

NAME _____ SIGNATURE: _____

MOCK SET I EXAMINATIONS 2019
Uganda Advanced Certificate of Education
PRINCIPLES AND PRACTICES OF AGRICULTURE
P515/1
2Hours 30Minutes

Instructions to Candidates

- Answer **ALL** questions in both Sections **A** and **B**.
- Write answers to Section **A** by writing the best alternative in the box provided.
- Write answers to Section **B** in the spaces provided and nowhere else.

FOR EXAMINER'S USE ONLY		
SECTION	QUESTION	MARKS
A		
B	31	
	32	
	33	
	34	
	35	
	36	
	37	
Total		

SECTION A (40 MARKS)

1. The following hormones would be used by farmers to induce rooting of cuttings during vegetative propagation except
 - A. Indolebutyric acid
 - B. Indoleacetic acid
 - C. Absciscic acid
 - D. Napthaleneacetic acid
2. Which of the following types of soil water is left held so tight in loam soils during dry season;
 - A. Hydroscopic
 - B. gravitational
 - C. capillary
 - D. particle water
3. Oyster mushroom is a fungi that can be correctly classified under Phylum
 - A. zygomycetes
 - B. ascomycetes
 - C. myxomycetes
 - D. basidiomycetes
4. The following examples of bacteria are capable of converting free atmospheric nitrogen into utilizable form by living organisms in soil except
 - A. Thiobacillas
 - B. Anabaena
 - C. Nostoc
 - D. Clostridium
5. After fertilization, implantation takes place and secretion of paracrine allows the following to occur
 - A. More oxygen and nutrient flow to placenta.
 - B. Prevents miscarriage of embryo.
 - C. Swelling of the endometrium.
 - D. Closure of the cervix
6. Which of the following saccharides will combine to form milk sugar?
 - A. `Sucrose and fructose
 - B. Glucose and fructose
 - C. Glucose and galactose
 - D. Fructose and galactose

7. Liming in clay soil is carried out to physically
 - A. Encourage aggregation.
 - B. Improve on soil pH.
 - C. Attract microorganisms.
 - D. Discourage soil aggregation
8. Formative pruning is carried in tea management to encourage lateral growth and also helps to;
 - A. Reduce light competition
 - B. Attain a plucking table
 - C. Reduce pest spread
 - D. Increase leaf size
9. Which of these is true of maximum price for a product?
 - A. It is between equilibrium price and minimum price.
 - B. It's above equilibrium price.
 - C. It's below minimum price.
 - D. Its either above or below equilibrium price
10. It is advisable to discard unfertilized eggs during incubation because they decompose and can contaminate other eggs by producing;
 - A. Methane
 - B. Carbondioxide
 - C. Hydrogen sulphide
 - D. Carbon mono oxide
11. In rabbits, the allele for rough coat (R) is dominant over one for smooth coat (r) and that for black coat (B) is dominant over one for white coat (b). The alleles for coat type and colour are not linked. A cross between rough black rabbit and rough white one produced 28 rough black, 31 rough white, 11 smooth black and 10 smooth white. Which one of the following could be the genotype of the parents?
 - A. RrBb x Rrbb
 - B. RRBB x RRbb
 - C. RRBb x Rrbb
 - D. RrBB x Rrbb
12. The significance of etiolation to a germinating seed in the soil is that it
 - A. Leads to rapid elongation of the epicotyl in monocotyledonous plants.
 - B. Allows maximum growth in length with minimum use of food reserves.
 - C. Allows the seedling leaves to grow in the dark.
 - D. leads to rapid elongation of the epicotyl in epigeal germination.

13. Dioecious plants are rare in spite of having the advantages of cross pollination because
 - A. Anthers and stigmas mature at different times.
 - B. The male and female plants are usually apart.
 - C. Half of the individuals do not produce seeds.
 - D. Only few agents of dispersal are involved.
14. Which of the following hormones would help reduce water loss for plants under conditions of water stress?
 - A. indoleacetic acid
 - B. Ethene
 - C. Gibberelline
 - D. Absciscic acid
15. The form of land tenure where land is owned by individuals with land title deeds is called.....

A. Lease hold	B. Cooperative tenure
C. private tenure	D. Mailo land
16. Worker bees are;
 - A. sterile females developed from fertilized eggs
 - B. fertile males developed from unfertilized eggs
 - C. sterile males developed from unfertilized eggs
 - D. fertile females developed from unfertilized eggs
17. The process of interpreting information on mRNA into formation of polypeptides is known as.
 - A. Transcription
 - B. Translation
 - C. Transduction
 - D. transformation.
18. A farmer opting to make a nominal mix of concrete to floor a room used by heavy machinery would have cement: sand: gravel in the following ratios except.

A. 1:1:2	B. 1:2:3	C. 1:2:4	D. 1:3:6
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19. Which of these examples of levers simplifies work by multiplying EFFORT and changes the effort direction?

A. Crowbar	B. wheelbarrow
C. bottle opener	D. tweezers
20. The part of the mould board plough that facilitates attachment to the tractor is;
 - A. hitch
 - B. disc hangers
 - C. frog

D. land side

21. Which of the following is a limitation of using a spray race on remote village farms in Uganda?
- A. Ignorance of farmers
 - B. Blockage of nozzles
 - C. the animal's body may not be well covered by the acaricide
 - D. it is operated by power
22. The following material may induce health risks when used for so long in collecting farm water for home consumption
- A. asbestos
 - B. iron
 - C. aluminium
 - D. plastics and polythen
23. The main function of buttress roots in some agro forestry tree species is to?
- A. Provide additional support
 - B. Modified for food storage
 - C. Attach on other plants
 - D. Store water for the plant
24. The porosity of clay soils can be improved by deflocculating particles and allow free circulation of atmospheric air by adding;
- A. Agricultural Lime
 - B. manures
 - C. Di Ammonium Phosphate
 - D. Calcium Ammonium Nitrate
25. During movement the rolling of tilapia fish body along its longitudinal axis is normally controlled by;
- A. Adorsal fins.
 - B. Pelvic fins.
 - C. Pectoral fins.
 - D. Lateral line.
26. Plants showing yellowing of leaves mainly along the margins survive in soil deficient of:
- A. Nitrogen.
 - B. Magnesium.
 - C. Phosphorous.
 - D. Zinc

27. A market situation where one seller and many buyers compete and the commodity is taken by one who pays the highest price is
- A. Haggling.
 - B. Cartel.
 - C. Fixing by treaties
 - D. Auctioning
28. Technology of production is likely to keep prices of agriculture products high in the following ways except
- A Producing above equilibrium product
 - B Producing high quality products
 - C Processing products
 - D Producing seasonally below equilibrium product
29. The following are current liquid assets in a farm business except;
- A cash at hand
 - B value of land
 - C maize in store
 - D value of closing valuation
30. Using the marginal productivity theory; wages for labour are determined using;
- A. Price of the output
 - B. value of marginal product
 - C. amount of work done by workers
 - D. current economic status of the farmer

SECTION B (70 MARKS)

31. a) Differentiate between static friction and Kinetic friction (2 marks)

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b) An object of mass 0.5 kg rests on a table and a fore of 4N is required to make it move.

(i) Draw a diagram to show all the forces acting on the body (02 marks)

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(ii) Calculate the coefficient of friction (02 marks)

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c) Suggest four measures of reducing friction between moving objects (04 marks)

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32a) Differentiate between organic farming and sustainable farming (02 marks)

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b) State five benefits of organic farming

(05marks)

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(c) Explain ways of practicing urban farming in Uganda

(03marks)

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33. a) Explain the factors affecting the quality of honey produced

(05 marks)

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b) Give reasons why farmers are encouraged to take up apiculture

(05 marks)

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34. a) State three benefits of early weaning in pig production

(03 marks).

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b) Suggest five measures undertaken to improve the weaning percentage of piglets.(05 marks)

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c) Outline three ways of controlling mortality of piglets (03 marks)

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35. a) Explain the considerations before selecting breeding animals (05 marks)

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b) Give five ways of improving breeding efficiency of a herd (05 marks)

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36. a) Define the following forms of physical products (06 marks)

(i) Total product

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(ii) Average product

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(iii) Marginal product

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b) Giving examples in each case, explain the three regions of the production function. (04 marks)

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37. a) Explain five measures of increasing the activities of soil living organisms. (05 marks)

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b) State the roles of specific microorganisms in the soil. (04 marks)

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