

Practical Questions

Practical 1

PAPER 332/2 PRACTICAL

Time: 1½ hrs

Answer all the questions. Read instructions carefully.

1. Carefully examine the specimens provided and answer the questions that follow:
 - (a) (i) Identify specimens L and M. (2 marks).
 - (b) State two types of damages that each of the specimens causes to livestock. (2 marks).
 - (c) What two methods could be used to control each of the specimens above? (2 marks)
 - (d) What classes of livestock would be enclosed using specimens N, O and P? (3 marks)
 - (e) What is specimen Q? (1 marks)
2. Examine specimens J and K carefully and answer the questions that follow.
 - (a) Complete the table below. (3 marks)

Observations	J	K
Origin		
Description		
Identity of specimens		

- (b) What two precautions would you take when obtaining specimens J and K? (3 marks).
- (c) State four treatments given to both specimens J and K after they are obtained from the sources. (2 marks).
- (d) What four livestock management practices are required to ensure high quality products represented by specimens J and K? (2 marks).
3.
 - (a) What disease has attacked specimen A₁? (2 marks).
 - (b) Describe the symptoms of the disease which has attacked specimen A₁. (1 mark).

- (c) How is this disease controlled? (3 marks).
- (d) Name the variety of the crop which is resistant to the disease. (1 mark).
- (e) Which propagation materials for citrus fruits are represented by A_2 and A_3 ? (2 marks).
- (f) Name the crop which is normally propagated by the method of joining A_2 and A_3 . (1 mark).

Practical 2

PRACTICAL PAPER 332/2

Time 1½ Hrs.

Answer all the questions. Read instructions carefully.

1. (a) Put one teaspoonful of A_1 provided into test-tube labelled T_1 : (4 marks).
- (i) Add about 5 mls. of distilled water and record your observations in the table below.
- (ii) After about 2 - 3 minutes, add a further 5 mls of distilled water and record your observations.
- (iii) Using a glass rod, stir the mixture thoroughly. Allow the mixture to settle for about 5 minutes. Then carefully insert a piece of pH- paper into the mixture.
- (iv) With the pH-chart provided, determine the pH value of the specimen A_1 .
- (v) Retain the test-tube T_1 and its contents.

Repeat the above procedure for the specimen A_2 provided.

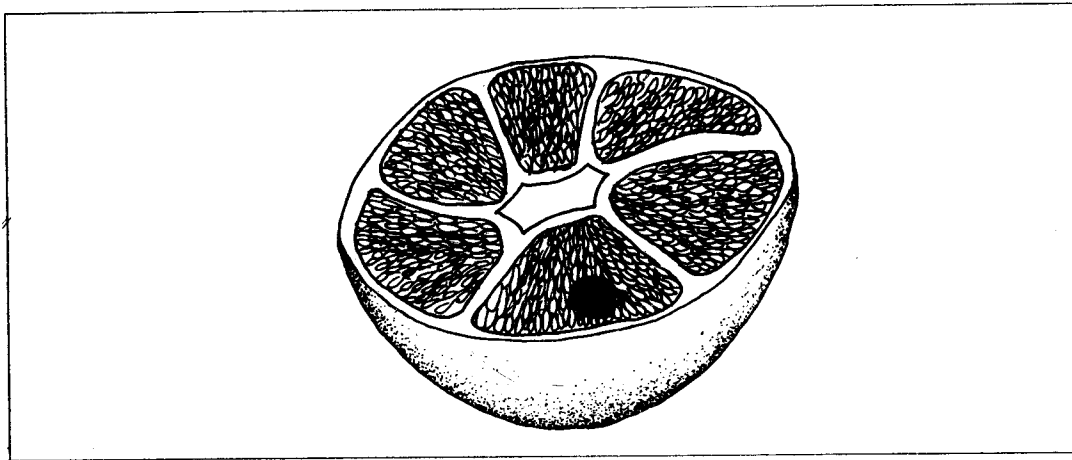
Specimen	Observation after adding 5mls of water	Observation after further adding of 5mls	pH-Value
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A_1

A_2

- (b) Identify specimens A_1 and A_2 . (1 mark).
- (c) From your observations, state one major difference between A_1 and A_2 . (3 marks).
- (d) Mention one factor that is responsible for pH value of A_1 . (1 mark).
- (e) Name the major nutrient that is likely to be unavailable in A_1 . (1 mark).

- (f) Which cash crop would perform well in areas where A_1 is prevalent? (1 mark).
- (g) How would you make A_1 suitable for growing crops which require a neutral pH? ($\frac{1}{2}$ mark).
2. You are provided with specimens L_1 and L_2 .
- (a) Identify the specimens. (2 marks).
- (b) Which liquid is usually used for topping up L_1 ? (1 mark).
- (c) State any **one** function of L_1 on the farm. (1 mark).
- (d) Name the possible cause that could make L_1 not to function any time. (2 marks).
- (e) Name **three** items or equipment in which specimen L_2 can be used. (2 marks).



3. (a) The diagram shows an orange which has been attacked. Name the organism which has caused the damage. (1 mark).
- (b) How can this problem be solved? (1 mark).
- (c) Observe the specimen B provided very carefully.
- (i) Name the disease which has attacked the specimen. (2 marks).
- (ii) How can this disease be controlled? ($1\frac{1}{2}$ marks).
- (iii) Where is this disease common in Kenya? Give the altitude. ($\frac{1}{2}$ mark).
- (d) (i) Examine and identify specimen C.
- (ii) Name **four** commercial products processed from specimen C. (4 marks).
- (iii) How are the planting materials of specimen C treated before planting. ($\frac{1}{2}$ mark).

Practical 3

PRACTICAL PAPER 332/2

Time: 1½ Hrs

Answer all the Questions .

1. You are provided with four photographs of some farm animals; that are marked; B, C, D and E.

Study the photographs carefully and then answer the question that follows in the tables below:

- (a) Identify the animals shown in the photographs labelled B, C, D and E; in the appropriate columns.

<i>Photograph</i>	<i>Identity</i>
B	
C	
D	
E	

(4 marks).

- (b) Study the photographs and record the differences in conformation between animals B and D.

(6 marks).

B	D
(i)	(ii)
(ii)	(ii)
(iii)	(iii)

2. The following is a supply and demand schedule of eggs to teachers in a school.

<i>Price per 30-egg tray (KShs.)</i>	<i>Demand per day (No. of trays)</i>	<i>Supply per day (No. of trays)</i>
33.00	0.50	4.70
31.00	1.10	4.60
30.00	1.60	4.45
28.50	2.00	4.20
25.50	2.40	3.95
24.00	2.90	3.65
22.50	3.30	3.30
21.00	3.70	2.90
19.50	4.20	2.50
18.00	4.80	2.00

- (a) Using the same axes, with price on the vertical axis, draw graphs to indicate the relationship between price, demand and supply. (6 marks).
- (b) What is the name given to the point where the curves intersect? (1 mark).
- (c) (i) What is the price of eggs per tray at the point of intersection? ($\frac{1}{2}$ mark).
- (ii) What is the supply and demand of eggs at the point of intersection? ($\frac{1}{2}$ mark).
- (d) What marketing assumptions can you make from the data given on the sale of eggs with respect to demand? (1 mark).
- (e) If the demand was three trays of eggs; what would be the price per tray? (1 mark).
3. (a) Observe and identify specimens $D_1 - D_4$. Name the major problems of the specimens in farm operations. (4 marks).
- (b) Identify Specimen E and state control measures that can be taken against it. (2 marks)
- (c) Examine and identify Specimens $F_1, F_2, F_3,$ and F_4 and for each Specimen answer the following questions in the table below:
- | Specimen | Identity | Method of propagation | Use |
|----------|----------|-----------------------|-----|
| F_1 | | | |
| F_2 | | | |
| F_3 | | | |
| F_4 | | | |
- (4 marks).

Practical 4

PRACTICAL PAPER 332/2

Time 1½ Hrs.

Answer all the Questions.

1. You are provided with Specimens B and C. Immerse Specimen B into solution C and remove it after about ten minutes, using a spatula or plastic spoon. Observe the specimen for another two minutes; and answer the questions that follow:
- (a) Record your observations. (2 marks).
- (b) What practice does this experiment test in livestock management? (1 mark).
- (c) Name **three** cattle diseases spread by specimen B. (3 marks).
- (d) What is the general name of solution C? (1 mark).

- (e) Name or identify specimen B. (1 mark).
- (f) What other method would you recommend to the farmer for the control of specimen B? (1 mark).
- (g) Name another ectoparasite that can be controlled using solution C. (1 mark).
2. You are provided with specimens D and E for this question.
- (a) Cut a small piece of specimen D (about 1 cm long). Slice the piece you have obtained longitudinally, then crush it thoroughly using one end of the stick and wooden board provided.
Observe the solid residue left on the board; and then answer the following questions.
- (i) Name the solid residue. (1 mark).
- (ii) How is specimen D commonly used in animal production? (1 mark).
- (iii) What class of farm animals use specimen D? (1 mark).
- (iv) Explain briefly why the class of animals you have named in (iii) above is able to utilise specimen D.
- (b) Using the other end of the stick provided, crush specimen E into smaller particles against a filter paper on the bench. Remove the residue from the filter paper and observe the latter against light.
- (i) What is the main feature of the area on which specimen was crushed? (1 mark).
- (ii) State the property of specimen E which has caused the observation you have described in (i) above. (2 marks).
- (iii) Name two commercial products obtained from specimen E. (2 marks).
- (iv) What is the importance of specimen E in animal nutrition? (2 marks).
3. (a) Identify Specimens M_1 and M_2 . (2 marks).
- (b) Examine closely the two specimens, then answer the following questions.
- (i) What pest has affected M_1 ? (1 mark).
- (ii) How can this pest be controlled? (2 marks).
- (iii) What pest has affected M_2 ? (1 mark).
- (iv) How can this pest be controlled? (2 marks).
- (v) Give the name of the disease which can be transmitted by the pest labelled M_2 . (2 marks).

Practical 5

PRACTICAL PAPER 332/2

Time 1½ Hrs.

Answer all the Questions.

1. You are provided with specimens labelled A,B,C,D and E. Examine them carefully and answer the questions that follow:
 - (a) Identify the specimens by their common names. (2½ marks).
 - (b) State five harmful effects of these specimens to cultivated crops. (2½ marks).
 - (c) What cultural control measures can be applied to minimise the effects of specimens A, B, C and E? (4 marks).

2. (a) Use the following information to construct or draw a profit and loss account (Trading Account) for Etyet Farm at the end of 1990. (10 marks).

	Kshs.
Purchase of feeds	250
Sales of poultry	500
Opening valuations	14,000
Purchase of Seeds	280
Purchase of fertilisers	200
Rent	200
Sales of grains	1,200
Sales of vegetables	50
Closing Valuations	15,000
Hire of Labour	250
Depreciation of Machines	50
Interest on borrowed loan	40
Purchase of chicks	80
Sales of Milk	600
Purchase of calves	100
General expenses	100

- (b) (i) Did the farm make a profit or loss in the year 1990? (1 mark).
- (ii) How much profit or loss was made by the farm in that year? (1 mark)

3. (a) Examine closely specimens N₁, N₂, N₃ and N₄ given and identify them. (2 marks).
- (b) Name any two commercial products obtained from the above specimens N₁, N₂, N₃ and N₄ given and identify them. (2 marks).
- (c) What is common to all these specimens? (1 mark).
- (d) You have been provided with specimen Q. Cut the specimen longitudinally and draw a well labelled diagram of the cut section. (2 marks).
- (e) Name any four products obtained from the specimen Q. (2 marks).

Practical 6

PRACTICAL PAPER 332/2

Time 1½ Hrs.

Answer all Questions.

1. You are provided with specimens labelled E, F, G and H. Examine them carefully and answer the questions that follow:

- (a) Identify each of the specimens. (4 marks).
 (b) What industrial products, of economic importance are obtained from specimen E? (4 marks).
 (c) Specimens F, G and H shows symptoms of pest attack. Suggest, from the symptoms, the pest and possible control measures.

<i>Specimen</i>	<i>Possible pest attacking</i>	<i>Control measures</i>
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F

G

H

(6 marks).

2. Carefully examine specimens S, T, U and V and answer the questions that follow.

- (a) Name and give one main use of each of specimens S and T on livestock farms. (2 marks).
 (b) Of what use or importance are specimens U and V in producing "clean Milk" on a dairy farm? (2 marks).
 (c) Identify and give one use of each of the following farm equipment.

<i>Specimen</i>	<i>Identity</i>	<i>Uses</i>
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W

X

Y

Z

(6 marks)

3. Examine and identify specimen S₁, S₂, S₃ and for each specimen answer the following questions in the table provided.

<i>Specimen</i>	<i>Identity</i>	<i>Method of Propagation</i>	<i>Agricultural Importance</i>
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S₁

S₂

S₃

S₄

(6 marks).

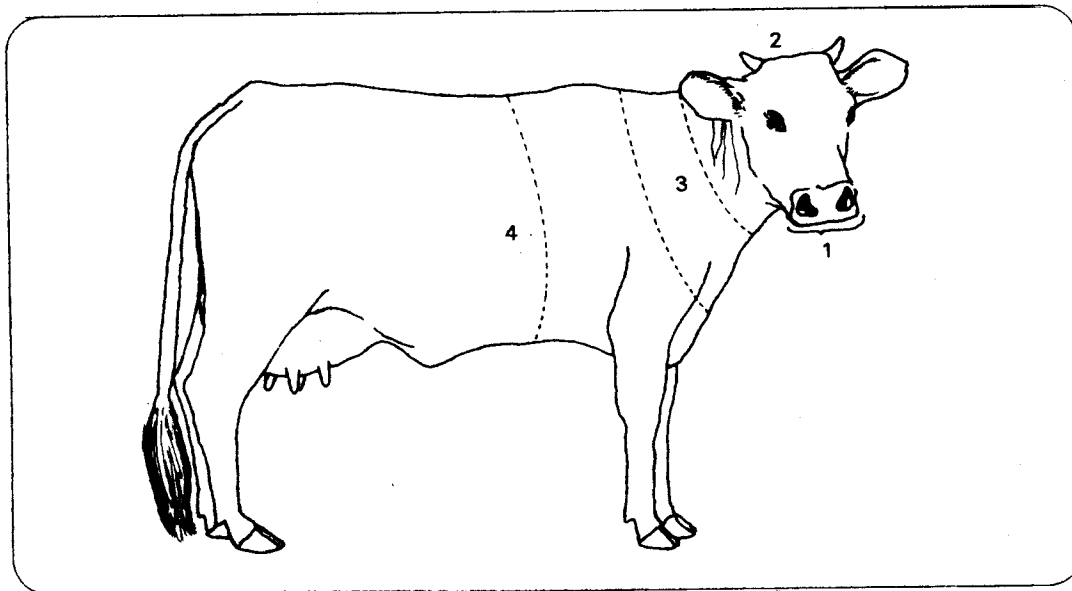
Practical 7

PRACTICAL PAPER 332/2

Time 1½ Hrs.

Answer all questions.

1. Below is a drawing of a farm animal. Study the diagram carefully and then answer the questions that follows:
 - (a) On the drawing, mark with the letters indicated in brackets the parts of the animal where:
 - (i) Branding should take place (B). (4 marks).
 - (ii) Vaccination should be carried out (V). (2 marks).
 - (iii) Body temperature of the animal should be taken (BT). (2 marks).
 - (iv) Mastitis infection may occur (M).
 - (b) Name three areas of the animal's body where ticks are likely to be found. (2 marks).
 - (c) Name the parts of the animal numbered 1 - 4. (2 marks).



2. You have been provided with specimens W_1 and W_2 . Examine them carefully and then answer the questions that follow:
 - (a) Identify specimen W_1 . (1 mark).
 - Identify specimen W_2 . (1 mark).
 - (b) Describe the stages followed to obtain the given specimens. (5 marks).
 - (c) How are the specimens propagated? (2 marks).
 - (d) Name three diseases which may attack the specimens. (3 marks).

3. You have been provided with Specimens X_1 and X_2 . (2 marks).
 (a) Identify the Specimens X_1 and X_2 .
 (b) State the commercial products obtained from the specimens. (6 marks).
 (c) Name the parts harvested from the two specimens. (2 marks).

Practical 8

PRACTICAL PAPER 332/2

Time 1½-Hrs.

Answer all the questions.

1. You are provided with specimens A,B,C,D,E, F^1 and F^2 . Examine them carefully and answer the questions that follow each of them.

- (a) Identify specimens A,B,C,D and E, and for each specimen, state the product that can be obtained from it. (2½ marks).

<i>Specimen</i>	<i>Identity</i>	<i>Product obtained</i>
A		
B		
C		
D		
E		

- (b) How is each specimen propagated? (2½ marks).
 (c) Examine and identify Specimens F_1 , and F_2 . (2 marks).
 (d) What disease has attacked Specimen F_1 ? (1 mark).
 (e) What two methods are used to control the disease? (2 marks).
2. At the end of the year 1988, the records of how a commercial farm spent and received money was as follows:

	<i>KShs.</i>
Dairy cattle expenses	430
Sale of steers to K.M.C.	1,620
Beef cattle expenses	435
Cull cows and heifers sales	1,532
Opening valuation (Jan, 1988)	19,000
Sale of cross-bred heifers	900
Milk sales	3,640
Rent	1,000
Closing valuations (31st Dec. 1988)	18,000

Purchase of new machinery	500
Other expenses	1,000
Wages and salaries	2,400

- (a) Using the information given above, draw a profit and loss account for the farm for the year 1988. (7 marks).
 - (b) Was there any profit or loss made in the year? (2 marks).
 - (c) If so, how much? (2 marks).
3. (a) Examine and identify specimens G₁ - G₅ and mention one economic importance of each.

Specimen Identity Economic importance

G₁

G₂

G₃

G₄

G₅

- (b) Why is it difficult to eradicate Specimen G₃ in the farm? (5 marks).
- (c) How does G₂ affect the quality of livestock product? (2 marks).

Practical 9

PRACTICAL PAPER 332/2

Time 1½ Hrs.

Answer all the questions.

1. You have been provided with a number of specimens. Examine them carefully and answer the questions that follow:
 - (a) (i) Identify specimen G. (½ mark).
 - (ii) Put about 30 gms of specimen G in a beaker containing about 200ml of tap water and stir with a glass rod for about half a minute. Record your observation. (½ mark).
 - (b) How does the behaviour of the specimen affect its use in crop production? (½ marks).
 - (c) Examine and identify specimens H, I, J and L. For each specimen state one use on the farm.

- | <i>Specimen</i> | <i>Identity</i> | <i>Use on farms</i> |
|-----------------|-----------------|---------------------|
| H | | |
| I | | |
| J | | |
| L | | |
- (4 marks).
- (d) (i) What is specimen M? (½ mark).
(ii) Name **four** commercial products which can be obtained by processing this specimen. (2 marks).
- (e) (i) Examine and identify specimens N, O and P. (1½ marks).
(ii) From a nutritional point of view, how does specimen N differ from specimens O and P? (½ mark).
2. (a) Identify specimen E and give **two** control measures that can be taken against it. (2 marks).
(b) Examine specimens F₁ and F₂ carefully then answer the questions that follow.
(i) Identify F₁ and F₂. (1 mark).
(ii) Which specimen is likely to be more fertile? (½ mark).
(iii) Which one is likely to require addition of organic matter to improve its structure? (½ mark).
- (c) Give **one** use of each of the following specimens shown below.
A, B, C and D. (4 marks).
- (d) Identify specimen X and state **two** methods of controlling it. (2 marks).
3. You are provided with specimen Y which has been damaged by a pest. Cut it open to expose the damaged part.
(a) Identify the Specimen. (1 mark).
(b) Make a large longitudinal well labelled drawing of your preparation to show the damage done. (5 marks).
(c) What pest do you think is responsible for the damage. (2 marks).
(d) State the control measures. (2 marks).

Practical 10

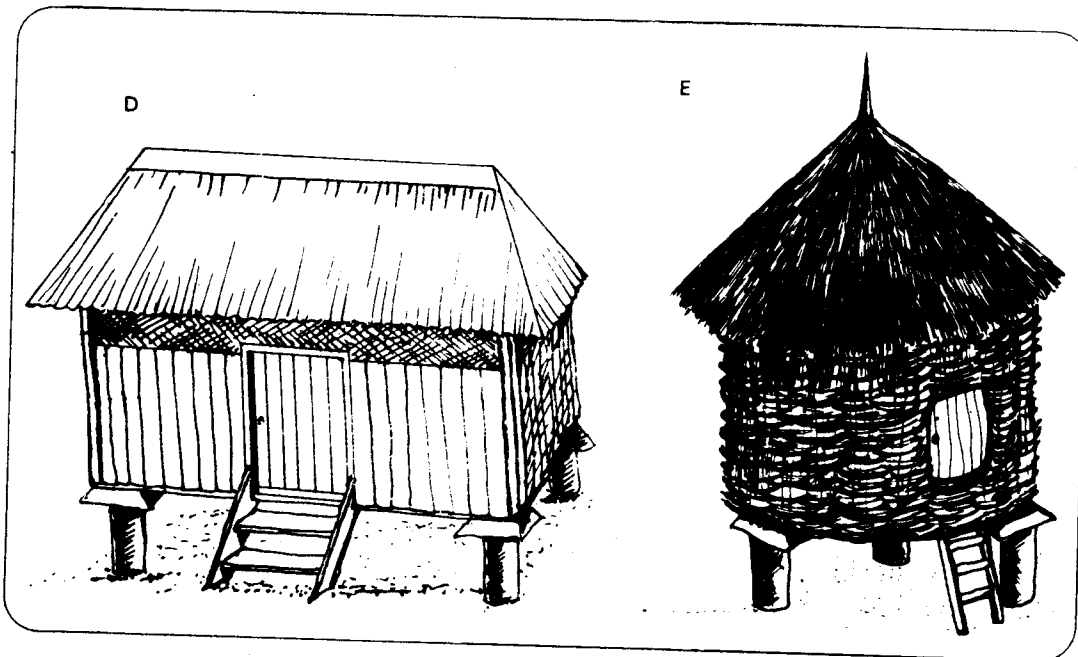
PRACTICAL PAPER 332/2

Time 1½ Hrs.

Answer All the Questions

1. Examine the specimens provided and then answer the questions that follow:
- (a) Specimens A, B and C are different plant parts. Identify the specimens: (1½ marks).
- (b) Specimens H₁ and H₂ are common crop pests of economic importance. Identify them. (1 mark).

- (c) Name the crops attacked and the nature of damage caused by specimens H₁ and H₂.
(3 marks).
- (d) What cultural control measures are taken against these pests? (1 mark).
- (e) What are specimens F and G? (1 mark).
- (f) What major plant nutrient is supplied to growing plants by each of the specimens? (1 mark).
- (g) At what stage of plant growth is each of the specimens applied or used. (1½ marks).
2. Examine specimens J and K and answer the questions that follow:
- (a) Identify these specimens. (1 mark).
- (b) For each specimen, give the method of propagation. (1 mark).
- (c) What methods can farmers use or employ to control these specimens? (2 marks).
- (d) In what way is each of specimens M and P useful to livestock farmers? (4 marks).
- (e) Briefly state one use of each of the following specimens. (2 marks).
- R, S, T and U.
3. Study the two diagrams carefully and answer the questions that follow.
- (a) Identify the two structures. (2 marks).
- (b) State four structural differences between D and E. (4 marks).
- (c) State two maintenance practices carried out on the structures. (4 marks).



Practical 11

PRACTICAL PAPER 332/2

Time 1½ Hrs.

Answer all questions.

1. Examine carefully the specimens provided and answer the questions that follow:
 - (a) Identify specimens A, B and C. (3 marks).
 - (b) Are all the above specimens fit for immediate human consumption? Use ticks to indicate your answers in the grid. (3 marks).

Specimens	A	B	C
Fit for consumption			
Unfit for consumption			

- (c) For each specimen you consider not fit for consumption, describe the factors that led to this condition. (1½ marks).
 - (d) Examine specimens D, E and F and answer the questions that follow:
 - (i) Identify the specimens. (1½ marks).
 - (ii) Describe briefly how each of the specimens is important to farmers. (1½ marks).
2. (a) Examine carefully specimens G, H, I, J, and K and answer the questions that follow in the table below. (7½ marks).

<i>Specimen</i>	<i>Identity</i>	<i>Part of Plant</i>	<i>Type of crop</i>
G			
H			
I			
J			
K			

- (b) What are specimens L and M? (1 mark).
 - (c) What is the agricultural importance of the two specimens? (1 mark).
3. Examine specimen W₁ and W₂ carefully then answer the questions that follow:
 - (a) Identify the two specimens. (1 mark).
 - (b) State the uses of the two specimens in crop production. (2 marks).
 - (c) Mention how the two specimens can be kept in good working conditions. (4 marks).
 - (d)
 - (i) Identify specimen L. (½ mark).
 - (ii) What pest has attacked the specimen? (½ mark).
 - (iii) How can this pest be controlled? (1 mark).
 - (iv) Describe the nature of attack on this specimen. (1 mark).

Practical 12**PRACTICAL PAPER 332/2**

Time 1½ Hrs.

Answer all questions.

1. Examine specimens A, B, C and D and answer the questions that follow:
 - (a) Identify the specimens. (2 marks).
 - (b) Put about 5 gms of each specimen A and B in a test-tube containing about 10 ml. of distilled water. Shake the mixture vigorously and allow to settle for about 3 minutes. Record your observations. (2 marks).
 - (c) Put a piece of blue litmus paper into each of the test-tubes (touching the contents). Record your observations. (2 marks).
 - (d) Explain your observations. (2 marks).
 - (e) Which one of the above specimens would increase the acidity of the soil, if used for a long time: (2 marks).
2.
 - (a) Examine carefully specimens E and F. Identify and give one main use of each of the specimens. (4 marks).
 - (b) Name two predisposing factors of the problem that are usually solved by use of specimen F. (2 marks).
 - (c) You are provided with specimen H. Outline the procedure followed when using it. (2 marks).
3.
 - (a)
 - (i) Examine and identify specimens N, O and P. (1½ marks).
 - (ii) Give the source of specimen N. (1 mark).
 - (iii) Explain the precautions one has to take while using specimen P as a livestock feed. (2 marks).
 - (iv) Give three ways of utilising specimen O as a livestock feed. (3 marks).
 - (v) From a nutritional point of view how does specimen O differ from specimen P (2 marks).
 - (b) Examine specimen Q carefully and list stages of its life cycle. (2 marks).
 - (c) Name a structure that is used in the control of the above specimen. (½ mark).

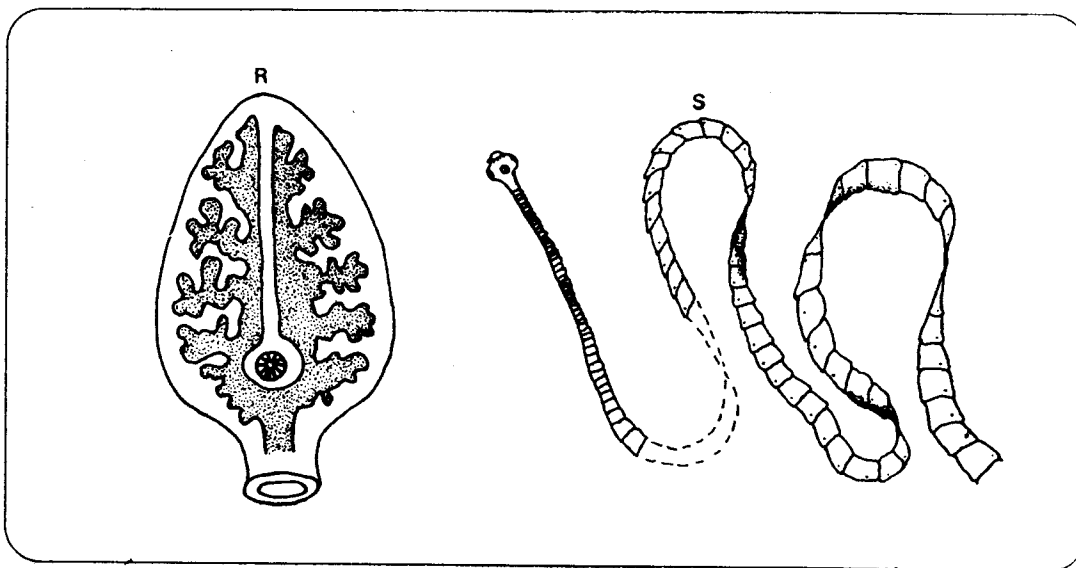
Practical 13**PRACTICAL PAPER 332/2**

Time 1½ Hrs.

1. (a) You are provided with specimens J, K, L, M, N and O. Using the table below, identify these specimens and briefly give one use of each specimen on a well managed farm. (6 marks).

<i>Specimen</i>	<i>Identity</i>	<i>Use of Specimens</i>
J		
K		
L		
M		
N		
O		

- (b) Give two maintenance practices carried out on specimen N. (2 marks).
- (c) What is the importance of specimen Q in good quality egg-production? (2 marks).
2. (a) What are specimens A, B, C and D? (2 marks).
- (b) Of what economic importance are these specimens to crop farmers? (4 marks).
- (c) Examine specimen S and mention the importance of the specimen to a livestock farmer. (2 marks).
3. Below are the diagrams of specimens R and S. Using the diagram answer the following questions.
- (a) Identify the two specimens. (2 marks).
- (b) Name one final host of specimen R. (2 marks).
- (c) Name the intermediate host of specimen R. (1 mark).
- (d) Name the intermediate host of specimen S. (1 mark).
- (e) State the control measures of specimen R. (3 marks).
- (f) State the control measures of specimen S. (3 marks).



Practical 14

PRACTICAL PAPER 332/2

Time 1½ Hrs.

Answer all questions.

1. Examine specimens U, V, W and Y and answer the questions that follow:
 - (a) For each specimen, name two areas in Kenya where it is produced. (8 marks).
 - (b) Name one material used to propagate each of the specimens above. (2 marks).

2. Use the following production figures in potato growing to answer the questions that follow:

<i>Value of Potatoes (Kshs.)</i>	<i>Cost of fert. Used (Kshs.)</i>	<i>Profit (Kshs.)</i>	<i>Additional Revenue per additional cost (Ksh.)</i>
80	0	80	
400	100	300	320
900	200	700	500
1600	300	1300	700
2160	400	1760	560
2300	500	1800	140
2200	600	1600	100

- (i) Indicate the point of fertiliser application which brings the highest Net Revenue. (8 marks).
 - (ii) Give a reason for your answer. (2 marks).

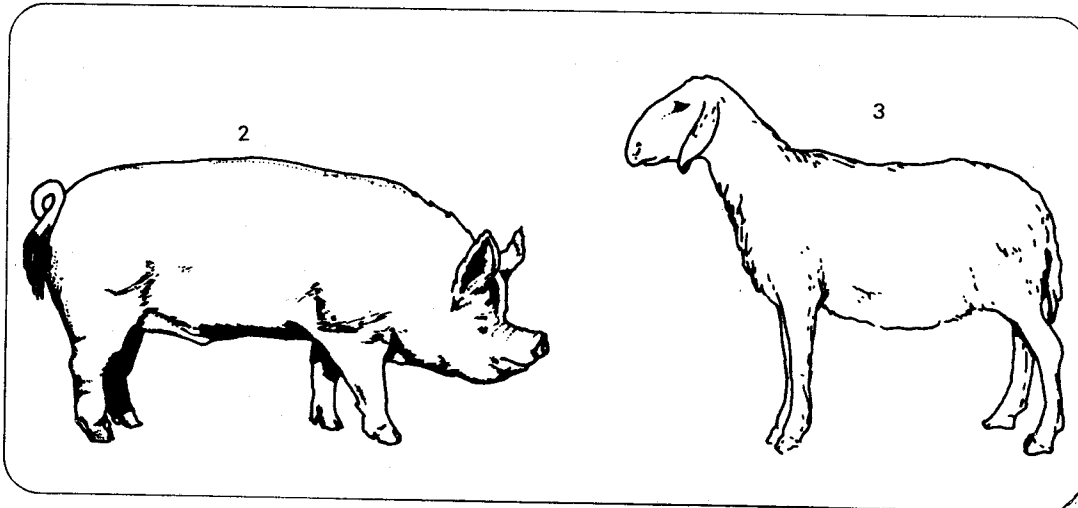
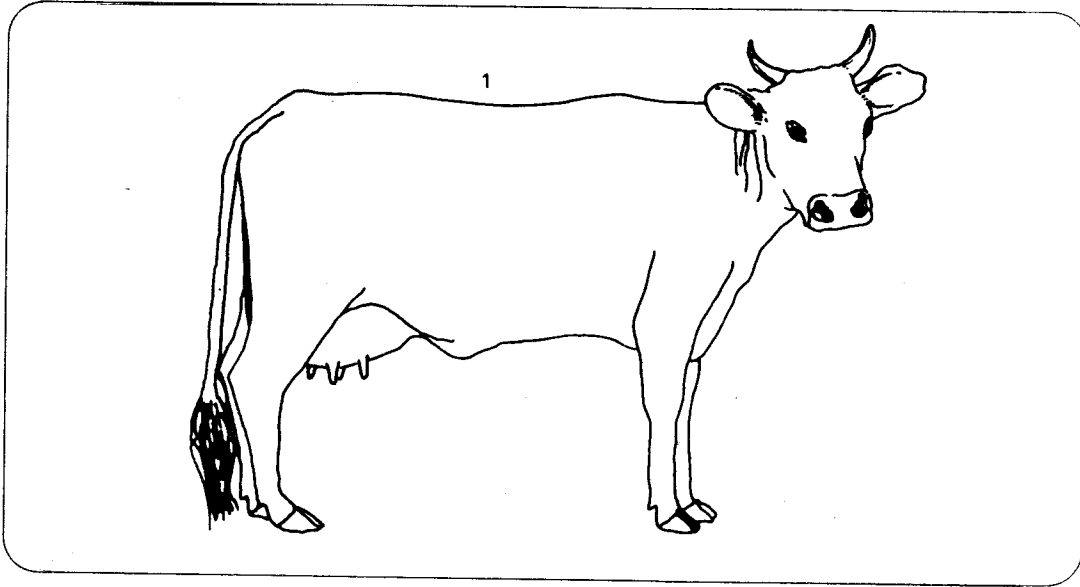
3. Examine carefully specimen V provided and answer the questions that follow:
 - (i) What do you think the plant is suffering from? (2 marks).
 - (ii) Describe the symptoms on the crop. (3 marks).
 - (iii) State the control measures of the disease. (3 marks).
 - (iv) Give the name of the causal organism of the disease. (2 marks).

Practical 15**PRACTICAL PAPER 332/2**

Time 1½ Hrs.

Answer All the questions.

1. Carefully examine the drawings of farm animals given below and answer the questions that follow:



- (a) What class of farm animals are represented in the drawings ? (1½ marks).
 - (b) Indicate which of the animals 1, 2, and 3 is ruminant or non-ruminant. (1½ marks).
 - (c) Which of the animals 1, 2 and 3:
 - (i) Usually require(s) foot-trimming.
 - (ii) Is (are) usually dehorned.
 - (iii) Can be infected by mastitis. (1½ marks).
 - (d) Name an external parasite of economic importance to animal 1, prevalent in your area. (1 mark).
 - (e) Name two common diseases of animal 3. (3 mark).
- You are also provided with specimens labelled A and B. Examine them carefully and answer the questions that follow.
- (f) To which of animals 1, 2 and 3 above will specimens A and B be fed to? (1 mark).
 - (g) Is specimen B suitable for feeding animal 2? (½ mark).
 - (h) Give one reason for your answer in (g) above (2 marks).
2. (a) Identify Specimens W₁, W₂, W₃ and W₄. (2 marks).

<i>Specimen</i>	<i>Identity</i>
W ₁	
W ₂	
W ₃	
W ₄	

- (b) From which animals do you think they were obtained? (2 marks).
 - (c) What is the incubation period of the animal from which W₁ was obtained? (1 mark).
 - (d) What is the gestation period of the animal from which W₂ was obtained. (1 mark).
 - (e) State the economic uses of specimen W₄. (2 mark).
3. (a) State any four uses of specimen X in livestock management. (4 marks).
- (b) State three maintenance practices carried out on specimen X to be of use for a longer time. (3 marks).
 - (c) (i) Identify specimen Y. (1 mark).
 - (ii) Why is it difficult to control this specimen in a coffee plantation? (2 marks).

Practical 16

PRACTICAL PAPER 332/2

Time 1½ hours

Answer all the questions.

1. You are provided with specimens A, B, C, D and E. Study them carefully and then answer the questions that follow.
 - (a) Identify each of the specimens and state one use of each in a mixed farm. (5 marks).
 - (b) Briefly explain the procedure followed when using specimen E. (5 marks).
2.
 - (a) Identify specimens M, N, P, and Q. (2 marks).
 - (b) What is common about specimens M and N? (2 marks).
 - (c) What food substance is dominant in specimen N and Q? (2 marks).
 - (d) State the main difference between specimens P and Q. (2 marks).
 - (e) Which part of specimen N is harvested and used as food? (2 marks).
3. Carefully study the information that is tabulated below and answer the questions that follow.
At the start of the year 1991, financial and asset valuations of Nyota farm stood as follows:

Opening valuations as at January 1, 1991.

	<i>Kshs.</i>
Dairy cattle	25,000
Maize in store	9,000
Buildings	125,000
Potatoes ready for sale	3,500
Beans in store	5,000
Calves and heifers	15,000
Mature sheep	7,000
Mature goats	5,000
Land (100 Ha)	160,000
Machinery	80,000
Milking machine	10,000
Cattle feed in store	600
Office equipment	1,400

On the same date, the farmer had Kshs. 5,000 in the bank, Kshs. 300 cash at hand. The farm was owed Kshs. 3,000 for milk and Kshs. 500 for maize. The farm owed K.G.G.C.U. Kshs. 1,500 for fertilisers and Unga Limited Kshs. 500 for feed.

- (a) Draw the balance sheet for the farm as at January 1, 1991. (8 marks).
- (b)
 - (i) If the Manager of the farm wished to apply for a loan of Kshs. 200,000 do you think he would stand a good chance of getting it? (1 mark).
 - (ii) What two major points would the Bank consider before advancing the loan? (1 mark)

Practical 17

PRACTICAL PAPER 33/2

Time 1 1/2 Hrs.

Answer all the questions.

1. You have been provided with specimen $M_1 - M_4$.
 - (a) Put all the specimens in a basin of water. Note the observations. (2 marks).
 - (b) Break specimen M_1 at the broad end and note the observations. (2 marks).
 - (c) Note the difference between specimen M_1 and the others. (3 marks).
 - (d) What has contributed to the external difference of specimen M_1 and the others. (2 marks).
 - (e) Specimen L is a construction material commonly used on farm. Name three ingredients used in the mixture to make it. (4 marks).
2. Examine the specimens provided and answer the questions that follow. Observe specimens A_1 and A_2 .
 - (a) Name the pest which has attacked specimen A_1 . (1 mark).
 - (b) Describe the nature of damage done by the pest on the maize grains. (2 marks).
 - (c) State three control measures of the pest. (3 marks).
 - (d) Identify the disease which has attacked specimen A_2 . (1 mark).
 - (e) Describe the symptoms of the effect of the disease on the crop. (2 marks).
 - (f) State two control measures of the disease on the crop. (2 marks).
3. You have been provided with specimens C and D. Examine them carefully and then answer the questions that follow:
 - (a) By use of a dropper, place a drop of specimen C on a small strip of red and blue litmus papers and note the observation.
 - (b) Rinse the dropper with water and repeat the experiment with specimen D. Fill in the table below.

<i>Specimen</i>	<i>Litmus paper</i>	<i>Observation</i>
C	Red	
C	Blue	
D	Red	
D	Blue	

- (c) Explain briefly the difference in the two specimens. (4 marks).
- (d) Which one of the two specimens is suitable for preparing tea for breakfast? (2 marks).

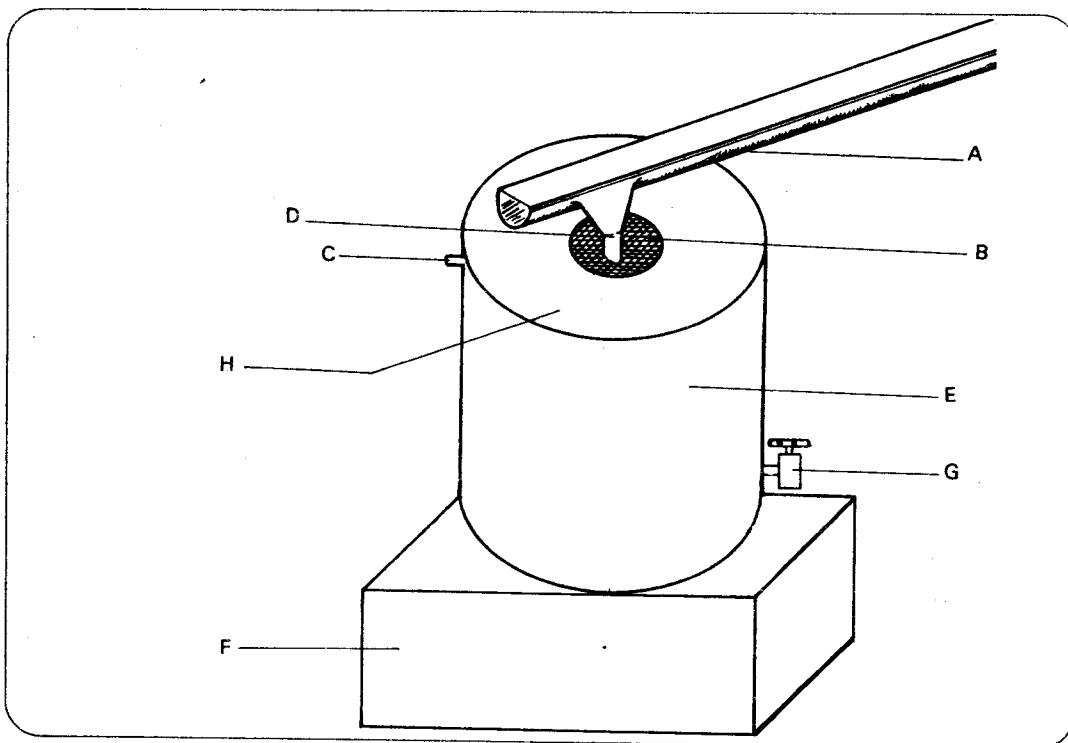
Practical 18

PRACTICAL PAPER 332/2

Time 1½ Hrs.

Answer all questions.

1. (a) Identify specimens A₁ and A₂. (2 marks).
- (b) Examine carefully the specimens you have identified and answer the following questions.
 - (i) What disease has attacked specimen A₁? (1 mark).
 - (ii) Name control measures against the disease. (1 mark).
 - (iii) What pest has affected specimen A₂? (1 mark).
 - (iv) How can this pest be controlled? (1 mark).
- (c) Examine specimen B and then answer the questions that follow:
 - (i) Identify this specimen. (1 mark).
 - (ii) What pest do you think has attacked this specimen? (1 mark).
 - (iii) What control measures can be taken against the pest? (2 marks).
2. (a) You are provided with specimens C and D.
 - (i) Identify specimen C. (½ mark).
 - (ii) What elements does it supply to plants in large amounts? (1 mark).
 - (iii) In growing maize when do you apply specimen C? (1 mark).
- (b) (i) Identify specimen D and mention the element it supplies to growing plants. (1½ marks).



- (ii) At what stage of growth is this specimen applied in maize? (1/2 mark).
 - (c) What storage precaution must be taken to protect specimens C and D before use? (1 1/2 marks).
 - (d) The diagram above represents a water-supply structure. Name the parts labelled A-H. (4 marks).
3. (a) Determine the pH of the two soil samples X₁ and X₂ provided. (6 marks).
- (b) Why is it advisable to use the following in determining the pH of the soil?
- (i) Barium sulphate. (1 mark).
 - (ii) Distilled water. (1 mark).
- (c) Which soil sample is suitable for tea growing. Give reasons. (2 marks).

Practical 19

PRACTICAL PAPER 332/2

Time 1 1/2 Hrs.

Answer all the questions.

1. You are provided with specimens labelled A-J. Examine and identify them. Also give one use of each specimen on a mixed farm. (10 marks).

<i>Specimen</i>	<i>Identity</i>	<i>Use on mixed farm</i>
A		
B		
C		
D		
E		
F		
G		
H		
I		
J		

2. Observe specimen B₁, B₂ and B₃ provided and answer the questions that follow.
- (a) Identify and give one agricultural use of each. (3 marks).

- (b) Give two maintenance practices on each of the specimen B₁ and B₂. (4 marks).
3. Examine specimens K₁ and K₂ provided and answer the questions that follow:
- (a) Identify the specimens. (2 mark).
- (b) Briefly explain the functional operation of specimen K₁. (4 marks).
- (c) Name any six main parts of specimen K₂. (3 marks).
- (d) State four advantages of specimen K₂ to a small scale farmer. (4 marks).

Practical 20

PRACTICAL PAPER 332/2

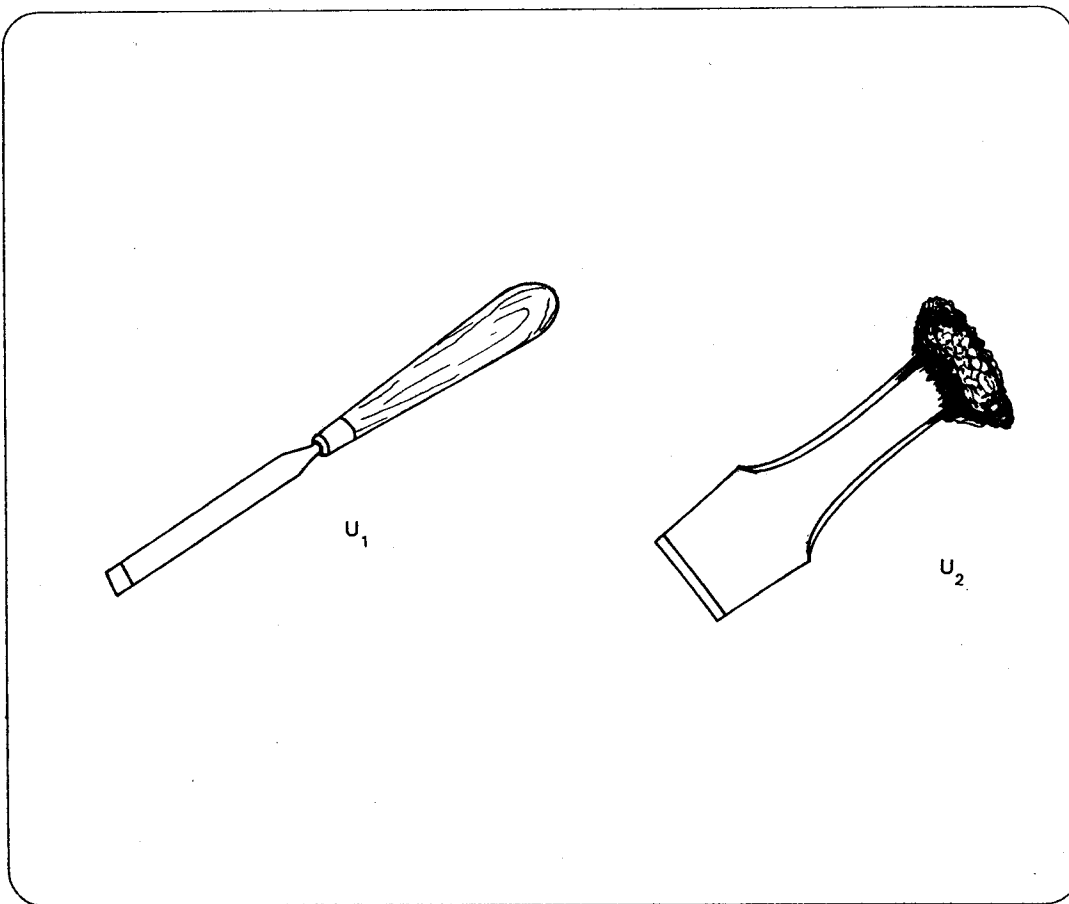
Time 1½ Hrs.

1. At the end of 1990, Mr. Maina had a good record of how he spent and received money on his mixed farm. His purchases and expenses were as follows:

Goats	2,000/=
Poultry	15,000/=
Fuel for the grinding mill	12,500/=
Dairy meat	45,000/=
Pasture seeds	5,000/=
Transportation of farm produce	15,000/=
Casual labourers	2,000/=
Ox-plough	20,000/=
Opening valuation	125,000/=
His sales and receipts were:	
Mohair	50,000/=
Rabbits	10,000/=
Pigs	35,000/=
Groundnuts	100,000/=
Fruits (Oranges)	15,000/=
Eggs to the hotel	2,500/=
Closing valuation	200,000/=

- Draw up a profit and loss account. (8 marks).
2. Examine specimen E provided and then answer the questions that follow.
- (a) Name specimen E. (1 mark).
- (b) What is the use of this specimen in a mixed farm? (2 marks).
- (c) Name and give the functions of the parts labelled 1, 2, 3 and 4 on the specimen E. (4 marks).

- (d) Give four precautionary measures that one should observe when using specimen E to ensure one's safety. (4 marks).
3. (a) Name the tools shown in the diagrams below. (2 marks).



- (b) State one functional difference between the tools represented by the diagrams U₁ and U₂. (2 marks).
- (c) Give two routine maintenance practices necessary for efficient functioning of these specimens. (4 marks).
- (d) Give two uses of each of the two specimens in the farm. (2 marks).