

P515/1
AGRICULTURE
Paper 1
2 ½ hrs

AGRICULTURE

PAPER 1

TIME: 2HOURS 30MINUTES

INSTRUCTIONS TO CANDIDATES

- *Attempt all questions.*
1. Premature births in cattle are sometimes caused due to insufficient amount of:
A. Oxytocin
B. Oestrogen
C. Prolactin
D. Progesterone
 2. The following are chemical forms of lime except
A. Oxide
B. Hydroxide
C. Carbonate
D. Sulphate
 3. In which one of the following parts does fertilization take place in a bird?
A. Fallopian tube
B. Infundibulum
C. Shell gland
D. Isthmus
 4. Which of the following factors may not influence the level of supply of agricultural products?
A. Level of technology
B. Level of demand
C. Government policy
D. Quality of the product.
 5. The following are functions of marketing boards except
A. Giving dividends
B. Offering farm credit
C. Bulk storage
D. Transporting of goods
 6. Side thrust in an ox-plough can be overcome by the
A. Share
B. Land slide
C. Yoke
D. Furrow wheel

7. Over inflated tractor tyres,
A. Reduce between wheel slippage and traction
B. Increase both wheel slippage and traction
C. Reduce traction and increase slippage
D. Reduce slippage and increase traction
8. Which of the following chemicals does not supply nitrogen
A. Urea
B. Ammonium nitrate
C. Muriate of potash
D. Sulphate of ammonia
9. A wheel barrow belongs to
A. First class lever
B. Second class lever
C. Third class lever
D. Beam balance
10. When a small change in price of a commodity cause a big change in the demand of the commodity, then the demand is said to be;
A. Inelastic
B. Elastic
C. Perfectly inelastic
D. Unitary
11. The monetary value attached to the farmers own labour and management is;
A. An explicit cost
B. An implicit cost
C. A variable cost
D. A marginal cost
12. One of the following is an advantage of diversifying farm production
A. Reduction in pest and disease attack
B. Easy marketing of farm products
C. More efficient use of farm resources
D. Increase on the yields
13. Animal feed is described as basal if it has a high,
A. Protein content
B. Fat content
C. Fibre content
D. Energy content
14. Calcium demand in cattle is lowest during
A. Fattening
B. Early
C. Gestation
D. Lactation
15. The S.I unit of power produced by a machine is
A. Newton per second
B. Joule per second
C. Joule per metre
D. Newton per square metre
16. A soil sample was weighed and was 80g. When it was dried in an oven its mass become 60g. What was the percentage composition of water in the soil?
A. 20%
B. 25%
C. 30%
D. 50%

17. Which of the following are products of microbial fermentation in the rumen?
- A. Glucose
 - B. Peptones and peptides
 - C. Fatty acids and glycerol
 - D. Volatile fatty acids and ammonia
18. One of the following methods of identification would be ideal for beef herd.
- A. Ear notching
 - B. Ear tatting
 - C. Ear tagging
 - D. Branding
19. Which of the following may not affect the bulk density of soil
- A. Soil minerals
 - B. Depth of soil
 - C. Presence of organic matter
 - D. Number of cultivations
20. The following bacteria may be of importance in maintaining soil nitrogen balance except
- A. Thio bacillus
 - B. Azobacter
 - C. Nitrobacter
 - D. Nitrozomonas
21. A traditional farming system that involves alternating crops with pastures on the same piece of land is
- A. Crop rotation
 - B. Strip cropping
 - C. Arable farming
 - D. Ley farming
22. The occurrence of a genetic defect among individuals of an isolated population in a percentage higher than expected is likely to be a result of;
- A. Natural selection
 - B. Speciation
 - C. Adaptation
 - D. Genetic drift
23. Ripening of unripe fruits is facilitated when they are enclosed with ripe ones because.
- A. 1AA is produced by the ripe fruits to facilitate ripening of others
 - B. Ripe fruits produce ethane which facilitates ripening of others
 - C. Ripe fruits increase the temperature which encourage ripening
 - D. The unripe fruits absorb moisture from ripe fruits which separately speed up ripening.
24. Which of the following properties of organic matter contributions highly to moderation of soil temperature?
- A. Low bulk density
 - B. Dark coloured
 - C. High cation exchange capacity
 - D. Binding effect

25. The use of lime water in determining presence of living organisms in the soil is to;
- Increase speed of reaction
 - Indicates presence of carbon dioxide
 - Increase permeability of Muslim bags
 - Keep organisms alive
26. A recessive allele is that which can express itself only in
- Dominant stage
 - Heterozygous stage
 - Homozygous state
 - F1 generation
27. Which of the following features in a bony fish makes it more efficient in swimming than cartilaginous fish.
- Strong bony skeleton
 - Highly coordinated neuromuscular activity
 - Swim bladder
 - Stream lined body
28. Which of the following is true about the environment agro-forestry floor under a thick canopy?
- Wide temperature fluctuation
 - Thick layer of organic matter
 - Dense plant growth
 - Has heavy erosion
29. Most fungal disease are hard to control in crops because
- Fungi are not seen with the naked eye
 - Fungi produce many spores
 - Can tolerate wide range of soil conditions
 - Are resistant to drought
30. In mushroom husbandry, carbofuran is added to the substrate to
- Increase nutrient uptake
 - Control nematode attack
 - Increase composting rate
 - Increase spawn grown rate

SECTION B

31. (a) State four signs of over feeding in a fish pond. (4marks)
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(b) Give four advantages that Race ways have ever earthned ponds.

(6marks)

- (i)
- (ii)
- (iii)
- (iv)

32. (a) What is the difference between gender and sex as used in agricultural production? (2marks)

- (i)
- (ii)
- (iii)

(b) Explain four reasons to support gender analysis in agricultural production. (4marks)

- (i)
- (ii)
- (iii)
- (iv)

(c) State four ways in which women can be empowered to carry out productive agriculture in Uganda. (4marks)

- (i)
- (ii)
- (iii)
- (iv)

33. (a) Outline four functions of worker bees. (4marks)

- (i)
- (ii)
- (iii)
- (iv)

(b) Explain the meaning of the following terms as used in bee production. (6marks)

(i) Death period

(ii) Super cedure.....

(iii) Honey supers.....

(iv) Circular dance of workers

34. (a) Explain the reaction of ammonium sulphate in soils with: (4marks)

(i) Less organic matter
.....
.....
.....
.....
.....

(ii) Much organic matter
.....
.....

(b) Give six major characteristics of farm yard manure. (6marks)

- (i)
- (ii)
- (iii)
- (iv)
- (v)
- (vi)

35. (a) What is an agricultural policy?

(2marks)

.....
.....

(b) Outline four guiding principles of Agricultural policies. (4marks)

- (i)
- (v)
- (vi)
- (vii)

(b) Show the different government interventions carried out to develop agriculture in Uganda. (4marks)

- (i)
- (ii)
- (iii)
- (iv)

36. (a) Explain the factors influencing food conversion ratio in animals.

(5marks)

- (i)
- (ii)
- (iii)
- (iv)
- (v)

(b) What considerations should be made when formulating rations for animals? (5marks)

- (i)
- (ii)
- (iii)
- (iv)
- (v)

37. (a) Suggest reasons why Uganda farmers are being encouraged to grow high value crops. (5marks)

- (i)
- (ii)
- (iii)
- (iv)
- (v)

(b) Suggest possible causes of pasture deterioration on a mixed farm. (5marks)

- (i)
- (ii)
- (iii)
- (iv)

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