



WINNERS ONLINE SCHOOL

2022 AGRICULTURE PRACTICAL TRAINING

BY

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ROUND 1

QUESTION 1

You are provided with two soil samples labeled **A and B**. Add a little water to each soil sample to just moisten it. Rub each wet soil sample between your fingers.

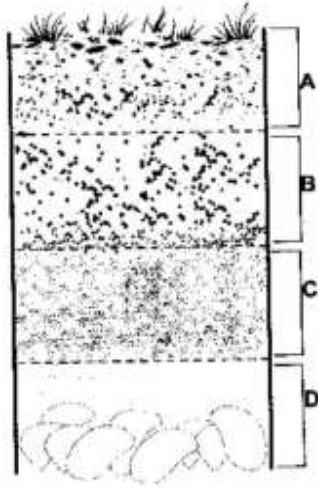
- (a) Identify the soil samples labelled A and B

A is clay soil and B is sand soil

- (b) Mention the method used to identify the soil samples labelled **A and B**
- (c) Identify the soil sample that has got a lot air spaces in it
- (d) Explain any one reason why the soil mentioned in **C** above has a lot of air spaces in it
- (e) What two other methods can be used to determine soil texture
- (f) Which of the two soil samples has the largest nutrients in it. Give the reason for your answer
- (g) Which soil sample has good physical properties but bad physical properties
- (h) Discuss one way how the soil structure of sample A affects nutrient uptake



- (i) Mention one method of improve improving productivity of **A and B**
- (j) Draw and label any four parts of soil profile



QUESTION 2

You are provided with specimen **L**

- (a) Identify the specimen labelled **L**.
L is the elephant grass or Napier grass or star grass
- (b) To which group of livestock feeds does it belong
- (c) State any two characteristics of feeds which belong to the group mentioned above
- (d) Explain two advantages of growing of growing the specimen **L** together with *Leucaena*

QUESTION 2

You are provided with four samples **G, L, F, S** which can be used as feed for animals

(a) Identify the samples of pasture

G is grass pasture, L is legume pasture, F is common salt or sodium chloride and M is maize flour

(b) Which of the four samples would be, most suitable for grazing. Give a reason for your answer

(c) In what one way would maturity of sample G affect the quality of feed

(d) Explain one best way of conserving sample L

(e) Mention three importance of drying crops

(f) Give four reasons why crop storage aeration is necessary

(g) Mention any four reasons for giving F to layers

(h) State any three reasons for feeding layers with green vegetables apart from providing sample F

(i) Explain one problem that layers feeding only on M would develop. How the problem can be corrected?

(j) Imagine you were told to prepare simple ration for layers from maize bran(deya), beans and maize. Explain how you could go about it.

QUESTION 4

Table bellows the supply and demand for fresh chambo fish at different prices in the market. study it carefully and answer the questions that follow.



Average price for each fish in Kwacha	Quantity demanded (kg)	Quantity supplied (kg)
80	10	88
70	21	79
60	30	70
50	40	61
40	50	50
30	63	37
20	77	23
10	92	10

- Draw a graph to show the relationship between price and quantity of fish demanded and supplied on the market
- How much chambo fish would be demanded when the price for each is k55.00
- What is the equilibrium price of fresh chambo fish at the market?
- Explain any one way in which the equilibrium is important to a fish farmer
- What happens to quantity demanded when the price of fish increases from k40 to k50.
 - calculate price elasticity of demand
 - what does the answer above tell you about the price elasticity of demand for fish at the market
- Describe any three effects of changing the price of the fish at the market

QUESTION 5

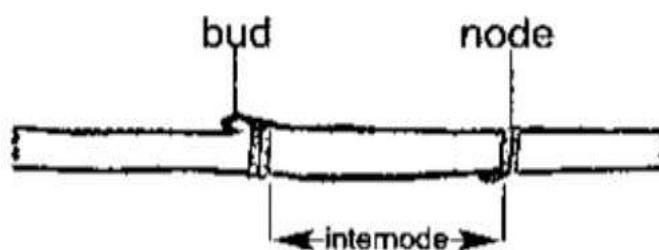
You are provided with five different planting materials **P, Q, R**

- Identify the specimens



P is sugarcane stem, **Q** is maize fruit, **R** is the sweet potato vines,

- (b) Which of the five planting materials is propagated by seeds
- (c) Mention any one characteristic of a good planting material
- (d) Give any two disadvantages of propagation by seed
- (e) Draw and label three parts of sample **P**



- (f) Give any three agro based industries that can use specimen **Q** as the raw material
- (g) Calculate the plant population of specimen **Q** which is planted on 90 cm apart ridges, planting three seeds per plant station and at 0.9 m apart. Area to be planted is 1 ha.

QUESTION 5

You are provided with specimen **X** and **Y**

- (a) Identify specimen X and Y

X is groundnut seed and Y is groundnut flour

- (b) Identify two primary products and one primary product from the two specimens
- (c) Remove the testa of specimen X and break it longitudinally. draw and label any three parts
- (d) Describe any three ways why specimen X is necessary for the economic development of Malawi.

QUESTION 6

You are provided with specimen M and N

(e) Identify specimen M and N

M is maize seed and N is cassava tuber

- (a) State any two processing activities through which specimens M and N undergo in readiness for storage
- (b) Explain any two conditions which are necessary for the storage of specimen M
- (c) Explain any two ways in which specimen N is important in terms of food security
- (d) State the nutritive value of specimen N
- (e) Give any two products obtained from processing of specimen N

QUESTION 7

You are provided with specimen X and Y

(a) Identify specimen X and Y

X is maize bran and Y is elephant grass

- (a) among the two specimens which one has greatest energy value
- (b) name the sample that can be an additive feed to chickens that lay eggs
- (c) list two other additive feeds that can be supplied to chickens that lay eggs
- (d) Mrs Chatha plans to graze her twelve cattle on a 1.5 hectare of star grass. However, during the wet season there is usually more grass than the number of animals that can feed on them.
 - i if you were a farmer what would you do in this situation. Give any five reasons for your answer
 - ii explain any two ways in which seasonal production of star grass affects its quality and quantity



(d) what four factors should be considered before formulating an animal feed.

QUESTION 8

Farmer at Ziwaya village has a mango plantation and during the growing seasons he plants maize between the spaces, grows dwarf beans between the maize spaces and finally grows the pumpkins in the same field.

- (a) Name the type of mixed cropping system practiced by this farmer.
- (b) How many levels or storey would the plot have
- (c) Apart from this way of practicing cropping system describe any two other cropping systems that you know
- (d) Explain any two advantages and disadvantages of this cropping system
- (e) Another cropping system is crop rotation. Design a three-year crop rotation program for maize, beans and pumpkins
- (f) Describe any three principles of crop rotation that should be observed when doing the system
- (g) Mr. Ziwaya applied four bags of DAP fertilizer each weighing 50kg to his crops.
Calculate the amount of nitrogen this farmer applied. Show your working.
What would be the four results of excessive nitrogen being applied to crops

QUESTION 9

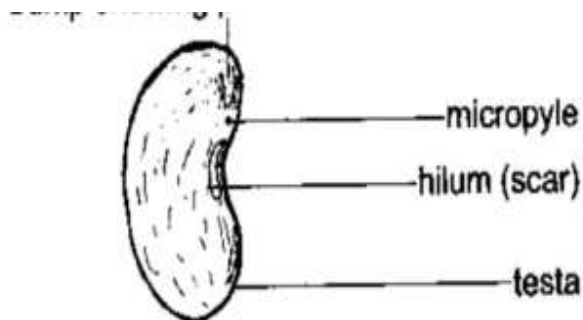
You are provided with specimen S

- (a) Identify the specimen labelled S

It is bean seed

- (b) Draw the specimen as you see it





- (c) On your diagram label four important parts for its growth
- (d) State two functions of any one part you have labeled
- (e) Define germination
- (f) Mention four necessary conditions for germination to take place
- (g) Describe two main types of germination that you know

END OF ROUND 1 2022 CHEMISTRY PRACTICAL TRAINING QUESTIONS. JOIN WINNERS ONLINE SCHOOL AND HAVE ACCESS TO SOLUTIONS OF THE QUESTIONS ABOVE. DONT SCRATCH YOUR HEAD IN YOUR EXAMS, FIND US ON 099 606 9997(CALL) or 088 11 53 203(call & whatsapp)



