

MERU SCHOOL
HOLIDAY ASSIGNMENT NOVEMBER/DECEMBER 2025
AGRICULTURE FORM TWO

- **ANSWER ALL THE QUESTIONS**

LIVESTOCK PRODUCTION III
(SELECTION AND BREEDING)

1. State **four** ways of minimizing disowning of lambs by ewes
2. State the gestation period of the following farm animals
 - i) Pigs
 - ii) Rabbits
3. i) What is selection in live stock production
 - ii) State **three** methods used in selection of livestock
4. Give **four** signs of heat observed on female rabbit
5. Name **four** meat breeds of rabbits
6. State **four** reasons for cutting a breeding boar
7. List the methods of selection in livestock
8. Define the following terms as used in livestock breeding
 - i) Heterosis
 - ii) Epistasis
9. State **three** signs of heat in Does (Female Rabbits)
10. Give the gestation period of the following:
 - i) Cow
 - ii) Sow
11. State **three** disadvantages of natural methods of mating in cattle breeding
12. a) Explain the advantage of battery cage system of rearing layers
 - b) Outline **ten** factors considered when selecting dairy cattle for breeding
13. What is upgrading as used in livestock production?
14. Define the word breech of birth as used in livestock production
15. What does the term “**drift lambing**” mean in livestock production?

time. Calculate the feed conversion ratio

b) Describe digestion in the four stomachs of the ruminant animal

c) Give the significance of lubrication system

12. State **four** ways of controlling tsetseflies
13. Name **two** types of roughages
14. Name the common milk breed of goats reared in Kenya
15. Why are the element calcium and phosphorus important in the diet of young livestock?
16. Give **two** parasites of cattle which are also disease vectors
17. Give **three** control measures of fleas in a flock of layers

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CROP PRODUCTION II (PLANTING)

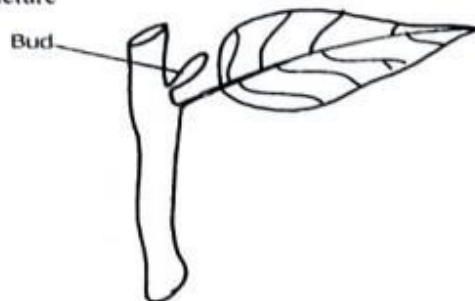
1. State **two** reasons for seed treatment of tree species before planting
2. Give **three** factors that determine spacing of beans
3. State **four** reasons for using certified seeds for planting
4. Differentiate between hybrid and composite
6. a) A farmer planted 100 maize seeds and 90 seeds germinated.
7. Calculate the germination percentage
- b) Given that maize is planted at a spacing of 75cm by 25cm, calculate the plant population in a plot measuring 4m by 3m
7. Give **four** qualities of a mother plant which should be considered when selecting vegetative material for propagation
8. Explain **five** practices that a farmer should carry out to ensure uniform germination of seeds
9. State **two** factors which determine the depth of planting
10. State **two** advantages of adding organic matter to sandy soil
11. Calculate the number of tea plants in two hectares (2ha) given that the spacing is 150cm x 75cm and one seedling is planted per hole
12. Outline **four** reasons why training is important in some crops
13. Give **four** factors that influence the depth of planting
14. Two precautions taken when harvesting cotton
15. Outline **four** reasons why training is important in some crops
16. Give **four** factors that influence the depth of planting
17. Two precautions taken when harvesting cotton
18. State **four** factors that determine the spacing of annual crops
19. Outline **four** advantages of rolling in seedbed preparation
20. List **two** factors that effect rooting of cuttings in crop production

21. Outline **three** ways of preparing materials before sowing
22. Outline **three** ways of preparing materials before sowing
23. Distinguish between over sowing and under sowing
24. Study the illustration below of a tea vegetative material and answer the questions that follow



- a) What name is given to the vegetative material drawn above for tea propagation
- b) State **two** devisable characteristics of the selected plants used to develop the plant shown
- c) Give **two** precautions observed during the preparation of the material above before planting
25. The diagram below illustrates the spacing which is used when planting beans. Study the diagram and answer the questions that follow:
 - a) State the spacing illustrated above
 - b) Suppose the student is asked to use the illustrated spacing to plant in a plot 4m by 3m leaving 30cm distance from the edge; calculate;
 - i) The number of rows on the wider side of the plot
 - ii) Calculate the plant population

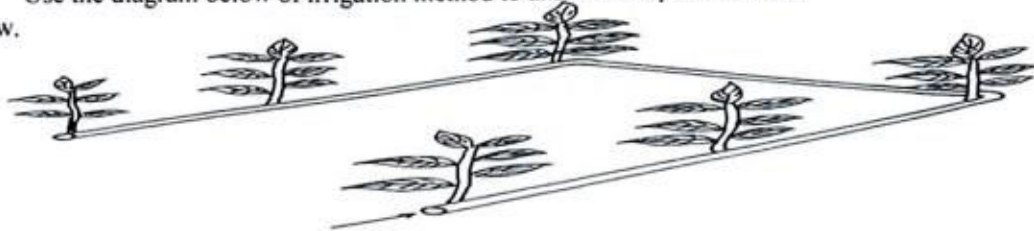
26. Using planting material whose diagram is shown below, list **four** factors that would influence the rooting of the structure



27. Describe the selection, preparation and raising of vegetative tea seedlings in the nursery
28. Explain the factors considered in timely planting of annual crops
29. Give four disadvantages of broadcasting as a method of planting.
30. Define the following terminologies as used in Agriculture
31. Give two advantages of producing crops by use of seeds over vegetative propaganda
32. State **four** ways of preparing planting materials before planting

WATER SUPPLY, IRRIGATION AND DRAINAGE

1. State **two** reasons for treating water for use on the farm
2. State **three** reasons for draining swampy land before growing crops
3. Use the diagram below of irrigation method to answer the questions that follow.

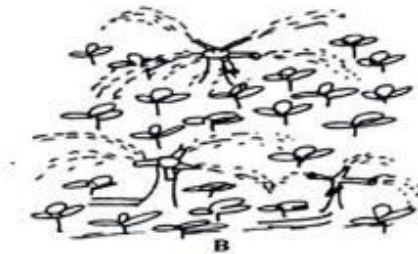


- a) Identify the method of irrigation
- b) State **four** advantages of the above irrigation system
- c) State **three** factors that determine the type of irrigation on the farm
- d) State **two** disadvantages of the above system of irrigation
4. a) What is **irrigation**
- b) Outline **three** methods of irrigation
5. a) List **four** uses of water on the farm
- b) Give **four** methods of harvesting water on the farm
- c) Outline the stages involved in water treatment process
6. List any **four** uses of water in the farm
7. State **two** types of irrigation used in Kenya
8. Outline **four** disadvantages of cambered beds
- Describe the process of water treatment
9. Give **four** roles of drainage as a method of land reclamation
10. Name **two** types of water pumps which can be used in the farm
11. Name any **four** examples of working capital in maize production

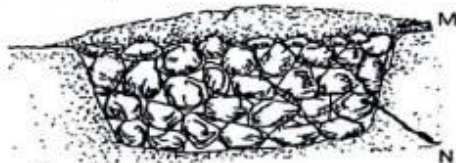
12. List **four** types of water pumps which can be used in the farm
13. State **four** methods of drainage
14. Distinguish between a **dam** and a **weir**
15. How do the government control prices of essential farm produce
16. What is the difference between pumping and piping of water in the farm?
17. List four reasons of draining water logged soils before planting.
18. Give three Agricultural practices which lead to water pollution
19. The diagrams below illustrate some methods of irrigating crops in the field.

Study the diagrams

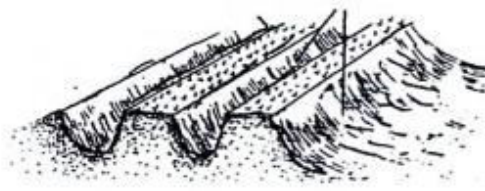
and answer the questions that follow:



- (a) Identify the methods used ; (i) A (ii) B
- (b) State **two** advantages of method A over method B
- (c) What material should be inserted at point T
- b) Name **two** farming practice that cause water pollution
20. Give **four** reasons for practicing irrigation
22. a) State **four** importance of water to plants
- b) State **four** reasons for treating water before use
- c) Describe water treatment system in a chemical treatment plant
23. Name **four** diseases caused to man by drinking untreated water
24. State the functions of the following chemicals as used in water treatment;
 - (a) Chlorine.
 - (b) Aluminum sulphate (Allum)
21. The diagrams labeled S and T illustrate some methods of draining waterlogged fields; use it to answer the questions that follow:



S



T

- (a) Identify the methods illustrated.
- (b) What are the materials in S labelled M and W.
- (c) Name two types of crops that can be planted in the field instead of carrying out the practice illustrated in Sand T.
- (d) What is the importance of carrying out land reclamation?

SOIL FERTILITY II (IN ORGANIC FERTILIZERS)

1. State **four** advantages of applying lime in clay soil
2. a) Give the form in which the following elements are absorbed by crops
 - i) Sulphur
 - ii) Nitrogen
 - iii) Carbon
 - iv) Magnesiumb) List **three** effects of nitrogen to plants
3. Mr. Malombe of Shinyalu village prepared to top dress 10 hectares of nappier grass using sulphate of ammonia (21%N). Sulphate of ammonia is applied at rate of 150kg per hectare.
Calculate
 - a) The quantity of sulphate ammonia fertilizer the farmer will need for 10 hectares
 - b) The number of 50kg bags of fertilizer he will purchase
4. Give **two** disadvantages of using farmyard manure
5. State **four** factors which influence the stage at which the crops are harvested
6. A form **four** student was given a sample of a fertilizer with the following characteristics:
 - (i) Grey in colour
 - (ii) It is granular
 - (iii) Causes no corrosion
 - (iv) It is highly hygroscopic
 - (v) It is neutral
 - (a) Identify the fertilizer
 - (b) At what stage of growth of maize should it be applied?
 - (c) Calculate the amount of K_2O contained in 400kg of a compound fertilizer 25:10:5
7. State **two** pieces of information that soil sample should have before being taken to the laboratory for testing
8. A compound fertilizer bag has the labels 20-20-0. What do the figures stand for?
9. Give **four** functions of sulphur in crops
10. State **four** advantages of lining as a measure of soil improvement
11. State **two** methods of increasing soil PH
12. (a) State **three** factors that determine the amount of inorganic fertilizers needed to be applied

to crops

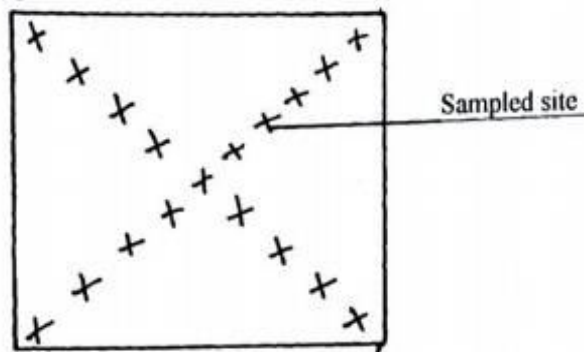
(b) What are the necessary precautions observed when carrying out soil sampling?

13. List **three** functions of nitrogen in crops

14. (a) Distinguish between fertilizer grade and fertilizer ratio

(b) List **four** elements whose deficiency results into chlorosis in plants

15. The diagram below shows a method of soil sampling



(a) Name the method illustrated in the diagram

(b) State **three** precautions taken when collecting the soil for testing using the above method

(c) Give **four** reasons why soil from the farm is tested

16. A farmer was advised to apply compound fertilizer 20-20-10 on an orchard measuring

20m X 10m at the rate of 80kg/ha. Calculate the amount of fertilizer the farmer would require

for the orchard.

(Show

your working)

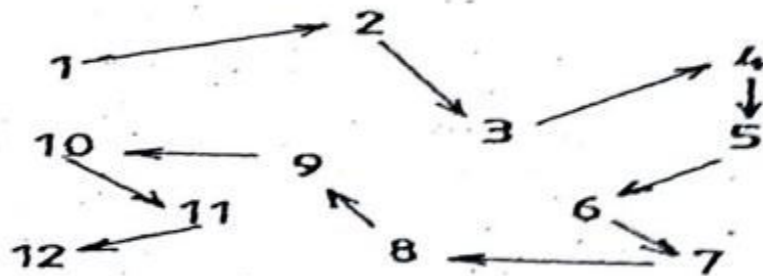
17. a) A compound of fertilizer has a fertilizer grade of 25:10:5. calculate the amount

of phosphorus fore sent in 400kg of this fertilizer

b) The diagram below illustrate methods of collecting soil sample from a field

- i) Identify the methods illustrated I-
 - ii) xx
 - iii) State **three** importance of carrying out soil sampling and testing
18. (a) What is an incomplete compound fertilizer?
- (b) State **four** reasons why a maize crop continued showing deficiency of potassium despite applications recommended amount of potassic fertilizer

19. The diagram below shows a soil sampling method.



- (a) Identify the method illustrated above
- (b) Name any **two** spots in a farm that should be avoided during sampling
- (c) Describe the steps followed while carrying out the exercise in (a) above

MERU SCHOOL
FORM 2 ART AND DESIGN HOLIDAY ASSIGNMENT
NOVEMBER/ DECEMBER 2025

SECTION A

1.

- a. State two functions of value as an element of art and design (2 marks)
- b. Contrast between symmetrical and asymmetrical balance (2 marks)
- c. Describe the role of a viewfinder in drawing (2 marks)
- d. With regard to distance, mention 3 parts of a scenery (3 marks)
- e. Distinguish between the terms hue and pigment (2 marks)
- f. Explain the term wash as it relates to painting (2 mark)
- g. Distinguish between raw edge and selvedge in weaving (2 marks)
- h. List 2 factors that determine the type of pendant (2 marks)
- i. Define the term montage (2 marks)
- j. Distinguish between structure design and applied design in fabric decoration (2 marks)
- k. Name the two resist techniques in fabric decoration (2 marks)
- l. The picture below is of a wall hanging created using batik technique. Study it.



Which is the most preferred method of removing wax from such a work. Give a reason (2 marks)

- m. Give 2 reasons for using a double container to melt to melt wax (2 marks)
- n. Identify the unique characteristic tritik technique in fabric decoration (1 mark)
- o. Name the two common defects in weaving (2 marks)

2.

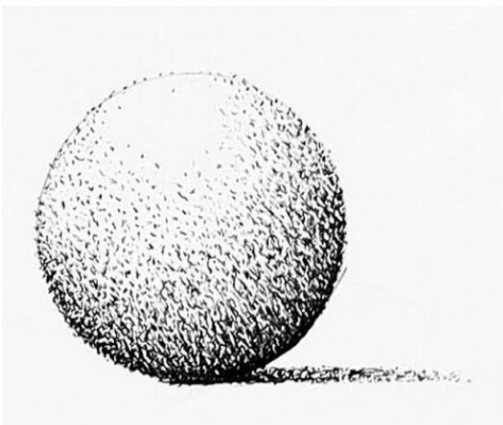
- a. The illustration below represents a technique in lettering. study it and answer the question that follow;



- i. identify the technique (1 mark)
- ii. What distinguishes this technique from the others (1 mark)
- b. Distinguish between **visual adjustment** and **mechanical adjustment** methods as ways of spacing in lettering (2 marks)
- c. Describe two ways of creating harmony in pictorial compositions (2 marks)
- d. Study the illustration presented below and answer the questions that follow;



- Identify and state the importance of this type of illustration in drawing (2 marks)
- e. What is the function of **sizing** in oil painting (2 marks)
 - f. Differentiate between applied and structured design in fabric decoration (2 marks)
 - g. With reference to the illustration below, explain what you understand by **modelling a form** using stippling technique (2 marks)

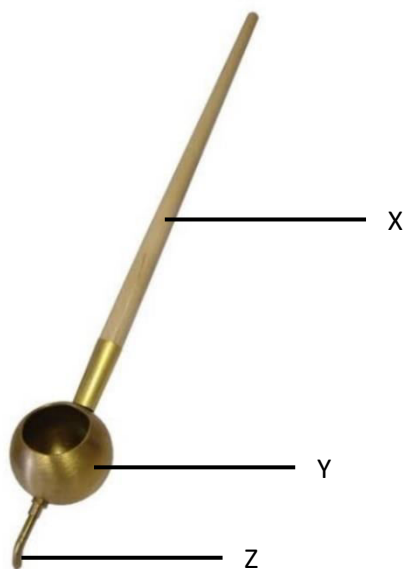


- h. Highlight one reason why bees wax and paraffin wax are mixed during the batik process (2 marks)
- i. Distinguish between a tjap and a tjant both of which are equipment used in batik (2 marks)
- j. State two reasons for washing the fabric before dyeing (2 marks)

SECTION B

Answer ALL questions in the spaces provided

3. The illustration below represents a tool used in fabric decoration. Study it.

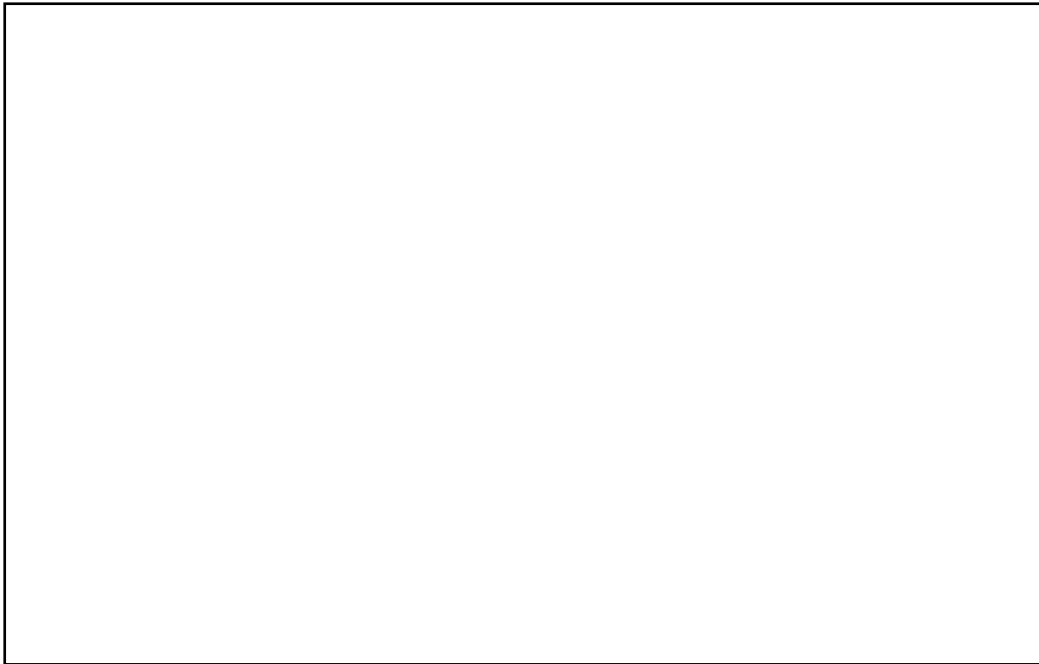


- a) What is the name of the tool? (1 mark)
- b) What advantage does this tool have over the other tools used for the same purpose (1 mark)
- c) Name the parts labelled X,Y and Z (3 marks)

4. The illustration below represents a process in tie and dye. Study it.



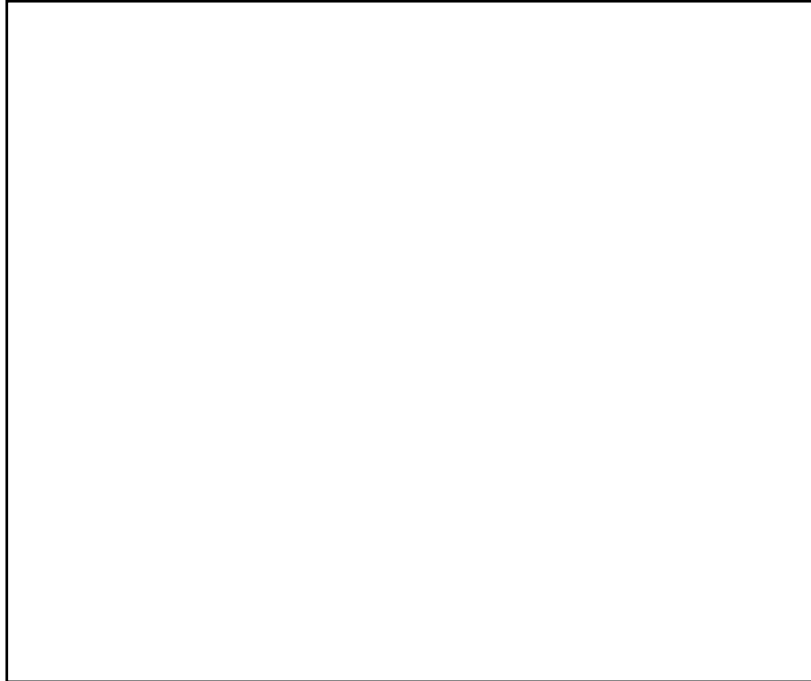
- a) What is the name of this particular process (1 mark)
 - b) Outline 4 main steps involved in the process (4 marks)
5. In the space provided below illustrate circular twinning (5 marks)



- 6. Describe the five unique characteristics of collage (5 marks)
- 7. Describe the unique qualities of the following weave structures
 - a. Warp faced weave structure (2 marks)
 - b. Weft faced weave structure (2 marks)
 - c. Open work weave structure (2 marks)
- 8. Use illustrations to explain each of the following tapestry joints

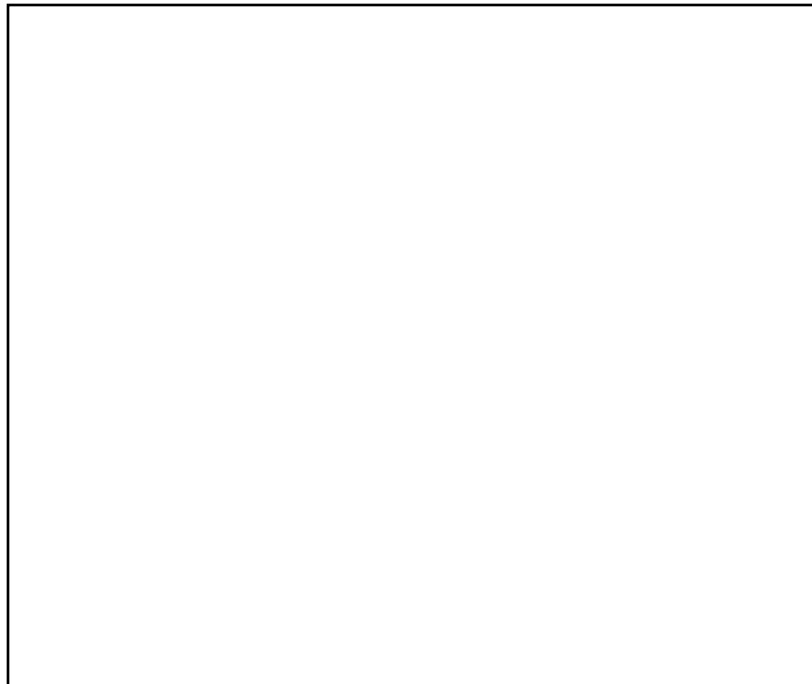
a. Slit

(2 marks)

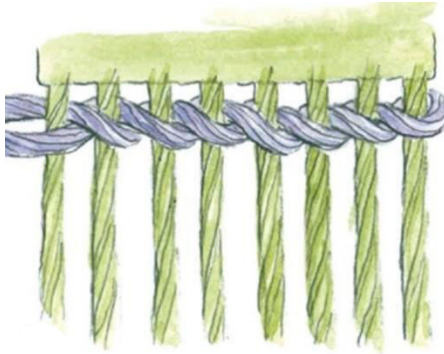


b. Interlocking

(2 marks)



9. A form 2 art and design student has approached you to assist them in a project about decorating a t-shirt in t colours using marbling technique. Describe five key steps you would insist on. (5 marks)
10. State five guidelines observed when drawing a scenery from observation in two point linear perspective (5 marks)
- 11.
- a) Define the term **chroma** (1 mark)
 - b) While providing precise examples, distinguish between monochromatic colour scheme and analogous colour scheme (4 marks)
12. The illustration below represents a technique in weaving;



- a) Identify the technique (1 mark)
- b) Name two natural and two synthetic fibres used in weaving (4 marks)

SECTION C

Answer ALL questions in the spaces provided

13. Outline 5 factors to be considered when designing a book cover (10 marks)
14. Mentioning the materials, tools and equipment, discuss the steps of making a collage pictorial composition from imagination (10 marks)
- 15.
- a. Define the term collage (2 marks)
 - b. State 3 characteristics of a collage (3 marks)
 - c. Mentioning the materials and tools, describe the process of making a collage composition from imagination (10 marks)
- 16.
- a. Explain each of the following functions of a woven item

- i. status symbols (1 mark)
 - ii. aesthetics (1 mark)
- b. Outline three factors to be considered when selecting the length of warps to be used on a heddle loom (3 marks)
- c. With the aid of well labelled illustrations, describe the process of warping a rigid heddle loom (10 marks)

Practicals:

17.

- a. Guided by the theme sports, generate 15 stick figures in the space provided below (15 marks)
- b. In the space provided below draw a self portrait in $\frac{3}{4}$ view (5 marks)
- c. Working with the Head units, come up with a sketch detailing the proportions in the human figure (5 marks)
- d. Carry out study drawings of the hand (10 marks)

MERU SCHOOL
HOLIDAY ASSIGNMENT NOVEMBER/DECEMBER 2025
BIOLOGY FORM TWO

- **ANSWER ALL QUESTIONS**

TRANSPORT IN PLANTS AND ANIMALS

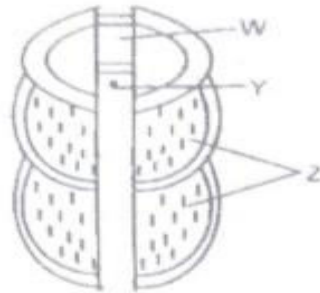
1. State the role of the following: (3mks)
 - i) Sino Atrial Node
 - ii) Atriorendricular Node
 - iii) Chordinae tendenae
2. State three factors that determine the health of the cardiovascular system. (3mks)
3. Most often, cornea transplants are not rejected by the recipient immune system. Suggest a reason. (2mks)
4. Describe the role of blood in;
 - i) Development of organisms. (2mks)
 - ii) Excretion (2mks)
 - iii) Homeostasis (2mks)
5. Name the structures in phloem that are involved in the translocation of sugars. (2mks)
6. Other than sugars name four compounds that are translocated by the phloem. (2mks)
7. Draw a well labelled diagram of internal structure of a dicotyledonous stem. (2mks)
8. Discuss the structural factors that increase the rate of transpiration. (10mks)
9. Explain the role of erythrocytes in transport of respiratory gases. (6mks)
10. Explain how blood clotting occurs. (6mks)

GASEOUS EXCHANGE
PAST KCSE QUESTIONS ON THE TOPIC

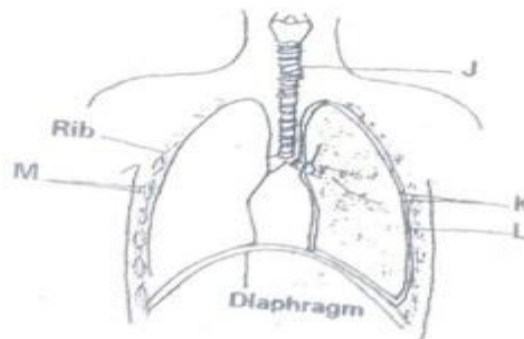
1. Discuss how gaseous exchange occurs in:
 - a) Terrestrial Insects.
 - b) Boy fish
2. a) Explain how mammalian lungs are adapted for gaseous exchange.
 - b) Describe how carbon (IV) oxide produced by
 - i) Respiring muscle cells reaches the alveolar cavities in mammalian lungs.
 - ii) Respiring mesophyll cells of flowering plants reaches the atmosphere.
3. a) Describe the path taken by carbon dioxide released from the tissues of an insect to the atmosphere.
 - b) Name two structures used for gaseous exchange in plants.
4. Why are gills in fish highly vascularized?
5. Describe the

- a) Process of inhalation in mammals.
 - b) Mechanism of opening and closing of stomata
6. Name three sites where gaseous exchange takes place in terrestrial plants.
 7. How is aerenchyma tissue adapted to its function?

8. The diagram below represents a part of the rib cage.



- a) Name parts labeled W, Y and Z.
 - b) How does the part labeled Z facilitates breathing in?(1mk)
9. State two ways in which floating leaves of aquatic plants are adapted to gaseous exchange. (2mks)
10. a) Name two structures for gaseous exchange in aquatic plants. (2mks)
 - b) What is the effect of contraction of the diaphragm muscles during breathing in mammals? (3mks)
11. The diagram below represents some gaseous exchange structures in humans.



- a) Name the structure labeled K, L and M (3mks)

- b) How is the structure labeled J suited to its functions? (3mks)
- c) Name the process by which inhaled air moves from the structure labeled L into blood capillaries. (1mk)
- d) Give the scientific name of the organism that causes tuberculosis in humans. (1mk)
12. State three factors that make alveolus adapted to its function. (3mks)
13. Explain how the alveoli are ventilated.
14. Explain why water logging of the soil may lead to death in plants. (2mks)
15. Write three advantages of breathing through nose than through mouth. (3mks)
16. State and explain ways the leaves are adapted for gaseous exchange (4mks)
17. Name three gaseous constituents involved in gaseous exchange in plants. (3mks)
18. Name three sites of gaseous exchange in frogs. (3mks)
19. Name the main site of gaseous exchange in
- a) Mammals
- b) Fish
- c) Leaves
- d) Amoeba (4mks)
20. Name the physiological process by which gas exchange takes place at the respiratory surface in animals and plants (1mk)

RESPIRATION

1. Giving equations distinguish between aerobic and anaerobic respiration. (4mks)
2. State ways in which anaerobic respiration differs from anaerobic respiration. (4mks)
3. i) What is oxygen debt? (1mk)
 ii) How does the body overcome oxygen debt? (2mks)
 iii) Explain what leads to oxygen debt in human muscles? (2mks)
4. distinguish between facultative and obligate anaerobes. (2mks)
5. the complete oxidation of the fat tristearin is summarized below

$$2C_{57}H_{110}O_6 + 163O_2 \longrightarrow 114CO_2 + 110H_2O + \text{Energy}$$
 Calculate the respiratory quotient for the complete oxidation of the fat. (2mks)
6. The concentration of lactic acid in blood during and after a ten minutes exercise was determined. The results are shown in the table below;

Time in minutes	0	10	15	30	40	55
Lactic acid concentration (Mg/100cm ³)	20	80	96	72	54	52

- a) On a grid, draw the graph of lactic acid concentration against time. (6mks)
- b)
 - i) At what rate did the lactic acid increase at the end of 10 minutes? (2mks)
 - ii) After how many minutes was the lactic acid concentration 60mg/100cm³? (2mks)
 - iii) What would be the concentration of lactic acid if the experiment were extended for another 5 minutes? (1mk)
- c) Explain why there was a rapid increase of lactic acid during the exercise. (2mks)
- d) Account for the decrease in the concentration of lactic acid after the 13th minute. (2mks)
7. Some students soaked some seeds in a vacuum flask full of sand. They determined the temperature in the plants from the first day up to the 14th day. The average temperature per day were recorded as shown below;

Day	Average temperature
1	22
2	22
3	24
4	25
5	28
6	32
7	38
8	37
9	36
10	39
11	28

- a) Plot a graph of temperature against time in days. (6mks)
- b) Explain the results obtained in the first two days. (2mks)
- c) Suggest the process that resulted to changes in temperature from the third day. (1mk)
- d) Account for the shape of the curve between day 4 and day 7. (4mks)
- e) Name an enzyme that enhanced changes in temperature from day 3. (1mk)
- f) Account for the shape of the curve between day 8 and day 11. (3mks)
8. Describe the applications of anaerobic respiration by human. (20mks)
9. Describe the process of anaerobic respiration. (20mks)

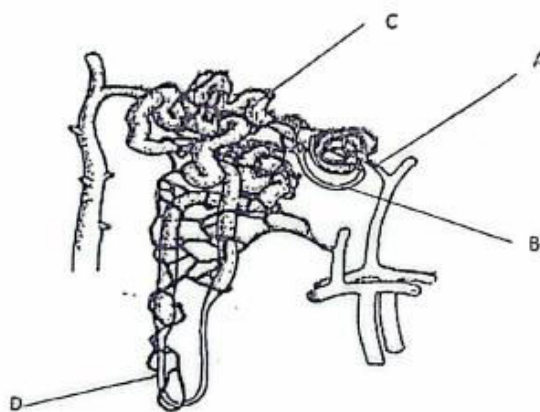
10. The following table shows energy requirements and nutrients of individuals in different age groups and sexes.

Occupation and Age	Energy Requirement	Nutrients		
		Protein (Mg)	Iron (Mg)	Calcium (Mg)
Retired male	6400Kj	25	4.2	0.4
Mason	14200Kj	110	16.6	1
Teenage Boy	14900Kj	112	17.0	1.2
Retired Female	4,400Kj	16	2.1	0.1
Pregnant Housewife	10,300Kj	110	24	1.5
Teenage Girl	9,800Kj	116	22.1	1.1

- a) Account for the differences in energy and nutrients requirements between:
- Teenage girl and teenage boy. (2mks)
 - Retired female and pregnant housewife. (2mks)
 - Retired male and mason. (2mks)
- b) Other than age and occupation, give other factors that influence energy requirement in man. (3mks)
- c) State two functions in each case for calcium and iron in the body. (4mks)

TOPICAL QUESTIONS: EXCRETION AND HOMEOSTASIS

- (1) Small birds like the European robin puff up (swell up) their feathers during winter. Explain the significance of this behavioral response. (3 marks)
- (2) Animals have complex excretory organs as compared to the plants. Explain. (2 marks)
- (3) Name two parts in the kidney nephron where re-absorption of water takes place. (2mks)
- (4) Describe the effects of high osmotic pressure of the body fluids on urine formation (5mks)
- (5) The figure shown below represents a mammalian structure. Use it to answer the questions that follow



- (a) Name parts labeled A, C, and D on the diagram (3 marks)
- (b) (i) State structural difference between Part A and B (1mark)

(ii) State the importance of the above difference in (b) (i) above (1 mark)

(c) Explain how part D is adapted to its function. (2marks)

(d) Name two materials found in B and absent in D (2 marks)

(6) State the function of the following parts of the kidney nephron: (2mks)

(i) Proximal convoluted tubule

(ii) Loop of Henle

(7) State one way certain plants get rid of the following metabolic wastes: (2mks)

a) Excess water:

b) Caffeine:

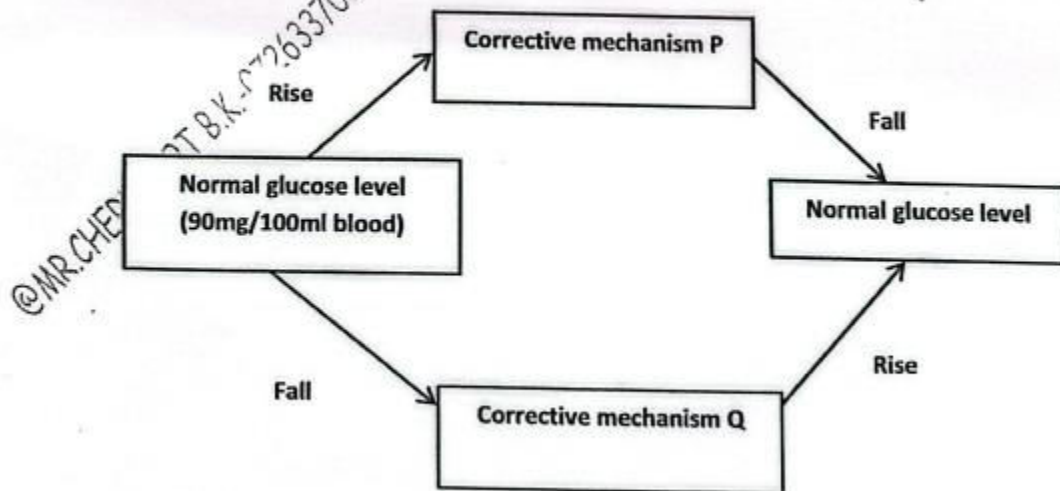
(8) Explain the role of the following parts of the mammalian skin (3mks)

(i) Malphigian layer:

(ii) Sweat gland:

(iii) Sebaceous gland:

(9) The diagram below shows how blood glucose in mammalian body is regulated.



a) Explain what happens during corrective mechanism P. (3mks)

(b) Name the hormone involved in corrective mechanism Q (1mk)

(10) What is the fate of excess amino acids in the human body (3mks)

(11) Give reasons for each of the following statements:-

(a) Constant body temperature is maintained in the body (2mks)

(b) Low blood sugar is harmful to the body (2mks)

- (12) A certain organ K was surgically removed from a rat. It was later found that there was a drastic increase in glucose level in the blood. When substance Q was injected into the animal the glucose in the blood went back normal. Identify
- Organ K: (1mk)
 - Substance Q: (1mk)
- (13) Name the **three** processes that take place in the liver to bring about difference in composition of blood in hepatic portal vein and hepatic vein. (3 marks)
- (14) a) What problems are experienced by fresh water and marine fish in their habitats? (2 marks)
- (b) Compare how the fresh water and marine fish overcome the problem identified above. (4mks)
- c) Explain why a person discharges urine more often when the environmental temperatures are low than when they are high. (2 marks)
- (15) The equation below represents a metabolic process that takes place in the mammalian liver.
- Amino acids $\longrightarrow$ Organic compound + Urea
- Identify the process: (1mk)
 - Name the process in which nitrogen is excreted in amoeba: (1mk)
- (16) State three adaptations of the proximal convoluted tubule to its function. (3 marks)
- (17) Explain how animals are adapted to cold climate. (3marks)
- (18) A certain organ K was surgically removed from a rat, later drastic increase in glucose level in the blood was reported but when substance Q was injected into the animal the whole process was reversed.
- Identify:
- Organ K:
 - Substance Q:
- (19) Explain why small mammals such as moles feed more frequently than larger ones such as elephants
- (20) Explain why a rat, though small eats more frequently than an elephant.
- (21) Explain the following:-
- (a) Fresh water fish excrete ammonia
- (b) Glucose is absent in urine yet present in glomerular filtrate:
- (22) (a) State **two** functions of the kidney
- (b) Name **two** substances that are not found in urine of a healthy person
- (c) Name **two** diseases that affect the kidney
- (23) (a) State **two** structural modifications of the kidneys of deserts animals like kangaroo rat.

(b) Describe how ingestion of very salty food may reduce the amount of water excreted in urine.

(24) A student mixed a sample of urine from a person with Benedict's solution and heated, the colour changed to orange.

(a) What was present in the urine sample?

(b) What did the student conclude on the health status of the person?

(c) Which organ in the person may not be functioning properly?

(25) (a) If the human pancreas is not functional:-

(a) Name the hormone which will be deficient:

(b) Name the disease the human is likely to suffer from:

b) What is diuresis?

(26) State one structural adaptation of nephron in the kidney of a desert mammal

(27) Name the nitrogenous wastes excreted by the following organisms:-

Animal	Nitrogenous Waste
--------	-------------------

(i) Desert mole

(ii) Marine fish

(iii) Tilapia

(28) The table below shows description of sizes of glomeruli-renal tubules of two animals which are living in different environments

	Animal X	Animal Y
Glomeruli	Large and few	Small and many
Renal tubules	Short	Long

(a) Name the likely environment in which each animal lives :

(b) What role does vasoconstriction play in thermoregulation?

(29) The table below shows the approximate percentage concentration of various components in blood plasma entering the kidney, glomerular filtrate and urine of a healthy human being

Component	Plasma	Glomerular filtrate	Urine
Water	90	90	94
Glucose	0.1	0.10	0.00
Amino acids	0.05	0.05	0.00
Plasma proteins	8.0	0.00	0.00
Urea	0.03	0.03	2.00
Inorganic ions	0.72	0.72	1.50

(a) Name the process responsible for the formation of glomerular filtrate:

(b) What process is responsible for the absence of glucose and amino acids in urine?

(c) Explain why there are no plasma proteins in the glomerular filtrate?

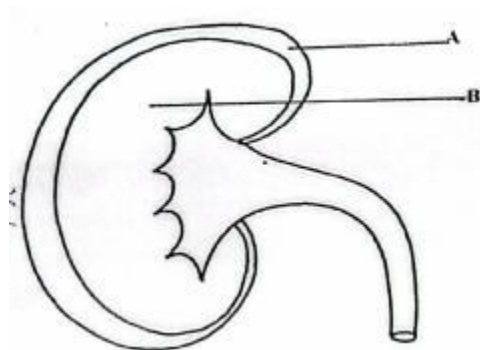
30. What is the importance of sebaceous glands in the human skin?

31. Explain why sweat accumulates on a person's skin in a hot humid environment.

(32) Distinguish between diabetes mellitus and diabetes insipidus

(33) State two processes through which plants excrete their metabolic wastes.

(34) The figure below shows a vertical section through a mammalian kidney.



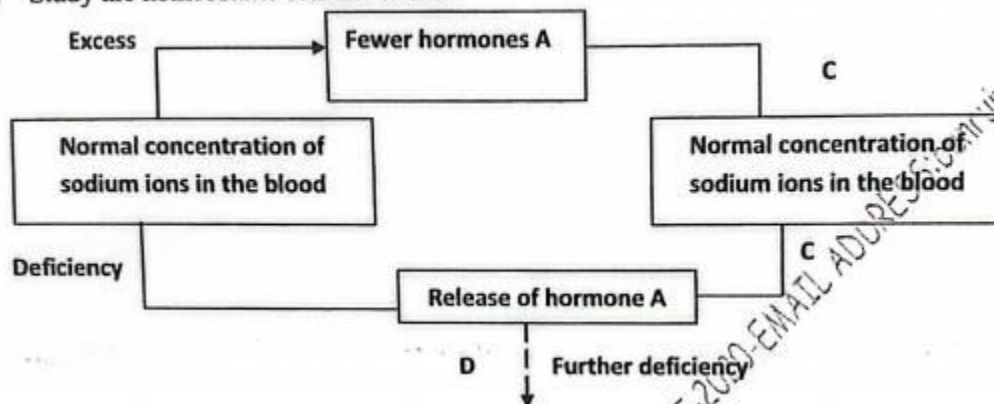
(a) Label the parts A and B:

(b) Which part is the Bowman's capsule found?

(35) (a) Explain the effects of the production of large amounts of Antidiuretic hormone in the human body.

(b) State two functions of the loop of Henle

(36) Study the homeostatic scheme below:



(a) Identify the hormone labeled A:

(b) Name the site of action of hormone A:

(c) Identify the feedback labeled D

(37) State three importance of Osmosis in animals

(38) A patient was complaining of thirst most of the times. A sample of the patient's urine was found not to contain a lot of sugar but was dilute:-

(a) Name the hormone the person's body was deficient of :

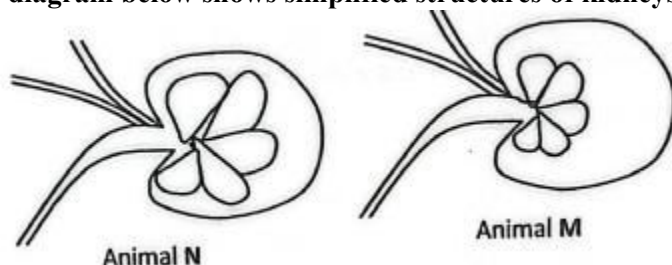
(b) Which gland produces the above hormone:

(c) Name the disease that the patient was most likely suffering from:

- (39) State two features in the nephron that facilitate ultra-filtration.
- (40) The table below shows a description of size of glomeruli and renal tubules of two animals which are adapted to living in different environment: -

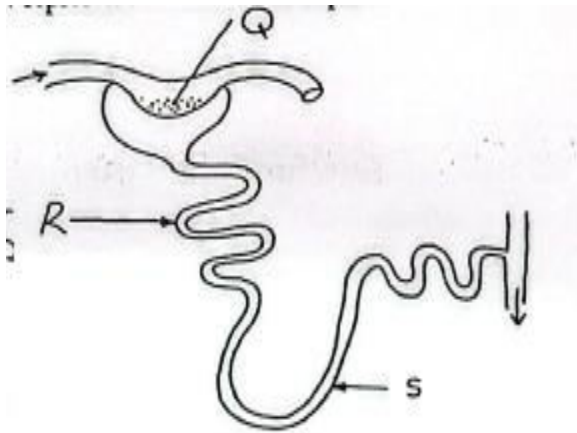
	Animal A	Animal B
Glomeruli	Large and few	Small and many
Renal tubules	Short	Long

- a) Name the likely environment in which animal A lives
- b) Suggest the main nitrogenous waste produced by animal B:
- c) Name the organelle of osmoregulation in each of the following animal:
- Paramecium
 - Insects
- (41) What role is played by the liver in excretion?
- (42) The equation below represents a metabolic process that occurs in the mammalian liver:
- (43) A person was found to pass out large volume of dilute urine frequently. Name the:-
- Disease the person was suffering from:
 - Hormone that was deficient:
- (44) Explain the effects of the following on the quantity and composition of urine:
- Drinking large amount of lean water:
 - Drinking very salty soup
 - Removal of pancreas:
- (45) (a) Distinguish between excretion and egestion
- (b) State the importance of excretion in the bodies of living organisms.
- (46) The diagram below shows simplified structures of kidneys from two different animals.



- (a) Suggest possible habitat in which animal N is found:
- (b) Give two reasons for your answer in (a) above.
- (47) (a) What is poikilotherm?
- (b) State two classes of phylum chordata where all members are poikilothermic.

- (48) The diagram below represents a mammalian nephron.



(a) Name the structure labelled Q

(b) State two adaptations of part labeled R

(49) Distinguish between internal environment and external environment as used homeostasis.

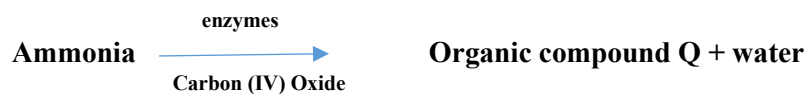
(50) The diagram below represents a nephron of a mammal:



(a) Name the parts labeled A, B and D:

(b) Name a major substance of glomerular filtrate whose concentration remains the same between A and C:

(51) The equation below represents a metabolic process that occurs in a certain organ in the mammalian body:-



(a) Name the process represented in the equation:

(b) Name the organ in which the process occurs:

(c) Why is the process important to the mammal?

(d) Identify the organic compound Q.

(e) Explain the source of ammonia in the organ named in (b) above.

(f) What happens to organic compound Q?

(52) The table below shows the percentage of some substances in the glomerular filtrate and urine of a certain mammal:

Substances	Contents in glomerular filtrate	Contents in urine
Water	90	90
Sodium ions	0.3	0.35
Chloride ions	0.37	0.60
Glucose	0.1	0.0
Urea	0.03	2.0
Proteins	0.0	0.0

(a) From the above table, account for ;

(i) The absence of glucose in urine

(ii) The absence of protein in both glomerular filtrate and urine

(b) Explain the significance of the flow system in the nephron where the glomerular filtrate flows in opposite direction to that of blood in the surrounding capillaries

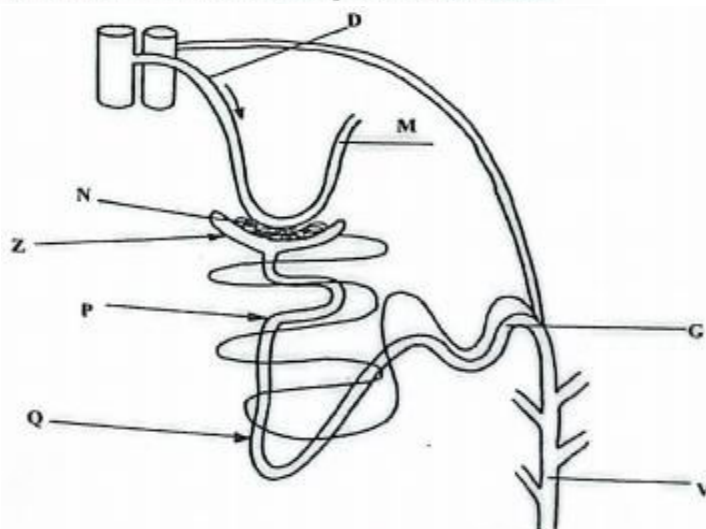
(c) Name the hormone that controls the percentage of water in urine and that which control the amount of salts

(i) Percentage of water

(ii) Amount of salts

(d) List any two diseases/disorders of the kidney

(53) Study the diagram below and answer the questions that follow



(54) In an investigation, two persons A and B drank the same amount of glucose solution. Their blood sugar levels were determined immediately and thereafter at intervals of one hour for the next six hours. The results were as shown in the following table:

Time (hrs)	Blood glucose level (mg/100ml)	
	Process A	Person B
0	90	120
1	220	360
2	160	370
3	100	380
4	90	240
5	90	200
6	90	160

(a) Draw a graph of blood sugar levels of persons A and B against time on the same axis.

(b) Explain each of the following observations:

(i) Blood sugar level increased in person A between 0 and 1 hour

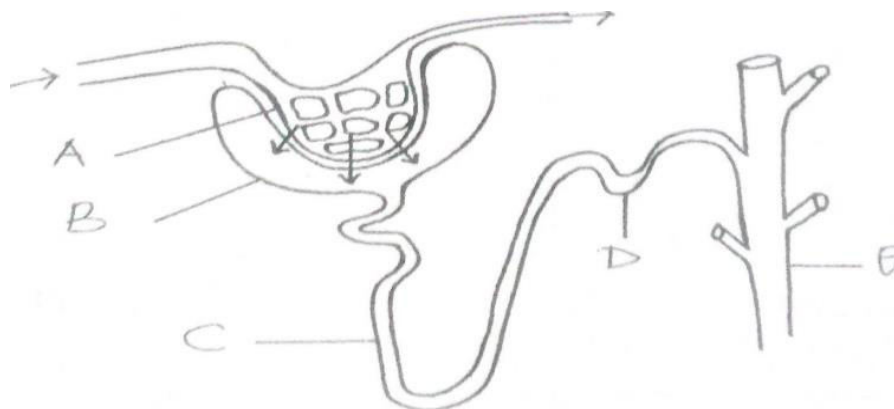
- (ii) The blood sugar level dropped in person A between 1 and 1 hours.
- (c) From the graph, what is the normal blood glucose sugar level for human beings;
- (d) Suggest a reason for the high sugar level in person B
- (e) How can the high blood sugar level in person B controlled?
- (f) What is the biological significance of maintaining a relatively constant sugar level in a human being?
- (g) Account for the decrease in the blood glucose level of person B after 4 hours.

55. An experiment was carried out to determine the effect of drinking on excess amount of water on the flow of urine. A person drinks one litre of water and urine was collected at intervals of 15 minutes:

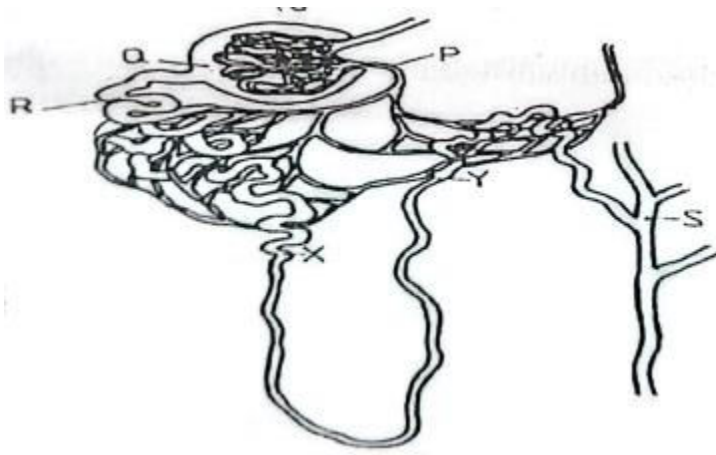
The results were as shown below:

Time in minutes	0	15	30	45	60	75	90	105	120	135
Urine output (ml/min)	1.6	1.6	1.6	5.4	9.0	9.0	7.6	3.0	0.8	0.8

- a) Plot a suitable graph to represent urine output with time.
 - b) Explain the rate of flow of urine between the following times:
 - (i) 15 and 60 minutes
 - (ii) 60 and 75 minutes
 - (iii) 75 and 135 minutes
 - c) Name two hormones responsible for regulation of relative amount of salts and water in a man.
- (56) a) Explain how urea is formed in the human body.
- b) Describe the path taken by urea from the organ where it is formed until it is released from the human body.
- (57) The diagram below represents a mammalian nephron:



- (a) Name the structures labeled B, C and D.
 - (b) Name the process by which substances are reabsorbed from structure C into blood capillaries.
 - (c) How is the pressure in structure A achieved?
- (58) How does an Endotherm respond to both heat gain and heat loss?
- (59) The diagram below represents a mammalian nephron.



- (a) Name the Structure labelled P and X,
- (b) State the structural modifications of the part labelled Q for:
- Desert mammals
 - Fresh water mammals
- (c) (i) Name one substance present at point R but absent at point S in a healthy mammal.
- (ii) The appearance of the substance you have named in ©(i) above is a symptom of a certain disease. Name the disease:
- (60) Describe how the mammalian skin regulates body temperature. (20mks)

CLASSIFICATION II

- Discuss the economic importance of members of kingdom:
 - Fungi (20mks)
 - Monera (10mks)
- State the characteristics of members of the division pteridophytes. (5mks)
- Compare and contrast algae and fungi. (3mks)
- State the differences between division Bryophyta and division Pteridophyta. (3mks)

MERU SCHOOL

HOLIDAY ASSIGNMENT NOVEMBER/DECEMBER 2025

C.R.E FORM TWO

ANSWER ALL QUESTIONS

SAMPLE 1

1.
 - a) Explain how the teaching and learning of Christian Religious Education helps in achieving national goals of education. (6mks)
 - b) Outline the effects of Bible translation to Africans. (3mks)
 - c) Give 3 ways how social media is used to spread the gospel. (3mks)

2.
 - a) Describe the covenant ceremony between God and Abraham (Gen 15:1-19). (8mks)
 - b) Explain 4 ways how baptism qualifies to be a covenant. (6mks)
 - c) Give elements of Jewish worship found in Christian worship today. (6mks)

3.
 - a) Explain 6 ways used by King David to promote the worship of Yahweh in Israel. (12mks)
 - b) Explain 4 life skills used by prophet Elijah to fight against false religion in Israel. (8mks)

4.
 - a) Give 6 conditions that made it difficult for prophet Elijah to stop idolatry in Israel. (6mks)
 - b) State 4 differences between Yahweh worship and Canaanite worship. (3mks)
 - c) Outline the relevance of prophet Elijah's mission to Christians today. (6mks)

5.
 - a) State 6 African traditional practices that undermine the dignity of women. (6mks)
 - b) Give ways in which God is worshipped in African traditional society. (7mks)
 - c) Explain the African understanding of a community. (7mks)

6.
 - a) Explain the significance of rituals conducted during the naming ceremony in Traditional African Communities. (6mks)
 - b) Give 7 moral values acquired during marriage in Traditional African Communities. (7mks)
 - c) State 5 reasons why traditional African Communities fear death. (5mks)

SAMPLE 2

1.

a) State and explain 4 ways how Jesus fulfilled Isaiah's prophecy concerning the Messiah.

(8mks)

b) What does the magnificent reveal about the nature of God?

(6mks)

c) State ways in which Christians show gratitude to God.

(6mks)

2.

a) Describe Zachariah's vision in the temple (Lk 1:8-22).

(7mks)

b) Give the teachings of Jesus about John the Baptist.

(6mks)

c) State and explain reasons why practices may be abused by some people in the modern society.

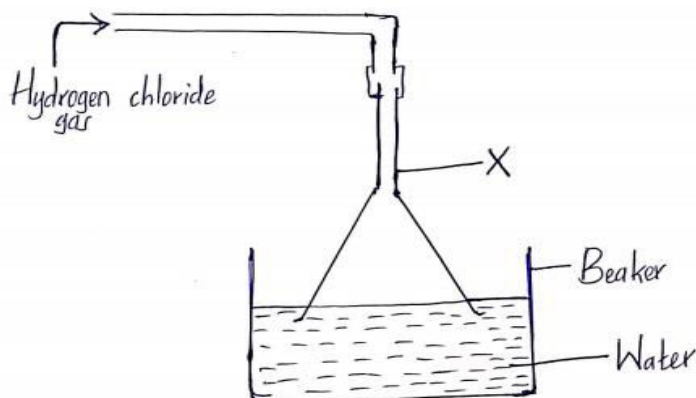
(6mks)

MERU SCHOOL
HOLIDAY ASSIGNMENT NOVEMBER/DECEMBER 2025
CHEMISTRY FORM TWO

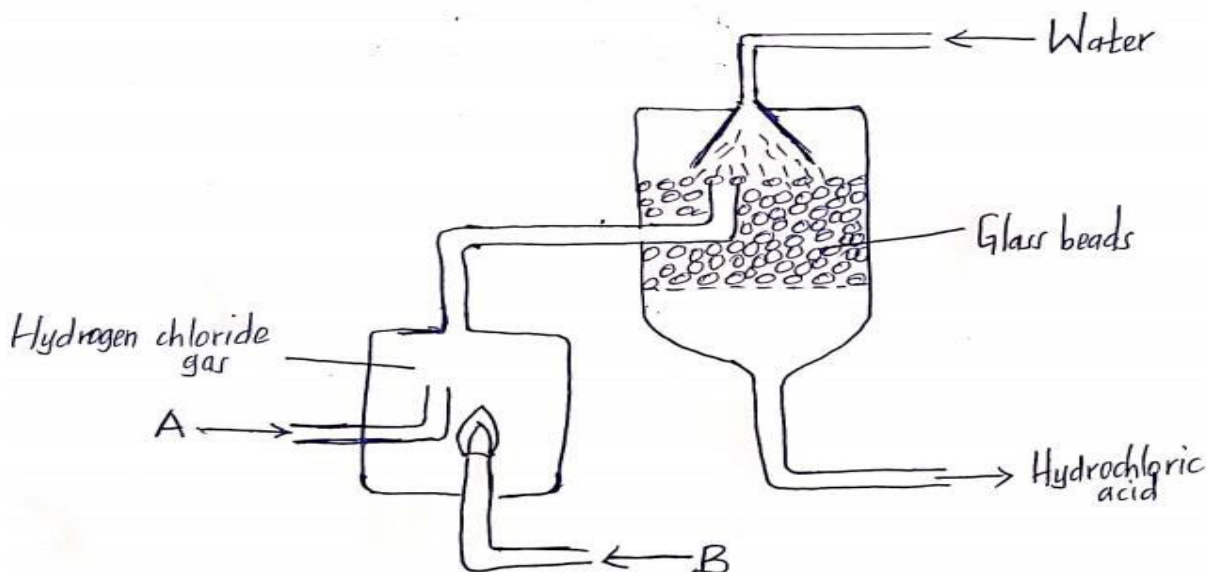
- **READ AND MAKE NOTES ON NITROGEN AND COMPOUNDS AND SULPHUR AND COMPOUNDS.**

- **ANSWER ALL THE FOLLOWING QUESTIONS**

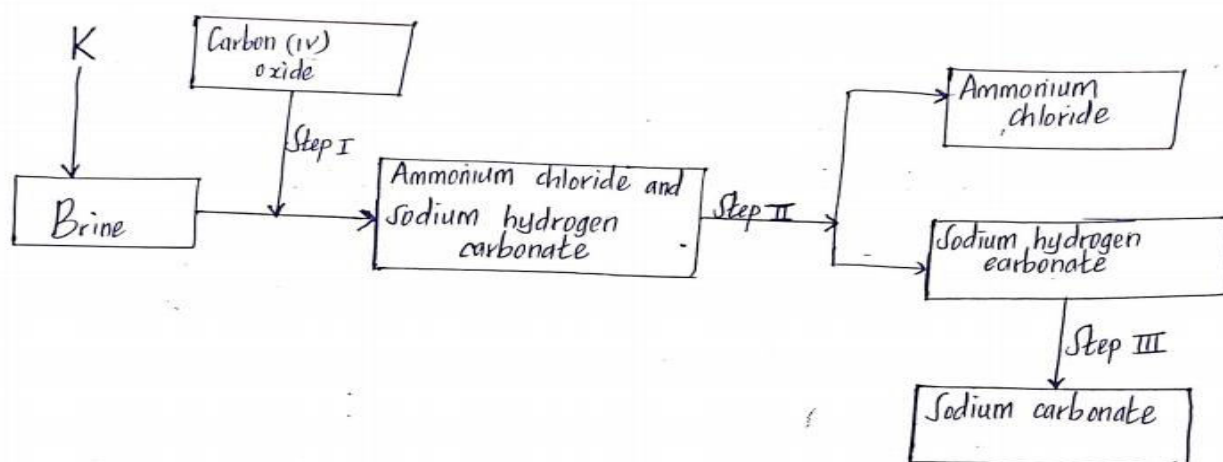
1. Describe the industrial process that is used to obtain nitrogen from air in a large scale.
(4mks)
2. a) The set up below was used to prepare a solution of Hydrogen Chloride gas. Study it and answer the questions that follow:



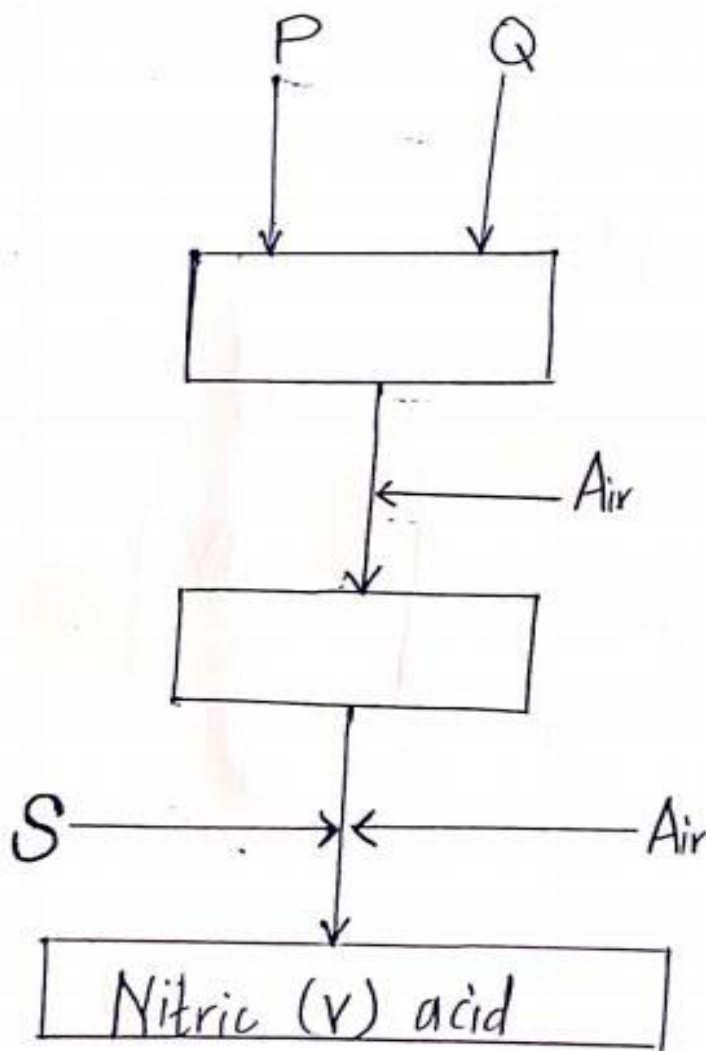
- i) Name apparatus X. (1mk)
 - ii) State the function of apparatus X. (1mk)
 - b) State and explain the observation made when blue litmus papers are put in a solution of Hydrogen chloride gas in water and in Methylbenzene. (2mks)
3. a) The diagram below shows a set-up that can be used for industrial manufacture of hydrochloric acid. Study it and answer the questions that follow:



- a) i) identify gas A and B. (2mks)
 ii) Why is gas B flown in through a jet. (1mk)
4. What are: (2mks)
 - i) CFC
 - ii) DDT
5. a) State the main reactants and the essential condition required for the laboratory preparation of nitrogen gas. (2mks)
 b) Explain the observation made when hot magnesium is lowered into a gas jar containing nitrogen gas. (1mk)
6. a) Write a balanced chemical equation leading to the formation of nitrogen (I) oxide. (1mk)
 b) Give one distinctive property of nitrogen (I) oxide that relates to its use as an anesthetic. (1mk)
7. a) Identify the method of collecting nitrogen (II) oxide. (1mk)
 b) Describe a simple chemical test to distinguish between nitrogen (II) oxide and nitrogen (I) oxide. (1mk)
8. a) Apart from copper and concentrated nitric (V) acid, thermal decomposition of some nitrate salts;
 - i) identify the most preferred nitrate salt. Give a reason. (1mk)
 - ii) write an equation for the change involved when the salt in (i) above is heated. (1mk)
- b) Describe how the two gases as shown in a(ii) above are separated. (2mks)
9. State two properties of carbon (iv) oxide that makes it suitable for use in fire extinguishers. (2mks)
10. Explain why graphite is used in making of pencil leads. (2mks)
11. When carbon (iv) oxide was passed through aqueous calcium hydroxide a white suspension was formed.
 - a) Write an equation for the reaction that took place. (1mk)
 - b) State and explain the changes that would occur when carbon (IV) oxide gas is bubbled through the white precipitate. (2mks)
12. The chart below shows some of the steps in manufacture of sodium carbonate in Solvay Process



- a) Identify substance K. (1mk)
 - b) Name the process taking place in step II. (1mk)
 - c) Write an equation for the reaction which takes place in step III. (1mk)
 - d) With the use of an equation, explain how ammonium chloride is removed from this process. (2mks)
13. Carbon (II) oxide is described as a “silent killer.”
- a) State one physical property of carbon (II) oxide that makes it a “silent killer”. (1mk)
 - b) State and explain one chemical property that makes carbon (II) oxide poisonous to human beings. (1mk)
14. a) What is meant by the term global warming. (1mk)
- b) State the disadvantage of C.F.C. based compounds. (1mk)
15. The figure below is a flow chart that shows the process that occurs in the manufacture of nitric (V) acid.



a) Name substance: (4mks)

P.....

Q.....

R.....

S.....

b) To obtain R ammonia is heated at 900°C in the presence of air and catalyst. The product is then cooled in air. Name the catalyst. (1mk)

16. Fill the following table. (3mks)

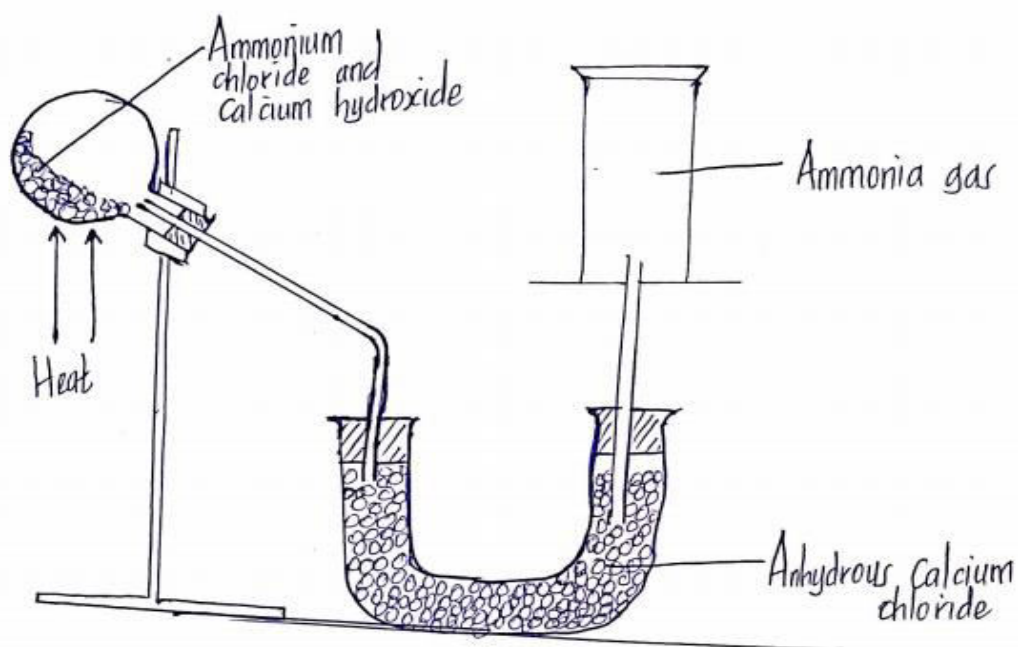
Metal nitrate	Products
	Metal nitrite + oxygen
Zinc nitrate	
	Metal, nitrogen (IV) oxide and oxygen

17. Describe how nitrates are tested in the laboratory.

18. Explain effects of nitrogen (IV) oxide to human beings.

(2mks)

19. The diagram below shows an experimental set up by a student for the preparation of dry ammonia. Study and answer the questions that follow:



a) Identify with a reason a mistake in the set up. (1mk)

b) Write an equation for the reaction in the formation of ammonia. (1mk)

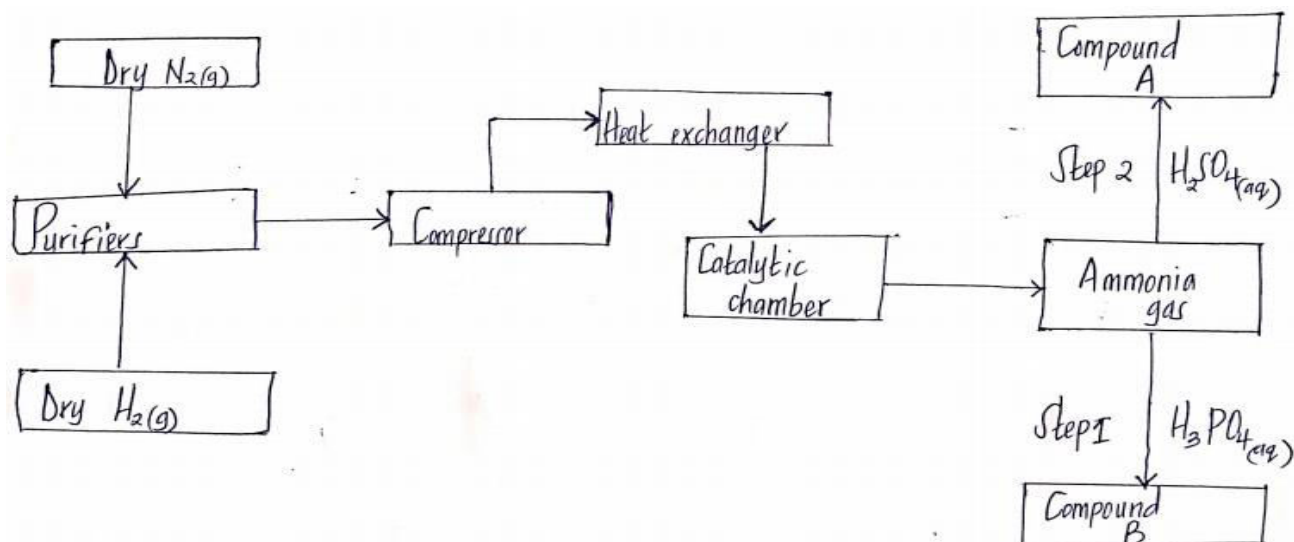
c) Name the method used to collect the gas and state why it is chosen. (2mks)

d) State the expected observation, when 1cm³ of aqueous copper nitrate is mixed with;

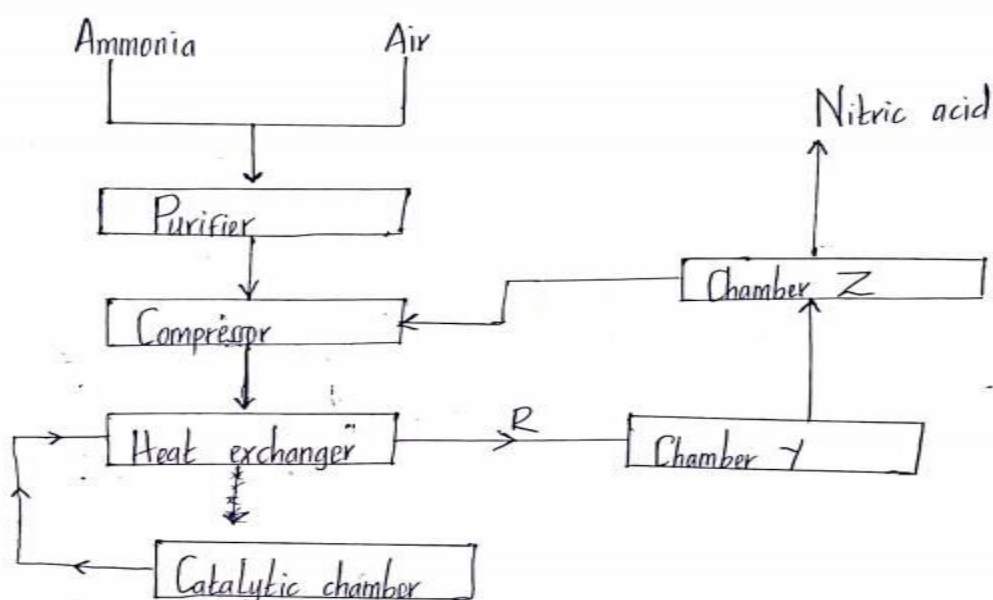
i) Few drops of ammonia solution. (½ mk)

ii) Excess ammonia solution. (½ mk)

20. The flow chart below shows the large scale manufacture of ammonia gas.

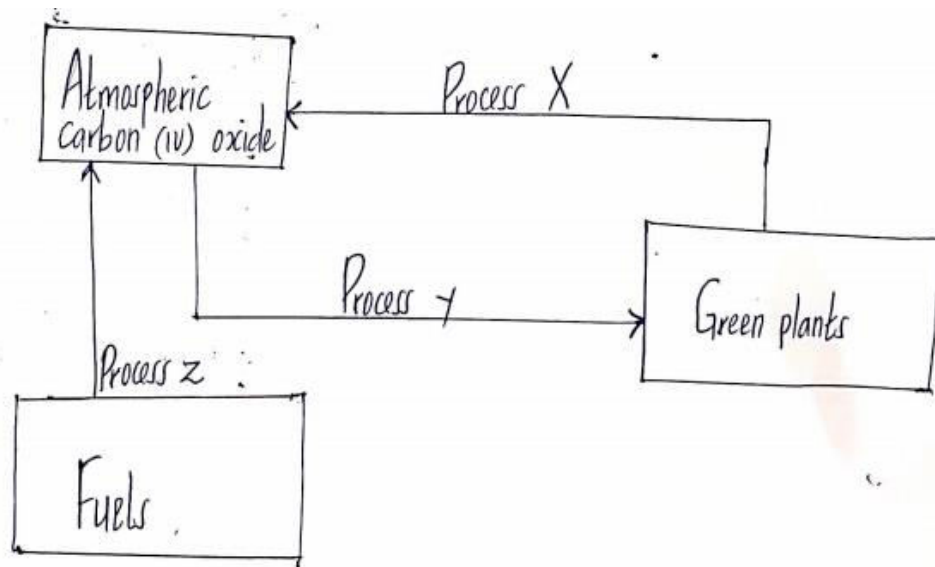


- a) What are the sources of the following raw materials?
- Hydrogen gas. (1mk)
 - Nitrogen gas (1mk)
- b) What optimum conditions are needed during the manufacture of ammonia in the following chambers:
- Purifier (½ mk)
 - Compressor (½ mk)
 - Catalytic Chamber (½ mk)
- c) Write an equation for the reaction in;
- Catalytic Chamber. (½ mk)
 - Step I (1mk)
 - Step 2 (1mk)
21. The flowchart below represents the industrial preparation of nitric acid. Study it and answer the questions that follow:



- State what happens in the heat exchange. (1mk)
- Write an equation for the reaction that takes place in the catalytic chamber and name the catalyst. (2mks)
Catalyst –

22. Below is a section of the carbon cycle. Use it to answer the questions that follow:

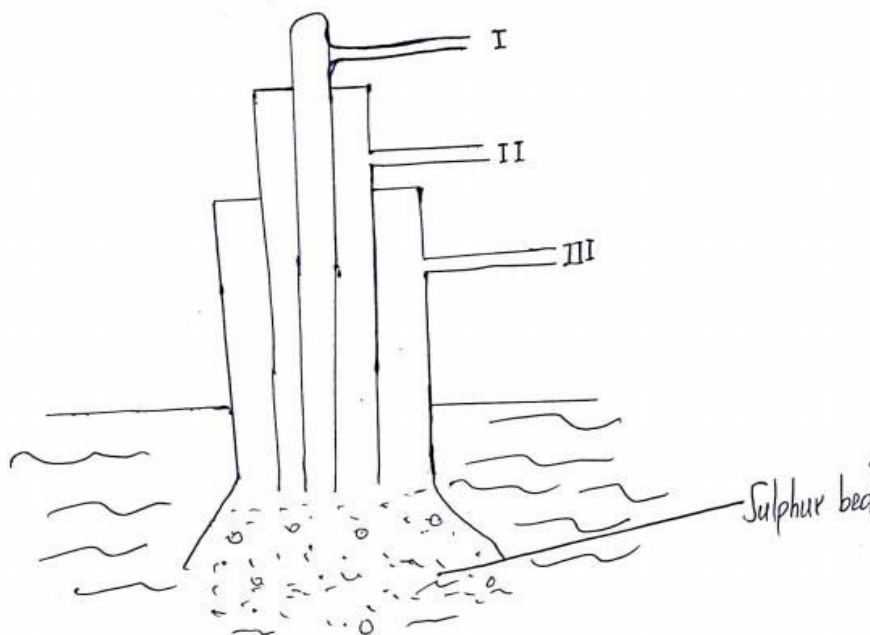


a) Name the processes:

- i) Y..... (½ mk)
 ii) X..... (½ mk)

b) One example of the fuels is charcoal. Write a balanced chemical equation to show how it avails carbon (IV) oxide into the atmosphere via process Z. (1mk)

23. The diagram below represents the extraction of Sulphur.



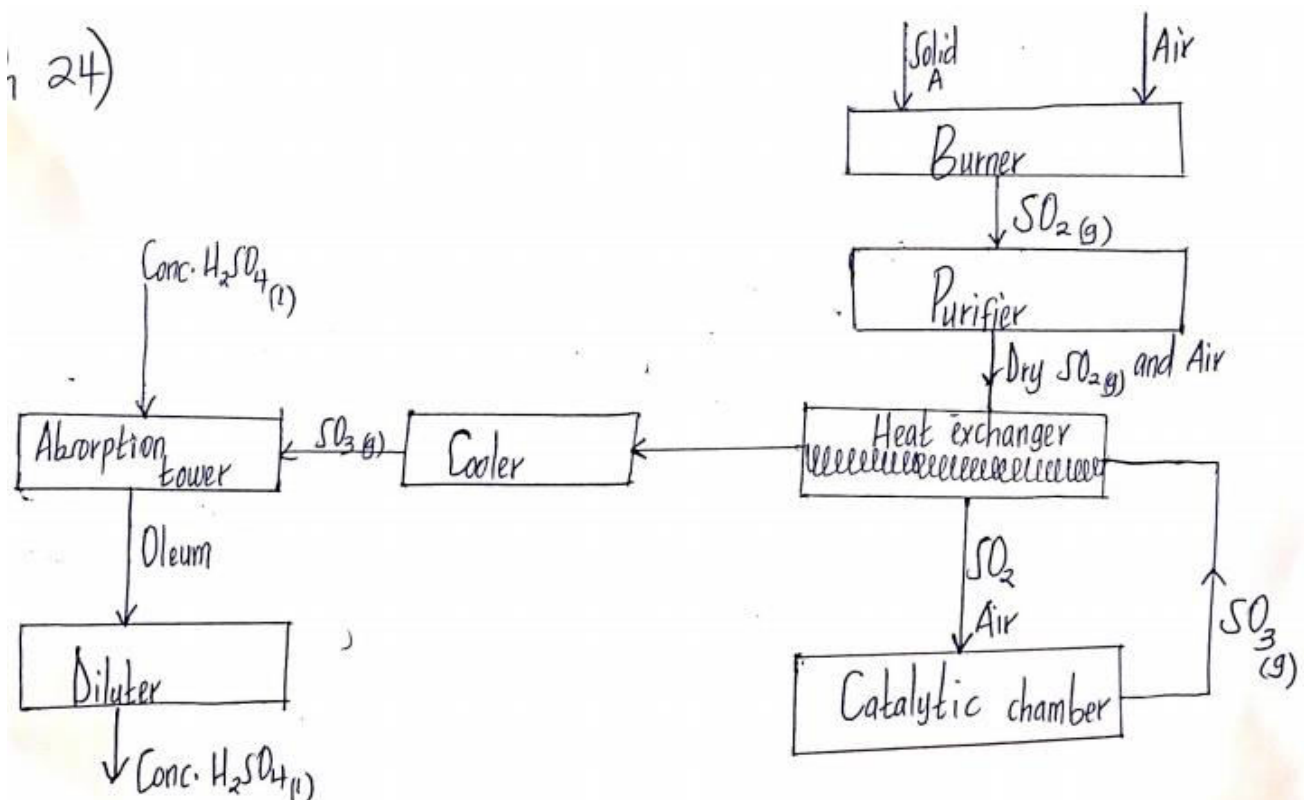
a) Name the process used in extraction of Sulphur. (½ mk)

b) Name the substance that is passed through:

- I..... (½ nmk)
 II..... (½ mk)
 III..... (½ mk)

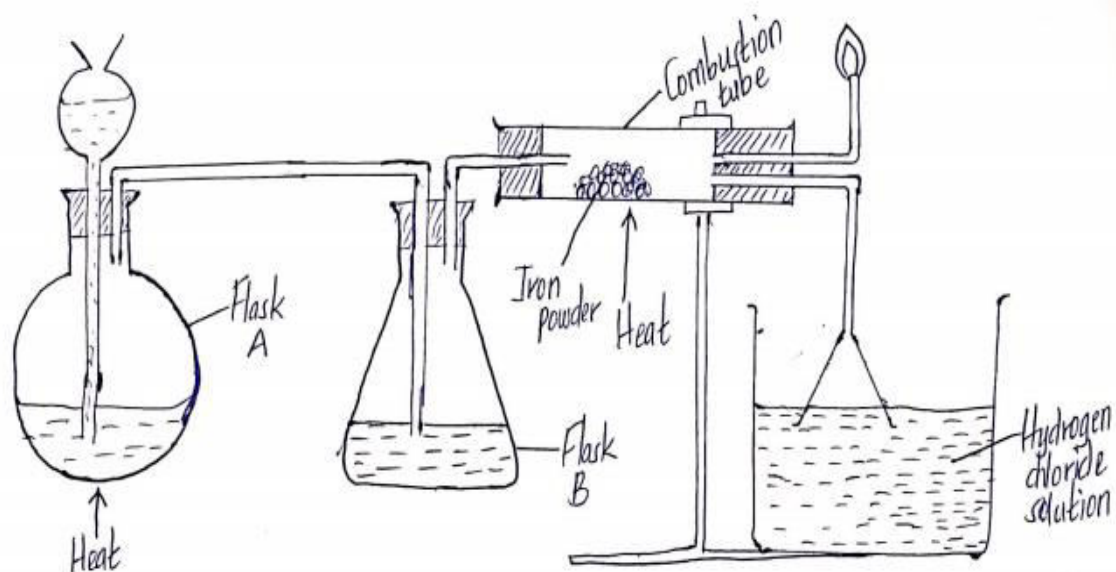
c) One of the substances required in this process is hot compressed air. State its role. (1mk)

24. The scheme below represents the steps followed in the contact process. Study it and answer the questions that follow:



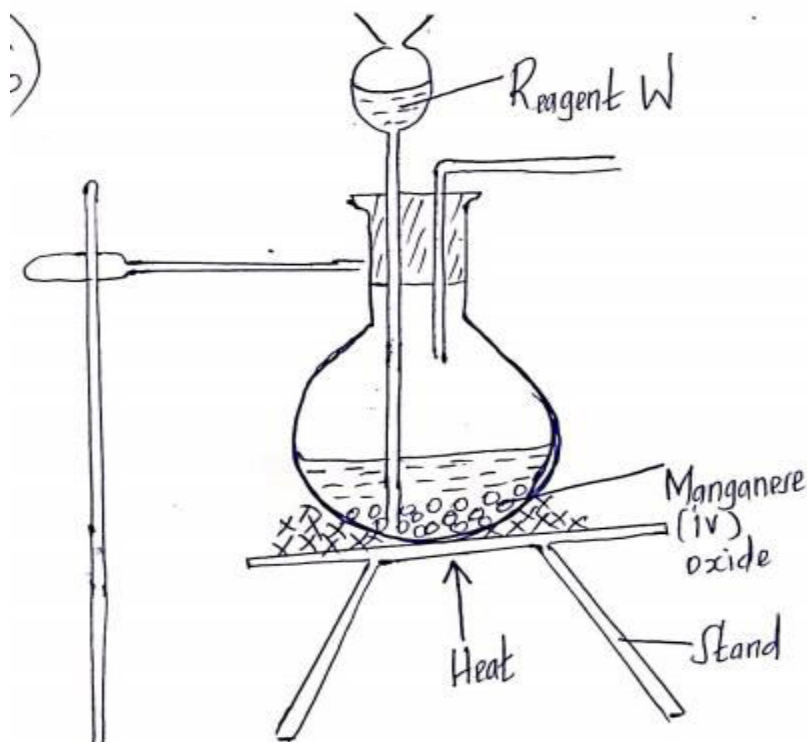
- Name two possible identities of solid A. (2mks)
- Name one impurity removed by the purifier. (1mk)
- Why is it necessary to remove impurities? (1mk)
- Write down the equation of reaction taking place in the converter. (1mk)
- I) Name the two catalysts that can be used in the converter. (2mks)
II) What is the function of the heat exchanger? (1mk)
- Sulphur (VI) oxide is not dissolved directly into water? Explain. (2mks)
- I) Name the main pollutant in the contact process. (1mk)
II) How can pollution in (g)(i) above be controlled? (1mk)
- Give one use of sulphuric (VI) acid? (1mk)

25. The diagram below was used to prepare hydrogen chloride gas which was passed over heated iron powder.



- a) Give a pair of reagents that will produce hydrogen chloride in flask A. (2mks)
- b) Name the substance in flask B. (1mk)
- c) State the observation made in the combustion tube. (1mk)
- d) Write an equation for the reaction in the combustion tube. (1mk)
- e) Describe a chemical test for hydrogen chloride gas. (1mk)
- f) i) Identify the gas burns at the jet. (1mk)
 ii) Explain why the gas in (i) above is burned. (1mk)
- g) Give reasons why excess hydrogen chloride is dissolved using the funnel arrangement as shown in the diagram. (2mks)

26. Chlorine gas can be prepared using a set-up whose part is shown below



- i) Name reagent W. (1mk)
- ii) Complete the diagram to show how a clean dry sample of chlorine gas can be collected. (3mks)
- iii) Write an equation of reaction between reagent W and another substance that can be used instead of Manganese (IV) oxide to prepare chlorine gas. (1mk)
- iv) Write a balanced chemical equation for each of the following:
 - a) Chlorine gas reacting with iron. (1mk)
 - b) Chlorine gas reacting with hot concentrated sodium hydroxide. (1mk)
- v) State and explain what would happen if dry blue litmus paper was dropped in a gas jar of dry chlorine gas. (2mks)
- vi) Other than manufacture of weed killers, state two other uses of chlorine. (2mks)
- vii) Describe a simple experiment that can be used to test the presence of chloride ions in a solution. (2mks)

MERU SCHOOL
HOLIDAY ASSIGNMENT NOVEMBER/DECEMBER 2025
ENGLISH FORM TWO

A. Read fathers of Nations and in a SMALL 80 PAGES EXERCISE BOOK, summarize each chapter.

B SET 1.

1: COMPREHENSION (20MKS)

Read the passage and answer the questions that follow: -

Reading is a fundamental skill that plays a vital role in our lives. It's not just about deciphering words on a page but about the doors it opens, the knowledge it imparts, and the worlds it allows us to explore. Reading is an essential tool for learning, expanding our horizons and fostering imaginations.

When we read, we acquire knowledge. Whether it's reading textbooks, newspapers, or online articles, we gain information that helps us understand the world. Books, in particular, are a treasure trove of knowledge. They contain the wisdom of generations, the discoveries of great minds and the stories of diverse cultures. Reading books can educate us on history, science, literature, and countless other subjects. It's like having a mentor, guiding us through the complexities of life. Reading also broadens our horizons. It exposes us to different viewpoints, perspectives, and experiences. When we read about characters from various backgrounds or explore far-off lands through the pages of a novel, we step into their shoes and see the world from a different angle. This broadening of perspective fosters empathy and understanding, making us more tolerant and open-minded individuals.

Furthermore, reading fuels our imagination. Whether it's a fantasy novel, a science fiction story, or a compelling mystery, books transport us to envision the unimaginable. Our minds become the canvas, and words paint the pictures. It's a magical experience that ignites creativity and inspiration.

Moreover, reading is a skill that transcends academic boundaries. It's not just about scoring well on test; it's about developing critical thinking, analytical skills, and the ability to communicate effectively. A person who reads regularly, is likely to have a broader vocabulary, better writing skills, and an improved ability to express their thoughts and ideas.

In our modern digital age, reading has taken on new forms. E-books and audiobooks have made it more accessible and convenient. With just a few clicks or taps, we can access a vast library of literature. However, there's something timeless and intimate about holding a physical book, flipping its pages, and smelling the scent of paper and ink.

In conclusion, reading is not just a hobby; it's a cornerstone of education, personal growth, and cultural enrichment. It empowers u with knowledge, broadens our perspective, ignites our imagination, and equips us with essential skills. Whether we're reading for pleasure, information, or self-improvement, reading is a journey that enriches our lives and shapes us into more informed, empathetic, and creative individuals.

QUESTIONS

1. How does reading foster empathy and understanding? (2mks)
2. What role does reading play in developing critical thinking and communication skills? (2mks)
3. What is the advantage of reading physical books, compared to digital formats? (1mk)
4. In note form, explain why the author says that reading is an essential tool for learning. (4mks)
5. How does reading enrich our lives and shape us as individuals, according to the passage? (2mks)
6. What does this passage reveal about the writer? (3mks)
7. Reading fuels our imagination. Add a question tag. (1mk)
8. Explain the following words as used in the passage. (5mks)
 - a. Fundamental
 - b. Envision
 - c. Transcends
 - d. Timeless
 - e. Ignites

2. EXERPT: THE SAMARITAN

Read the following excerpt and then answer the questions that follow. (25mks)

MOSSI: Very well, my good people. (Turning to face principal and then the teachers) I thank you Madam principal and all the teachers for your continued good work, which has won this School an outstanding reputation nationally. (pauses) The subject of today's event is yet another example of the schools outstanding performance. I am genuinely impressed by Nicole and the two students. I like the issues they have highlighted in the presentation. This is a clear indication that our schools are nurturing visionaries and innovators capable of solving our Municipality practical problems. And, of course, there can be no better resource for bettering our lives, as a municipality and as a nation. In fact, and for this very reason, the Municipal council will explore the possibility of mobilizing resources in support of innovation in our schools in order to actualize the future we heard about during the presentation.

I will ensure this happens because as you know, my name is Mossi-oa-Tunya, which means the Smoke that thunders. I would especially be delighted if the medicine for regenerating my body cells was discovered today. That would enable me live four hundred and twenty-two more years! How amazing! Please think mostly in this direction! (Mossi pauses, regards his audience, turning his head slowly. Then he resumes) However, we will neither launch the innovation nor present the prize today. Not because the App is terrible. No, it is in fact an outstanding innovation; so good that it could have far-reaching implications on other areas of our social, economic and political life. As municipal leaders, we need time to reflect on these implications. (pauses) I now request the teachers and students to leave as we discuss with the principal and Teacher Nicole how we will move forward with this incredible innovation.

QUESTIONS

1. Why is the Municipal Council ready to mobilise resources to support schools in the future? (2mks)
2. I am genuinely impressed by Nicole and the two students. Which role does Nicole hold in the school? Who are the two students Mossi is talking about? (4mks)
3. Apart from the medicine that regenerates body cells, mention any three other things in the play that Alvita sees in her vision of the future. (3mks)
4. Identify any theme brought out in this extract. (2mks)
5. Mayor Mossi says they will neither launch the Samaritan App nor present the prize to the innovators. What reason does he give for this? (1mk)
6. From elsewhere in the play, mention any two other evils Mayor Mossi is accused of? (2mks)
7. Discuss any two character-traits of Mayor Mossi as brought out in the excerpt. (4mks)
8. I would especially be delighted if the medicine for regenerating my body cells was discovered today. Rewrite in reported speech. (1mk)
9. Identify and illustrate any aspect of style used in this excerpt. (2mks)
10. Explain the meaning of the following words as used in the excerpt. (4mks)
 - a. outstanding
 - b. innovators
 - c regenerating
 - d. incredible

3. ORAL SONG

Read the following oral song and then answer the questions that follow.

Listen

My husband

In the wisdom of the Lang'o

Time is not stupidly split up,

Into seconds and minutes

It does not flow

Like beer in a pot

That is sucked

Until it is finished

It does not resemble

A loaf of millet bread

Surrounded by hungry youths
 From a hunt
 It does not get finished
 Like vegetable in the dish
 A lazy youth is rebuked
 A lazy girl is slapped
 A lazy wife is beaten
 A lazy man is laughed at
 Not because they waste time
 But because they only destroy
 And do not produce
 And famine
 Invade your villages
 And women take their baskets
 To go and beg food
 In the next village
 Strangers will sleep with them
 They will have your wives
 And what you say?

QUESTIONS

- [a] classify this song [2marks]
- [b]who is the singer of this song. [2marks]
- [c]Explain socio-economic activities practised by the community from which the song is derived from. [4 marks]
- [d] Identify and illustrate three features that qualify this to be an oral poem[6marks].
- [e]what is the dominant tone of this song? [2marks]
- [f]what main value do we learn from this community. [2mks].
- [g]what is the attitude of people from this community towards lazy people. [2mks]

4. GRAMMAR

1) Rewrite the following sentences according to the instructions given. (4mks)

- a. They were so exhausted that they could not stay awake. (Rewrite using 'too')
- b. If I had an eight-to-five job, I piano lessons. (take)
- C. I think we are being followed by somebody. (Rewrite in the active voice)
- D. The telephone rang without stopping. (Replace the underlined words with one word)

2. Complete the following sentences using the appropriate form of the word in brackets. (2mks)

- a. The winner of the race jogged around the stadium waving the Kenyan flag. (pride)
- b. The beautiful scenery was . (awe)

3. Correct the errors in each sentence below. (2mks)

- a. I went for shopping yesterday.
- b. How do you hope to get the lost child between so many people?

4. Complete each of the following sentences with one of the words in brackets. (2mks)

- a. They saw animals in the park than thy expected. (less, fewer)
- b. After walking for three kilometres, they were lucky to get water from the stream. (little, a little)

5. Replace the underlined word with an appropriate phrasal verb beginning with the word given in brackets. (2mks)

- a. We hope our plan succeeds. (pull)
- b. Over the holiday my friends visited me. (call)
- 6. Explain the meaning of the underlined idiomatic expression. (1mk)
- I.Mary told her trainer that she was going to throw in the towel if she did not win the fight.
- 7. Punctuate the following sentence in two different ways to convey two different meanings. (2mks)
- I.Otieno said Mary is absent today.

SET 2

1. COMPREHENSION (20MKS)

Read the passage below and then answer the questions that follow;

Education is perhaps one of the greatest assets children can inherit from their parents. Indeed, parents are known to incur huge debts to help their children get education. The drive to make these sacrifices and our population growth, have created a huge demand for education. This demand is reciprocated by mismatched supply that is not focused on developing “employable” skills and the output is more jobless graduates into the already full market place. Ironically, whereas this is the scenario in emerging economies the world over, it is in the same economies that skilled workers are in high demand, according to a human capital study done by PWC. Indeed, emerging economies are no longer relying on cheap labour to fuel exports-driven economies, but rather focus on skilled labour because their economic models have shifted to exporting value-added goods. The demand for workers capable of doing talent intensive jobs that require quality qualifications is growing steadily. Studies have shown that no country in the world can achieve major socio-economic transformation without the contribution of skilled manpower. Kenya seems to be cognizant of this fact going by the massive budget allocation made in education each year.

There is a strong case for standardization and regulatory framework that will ensure delivery of high quality teaching and research whose end product are work ready students. This is therefore a call to the government and their private sector to work hard in glove to address the prevailing challenges in higher education that impact the quality of graduates produced. Lack of adequate resources, poor training infrastructure and facilities as well as an emphasis on “cramming” – reproduction of class notes in the exam papers compromise the quality of education. The results have been a yawning gap between the quality of students released into the job market and the needs of the employers. If we are able to turn our institutions of higher learning into factories of talent that is readily marketable locally and other countries, human capital development, would become a key economic driver in our country.

The government needs to partner with all stakeholders and come up with “out of the box”, holistic policy interventions that make use of best practices in order to promote practical skills and make education more effective in the short and long term. This also calls for accrediting and streamlining the requirements of new and existing education should look beyond profits and prioritize equipping of students with knowledge, skills and competencies that enhance their employability both locally and internationally. While Kenya boasts of high literacy levels, it should now prioritize the development and implementation of a long-term growth strategy that focuses on quality, not quantity.

Questions

- a) What has created a huge demand for education according to the passage (2mks)
- b) What do the emerging economies rely on and why? (3mks)
- c) Indeed, emerging economies are no longer relying on cheap labour. (Rewrite adding a question tag). (1mk)
- d) What advice is given to those investing in education. (3mks)
- e) Why do we have emphasis on standardization in education. (2mks)
- f) In not more than 40 words, summarize the reason why the government and other sectors should partner in education. (5mks)

ROUGH COPY

FAIR COPY

- g) Explain the meaning of the following words and expressions as used in the passage. (4mks)

- i. Employable skills
- ii. Cognizant
- iii. Yawning
- iv. Out of the box

QUESTION2. QUESTIONS BASED ON EXTRACT FROM SETBOOK (25MARKS)

Read the following extract from the play “The Samaritan” by John Lara and then answer the questions after.

Seymour: (Springing to his feet with clenched fists) That cannot be possible. Nobody can write that kind of thing about me in this world!

Harvester: (Looking at Ted and Seymour) Copies of indisputable documentary evidence to that effect were all over today’s newspapers and are being shared in all media platforms.

Seymour: (Resuming his seat and swearing with trembling voice) Those are fake documents! These are all barefaced falsehoods! And I can assure you one thing: Those behind the allegations now have their appointment with fate! Certainly!

Ted: (Sitting properly and looking up for the first time) Supply of air? I am beginning to think this is serious. Could we end up in Baneta Express Prison?

Harvester: (Turning pages of his note book) But that is only one of the allegations, there are many more, including drug trafficking, grabbing of public land, inflation of the cost of municipal projects, use of proxies to secure municipal tenders, undertaking shoddy public works, murder and gang warfare. The information is very detailed on the people and companies involved.

Mossi: There is a lot of personal information on municipal leaders on that evil thing too; including lifestyles of individual municipal officials, where they live, the kind of houses they live in, their businesses, the vehicles they own, other properties in their possession, when the properties were acquired, and a lot of other personal details I don’t want to mention here. (Looking at Bembe) There was a lot of talk yesterday on the Madingo Golf Club, with everyone Wondering where you got the money to put it up.

Bembe: (Sitting up with an expression of horror on his face) The Madingo Golf Club? No! I have always been very discreet about my private affairs! How did they get the Information it is mine?

Mossi: You see, there is hardly anything on earth you can do without somebody knowing About it. You should also remember that those we regard as our friends are Sometimes wolves in sheep’s clothing. And they may have a lot of information About us, which could be damaging!

Bembe: This might be our worst nightmare!

Mossi: What worries me most is the recent formation of a lobby group, an amorphous virtual group, comprising mostly of lawyers, calling itself The Samaritan. It is calling upon the people to volunteer as witnesses and help in the prosecution of those involved in corruption and abuse of office in the Municipality. They are also planning to petition the Local Government Minister, the Prime Minister, and the Chief Justice to take action. The situation is not pretty at all.

Ted: (Looking at Justice Jaden) Can such online allegations form a strong basis for prosecution and conviction?

Jaden: (Adjusting his eyeglasses) Yes, they can; provided there are valid documents supporting the allegations.

Bembe: (Throwing his hands in the air) I think we have no choice other than ban that thing within Maracas Municipality! The Municipal Council needs to pass a by-law to that effect urgently. I will enforce it immediately!

Jaden: (Adjusting his eyeglasses and then his tie) I think we need to be careful and strategic. On what basis do you ban it? And how can you police the use of mobile phones to ensure the ban is effective?

Seymour: We can think creatively about that. For example, we can claim that municipal authorities are concerned that suspect Apps, particularly spy Apps, are finding their way into our municipality. This may lead to theft of confidential information such as bank account details. We can also cite issues of cyberbullying and the sharing of pornographic materials in schools

QUESTIONS

a) What is Seymour referring to at the beginning of the excerpt? (2mks)

- b) Identify and illustrate two aspects of style in this excerpt. (4mks)
 c) Discuss two themes evident in this excerpt. (4mks)
 d) Discuss one character trait of Seymour and one character trait of Mossi as presented in this excerpt. (4mks)

e) From your knowledge of the rest of the play, what two things does Mossi suggest could be done to control the use of the Samaritan App? (2mks)

f) From your knowledge of the rest of the play, briefly explain the origin of the Samaritan App. (4mks)

g) Explain the meaning of the following words and phrases as used in the excerpt (5mks)

i) Supply of air

ii) Inflation

iii) Discreet

iv) Amorphous

v) Petition

QUESTION 3: ORAL LITERATURE (20 MARKS)

Read the following narrative and answer the questions after it.

Story Teller: 'I salute you the Old Men and Women of the Land.'

Audience: 'We salute you, too'

Story Teller: 'Is this where you reside?'

Audience: 'Yes, this is where we reside; it is where old age found us.'

Story Teller: 'Shall I tell you a story?'

Audience: 'O, yes.'

Story Teller: 'A good one or a bad one?'

Audience: 'A good one.'

Once upon a time, there lived a boy called Kimera of the Angare clan. He was out hunting one day when he found a grove of mango trees. He went home and told his parents about it, who then told the clan elders and all the people moved to the grove so they could eat as many mangoes as they wanted.

The Angare clan lived there for some years, but one day someone said the mango grove belonged to the Nohoho, the giant. When the grown-ups heard this, they were very frightened and did not pick any more fruits. They told the children that they must not eat the fruits any more, but the children did not take any notice. They liked mangoes and picked them when it was dark so no one could see them.

One evening before the new moon, the children went to pick the fruits as usual. As they climbed up one of the trees, they heard a horrible voice shout: 'Who are you? You have eaten the mangoes of my ancestors, you have done this for many years ... for many days and nights. If you ever come here again ...! Before the giant had finished his sentence, the children ran and ran as fast as their legs could take them. They ran back to their parents and told them about the giant. The parents did not believe the children's story but warned them again not to pick the mangoes.

For the next few days, the children kept away from the mango grove, but they soon got over their fright. They decided that they would visit the place at midday and pick some of the sweet fruits. 'If we see the giant, we will kick him,' they said. They then argued about who would kick the giant first. Some of the boys were frightened. But they all walked towards the trees, climbed up and picked as many mangoes as they could hold. Nothing happened and they climbed down again and again with the fruits.

They looked at the fruits and they were all unripe or bad. Kimera, the grandson of the great Kimera who first told the clan to move to the mango grove said: 'I am going to climb up again and pick some better fruits. This is no good Yes, you go,' said the other children. If the giant attacks you, we shall come to your help at once.' Kimera climbed up, but just as he put out his hand to pick a large mango, the huge giant Nohoho appeared! He was as big as an elephant and the whole body was covered with thick short hair. He had four eyes just under his forehead. His eyelids were like red flames and his eyes kept moving up and down or sideways.

When Kimera saw this awful sight, he screamed. The giant hit him a terrible 'whack' on his left cheek.

'Where are my helpers?' Kimera angrily asked himself. Of course, as soon as the other children had heard the 'whack' they forgot to keep the promise to kick the giant. You know what happened then. Nohoho picked up Kimera in one hand and put him in a dirty purse which was tied around his waist. Kimera cried and cried, but the giant thought what a good meal he would be. The giant went home and cooked Kimera and ate him. Each year the ripe fruits fall on the ground, but who touches them? My story ends there Nede! Nede!

- a) Classify this narrative. (2 marks)
- b) Explain two effects of dialogue in this narrative. (4 marks)
- c) Imagine you are to perform this narrative before an audience, Write two ways in which you would make it more interesting to your audience (2 marks)
- d) With illustrations from the passage, describe one character trait of the following: (4 marks)
 - i) Kimera
 - ii) Kimera's friends
- e) Explain any two main economic activities carried out in the community. (4 marks)
- f) What is the moral lesson of this story? (2 marks)
- g) If you set out to collect an oral literature item like the one above, explain two problems you would expect to encounter and how you would try to solve each of them. (4 marks)

4. GRAMMAR (15mks)

a) Rewrite the following sentences according to the instructions given. (4mks)

a) Tom did not go to church.

Mary did not go to church.

(Rewrite as one sentence beginning: Neither.....)

ii) "I am sick now," Juma said. (Rewrite in reported speech)

iii) You will not pass your examinations if you do not work hard

(Rewrite using (unless)

iv) You will accompany me on the trip if you behave well.

(Rewrite using "on condition that")

b) Use the correct preposition to complete the following sentences. (3mks)

i. Tonny was accused murder.

ii. Philip was acquitted treason.

iii. Omollo has been charged..... handling stolen property.

c) Rewrite the following sentences correctly. (4mks)

i. Repeat again what you told me yesterday.

ii. My friend hit the tree as he reversed back.

iii. The meeting was held at 10.00 am in the morning.

iv. In my opinion, I think there are too many public holidays.

d) Give two meanings of the following sentence. (2mks)

Visiting relatives can be boring.

i.

ii.

e) Replace the underlined words with one word that has same meaning. (2mks)

i. Jane passed out during athletics

ii. Hellen takes after her mother.

SET 3

1.COMPREHENSION

Read the passage below and answer the questions that follow (20 MKS)

Have you ever come across classmates who can't resist the urge to steal? The urge could be so strong that they steal things that they don't even need .They might steal a book that they already have or steal items even though they have an option of borrowing or even buying. A mental disorder called Kleptomania was uncovered in 1886 after experts discovered that a

small group of thieves were stealing things that they could be obtained easily without engaging in the criminal act. It was also noted that their stealing was impulsive (not planned for) and somehow compulsive.

One difference between Kleptomania and other types of stealing is that Kleptomaniacs struggle with other underlying disorders such as anxiety, depression or substance abuse and they use theft as a way “treat” or soothe themselves. A lot of people who suffer from the disorder report experiencing some sort of excitement after stealing but they also feel guilty and ashamed afterward. They are likely to steal more often when they are feeling stressed than when they are emotionally fine. Another difference is that, unlike other types of thieves, Kleptomaniacs tend to discard, give away or just keep the stolen items without ever using them.

In addition to shame and guilt, Kleptomania causes those suffering from it to isolate themselves as they lost the trust of friends and family. They end up hurting those they steal from, thus breaking relationships with people who matter. In extreme cases, they could be arrested or taken to jail.

It's been more than two centuries since the condition was discovered, which means psychiatrists and other experts have had a lot of time to innovate treatment for the disorder. Though there is no cure, therapy and some types of medication can help treat the underlying conditions that cause one to steal. Going through treatment helps one to overcome the urge to take things that do not belong to them and live a healthier lifestyle.

Unfortunately, a lot of experts say that Kleptomaniacs do not seek treatment and live with the condition secretly due to the shame attached to it. But if you are struggling with this condition, coming clean and seeking help you prevent more problems in the future. You should consider talking to a parent about it and requesting to see a specialist.

You could also try to manage the condition by identifying the things that push you to steal and adopt healthy ways to deal with stress and anxiety, such as joining sports club, exercising often and exploring your talents.

- a) According to the passage, what was the discovery of experts in 1816? (3marks)
- b) Make notes on the difference between Kleptomaniacs and other types of thieves. (4marks)
- c) What are the characteristics exhibited by those suffering from Kleptomania? (3marks)
- d) Why do Kleptomaniacs fail to seek treatment? (1mark)
- e) Comment on the use of one aspect of style in paragraph one. (3marks)
- f) Give two ways in which Kleptomaniacs can manage their condition. (2marks)
- g) It's been more than two centuries since the condition was discovered. (Rewrite adding a question tag) (1mark)
- h) Give the meaning of the following words as used in the passage (3marks)
 - a) Criminal.....
 - b) Discard.....
 - c) Innovate.....

2.SAMARITAN

Read the excerpt and answer the questions that follow (25 mks)

Mossi:(Pacing about on the stage, turns to face the Principal and Nicole.) I am afraid we may not continue with this thing. Oh, I have already forgotten what you ate calling

Pirro:(Looking rather disappointed) but why, Your Worship? This is a blessing for our country.

Mossi: Don't you see it? It might turn out to be platform for misinformation, lies and witch hunt. You see, last year someone spread a rumour that had died, I just sent a text message on some social media and it spread like wild bush fire and do you I know almost died? During that time I accidentally swallowed a whole toothpick!

Ramdaye: Oh, yes, I see the risk. They might spread another rumour on this platform! And you might swallow another toothpick! Yes, you will!

Basdeo: (To Mayor) The way I see it, that App will be a people's platform! And it will have far-reaching implications whether you launch it or not.

Mossi: (Casting a stern look at Mr. Basdeo) I need time to think about it. I will launch it at my own convenient time. (Turning to Nicole and the Principal) There are no two ways for now. Halt any activities regarding that thing until my office gives further guidance. (Ramdaye nods in approval. Other guests exchange knowing glances in silence)

Narine: Your Worship, the President of the Republic is scheduled to officially launch the App at the national level early next year when schools reopen. We presently have some ongoing activities in preparation for it. I doubt whether this process can be stopped.

Harvester:(Looking at the Principal and Nicole alternately) Is that so?

Mossi: (Looking at the Principal) The President?

Narine: Yes, Sir.

Ramdaye: Why have you kept us in the dark about it?

Narine: The Mayor's office has been duly informed, Sir.

Mossi; (Looking at Narine) Oh yes, I remember! But you never explained that kind of thing it was! No, you still have to stop it!

Pirro: I think that is beyond their powers, Your Worship.

Mossi; (Looking at Mr. Pirro) This thing we are talking about is a school project under their control! (Turning to face the principal) It is, therefore, within your powers to find a way around it. You are at the centre of it! Figure out a way, like writing to the Ministry of Education indicating that there are some fundamental errors in it that you need to attend get what I mean?

Nicole: I am afraid, Your Worship, the assessment of the innovations was done by senior officers at the Ministry of Education. Experienced software engineers Were involved. It passed all the tests, and no errors were found

QUESTIONS

- Place this excerpt in its immediate context. (4 marks)
- Why is Mayor Mossi adamant to launch the App? (2 marks)
- From elsewhere in the play, what is the name of the App and how is it a people's platform?(2mks)
- Give reasons App is error proof. (4 mks)
- Think about it: (Rewrite using the question tag.) (1mk)
- Identify and explain any two stylistic devices used in the excerpt. (4 mks)
- From your knowledge of the text, identify four allegations against municipal leaders as uploaded on the APP. (4mks)
- Explain the meaning of the following expressions as used in the excerpt. (4 marks)
 - Far-reaching Implications
 - Halt
 - Kept us in the dark
 - Figure out a way

3.ORAL NARRATIVE (20 MKS)

THE FOX AND THE CROW

Read the narrative and answer the questions that follow

A fox once saw a crow fly off with a piece of cheese in its beak and settle on a branch of a tree.

"That's for me, as I am a fox," said Mr. Fox, and he walked up to the foot of the tree.

"Good day, Ms Crow," he cried. "How well you are looking today: how glossy your feathers; how bright your eye. I feel sure your voice must surpass that of other birds, just as your figure does. Let me hear but one song from you that I may greet you as the Queen of Birds."

The crow lifted up her head began to caw her best, but the moment she opened her mouth the piece of cheese fell to the ground, only to be snapped up by Mr. Fox. "That will do," said he.

"That was all I wanted. In exchange for your cheese I will give you a piece of advice for the future- "Do not trust flatterers!

" (Adapted from Prentice hall literature,Ed. Roger Babusci et al. Englewood Cliffs, New Jersey, 1991).

- How would you classify this narrative? Explain your answer. (3 marks)
- Identify and illustrate any two character traits of the crow. (4 marks)
- What does the fox mean by "That's for me, as I am a fox?" (2 marks).
- Identify and illustrate any three stylistic features in this story. (6 marks)
- Explain what this story reveals about human relationships. (4 marks)
- Explain the meaning of the word 'caw' as used in the story. (1 mark)

4. GRAMMAR (15MKS)

a) Rewrite the following sentences as instructed: (3 mks)

- i) Jane is both humble and obedient. (Begin: Not only.....)
- ii) Goods once sold will not be returned under any circumstances. (Begin : under.....)
- iii) He will receive a warm welcome if he comes back. (Begin : Should.....)

b) Complete the sentences using the correct form of the words in brackets (3 mks)

- i) She filed a(sue) against her employer.
- ii) The tragedy was beyond everyone's(comprehend)
- iii) The driver declined to accept(liable)

c) Complete the sentences using the correct phrasal verb formed from the word given in brackets (4 mks)

- i) John of the race due to injury. (pull)
- ii) The fire brigadethe fire after many hours. (put)
- iii) It is clear from her looks that Claire her mother.(take)
- iv) The youth shouldto adults for guidance. (look)

d) Fill the blanks with suitable preposition (3 mks)

- i) My uncle deals second hand clothes.
- ii) The brave girl was compared a lioness.
- iii) Wekesa mistook Wambui her sister.

e) Choose the correct alternative (2 mks)

- i) They have remained hopeful in spite of the many(crises, crisis)
- ii) Since last year, of theft has reduced. (incidence, incidents)

SET 4

1. Read the passage below and answer the questions that follow (20 marks)

The United Nations (UN) defines youth as those between age 15 and 24 per the African Youth charter the bracket stretches to age 35. Estimates place upwards of 70 percent of Africa's population at age thirty per cent of Africa's population at age of thirty under. These figures are often ban died about. But even a cursory reflection on the implications is pretty sobering. As a child of the mid 70s and an idealist, when I reflect on the unhopeful state of the world and society I am struck by just how much grimmer the prospects are for the youth –especially in our part of the world. Inevitably worse for those that do not belong to the privileged minority classes. In a world with plentiful such reality is discomfiting to say the least.

Yet discomfiture is not something that a society and peoples that are mostly numbered and soulless care to feel. Too many hitherto abnormal things are now normalized and condoned even celebrated. Such are the times we live in. For most life's essence to experience a dignified human existence is elusive, constantly threatened, devalued and denied.

First, we have endured being ruled by mostly visionless predominantly older generations of patriarchs that did not get into public life to serve but to reign. After the initial 'windfall' of development strides in the immediate post-independence period the hallmark of our childhood was living through the worst of austerity programs of the 1980s/90s – which coincided with a pivotal life phase requiring essential investments to secure quality of life. Austerity translated for the majority into, low quality education, lack or limited access to living and sanitary conditions, grim employment prospects and so on. The imprint of austerity is a lifelong legacy of deprivation and inequities, lives prematurely nipped in the bud and unimaginable foregone possibilities. We bore the brunt of the HIV pandemic (before lifesaving antiretrovirals arrived on scene courtesy of determined struggles calling out greedy multinational pharmaceuticals and uncaring governments to shame.)

Secondly, for about half of the populace who are female, the pervasiveness of patriarchy means that no matter how much you defy odds in a quest to excel, you remain effectively relegated and suppressed into the lesser human. This manifests in both the public and private spheres of life. Thirdly, if you invested your youth in the struggles for human dignity and a better society, it is humbling to watch the fruits of those struggles constantly reneged upon and undermined. Seems to me that seizing control of agenda setting and governance (plus leadership) is non-negotiable. Youth must take this on as a fight to secure needs, interests and survival. They have

to essentially seize their destiny in their own hands – no matter the counter forces. They have no choice because their actual lives and semblance of survival depend on it. It cannot be normalized that those living on borrowed time are allowed to essentially rob the youth of their lives and future.

I say this based on my active footprint (during my youth no less) on the costly (in terms of lives lost in that struggle) but totally worthwhile journey that delivered Kenya's revolutionary and dignity affirming constitution. It is no wonder this governance road map remains under-implemented and much fought.

In exercising the right to active citizenship, youth must leverage all they can – available tech in its many facets and possibilities; out of the box thinking, tapping into the disposition of being unshackled by properness, conformity or shame – to forge broad and formidable alliances across class, gender and other identities – to speak and act truth to power. It is to be unbowed and fearless for they have nothing to lose. Without a doubt. Passively waiting for saviours is not an option. For there are none but yourselves.

Questions

- i) What does the writer's use of the expression "bandied about" reveal about his/her attitude towards the statistics on youth population? 2 marks
 - ii) Comment on the irony revealed in paragraph 3. 2 marks
 - iii) Why is the word 'windfall' put in quotation marks? 2 marks
 - iv) What were the consequences of the austerity advocated for in the 1980s/90s for the majority? 3 marks
 - v) In about 50 words, summarize the three challenges that face our society today. 3 marks
- Rough draft
- Fine copy
- vi) According to the writer, what do the youth need to do to secure their future? 2 marks
 - vii) Describe the tone of the writer as revealed in the passage? 2 marks
 - viii) Rewrite the sentence below as instructed 1 mark
- "It is no wonder this governance road map remains under-implemented and much fought."
(Rewrite beginning: Is it....)
- ix) What do the following words and expressions mean as used in the passage? 3 marks

- a) implications
- b) manifests
- c) out of the box thinking

2. Read the excerpt below and then answer the questions that follow (25marks)

Bembe: (Interrupting Nicole) The matter of The Samaritan is weighty. It can destroy lives. It is threatening the lives of many powerful people. They are fighting back and they will destroy your life. I am giving you a chance to secure your life. I am an officer whose duty is to protect lives. Just do what the Mayor told you. You should never fight a losing battle.

Nicole: (Firmly) I have made a choice to do what is right. That is not negotiable. And besides, I have no control over the App. The National Information and Communications Technology Corporation is now in charge of that App.

Bembe: (Interrupting Nicole) I understand that to mean you are ready for a fight. And to get us started, are you aware that the signal of your phone was at one time located at the scene of murder?

Nicole: (In horror and rising to her feet) That's preposterous! (Moves towards the door) I need to see the Principal now!

Bembe: (Blocking the way) And what about last night?

Nicole: What?

Bembe: The school generator.

Nicole: School generator? What about it?

Bembe: Who sold it?

Nicole: That is ridiculous!

Bembe: I thought so, too.

Nicole: (Trying to find a way past Inspector Bembe) I have nothing to do with the school generator!

Bembe: (Blocking her every move) The generator has been stolen, and you and I know who stole it!

Nicole: Listen, Mr. Officer, do not try to fabricate anything against me. It will get you nowhere. And if you insist, this will become the darkest day in your career!

Bembe: What? Are you threatening a police officer?

Nicole: (With a sharp and firm voice) You must not break the law by accusing me of crimes I have not committed!

Bembe: You're just confirming some of the other accusations that have been made against you.

Nicole: Which allegations?

Bembe: You have a reputation for being too strong-willed to be suitable for a school teacher. You're as stubborn as a mule.

Nicole: What crime is that?

Bembe: Well, it is not a crime as such; but don't you think it is a bad influence to the students? (Bangs the table violently and shouts an order. Two police officers enter.) Handcuff her! (There is a commotion as the officers reach out to Nicole. She resists but is overpowered. There is an interval of silence as Bembe begins to rummage through papers on Nicole's table. Nicole refuses to move and sits down on the floor. The officers drag her on the floor) Stop. (The officers stop. There is silence Then Bembe moves behind Nicole's table and starts pulling the drawers open, one after the other, removing and throwing papers all over the floor.) Where have you hidden it?

Nicole: Hidden What?

Bembe: The Samaritan! (Nicole is visibly surprised at the answer but remains silent.) I will tell you this, whenever you see me personally involved in an arrest, you must know it's a serious matter, as serious as death. And you should be afraid. Very afraid!

Nicole: I am not guilty of anything, and I refuse to be intimidated!

Bembe: (Inspector Bembe bangs the table violently with his gun. Nicole recoils with a start.) Woman! Show some seriousness! This is no laughing matter. Are you willing to talk?

Nicole: About what? (There is silence as Inspector Bembe wears his beret and places his scepter under his armpit.)

1. Briefly explain what Nicole was told to do by the Mayor. (3marks)
2. Summarize the circumstances that makes Bembe interrupt Nicole at the beginning of the excerpt (3marks)
3. Describe the following characters as seen in the excerpt (4marks)
 - i) Bembe
 - ii) Nicole
4. Describe the mood portrayed in the excerpt. (3 marks)
5. From your knowledge of the text, explain how the Samaritan works (3 marks)
6. Identify and state the effectiveness of two styles used in the excerpt. (4 marks)
7. Identify and illustrate one theme from the excerpt. (2 marks)
8. You cannot fabricate crimes against me! (Begin: Crimes ...) (1 mark)
9. Explain the meaning as used in the excerpt. (2 marks)
 - i) a losing battle
 - ii) prepositions

3. Read the narrative below and then answer the questions that follow (20 marks)

An aging king realized that if he died he had no one to take over his throne. He decided to adopt a son. He launched a competition and ten boys made it to the top. The king said to them, "I have one last test and whoever comes top will become my adopted son and heir to my throne." He gave each boy a maize seed and told them to take the seed home, plant and nurture it for three weeks. Then ten boys took their seeds and ran home to plant. In one home, the boy and his parents were sad when the seed failed to sprout. The boy had done everything but in vain. His friends advised him to buy another maize seed and plant but since his parents had taught him good morals and honesty, he refused. The day came and the ten boys went to the palace. Nine of the boys were successful.

The king went round to each boy asking, "Is that what came out of the seed I gave you?" And each boy said, "Yes your majesty." The king would nod and move down the line until the last boy in the line who was shaking with fear. The king asked him, "What did you do with the seed I gave you?" the boy

said, "I planted and cared for it but it failed to sprout." The king went to the throne with the boy and said, "I gave these boys boiled seeds and a boiled seed cannot sprout. If a king must have one quality, it must be honesty and only this boy has passed the test."

1. Identify and illustrate any two themes brought out in this narrative. 4 marks.
2. Discuss two roles of the king in this narrative. 4 marks.
3. Discuss one moral lesson we learn from this narrative. 2 marks
4. Identify any three social- economic or political organization of the people from which this narrative is taken. 3 marks.
5. Discuss two instances of irony in this narrative. 4 marks.
6. Describe the character trait of the king. 2 marks.

4. a) Rewrite the following sentences according to the instructions given. Do not change the meaning. 4 marks.

- a) You should not feed wild animals at the game park. (Rewrite beginning: Under....)
- b) If they had not paid my school fees, I would have gone home yesterday. (Rewrite beginning: If my school fees....)
- c) "We cannot wait any longer because the patient needs immediate treatment." the doctor said. (Rewrite in reported speech.)
- iv) The topic on verbs follows the one on nouns. (Begin: After....)

b) Fill in the blanks with the most appropriate linking words from those provided below. 4 marks.

immediately finally further

at first meanwhile secondly

We sat in the sitting room waiting. We were (i) scared because we did not know what kind of person our mother's friend would be. (ii) we looked at the beautiful photographs on the wall without saying a word to each other. (iii) she arrived and her warm motherly smile (iv) dissipated our fears.

c) Fill in the blanks with the correct word to complete the sentences below. 2 marks.

- i) Neither the children nor their mother at the wedding ceremony. (was/were)
- ii) Of the two brands of perfume on offer, this one smells (better/ best)

d) Fill in the blanks with the correct form of the words in brackets. (3 marks)

- i) The (spectacle) man looked very disturbed.
- ii) Pouring water on steel nails is likely to (active) rusting.
- iii) Your (hostile) will take you nowhere.

e) Punctuate the following sentences. (2 marks)

- i) Only one problem was yet to be solved transport to the stadium
- ii) His brother John was finally going to graduate that week

SET 5

1. COMPREHENSION (20 MARKS)

Read the passage below and then answer the questions that follow.

Discipline is something that we have all experienced personally in different forms, seen, used on others, and is also something that many of us will go on to use later in life, both in the form of self-discipline and as something to keep children and even employees in check. It is essential to life as we know it, and we need it in its many different forms in many different situations.

The first reason that discipline is so important is that we all need to exercise self-discipline to be successful in life. Self-discipline can mean very different things to different people; for students, for example, self-discipline is often about motivating yourself and making yourself concentrate on your studies and get your assignments in time. For working people, it can be as simple as getting up on time every morning, however tired you may be and how much you may hate your job, getting to work on time and doing your job. Without this kind of self-discipline, people would not be able to enjoy academic success, or be successful in their careers either.

Self-discipline is also required for dieters and anyone doing regular exercise, because given

the chance, most of us would prefer to be lazy rather than get up and exercise, and eat burgers and fries rather than healthy food. Without it, even more people would be fat and unhealthy, and a lack of self-discipline in some people certainly contributes to the obesity crisis.

Discipline is also something that needs to be used on others where necessary. If parents didn't discipline their children when they were naughty, children wouldn't grow up knowing right from wrong, or be able to become productive members of society who contribute to the system. Equally, school teachers need to be able to dish out punishments to children who don't behave themselves. Without discipline in the classroom, there would be a great deal of disruption and nobody would ever learn anything. Indeed, teachers who struggle to command the respect of students and who fail to use discipline effectively will often have trouble even making themselves heard in a classroom.

In the workplace, discipline is also essential to maintaining a hierarchy and dealing with employees who do not follow company policies and procedures, regularly arrive late or not at all, or treat their co-workers unfairly. Then, you have to consider that without discipline, there would be no law enforcement. Murderers would be roaming the streets and everybody would be stealing from each other, because there would be no consequences for their actions.

Discipline acts as a vital deterrent to stop children being naughty, people from missing work, and even potential criminals from stealing and killing, and for this reason it is vital in human society.

- (a) In which way can discipline be used later in the life of a person? (2marks)
- (b) What would become of naughty children if parents didn't discipline them according to the passage? (2marks)
- (c) What does self-discipline mean to a student according to the passage? (2marks)
- (d) In note form, state the reasons for discipline. (4marks)
- (e) How does absence of discipline lead to no law enforcement according to the passage? (3mks)
- (f) What three things does discipline restrict one from doing according to the passage? (3mks)
- (g) Equally, school teachers need to be able to dish out punishments to children who don't behave themselves. (1mark)

Replace the word in **bold** with a word with similar meaning.

- (h) Explain the meaning of the following expressions as used in the passage. (3marks)

i) Disruption

ii) Vital

iii) Roaming

2. EXTRACT (25 mks)

John Lara; The Samaritan

Read the excerpt below and then answer the questions that follow. (25 marks)

Mossi: Municipal fund? How?

Seymour: We just need to do some reallocation of budget line items.

Ted: I agree. We must set aside some money to take care of investigators, lawyers, prosecutors and judges if things go wrong.

Seymour: You see, the waste disposal system in our town is in a terrible state. There is garbage all over the place and the drains are broken. As we speak, it is a serious health hazard. We can justify reallocation of funds on the need to address this problem. In reality, we will use some of the funds to fight off cases that are without a doubt coming.

Mossi: (Surprised and in disbelief) What?

Seymour: Yes, we have to get money to fight the cases. And enough of it, I dare say!

Mossi: But that will only get us deeper into problems!

Seymour: Yes, it will; but we will be the better armed to deal with the trouble and even more of it.

Mossi: Over my dead body! What you are suggesting is illegal? The law is very clear. A Municipal Council cannot spend any money at any time of a financial year except as provided in the national estimates, and as contained in an Appropriation Act approved by Parliament.

Ted: (Looking at Mayor Mossi in disbelief) What do you mean? You would rather we are prosecuted and imprisoned?

Seymour: In that case, we can submit a supplementary estimate of expenditure. That is

allowed under the law.

Mossi: So long as that money will be committed to other uses, I will be blamed for the misallocation. It will get me into more trouble!

Seymour: You will be in a position to deal with the trouble. Can't you understand? You will have the money!

Mossi: (Pointing at Seymour and Ted) Look here, my good friends, you have in the past forced my hand into misallocating funds by making unreasonable demands.

Seymour: Which demands?

Mossi: You cannot deny that you have forced me to concede to endless demands ranging from regular travel with enhanced allowances for members of the Municipal Council, sitting allowances of unnecessary committee meetings, to loans and mortgages. It is as though all the money allocated to the Municipality is exclusively meant for Council Members!

Seymour: Don't start pontificating! You will never get away with the crimes committed under your watch if things get out hand! And you also know how much you have stolen! So you better be wise! Let's do a supplementary estimate.

Mossi: (Hand raised and wagging his finger pointing at Seymour in anger) I know you very well. I know those things you deal with! If you are not careful, I will have you arrested and prosecuted! I can make you see real smoke! And I can strike harder than thunder!

- (a) Where does this conversation take place and what happens before it? (3 marks)
- (b) Basing on the events that happen earlier in the play, explain the cause of the conflict in this excerpt (3 marks)
- (c) Identify and illustrate one theme brought out in the excerpt. (2 marks)
- (d) How is Seymour portrayed in the excerpt? Illustrate your answer. (4 marks)
- (e) "If you are not careful, I will have you arrested and prosecuted!" From your knowledge of the play, state any three accusations for which Seymour can be arrested and prosecuted. (3 mks)
- (f) Explain the effect of any two stylistic features used in this excerpt. (4 marks)
- (g) What is the mood of this excerpt? (2 marks)
- (h) "We just need to do some reallocation of budget line items." Begin: What.... (1 mark)
- (i) Explain the meaning of the following expressions as used in the excerpt. (3 marks)
- (i) fight off
- (ii) concede
- (iii) pontificating

3. ORAL NARRATIVE (20 marks)

THE WARRIOR WHO HAD EIGHT LOVERS

A long time ago there was a warrior whose bravery and handsome looks made the girls of the village fall in love with him. Eight girls, at least, were known to want to marry the young warrior, for they had composed many songs in his praise.

Now, this warrior was one time getting ready to go on alone raid in faraway country. Before he set off for the raid, he called the youngest of his eight lovers and told her to put fresh milk in a small guard. He also instructed to keep checking on the colour of the milk every day."

Should the milk turn red, " the warrior told the girl, ' it would mean that I have been killed or I am seriously wounded.'

The young girl was so touched by the departure of her lover that she composed the following song for him.

My warrior whom I love

For whom I open the sweet curdled

Milk of my father's herd,

And to whom I give fat rams

Of my father to slaughter,

To whom I give my slender

Thighs to lie on,

With whom are you going on a raid next?

It happened that many days after the departure of the warrior, the girl noticed that the milk

was turning red. She wept bitterly, for she knew that her lover was either dead or dying in a faraway country. Without telling anyone, the girl set off to look for her dying lover.

For many days she traveled, and as she walked through plains and forests she sang the song she had composed for her warrior. She travelled on and as she travelled she checked the colour of the milk in the gourd. Each day that she saw the milk turn a little more red, she traveled faster. And each day she hoped that she would find her lover alive.

On the ninth day the girl sang louder and louder as she traveled. Each time she sang she would listen to hear if there was any reply. Any as she listened at one time, she heard a faint voice. There was no mistake about it. It was her lover's voice. She ran and ran and after a while she found her lover. He was extremely weak and badly wounded.

When the dying warrior saw her, he told her; 'When I am finished, you take my attire and weapons home. When you get a son give them to him And with that the warrior seemed to be dying.

But the girl did not listen to him, she quickly looked for water and washed his wounds. And after that she began to look for food for him. It did not take long before she saw a deer passing by. With her lover's spear she killed it, and wasted the meat for her lover. For many months the young woman washed the wounds of her lover and fed him until he was well again.

Back at home everybody thought that the young woman and her lover were dead, and they insisted that their death rites be performed. However, the father of the warrior kept postponing the death rites. But at last the old man agreed to perform the rites because his youngest son was to be circumcised, and could not be circumcised before the rites were performed.

So preparations for the death rites for the lost warrior were made. But on the morning of the day that the rites were to be performed, and as people were gathering, one of the people in the gathering heard a war song coming from the other side of the valley. He asked other people to listen. The father of the warrior could not mistake his son's voice. He was almost crying as he gazed on the other side of the valley. The singing voice became clearer and before long the warrior and his lover emerged, driving a large herd of cattle. The bells that were tied around the necks of the oxen played to the tune of the war song.

There was great rejoicing as people ran to meet the lost warrior and his young lover. On their arrival back home a big bull was slaughtered and there was a great feast. People ate and drank. And the warrior and his lover were married.

The two became man and wife and lived happily. And my story ends.

From Oral Literature. A Junior Course

By A. Bukenya and M. Gachanja,
Longhorn Kenya.

Questions

- a) What kind of a narrative is this? (2mks)
- b) Identify two instances of repetition in the passage (2mks)
- c) What are the character traits of? (4mks)
 - i. the warrior
 - ii. the youngest lover
- d) Give two functions of the song. (2mks)
- e) Show instances of irony in the passage (2mks)
- f) What are the economic activities of this community? (2mks)
- g) Which devices have been used to start and end this story? What are their functions? (4mks)
- h) With one proverb, summarize the teaching or moral lesson in the story. (2mks)

4. GRAMMAR (15 marks)

5.

a) Rewrite the following sentences according to the instructions given after each. Do not change the meaning. (4 marks)

(i) It is really annoying that capitation has not been received and there is no explanation.
(Begin: That....)

(ii) "The poet proudly claimed, "I wrote many poems during the vacation." (Rewrite in reported speech)

(iii) the student spent three hours in the library however he could not find the book he wanted
(Punctuate correctly)

(iv) The second race was not quite as easy as the first one. (Begin: The first....)

b) Fill in the blanks with the correct word to complete the sentences below. (3 marks)

(i) All that make-up she wears actually (distracts, detracts) from her beauty.

(ii) Ben (lay, lied, lie) on the grass and watched a plane fly overhead.

(iii) Could you (sent, send) a reply to them as quickly as possible?

c) Fill in the blanks with the correct form of the words in brackets. (3 marks)

(i) She (know) that she was at fault.

(ii) Running a marathon is a test of human (endure)

(iii) This is a (true) remarkable achievement.

d) Rewrite the following sentences to remove ambiguity. (2 marks)

(i) They pulled out of the senseless workers' strike.

(ii) The girl hit the boy with a book.

e) Fill in each of the blank spaces with the correct preposition. (3 marks)

(i) Peter had to dispense a lot of luxuries since he lost his job.

(ii) The train goes the tunnel.

(iii) Elisha hit the baseball the fence.

FORM TWO COMPUTER STUDIES

YEAR 2025 HOLIDAY ASSIGNMENT

1. Define the term computer system (2 marks)
2. Computers have undergone various hardware developments. Name the technology used to make the processor of the first four computer generations (2 marks)
3. State three electronic pathways attached to the motherboard that are used to transfer data
4. (a) List two categories of scanners that are used for inputting data into the computer (1 mark)
(b) Previously scanners were connected to a computer via the Parallel ports, but this has been replaced with USB port. Briefly explain the difference between the Ports (2 marks)
5. Distinguish between **File** and a **Folder** as used in Windows Operating system (2 marks)
6. (a) Outline two ways in which IEBC will use computer to ensure free and fair election in 2027 (2 marks)
(b) Explain any two biometric technologies that may be used to control access to a computer lab (2 marks)
7. a) State two instances where Right clicking of a mouse may be applicable (2 marks)
b) Name the keyboard keys that will help you (2 marks)
Type the upper character in a computer
Delete a text from left to right of the cursor position
8. State two circumstances which may force an individual to acquire an Impact printer instead of Non – Impact printer (2 marks)
9. Name the disk management activity described below (2 marks)
Creates logical drives in disk
Deletes idle files to create more disk space
Aligns tracks and sectors in a disk
Allows contents of a file to occupy contiguous sectors for faster access
10. Name three common malicious programs that are harmful to computer (3 marks)
11. Speech or voice input is rapidly developing means of input to a computer. List one advantage and one disadvantage of speech input technology (3 marks)
12. a) Apart from control unit, Name any other two functional elements of the CPU (1 mark)
b) State two functions of the Control unit (2 marks)
c) State one purpose of RAM in a smartphone (1 mark)
13. State two reasons why Flash disks have gained more popularity than other storage devices (2 marks)
14. A school wishes to acquire software for analyzing learner's academic work. State two benefits of acquiring Vendor off the shelf software (2 marks)
15. List three advantages of using a screen as an output device over a printer (2 marks)

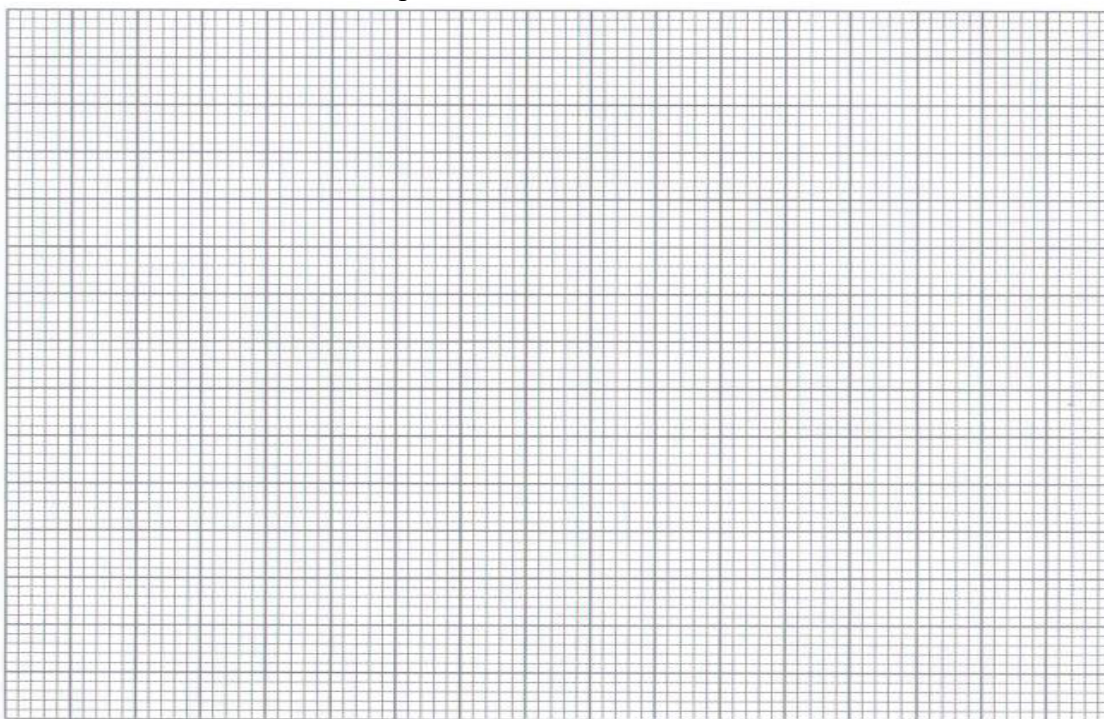
16. a) You are required to prepare a Curriculum Vitae. State three reasons why you would choose an electronic Word processor over Manual one (3 marks)
- (b) Explain the following terms as used in word processing (3 marks)
- Document Editing
 - Document Formatting
 - Proof reading
- (c) (i) List four types of publications that can be designed using DTP Program (2 marks)
- (ii) Define the term Pasteboard as used in DTP (2 marks)
17. a) Explain three main tasks in creating a merged document (3 marks)
- b) (i) Define the term Desktop Publishing (2 marks)
- (ii) Name two types of Desktop Publishing software's (2 marks)
- c) Outline three features of DTP that would be used to produce Newsletters (3 marks)
18. (a) State the functions of the following logical functions as used in spreadsheet.
- Count If (2 marks)
 - Sum If (2 marks)
 - Distinguish between a **formula** and a **function** as used in spreadsheet (2 marks)
- (b) Explain each of the following features in spreadsheet (4 marks)
- Workbook
 - Navigation Bar
 - Name box
 - Cell pointer
- (c) (i) Explain three components of a spreadsheet (6 marks)
- (ii) With aid of an example, explain the difference between Absolute and relative cell referencing (3 marks)
- (iii) Five students Jane, Beryl, Baroness, Linda and Jael scored the following marks in mathematics: 45,76,34,65, and 45. The marks were recorded in cell C3 to C7. Write down the most appropriate function that can be used to give positions so that they can be awarded in descending order. (1 mark)
19. a) Describe any three types of action queries (6 marks)
- b) List two benefits of using Relational Database Management System as opposed to Flat File database system (2 marks)
- c) (i) State two types of Controls used in forms in database (2 marks)
- (ii) Explain one relationship that can be established between tables for entities "Teacher" and "Student" in DBMS (2 marks)
- d) (i) Explain Primary Key as used in database (1 mark)
- (ii) State three functions of the Primary key field in database (3 marks)
- (iii) The following fields are found in Patients table: Patient name, Patient ID, Doctors ID, Ailment.
- Identify the most appropriate data type for each field mentioned above (2 marks)

- a. What is a foreign key as used in database (1 mark)
- b. Identify the most appropriate field to be used as a foreign key (1 mark)
20. (a) Define the following terms as used in Internet
- i. Search engine (2 marks)
 - ii. Browser (2 marks)
 - iii. E – commerce (2 marks)
 - iv. E- learning (2 marks)
- (b) (i) E- mail services are one of the most utilized services by online users. Explain three features available in an E- mail. (3 marks)
- (ii) A school has been advised to install E – mail software. State three benefits the school would gain from this service (3 marks)
- (c) (i) Differentiate between private and confidential data used in data security and control (2 marks)
- (ii) Explain the following types of computer crimes (4 marks)
- ❖ Piracy
 - ❖ Fraud

MERU SCHOOL
FORM 2 MATHEMATICS
DECEMBER HOLIDAY ASSIGNMENT 2025

1. Evaluate without using a calculator or mathematical tables.
$$\frac{\left(2\frac{2}{7} - 1\frac{5}{6}\right) \div \frac{5}{6}}{\frac{2}{3} \text{ of } 2\frac{1}{4} - 1\frac{1}{7}}$$
2. Simplify completely by factorization
$$\frac{20 - 45x^2}{6x^2 - x - 2}$$
3. A perpendicular line is drawn from a point (4, 6) to the line $5y + 4x - 20 = 0$. Find its equation in the form of $ay + bx = 0$ where a, b and c are integrals.
4. Solve for x in the equation
$$8^{(2x-1)} \times 32^x = 16^{x+1}$$
5. Use square roots and reciprocal tables to evaluate to 4 significant figures the expression.
$$(0.06458)^{-\frac{1}{2}} + \frac{2}{0.4327}$$
6. Given that $\sin \theta = \frac{2}{3}$ and θ is an acute angle, find $\tan (90 - \theta)$, giving answer to four significant figures.
7. Given the column vector $\mathbf{p} = \begin{pmatrix} -5 \\ 3 \end{pmatrix}$, $\mathbf{q} = \begin{pmatrix} 4 \\ -8 \end{pmatrix}$ and $\mathbf{r} = \begin{pmatrix} 6 \\ -9 \end{pmatrix}$, $\mathbf{t} = 2\mathbf{p} - \frac{1}{2}\mathbf{q} + \frac{1}{3}\mathbf{r}$
 - (i) Express $\mathbf{t}$ as a column vector.
 - (ii) Calculate the magnitude of vector $\mathbf{t}$ in (i) above correct to 2 d.p.
8. Four machines give out signals at intervals of 24 seconds, 27 seconds, 30 seconds and 50 seconds respectively. At 5:00 p.m. all the four machines give out a signal simultaneously. Find how many times the second machine will have signalled before the four machines signal together again.
9. A wire in form of an arc with radius 12cm and centre angle 150° is formed into a circle. Find the radius of the circle.
10. The exterior angle of a regular polygon is equal to one-third of its interior angle. Calculate the number of sides of the polygon and give its name.
11. The area of a parallelogram is 121cm^2 and its sides are 11cm and 16cm long. Find the sizes of all the angles of the parallelogram.
- 12(a) Using a ruler and a pair of compasses only, construct triangle ABC in which $BC = 6\text{cm}$, $AB = 8.8\text{cm}$ and $\angle ABC = 22.5^\circ$.
 - (b) Measure length AC and $\angle ACB$.
 - (c) Construct a circle that passes through vertices A, B and C
 - (d) What is the radius of the circle.

- (e) Calculate area outside the triangle.
13. Forty students in Form 3 class were weighed and their masses recorded to the nearest kilogram as shown below:
- | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|
| 45 | 48 | 56 | 39 | 36 | 37 | 46 | 33 | 43 | 42 |
| 47 | 40 | 46 | 41 | 43 | 54 | 42 | 51 | 39 | 45 |
| 49 | 50 | 46 | 47 | 45 | 39 | 42 | 48 | 51 | 47 |
| 50 | 38 | 45 | 45 | 46 | 35 | 52 | 46 | 42 | 44 |
- (a) Using class intervals of 5kgs, tabulate this data in a frequency distribution table starting from 30kg.
- (b) State the modal frequency.
- (c) From your table calculate mean mass
- (d) Draw a histogram to represent above information and on it draw a vertical line showing where median mass lies.
14. A bus left town A at 11:45a.m. and travelled towards town B at an average speed of 80km/hr. A matatu left town B at 1: 15p.m. and travelled towards A along the same road at an average speed of 120km/hr. The distance between the two towns is 840km. Determine:
- (a) The time of day when the two vehicles met.
- (b) How far from town A they met.
- (c) How far outside town B the bus was when matatu reached town A.
- 15.(a) The points A(2, 6) B(1, 1) C(3, 4) and D(5, 3) are vertices of a quadrilateral ABCD. Plot points ABCD on the grid below to form quadrilateral ABCD.
- (b) ABCD undergoes a rotation of positive 90° about (0, 0). On the same grid, draw the image A'B'C'D' and state its coordinates.
- (c) A'B'C'D' undergoes a reflection in the line $y = 0$ to give A''B''C''D''. On the same grid draw A''B''C''D'' and state its coordinates
- (d) A''B''C''D'' is the image of ABCD under a reflection. On the same grid mark the mirror line and states its equation.



- (e) State a pair of direct congruence quadrilaterals.

- (f) Describe fully a transformation that maps A'B'C'D' onto ABCD.
16. Solve the equation $2x^2 + 10x + 12 = 0$ by completing the square method.
17. Find all the integral value of x which satisfy the inequalities
 $2(2 - x) < 4x - 9 < x + 11$
18. The data below shows the masses in grams of 50 potatoes.

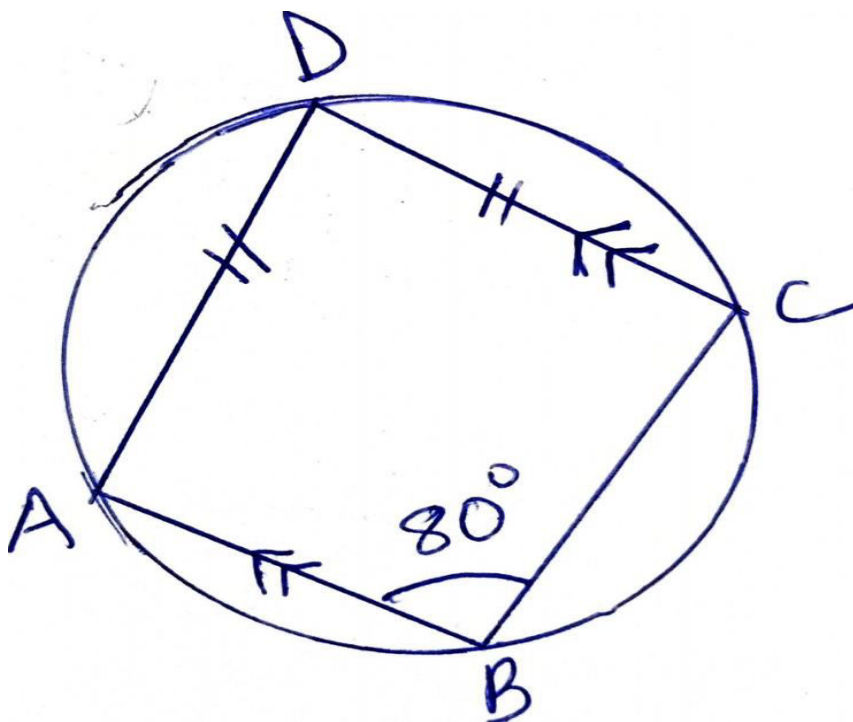
Mass (g)	25 – 34	35 – 44	45 – 54	55 – 64	65 – 74	75 – 84	85 – 94
No. of potatoes	3	6	X	12	8	4	1

- (a) Calculate the value of x .
- (b) State the modal class of the data.
- (c) Calculate mean mass of the potatoes
- (d) On the same axes; Draw:
- (i) Histogram to represent the above information.
- (ii) Frequency polygon.
19. A frequency distribution of marks obtained by 12 candidates is to be represented in a histogram. The table below shows the grouped marks. Frequencies for all the groups and also the area and the height of the rectangle for the group 30 – 60 marks.

Marks	0 – 10	10 – 30	30 – 60	60 – 70	70 – 80
Frequency	12	40	36	8	24
Area of rectangle			180		
Height of rectangle			6		

- (a)(i) Complete the table above.
- ii) On the grid provided below, draw a histogram to represent the data.
- (b)(i) State group in which median lies.
- ii) A vertical line drawn through the median mark divides the total area of the histogram into two equal parts using this information or otherwise, estimate the median mark.
- c) Calculate the different in area of rectangle in lower and upper quarters.
20. A father is now four times as old as his son. Five years ago he was exactly one and a half times as old as his son will be ten years from now. Determine the sum of their present ages.
21. Given that $\overrightarrow{OP} = 3i - 2j$ and $\overrightarrow{OQ} = 8i - 5j$. Find the magnitude of $\overrightarrow{PQ}$ to 3 s.f
22. Without using mathematical tables or a calculator evaluate:

$$\frac{2.7 \times 2.04}{300.00 \times 0.0540}$$
23. ABCD is a cyclic quadrilateral in which $AD = DC$ and AB is parallel to CD .



Given that angle $ABC = 80^\circ$, find the size of angles DAC , BAC and BCD .

- (i) $\angle DAC$ (ii) $\angle BAC$ (iii) $\angle BCD$

24. From a watch tower M on a hill, N is 5km on a bearing of 078° and railway station P 9km away on a bearing of 200° .

(a) Using a scale 1 : 100000 draw the relative positions of M, N and P

(b) Find:

(i) The bearing of N from the railway station.

(ii) The distance between P and N.

iii) The shortest distance between M and the line PN.

iv) The true North bearing of railway station from point N.

25. The vertices of a triangle PQR are $P(-3, 2)$, $Q(-1, 2)$ and $R(-1, 4)$.

(a) On the grid provided draw triangle PQR.

(b) Triangle PQR is reflected on a line $y = x + 1$

(i) Draw line $y = x + 1$

(ii) Draw triangle $P'Q'R'$ the image of triangle PQR under reflection in the line $y = x + 1$

c) Draw triangle $P''Q''R''$ the image of triangle $P'Q'R'$ under a rotation of positive quarter turn about the origin.

d) Under translation $\begin{pmatrix} 2 \\ 3 \end{pmatrix}$ triangle $P''Q''R''$ is mapped onto triangle $P'''Q'''R'''$

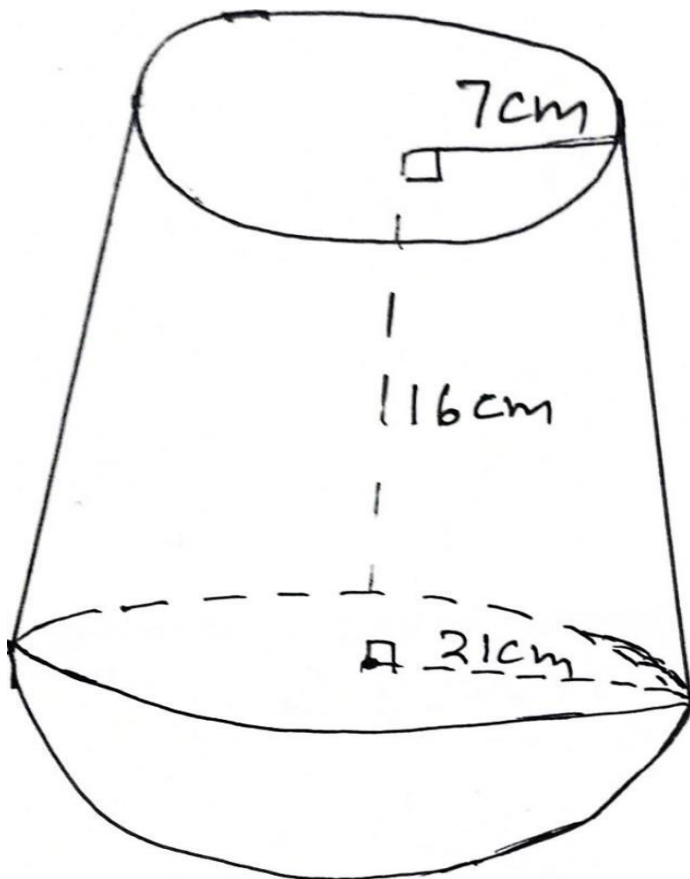
(i) Find the coordinate of $P'''Q'''R'''$

(ii) Draw triangle $P'''Q'''R'''$

e) State a pair of triangles which are directly congruent

26. A rectangular plot of land measures $(3x + 9)m$ by $(x - 3)m$ and has an area of $648m^2$.

- (a) Write a simplified equation for the area of the plot in the form $ax^2 + bx + c = 0$
- (b) Determine the dimensions of the plot.
- (c) The plot was to be divided into square plots for sale. Calculate the number of plots obtained.
- (d) Another similar plot has an area of 2592m^2 . Find the dimensions of the plot.
27. The ratio of the interior angle to that of the exterior angle of a regular polygon is $7 : 2$. Find the number of sides of the polygon.
28. A line $y + 6x + p = 0$ passes through $(4, 2)$ and is perpendicular to the line $qy + 4x - 10 = 0$. Determine the values of p and q .
29. Kemosi cycled from town A to town B at 10km/h and he returned to town A at 12km/h , the total time taken was 1 hr 50 mins. Find the distance between the two towns.
30. Solve the following inequalities and represent the solutions on a single number line.
- $$2x + 1 \leq 11$$
- $$x - 4 < 3(x - 2)$$
31. Find the integral values that satisfy the inequality $\frac{1}{2}(5x - 4) \leq x + 5 \frac{1}{2} < 3x + 1 \frac{1}{2}$
32. Simplify the expression: $\frac{16p^2 - 9q^2}{4p^2 - pq - 3q^2}$
33. The figure below represents a solid consisting of a hemispherical bottom and a conical frustum at the top (use $\pi = \frac{22}{7}$)



Calculate:

- (a) The vertical height of original from which the frustum was cut
 (b) The volume of the hemispherical part.
 (c) The volume of the conical frustum
 (d) The volume of the solid.
34. The volume of two similar cylindrical solid are 200cm^3 and 3125cm^3 . If the surface area of the smaller one is 36cm^2 . Find the surface area of the larger cylinder.
35. Use logarithm tables to evaluate to 4 d.p.

$$\left(\frac{69.714 \log 23.4}{\cos 65.3^\circ} \right)^{1/2}$$
36. Use squares, square root and reciprocals to find the value of:

$$\frac{3.045^2 + 1}{\sqrt{49.24}}$$
37. A polygon of n sides has half of interior angles 150° each and rest 170° each. Find the value of n.
38. An irregular 8 sided polygon has 3 of its interior angles equal to $(2x + 10)^\circ$ each, two angles equal to x° each and the remaining angles equal to 70° each. Calculate the value of x.
39. Yusuf has a total shs.210 in three denominations. He has a total of 19 coins. The number of ten shillings coins is 3 less than the sum of five shillings coins and twenty shillings coins. Determine the number of twenty shillings coins.
40. Given that $\sin \theta = \frac{4}{5}$ evaluate without using mathematical tables or calculator.

$$\frac{1}{\tan 90 - \theta} \times \cos \theta$$
41. The angle of the vertex of a cone is 90° . If the slant height is $3\sqrt{2}\text{cm}$. Find without using tables or a calculator.
 (a) The diameter of the cone
 (b) The height of the cone.
42. Solve the following simultaneous equation.

$$y = x^2 + 4x + 3$$

$$y = -x + 9$$
43. A square floor is fitted with identical rectangular tiles. The length of the floor is 9.6m. The perimeter of each of the tile is 220 cm. Each row (tile lengthwise) carries 20 less tiles than each column tiles (breadthwise). Taking x to represent the width of the tile..
 (a) Write the expression in x the number of tiles on both row and column.
 (b) Calculate the dimension of the tiles.
 (c) Find the number of tiles needed to cover the whole floor of the room.
 (d) Find the cost of fitting, if the tiles are sold in dozen at Kshs.1500 per dozen and the labour is Kshs.300.

44. A bus leaves town x for town y 240km away at an average speed of 60km/h at 8:00 a.m. Thirty minutes later a car leaves town y and travels towards town x at an average speed of 80km/h,
- Calculate the time when the bus met the car.
 - How far from x does the car meet the bus.
- (b) At the point of meeting, the car develops a puncture and the driver stops for 45 minutes to replace the wheel. At what speed must the car travel so as to get to x at the same time the bus reaches y.

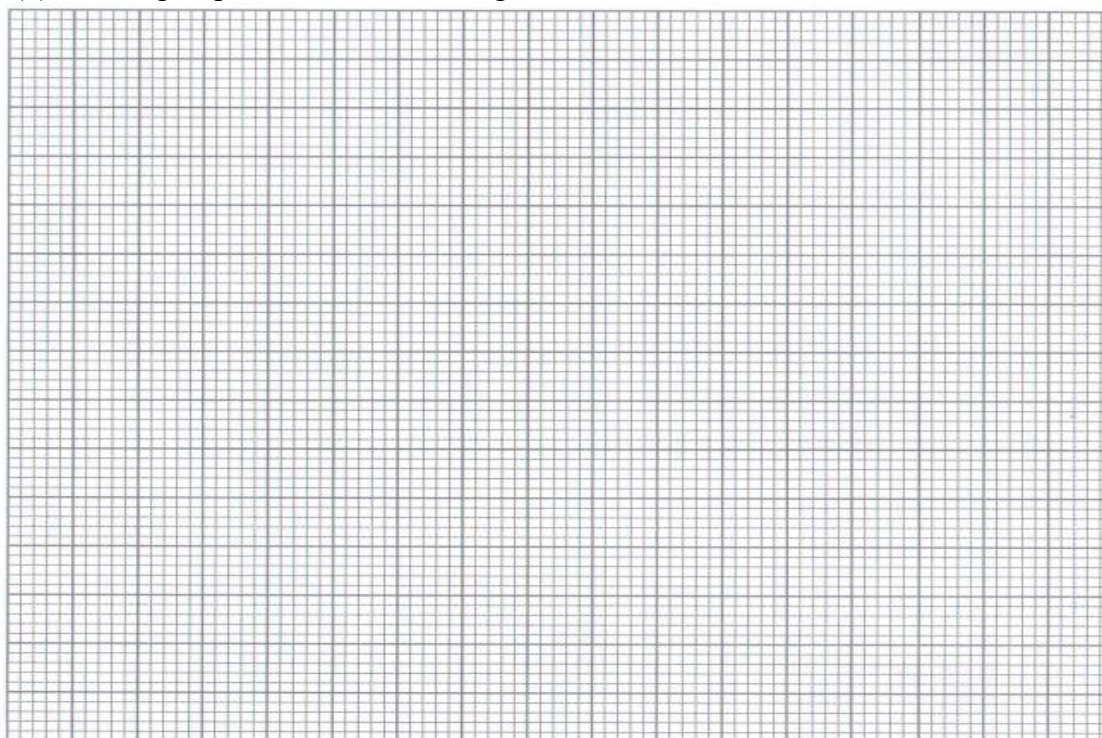
45. The daily pocket expenses of 120 students in a school are recorded in the table below.

Pocket expenses in Kshs.	50–60	60–70	70–80	80–90	90–100	100–110	110–120
Frequency	8	14	19	26	33	14	6

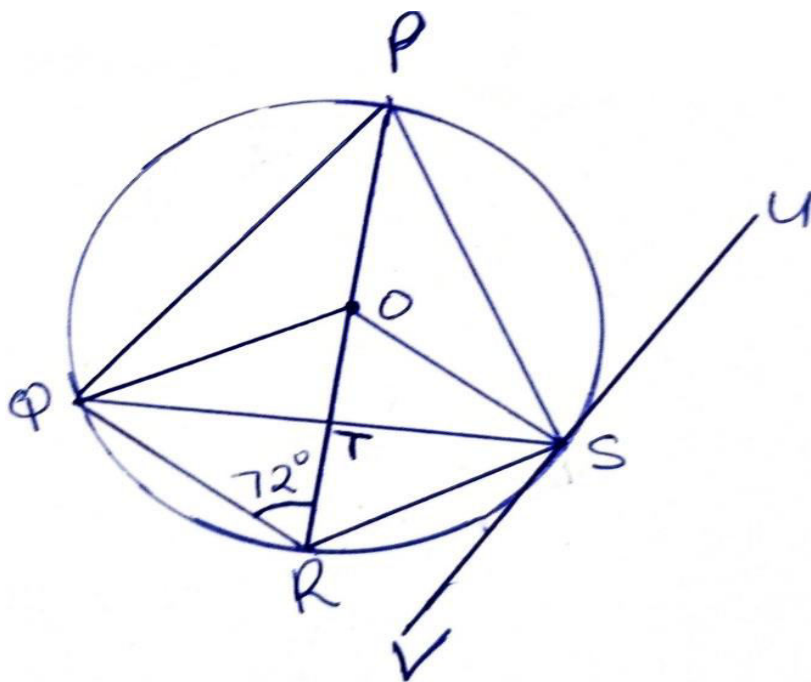
- (a) Using the table above data. Calculate:

- The mean
- The median
- State the modal class

- (b) On the grid provided draw a histogram

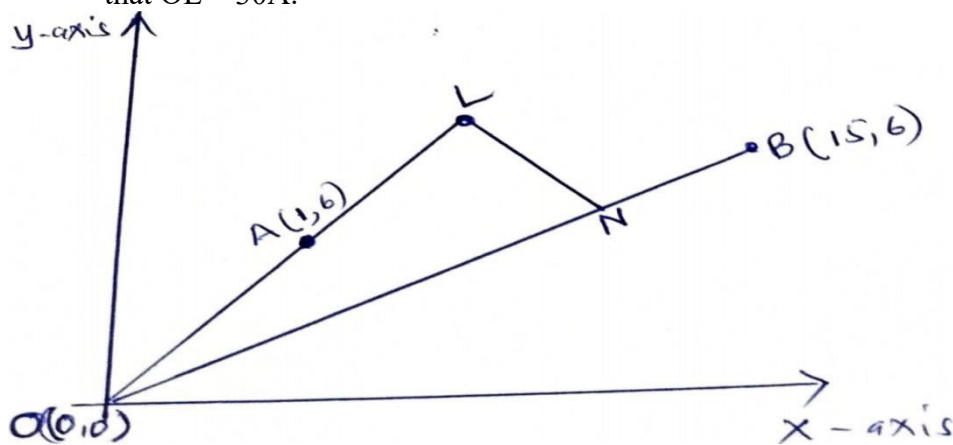


46. In the figure below PR is a diameter of the circle centre O points P,Q,R and S on the circumference of the circle. Angle PRQ = 72° , QS = QP and line USV is a tangent to the circle at S. Giving reasons, calculate the size of:



- a) $\angle QPR$ (b) $\angle PQS$ (c) $\angle OQS$ (d) $\angle RTS$
 (e) $\angle RSV$

47. In the diagram below, the coordinates of points A and B are (1, 6) and (15, 6) respectively, point N is on OB such that $3ON = 2OB$. Line OA is produced to L such that $OL = 3OA$.



- a) Find vector LN
 b) Given that a point M is on LN such that $LM : MN = 3 : 4$ find the coordinates of M.
 c) Line OM is produced at T such that $OM : MT = 6 : 1$
 (i) Find the position vector of T
 (ii) Show that point L, T and B are collinear.

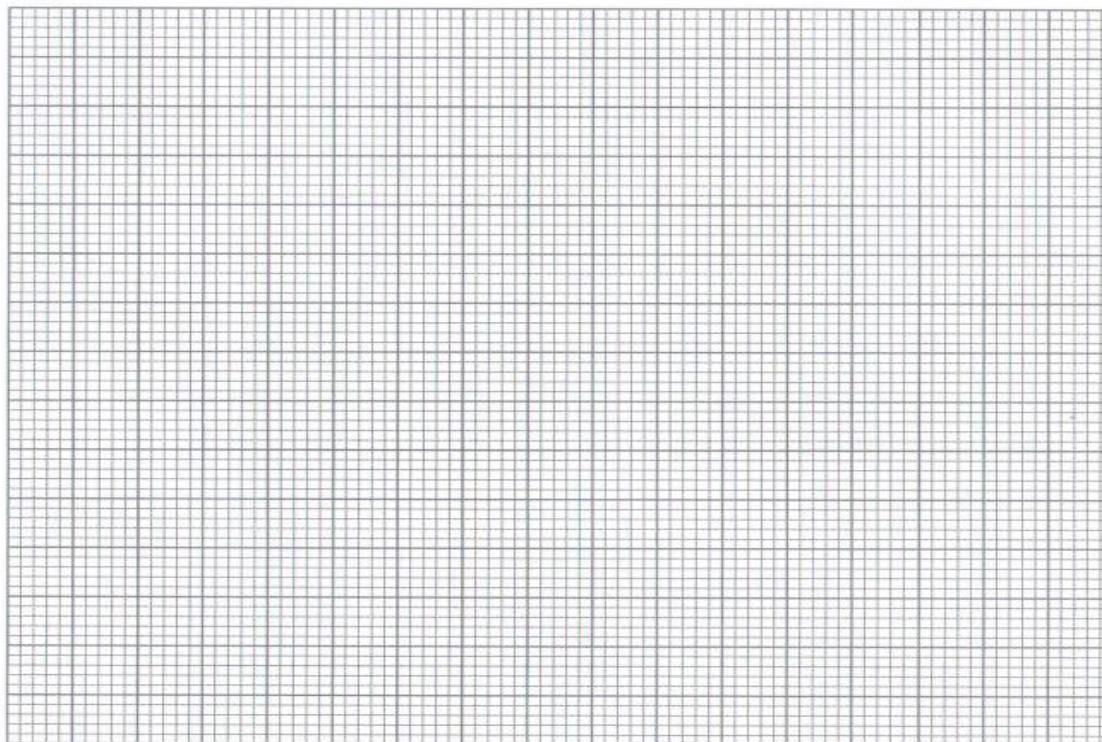
48. The position vectors of points A and B with respect to origin O are $\begin{pmatrix} -8 \\ 5 \end{pmatrix}$ and $\begin{pmatrix} 12 \\ -5 \end{pmatrix}$ respectively. Point M is the midpoint of AB and N is the midpoint OA.

- a) Find:
 (i) The coordinates of N and M
 (ii) The magnitude of NM
 b) Express vector NM in terms of OB.

- c) Point P maps onto P' by a translation $\begin{pmatrix} -5 \\ 8 \end{pmatrix}$. Given that $OP = OM + 2MN$. Find the coordinates of P'.
49. Motorbike A travels at 10km/h faster than motorbike B whose speed is x km/h. Motorbike A takes $1\frac{1}{2}$ hours less than motorbike B to cover a 180km journey.
- (a) Write an expression in terms of x for the time taken to cover the 180km journey by:
- (i) Motorbike A.
- (ii) Motorbike B
- b) Use the expression in (a) above to determine the speed in km/h of motorbike A.
- c) For a journey of 48km, motorbike B starts 10 minutes ahead of motorbike A, calculate in minutes the difference in the time of their arrival of the destinations.
50. Express: $\frac{1}{x-2} - \frac{2}{x+5} = \frac{3}{x+1}$ in the form $ax^2 + bx = c$ where a, b are constants hence solve for x
51. Neema did y tests and scored a total of 120 marks. She did two more tests which she scored 13 and 14 marks. The mean score of the first y test was 3 marks more than the mean score for all the tests that she did. Find the total number of tests that she did.
- 52(a) Complete the table below for the function $y = -x^2 + 3x + 4$

X	-2	-1	0	1	2	3	4	5
Y			4					

- b) On the grid provided below draw the graph of $y = -x^2 + 3x + 4$ for $-2 \leq x \leq 5$.



- c) Use your graph in (b) above to solve the quadratic equations.
- (i) $-x^2 + 3x + 4 = 0$
- (ii) $-x^2 + 5x = 0$
53. Given that a line L1 passes through the points P(2, 1) and Q(4, 5) find:
- a) The equation of line L1 in the form $y = mx + c$.

- b) The equation of a line L2 which is perpendicular to line L1 and passes through point (1, 4). Leave your answer in the form $ax + by = c$ where a, b and c are integers.
- c) The coordinates of the point of intersection of lines L1 and L2.
54. Pauline is standing at a point P 160m South of a hill H on a level ground. from point P she observes the angle of elevation of the top of the hill to be 67° .
- (a) Calculate the height of the hill.
- (b) She then walks 420m due East to a point Q. Calculate the angle of elevation of the top of the hill from point Q to the nearest degree.
55. Show that the points P(3, -4), Q(-1, 8) and R(6, -13) are collinear.
56. Water flows through a cylindrical pipe of diameter 4.2cm at a speed of 50m/min.
- a) Calculate the volume of water delivered by the pipe per minute in litres.
- b) A cylindrical storage of depth 3m is filled by water from this pipe at the same rate of flow. Water begins flowing into the tank at 8:30 a.m. and is full at 3:10 p.m. Calculate the area of cross-section of this tank in m^2 .
- c) A family consumes the capacity of this tank in one month. The cost of water is Kshs.200 per a thousand litres plus a fixed charge of Kshs.2500. Calculate the family's water bill in a year.
57. Solve for x and y $3^{x-2y} \times 5^{y+x} = 91125$

**MERU SCHOOL
DECEMBER HOLIDAY ASSIGNMENT 2025
FORM TWO GEOGRAPHY**

This Paper consists of two sections, A & B. Answer all the questions in section A and B

NB. READ AND WRITE NOTES ON;

AGRICULTURE. (1) Definition of the term agriculture

(2) Factors influencing agriculture

(3) types of agriculture -arable

-mixed farming

- Livestock farming

(4) crop farming -tea farming

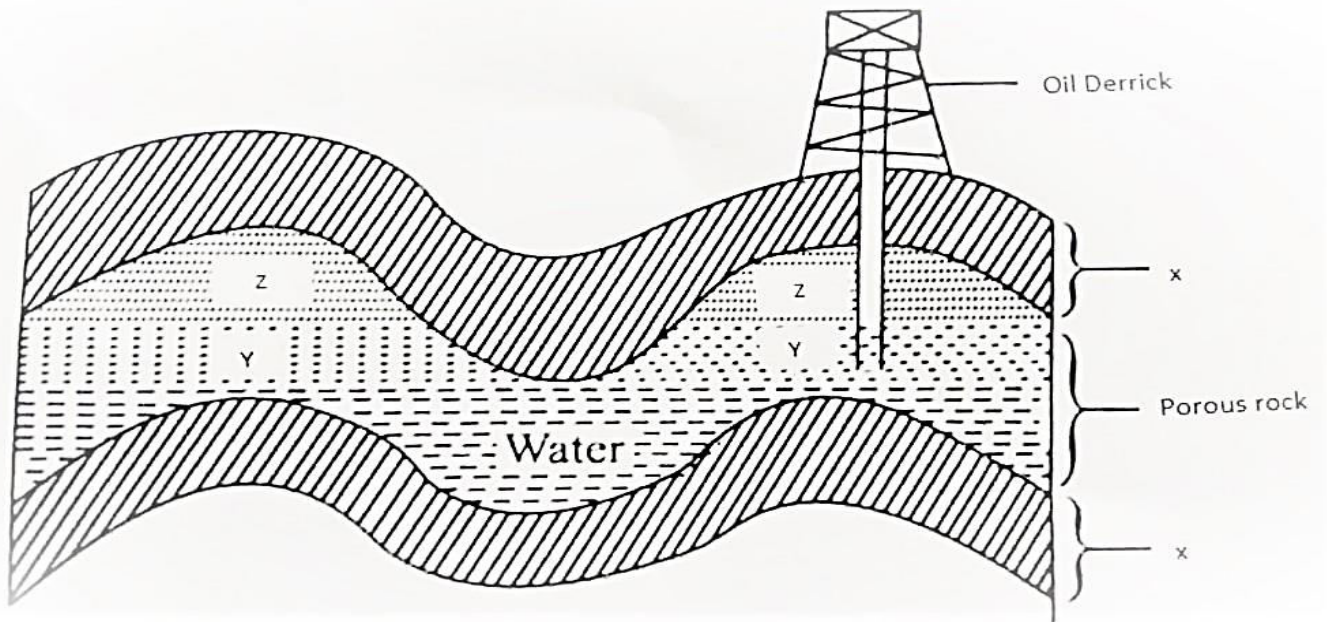
-sugarcane farming

-maize farming

SECTION A.

Answer all the questions in this section.

- 1.(a) Give the relationship between Geography and Economics. (2marks)
(b) State three reasons for studying Geography in secondary schools. (3marks)
- 2.(a) Identify three characteristics of bar graphs. (3marks)
(b) State advantages of using bar graphs (3marks)
- 3.(a) The diagram below represents the occurrence of petroleum in the earth's crust.



- Name the parts marked X, Y and Z (3marks)
- (b) Give the by-products obtained when refining crude oil (3marks)
- 4.(a) Define re-afforestation (2marks)
- (b) Identify the importance of agro-forestry (3marks)
- 5.State three characteristics of beef cattle ranching (3marks)

SECTION B

Answer question 6 and any other TWO questions from this section

- 6.Study the photograph below and answer the following questions.



- (a)(i) Giving a reason identify the type of photograph above. (2marks)
- (ii) Draw a rectangle 15cm by 10cm to represent the area covered by the photograph. (1mark)
- (iii) On the rectangle, sketch and label four main features shown on the photograph. (4marks)
- (b)(i) Which type of farming is shown on the photograph. (1mark)
- (ii) Give three physical conditions favoring the farming activity in Kenya. (3marks)
- (iii) Describe the significance of agriculture in Kenya. (4marks)
- (c)(i) State two areas in Kenya where maize is grown on large scale. (2marks)
- (ii) Explain four problems facing maize farmers in Kenya (8marks).

- 7.(a)(i) Identify **two** types of open cast mining. (2marks)
- (ii) Describe the stages involved in deep-shaft mining. (6marks)

- (b) State **three** negative effects of mining on the environment. (3marks)
- (c) Give **two** reasons why Kenya imports her oil in crude form. (2marks)
- (d) Explain **four** ways in which mining contributes to the economy of Kenya. (8marks)
- (e) Explain how the following factors influence exploitation of minerals.
- Technology (2marks)
 - Quality of the ore. (2marks)

- 8.(a)(i) Name three exotic softwood tree species planted in Kenya (3marks)
- (ii) State four factors favouring the development of softwood forests in Kenya (4marks)
- (b) Explain four measures that the government of Kenya is taking to conserve forests in the country. (8marks)
- (c)(i) Give reasons why forests are more wide spread in Canada than Kenya. (4marks)
- (ii) Compare forestry in Canada and Kenya under the following sub-headings;
- Tree species (2marks)
 - Harvesting (2marks)
 - Transportation (2marks)

MERU SCHOOL GEOGRAPHY

DECEMBER 1 HOLIDAY ASSIGNMENT

FORM 3

A. Read and write notes on the following form 4 topics

- 1) Land rehabilitation and reclamation
- 2) Fishing
- 3) wildlife and tourism
- 4) transport and communication

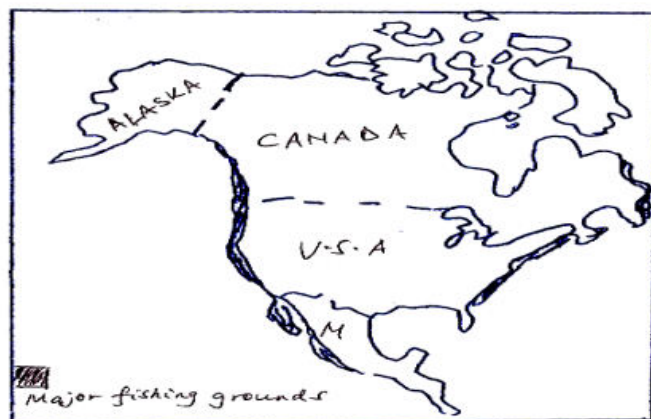
B. Answer the following questions

Land rehabilitation and reclamation

1. (a) Differentiate between land reclamation and land rehabilitation. (2mks)
(b) (i) List **three** ways in which tsetse fly menace has been controlled in the Lambwe Valley. (3mks)
(ii) Name **two** areas in Kenya where swamps have been reclaimed. (2mks)
(iii) State **four** factors which influenced the establishment of Perkerra Irrigation Scheme. (4mks)
(c) You intend to carry out a field study on Budalangi Flood control.
(i) Name **two** methods that have been used to control flooding in Budalangi. (2mks)
(ii) Give **three** reasons why flood control in Budalangi is important. (3mks)
(iii) List **three** activities that you would undertake prior to the study. (3mks)
(iv) Explain **three** methods that you would use to present your findings after the study. (6mks)
2. a) i) Define land reclamation. (2mks)
ii) Give two methods that are used to drain swamps in Kenya. (2mks)
iii) Name the method of irrigation used in Mwea Tebere. (1mk)
b) Explain how the following factors influenced establishment of Mwea Tebere irrigation scheme.
- Topography (2mks)
- Soil (2mks)
- Government policy

Fishing

1. Use the map of North America below to answer questions (a) and (b)



- a) Name
(i) The fishing ground shaded (1 mark)

- (ii) The ocean current marked (b) (1 mark)
 - b) Explain **four** physical conditions necessary for fishing in the fishing ground shaded. (8 marks)
 - c) Describe trawling method of fishing (6 marks)
 - d) i) Explain **three** ways in which overfishing can be controlled in Lake Naivasha (6 marks)
 - ii) State **three** significance of fish farming (3 marks)
2. a .i) Name two countries found in the north West pacific fishing ground. (2mks)
- ii) Explain four physical factors that favour fishing in the above fishing ground. (8mks)
- b) Describe the following methods of fishing:
- i) drifting (4mks)
 - ii) purse seine (4mks)
- c) Compare fishing in Kenya and Japan under the following sub-headings:
- i) fishing ground (2mks)
 - ii) climate (2mks)
- d) State 3 significance of fishing to the economy of Kenya. (3mks)

wildlife and tourism

1. (a) (i) Differentiate between Ecotourism and Domestic Tourism (2mks)
- (ii) Give four reasons why the government of Kenya should promote eco-tourism (4mks)
- (b) Explain how the following factors influence the distribution of wildlife in East Africa
- (i) Human factors (2mks)
 - (ii) Vegetation cover (2mks)
- (c) (i) Name three game sanctuaries in Kenya (3mks)
- (ii) Explain two problems experienced in wildlife conservation in Kenya (4mks)
- (d) (i) State four reasons why there is a decline in the number of tourist visiting Kenya in the year 2007/2008 (4mks)
- (ii) Give Four reasons why Switzerland has become a popular tourist destination than in Kenya (4mks)
2. (a) (i) What is domestic tourism? (2mks)
- (ii) Explain four factors which hinder the development of domestic tourism in Kenya. (8mks)
- (b) (i) State three reasons why domestic tourism should be encouraged in Kenya. (5mks)
- (ii) Give two effects of forests fires on wildlife in Kenya. (2mks)
- (b) (i) Explain three factors which have made Switzerland a major tourist destination in Europe. (6mks)
- (ii) Other than establishing national parks, explain two measures being taken by the government of Kenya to conserve wildlife. (4mks)

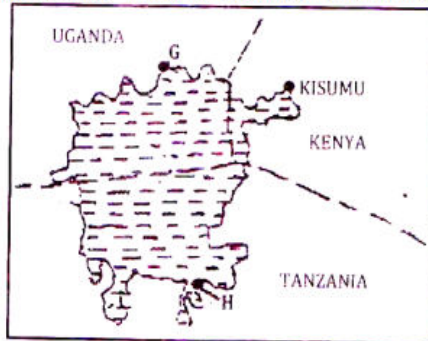
Transport and communication

1. (a) (i) Differentiate transport and communication. (2mks)
- (ii) State three reasons why road network is more widespread than railway network in East Africa. (3mks)
- (b) (i) Outline three benefits derived from the construction of Nairobi-Thika super highway. (3mks)
- (ii) Draw a sketch map of the Great Lakes and St. Lawrence Seaway. On it mark and name the following:-
- Lakes Michigan and Ontario. (2mks)
 - Ports Duluth and Chicago. (2mks)
- (c) Explain how the following factors hinder transport and communication in Africa. (4mks)
- Terrain.
 - Shortage of skilled labour.
- (c) Explain four benefits of transport in the economic development of Africa. (8mks)

2.a)i)Distinguish between transport and communication.

2mks

ii) Use the sketch map of Lake Victoria below to answer the question that follow.



a) Name the Lake ports marked G and H.

2mks

b) i)State three advantages of using water transport .

3mks

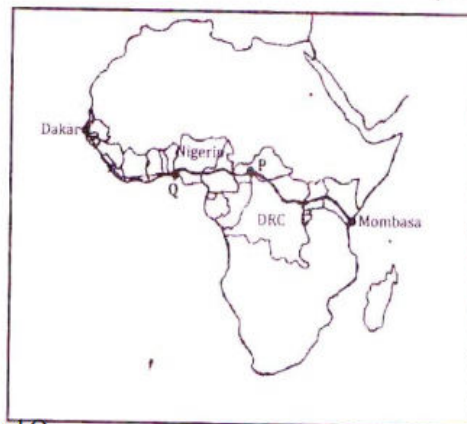
ii) Explain three problems facing river transport in Africa

6mks

iii) State two reasons why flowers from Kenya are transported by air.

2mks

c) Study the map of Africa below and use it to answer question (i) (ii)



i) Name the towns marked P and Q .

2mks

ii) Name two export goods from Kenya that are transported along the highway.

2mks

d) Explain three benefits of the Trans-African highway to the economies of Africa countries.

6mks

MERU SCHOOL
HISTORY AND GOVERNMENT
FORM 2 HOLIDAY ASSIGNMENT 2025

• **ANSWER ALL THE QUESTIONS**

1a) State European activities in Africa before 1850

b) Define the term –Scramble

-Partition

c) State the factors that led to the scramble and partition of Africa

d) Define the term sphere of influence

e) Name the African communities that took part in the Majimaji rebellion

f) Give the results of British Ndebele war of 1893

g) Why did Kabaka Mutesa 1 of Buganda collaborate with the British

h) Give the terms of Anglo-Buganda agreement

i) What were positive impact of European partition and occupation of Africa

2a) Explain the results of Nandi resistance against British

b) Why did the Maasai collaborate with the British

c) State the reasons for Wanga collaborations with the British

d) Give the reasons why the Luo of Uganda resisted the British

e) Explain the effects of Maasai collaboration with the British in early 20th C

f) Give reasons why the British used indirect rule in some parts of Kenya

g) State the duties of a British governor in Kenya during the colonial era

h) Identify the reasons for the Bukusu resistance against the British invasion

3a) Define the following terms

-Direct rule

-Indirect rule

-Assimilation

- b) Give the main feature of indirect rule as applied by the British in Kenya
- c) State the role played by the African chiefs in Nigeria
- d) Give the reasons why the British used direct rule to administer Zimbabwe
- e) Name the chartered company that ruled Zimbabwe
- f) Explain the effects of direct rule in Zimbabwe
- g) Outline the features of assimilation policy
- h) State the condition that one had to fulfil in order to become a French citizen
- i) Why did the French systems of administration fail outside the four communes
- j) Compare the British systems of indirect rule with the French systems of assimilation

NB; The above questions should guide you to cover the following topics

- European invasion of Africa and the process of colonization
- Establishment of colonial rule in Kenya
- Colonial administration

NB: OPENER EXAMS WILL COVER THE ABOVE TOPICS

MTIHANI WA UFUNGUZI

KIDATO CHA TATU 2026

A. NGUU ZA JADI

1. “Ole wako ewe mwanaume uishiye leo. Unaye chakura mapipa ili kuizima njaa. Uliikosea nini jamii hata usalie kuwa ombaomba? Umevaa koti kuukuu na umesalia kuwa nyuma kama koti hilo. Yu wapi baba aliye kutelekeza? Wapi jamii isiyothamini elimu na utu wako? Jamii ilimshika mkono mtoto wa kike. Ikasahau kwamba hata wewe unastahili kushikwa mkono. Lazima tujirudi tuone ni wapi tulipoanza kupotea njia. Lazima tuokoe kizazi hiki kinachopotea nyikani bila matumaini. Ole wako Matuo, utashika mti gani?”
(a) Changanua mtindo katika kifungu hiki (alama 10)
(b) Jadili changamoto wanazopitia watu wa jinsia ya kiume katika riwaya. (alama 10)

B. FASIHI SIMULIZI

1. Ngomezi ni nini? (alama 2)
2. Eleza sifa zozote tano za ngomezi (alama 5)
3. Jadili aini zozote mbili za ngomezi (alama 4)
4. Ngomezi ina umuhimu gani? (alama 5)
5. Eleza changamoto za ngomezi katika jamii ya sasa (alama 4)

C. USHAIRI

1. Wenye vyao watubana, twaumia maskini,
La kufanyiza hatuna, hali zetu taabani,
Kwa sasa kilo ya dona, bei mia ishirini,
Wakubwa tuteteeni, wenye vyao watubana.
2. Washindana matajiri, kwa bei siyo utani,
Na pigo kwa mafakiri, tunao hali ya chini,
Wazeni kutafakari, wanyonge tu madhilani,
Wakubwa tuteteeni, wenye vyao watubana.
3. Limekuwa kubwa zogo, hakwendeki madukani,
Fungu moja la muhogo, sasa shilingi miteni,
Huo mkubwa mzigo, waelemea vichwani,
Wakubwa tuteteeni, wenye vyao watubana.
4. Si hichi wala si kile, hakuna cha afueni,
Bei imekuwa ndwele, wenye macho lioneni,
Ukiutaka mchele, pesa jaza mfukoni,
Wakubwa tuteteeni, wenye vyao watubana.

5. Waliko hao samaki, huko ndiko uchawini,
Wachuuzi hawachekei, zimewatoka huzuni,
Vibuwa havishikiki, kimoja kwa hamsini,
Wakubwa tuteteeni, wenye vyao watubana.
6. Maisha yetu viumbe, yamekuwa hilakini,
Wenye vyao kila pembe, wametukaa shingoni,
Nyama ya mbuzi na ng'ombe, sasa hali maskini,
Wakubwa tuteteeni, wenye vyao watubana.
7. Maji yamezidi unga, kwa lodi wa darajani,
Kajitolea muhanga, kwa bei hawezekani,
Mvao wake wa kanga, ni shilingi elifeni,
Wakubwa tuteteeni, wenye vyao watubana.

Maswali

- a. Lipe shairi hili kichwa mwafaka. (alama 1)
- b. Jadili dhamira ya nafsi neni. (alama 2)
- c. Tambua toni ya shairi hili. (alama 1)
- d. Andika ubeti wa sita kwa lugha tutumbi. (alama 4)
- e. Onyesha vile kibali cha utunzi wa mshairi kilivyotumiwa kukidhi mahitaji ya kiarudhi. (alama 2)
- f. Taja na ueleze bahari mbili za ushairi ukizingatia. (alama 4)
 - i. Ubeti
 - ii. Vina
- g. Tambua aina tatu za taswira ukirejelea shairi hili. (alama 3)
- h. Eleza maana ya maneno yafuatayo kama yalivyotumika kwenye shairi. (alama 3)
 - i. Dona
 - ii. Zogo
 - iii. Waelemea

MERU SCHOOL

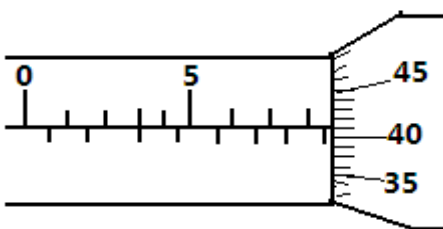
HOLIDAY ASSIGNMENT NOVEMBER/DECEMBER 2025

PHYSICS FORM TWO

SECTION A (25 MARKS) (*Answer ALL the questions in the spaces provided*)

1. What is the reading on the micrometer screw gauge shown below with an error of +0.5mm?

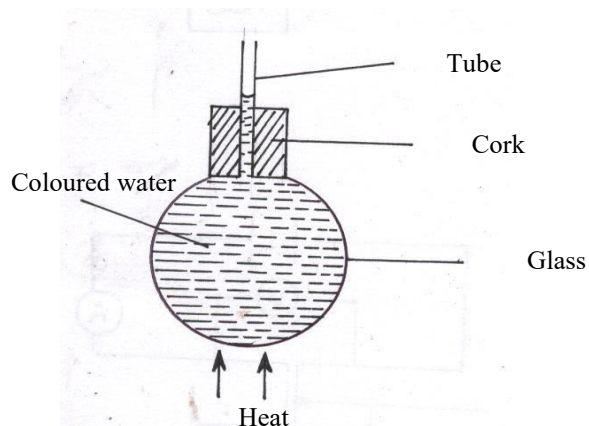
(1mk)



2. In a ball and ring experiment, the ball goes through the rings at room temperature. When it is heated it does not go through the ring, but when left on the ring for some time, it goes through. Explain this observation (2mks)

3. In the study of free fall, it is assumed that the force F acting on a given body of mass, m , is gravitational, given by $F = ma$. State **two** other forces that act on the same body (1mk)

4. In the set up shown below, it is observed that the level of the water initially drops before starting to rise. Explain this observation (2mks)



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5. Distinguish between **speed** and **velocity**. (2mks)

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6. State how the pressure in a moving fluid varies with speed of the fluid. (1mk)

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7. A piece of metal weighs 3N in air and 2N when totally immersed in water.

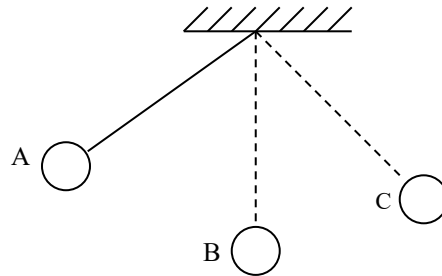
Calculate the volume of the metal (3mks)

8. Explain how a person is able to drink a soda using a drinking straw. (2mks)

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9. Give a reason why air is not commonly used as the fluid in a hydraulic lift. (1mk)

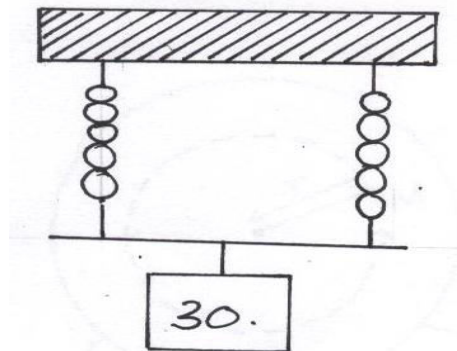
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10. State **one** assumption made when estimating the size of an oil molecule in the oil drop experiment. (1mk)

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11. The figure below shows a swinging pendulum.



State the energy conservation taking place as the pendulum moves from A to B and B to C (2mks)

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12. The identical springs of spring constant 3N/cm are used to support a load of 30N as shown.



Determine the extension on each spring

(3mks)

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13. In a vacuum flask, the walls enclosing the vacuum are silvered on the inside.

State the reason for this.

(1mk)

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14. State the features that govern the strength of a spiral spring of a given material.

(2mks)

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15. Sketch velocity-time graph of a body moving down a viscous fluid.

(1mk)

SECTION B (55 MARKS)

(Answer ALL the questions in the spaces provided)

16. (a) State the principle of conservation of linear momentum. (1mk)

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.....

- (b) Calculate the recoil velocity of a gun of mass 0.4kg which fires a bullet of mass 0.0045kg at a velocity of 400ms^{-1} (3mks)

- (i) State **two** factors which affect frictional force of a body (2mks)

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- (ii) Suggest **three** ways in which friction can be minimized (3mks)

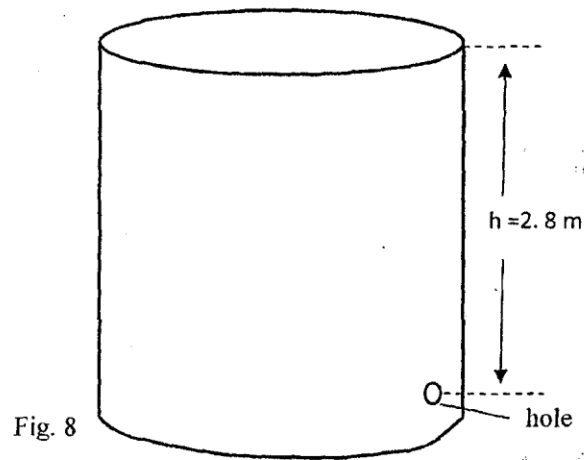
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- (iii) State **three** advantages of friction (3mks)

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17.

- a) Fig. 8 shows a cylindrical can filled with a liquid of density 0.8 gcm^{-3} . A hole of diameter 2.0 cm is drilled at a depth of 2.8 m from the top of the can.



Determine:

- i. The cross-sectional area of the hole. (2mks)

- ii. The maximum pressure exerted by the liquid at the hole. (2mks)

- iii. The maximum force exerted on a jet of liquid through the hole. (2mks)

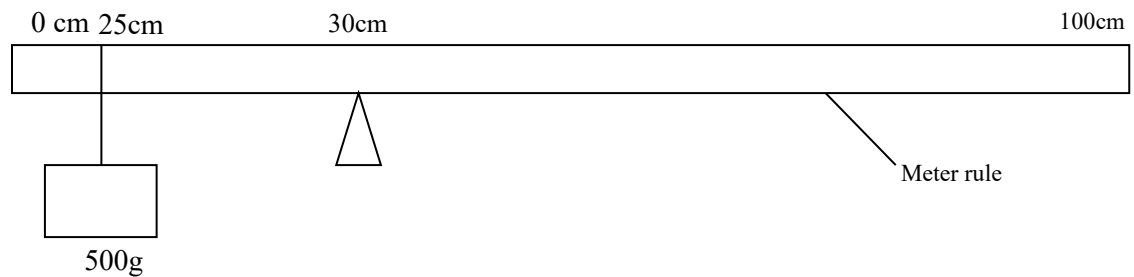
b) State the principle of moments (1mk)

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c) A metre rule whose centre of gravity is at the 50cm mark balances at the 35cm mark when a mass of 500g is placed at the 25cm mark as shown in the figure 8 below



i. Determine the mass of the meter rule (3 mks)

ii. With the metre rule remaining on the knife-edge at the 30 cm mark, a mass of 125g is suspended from the 70 cm mark. The mass of 500g is moved until the rule is balanced. Determine the new position of the 500g mass (3 mks)

18.

a) For a body moving with a constant acceleration, a , show that:

i. $V = u + at$ where v and u are the final and initial velocities respectively while t is the time taken (2mks)

ii. $S = ut + \frac{1}{2}at^2$ where S is the distance covered (2mks)

iii. A car of mass 1200kg moving at 90km/h is brought to rest over a distance of 20m. Calculate the breaking force (3mks)

b) An object is projected vertically upwards with a velocity of 200m/s. Calculate:

i. Its velocity after 5 seconds (2mks)

ii. The distance covered in the first 8 seconds (2mks)

iii. The maximum height reached (2mks)

c) The figure below shows a uniform cardboard in the shape of a parallelogram.



Locate the centre of gravity of the cardboard. (1 mk)

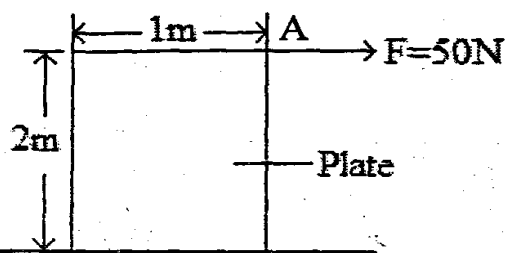
d) Two samples of bromine vapour are allowed to diffuse separately under different conditions, one in a vacuum and the other in air. State with reasons the conditions in which bromine diffuse slower. (2 mks)

19.

a) State **two** factors affecting stability of body (2mks)

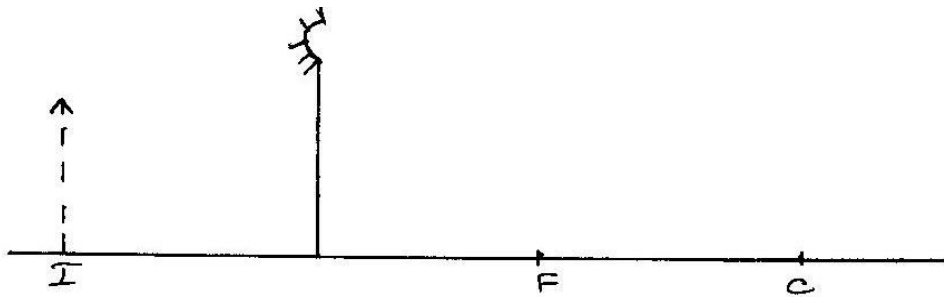
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b) The figure below shows a metal plate 2 m long, 1M wide and negligible thickness. A horizontal force of 50 N applied at point 'A' Just makes the plate tilt.

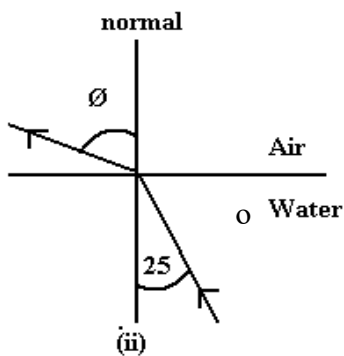
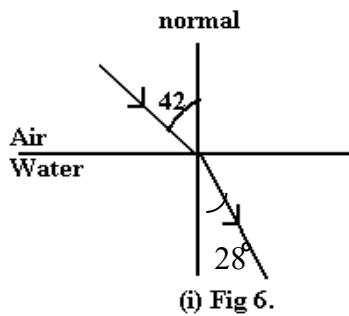


Calculate the weight of the plate. (3mks)

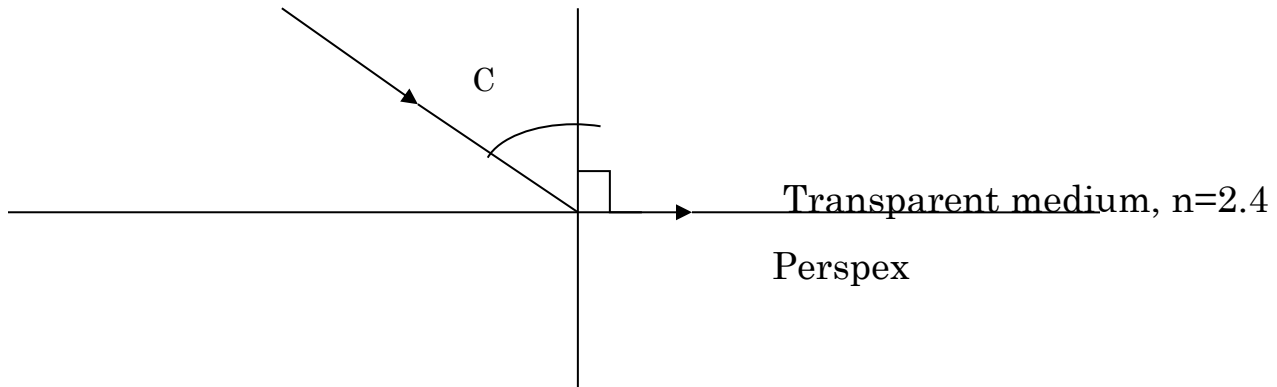
- c) Fig 4 shows an image I formed by an object placed in front of a convex mirror. C is the centre of curvature of the mirror. Using ray diagram, locate the object position. (3mks)



- d) Fig 6 (i) and (ii) show refraction of light at air-water interface. Determine angle θ in figure 6(ii) (3mks)



- e) A ray of light now travels through a transparent medium into the Perspex as shown in the figure below:



Calculate the critical angle

(3mks)