hours



**KAMOTA MOCK EXAMINATIONS 2023**  
**UGANDA ADVANCED CERTIFICATE OF EDUCATION**  
**PRINCIPLES AND PRACTICES OF AGRICULTURE**  
**P515/1**  
**2 hours 30 minutes**

**INSTRUCTIONS TO CANDIDATES**

Answer **ALL** Questions in this paper

## SECTION A (30 MARKS)

Write the letter corresponding to the correct answer in the box provided.

1. The favourable PH range for oyster mushroom growing is between
  - A. 8 and 9i
  - B. 4 and 6
  - C. 5.5 and 5.9
  - D. 6 and 7
  
2. Which one of the following is not checked during inspection of a bee hive.
  - A. Diseases and pest sign
  - B. Activity of the queen
  - C. Aggressiveness of bees
  - D. Sanitation of the hive
  
3. Which one of the following best explains why American boll worm is difficult to control
  - A. Feeds on variety of crops
  - B. Resistant to pesticides
  - C. Lives inside the host plant
  - D. Has a high rate of reproduction
  
4. Which one of the following is the ratio of sand, cement and aggregates when preparing concrete for construction of store for keeping machinery
  - A.1:3:3
  - B. 2:1:4
  - C. 1:4:6
  - D. 1:3:6
  
5. Which one of the following will not influence the farmer's decision on what to produce

A. current market demand

B. opportunity cost

C. tastes and preferences of buyers

D. the law of diminishing returns

6. The process by which nitrogen is lost to the atmosphere in gaseous form is known as

A. Immobilisation

B. mineralisation

C. hydration

D. volatilisation

7. Seedlings are transplanted during evening in order to

A. minimize water loss from the plant

B. allow seedlings to make enough food

C. allow roots absorb enough water before transplanting

D. allow seedlings adjust to new condition at night

8. Which of the following is the advantage of keeping boran cattle over zebu cattle?

A. boran has high tolerance to tick borne diseases

B. boran is a milk producing breed

C. boran has a high growth rate

D. boran produces milk with a lot of vitamin B

9. Which of the following methods of irrigation may cause hardening of the top soil

A. Drip irrigation

- B. Sprinkler irrigation
- C. Basin irrigation
- D. Furrow irrigation

10. The following is a food chain in aquatic habitat

Algae ----> mosquito larvae----> small fish---> carnivorous fish--> crocodiles

Which one of the following changes would cause a reduction in the number of mosquito larvae?

- A. increase in the number of algae
- B. increase in the number of carnivorous fish
- C. increase in the number of crocodiles
- D. increase in the number of small fish

11. Which one of the following is the reason for adding manure to a fish pond before introducing fingerlings

- A. Encourage growth of algae and other water plants
- B. Provide materials for breeding nests
- C. Provide food for fingerlings
- D. Gives pond water dark colour to protect fish

12. The process where bees abandon the recently acquired hive is known as

- A. swarming
- B. migration
- C. absconding
- D. supercedure

13. Which one of the following may occur during egg formation as a result of a physiological defect in the oviduct

- A. Deformed eggs
- B. Soft shelled eggs
- C. Double yolked eggs
- D. Rough surface eggs

14. The major reason for budgeting on a farm is to

- A. estimate expected returns
- B. control farm income
- C. enable farmers prepare balance sheet
- D. work out cash analysis

15. Which one of the following is not a characteristic of sustainable agriculture?

- A. use of inorganic fertilizer
- B. controlled grazing of animals
- C. practicing agro forestry
- D. use of high yielding crop varieties

16. Which one of the following factors does not determine the strength of concrete prepared for construction of farm structure

- A. Reinforcement used
- B. Method of curing
- C. Amount of cement used
- D. Brand of cement used

17. Tissue culture can be used in mass production of desired clones because

- A. it ensures high rate of multiplication
- B. it maintains disease free environment
- C. it requires little labour
- D. the equipment used are readily available

18. Trypanosomiasis disease in cattle can best be controlled by

- A. vaccination of animals
- B. burning animal beddings
- C. clearing of bushes on the farm

D. burning of the carcass

19. A block and tackle system is used to lift a mass of 200kg. If the machine has a velocity ratio of 5 and efficiency 80% then, what will be the effort applied

A.400N

B.500N

C.200N

D.2500N

20. The site that would result into crossing over during meiosis is called the

A. centrosome

B. centromere

C. synapse

D.chiasma

21. Which one of the following is the advantage of urban farming

A. Farmers earn much income from it

B. the cost of production is low

C. there is access to consumer market

D. products are packed before sale

22. The cation exchange capacity of soil plays a role in

A. improving water holding capacity

B. increasing the rate of organic matter decomposition

C. allows free movement of air, water and root penetration

D. prevents leaching of nutrients from the soil

23. The poor penetration of animal drawn tillage implements into the soil is least influenced by

A. soil conditions

B. bluntness of the cutting edge

- C. health of the draught animals
- D. breed of the animal

24. Which one of the following is controlled from spreading by burning

- A. heart water
- B. anthrax
- C. brucellosis
- D. foot and mouth disease

25. Excessive salt in the root zone of a plant may cause

- A. water deficiency in plants
- B. delayed maturity of crops
- C. lodging of plants
- D. reduced resistance to diseases

26. Which one of the following part of animal cell is responsible for eliminating worn out organelles

- A. Ribosomes
- B. Cytoplasm
- C. Lysosomes
- D. Nucleolus

27. The selection of animals for breeding based on the performance of their ancestors is referred to as

- A. Progeny selection
- B. Pedigree selection
- C. Mass selection
- D. Individual selection

28. The term land reforms refers to the measure that aims at

- A. controlling land use by government
- B. improving land management and use

- C. changing land ownership
- D. ensuring that everybody owns land

29. Wood is commonly used as a construction material because it is

- A. very resistant to termites
- B. more durable
- C. easy to work on
- D. resistant to fire

30. When sand and clay are mixed

- A. water and roots enter soil more easily
- B. soil particles becomes more smaller
- C. this is called heavy soil
- D. it is difficult to cultivate the soil.

## SECTION B (70 MARKS)

**Write all your answers in the spaces provided**

31. a). What is lease hold tenure? (02 marks)

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b). State four benefits of land consolidation as a land reform (04 marks)

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c). Explain four causes of land conflict in Uganda (04 marks)

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34. a). Outline four benefits of growing mushrooms (04 marks)

[illegible]

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[illegible]

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36.a). Explain how each of the following affects crop growth

(i). soil temperature (03 marks)

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(ii). Soil micro-organism (03 marks)

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b). Suggest four precautions taken to ensure good quality farm yard manure (04 marks)

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37. a). Tinah plans to erect a perimeter fence around her square farm land measuring 40 hectares. Use the following information to answer the questions that follow;

Posts to be used 5 metres apart

Each treated post costs shs 2,500.

1 kg of fencing staples contains 50 stapples and costs shs 2,200

A roll of barbed wire measuring 500 metres long and costs shs 24,000

The perimeter fence is to have 4 strands.

Calculate;

a). the perimeter of Tinah's land in metres (02 marks)

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b). Number of post needed for the perimeter fence and their costs  
(03 marks)

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c). Number of rolls of barbed wires needed and their costs (02 marks)

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d). Number of kilograms of staples needed if each post is to have 4 staples and their costs (02 marks)

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c). Total costs of materials needed for Tinah to complete the fencing project  
(01 mark)

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**END**

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