1. An oxen with a good temperamunt is likely to have a low concentration of?
A. Prolactin
B. Relaxing
C. Adrenaline
D. Progesterone
C

2. Beef and hides production on a farm beef being the main product is an example of
A. Supplementary product
B. Complementary product
C. Joint product
D. Competitive product
C

3. Which one of the following influences the effectiveness of a non-selective contact herbicides?
A. Degree of wetting leaves
B. Type of weed being controlled
C. Type of crop being grown
D. Time of day the herbicide is applied
A

4. Which of the following statements best describes the hydrogen potential of soil Z
A. Soil reaction
B. Soil
C. Cation exchange capacity
D. Hydrogen mineralization
A

5. Which one of the following is found in both RNA and DNA?
A. Thymine
B. Ribose
C. Double helix
D. Sugar-phosphate chain
D

6. Docking in sheep management is carried out in order to:
A. Facilitate mating
B. Improve hygiene
C. Control diseases
D. Make sucking of lambs easy
A

7. In herbaceous plants, support is proridal by?
A. Thickening of collenchyma
B. Lignification of tracheid
C. Sclerenchyma tissues
D. Turgidity of parenchyma
D

8. Which of the following is the major objective of marking soil?
A. Allow water and root penetration easy
B. Improve harness of soil
C. Make soil particles much smaller
D. Maintain the PH of the soil
A

9. Which one of the following statements is true of enzymes?
A. Substrate specific
B. Temperature specific
C. Speed specific
D. Heat specific
A

10. Maize is mainly dried be before storage in order to control pests and preserue its viability. The above method of controlling pest is a?
A. Legal method
B. Cultural method
C. Physical method
D. Biological method
C

11. In the preparation of silage, molasses, are added in order to
A. Act as a catalyst
B. Aid bacterial action
C. Kill harmful organism
D. Increase silage temperature
B

12. When the price of meat was 400/=, Peter bought 5kgs when the price reduced to 350/=, he bought 8kgs. Which type of elasticity of demand was it?
A. Unitary elasticity of demand
B. Inelastic demand
C. Elastic demand
D. Perfectly inelastic demand
C

13. Mr. Kizito had a nursery bed of coffee seedling, he transferred the good seedling into another nursery bed to reduce congestion. This activity is called?
A. Transplanting
B. Pricking out
C. Thinning
D. Hardening off
B

14. Which of the following cattle diseases has the following symptoms, distention of rumen, difficulty in breathing, animal lies down

C

A. Mastitis
C. Bloat
B. East coast fever
D. Anthrax

15. High concentration of hydroxyll ions in the soil mainly farrows the abundancy of

C

A. Fungi organisms
C. Bacteria organisms
B. Earth worms
D. Termites

16. Why are animals kept in a collecting yard prior to dipping? To

D

A. Count them
C. To carryout milking
B. To see which one has ticks
D. Water them and avoid dipping thirsty animals

17. Which of the following affects the composition of milk produced by a cow?

C

A. Type of feed
C. Age of cow
B. Milking material
D. Colour of the cow

18. When a goat is pregnant, it shows the following signs except

C

A. Enlargement of the belly
C. Closing of cervix
B. Udder tissue develops
D. Opening of cervix

19. A gene which does not express itself unless in homozygous state is

D

A. Dominant
C. Codominant
B. Sex-linked
D. Recessive

20. In ruminants, where does digestion of proteins begins from?

A

A. Abomasum
C. Rumen
B. Omasum
D. Mouth

21. In ground nuts, ground nut roselte disease is mainly transmitted by:

C

A. White fly
C. Aphids
B. Ground nut pests
D. Leaf hopper

22. Which one of the following does not influence bulk density of soil?

B

A. Soil depth
C. Organic matter
B. Soil temperature
D. Soil texture

23. The animal management practice that helps to improve milk hygiene is?

B

A. Docking
C. Flushing
B. Grooming
D. Proper feeding

24. The major objective of plane for modernization of agriculture (PMA) is?

B

A. Empower all farmers
B. Increase household income and quality of life
C. Promote farmer groups
D. Create avenues for financing and delivering of advisory services

25. Which of the following best describe the reasons why sand soil allows more water to pass through?

A

A. Large particles with large pore space
B. Large particles with small pore spaces
C. Small particles with smaller pore spaces
D. Small particles with large pore spaces

26. The following are inorganic fertilizers, which of them is applied at the time of planting?

C

A. Urea
C. D.A.P
B. N.P.K
D. C.A.N

27. In the nitrogen cycle, the bacteria which converts ammonium compound into Nitrites (NO2) is?

A. Azotobacterial bacteria
B. Nitrobacter bacteria
C. Rhizobium bacteria
D. Nitrosomonas bacteria

D

28. Which of the following eco system shows the highest gross productivity per unit area

A. An estuary
B. Forest
C. Grassland
D. An ocean

A

29. The following processes are used in heat treatment method of hardening steel except?

A. Tempering
B. Annealing
C. Normalization
D. Cyaniding

D

30. Where does the formation of chalaza take place in a hen?

A. Infundibulum
B. Magnum
C. Cloaca
D. Isthmus

A

31. Mr. Obonyo has 2 hectares of land where he planted coffee, when growing it, the following costs were involved seedlings 40,000/=, planting 10.000/=, weeding 5.000/=, land 20.000/=, pesticides 30.0000/=He is obtained 100kg and each is to be sold at 3000/=He expects to get 100kg &each tobe sold at 3000.

a) Calculate the gross margin **(02marks)**

Gross margin = total revenue-total variable cost

T.r =3000× 100 = 300,000

T.V.C 40,000+10,000+5000+30,000=85,000

G.M=300,000-85,000=215,000

Formular-$\frac{1}{2}$male

T.R=$\frac{1}{2}$male

TVC=$\frac{1}{2}$male

GM=$\frac{1}{2}male$

a) What will be the gross profit **(04marks)**

gross profit =TR-TVC+fixedcost
t.r=3000×100=300,000shs
t.v.c40,000+10,000+5000+30,000=85,000
f.c=20,000 for land
G.p= 300,000 -(85,000 + 20,000) =195,000shs

a) Why should farmers keep records on the farm? **(04marks)**

- Helps in budgeting
- Helps in decision making
- Helps in settling disputes
- Helps in sharing profits
- Helps in evaluating of performance of the farm
- Helps in comparing performance
- Helps to remember debts
- Remember histry

32(a) Explain the factors that favour the abundance of living organisms in the soil

(06marks)

- Organic matter :soil with organic matter forms more living organisms it act as food for them
- Soil ph.: soil which are acidic they contain more fungi
- Aeration:more air more living organisms
- Soil depth:the deeper the soil the lower the living organisms
- Temperature:extream temperature reduces the abundance
- Water: flooding reduces number especially those that can not survive in place with more water
- Pollution:use of pesticide reduces the number of living organisms
- Type of crop gbrown
- Soil structure
- Predation
- Availability of soil nutrients

Award a6 well explained points 6× 1=6marks

(b) Outline the desirable effects of soil living organisms **(04marks)**

- They make holes & improve soil aeration
- Some fix nitrogen into the soil eg bacteria & improve soil fertility
- They decompose organic matter &improve soil fertility
- Help in soil formation
- They release substance that aggregate soil
- Their waste product improve soil fertility
- Award any 4 importance of living organisms

33.(a) A poultry farmer wants to mix 18% ratio using maize bran 8%, rice bran 4%, fish meal 40% and cotton seed cake 38%. He would like to mix maize bran and rice bran in the ratio of 1:2 while cotton seed cake and fish meal in the ratio of 1:1. Calculate how much of cotton seed cake and maize bran if he is to make 100kgs of the ration.

ingredients	%	Rate	Products
Base feeds Maize brand Rice brand	 8 4	 1 2 3	 8 x 1 = 8 4 x 2 = $\frac{8}{16}$ = $\frac{16}{3}$= 5.3%
Protein feed Fish meal Cotton seed coke	 40% 38%	 1 1 2	 40 x 1 = 40 38 x1 $\frac{38}{78}$ $\frac{78}{2}$ = 39%

(06marks)

Based seed 5.3% 21 parts of based

Protein 39% | 18 | 12 .7 part of protein

33.7

Based = $\frac{21}{33.7}$ x 100 = 62.3kg.

Proteins = $\frac{12.7}{33.7}$ x 100 = 37.7 kg

Maize brand = $\frac{1}{3}$ x 62.5 = 20.8 kg

Rice brand = $\frac{2}{3}$ x 62.5 = 41.7kg

Cotton seed cake = $\frac{1}{2}$ x 37.7 = 18.9 kg

Fish meal = $\frac{1}{2}$ x 37.7 = 18.9 kg

(b) Outline 4 additives that can be added in animal feeds. **(04marks)**

- Antibiotics
- Anti-oxidants
- Favorites
- Grit
- Hormones
- Pellets blinders

Award any $4\times 1 = 4mark$

32. (a) Explain the management practices that ensure optimum power output from draught animals. **(05marks)**

- Proper feeding of animals
- Control diseases
- Use well trained workers
- Train the animals
- Proper pairing of animals
- Proper feeding
- Giving enough rest to animals
- Avoid over working of animals
- Use castrate animals.

(b) Why do you think there is poor coverage of ox-plough cultivation in Uganda

(05marks)

- Topography
- High intrest rates charged
- Production failure
- Price fluctuation
- Short repayment period

- Death
- Miss-use
- Negative cultural beliefe
- Lack of extensive services

34 (a) Give the reasons why farmers tend not to pay back the bank loans. **(06marks)**

- High intrest rate
- political instability
- Price fluctuation
- Production failure
- Dishonest
- Lack of market
- Short paymentperiod
- Poor supervision
- Death of farmers
- low price
- Mis-use of loans
- Theft
- Inflation
- Delay in giving out loans

(b) Mention the reasons why farmers should borrow money **(04marks)**

- To purchase implement
- To pay workers
- To purchase laqnd
- To buy in puts
- Eg seeds reduce budget deficts
- Increase level of production
- Buy food
- Provide working capital setting up structurs

35(a) Describe how you can preserve wood using sap displacement method

- Cut poles to the required length
- Remove the outer cover
- Get cylinder
- Put in preservatives
- Place poles vertically into the cylinder
- Leave them for 7days & then turn them upside down so that sap in poles is displaced &replaced with preservertive

(b) Outline the advantages of using wood as a constructions material. **(05marks)**

- They are cheap
- They are locally available
- They have good insulating properties
- They can be shaped into different shapes
- They can be worked on using simple tools

- They have agood appearance
- They are durable if well treated

Award 1 mark for any 5 points

36(a) Describe how you can castrate a pig using open castration material **(08marks)**

Restrain it and cast it down

- Wash the scrutum and disinfect it
- Apply fair killer to reduce pain
- Make vertical cut on the scrutum
- Pull the spermatic code
- Tie and cut the spermatic code
- Remove the test and repeat the same to the next tools
- Apply iodine deltol on the wound

(b) Outline the reasons for low coverage of artificial insemination in Eastern Uganda

- Poor infrastructure
- Lack of traing facilities
- Conservativeness of workers
- Poor training tecchicacals
- Scalter farmers
- Communal grazing which encourage natural mating
- High cost of semen
- Poor timing of inseminating animals
- Fewer inseminating centers

(05marks)

END