

RESOURCEFUL MOCK 2017
Uganda Advanced Certificate of Education
AGRICULTURE P515/1
TIME: 2 HOURS

*Do **all** questions in this paper*

SECTION A [30 marks]

1. High soil pH can be corrected by application of;
A. Lime
B. SP fertilizer
C. compound fertilizer
D. Sulphate of ammonia fertilizer
2. Which of the following is not a characteristic of nematodes?
A. Having piercing and sucking mouth parts
B. Are round with un-segmented bodies
C. Lack legs
D. Are hermaphrodites
3. Scarification of seeds is done to;
A. Protect them from soil borne diseases
B. Inoculate them
C. Allow easy germination
D. Improve their storage life
4. Which one of the following factors does not affect the price of a commodity?
A. Government policy
B. Sex of consumers
C. Cost of implements
D. Marketing costs
5. Which one of the following diseases is controlled by slaughtering of affected animal?
A. Foot rot
B. Foot and mouth disease
C. African swine fever
D. Black quarter
6. Tomato plants become yellow or reddish on ripening because
A. There is breakdown of chlorophyll
B. There is reduction of nutrient low in the fruit
C. Green pigments are oxidized to yellow
D. There is more iron uptake causing reddening
7. Genes are said to be linked when they;
A. Are situated on the same chromosomes
B. Express themselves in homozygous form
C. Don't allow independent assortment

- D. Are located on homozygous chromosomes
8. The ability of a material to extend in all directions when subjected to compressive forces is its
 A. Hardness B. ductility C. malleability D. toughness
9. The major reason for adding sand to clay soil for crop production is to
 A. Decrease acidity C. improve water retention
 B. Improve drainage D. decrease alkalinity
10. Which one of the following is a control measure for trypanosomiasis in cattle
 A. Dipping C. spraying bushes with pesticides
 B. Vaccination D. isolating sick animals
11. Which one of the following is the correct order for treating hides after slaughter
 A. Laying – washing – leshing – draining – trimming – preservation
 B. Laying – leshing – draining – washing – trimming – preservation
 C. Laying – trimming – leshing – washing – draining – preservation
 D. Laying – draining – leshing – washing – trimming – preservation
12. Supply of excess nitrogen macronutrient to a plant may cause
 A. Browning of leaves and premature drop off
 B. Chlorosis
 C. Delayed maturity
 D. Production of pigments other than chlorophyll
13. A test cross refers to crossing
 A. An individual with the parent to determine the genotype
 B. An individual with a homozygous recessive one to establish the genotype
 C. Two individual to determine the dominant
 D. Two individual to determine compatibility
14. Maize streak is characterized by
 A. Dark brown patches on underside of leaves
 B. Papery lesions on leaves
 C. Sooty appearance on the cob
 D. Narrow yellow stripes parallel to the leaf vein
15. The method used in castrating animals depends on the following except
 A. Tools available C. type of animal
 B. Skills available D. age of the animal
16. The process of creating enough space for seedlings to grow before transplanting may be achieved by
 A. Hardening off B. staking C. pricking out D. pruning
17. Which one of the following is not a characteristic of a good agro-forestry tree specie

- A. Having a light canopy to allow sunlight penetration
 - B. Being deep rooted
 - C. Being easy to establish
 - D. Being able to compete with crops
18. Which one of the following conditions may make a cow fail to show signs of oestrus
- A. Secretion of adrenalin
 - B. Persistent corpus luteum
 - C. low levels of progesterone hormone
 - D. absence of a bull
19. Keeping animals in a collecting yard before dipping is done to
- A. Ensure orderly entrance of animals
 - B. Ensure that all animals are present before dipping
 - C. Rest the animals before dipping
 - D. Assess the level of tick infestation
20. Price mechanism in agriculture assists farmers in the following except;
- A. Deciding on production alternatives
 - B. Improving productivity
 - C. Deciding on product combinations
 - D. Guiding on choice of markets
21. Which of the following minerals and vitamins combats rickets in chicken?
- A. Magnesium, Manganese, Vitamin B
 - B. Vitamin D, Phosphorus, sulphur
 - C. Vitamin B, Calcium, phosphorus
 - D. Calcium, Vitamin D, Phosphorus
22. Intramuscular injection in cattle is best administered in the;
- A. Hump
 - B. Neck
 - C. Rumen
 - D. Shoulder
23. One cotton pest controlled by growing hairy cotton variety is;
- A. Cotton stainer
 - B. American boll worm
 - C. Jassids
 - D. Spiny boll worm
24. In vegetable production, pricking out refers to removing;
- A. Excess plants and transferring them to another bed
 - B. Diseased plants from nursery and burying them
 - C. Soil to facilitate planting seeds in a nursery
 - D. Excess plants from a nursery and throwing them away
25. Absorption banks conserve water and soil by;
- A. Holding soil particles together
 - B. Retaining water and soil
 - C. Increasing surface roughness to reduce speed of run off
 - D. Preventing run off

26. Which of the following may be a result of inbreeding?
- A. Improved fertility
 - B. Increased mutation rates
 - C. Accumulation of lethal genes
 - D. Polyploidy
27. Silage is not recommended for feeding calves because;
- A. It is likely to be contaminated with harmful micro organisms
 - B. Calves can not digest silage effectively
 - C. It is not palatable to calves
 - D. It contains chemicals which are harmful to calves
28. The value of assets minus debts on a farm is referred to as;
- A. Profits
 - B. capital
 - C. Gross margins
 - D. Net worth
29. Which of the following is a third class lever?
- A. Tongs
 - B. wheel barrow
 - C. Hoe
 - D. Borehole
30. It is not necessary to apply nitrogen fertilizers to a mixed grass-legume pasture because;
- A. Nitrogen suppresses uptake of phosphorus
 - B. Nitrogen may reach toxic levels in the legume
 - C. Grass may overgrow to suppress legumes
 - D. Legumes fix enough nitrogen for the pastures

SECTION B [70 marks]

31. a) Define the following as applied to pesticide use;
- i) Pre –harvest period [1mk]
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 - ii) Lethal dose 50 (LD 50) [1mk]
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- b) Explain four characteristics that make pests successful in nature. [4mks]
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- c) State four qualities of a good biological agent for pest control. [4mks]
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32. a) State four characteristics of a good site for dip construction. [4mks]

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b) Explain six precautions taken during the dipping of farm animals. [6mks]

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33. a) State two other forces that aid movement of water up the stem of a plant other than transpiration pull. [2mks]

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b) Give three ways in which transpiration is important to plants. [3mks]

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c) Give five roles of water in plants. [5mks]

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34. a) Outline five conditions which would encourage a farmer to mix animal feeds on the farm. [5mks]

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b) A farmer would like to mix a ration containing 18%CP using maize bran which is 80% CP and cotton seed cake which has 40% CP.

- i) Using person square, show the proportion of maize and cotton seed cake which would be mixed to make the ration. [3mks]

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- ii) Explain two ways by which the nutritive value of the ration in (b) ii) may be improved. [2mks]

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35. a) Suggest five factors to be considered when planning a settlement scheme. [05]

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b) Explain five ways in which settlement and resettlement increases agricultural production. [5mks]

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36. a) Define these terms

i) Gender equality [2mks]

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ii) Gender equity [2mks]

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b) Suggest three ways how gender equality contributes to agricultural production. [6mks]

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37. a) Give three weed factors that affect their response to herbicides. [3mks]

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b) Give seven cultural methods that could be used to control weeds. [7mks]

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