

F4 SET 2 CHAMPIONS

K.C.S.E REVISION

ALL SUBJECTS (16 SUBJECTS)

*****Service Beyond expectation*****

TEL: 0725 733 640 (For this marking Schemes and other materials)

EMAIL: Cger89@gmail.com

FORM 4

CHAMPIONS HOLIDAY EXAMS 2020

SET 2(16 SUBJECTS)

COMPILED BY MR. CHARLES O. GER

CONTACT: 0725 733 640

**CHAMPIONS K.C.S.E REVISION SERIES EXECUTIVE COORDINATOR/EXAMINER
HISTORY/AUTHOR CHAMPIONS K.C.S.E REVISION HISTORY AND GEOGRAPHY**

443/1
AGRICULTURE
PAPER 1 (THEORY)
TIME: 2 HOURS
APRIL 2020

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
Kenya Certificate of Secondary Education

443/1
AGRICULTURE
PAPER 1 (THEORY)
TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the spaces provided above.
2. This paper has **THREE** sections: A , B and C
3. Answer **ALL** the questions in section A and B and any **TWO** questions in section C
4. ALL answers **MUST** be written in the spaces provided.
5. Do not remove any pages from this booklet.
6. This paper consists of 12 printed pages. Candidates should check to ensure that all pages are printed as indicated and no questions are missing

FOR EXAMINER'S USE ONLY

	Questions	Maximum score	Candidate's score
A	01 - 17	30 marks	
B	18 - 21	20 marks	
C	22 - 24	20 marks	
		20 marks	
Total score		90	

SECTION A (30 MARKS)

1. Why is sub-soiling important in crop production? (1mark)

.....
.....
.....

2. a. What is minimum tillage? (1mark)

.....
.....

b. List four activities involved in minimum tillage (2marks)

.....
.....
.....
.....

3. a. What is opportunity cost? (1mark)

.....
.....

b. When is opportunity cost zero? (1mark)

.....
.....
.....

4. State four effects of HIV/AIDs on Agricultural production (2marks)

.....
.....
.....
.....
.....

5. Give five functions of soil water (2½mks)

.....
.....
.....
.....

6. Define the following terms as used in crop production (2marks)

a. Hardening off

.....
.....

b. Pricking out

.....
.....

c. Rogueing

.....
.....

d. Trellishing

.....
.....

7. List three uses of vegetables (1½mks)

.....
.....
.....
.....

8. a. What is tissue culture as used in crop production (1mark)

.....
.....
.....

b. State three advantages of using tissue culture in propagation (1½mks)

.....
.....
.....
.....

9. Distinguish between budding and grafting (1mark)

.....
.....
.....
.....

10. Give four reasons for crop rotation (2marks)

.....
.....
.....
.....
.....

11. Name four examples of working capital in maize production (2marks)

.....
.....
.....
.....

12. Give two similarities between a household and a firm in production economics (1mark)

.....
.....
.....

13. a. Define production function as used in agricultural economics (1/2mark)

.....
.....

b. Give three types of production functions (1 1/2mks)

.....
.....
.....
.....

14. a. State the law of substitution in production economics (1/2mark)

.....
.....
.....

b. Give an example of where this law can apply. (1mark)

.....
.....
.....

15. Give two ways by which polythene sheets help in water conservation (1mark)

.....
.....
.....

16. Name two methods of making compost manure (1mark)

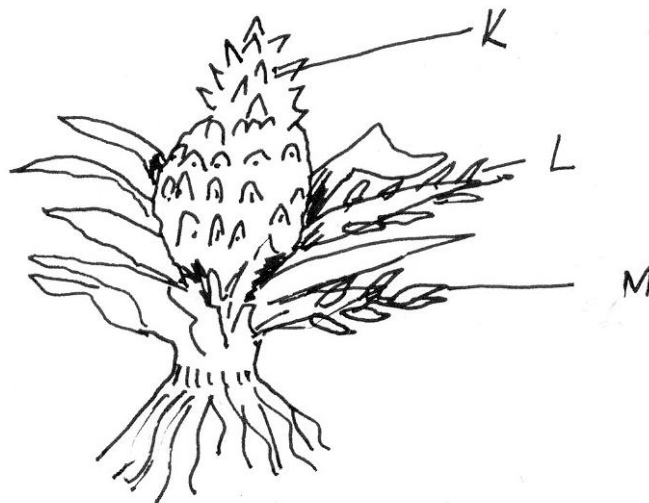
.....
.....
.....

17. List four characteristics of a crop grown for green manure (2marks)

.....
.....
.....
.....

SECTION B (20MARKS)

18. The diagram below illustrates a pineapple crop. Study it and answer the questions below.



(a) Identify the parts labeled **K**, **L** and **M**. (3 marks)

K

L

M

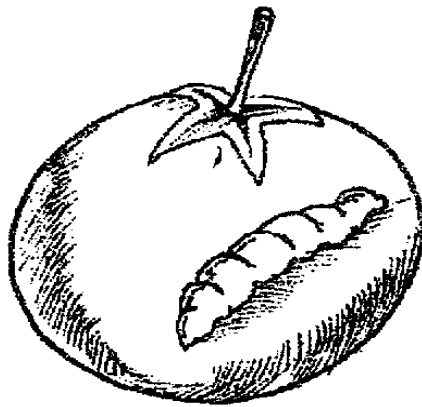
(b) Apart from the parts mentioned above, list down TWO other vegetative materials used for

crop propagation.

(2marks)

.....
.....
.....

19. The diagram **below** illustrates a tomato fruit infested by a certain pest.



(i) Identify the pest. (1 mark)

(ii) State the damage caused by the pest on the fruit. (1 mark)

.....
.....

(iii) State **two** methods of controlling the pest. (2 marks)

.....
.....
.....

(iv) Name the disease characterized by rotting of the lower part of the fruit above. (1 mark)

.....
.....

20. A farmer is to apply a compound fertilizer 20-30-0 on a vegetable plot measuring 5m long by 4m wide at the rate of 200kg/ha.

a. Calculate the amount of fertilizer the farmer requires for the plot (show your working). (3 marks)

b. What do the figures 20-30-0 represent? (1mark)

20

30

c. Differentiate between compound and mixed fertilizer (1mark)

.....
.....
.....

21. Below is a method of irrigation. Study it carefully and answer questions that follow;



a) Identify the method (1mark)

.....
.....

b) Other than the above method, give any other two types of surface irrigation? (2marks)

.....
.....

c) Give two ways in which the above method of irrigation can be maintained? (2marks)

.....
.....

SECTION C (40MARKS)

ANSWER ONLY TWO QUESTIONS IN THIS SECTION IN THE SPACES PROVIDED AFTER

QUESTION 24.

22. a. Outline four advantages of using seeds for propagation (4marks)

b. Describe five ways in which soil fertility can be maintained (10 mks)

c. Outline six uses of farm records (6marks)

23. a. Discuss five ways in which labour productivity in a farm can be improved (5marks)

b. Outline the steps followed in land adjudication (5marks)

c. Describe the field production of cabbage under the following sub-headings

i. nursery establishment and management (5marks)

ii. transplanting (3marks)

iii. harvesting (2marks)

24. (a) State and explain any **five** cultural methods of controlling weeds (10marks)

(b) Explain the factors that may determine spacing of crops in the farm (10marks)

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

443/2
AGRICULTURE
PAPER 2 (THEORY)
TIME: 2 HOURS
APRIL 2020

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
Kenya Certificate of Secondary Education

INSTRUCTION TO CANDIDATES

- Write your name and index number in spaces provided above
- Sign and write the date of examination in the spaced provided above
- This paper consists of THREE sections: A, B and C.
- Answer ALL questions in section A and B and ANY Two questions from section C
- All questions should be written in the spaces provided on the question paper.

For Examiner's Use Only

SECTION	QUESTION	MARKS	CANDIDATE SCORE
A		30	
B		20	
C		40	
TOTAL SCORE		90	

1. Name four exotic pig breeds reared in Kenya. (2mks)

.....
.....

2. State four predisposing factors of mastitis in cattle (2mks)

.....
.....

3. Give two functions of a carburetor in a petrol engine (1mk)

.....
.....

4. State four signs of broodiness in a her (4mks)

.....
.....
.....
.....

5. State two functions of the crop in poultry digestive system (1mk)

.....
.....

6. State four factors that would determine the amount of concentrate fed to dairy cattle. (2mks)

.....
.....

7. Give four factors to consider when sitting fish pond. (2mks)

.....
.....

8. Give four effects of external parasites that are harmful to livestock (2mks)

.....
.....

9. State one use of the following tools (2mks)

a) Pipe wrench

b) Steel float

c) Mason`s towel

d) Ball pein hammer

10. State four reasons why a farmer would choose to use a disc plough rather than a mould board plough.

(2mks)

.....
.....

11. Give two methods used in administering vaccines to livestock. (1mk)

.....
.....

12. Give the meaning of the following terms as used in livestock breeding.

a) Recessive gene (1mk)

b) Epitasis(1mk)

13. Name the strokes in a four stroke cycle engine. (2mks)

.....
.....

14. Name four wood preservatives (2mks)

.....
.....

15. State two functions of guard rails in a furrowing pen.

(1mk)

.....
.....
.....

16. A dairy cow under zero grazing system weight 700kg. Calculate how much of dry matter it takes given that it takes 2.5kg for every 100kg live weight. (Show your working (2mks)

.....
.....
.....
.....

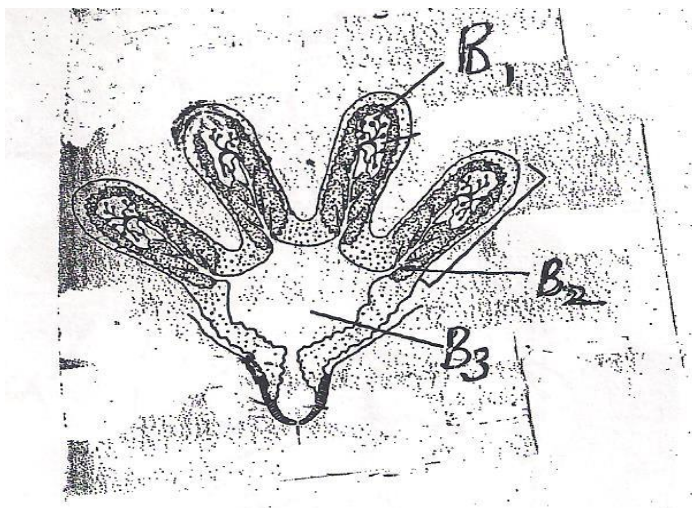
17. List four factors that influence the quality of honey.

(2mks)

.....
.....
.....
.....

SECTION B(20MKS) ANSWER ALL THE QUESTIONS IN THIS SECTION IN THE SPACES PROVIDED

18. The diagram below shows a cross-section of an udder. Study it and answer the questions that follow.



i) Identify the parts labeled B1,B2 and B3

a) B1

b) B2

c) B3

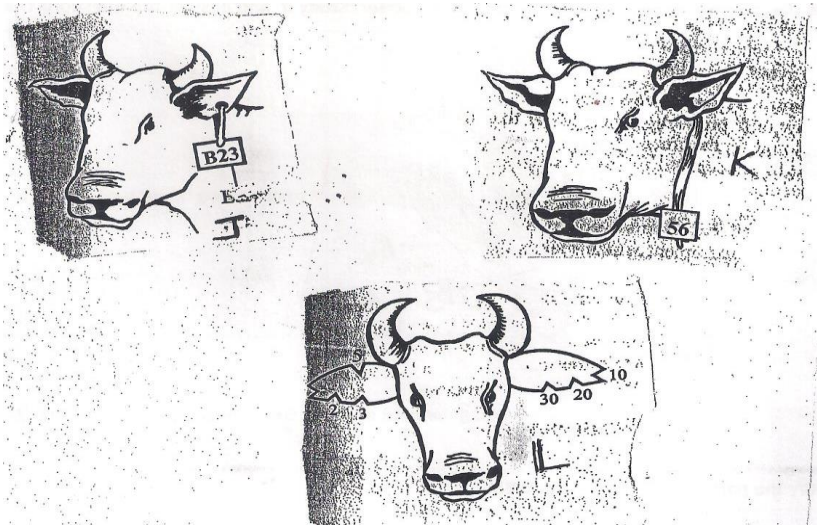
ii) Give one function of the labeled B1 (1mk)

.....
.....

iii) Name the hormone responsible for milk let-down. (1mk)

.....
.....

19. The pictures below show methods of identification in livestock.



a) Name the methods labeled, K and L

J

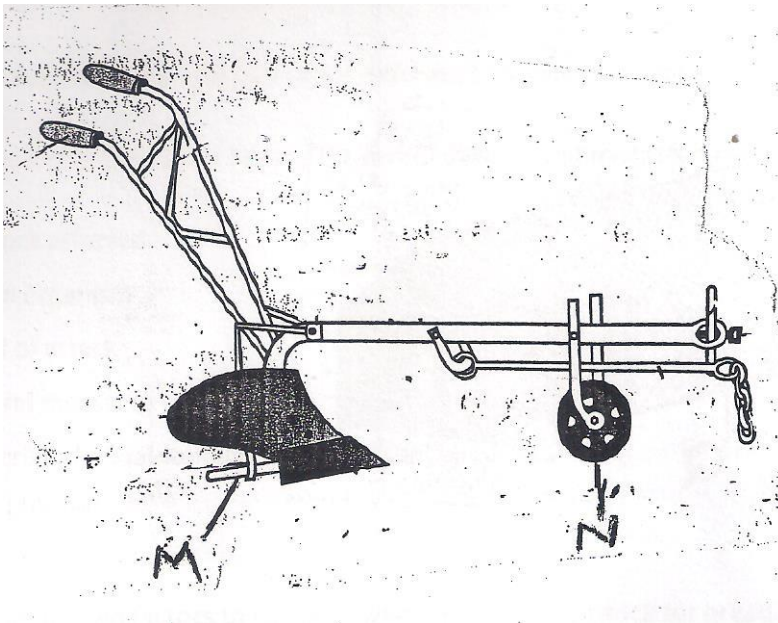
K

L

b) Give two reasons why method L of identification is discouraged in livestock rearing. (2mks)

.....
.....
.....

20. The diagram below illustrates an animal draw implement



a) Identify the implement

(1mk)

.....
.....

b) Name the part labeled

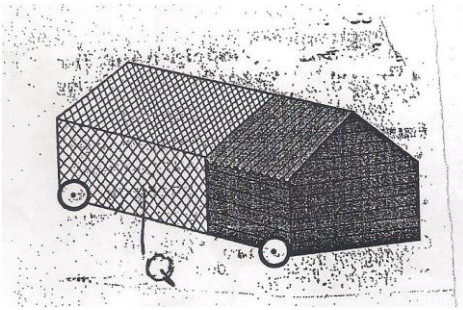
M.....

N

c) Give two maintenance practices carried on the above implement.

.....
.....

.....
21. The illustrate below shows a structure used in raising poultry under a certain rearing system. Study it and answer the questions that follow.



a) Identify the system of poultry rearing illustrated above. (1mk)

.....
.....

b) Give the appropriate measurements for the structure that can accommodate between 10-15 hens. (1mk)

.....
.....

c) State the main functions of the region marked Q on the structure. (1mk)

.....
.....

d) What is the importance of moving the structure daily to a fresh ground. (2mks)

.....
.....
.....

SECTION C (40MKS) ANSWER ANY TWO QUESTIONS

22. a) Describe conditions necessary for artificial incubation. (8mks)

b) Explain seven factors that affect milk composition in dairy farming (7mks)

c) Give five structural and functional differences between petrol and diesel engine. (5mks)

23. a) Describe East Coast Fever/Theileriosi disease under the following sub-heading

i) Livestock affected (1mk)

ii) Casual organism (1mk)

iii) Signs of attack (1mk)

iv) Control measures (1mk)

b) Describe the maintenance practices required on the tractor before it is put to daily use. (10mks)

24.a) Outline **ten** factors to consider when selecting livestock for breeding . (10mks)

b) Describe the function of **ten** parts of a plunge dip. (10mks)

.....

.....

.....

.....

231/1 BIOLOGY
PAPER 1 (THEORY)
TIME: 2 HOURS
APRIL 2020

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
Kenya Certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES

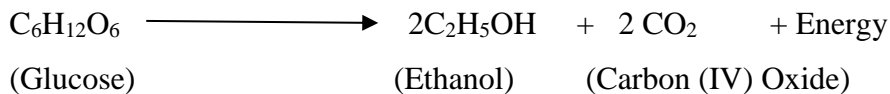
- Write your *name and Admission number* in the spaces provided above
- *Sign* and write the *date* of examination in the spaces provided.
- Answer *all* the questions in the spaces provided.
- *This paper consists of 10 printed pages.*
- *Candidates should check to ascertain that all pages are printed as indicated and that no questions are missing*

For Examiners Use Only

Question	Maximum score	Candidate's score
1- 34	80	

1. A black mouse was crossed with a brown mouse. Half of the offspring were black and the other half brown using letter B to represent the gene for black colour and b to represent the gene for the brown colour, work out the genotype of the parents. **(3marks)**

2. A process that occurs in plants is represented by the equation below.



a) Name the process. **(1mark)**

.....

b) State the economic importance of the process named in (a) above. **(1mark)**

.....

3. State the importance of the following parts of a microscope **(2marks)**

i) Clip

.....

ii) Coarse adjustment knob

.....

4. a) Explain why larmacks theory of evolution was not accepted by the modern Biologists. **(1mark)**

.....

.....

b) Define the following terms

i) Analogus structures. **(1mark)**

.....

.....

ii) Divergent evolution. **(1mark)**

.....

.....

5. Name the chemical component that provides support in the following **(2marks)**

a) Collenchyma

.....

b) Sclerenchyma.

.....

6. State **two** importances of roughages in the process of digestions of food. **(2marks)**

.....
.....
.....
.....

7. Identify the cells that produce the following (3marks)

i) Mucus

.....

ii) Pepsin and rennin

.....

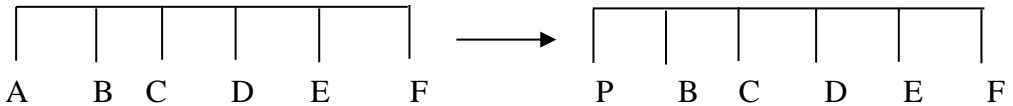
iii) Hydrochloric acid

.....

8. Name **two** type of mutation represented below. (2marks)

(i) Original strand

(ii) Mutated strand



.....

9. a) Suggest the significance of the following adaptations in bony fish.

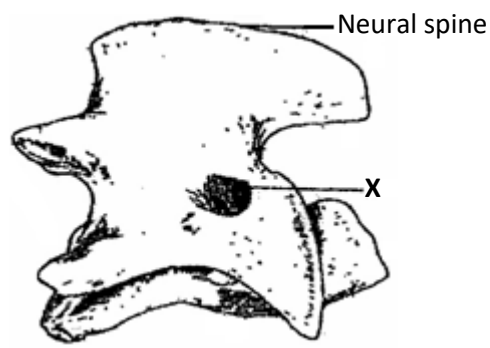
(i) Flexible vertebral column (1mark)

(ii) Presence of swim bladder (1mark)

.....

b) State **two** features which reduce resistance in fish during swimming. (2marks)

12. The diagram below represents a type of bone in the mammalian skeleton.



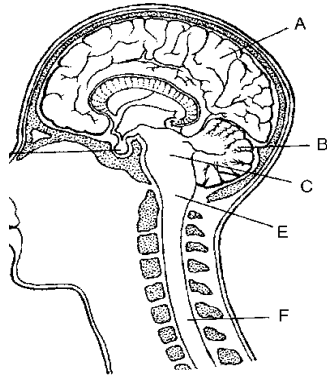
(a) Identify the bone illustrated in the diagram. **(1 mark)**

.....

(b) Give a reason for your answer in (a) above. **(1 mark)**

.....

13. Study the diagram below and answer questions that follow



a) Name the parts labelled A, B, C and D. **(2 marks)**

A. B.....

C..... D.....

b) Which of these structures is responsible for?

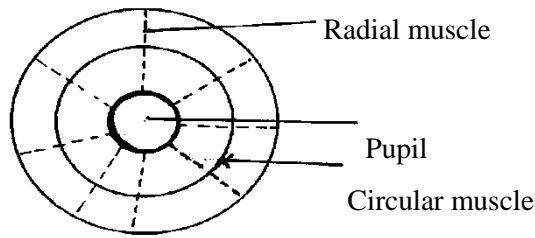
i) Regulation of heart beat **(1 mark)**

.....

ii) Reflex knee jerk **(1 mark)**

.....

14. The diagram below shows a front view of the iris and pupil of the eye.



(a) Complete the table below to show what happens to the structure shown when the eye is in. **(2marks)**

Structure	Darkness	Bright light
Radial muscles		
Circular muscles		

15. List any **three** homeostatic functions of the kidney **(3 marks)**

.....

.....

.....

.....

16. Name the components of the blood that do not enter the renal tubule in mammals. **2marks**

.....

.....

17. How are leaves of floating hydrophytes adapted for gaseous exchange **(2 marks)**

.....

.....

18 a) State the role of each of the following in blood clotting process: **(3 marks)**

Calcium

.....

Thrombokinase

.....

Vitamin K

.....

b) Strong winds speed up the rate of transpiration. Explain? **(2 marks)**

.....
.....

19. The student wrote the scientific name of a rat RATUS NOVEGICUS

a) Give the specific and generic name

Specific name..... **(1mark)**

Generic name **(1mark)**

b) Identify two mistakes in the name above. **(2marks)**

.....
.....

22 State the role of the following requirement in germination **(2marks)**

a) Light

.....

c) Gibberelic acid

.....

23 Differentiate between complete and incomplete metamorphosis **(2marks)**

.....
.....
.....
.....

24. a) Differentiate between irritability in plants and animals **(2marks)**

.....
.....

b) State the branch of Biology that would be used in solving the problem of disputed parentage. **(1mark)**

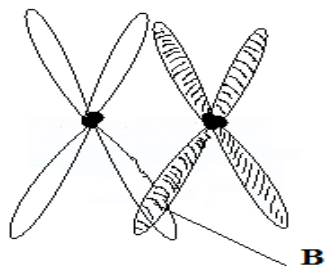
.....

25. Study the diagram below and answer questions that follow:

b)Adhesion

.....

29. The diagram below shows a phenomenon which occurs during cell division.



a) Identify the stage of cell division in which this phenomenon occurs. (1 mark)

.....

b) State the importance of the phenomenon taking place in the part labeled B.(2 marks)

.....

.....

30 Distinguish between tropism and taxes (2 marks)

.....

.....

31. State **three** methods which could be used to determine the diet of wild animals in an ecosystem (3marks)

.....

.....

.....

.....32.

i)Name the hormone which is released by the pituitary gland in high concentration on the 14th day of the menstrual cycle (1mark)

.....

ii) State **two** functions of the hormone named in 19(i) above (2marks)

.....

.....

33. Give **two** functions of the centrioles (2marks)

.....
.....
34 How is a gill filament adapted to its function?

(3 marks)

.....
.....
.....

(END)

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
Kenya Certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES

- Write your Name and Index number in the spaces provided above
- Sign and write the date of examination in the spaces provided. Answer all the questions in the spaces provided.
- This paper consists of two sections A and B.
- Answer all questions in section A in the spaces provided after each question.
- In section B answer question 6 (compulsory) and either question 7 or 8 in the spaces provide.
- This paper consists of 8 printed pages. Candidates should check the question paper to ascertain all the pages are printed as indicated and no questions are missing.

FOR EXAMINERS USE ONLY

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1	8	
	2	8	
	3	8	
	4	8	
	5	8	
B	6	20	
	7	20	
	8	20	
	TOTAL		

SECTION A (40 MARKS)

Answer all questions in this section in the spaces provided

1. a) Apart from diffusion name two other methods of excretion in plants (2 mks)

.....

- b) State two economic importance of the following products of excretion in plants.

- (i) Quinine. (1 mk)

.....

(ii) papain.

(1 mk)

.....
.....

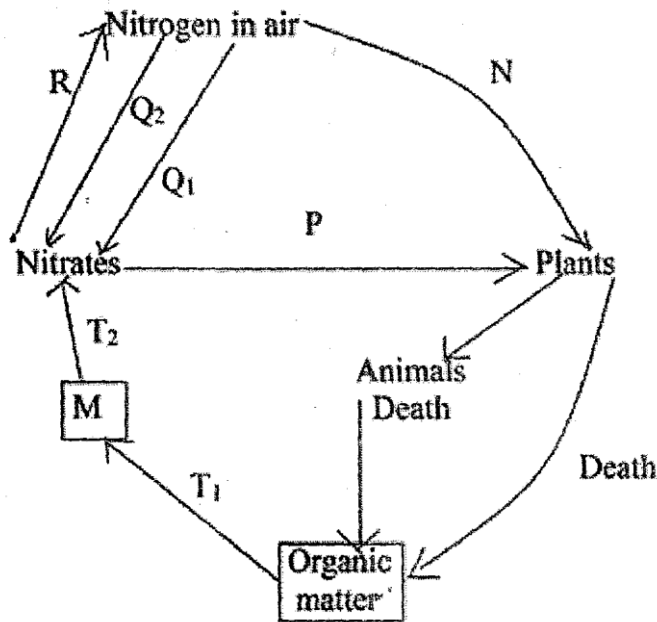
c) Describe what happens in the liver when blood level is above normal.

(4 mks)

.....
.....
.....

.....

2. The diagram below represents the nitrogen cycle.



(a) Name the process labeled

(3 mks)

P.....

T₁.....

T₂.....

(b) Name the organism that converts M into Nitrates

(1 mk)

.....
.....

(c) Name the organism in plants which promote process N.

(1 mk)

.....
.....

(d) State the relationship the organism stated in C above and the plant.

(1 mk)

.....
.....

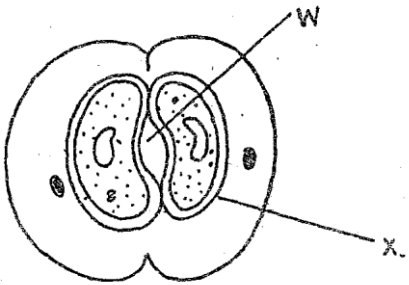
(e) How would excess pesticides in the soil interfere with process N. (1 mk)

.....
.....

(f) If Q1 represents fixation of nitrogen by free living bacteria, what is represented by Q2 (1 mk)

.....
.....

3. (a) The diagram below shows part of a plant tissue.



(i) Name cell labeled X and part labeled W. (2 mks)

.....
.....

(ii) State two adaptations of cell labeled X to its functions. (2 mks)

.....
.....
.....

(b) (i) Name the kingdom to which the above structure is found. (1 mk)

.....
.....

(ii) State three differences between Bryophyta and Pteridophyta. (3 mks)

.....
.....
.....

.....
.....

4. A cross between black bull and white cow produces a calf with black and white spots. Using letter B for Black and W to represent white trait

(a) Work out the possible genotypes of a calf resulting from a cross between a black bull and a white cow. (4 mks)

(b) State the reason why the calf had black and white spots. (1 mk)

.....
.....

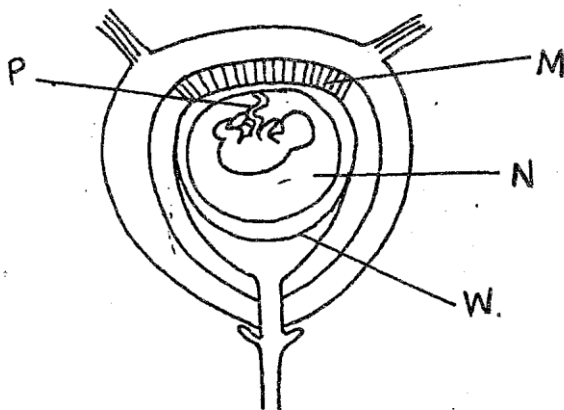
(c) What is meant by the term allele. (1 mk)

.....
.....

(d) State two characteristic of an individual with Down's syndrome. (2 mks)

.....
.....

5. The diagram below represents human foetus in a uterus.



(a) Name the part labeled W. (1 mk)

.....
.....

(b) (i) Name the type of blood vessels found in the structure labeled P. (2 mks)

.....
.....

(ii) State the differences in composition of blood found in vessel named in b (i) above.(2mks)

.....
.....

(c) Name two features that enable the structure labeled M carry out its function. (2 mks)

.....
.....
.....

(d) State the role of part labeled N. (1 mk)

.....
.....

SECTION B

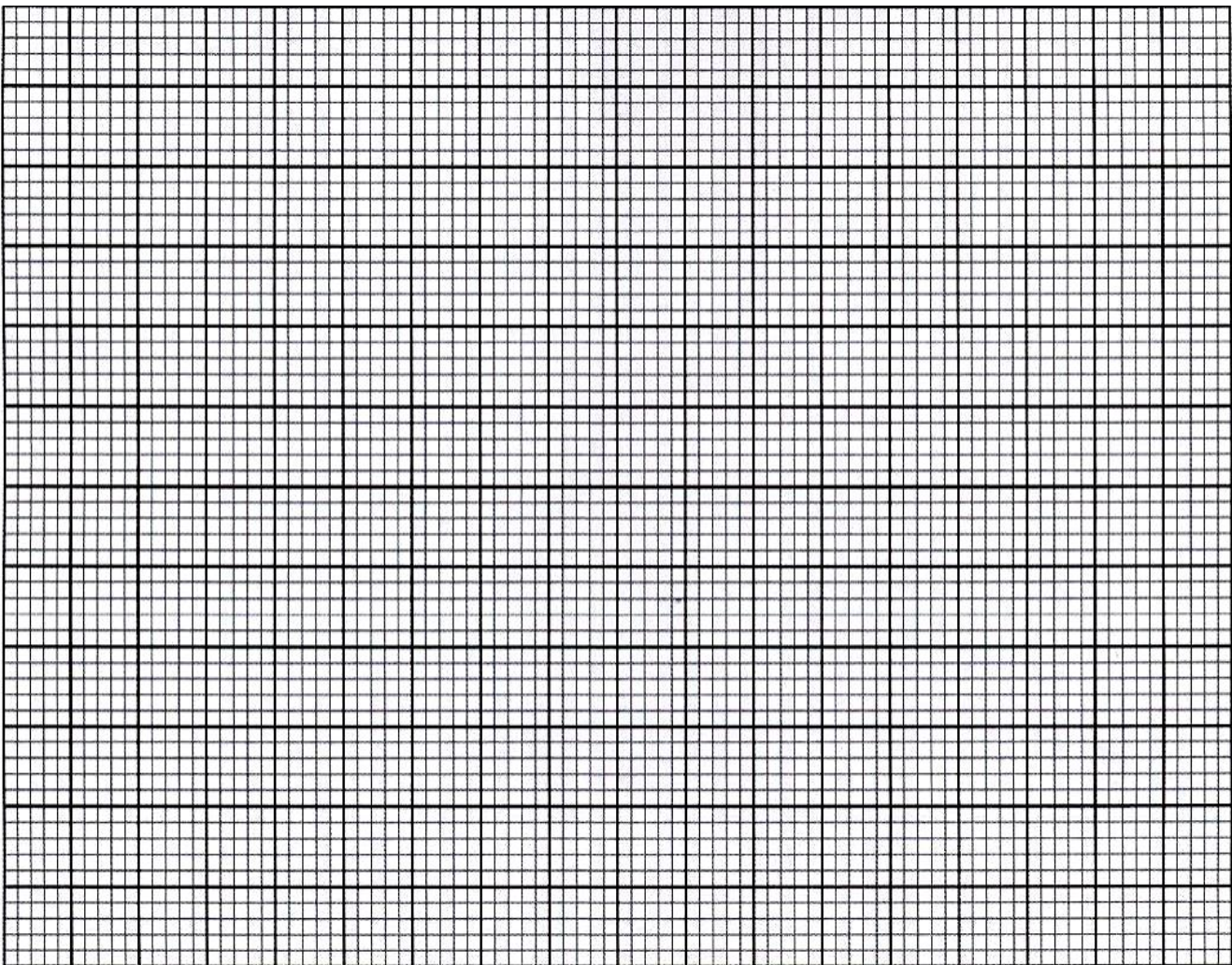
Answer question 6 (compulsory) and either question 7 or 8 in the spaces provided after question 8.

6. An experiment was carried out to investigate plasmolysis in Onion epidermal cells. The cells were placed in different concentrations of sodium chloride solution. The percentage plasmolysed cells was determined after 30 minutes. The results were shown in the table below.

Salt concentration g, per 100cm ³ (%)	0.30	0.35	0.40	0.45	0.50	0.55	0.60
Onion epidermal cells plasmolysed. (%)	0	10	25	55	78	92	100

- (a) (i) On the grid provided plot a graph of plasmolysed epidermal cells against concentration.

(6mks)



(ii) At what concentration of salt solution was the proportion of plasmolysed cells equal to non-plasmolysed cell. (1 mk)

.....
.....

(iii) State the salt concentration at which 60% of the cells were plasmolysed. (1 mk)

.....
.....

(b) Account for the results obtained at

(i) 0.30% salt concentration. (3 mks)

.....
.....
.....

(ii) 0.60% salt concentration. (3 mks)

.....
.....
.....

(c) (i) Define the term plasmolysis. (1mk)

.....
.....

(ii) What would happen to animal cells if they are placed at 0.55% concentration for 30 minutes. (1mk)

.....
.....

(iii) Explain your answer in c (ii) above. (2 mks)

.....
.....

(d) Describe the relationship between concentration of the salt solution and the percentage of plasmolysed cells. (1 mk)

.....
.....
.....

(e) What term would best describe a plant where 100% of its cells were plasmolysed. (1 mk)

.....
.....

7. Describe the uptake and movement of water from the soil to the leaves of a tall plant till transpiration.

(20mks)

8. Describe the structure and functions of the various plants of a mammalian ear. (20mks)

.....
.....
.....
.....

**231/3 BIOLOGY
PAPER 3 (PRACTICAL)
APRIL 2020**

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
Kenya Certificate of Secondary Education

**231/3
BIOLOGY
PAPER 3**

TIME: 1HR. 30 MINS

INSTRUCTIONS TO CANDIDATES

- Write your *name, Admission number* in the spaces provided above
- *Sign* and write the *date* of examination in the spaces provided.
- Answer *all* the questions in the spaces provided.
- *This paper consists of 7 printed pages.*
- *Candidates should check to ascertain that all pages are printed as indicated and that no questions are missing*

For Examiners' Use Only

QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
1	12	
2	14	
3	14	
TOTAL SCORE	40	

1. You are provided with 8cm³ solution **Q**, Iodine solution, Benedict's solution, 10% sodium hydroxide solution, 1% copper sulphate solution, means of heating, test tube rack, 3 dry test tubes and a water bath.

Use the provided reagents and apparatus to establish food substances present in solution **Q**, and fill the table provided.

Food substance	Procedure	Observation	Conclusion

(9 mks)

(b) How would you test for the presence of Vitamins in solution Q

(1mk)

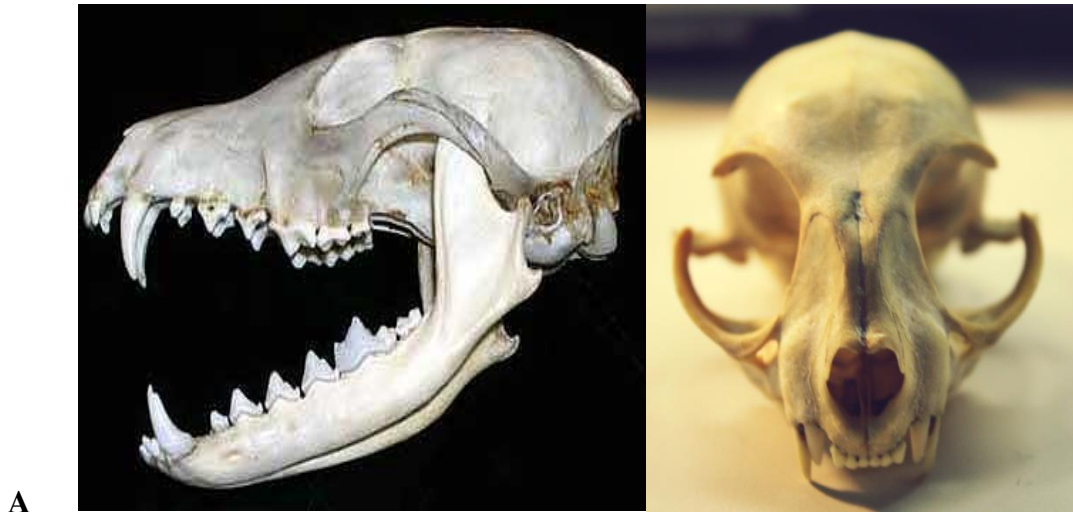
.....

(c) State **two** food substance in Q and enzymes in human beings that would digest them (2mks)

Food substance	Enzyme from pancreas

--	--

2. You are provided with specimen A and B obtained from animals whose skulls are represented in the photographs below.



a) With a reason name the class of the animals from which the photographs were taken.

Class _____ (1mk)

Reason _____ (1mk)

b) State three observable differences between specimen **A** and **B**. (3mks)

c) Name the gap on the lower jaw of specimen **B**. (1mk)

d) Suggest the **diet** and **mode** of feeding of animal represented by photograph **A**.

Diet(1mk)

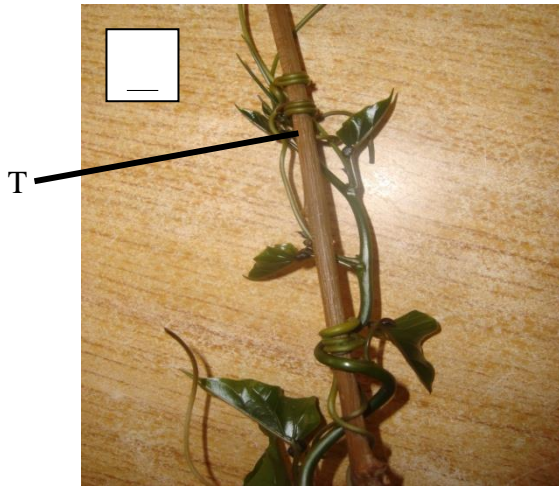
Mode.....(1mk)

e) Using observable features only explain how animal represented by photograph A is adapted to its mode of feeding. (3mks.)

f) (i) Letter S on the photographs indicates the position of the eyes in the skulls. With reference to the two distinguish between monocular and binocular vision. (2mks)

(ii) What is the significance of the type of vision in photographs B to their mode of feeding? (1mk)

3 (a) Examine photograph A, **B1** and **B2** carefully and answer the questions that follow. **B2** was extracted from **B1**



B2

B1



(i) **What** name is given to the coiled part labeled **T** found on specimen **A** (1mk)

(ii) **Name** the type of response exhibited by the coiled part on specimen **A** (1mk)

- (iii) **Name** the stimulus responsible for the response named in (ii) above. (1mk)
- (iv) **Explain** how the response exhibited by the coiled part on specimen **A** occurred (3mks)
- (v) **State** the biological significance of the response described in (iv) above to the survival of the specimen. (1mk)
- b) Use photographed specimens labeled **B1** and **B2** above to answer the questions below.
- (i) State the agent of pollination for the specimen above. (1mk)
- ii) Give a reason for your answer. (1mk)
- (iii) Describe the external features of leaves of the specimen **B2**. (3mks)
- (iv) Based on the floral parts, state the class to which specimen **B** belongs. (1mk)
- (v) Give a reason for your answer in (iv) above. (1mk)

1. (a) Starch test to 1cm³ of solution Q, add 3 drops of iodine solution ;solution turned to blue black; starch present
- (b) Reducing Sugar; To 2cm³ of Q, add equal amount test/Bendicts of Benedicts solution and heat to boiling ; colour changes from blue to green to yellow and finally orange; reducing sugar present;
- (c) Biuret test/Profen test; to 1cm³ of Q add equal amount of NaOH; the add 1 % CuSO₄ solution dropwise; Colour changes to purple violet
Protein are present (9mks)

Correct procedure: absent; conclusions

X 3 = 9mks

(d) To 1cm³ DCPIP in test tube, add solutionQ and dropwise if it is decolourise vitamins will be present;

(c) Starch (amylase) – Pancreatic amylase

Proteins - trypsium

2. a) Mammalia

Have different types of teeth / have heterodont teeth

b)

Specimen a cisor	Specimen B molar
Has one root	Has three roots
Has chisel shaped crowns	Has broad flattened crown
Has no crisps / ridges on the crown	Has ridges crisps on the crown
Have closed roots	Have open roots

- a) It is chisel shaped with sharp ridged edge for cutting / gripping / grasping food.
- b) Vegetation / plants , herbivorous
- c) Have long conical and curved curves to hold / kill/ pierce and tear the prey.
Have large carnassial teeth with pointed edge to slice through flesh and crash bones
Moles and premolars are small with sharp crisps for strong flesh.
- d) (i) monocular vision is where each eye has its own visual field; while binocular vision is where visual fields of both eyes overlaps hence fovea centrals/ yellow spot of both eyes can be focused on the same object.
(ii) it has binocular vision which enables it to determine size, distance and depth which is vital in capturing prey;

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR
Kenya Certificate of Secondary Education

Instructions to candidates

- (a) Write your name and Adm Number in the spaces provided above.
- (b) Answer ALL the questions.
- (c) All answers must be written in the spaces provided.
- (d) Candidates should check the question paper to ascertain that all the pages are printed as indicated and no of questions missing.
- (e) This paper consist of 10 printed pages.
- (f) Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.
- (g) Candidates should answer all the questions in English.

For Examiners Use Only

Questions	1	2	3	4	5	6	7	8	9	10	11	12
Marks												

Questions	13	14	15	16	17	18	19	20	21	22	23	24	25
Marks													

Total marks

1. Outline **four** business activities in your community.

(4 marks)

- (a)
- (b)

- (c)
- (d)

2. Define the following: (4 marks)

- (a) Human wants
.....
.....

- (b) Goods
.....
.....

- (c) Choice
.....
.....

- (d) Opportunity cost
.....
.....

3. Outline **four** factors to take into consideration when planning an office layout. (4 marks)

- (a)
- (b)
- (c)
- (d)

4. Highlight **four** means of payment that a trader can use to settle business debts. (4 marks)

- (a)
- (b)
- (c)
- (d)

5. State **four** difference between chain stores and departmental stores. (4 marks)

	Chain Stores	Departmental Stores
(a)		(a)
(b)		(b)
(c)		(c)
(d)		(d)

6. Give **four** functions of money. (4 marks)

- (a)
- (b)
- (c)
- (d)

7. Outline **four** ways in which the government participates in training business people in the country. (4 marks)

- (a)
- (b)
- (c)
- (d)

8. State **four** disadvantages of mobile phone communication. (4 marks)

- (a)
- (b)
- (c)
- (d)

9. State **four** benefits that may accrue to a community that engages in indirect production. (4 marks)

- (a)
- (b)
- (c)

(d)

10. Give **four** importance of product promotion. (4 marks)

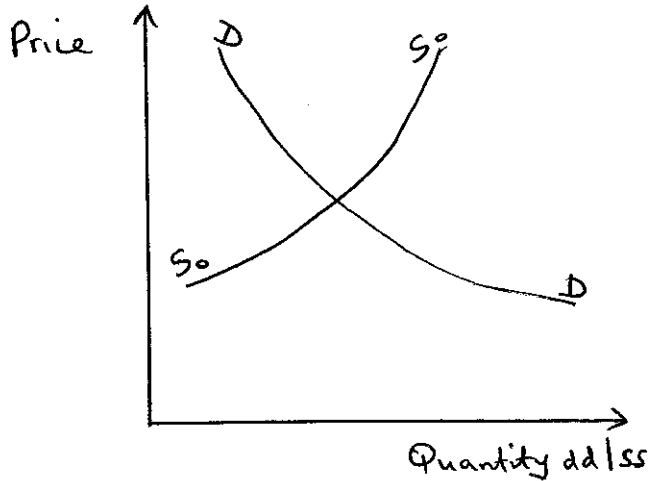
(a)

(b)

(c)

(d)

11. The graph below represents the demand and supply curves of potatoes in Manyoro city.



State **four** effects of a shift of the supply curve to the right. (4 marks)

(a)

(b)

(c)

(d)

12. Outline **four** factors that may influence the choice of a distribution channel. (4 marks)

(a)

(b)

(c)

(d)

13. The balance sheet of Octaph General Store as at 1st October, 2013 is given below.

OCTAPH GENERAL STORE
Balance sheet
As at 1st October, 2013

Assets	sh.	Capital + liabilities	sh.
Building	950,000	Capital	86,000
Equipment	12,000	<u>Liabilities</u>	
Stock	36,000	Bank Loan	70,000
Debtors	12,000	Creditors	9,000
Cash at bank	10,000		
	165,000		165,000

The following transactions took place in the business:

October 2: Paid creditors by cheques sh 5,000

October 3: Received from debtors sh 6,500 in cash.

October 4: Bought more equipment for sh 4,500 and paid for them in cash.

October 5: Bought shop fittings for sh 30,000 on credit.

Required:

Draw the balance sheet of the business as at 5th October, 2005.

(5 marks)

14. Given below are average prices of imports and average prices of exports for the year 2012 and 2013.

Year	Average price of exports in '000	average price of imports in '000
2012	10,000	16,000
2013	15,000	26,000

Calculate:

(i) Export price index using 2012 as the base year.

(2 marks)

(ii) Import price index using 2012 as the base year. (2 marks)

(iii) The country's terms of trade using 2012 as the base year. (2 marks)

15. Identify the type of journal in which each of the following transactions would be recorded. (3 marks)

	Transaction	Type of journal
(a)	Purchase of an old tractor on credit	
(b)	Goods previously sold on credit were returned.	
(c)	Goods sold for cash	

16. "Consumer price indices (CPI) help in determining the extent of inflation in a country". Highlight **three** problems encountered in calculating consumer price indices in Kenya. (3 marks)

- (a)
- (b)
- (c)

17. Highlight **four** reasons why less developed countries tend to experience unfavourable terms of trade in international trade. (4 marks)

- (a)

-
- (b)
-
- (c)
-
- (d)
-

18. Outline **four** principles of economic planning. (4 marks)

- (a)
- (b)
- (c)
- (d)

19. The following transactions were extracted from the records of Sananka provision shop.

2006

- April 2: Started business by depositing a cheque of sh 250,000 in a business bank account.
- April 9: Withdrew sh 50,000 from the business bank account out of which sh 30,000 was used to purchase equipment and the rest was retained for office use.
- April 10: Purchased stock on credit for sh 40,000 from Central Stores.

Required:

Enter the transactions above in the appropriate ledger accounts of the business.

(4 marks)

20. Highlight **four** factors that one may consider when evaluating a business opportunity. (4 marks)

- (a)
- (b)
- (c)
- (d)

21. Despite the possibility of existence of economics of scale by expanding its operations a firm may choose to remain small in size. State **four** reasons why this could be so. (4 marks)

- (a)
.....
- (b)
.....
- (c)
.....
- (d)
.....

22. Outline **four** advantages of a good transport system to a country. (4 marks)

- (a)
.....
- (b)
.....
- (c)
.....
- (d)
.....

23. Give **four** reasons why a government imposes taxes. (4 marks)

- (a)
.....
- (b)
.....

- (c)
-
- (d)
-

24. Highlight **four** principles of co-operatives. (4 marks)

- (a)
- (b)
- (c)
- (d)

25. The following information relates to Mambo Leo business

Mark up 20%
 Opening stock sh 90,000
 Closing stock sh 150,000
 Rate of stock turnover 3 times

Calculate:

- (a) Gross profit (2 marks)
- (b) Purchases (1 mark)

Name..... Index No.....

Sign.....

Date.....

565/2

BUSINESS STUDIES

PAPER 2

MAY/JUNE 2019

TIME: 2 ½Hours

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR
Kenya Certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES

- i) This paper consists of **six** questions
 - ii) Answer any **five** questions
 - iii) Answer the questions on the answer sheets provided
 - iv) All questions carry equal marks
 - v) This paper consists of **4** printed pages
 - vi) Candidates should check the question paper to ascertain that all pages are printed as indicated and that no questions are missing
 - vii) Candidates should answer the questions in English
-
1. (a) Uhuru traders exhibited their products in Kisii ASK show. However sales did not increase significantly thereafter. **Outline five** reasons that may have led to the lack of significant sales increase. (10mks)

(b) **Explain five** principles which guide the government in its expenditure. (10mks)
 2. (a) Matatu business is a recent development in Kenya. **Discuss five** problems faced by the matatu operators. (10mks)

(b) **Explain five** current trends and emerging issues in the banking industry. (10mks)
 3. (a) **Explain five** challenges facing the savings and credit co-operative societies. (10mks)
(b) As at 1st August, 2018, the cash book of Konga traders showed the following balances:

	Sh
Cash	15,000

Bank 4,000(CR)

During the month, the following transactions took place.

- August 4 Mary a debtor, settled her account of sh.10,000 by a cheque of sh. 8,000
- “ 7 Deposited sh. 4,000 into business bank account from the cash till.
- “ 8 Paid rent by cash sh. 4,000
- “ 14 Cash sales sh. 14,000
- “ 17 Purchased furniture sh. 3000 paying by cheque
- “ 18 Settled Kofi’s account sh. 10,000 who had allowed a discount of 5%.
- “ 20 Received sh. 6000 cash from Kerubo
- “ 22 Nyang’au , a debtor settled his account by cheque of sh. 4,000 having been allowed a discount of 20%
- “ 25 Deposited sh. 17,000 in the bank from private resources.
- “ 31 Banked the available cash except sh. 1,000

Draw up a three column cash book for the month. (10mks)

4. (a) **Explain five** factors that determine the size of a firm. (10mks)

(b) Manufacturers distribute their products to the final consumers through various channels. **Highlight five** factors considered in choosing a particular channel of distribution. (10mks)

5. (a) **Explain five** circumstances under which a high population growth may be desirable. (10mks)
(b) The following balances were obtained from the books of Kisii Mattress on 31st December, 2018.

	Shs
Opening stock	60,000
Equipment	96,300
Purchases	161,000
Sales	208,000
Land and building	100,000
Discount received	7,500
Return outwards	25,000
Return inwards	27,000

Salaries	22,000
Telephone charges	5,000
Water bills	2,100
Creditors	15,000
Debtors	21,000
Electricity bill	2,000
Bank balances	68,000
Cash in hand	12,000
Drawings	19,500
Insurance paid	1,500

Additional information

- (i) Closing stock was valued at shs. 72,000
- (ii) Depreciation on equipment is 10% p.a. on cost
- (iii) Telephone charges prepaid shs. 1,100
- (iv) Outstanding water bill shs. 1,300
- (v) Carriage inwards shs. 11,000 carriage outwards shs. 10,000

Required

Prepare Kisii Mattress profit and loss account for the year ended 31st December, 2018.

(10mks)

6. (a) **Explain five** factors that have frustrated economic development in a developing country like Kenya for the last few decades. (10mks)
- (b) **Highlight five** measures that the Kenya government should take to control the high rate of inflation. (10mks)

233/1

CHEMISTRY

PAPER 1

TIME: 2 HOURS

APRIL 2020

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020 FORM FOUR

Kenya Certificate of Secondary Education

Instruction to candidates

- (a) Write your name and index number in the spaces provided
- (b) Sign tables and silent non-programmable electronic calculators may be used.
- (e) All working **must** be clearly shown where necessary.
- (f) This paper consists of **11** printed pages.
- (g) Candidates should answer the questions in English.

For Examiner's use only

Questions	Maximum score	Candidates score
1-29	80	

1. Study the information represented in the table below and answer the questions that follow

Element	Atomic radii (nm)	Ionic radii (nm)
P	0.153	0.185
Q	0.184	0.211
R	0.230	0.260
S	0.260	0.305

(a) Would the element form part of a period or group. Explain (2marks)

.....
.....
.....

(b) Which one is the most reactive element? (1 mark)

.....
.....
.....

2. Copper (II) chloride solution and graphite are both capable of conducting electricity. What is the major difference between the two substances in their electrical conductivity? (2 marks)

.....
.....
.....

3. (a) State Graham's law of diffusion (1 mark)

.....
.....
.....

- (b) A certain volume of gas J takes 180 seconds to diffuse through porous plug. Molar mass of J is 18g. Equal volume of gas Q takes 240 seconds to diffuse through the same plug. Calculate the molar mass of Q. (2 marks)

.....

.....

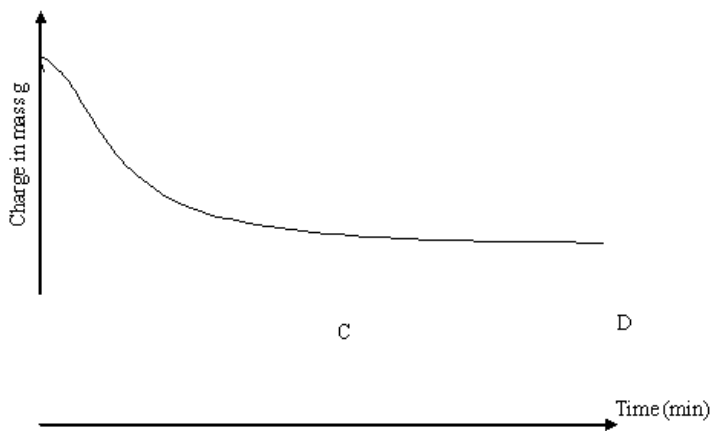
.....

4. Name One piece of apparatus a student could use to measure accurately 0.1 cm³ of sulphuric (VI) acid (1 mark)

.....

.....

The sketch below shows the change in mass against time where fixed mass of calcium carbonate is reacted with excess dilute hydrochloric acid at 25.0°C



- (a) On the same axis sketch the curve that would be expected when the experiment was repeated at 40°C. (1 mark)

.....

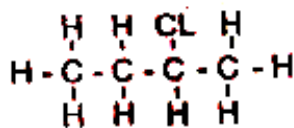
.....

- (b) Explain why the part of the graph CD is horizontal (1 mark)

.....

.....

One mole of hydrogen chloride gas reacts with an organic compound R to give a simple product with structural formula shown below



(a) Give the name of the product (1 mark)

.....

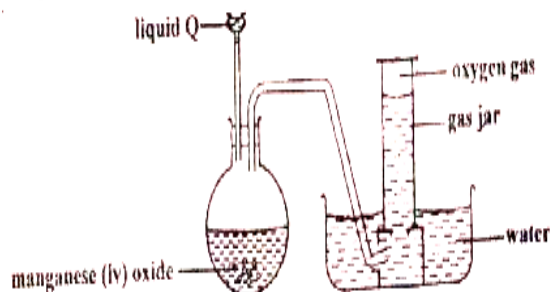
(b) Draw the structural formula of compound R (1 mark)

.....

(c) To which homologous series does compound R belong? (1 mark)

.....

4. A student set- up the apparatus shown below attempting to collect oxygen gas



(a) State one mistake the student made (1 mark)

.....
.....

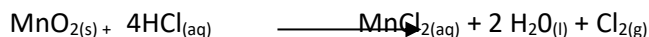
(b) Identify liquid Q (1 mark)

.....
.....

(c) What property- enable the gas to be collected as shown above (1 mark)

.....
.....

8. Below is the Redox reaction that takes place when manganese (IV) oxide reacts with dilute hydrochloric acid to liberate chlorine gas



(a) Explain using oxidation numbers which species is reduced (1 mark)

.....
.....

(b) State one other reagent that can be used to prepare chlorine gas other than manganese (IV) oxide (1 mark)

.....
.....

(c) Other than water treatment, state one other use of chlorine (1 mark)

.....
.....

9. When $\text{Na}_2\text{CO}_3 \cdot x\text{H}_2\text{O}$ is heated strongly it loses 63.20% of mass. Calculate the value of x (3 marks)

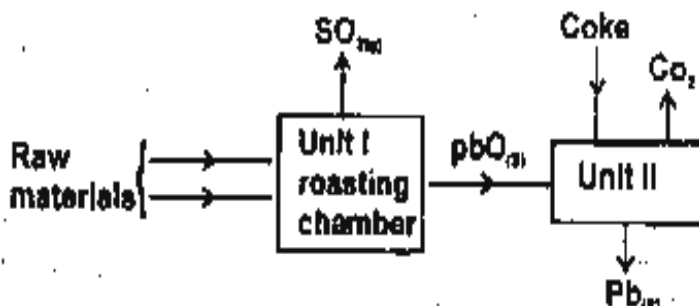
(Na = 23.0, C= 12.0, O = 16.0, H = 1.0)

.....
.....
.....
.....

10. Some sodium chloride was found to be contaminated with lead (II) oxide. Describe how a sample of sodium chloride can be obtained from the mixture. (3 marks)

.....
.....
.....

11. The flow chart below shows some process involved in extraction of lead metal. Study it and answer the questions that follow .



(a) Name the two raw materials that were fed into unit 1 (2 marks)

.....
.....
.....
.....

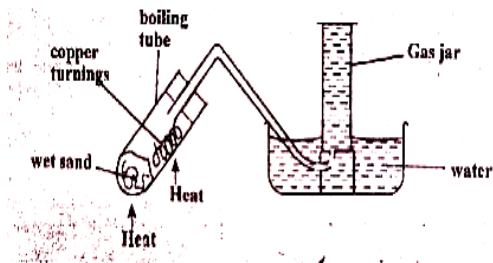
(b) State one environment hazard associated with the process in unit 1 (1 mark)

.....
.....

12. Explain why a crystal of Iodine can be vaporized by gently warming in a test tube whereas graphite has to be heated to a temperature of over 3700°C before it vaporizes (2 marks)

.....
.....
.....

13. The set up below was used to investigate the effect of steam on copper turnings



(a) What was observed in the boiling tube? Explain (2 marks)

.....
.....
.....
.....

(b) Suggest one other metal that would behave as copper turnings in the above set up if used (1 mark)

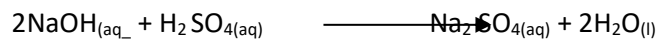
.....
.....

14. A piece of magnesium ribbon is placed in a solution of copper (II) sulphate. State and explain the observation made (2 marks)

.....
.....
.....

.....

15. The equation of a reaction between sodium hydroxide and sulphuric (VI) acid is



How many cm^3 of 0.05M sodium hydroxide solution reacts with 25cm^3 of 0.1M sulphuric (VI) acid .

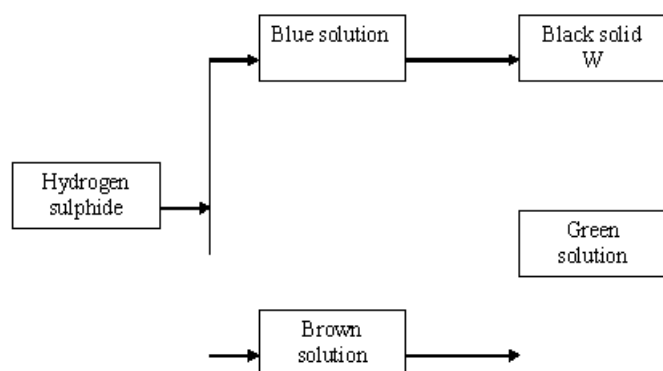
(3 marks)

.....

.....

.....

16. Hydrogen sulphide gas is bubbled into two solutions of metallic nitrates as represented in the flow chart



a) Identify the cation present in:

I. Blue solution

(1 mark)

.....

.....

II. Brown solution

(1 mark)

.....

.....

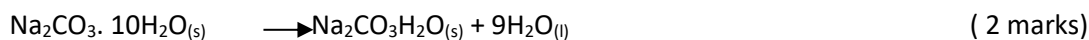
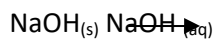
(b) equation for the formation of green solution Q

(1mark)

.....

.....

17. Both sodium hydroxide pellets and sodium carbonate were left exposed to atmospheric air overnight. The observations that took place are as shown below



Identify the process

A

B.....

18. Polyethene is a synthetic polymer (1 mark)

(i) Draw a unit structure of polyethene

(ii) What type of polymerization takes place during the formation of polyethene. (1 mark)

.....

(iii) State one disadvantage of synthetic polymers over natural polymers . (1 mark)

.....

19. Complete the table below

Species	Atomic mass	Number of neutrons	Number of electrons	Number of protons
V^{3+}	27			
Q^{2-}				16

20. M grams of radioactive isotope decayed to 5 grams in 100 days. The half life of the isotope is 25 days

(a) What is meant by half – life

(1

mark)

.....
.....

23. What observation would be made when $\text{NaOH}_{(\text{aq})}$ solution is added to the mixture above. Explain (2 marks)

.....
.....
.....

The table below gives some properties of the chloride of period three elements A,B and C. Study it and answer the questions that follow

Chloride of element	Melting point	Boiling Point
A	-101	-35
B	714	1407
C	-7	60

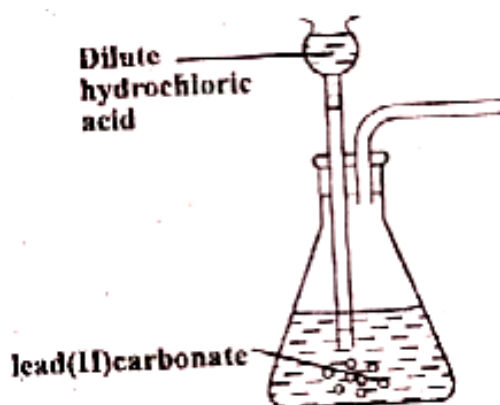
(a) Name the type of bond that most likely exists in the chloride of A (1 mark)

.....
.....

(b) What type of bond exists in chloride of element B (1 mark)

.....
.....

24. The diagram below shows an incomplete set-up for preparation of carbon (IV) oxide



(i) Explain why it is not suitable to use lead(II) carbonate in the above set – up . (1 mark)

.....
.....

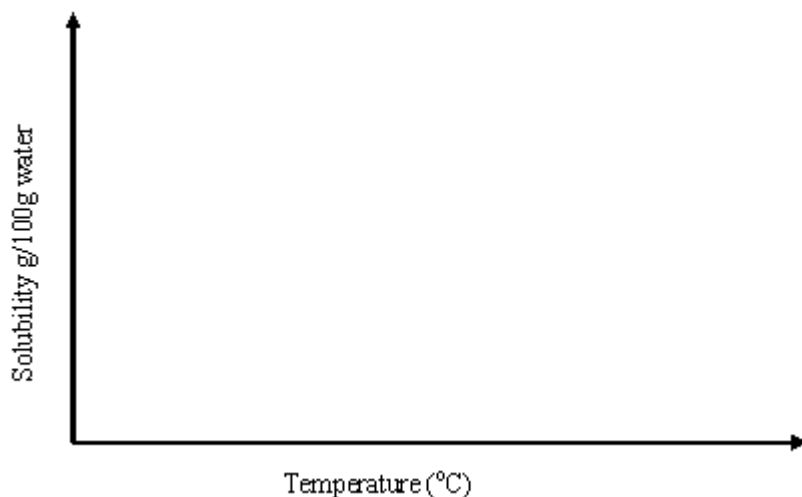
(ii) Complete the diagram to show how carbon (IV) oxide can be Collected (1 mark)

.....
.....

iii) Give two reasons why carbon (IV) oxide is used in fire extinguishers (1 mark)

.....
..... The

curve below represents solubility of potassium nitrate



(a) What is meant by solubility? (1 mark)

.....
.....
.....

b) On the same axis, sketch a curve to show solubility of hydrogen sulphide gas.

Explain the shape of your curve (2 marks)

.....
.....

26. (a) Calcium nitrate is a nitrogenous fertilizer. Calculate the percentage of nitrogen in the fertilizer.

(N=14.0, Ca = 40.0, O = 16)

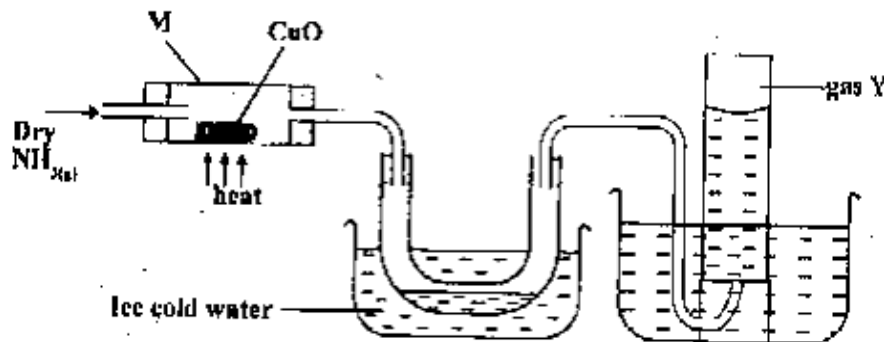
(2 marks)

.....
.....
.....

(b) State one physical property that makes solid calcium nitrate a good fertilizer. (1 mark)

.....
.....
.....

27. Dry ammonia gas was passed over heated copper (II) oxide as shown below



(a) State one observation made in tube M (1mark)

.....
.....

(b) Name a suitable drying agent for ammonia gas (1 mark)

.....
.....
.....
(c) Identify gas Y

(1 mark)

28. Complete the table below

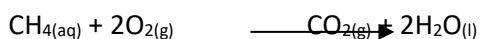
(2 marks)

Indicator	Colour in	
	H ⁺ _(aq)	OH ⁻ _(aq)
Phenolphthalein		
Methylorange		

28. When 2g of solid sodium hydroxide were reacted with 200cm³ of 0.55M hydrochloric acid, the temperature was 1.3^oC. Calculate the molar heat of neutralization (Specific heat capacity of solution is 4.2J/g/k, density of solution = 1g/cm³)

3mark

.....
.....
.....
29. Methane burns as shown in the equation below



30. Find the minimum volume of air containing 20% by volume of oxygen which will be required to completely burn 100cm³ of methane (3marks)

233/2

CHEMISTRY

PAPER 2

TIME: 2 HOURS

APRIL 2020

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020 FORM FOUR

Kenya Certificate of Secondary Education

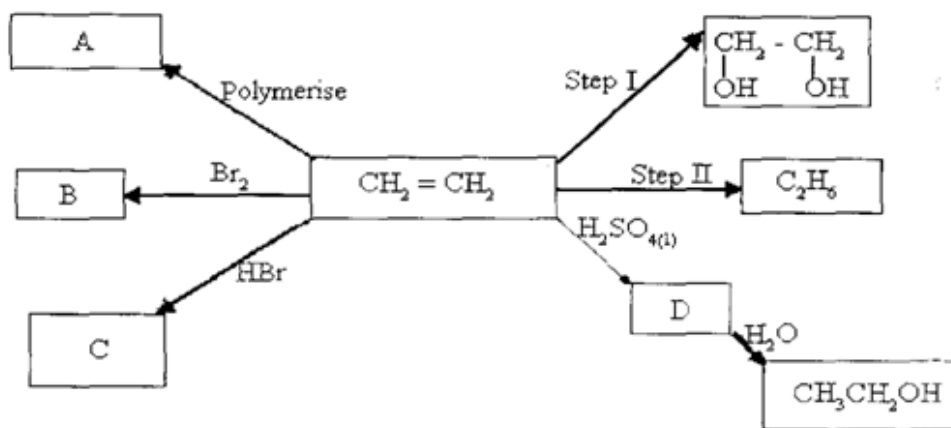
INSTRUCTION TO CANDIDATES

- Write your name and index number in the space provided at the top of this page.
- Sign and write the date of examination, in the space provided above.
- Answer all the questions in the space provided.
- KNEC mathematical tables and silent electronic calculators may be used.
- All working must be clearly shown where necessary.
- Candidates should answer the questions in English.
- This paper consists of 11 printed pages. Candidates should check to ensure that all pages are printed as indicated and that no questions are missing.

FOR EXAMINER'S USE ONLY

QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
1	12	
2	13	
3	12	
4	12	
5	10	
6	11	
7	10	
TOTAL SCORE	80	

- Use the flow chart to answer the questions.



i) State the conditions and reagents required to effect Step I and Step II. (2marks)

.....

.....

.....

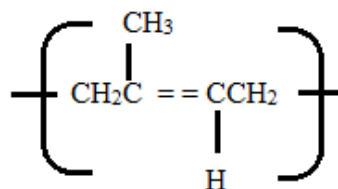
ii) Give the formulae of the products A, B, C and D.

.....

.....

.....

b) Natural rubber has the formula.



It has a molecular mass of 102000. How many units make up natural rubber? (2marks)

(C=12, H=1)

c) If one mole of sugar, $\text{C}_6\text{H}_{12}\text{O}_6$, produces two moles of pure ethanol, $\text{C}_2\text{H}_5\text{OH}$ and two moles of Carbon (IV) oxide gas as the only products.

i) Write an equation for the reactions. (1 mark)

.....

.....
ii) Find how many moles of ethanol would be produced by 148.8kg of sugar. (3marks)

2. (a) The grid below represents part of a periodic table. Study it and answer the questions that follow. The letters do not represent the actual symbols of elements.

S			R	E		X	
							V
Q	Z				M		
						T	

i) Identify the most reactive non-metal (1mk)

.....
.....

ii) Which of the metals is most reactive? Explain. (1mk)

.....
.....

iii) What name is given to the family of elements to which elements **X** and **T** belong. (1mk)

.....
.....

iv) Give reasons for the following

a) Ionic radius of **Q** is smaller than that of **M**. (1mk)

.....
.....

b) Atomic radius of **Q** is greater than that of **S**. (1mk)

.....
.....

v) Give an element which does not form compounds under ideal conditions. Explain. (2mks)

.....
.....

vi) Give the formula of the compound formed between element **R** and **Z**. (1mk)

.....
.....

b) Study the table below and answer the questions that follow.

Substance	A	B	C	D	E	F
Mpt ⁰ C	801	119 113	139	-5	-101	1356
Bpt ⁰ C	1410	445	457	54	-36	2860
Electrical conductivity (solid)	Poor	Poor	Good	Poor	Poor	Poor
Electrical conductivity (liquid)	Good	Poor	Good	Poor	Poor	Poor

i) Identify a substance with

a) Giant metallic structure. (1mk)

.....
.....

b) Simple molecular structure. (1mk)

.....
.....

ii) Suggest a reason why substance **B** has two melting points. (1mk)

.....
.....

iii) Substance **A** and **C** conduct electric current in the liquid state. State how the two substances differ as conductors of electric current. (2mks)

.....
.....

.....
.....

3. a) Sodium hydroxide pellets were accidentally mixed with sodium chloride-18.2g of the mixture was dissolve in water to make one liter of solution. 100cm³ of the solution was neutralized by 50cm³ of 0.45M Sulphuric acid.

i) Write an equation for the reaction that took place. (1mark)

.....
.....

ii) Calculate the;

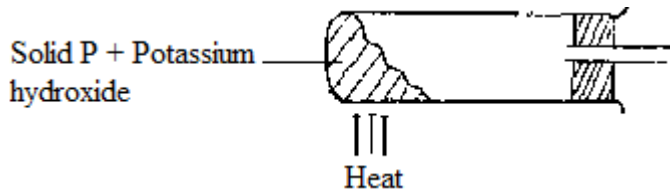
I. Number of moles of the substance that reacted with sulphuric acid. (1 mark)

II. Number of moles of the substance that would react with sulphuric acid in the one litre of solution. (1 mark)

III. Mass of the unreacted substance in the one litre of solution. (2marks)

(H = 1.0, Na 23.0, Cl 35.5, O = 16.0)

b) The diagram below shows an incomplete set-up used to prepare and collect ammonia gas.



i) Name solid P. (1mark)

.....
.....

ii) Complete the diagram to show how a dry sample of ammonia gas can be collected. (3 marks)

c) In an experiment, excess ammonia gas was passed over heated copper (II) oxide in a combustion tube.

i) State the observation that was made in the combustion tube at the end of the experiment. (1mk)

.....

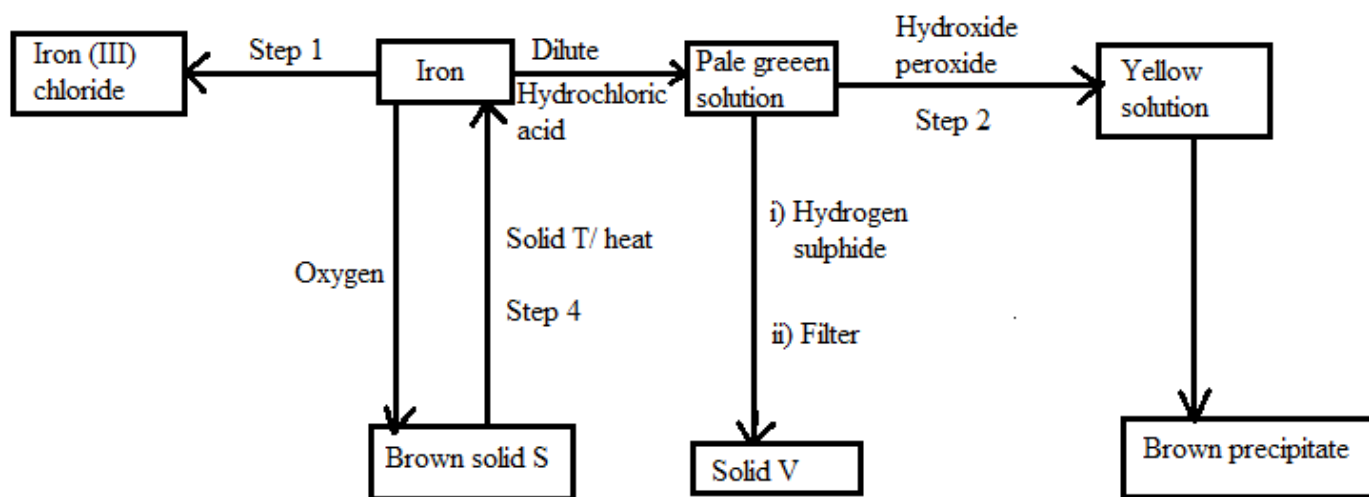
ii) What property of ammonia is shown in the above reaction? (1mark)

.....

iii) Give one use of ammonia. (1mark)

.....

4. a) The flow chart below shows a sequence of reactions starting with iron. Study it and answer the questions that follow;



i) Name the reagents and state the condition for the reaction in Step 1. (2 marks)

Reagent

.....

Condition

.....

ii) Give the names of the following. (3 marks)

I. Solid S

.....

II. Solid V

.....
III. Solid T
.....

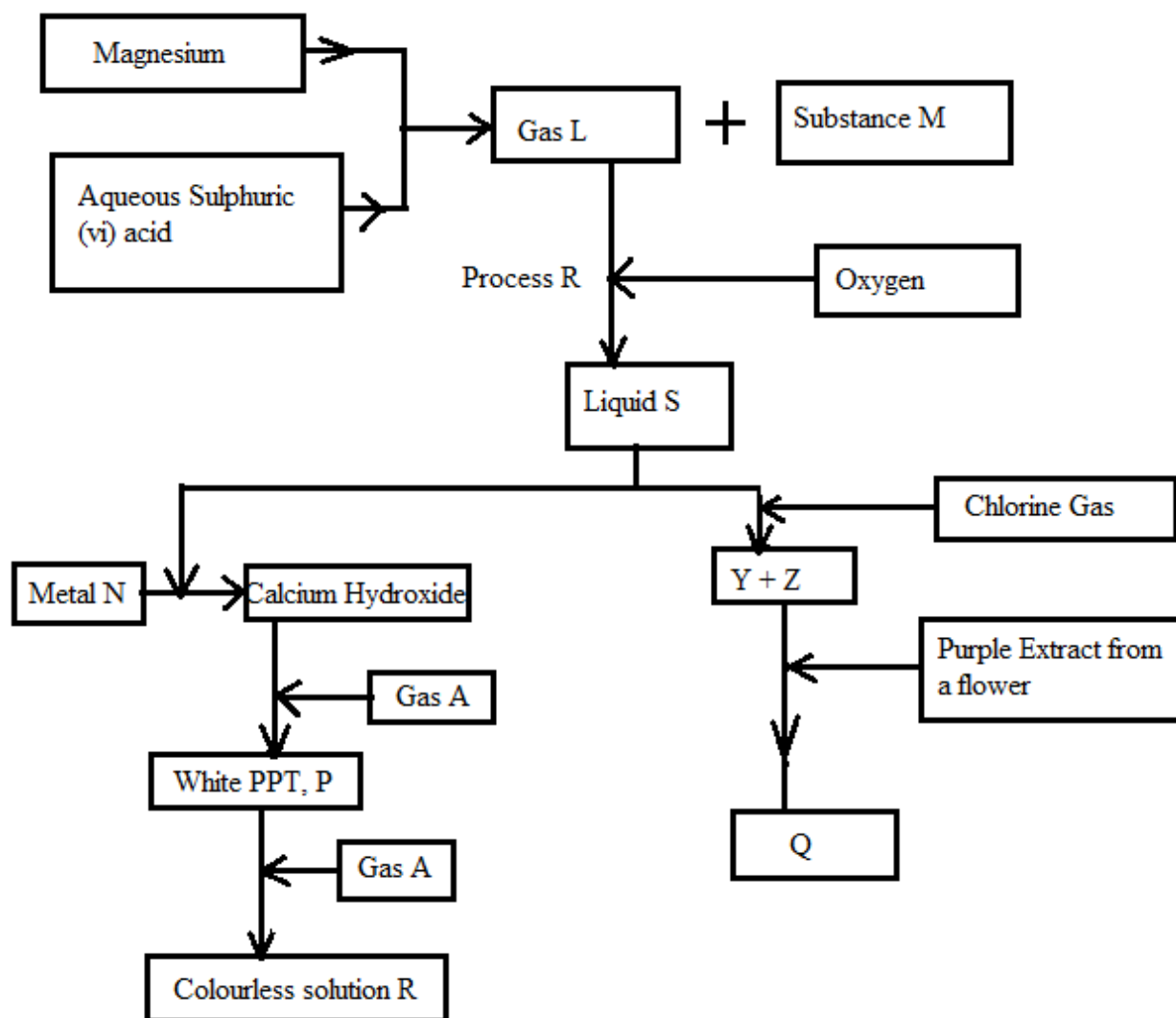
iii) Give reasons for the colour change in step 2. (2marks)

.....
.....
.....
iv) Write an ionic equation for the reaction which takes place in step 3. (1mark)

.....
v) Name one other substance that could be used instead of sodium hydroxide in Step 3. (1mark)
.....
.....

b) In an experiment, 3.36g of iron fillings were added to excess aqueous copper (II) sulphate,
Calculate the mass of copper that was deposited. (Cu = 63.5, Fe 56.0) (3marks)

5. The following flow diagram shows a summary of a process that was used to prepare and investigate the properties and products of a particular gas. Study it and then answer the questions that follow:



a) i) Identify the following;

I. Gas L (1mark)

II. Substance M (1mark)

ii. Write a chemical equation for the formation of Gas L and substance M. (1mark)

b. Identify liquid S and write an equation for its formation. (1 ½ marks)

.....
.....
.....
Write equations for the formation of **P** and **R**.

(2 marks)

.....
.....
.....
.....
c) i. What is the collective name of substance **Y** and **Z**?

(1 mark)

.....
.....
.....
ii. Identify **Q** and write an equation for its formation.

(1 ½ mark)

.....
.....
.....
iii. By use of a chemical equation show how metal **N** reacts with liquid **S**.

(1 mark)

6. The following table gives standard electrode potentials for a number of half cell reactions.

	E^θ volts
$\text{Zn}^{2+}(\text{aq}) + 2\text{e}^- \longrightarrow \text{Zn}(\text{s})$	-0.70
$\text{Fe}^{2+}(\text{aq}) + 2\text{e}^- \longrightarrow \text{Fe}(\text{s})$	-0.44
$\text{I}_2(\text{g}) + 2\text{e}^- \longrightarrow 2\text{I}^-(\text{aq})$	+0.54
$\text{Fe}^{3+}(\text{aq}) + \text{e}^- \longrightarrow \text{Fe}^{2+}(\text{aq})$	-0.77
$\text{Ce}^{4+}(\text{aq}) + \text{e}^- \longrightarrow \text{Ce}^{3+}(\text{aq})$	+1.61

To which half equation are these electrode potentials expressed.

(1 mark)

.....
.....
a) Which of the substances listed above is;

i) Strongest oxidizing agent

(1 mark)

.....
.....
ii. Strongest reducing agent. (1 mark)

.....
.....
b) i. Which substance(s) in the table could be used to convert Iodide ions to Iodine. (2 marks)

.....
.....
ii. Write a balanced equation for one possible conversion in b (i) above. (2marks)

.....
.....
c) A half cell is constructed by putting a platinum electrode in a solution which is 0.1 M with respect to Fe^{2+} and Fe^{3+} ions. This half cell is connected by means of a salt bridge to another half cell containing a non electrode in a 1.0M solution of Fe^{2+} ions.

i. Write the diagrammatic representation of the cell. (1mark)

.....
.....
ii. If the electrodes are connected externally, what reactions will take place in each cell? (2 marks)

.....
.....
iii. What is the e.m.f. of this cell in c (ii). (1 mark)

7. The table below gives some properties of three salts; **D**, **E** and **F**.

Salt	D	E	F
Solubility	Insoluble	Soluble	Soluble

Effect of heat	Decomposes forming a white residue G and a colourless gas H. Gas H forms a white precipitate with lime water.	Decomposes to form a yellow residue and two gases I and J. Gas I is reddish - brown and Gas J is colourless.	Dissociates into two gases. K and L. Gas K turn wet litmus paper blue. Gas K and L readily recombine on cooling to form dense white fumes of salt F.
-----------------------	---	--	--

Further tests showed that when residue G was reacted with water and the product heated with salt F, gas K was evolved. When D reacted with nitric (V) acid, there was effervescence. The resulting solution formed a white precipitate with dilute Sulphuric (VI) acid, but not with hydrochloric acid.

a) Identify

i) Gas **H** (1mk)

.....
.....

ii) Gas **I** (1mk)

.....
.....

iii) Salt **D** (1mk)

.....
.....

iv) Salt **F** (1mk)

.....
.....

b) Write an equation for the thermal decomposition of **D**. (1mk)

.....
.....

c) Name the compound formed when **G** is reacted with water. (1mk)

.....
.....

d) A Solution salt reacted with an aqueous solution gas **L** forming a white precipitate that dissolved when warmed.

i) Write an ionic equation for the formation of the white precipitate. (1mk)

.....
.....

ii) Write the formulae of the ions that are present in salt **E**. (1mk)

.....
.....

e) Explain what would be observed if the sodium hydroxide was added to a solution of **E** ,drop wise till in excess. (1mk)

.....
.....
.....

f) Write a chemical equation for the effect of heat on **F**. (1mk)

.....
.....

233/3

CHEMISTRY

PAPER 3

APRIL, 2020

2¼ Hours

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020 FORM FOUR

Kenya Certificate of Secondary Education

PAPER 3

(PRACTICAL)

Instructions to candidates

1. Write your name, admission number, class, school and date in the spaces provided above.
2. Answer **ALL** the questions in the spaces provided in the question paper.
3. You are **NOT** allowed to start working with the apparatus for the first 15 minutes of the 2¼ hours allowed for this paper. This time is to enable you to read the question paper and make sure you have all the chemicals and apparatus that you may need.
4. All working **MUST** be clearly shown where necessary.
5. Mathematical table and silent electronic calculators may be used.
6. **This paper consists of 8 printed pages.**
7. **Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.**

For examiner's use only

Question	Maximum score	Candidate's score
1	22	
2	10	
3	08	

Total score	40	
--------------------	-----------	--

1. You are provided with:

- **3.5g** of **solid Q** with the formula $C_2H_2O_4 \cdot nH_2O$
- **0.05M** of acidified Potassium Manganate (VII), $KMnO_4$, **solution R**.

You are required to determine:

- the solubility of **solid Q** at different temperatures.
- the value of **n** in the formula, $C_2H_2O_4 \cdot nH_2O$.

Procedure I.

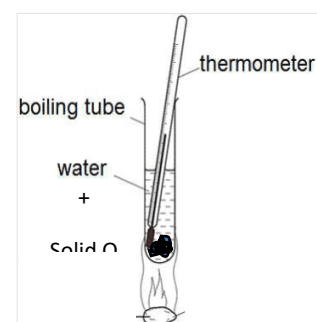
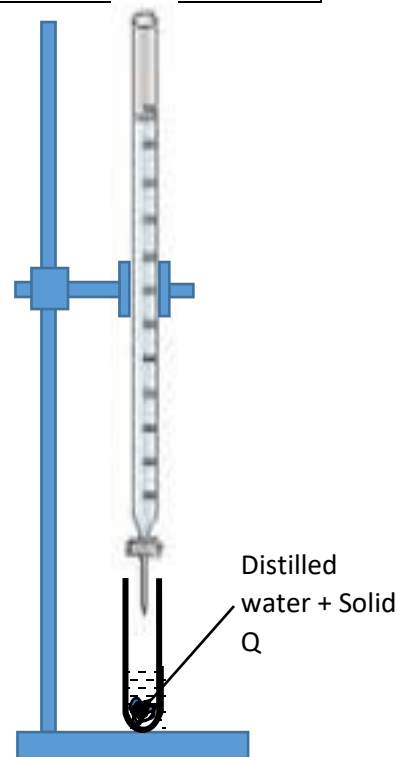
- Fill the burette up to the zero mark with distilled water.
- Transfer **4cm³** of distilled water to a boiling tube containing all the **solid Q** provided.
- Heat the mixture while carefully stirring with thermometer until all the solid dissolves.
- Allow the solution to cool while stirring with thermometer.
Note the temperature at which crystals start to appear and record the temperature in the table below.
- Add **2cm³** of distilled water from the burette to the contents in the boiling tube and heat while carefully stirring until all the solid dissolves.
- Allow the mixture to cool and record the temperature at which the crystals first appear.
- Repeat the procedure three more times to complete the table I below.

NB: Retain the mixture for Procedure II.

Viii) Complete the table by calculating the solubility of **solid Q** at different temperatures.

a) **Table I**

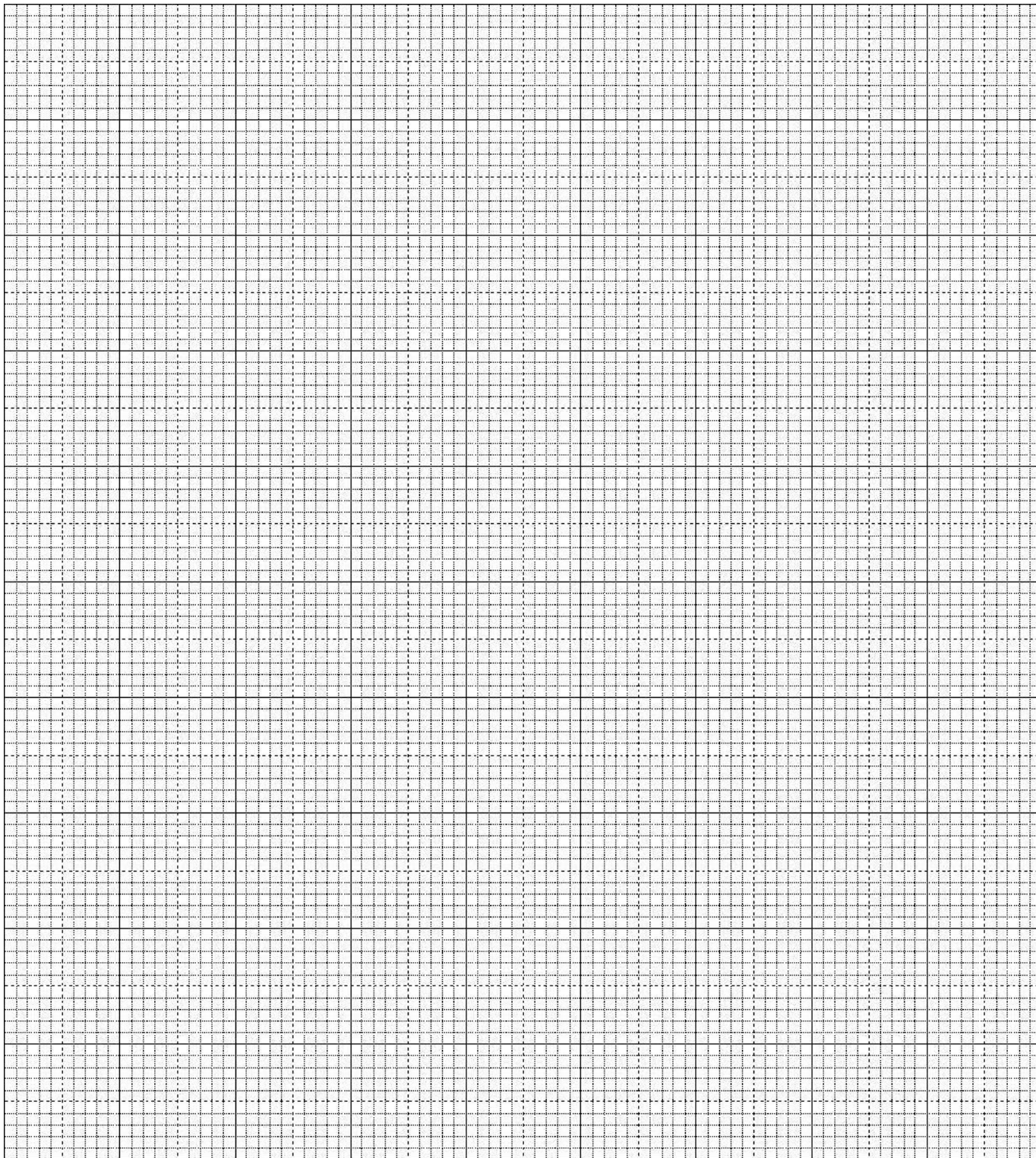
Volume of water in boiling tube (cm ³)	Temperature at which crystals first appear.(°C)	Solubility of solid Q in g/100g water.
4		



6		
8		
10		
12		

(6mks)

b) On the grid provided, plot a graph of solubility of solid Q in g/100g water (y-axis) against temperature (x-axis).
(3mks)



c) Using your graph determine:

i) The solubility of solid Q at 55°C.

(1mk)

.....

ii) The temperature at which 20g of solid **Q** would saturate 40g of water. (2mks)

.....

Procedure II.

Carefully pour the mixture from **procedure I** into a 250ml volumetric flask. Rinse the boiling tube twice with a little distilled water and pour the rinse into the 250ml volumetric flask. Add distilled water to top up the 250ml volumetric flask to the mark and shake the mixture well. Label it as **solution Q**.

Fill the burette up to the mark with **solution R**.

Pipette 25.0cm³ of **solution Q** into a clean conical flask. Heat the mixture in the flask to a temperature of about 70°C. (Do not boil the solution).

At this point the flask is too hot to be held with bare hands. Hold the flask with **a folded piece of paper** and place it directly below the clamped burette and begin titrating the hot **solution Q** with **solution R**.

Repeat the titration two more times to complete the **table II** below.

a) **Table II**

(4mks)

Titration	1	2	3
Final burette reading (cm ³)			
Initial burette reading (cm ³)			
Volume of solution R used (cm ³)			

b) Determine the average volume of solution R used.

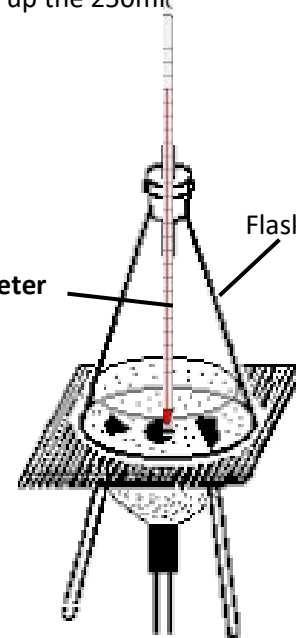
(1mk)

.....

c) Calculate the number of moles of Potassium Manganate (VII), KMnO₄, solution **R** used. (1mk)

.....

.....



d) Given that 5 moles of solution **Q** react with 2 moles of Potassium Manganate (VII), solution **R** calculate the number of moles of solution **Q** that reacted. (1mk)

.....
.....

e) Calculate the concentration of solution **Q** in moles/litre. (1mk)

.....
.....

f) Calculate the relative formula mass of **Q**. (1mk)

.....
.....

g) Given that the chemical formula of **Q** is $C_2H_2O_4 \cdot nH_2O$. Calculate the value of **n**. (C=12, H=1, O=16)
(1mk)

.....
.....

2. You are provided with solid **V**. Carry out the tests below. Write your observations and inferences in the spaces provided.

a) Add about 10cm³ of distilled water to solid **V** in a boiling tube and thorough shake the mixture. Into 5 separate test tubes, put 2cm³ portions of the mixture and use it for tests (b) to (f).

Observations	Inferences
(1mk)	(1mk)

b) To the first portion add 2M sodium hydroxide drop-wise until in excess.

Observations	Inferences
(1mk)	(1mk)

c) Clean one end of the glass rod provided. Dip the clean end of the rod in the 2nd portion. Remove the end and heat it in the non-luminous part of the Bunsen burner flame. Note the colour of the flame and record below.

Observations	Inferences
(½mk)	(½mk)

d) To the 3rd portion add 2 drops of Lead (II) nitrate solution

Observations	Inferences
(1mk)	(1mk)

e) To the 4th portion add 2 drops of Barium nitrate solution followed by 2cm³ of HCl then shake then mixture.

Observations	Inferences
--------------	------------

(1mk)

(1mk)

f) To the 5th portion add 3 drops of acidified potassium dichromate (VI) solution and warm

Observations

Inferences

(½mk)

(½mk)

3. You are provided with solid F. Carry out the following tests on it and write the expected observations and inferences in the spaces provided.

(a) Place about half spatula end of solid F on a metallic spatula and burn it using a Bunsen burner flame.

Observations

Inferences

(1mk)	(1mk)
--------	--------

(b) Place the remaining solid F in a boiling tube. Add about 10cm³ of distilled water and shake the mixture well. Divide the mixture obtained into 3 portions.

i) To the first portion, add 3 drops of acidified potassium dichromate and warm.

Observations	Inferences
(1mk)	(1mk)

ii) To the 2nd portion add universal indicator and determine the pH.

Observations	Inferences
(1mk)	(1mk)

iii) To the third portion, add a small amount of solid sodium hydrogen carbonate.

Observations	Inferences
(1mk)	(1mk)

451/1

COMPUTER STUDIES

Paper 1

APRIL- 2020

Time: 2 Hours

**SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION
2020
FORM FOUR
Kenya Certificate of Secondary Education**

INSTRUCTIONS TO CANDIDATES

Write your **name, School** and **index number** in the spaces provided above.

This paper consists of Two sections **A & B**

Answer **ALL** the questions in Section **A**

Question 16 is compulsory

Answer any **THREE** questions in section **B**

All answers to ALL questions must be written in the spaces provided in the question paper

FOR EXAMINERS USE ONLY

SECTION	QUESTION	MAXIMUM MARKS	CANDIDATES SCORE
A	1-15	40	
B	16	15	
	17	15	
	18	15	
	19	15	

	20	15	
TOTAL SCORE	100		

This paper consists of 12 printed pages.

*Candidates should check the question paper to ensure that all pages are printed as indicated
and no questions are missing*

SECTION A (40 MARKS)

Answers ALL the questions in this section in the spaces provided.

1. One function of an operating system is to control computer resources. State **four** resources under operating system control (2 marks)

.....
.....
.....
.....
.....

2. a) What do you understand by the term plotter in relation to computer (2 marks)

.....
.....
.....
.....

- b) List two types of plotters (1 mark)

.....
.....
.....

- 3 Explain the following terms as used in the word processing (4 marks)

- a) Indenting

.....
.....
.....

- b) Alignment

.....
.....
.....

c) Foot note

.....
.....
.....

d) Endnote

.....
.....
.....

4. List three application areas of artificial intelligence. (3 marks)

.....
.....
.....
.....
.....

5. Differentiate between COM ports and LPT ports. (2 marks)

.....
.....
.....
.....
.....

6. List **three** factors to consider when deciding on the choice of an electronic data processing method. (3 marks)

.....
.....
.....
.....
.....

7. Ventilation is an important practice in the computer lab because it enhances proper circulation of air. Outline **three** ways in which air is regulated in the computer room. (3 marks)

.....
.....
.....
.....
.....

8. Explain **two** types of optical disks in the market today (4 Marks)

.....
.....
.....
.....
.....
.....

9. What does the following control measures against computer crime involve? (4 marks)

a) Audit trail

.....
.....
.....

b) Data encryption

.....
.....
.....

c) Log files

.....
.....
.....

e) Passwords

.....
.....
.....

10. Differentiate between softcopy output and hardcopy output (2 marks)

.....
.....
.....
.....
.....

11. What is the function of ‘what if’ in spreadsheet program (1 marks)

.....
.....
.....
.....

12. State **two** files that are created in mail merging process (3 marks)

.....
.....
.....
.....

13. While purchasing computers for his school the principal Mwongori high school decided to consult an expert. As a computer student advise him on **four** hardware considerations (2 marks)

.....
.....
.....
.....

14. Name four methods used in data management on a worksheet (2 marks)

.....
.....
.....
.....

15. What do you understand by the term embedded chart in spreadsheets? (2 marks)

.....
.....
.....
.....

SECTION B. (60 MARKS)

Answer question 16 and Any other three questions

16. a). Study the pseudocode below and design a flowchart for it. (8 marks)
- i. Set total to zero
 - ii. Set grade counter to one
 - iii. While grade counter is less or equal to ten, Input the next grade
 - iv. Add the next grade into total
 - v. Add one to the grade counter
 - vi. Set the class average to the total divided by ten
 - vii. Print the class average.

- b). Describe **three** methods of testing the program for errors. (3 marks)

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

c). List down **four** selection controls used in writing a program (2 marks)

.....
.....
.....
.....
.....

d). Outline **four** benefits of modular programming (2 marks)

.....
.....
.....
.....

17 a). Convert the following numbers of their decimal equivalent (6 marks)

a). 111.10101_2

b). 245_8

c). $67BH$

b). Outline **four** ways in which data integrity may be maintained (4 marks)

.....
.....

.....
.....
.....
.....
.....
.....

c). Discuss **four** advantages of using questionnaires as a fact-finding tool (4 marks)

.....
.....
.....
.....
.....
.....
.....
.....
.....

d). What is the role of a recycle bin in Ms. Word? (1mark)

.....
.....
.....

18. a). List **three** advantages of fiber optic cables (3 marks)

.....
.....
.....
.....
.....

b). Differentiate between static RAM and dynamic RAM. (4 marks)

.....
.....
.....
.....
.....

.....
.....
.....

c). Describe the following types of queries found in Ms. Access (3 marks)

i). Update

.....
.....
.....

ii). Append query

.....
.....
.....

iii). Make table query

.....
.....
.....

d). Distinguish between source program and object code (4 marks)

.....
.....
.....
.....
.....
.....

e). Distinguish between a mouse pointer and an insertion point (1 mark)

.....
.....
.....

19. a). Outline **four** major ways the company network administrator can enforce good network practice on user of the company LAN (4 marks)

.....
.....

e). List **three** programming languages that can be used by web developers (3 marks)

.....
.....
.....
.....
.....
.....
.....
.....
.....

20. a). Borabu Teacher's college has decided to embrace ICT in offering its services. State four ways how it will help learners in the institution. (4 marks)

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

b). Define the following terms in relation to internet (4 marks)

i). Downloading

.....
.....
.....

ii). Hyperlink

.....
.....
.....

iii). Web browsers

.....
.....
.....

iv). Internet service providers

.....
.....
.....

c). Differentiate between sign in and sign up in email. (2 marks)

.....
.....
.....

d). Define the following terms (3 marks)

i). Spam mail

.....
.....
.....

ii). Disk

.....
.....
.....

iii). On board modem

.....
.....
.....

e) Define the term WIMP as used in computing. (2 marks)

451/2

COMPUTER STUDIES

PAPER 2

PRACTICAL

APRIL 2020

2 ½ HOURS

**SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION
2020
FORM FOUR**

Kenya Certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES

1. Save **ALL** your work as instructed
2. Save your final work on a folder on the desktop bearing your index number then later transfer them to a **DVD/CD** recordable provided
3. Label your **DVD/CD** to bear your name and index / Admission Number
4. Submit both printouts and the DVD/CD to the examiner
5. Answer **ALL** questions

This paper consists of 3 printed pages

Turn Over

1. (a) Type the text below as it is into a word processor software (18mks)

System development

For four purposes, the implementation process runs from the point when the systems design has been formally approved to the point when the new system is in place, ready to be used. As mentioned above, a decision could have been made to acquire commercial software for implementing the new system.

The following are the major activities which comprise the implementation process

- (1) Develop detailed programming specifications
- (2) Develop test specifications and test data
- (3) Write computer programs
- (4) Test computer programs
- (5) User testing
- (6) File conversion
- (7) Change over to the new system

Again, there is usually significant overlap among the above activities, For instance, file conversion may proceed while programs are being written.

DECISION TABLE

A decision table allows an analyst to set out a clear way in what could be a confusing situation.

		1	2	3	4
Conditions	Purchaser is a member	T	T	F	F
	Purchaser exceed ksh. 1000	T	F	T	F
Actions	15% discount	√			
	10% discount		√		

	7% discount			√	
	No discount				√

(b)

(i) Centre and underline the title (2mks)

(ii) Change font size of the headline to 25pts (1mk)

(iii) Change the case of the headline to title case (1mk)

(c) Insert this text as the page footer in Italic, "System development life cycle". Place it at the left of the page. (4mks)

(d) Spell check your document (4mks)

(e) Save your document as SDLC FILE1 (2mks)

(f) Excluding the title, set your document to be in two columns to the beginning of the subtitle, "decision table" (5mks)

(g) Double space the first paragraph of your document (3mks)

(h)

(i) Expand the title by 10pts in character spacing (4mks)

(ii) Use dotted line to underline your headline (3mks)

(iii) Save your document as SDLC F2 (2141 (S)

(iv) Print SDLV FI and SDLC F2 (2mks)

Q2

The data in the tables below was obtained from various insurance companies

Table 1: Insurance policy

Policy category	Policy types
PC01	LIFE
PC02	VEHICLE
PC03	HOUSE

Table 2 Customer

NAME	GENDER	MONTHLY CONTRIBUTION	REGNO	INSUARER ID	POLICE CATEGORY	TEL NO
JIM	M	7000	8790	101	PC02	0754233445
ALICE	F	5000	9094	102	PC03	0724345765
JOHN	M	7500	6790	101	PC01	0728567654
JANE	F	6700	8950	101	PC02	0734543321
BEN	M	5000	7980	103	PC01	0721564786
PAUL	M	6500	7956	104	PC03	0753213456

Table 3 insuring company

Company id	Company name
101	WORLD WIDE
102	PROMISE
103	GATEWAY
104	EASY

- (a) (i) Create a database named INSUARANCE (2mks)
- (ii) Create the three tables above in your database (12mks)
- (iii) Create relationships between the tables (3mks)
- (iv) Create and use forms to enter data into the tables. (12mks)
- (b) (i) Generate a report to display the name, Gender, policy type and company name (8mks)
- (ii) Create a query to display total monthly contribution made by WORLDWIDE company (4mks)
- (c) (i) Using a query, display the customer's name, contribution, policy category, and company name (5mks)
- (d) Print
- (i) Your tables (3mks)
- (ii) Report (1mk)
- (iii) Two queries (2mks)

313/1
CHRISTIAN RELIGIOUS EDUCATION
PAPER 1
CHAMPIONS APRIL EXAMS 2020
TIME: 2 ½ HOURS

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR
Kenya Certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES

- Answer ANY FIVE questions in the foolscaps provided.
- This paper consists of 2 printed pages.
- Candidates should check the question paper to ascertain all the pages are as indicated and no questions are missing.

Questions	1	2	3	4	5	6	Total
Marks							

1. a) Outline any six reasons why the Bible is referred to as a library. (6mks)
- b) Explain any four similarities between the two accounts of creation in Genesis 1 and 2 (8mks)
- c) State six ways in which Christians continue with Gods work of creation today. (6mks)
2. a) Give eight conditions for the renewal of Sinai covenant. (Ex. 34:11 – 36) (8mks)
- b) Outline the importance of the Exodus to the Israelites. (7mks)
- c) State ways in which Christians show their respect to God today. (5mks)
3. a) From the story of Naboth’s vineyard, explain four commandments that king Ahab and queen Jezebel broke. (6mks)
- b) Describe six ways in which King Solomon promoted Idol worship in Israel (6mks)
- c) What lessons can modern Christian’s leaders learn from King David’s leadership? (8mks)
4. a) Explain how the prophetic messages were written (8mks)
- b) Give six forms of punishment that Amos prophesied for Israel and Judah (6mks)
- c) Identify six ways used by the church to punish its errant members (6mks)
5. a) State the promises made by the Israelites during the renewal of the covenant by Nehemiah. (Nehemiah 10:20 – 29) (7mks)
- b) Give six reasons why Nehemiah advised the separation of the Jews from the foreigners. (6mks)
- c) Identify seven lessons leaders can learn from Nehemiah (7mks)
6. a) Describe the traditional African practices which demonstrate peoples belief in God.(8mks)
- b) State six characteristics of African communities (6mks)
- c) Show how the western culture has affected the Traditional African Communities (6mks)

313/2
CHRISTIAN RELIGIOUS EDUCATION
PAPER 2
CHAMPIONS APRIL EXAMS 2020
TIME: 2 ½ HOURS

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR
Kenya Certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES

- Answer ANY FIVE questions in the foolscaps provided.
- This paper consists of 2 printed pages.
- Candidates should check the question paper to ascertain all the pages are as indicated and no questions are missing.

Questions	1	2	3	4	5	6	Total
Marks							

1. a) With reference to Luke 1:57 – 66, describe the incident when John the Baptist was born. (8mks)
- b) Give an outline of how John the Baptist prepared the way for the Messiah. (6mks)
- c) State seven ways by which the church in Kenya assist in molding the character of the youth (6mks)

2. a) Describe an episode in which Jesus healed an evil possessed man in Capernaum.(Luke 4:31-37)(7mks)
- b) Give seven reasons why Jesus identified himself with the sinners during his public ministry (7mks)
- c) Identify six causes of human suffering in the society today (6mks)
3. a) Outline Jesus' teaching on conditions of disciples (8mks)
- b) Narrate the parable of the rich fool (Luke 12:13 – 21) (6mks)
- c) State six ways by which Christians may use their resources for the expansion of God's kingdom (6mks)
4. a) Explain how the concept of the vine and the Branches is used to express unit of believers (8mks)
- b) Identify seven ways of promoting unit with Christian community in Kenya today (7mks)
- c) Identify five symbols of unity that bring Kenyan together as a nation. (5mks)
5. a) Identify seven ways in which modern Christians use their leisure time. (7mks)
- b) Explain the criteria for evaluating the use of leisure. (8mks)
- c) Give five reasons as why Christians are against gambling. (5mks)
6. a) State six reasons why it is important to have laws in a country. (7mks)
- b) Give reasons why Christians are against capital punishment (6mks)
- c) In which ways can Christians solve conflict among themselves? (7mks)

101/1

English Paper (Functional Skills)

NASSHA

Time: 2 Hours

**SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR**

Kenya Certificate of Secondary Education

INSTRUCTIONS

- Answer all questions in this paper
- All your answers must be written in the spaces provided
- This paper consists of 7 printed pages
- Candidates should check the question paper to ensure that all pages are printed as indicated and no questions are missing.

For Examiner's Use Only

QUESTION	MAXIMUM	SCORE
1	20	
2	10	
3	30	
TOTAL	60	

1. FUNCTIONAL WRITING

Imagine that you have a foreign friend who intends to visit your home during the August holiday but does not know the way. He also intends to host ten African friends for a banquet.

a) Write the directions that you will send to your friend so as to reach your home with ease from the nearest town. (8 mks)

b) Write the recipe on any of your favourite meals that you will give to your friend for the banquet (12 mks)

.....

.....

.....

2. Cloze test

Fill each of the blank spaces with most appropriate word. (10 mks)

The police frequently (1).....our slum village in search of hidden illicit brew. It was (2)one of those raids that constable Amkatwende earned himself unexpected honour(3).....respect for his detective skills. (4)Chang'aa brewers in village had devised several smart ways of hiding their liquor in spots (5)..... even nosiest cops would not dream of looking. A new favourite trick was to put the chang'aa (6)..... twenty litre jerricans, close them tightly, tie strong sisal ropes (7)the necks and dangle them down pit (8) This of course necessitated boring extra openings at back of the toilet structures for the jerricans to be let down before the holes were in generously covered and disguised (9).....soil, refuse or even grass. No policeman in his right (10)..... was going to start looking for hidden Chang'aa down a toilet pit, surely.

3. ORAL SKILLS

Read the oral poem below and answer the questions that follow: (30 mks)

Suck and I hide you, my gentle one
Suck and hide you, my beloved
I dreamt that the hunt was at Buganga
I dream that the hunt was at Ngarama

Where, oh where, shall I put, my little baby?
Where, oh where, shall I put you, my lovely little lips?
If I put you in a clump of grass, my gentle one
The hunter' rough dog will come sniffing around
The hunters' thick club tears up the back

Where, oh where, shall I put you, my lovely little lips?
Where, oh where, shall I put you, my beloved?

If I put you by the wayside, gentle one

Passers-by will take you with them, my beloved
And wash them down with a little water, my little baby
The ants will enclose you in their nest, lovely little lips
Suck and I hide you, little baby
Suck and I hide you, my gentle one

When I am dead and gone, gentle one
Feed on little blades of grass like cow, my beloved
And wash them down with a little water, my little baby
That's what raises orphans, you for whom the drum sounds
If I do not die, my little baby
Good things will be ours to enjoy, you for whom the drum sounds

i) Identify any two aspects of oral performance that make this oral poem easy to remember? (2 mks)

.....
.....

ii) Suppose you were the performer of this oral poem, how would you endear it to the audience? (2 mks)

.....
.....

iii) How would you perform the last two lines of the above song? (2 mks)

.....
.....

iv) Suppose you were to perform this oral poem to a group of audience, what preparations would you put in place for a successful performance? (2 mks)

.....
.....

v) This oral song is a translation from the local dialect of the performer. What two aspects were lost during the translation? (2 mks)

.....
.....

b) Show, by underlining the syllable, where stress will fall in each of the following words. (2 mks)

i) Reputable

ii) Historic

iii) Mountaineer

iv) Nationalism

c) Indicate how you would address each of the following officials to express courtesy (3 mks)

i) President

Your

ii) Mayor

Your

iii) Judge

Your

iv) Pope

Your

v) Queen

Your

vi) Member of parliament

Your

d) Your teacher has requested you to chair a discussion based on the portrayal of Nora Helmer in Henrik Ibsen's *Adoll's House*. State three things you will do to ensure an effective discussion. (3 mks)

.....
.....
.....
.....

e) A group of student counselors have entered the principal's office to discuss the possibility of changing the school diet for the students. The session ended in disarray. The counselors were thrown out of the office by an upset principal. Explain any four things that may have been done by either party that could have led to this situation. (4 mks)

.....
.....
.....
.....

f) For each of the following words provide another word that is pronounced the same way. (2 mks)

i) Ate

ii) Flew

iii) Aunt

iv) Pain

g) Pick out words in the following list that have similar silent letters and group them together. (3 mks)

Whiff, rendezvous, write, debris, coup, wrist, psychology

.....
.....
.....

h) Imagine you are to make an oral presentation of a report on causes of poverty in your local area.

i) Give two ways in which you will prepare before your presentations. (2 mks)

.....
.....
.....
.....

ii) How would you present your report effectively? (1 mk)

.....
.....
.....
.....

101/2

ENGLISH

PAPER 2

(Comprehension, Literary Appreciation and Grammar)

June 2019

TIME: 2½ HOURS

**SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR**

Kenya Certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES:

- Write your **name**, **index number** and **school** in the spaces provided above.
- **Sign** and write the **date** of examination in the spaces provided above.
- Answer all questions in this question paper.
- All your answers must be written in the spaces provided in this question paper.
- Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no question is missing.

FOR EXAMINER'S USE ONLY

Question	Maximum score	Candidate's score
1	20	
2	25	
3	20	
4	15	
Total	80	

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

Production of greenhouse gas (GHGs) that include carbon dioxide (CO₂), nitrous oxide and methane leads to global warming. The warmer environmental temperatures in return affect rainfall and weather patterns, hence climate change. These gases are produced through man's activities, including agricultural production.

To manage climate change (CC) through reduced emission and or capture and storage of the GHGs, the United Nations came up with the Clean Development Mechanism (CDM) concept where each of the 38 developed countries was given a limit as to the amount of GHGs that it can emit.. In case it has to exceed that amount, it has to support a project in the developing countries that has the ability to capture and store or reduce GHGs equivalent to what it (developed country) is producing.

This trade is referred to "cap and trade". The aim of CDM, therefore, is two-fold; reduce GHG emissions by developed countries and economic development of the developing countries. There are 15 CDM targeted sectors that include energy, transport, industrial waste disposal, afforestation/reforestation and agriculture, among others. Voluntary initiatives, governments, private companies, and individuals have collectively committed billions of dollars to buy emission reductions. Despite its potential for project development, small-scale farmers have not benefited much from CDM due to limited understanding of its process and opportunities available in agriculture, plus examples that they can borrow from.

CDM process has five steps: (1) Project design, (2) Validation/registration (3) Monitoring, (4) Verification/certification and (5) Issuance of Certified Emission Reductions (CERs), which are the units of trade. In the project design, the process starts with identification of a project with a CDM potential and then preparation of a Project Idea Note (PIN), which is further developed to a Project Design Document (PDD). International acceptance of a CDM project first requires approval at the national level, consistent with the country's domestic laws and policy priorities. The country's Designated National Authority (DNA) issues this approval and in Kenya, the National Environmental Management Authority (Nema) is the DNA. Project participants then submit the PDD to the CDM Executive Board (EB).

An example of a project idea in the transport sector is like conversion of matatus (14 seaters) to buses (64 seaters) transport system. The bus might use slightly more fuel than a matatu in any one trip but it carries more than five times the number of people per trip. The difference in fuel utilization leads

to reduced CO2 production from burning the fuel and this can be used to claim CERs.

Projects that have been used frequently for CDM include animal waste management - mainly biogas production and composting of agricultural waste. Tree planting projects such as

afforestation (planting new ones), reforestation (replanting a degraded forest) and agroforestry (planting trees alongside crops).

Reduced emissions can also be realized through farming systems that avoid water logging as seen in rice production; power generation from agricultural waste like bagasse through cogeneration; not burning agricultural residues; gasification of municipal solid wastes; restoration of mangroves; utilization of forest/agricultural waste such as sawmill waste and rice husks to produce energy; use of used oils for biodiesel; use of organic biodiesel from plants like jatropha, capturing and flaring methane from waste water treatment, biomass briquetting/pelleting and reforestation as a source of renewable energy for industrial use.

For economies of scale, small-scale farmers have to form groups and come up with a programme of activities that constitute a CDM.

In Kenya, some of the agricultural CDMs and estimated CO2 equivalent emission reductions (metric tonnes/year) include Simgas biogas project (45,156); Muhoroni sugar bagasse cogeneration (15,056); Karan Bioresidues Briquettes supply for industrial steam production (43,699); and Aberdare Range/ Mt Kenya Small Scale Reforestation Initiative (8,542)

a) Explain how climate change is realized in the passage (2mks)

.....
.....

b) How is climate change managed by the United Nations (4mks)

.....
.....
.....
.....

c) What is the aim of United Nations Clean Development Mechanism (2mks)

.....
.....

d) Make notes on how to reduce emissions according to United Nations` Clean Development Mechanism (CDM) (6mks)

.....
.....

.....
.....
.....
.....

e) Identify and explain any instance of irony in passage. (3mks)

.....
.....
.....

f) The Countries Designated National Authority issues this approval and in Kenya NEMA is the DNA. (1mk) rewrite beginning with: this approval.....)

.....
.....

g) Give the meaning of the following words. (2mks)

i) Concept

ii) "Cap and trade"

2. Read the except below and answer the questions that follow. (25nks)

Mrs. Linde Is Doctor Rank a man of means?

Nora: Yes, he is.

Mrs.Linde And has no one to provide for?

Nora: No, no one; but

Mrs linde; And comes here every day?

Nora: Yes, I told you so

Mrs linde: But how can this well-bred man be so tactless?

Nora: I don` t understand you at all

Mrs. linde: Don` t prevaricate, Nora. Do you suppose I don` t guess who lent you the
the two hundred and fifty pounds

Nora: Are you out of your senses? How can you think of such a thing! A friend of
ours who comes here every day! Do you realize what a horribly painful
Position that would be?

Mrs. Linde: Then it really isn` t he?

Nora: No, certainly not. It would never have entered into my head for a moment.
 Besides, he had no money to lend then; he came into his money afterwards.

Mrs. Linde: Well, I think that was lucky for you, my dear Nora.

Nora: No, it would never have come into my head to ask Doctor Rank.
 Although I am quite sure that if I had asked him.

Mrs Linde: But of course you won't.

Nora: Of course not. I have no reason to think it could possibly be necessary.
 But I am quite sure that if I told Doctor Rank.

Mrs Linde: Behind your husband's back?

Nora: I must make an end of it with the other one, and that will be behind his back too. I must make an end of it with him.

Mrs Linde: Yes, that is what I told you yesterday, but-

Nora: (Walking up and down) a man can put a thing like that straight much easier than a woman-

Mrs Linde: One's husband, yes.

Nora: Nonsense!(standing still) when you pay off a debt you get your bond back, don't you?

Mrs Linde: Yes, as a matter of course.

Nora: And can tear it into a hundred thousand pieces, and burn it up-the nasty dirty paper!

Mrs Linde: (Looks hard at her, lays down her sewing and gets up slowly) Nora, you are concealing something from me.

Nora: Do I look as if I were?

Mrs Linde: Something has happened to you since yesterday morning. Nora, what is it?

Questions

a) What happens immediately after this except? (3mks)

.....

.....

.....

b) Discuss any two issues brought out in this except. (4mks)

.....

.....

.....

.....
c) How is Mrs. Linde depicted in this extract? (4 mks)

.....
.....
.....
.....
d) In which ways does the playwright use dramatic irony in this excerpt? (4mks)

.....
.....
.....
.....
e) Rewrite and add a question tag "Because you do as your husband wishes." (1 mk)

.....
.....
.....
f) How effective is the use of humor in this extract? (2mks)

.....
g) From this excerpt, Helmer is hardworking. How is this character trait brought out elsewhere in the play and how does it complicate the drama. (3mks)

.....
h) Give the meaning of the following (4mks)

i) A man of means.....

ii) Prevaricate.....

iii) Horribly.....

iv) Concealing.....

3. Read the poem below and then answer the questions that follow.(20mks)

THEY ARE ASKING FOR HER ALL OVER.

They are asking for her all over
Have you seen our girl?
Has anybody come across Ciagatune?
The parents, the village mates and the clan elders
They are searching for her
Has anyone seen our daughter?
She is lost
Some are saying that she went
Through the path To Mombasa
She was measured a dress at Chongoria
And the others at Kagoco
A girl has been taken away
The daughters of Mbeere land
You have no behavior
Have you ever had someone
Selling herself?
A girl taking herself there
Being picked with saliva like a flea!
A big person yet no mature in deeds

Big-for-nothing girl!

(Adapted from Oral Literature of the Embu and Mbeere by Ciarunji Chesaina)

a) What kind of audience would this song be suited for and why? (2mks)

.....
.....

b) Identify and illustrate any three features of oral songs present in this song. (6mks)

.....
.....
.....
.....
.....
.....

c) Explain the meaning of the following expressions as used in the song. (4mks)

i) "Being picked with saliva like a flea!"

.....

iii) The children are here. The children wanted to see you. (Combine the two sentences using a relative pronoun)

.....
.....

b) Fill in each blank space with the correct preposition. (3mks)

- i) There is no exceptionthis rule
- ii) He has been dealing.....hardware for a long time.
- iii) He was sorry.....failing to turn up at the meeting.

c) Use the correct form of the word given in brackets to fill the gaps. (3mks)

- i) John wanted aapology. (Rewrite)
- ii) The team.....expected back tomorrow(be)
- iii) The choir sang very.....(beautiful)

d) Explain the meaning of the underlined idiomatic expressions. (2mks)

- i) My neighbors is an open-handed person.

.....
.....

- ii) In those years, we led a dog`s life.

.....
.....

e) Explain the difference in meaning of each of the following pairs of sentences. (2mks)

- i) Even I attended the ceremony

.....
.....

- ii) I even attended the ceremony

.....
.....

f) Fill in the blanks with the correct alternative from the given choices. (2mks)

- i) The childless couple.....a choice (adapted/adopted)
- ii).....now seven o`clock," she said. (its/it`s)

Name.....Index Number.....

101/3

English Paper

NASSHA

Time: 2 Hours

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR
Kenya Certificate of Secondary Education

INSTRUCTIONS

- Answer any three questions in this paper
- All your answers must be written in the spaces provided
- This paper consists of 2 printed pages
- Candidates should check the question paper to ensure that all pages are printed as indicated and no questions are missing.

ANSWER THREE QUESTION ONLY

1. IMAGINATIVE COMPOSITION (COMPULSORY) 20MKS

EITHER

- a. Write a composition about a time in your life when you wished parents were around.
- or
- b. Write a composition to illustrate the saying: "A tree is known by its fruits "

2. COMPULSORY SET TEXT (20MKS)

H.R Ole Kulet, Blossoms of the Savannah.

"There is need for women to unite in their fight against harmful cultural practices" Write an essay illustrating the truth of this statement using H.R. Ole Kulet's Blossoms of the Savannah.

3. THE OPTIONAL SET TEXT (20MKS)

Either

- a. The short story.
Memories we lost and other stories.
Religious hypocrisy leads to exploitation of the ignorant in the society." Validate the assertion above with relevant illustration from The Folden leaf by Segun Afolabi

or

- b. Drama
David Mulwa, Inheritance
"Greed for power attracts evil" Drawing examples from David Mulwa's Inheritance, write an essay illustrating the truth of this statement

Or

The Novella

John Steinback, The Pearl

"Fortune can sometimes turn us to calamities and bad omens" Discuss this topic, with reference to the Pearl, by John Steinback.

312/1

Geography Paper 1

April Holiday Exams 2020

Time: 2 ¼ hours

**SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR**

Kenya Certificate of Secondary Education

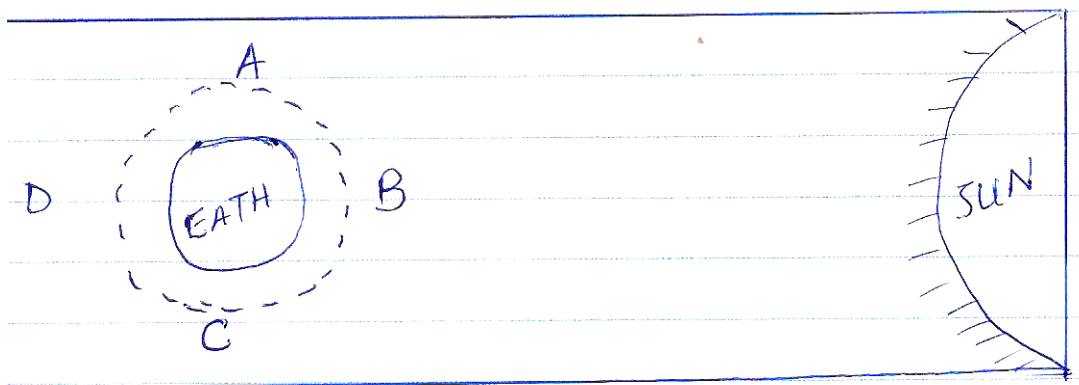
Instructions to candidates

- This paper has two sections A and B
- Answer questions in section A
- Answer question 6 and any other two questions from section b

SECTION A

Answer all questions in this section:

1. Explain two ways how soil is chemically degenerated. (4mks)
2. The diagram below shows the sun, the earth and the orbit of the moon round the sun. study it and answer the questions that follow.



- i) At what position is the moon likely to be for a solar eclipse to occur? (1mk)
 - ii) At what position is the moon likely to be for a lunar eclipse to occur? (1 mk)
- b) Give two reasons why the earth has a spherical shape. (4mks)

3. a) Name any two types of river erosion? (2mks)
b) Describe how the following factors cause river erosion . (4mks)
i) Gradient of the river channel
ii) Nature of the load.
4. a) State the conditions necessary for the formation of Fog. (2mks)
b) Name any two types of Fog. (2mks)
5. Name any five processes of mechanical/physical weathering. (5mks)

SECTION B

Answer question 6 in this section and any other two

6. Study the map of Taita Hills 1:50,000 and answer the following questions.

- a. i) What is the longitudinal extent of the area covered by the map. (2mks)
- ii) Using the marginal information, give the magnetic variation of the area when the map was drawn. (2mks)
- iii) Give a six figure grid reference of the junction where the two all weather loose surface roads D535 and D538 meet. (2mks)
- b. i) Calculate the area of Ronge Forest – north – eastern part of the area covered by the map. (2mks)
- ii) Describe the distribution of settlement in the area covered by the map. (5 mks)
- c) Draw a rectangle 12cm by 10cm to represent the area enclosed by the Eastings 20 to 32 and Northings 20 to 30.

On the rectangle drawn, mark and name the following features. (5mks)

- Forest
- all weather road bound surface
- Vura hill
- rock outcrop

- d. i) Describe the drainage of the area covered by the map. (5mks)
- ii) What is the bearing of the school in Msau- west of Ronge Chini grid square 350220 from grid reference 300180 near the pump house. (2mks)
7. Use the map of Africa below to answer question 7a and b.



- a) Name the four ocean currents marked A, B, C and D. (4mks)
- b) Describe the characteristics of the climate of the region marked (5mks)
- c. i) explain how the following influence climate. (6mks)
- i) Ocean currents
 - ii) Aspect
 - iii) Latitude

MONTHS	J	F	M	AP	M	JN	JY	A	S	O	N	D
TEMPERATURE °C	29	30	30	30	29	27	27	27	28	29	29	28
rainfall in MM	12	6	39	73	18	7	3	7	7	26	81	71

The above table shows mean monthly rainfall and temperature of a station. Use it to answer question 7 d.

- d) Describe the natural vegetation likely to be found in the area represented by the table. (4mks)
- e) Students from your school plan to carry out a field study of different types of vegetation and their uses within the school environment.
- i) A part from identifying different types of plants state three other activities you would carry out. (3mks)
 - ii) How would you identify the different types of plants . (3mks)

8. a) i) What is an ice-sheet? (2mks)

ii) Describe how the following influence ice-movement?

Gradient

(2mks)

Season

(2mks)

b) Describe how the following glacial features are formed.

i) Cirque

(4mks)

ii) Arete

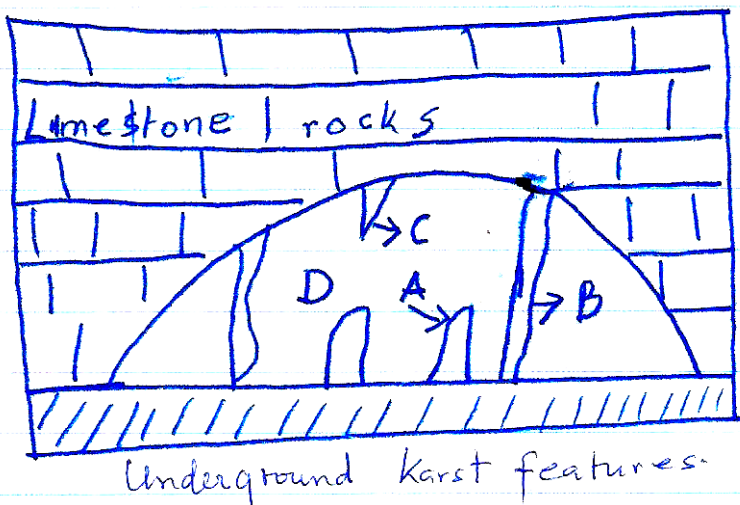
(4mks)

c. i) Name three lowland ice-erosion features. (3mks)

ii) Explain four ways how glacial lowland features are important to man. (8mks)

9. a) Name three sources of underground water. (3mks)

ii) Explain the conditions which influence the formation of features in limestone areas. (5 mks)



iii) Name the features marked A,B,C and D. (4mks)

9. b) i) Differentiate between an acquifer and a water table. (2mks)

ii) Describe how the following factors influence occurrence of underground water. (4mks)

- ❖ slope
- ❖ nature of rocks

9. c) Form four students from your school plan to carry out a field study to an area eroded by water.

i) Why is it necessary for them to carry out reconnaissance? (3mks)

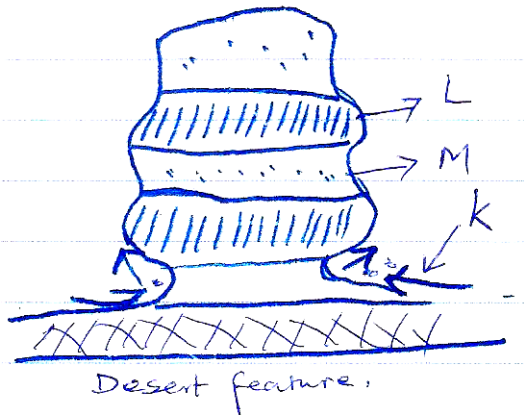
ii) Name two erosional features likely to be identified during the study. (2mks)

iii) What methods would they use to record the information? (2mks)

10. a i) Name three types of deserts. (3mks)

ii) State six factors which lead to the development of deserts. (6mks)

b) Describe the three process of wind transportation. (6mks)



i) Name the features marked L, M and K. (3mks)

ii) Name the features drawn above. (1mk)

d) Explain how desert landscape influence human activities. (6mks)

312/2

Geography Paper 12

April Holiday Exams 2020

Time: 2 ¾ hours

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR
Kenya Certificate of Secondary Education

INSTRUCTIONS TO STUDENTS

- *This paper has two sections A and B*
- *Answer **ALL** the questions in section A*
- *In section B answer questions 6 and any other **TWO** questions*

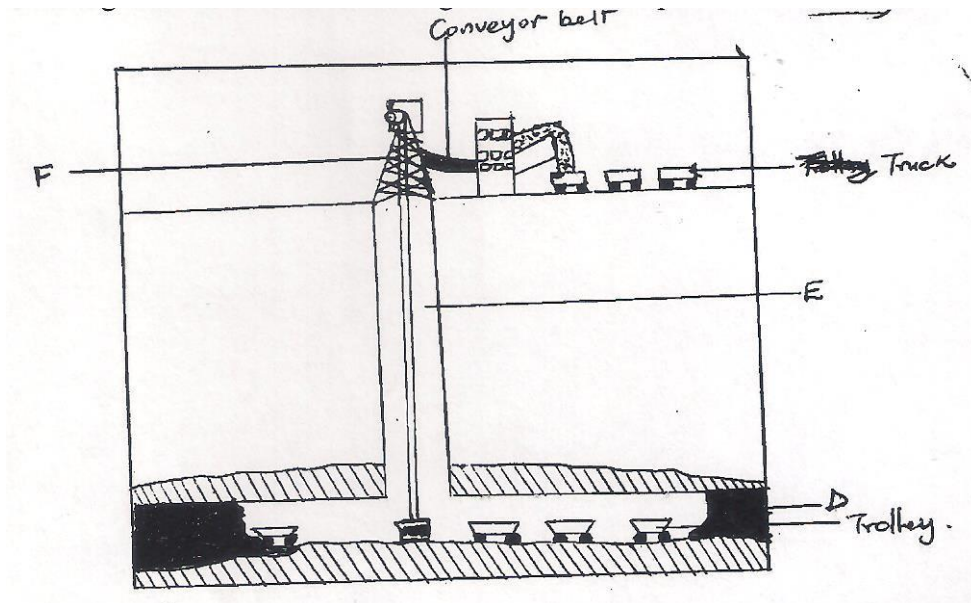
For examiner's use only

QUESTION	SCORE
SECTION A	
QUESTION 6	
OPTION 1	
OPTION 2	
TOTAL	

SECTION A

Answer All the Questions in This Section

1. a) The diagram below shows a mining drill. Name the parts marked D, E & F. (2 mks)



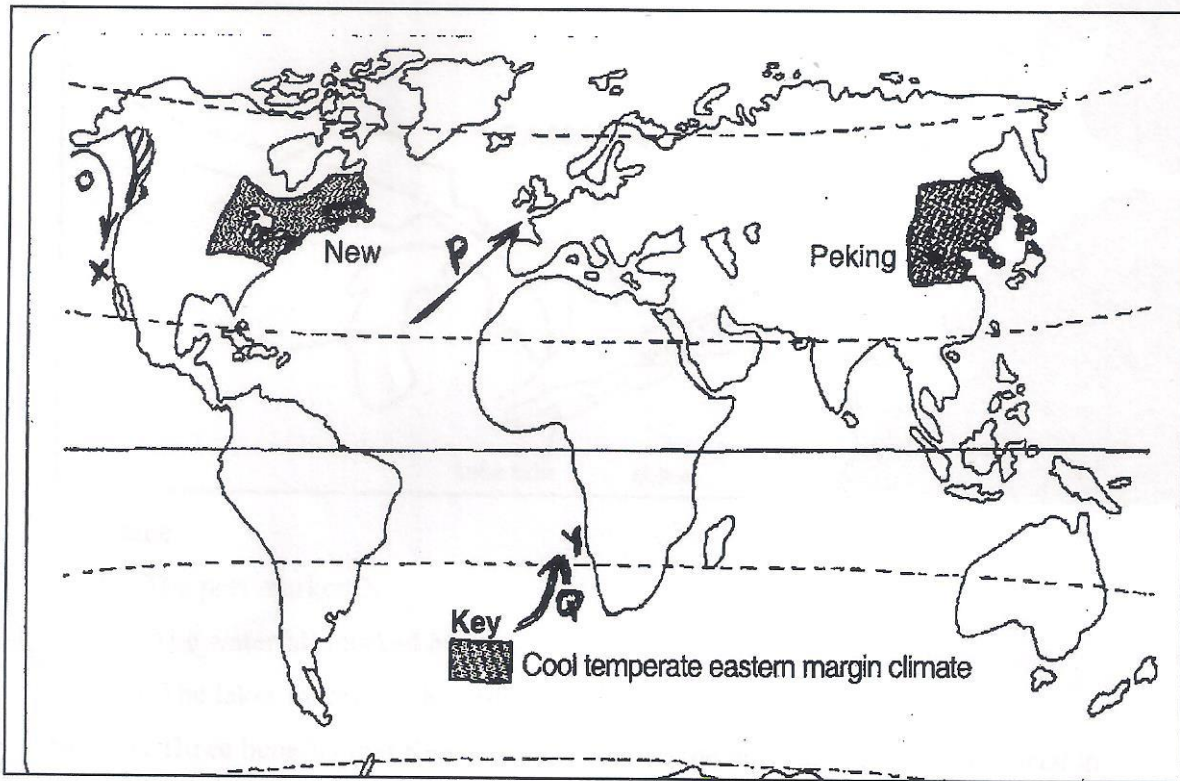
- b) State two factors necessary for the occurrence of oil (2 mks)
2. a) Give two characteristics of softwood forests in Canada (2 mks)
- b) State three problems that affect forestry in Canada (3 mks)
3. a) State three physical conditions necessary for the growing of cocoa (3 mks)
- b) Outline two problems which are experienced in cocoa farming in Ghana (2 mks)
4. a) Distinguish between balance of trade and balance of payment (2 mks)
- b) State four efforts made by the Kenya government to promote external trade (4 mks)
5. a) Identify three causes of lightening (3 mks)
- b) State two advantages of windstorms (2mks)

SECTION B

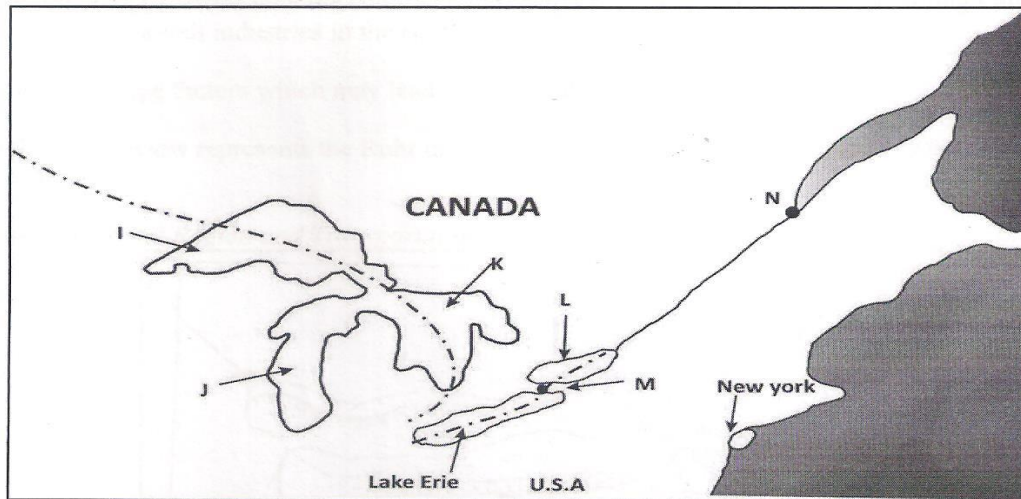
Study the photography given below and answer the questions that follow.



6. a) i) Identify the economic activity taking place in the photograph (1 mk)
- ii) Identify two counties in which the activity shown in the photograph can be carried in Kenya (2 mks)
- b) Draw a rectangle measure 12cm and 10cm wide. On it mark and label four features found on the photograph. (5mks)
- c) i) Give three reasons which indicate that the photograph is ground general view (3 mks)
- ii) Give two provinces in Canada where wheat is grown (2 mks)
- d) i) State three physical factors that favour coffee growing in the Kenya highlands (3 mks)
- ii) Describe the processing of coffee from the time it is taken to the factory to packaging (6 mks)
- e) Give three main areas where coffee is grown in Brazil (3 mks)
7. a) i) Name three types of fish (3 mks)
- ii) State three conditions for the growth of planktons in the ocean (3 mks)
- b) Study the world map provided and answer the questions that follow



- i) Name the fishing marked X & Y (2 mks)
 - ii) Identify the Ocean currents marked O, P, Q (3 mks)
 - c) Describe three major physical conditions that favour development of fishing ground X (6 mks)
 - d) i) Apart from Purse seine method, name three modern methods of fishing (3 mks)
 - ii) Describe how purse seining method is used to catch fish. (5 mks)
8. Use the sketch map of the Great Lakes and St. Lawrence Seaway given to answer the questions below.



a) Name:

- i) The port marked N (1 mk)
- ii) The waterfall marked M (1 mk)
- iii) The lakes marked J, K and L (3 mks)

b) Give three benefits that Kenyans enjoy due to the new regulations introduced in the transport sector, especially “matatu” transport.
(3 mks)

c) Mention three ways in which containerization has improved the handling of goods at a port
(3 mks)

d) i) Explain three factors that have hindered the development of river transport in Africa (6 mks)

ii) Explain four contributions of the St. Lawrence Seaway to the economy of Canada and the U.S.A (8 mks)

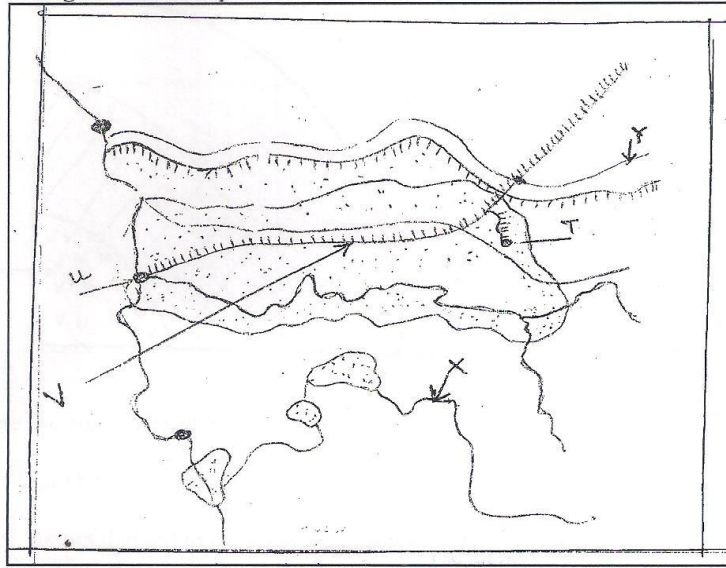
9. a) Define the term cottage industry (2 mks)

b) Outline four reasons why the county government of Nakuru should encourage foreign investors to establish jua-kali industries in the county.
(4 mks)

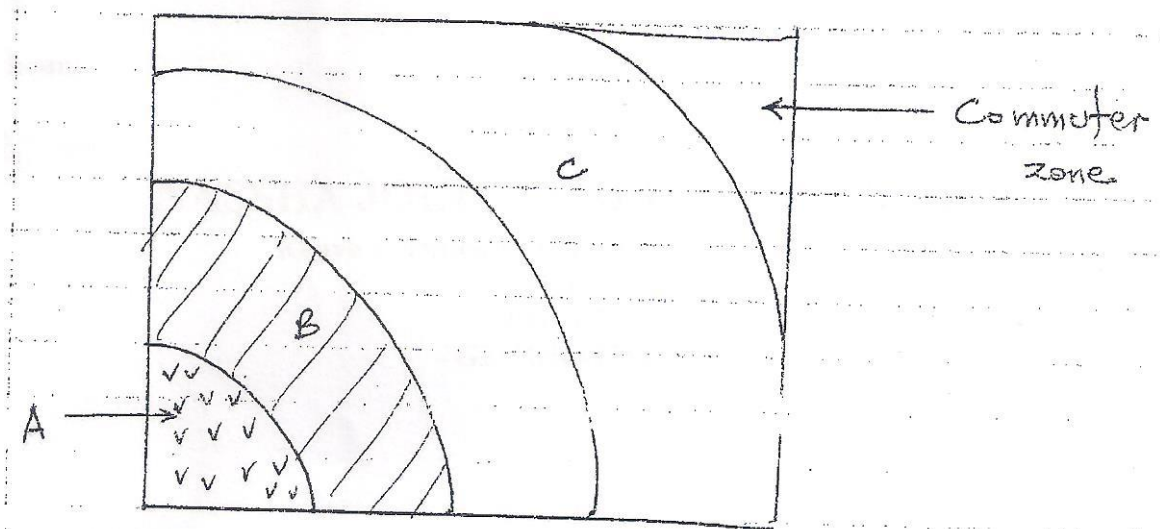
c) Explain three factors which may lead to industrial inertia (6 mks)

(d) The map below represents the Ruhr industrial region of Germany. Use it to answer the questions that follow

Ruhr – industrial Region and Transportation Lines



- i) Name the rivers marked X and Y (2 mks)
 - ii) Identify the towns labeled T and U (2 mks)
 - iii) Name the canal labeled Y (1 mk)
 - iv) Name any two forms of power used in the Ruhr region apart from coal (2 mks)
 - v) Explain three factors that led to the growth of industries in the Ruhr region (6 mks)
10. a) i) What is urbanization? (2 mks)
- ii) State three physical factors which influence the location of settlement (3mks)
- b) Give three social problems experienced in Kisumu city (3 mks)
- c) The diagram below represents the functional zones of an urban centre. Use it to answer questions (i) and (ii).



- i) Name the zone marked B (1 mk)
- ii) Give four characteristics of the zone A (4 mks)
- d) Explain three factors that led to the growth of Eldoret Town (6mks)
- e) Explain three benefits of urbanization (6 mks)

311/1
HISTORY AND GOVERNMENT
PAPER 1
CHAMPIONS APRIL EXAMS 2020
TIME: 2 ½ HOURS

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR

Kenya Certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES

- *This paper consists of three sections. Section*
- *Answer all questions in section A any three questions from section B and any two questions from section C.*
- *Candidates should not answer any extra question as it shall not be marked.*
- *This paper consists of 2 printed pages. Candidates should check the question paper to ascertain all the pages are printed as indicated and no questions are missing.*

SECTION A (25 MARKS)

Answer all questions in this section in the answer booklet provided

1. Identify the branch of history that studies the cultural practices of people. (1mk)
2. Name **one** area in Kenya where the remains of Kenyapithecus were discovered. (1mk)
3. Identify **two** customs associated with southern Cushites in Kenya. (2mks)
4. Give the main social custom the Abasuba adopted from the Luo. (1mk)
5. State two problems faced by Oman Arabs along the East African coast. (2mks)
6. Name two communities in Kenya that participated in the long-distance trade during the 19th Century.
7. Give the **main** way in which the use of Kiswahili promotes National unity in Kenya. (1mk)
8. Identify **two** groups that participated in the second Lancaster House conference of 1962. (2mks)
9. Name the last stage of constitution making process in Kenya. (1mk)
10. Identify the treaty that established the spheres of influence in East Africa in 1886. (1mk)
11. Identify **two** peaceful methods used to establish colonial rule in Kenya. (2mks)
12. State **two** groups that provided education in Kenya during the colonial period. (2mks)
13. Identify the immediate cause for the declaration of state of emergency in Kenya in 1952. (1mk)

14. Name the officer who oversees the implementation of the county government budgets. (1mk)
15. Identify the role of the president in the Kenya Defence Forces. (1mk)
16. State **two** organs of the county government in Kenya. (2mks)
17. Give **two** ways in which one can become a member of National Assembly in Kenya. (2mks)

SECTION B: (45 MARKS)

*Answer any **three** questions from this section in the answer booklet provided.*

18. (a) Give five reasons for the migration of the highland Nilotes into Kenya during the pre-colonial period. (5 marks)
(b) Describe the social organization of the Borana during the pre-colonial period. (10 marks)
19. (a) Identify three missionary societies that were involved in spread of Christianity in Kenya during the 19th Century. (3mks)
(b) Explain **six** effects of missionary activities in Kenya during the 19th century. (12mks)
20. (a) State **five** grievances that the Asians presented to the Duke of Devonshire in 1923. (5mks)
(b) Explain **five** effects of the Devonshire white paper of 1923. (10mks)
21. (a) Identify **five** main features of African socialism as spelt out in sessional paper No. 10 of 1965.
(b) Describe **five** ways in which Harambee philosophy has contributed to development in Kenya since independence. (10mks)

SECTION C: (30 MARKS)

*Answer any **two** questions from this section in the answer booklet provided.*

22. (a) State **five** aims of a prison sentence in Kenya. (5mks)
(b) Explain **five** challenges facing the National Intelligence Service in Kenya. (10mks)
23. (a) Give **three** reasons why elections are important in Kenya. (3 marks)
(b) Describe the law making process in Kenya. (12 marks)
24. (a) Identify **five** sources of revenue for county government. (5mks)
(b) Explain **five** ways in which the national government spends its revenue. (10mks)

311/2
HISTORY AND GOVERNMENT
PAPER 1
CHAMPIONS APRIL EXAMS 2020
TIME: 2 ½ HOURS

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR
Kenya Certificate of Secondary Education

Instructions to candidates

- This paper consists of three sections, A, B and C
- Answer all the questions in section A, three questions from section B and two questions in section C
- Candidates should check the question paper to ascertain that all the questions are printed and none is missing.
- Candidates should answer the questions in English.

FOR EXAMINERS USE ONLY

SECTION	QUESTION	MARKS
A	1-17	
B	18	
	19	
	20	
	21	
C	22	
	23	
	24	
TOTAL		

This paper consists of 2 printed pages. Candidates should check carefully to ascertain that all the pages are printed as indicated and no questions are missing.

SECTION A (25 marks)

Answer all questions in this section

1. Give the meaning of social history. 1mark
2. Identify two stages of evolution according to Charles Darwin. 2marks
State two ways in which political instability causes food shortages in African countries. 2marks
3. State two advantages of using currency system of trade. 2marks
4. Identify two characteristics of regional trade. 2marks
5. State the main effects of the invention of the wheel. 1mark
6. Identify two challenges facing space exploration. 2marks
7. Give one use of steel during the industrial revolution in Europe. 1mark
8. Name two social classes that made up the Buganda society in the pre-colonial period. 2marks
9. Outline two roles of the explorers in the colonization of Africa in the 19th century. 2marks
10. Give the main contribution of religion in the maji maji uprising between 1905 and 1907. 1mark
11. Give two reasons why the shone supported the British during the Ndebele war of 1893. 2marks
12. Give the main feature of indirect rule in northern Nigeria. 1mark
13. Identify one way in which nationalism undermined the policy of assimilation in French West Africa. 1mark
14. Give one benefit of international relations. 1mark
15. State one reason why the army staged a mutiny in Congo in 1960
16. Name the political party in the United States of America U.S.A. 1mark
- 17.

SECTION B (45 marks)

Answer any three questions from this section

19. a) State three disadvantages of the traditional system of farming in Britain before the 18th century. 3marks
b) Explain six factors which facilitated the development of agriculture in America before 1800. 12marks
20. a) Give three ways in which the kings of western Sudan enhanced the development of the Trans Saharan trade. 3mks
b) Explain six economic effects of slave trade on communities in West Africa during the Trans Atlantic trade. 12marks
21. a) Outline three factors that contributed to the establishment of European rule in Africa by the end of the 19th century. 3marks
b) Explain six factors of the lozi collaboration with the British. 12marks
22. a) State five methods used by African countries to assist South Africa to fight apartheid. 5marks

- b) Explain the challenges experienced by the liberation movement of Mozambique.
10marks

SECTION C (30marks)

Answer any two questions from this section.

23. a) State three political developments in Europe which influenced the outbreak of the first world war.

3marks

- b) Describe the social results of the Second World War. 12marks

24. a) Name three African heads of state who were founder members of the organization of African unity.

3marks

- b) Explain six achievements of the economic community of west Africa states.

12marks

25. a) Identify five persons who are not allowed to vote in Britain.

5marks

- b) Explain five functions of the Monarch in Britain.

10marks

END

441/1
Home Science
Theory Paper 1
April 2020
Time: 2 ½ Hrs.

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR
Kenya Certificate of Secondary Education

Instructions to Candidates.

- (a) Write your name and Index Number in the spaces provided, sign and write the date of examination.
- (b) This paper consists of Sections a, B and c.
- (c) Answer all questions in the spaces provided.
- (d) Candidates should check to see if any questions are missing.
- (e) Answer all questions in English.

Section	Question	Maximum Score	Candidates Score
A	1-		
B	22		
C	23		
	24		
	25		
TOTAL SCORE		100	

SECTION A (40 MARKS)

ANSWER ALL QUESTIONS IN THE SPACES PROVIDED

1. Differentiate the two kinds of fractures (2 mks)

.....

.....

.....

.....

.....
.....

2. a) State two functions of roughage in the body (2 mks)

.....
.....
.....
.....
.....
.....

b) Give two main source of roughage in the diet (2 mks)

.....
.....
.....
.....
.....
.....

3. Mention two causes of nappy rash (2 mks)

.....
.....
.....
.....
.....
.....

4. Give three points on choice of root vegetables (2 mks)

.....
.....
.....
.....

.....
.....

5. Give two conditions necessary for steam to act as a raising agent (2 mks)

.....
.....
.....
.....
.....
.....

6. Identify six methods of finishing the edges of sleeves other than using a cuff (2 mks)

.....
.....
.....
.....
.....
.....

7. Give two reasons for an open and coarse texture in creamed cake. (2 mks)

.....
.....
.....
.....
.....
.....

8. Mention two points on the role of VCT in safe parenthood (3 mks)

.....
.....
.....
.....

.....
.....

9. Mention three characteristics of a well made hem (3 mks)

.....
.....
.....
.....
.....
.....

10. Mention three points on conservation of energy when lighting up a room. (3 mks)

.....
.....
.....
.....
.....
.....

11. Give two factors that determine the size of a patch pocket (2 mks)

.....
.....
.....
.....

12. Identify three characteristics of fabrics that produce static electricity (3 mks)

.....
.....
.....
.....
.....

13. Mention two classes of garnishes and give an example in each case. (2 mks)

.....
.....
.....
.....

14. State two disadvantages of ready to eat frozen foods. (2 mks)

.....
.....
.....
.....

15. Define the term standardization. (2 mks)

.....
.....
.....
.....

16. Suggest uses of milk in cookery (2 mks)

.....
.....
.....
.....

17. Give two symptoms of diabetes (2 mks)

.....
.....
.....
.....

SECTION B (20 MARKS)

Answer these questions in the answer sheets provided

18. You have offered to carry out some household chores.

a) Explain the procedure you will follow to clean a glass window in your bedroom (11 mks)

b) Outline how you will dry clean your woolen gloves. (9 mks)

.....

SECTION C (40 MARKS)

Answer any two questions from this section in the answer sheets provided.

19. a) Outline the procedure of working a French seam on the side of a blouse (8mks)

b) Describe four factors that influence choice of fabric for a garment (4 mks)

c) Explain four points to bear in mind when attaching fastenings (4 mks)

d) Describe four points on choice of a sleeve to use on a garment (4 mks)

20. a) Explain five functions of fruits in cake making (5 mks)

b) Describe five ways of fortifying maize meal porridge (5mks)

c) Explain four guidelines when entertaining guests (5 mks)

d) Outline six rules to observe when storing leftover foods (6 mks)

21. a) Describe five problems likely to be encountered when weaning a baby (5 mks)

b) Explain four points to observe in the care of lighting fixtures (8 mks)

c) Explain four benefits of attending post-natal clinic to a mother (4 mks)

d) Outline the procedures of removing old iron rust stain from a white cotton towel (3 mks)

.....

.....

.....

.....

PAPER 2

PRACTICAL

2½ HOURS

441/2

Home Science

April 2020

Time: 2 ½ Hrs.

**SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR**

Kenya Certificate of Secondary Education

This paper consists of 4 printed pages Candidates should check the question paper to ensure that all the pages are printed as indicated and no questions are missing.

Turn over

A pattern of child's dress bodice is provided. You are advised to study the sketches, the question paper and the layout before you begin the test.

1. Materials provided

- A Front bodice
- B Sleeve
- D Midriff
- E Front neck facing
- F Back neck facing
- G Sleeve opening facing
- H Sleeve binding
- I Collar

2. Light –weight plain cotton fabric 75cm long by 90cm wide.
3. 1cm diameter flat button
4. Sewing thread to match the fabric.

The test

Using the materials provided, cut out and make the right half of a child's dress bodice as shown in the sketch below to show the following.

- a) The making of the inverted pleat on the front bodice.
- b) The attachment of the lined, interfaced midriff to the front bodice.
- c) The working of a shoulder seam using double stitched seam.
- d) The neatening of the back opening facing.
- e) The joining of the front and back neck facings at the shoulder.
- f) Preparation of the two piece collar.
- g) Attachment of collar using the facings.
- h) The making of the side seam using French seam.
- i) The preparation of the faced sleeve opening.
- j) The making of French seam at the underarm.
- k) The binding of the lower edge of the sleeve leaving the binding to extend on both ends.
- l) Attachment of the sleeve to the bodice. **DO NOT TRIM THE ARM HOLE SEAM.**
- m) Attaching the flat button at the back bodice opening.
- n) Working of the solid hem at the lower edge of the dress. Neaten the back side with even tacking and the front with slip hemming.

At the end of the examination, firmly sew onto your work, on a single fabric, a label bearing your name and Index number. Remove the needle and pins from your work, then fold your work carefully and place it in the envelope provided. Do not put scraps of materials in the envelope.

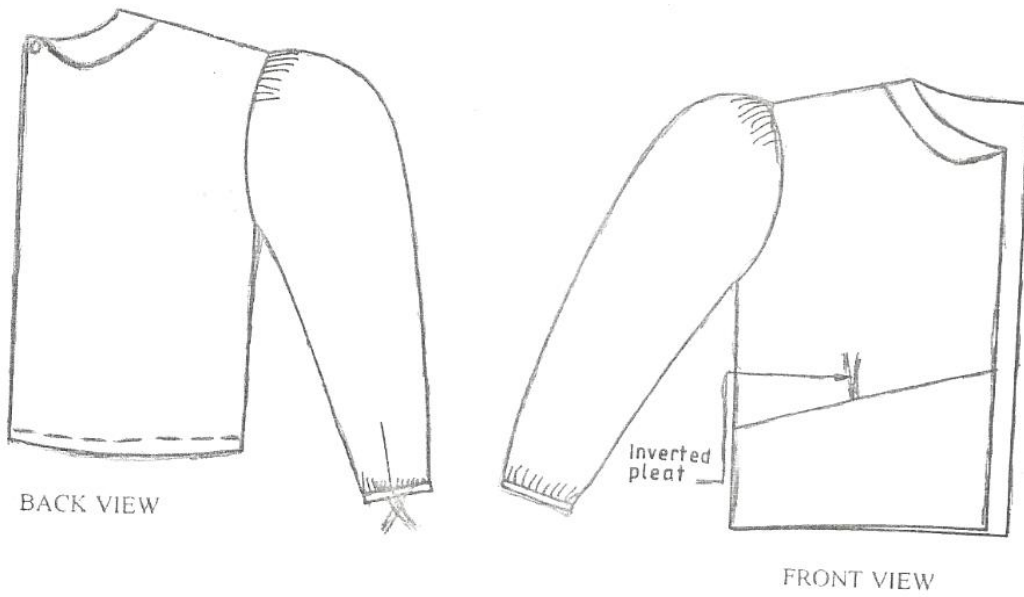
CHILD'S DRESS BODICE

JINA..

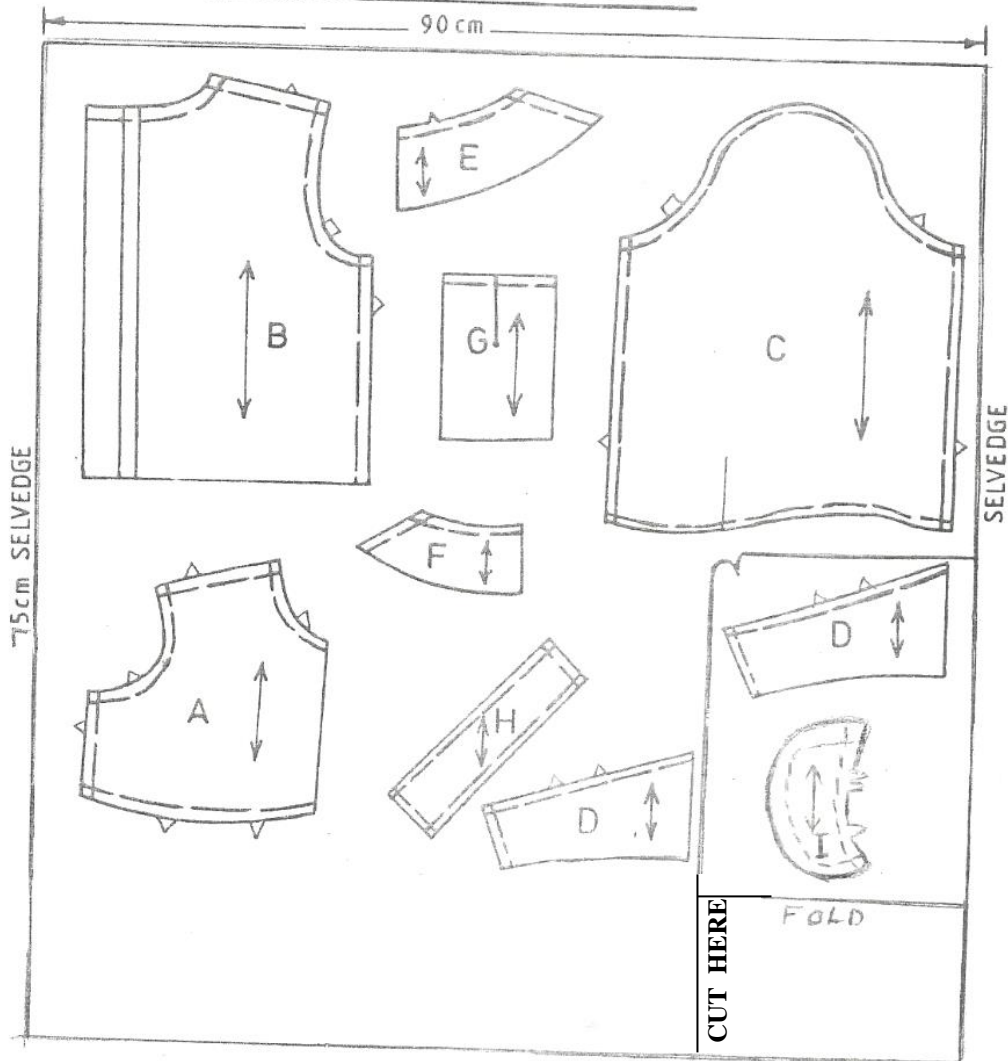
SHULI

102/1 |

KARAT.



THE LAYOUT (NOT TO SCALE)



- You will be expected to keep to your order of work during the practical session.
- You are allowed to take away **ONLY** your reference materials at the end of the planning Session
- You are not allowed to bring additional notes to the practical session.

441/3

HOME SCIENCE

FOODS AND NUTRITION

Paper 3

(PRACTICAL)

April 2020

1³/₄ Hours.

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020 FORM FOUR

Kenya Certificate of Secondary Education

PLANNING SESSION : 30 Minutes

PRACTICAL TEST SESSION : 1¹/₄ Hours.

INSTRUCTIONS TO CANDIDATES.

- Read the test carefully.
- Write your name and index number on every sheet of paper used.
- Textbooks and recipes may be used during the planning session as reference materials.
- You will be expected to keep to your order of work during the practical session.
- You are allowed to take away **ONLY** your reference materials at the end of the planning Session
- You are not allowed to bring additional notes to the practical session.

This paper consists of 2 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and no questions are missing.

Turn Over.

THE TEST.

You are left with your cousin who has been discharged from hospital. Using all the ingredients provided below, prepare, cook and present a two course lunch for both of you

Ingredients.

Liver/Chicken/Minced beef.

Rice/Green bananas/Irish potatoes.

Green leafy vegetables.

Sugar

Green Pepper.

Onions

Tomatoes

Carrots

Cooking fat/oil

Salt

Fruits in season

Use separate sheets of paper for each task listed below and a carbon paper to make duplicate copies. Then proceed as follows:-

- (i) Identify the food items and write down their recipes.
- (ii) Write down-your order of work.

(iii) Make a list of food stuffs, materials and equipments you will require.

THE TEST.

You are left with your cousin who has been discharged from hospital. Using all the ingredients provided below, prepare, cook and present a two course lunch for both of you

Ingredients.

Liver/Chicken/Minced beef.
Rice/Green bananas/Irish potatoes.
Green leafy vegetables.
Sugar
Green Pepper.
Onions
Tomatoes
Carrots
Cooking fat/oil
Salt
Fruits in season

Use separate sheets of paper for each task listed below and a carbon paper to make duplicate copies. Then proceed as follows:-

- (i) Identify the food items and write down their recipes.
- (ii) Write down-your order of work.
- (iii) Make a list of food stuffs, materials and equipments you will require.

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR

Kenya Certificate of Secondary Education

MAAGIZO

- a) Andika Insha mbili.
 - b) Insha ya kwanza ni ya lazima.
 - c) Chagua Insha nyingine moja kutoka kwa hizo tatu zilizobaki.
 - d) Kila Insha isipungue maneno 400.
 - e) Kila Insha ina alama 20.
-
1. Andika tahariri kwa gazeti la Taifa Leo juu ya umuhimu kwa ushauri nasaha katika shule za upili kwa wanafunzi. (Alama 20)
 2. Utandawazi una athari mbaya kwa maisha yetu jadili. (Alama 20)
 3. Aambuaye nyayo safari imeanza (Alama 20)
 4. "Mwanangu Nyanchama miaka kumi sasa tangu yakupate yaliyokupata. Shukuru Mola kwamba alikuhifadhi. Kuteleza si kuanguka..."Endeleza Insha hii. (Alama 20)

102/2

KISWAHILI LUGHA

(Ufahamu, Ufupisho, MatumiziyaLugha, Isimu-Jamii)

JUNI/JULAI-2019

Muda: Saa2¹/₂

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020 FORM FOUR

Kenya Certificate of Secondary Education

MAAGIZO:

(a)Andika Jina lako, nambari, sahihi na tarehe katika nafasi ulizoachiwa hapo juu.

(a) Jibumas waliyote.

KWA MATUMIZIYA MTAHPO PEKEE

SWALI	UPEO	ALAMA
UFAHAMU	15	
UFUPISHO	15	
MATUMIZI YA LUGHA	40	
ISIMU JAMII	10	
JUMLA	80	-

UFAHAMU (Alama 15)

Soma taarifa ifuatayo kisha ujibu maswali.

Mwalimu mtukutu alikuja kwangu kwa ualishi wa mke wangu. Siku hizo alikuwa amefanya kama maradhi ya wasiwasi. Hata akawahi kulazwa spitali na alipotoka sikuona tofauti kubwa. Basi shemeji yake aliposema kuwa kuna mganga fatashi aliyempoza mkewe na mkewe rafiki yao, nikakubali amwite aje amwangelie mke wangu.

Ama mimi siwaamini sana hawa waganga wa kikwetu - shemeji mke wangu awaita walimu. Naamini kuwa maradhi mengi yatokana na mawazo ya mgonjwa kuliko kuwa ni ugonjwa hasa wa viungo vya mwili. Juu ya hayo mwanymba wangu na huyo rafiki yake ni watu wa maana, nikaona siwezi kumvunja.

Mwalimu akaja nyumbani akamsikiza kwa makini mke wangu akimuaridhia uwele wake. Hapo ndipo alipombainishia maradhi yake ni nini, yatokana ria nini na yahitaji uaguzi gani. Sababu ya maradhi akaambiwa kuwa mume alikuwa akifanya utukutu nje akapambana na bibi mmoja aliyesalitika naye sana. Huyo bibi akaenda kufanya sihiri, "kumfunga mumeo na wewe kukuletea maruhani usijijue usijitambue ili awe naye peke yake," Sasa basi, habari hizi lazima aziweke siri kubwa hasa mimi nisijue, maana itakuwa shida kubwa kunifungua na kumtopoa yeye.

Kabla ya kwenda kuangalia nikaona hali imebadilika nyumbani. Kila nikiingia huwa kumenuniwa. Wakati wote bibiye akawa amenifuria. Nikajua pana jambo hapa. Na kwa tabia ya mke wangu jambo lenyewe namna linavyomkera, ndiyo lazima atalitoa tu, hataweza kustahamili akiteketea ndani kwa ndani. Nikasema, heri nibahatishe pengine nitasibu. Nikamwambia basi,' mwalimu amekutobolea mambo sasa yanakukera kumbe nilikuwa nimeugusa mshipa ndipo. Kukaanzwa tena hata kukimalizwa nikayapata yote. Kulitokea kidudu mtu akajifanya ni mwema wake mkubwa. Akambunia habari tumbi nzima zisizokuwa na msingi na habari hizo zilipomfikia mwalimu mtukutu zikazidi kupambwa na kutiwa kila kiungo.

Ama kuna watu duniani hawaoni watu wawili wamekaa vema wasitie peke peke kutaka kuwatangua na wengine wakiona mahali pana pato huwa kwao si nongwa kutia utesi ikiwa pato hilo halina njia nyingine yakulipata. Maswali

a) Ni kwa nini msimulizi alimkubalia mkewe amwite mwalimu mtukutu kwake? (alama 4)

.....
.....
.....
.....
.....
.....

b) Fafanua imani ya msimulizi kuhusu ugonjwa. (alama 2)

.....
.....
.....

c) Kwa mujibu wa habari, mwalimu mtukutu alikuwa na sababu ipi ya kumkataza mteja wake asimweleze uaguzi wake. (alama 1)

.....
.....

d) Eleza hali ilivyobadilika nyumbani kwa msimulizi na hatima yake. (alama 4)

.....
.....
.....

e) Mke wa msimulizi alimtilia shaka kwa sababu gani? (alama 2)

.....
.....

f) Eleza maana: (alama2)

i) Kumfunga mume.....

ii) Mwanyumba,

UFUPISHO: (ALAMA 15)

Soma makala hay a kisha ujibu maswali.

Dhana ya kupatilizwa tuliyo nayo haitokani na hofu ya sayansi bali yatokana na hofu ya vita na sababu za vita hazikuzushwa na sayansi. Utaalamu huu haukuunda vita, umeukuza ujuzi wa vita na kuupotoa.

Kwanza, pasi na shaka, sayansi imezongeza nguvu za wachochezi wa vita. Zana za kisasa zinaweza kuficha watu wengi zaidi wasijulikane walivyokufa na kuwaua kwa njia ya manyenzi zaidi kuliko zana za zamani. Kila silaha mpya zinazoundwa ni za maangamizi zaidi, ni za kutisha sana hata kuwapa watu kusema kuwa dola zitalazimika kuacha vita kwa hofu ya uharibifu utakaowapata hata wakiwa washindi. Lakini kweli ilivyo ni kuwa hakuna taifa ulilosita kuanza vita kwa kucha ati silaha lillilo nazo zitaangamiza walimo na wasiokuwemo kuundwa kwa marisau ya kulilikisha miji iliyo mbali, kuundwa kwa makombora ya atomiki, hewa za sumu zinazopaliza na kuzuia pumzi au zinazotawanya vidudu vya maradhi au vya kuua mimea, zana zote hizi hazijazuia wala hazitazuia vita.

Lakini lawama kubwa ni ya wataalamu wa sayansi maana utaalamu wenyewe una kunga kama za wachawi na waganga. Kila mtu azicha wala hajui la kuzifanya na hao wataalamu nao wamejiziba katika kunge la kunga hizi kupagaza waja na kujifanya waungu-wa-ti (miungu ya chini). Kwa sababu ya kujiepusha hivi na watu kile kilicho kimegeuka kuwa hofu na kitisho na kila mtu ataka amwepuke mtaalamu wa sayansi kama anavyomwepuka mchawi na mganga. Ni juu yao kuyaondosha maoni haya na ni juu yetu sote kutoivika vita sayansi bali tuifanye chombo cha kudumisha amani.

Maswali

a) Kwa kuzingatia mambo muhimu, fupisha aya za kwanza mbili (Maneno 50-55) (alama 9, 2 za utiririko)

MATAYARISO:

.....
.....

JIBU

.....
.....
.....
.....
.....

b) Fupisha aya ya mwisho bila kupoteza maana asilia (Maneno 40) (alama 6, 1 ya utiririko)

MATAYARISHO:

.....
.....
.....

JIBU

.....
.....
.....
.....

3. MATUMIZI YA LUGHA (ALAMA 4)

a) Andika kwa umoja: mavuzi yameota kwapa nimwao. (alama 2)

.....
.....
.....

b) Ainisha mofimu za neno: aliaye. (alama 2)

.....
.....

c) Huku ukitoa mfano mmoja, eleza majukimu ya kielezi. (alama3)

.....
.....

.....
d) Tunga sentensi ukitumia neno `seuze` ilikuonyesha matumizi yake. (alama 2)

.....
.....
e) Tambua matumizi ya 'ni' katika utungo ufuatao. Mama ni mgonjwa na ananisubiri hospitalini. (alama 3)

.....
.....
f) Sentensi hizi ziko katika hali gani?

(i) Kalindi na Chebet wacheza darasani. (alama 1)

.....
.....
ii) Juma angaliniona angalinituma kwao. (alama 1)

.....
g) Tunga sentensi moja iliyo na vitenzi viwili (alama 2)

.....
.....
h) Ainisha virai vilivyopigiwa mstari. (alama 2)

Mtoto mtundu alipanda juu ya dawati.

.....
.....
i) Tambua shamirisho na uonyeshe aina yake. Chakula kilipikwa na Misoi. (alama 2)

.....
.....
j) Changanua kwa kielelezo cha jedwali. Alifika mapema sana. (alama 4)

k) Andika kwa ukubwa umoja. Wanawake hawa ni wazembe. (alama 2)

.....

.....

.....

.....

1) Sahihisha:

Jamaa ile ako katika mtoni. (alama 2)

.....

.....

m) Tumia vitae hivi katika sentensi moja ilikudhihirisha matumizi yao. (alama 2)

i) Somea

(ii) Zomea

.....

.....

.....

n) Weka shadda katika neno 'mbaya' ilikuleta maana mbili tofauti. (alama 2)

.....

.....

o) Eleza matumizi yoyote mawili ya kiimbo. (alama 2)

.....

.....

p) Toa mfano mmoja wasauti hizi: (alama 2)

i) Kitambaza

.....

.....

ii) Kikwamizo cha meno na ulimi

.....

.....

r) Tofautisha kati ya /e/ na /o/ (alama 2)

s. Andika katika wakati usiodhihirika. (alama 2)

Mama anayecheza na watoto ndiye ninayempenda.

.....
.....
4. ISIMU JAMII (alama 10)

Kadenge anao! Anao bado!

Salaaaale!.....wa.....lahaula!

Chapokwajukimo cha panya.....Lo!

(a) Hii ni sajili gani? (alama 1)

.....
.....

(b) Taja sifa zozote tano za sajili hii. (alama 5)

.....
.....
.....
.....
.....

c) Eleza athari ya kiisimu, inayoweza kumkabili mtu asiye na meno ya juu. (alama 4)

.....
.....
.....

102/3
KISWAHILI
FASIHI
APRILI -2020
MUDA:SAA 2 ½

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR

Kenya Certificate of Secondary Education

MAAGIZO

- a) Jibu maswali MANNE pekee katika kijitabu cha majibu ulichopewa.
- b) Swali la kwanza ni la LAZIMA.
- c) Chagua maswali mengine matatu kutoka sehemu zilizobakia yaani: Riwaya, Fasihi simulizi, Ushairi na Hadithi fupi.
- d) Usijibu maswali mawili kutoka sehemu moja.
- e) Majibu yote sharti yaandikwe kwa lugha ya Kiswahili.
- f) Watahiniwa ni lazima wahakikishe kwamba kurasa zote zimepigwa chapa sawasawa na kuwa maswali yote yamo.

KWA MATUMIZI YA MTAHINI PEKEE

SWALI	1	2	3	4	5	6	7	8	JUMLA
ALAMA									

SEHEMU YA (A): TAMTHILIA YA KIGOGO

1. Swali la lazima.

“Mungu yu mwema. Utatembea.

- a) Fafanua mukthada wa dondoo hii. (alama 4)
- b) Fafanua sifa za msemewa wa maneno haya. (alama 6)
- c) Eleza changamoto tano ambazo wanamapinduzi walizozipitita katika harakati zao za kuikomboa Sagamoyo (alama 10)

SEHEMU YA B

2. CHOZI LA HERI: Assumpta K. Matei

“nimeonja Shubiri ya kuwa mtegemezi ya kuwa mtegemezi kihalali na mali, lakini katika yote hayo nimejifunza mengi.”

- i. Eleza muktadha ambapo kauli hii imetolewa. (alama 4)
- ii. Bainisha tamathali ya usemi iliyojitokeza katika kauli hii (alama 2)
- iii. Thibitisha ukweli wa kauli iliyopigigwa mstari kwa kutoa hoja saba huku ukirejelea mzungumzaji. (alama 14)

3. Riwaya ya Choji la Heri imeangazia matatizo yanayozikumba nchi huru za Afrika . Thibitisha kauli hii kwa kurejelea wahafidhina.

- a) Dhiki za wakimbizi (alama 14)
- b) Eleza athari za ukimbizi (alama 6)

SEHEMU C (Tumbo Lisiloshiba)

TUMBO LISILOSHIBA NA HADHITHI NYINGINE

4.

a). Jadili suala la elimu kwa kurejelea hadithi za:

- i. Mapenzi ya kifaurongo
- ii. Mtihani wa maisha

(alama 10)

b). Fafanua kwa kina maudhui ya malezi kwa kuzingatia hadithi ya

- i. Shogake Dada ana Ndevu
- ii. Tulpokutana Tena. (alala 10)

5. Ndoto ya Mashaka na Ali Abdulla Ali

“lakini hayo twayajua wenyewe tu. Ni siri yetu. Ndiyo sababu ya kuambiwa, siri ya mtungi uliza kata au kitanda usichokilalia huwajui kinguniwe.”

- i. Eleza muktadha wa dondoo hii. (alama 4)
- ii. Taja na utoe mifano ya tamathali ya usemi iliyotumika katika kifungu.(alama 1)
- iii. Taja sifa tano za anayezungumza (alama 5)
- iv. Kwa kurejelea tandale, eleza kauli “siri ya mtungi uliza kata.” (alama 10)

SEHEMU YA D: USHAIRI

USHAIRI

6. MKWARUZANO WA NDIMI

Huyo! Mshike huyo !
Hakuna bunduki wala kifani
Bomu na risasi hata hawazijui
Lakini mno wanashambuliana
Kwa ndimi zilizonolewa kwa makali
Vipande vya matusi silaha zao.

Yu imara mmoja wao
Akirusha kombora la neno zito!
Limtingishe adui wake
Na kumgusa hisia kwa pigo kuu
Pigo linalochoma moyoni kama kichomi
Kuchipuza joto la hasira na kisasi
Katika mapigano yaso na kikomo

Filimbi ya suluhu inapulizwa kuwaamua!
Nani anayekubali suluhu?
Roho zinakataa katakata
Huku ukaidi ukinyemelea na kutawala kote

Mapandikizi ya watu yakipigana

Vita shadidi visivyo ukomo

Vita vya ndimi!

Magharibi sasa

Jua linapungia mkono machweo

Nalo giza likinyemelea kwa kiburina

Kasi

Sisikii tena sauti za misonyo

Mate yawatesi yamekauka

Makanwa yao yamelemewa na uchovu

Sasa wameshikana mikono

Ishara ya suluhu.

Maswali

- (a) Hili ni shairi la aina gani? (alama 1)
- (b) Eleza dhamira ya mshairi. (alama 2)
- (c) Eleza kanuni za utunzi alizotumia mshairi. (alama 4)
- (d) Taja mbinu zozote tatu za kifasihi alizotumia mshairi. (alama 3)
- (e) Jadili toni ya mshairi katika beti tatu za awali. (alama 2)
- (f) Tambua matumizi ya mistari mishata na utoe mifano miwili. (alama 3)
- (g) Andika mishororo ya kwanza mitatu katika ubeti wa 4 kwa lugha ya nathari.
(alama 3)

- (h) Toa maana ya msamiati huu. (alama 2)
- (i) Kombora
- (ii) Misonyo

7. (Soma shairi hili kisha ujibu maswali yanayofuata)

Ameumbwa mwanadamu, kwa lililo zuri umbo,
Basi si wote fahamu, waliyo na sawa mambo,
Wako waliyotimamu, na wengineyo wa kombo,
Na mtu kuwa na tumbo, si kwamba mekamilika.

Kuna walo mafidhuli, lugha yao ni matango,
Na kuna wenye kauli, sizokuwa na ushingo,
Kuna wake kwa wavuli, vipofu na wenye tongo,
Na mtu kuwa na shingo, si kwamba mekamilika.

Kuna walo na fikira, na wenye vibovu vitwa,
kuna walo na subira, husubiri kucha kutwa,
wengine tabiya ya bora, hino huwanayo katwa,
Na mtu kuwa na kitwa, si kwamba mekamilika.

Kukamilika kwa Mja, ni mbali kwa Moliwa,
Kwa Mja nitakutaja, ili upate kwelewa,
Ni kufikiya daraja, ile aliyombiwa,
Hapo ndipo huambiwa, Mja amekamilika.

Aiyelewe duniya, kwa marefu na mapana,
Azipite zile ndiya, za miba mitungu sana,
Avuke bahari piya, zito na virefu vina,
Hiyo ni yangu maana ya mja kukamilika.

Akishafikwa na hayo, si kwamba ndiyo akhiri,
Lazima awe na moyo, wa kuweza kusubiri,
Kuyasubiri ambayo, yote yatayomjiri,
Kama huyo tamkiri, ni mja mekamilika.

Maswali

- a) Kulingana na shairi hili ni yapi humfanya mtu kuwa na utu? Taja matano. (alama 5)
- b) Fafanua namna mshairi alivyofaulu kutumia uhuru wake. (alama 4)
- c) Eleza maana ya vifungu hivi kama vilivyotumiwa katika shairi. (alama 3)
- i) Vibovu vitwa.

- ii) Tabiya bora.
- iii) Mtu kuwa na kitwa.
- d) Msanii anakiri nini kuhusu Mja? (alama 2)
- e) Andika ubeti wa tano kwa lugha nathari. (alama 4)
- f) Eleza umbo la shairi hili kwa kuzingatia mizani na vina. (alama 2)

SEHEMU YA E: FASIHI SIMULIZI (ALAMA 20)

8. a). Eleza maana ya dhana zifuatazo: (alama 5)

- i. Lakabu
- ii. Misimu
- iii. Ulumbi
- iv. Miviga
- v. Maapizo

b). Fafanua sifa tano za misimu (alama 5)

c) Fafanua sifa tano za ngomezi (alama 5)

d)Taja changamoto tano zinazokabili matumizi ya ngomezi katika jamii ya sasa. (alama5)

121/1
MATHEMATICS
PAPER 1
APRIL 2020
TIME: 2 ½ HOURS

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR
Kenya Certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES:

1. Write your name and index number in the spaces provided above.
2. Sign and write the date of examination in the spaces provided above.
3. The paper contain two sections: Section I and section II
4. Answer all the questions in section I and strictly any five questions from section II
5. All answers and working must be written in the question paper in the spaces provided below each question.
6. Show all the steps in your calculations, giving your answers at each stage in the spaces below each question.
7. Non-programmable silent electronic calculators and KNEC mathematical tables may be used, except where stated otherwise.

FOR EXAMINERS USE ONLY

SECTION I

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	total

SECTION II

17	18	19	20	21	22	23	24	total

Grand Total

--

SECTION I (50 MARKS)

1. Points S(-2,2) and T(-3, 7) are mapped onto S¹(4 -10) and T¹(0,10) by an enlargement. Calculate the enlargement scale factor.
(3 mks)

2. Given that $\frac{1}{2x} = (0.732)^2 + \sqrt[3]{85.3}$, use mathematical tables to find the value of x correct to 3 significant figures.
(3 mks)

3. Simplify: $\frac{12x^2 + ax - 6a^2}{9x^2 - 4a^2}$ (3mks)

4. All prime numbers less than ten are arranged in ascending order to form a number.

a) Write down the number formed (1 mk)

b) Express the number in (a) above in standard form (1 mk)

5. A two digit number is such that the one's digit is four more than the tens digit, and the sum of the digits is 14.
Find the number. (3 mks)

6. Marwa bought a refrigerator on hire purchase by paying monthly installments of Ksh.2000 per month for 40 months and a deposit of Ksh.12,000. If this amounted to an increase of 25% of the original cost of the refrigerator, what was the cash price of the refrigerator? (4 mks)

7. Find the integral values of x which satisfy the inequality (3 mks)

$$3(1 + x) < 5x - 11 < x + 45$$

8. Without using calculator, evaluate. $\left(\frac{7}{3} \left[\frac{2}{5} \text{ of } 1\frac{2}{3} - \frac{1}{2} \left(\frac{1\frac{2}{3} - 2\frac{1}{2}}{\frac{1}{3} - \frac{19}{27}} \right) + \frac{2}{3} \right] \right)^{\frac{1}{2}}$ leaving the answer as a mixed fraction. (4 mks)

9. During a certain month, the exchange rates in a bank were as follows;

	Buying (Ksh)	Selling (Ksh)
1 USD	91.65	91.80
1 Euro	103.75	103.93

A tourist left Kenya to the United States with KSh. 1,000,000. At the airport he exchanged all the money to dollars and spent 190 dollars on air ticket. While in US he spent 4500 dollars for upkeep and proceeded to Europe. While in Europe he spent a total of 2000 Euros. How many Euros did he remain with? (4 Marks)

10. A bus moving at a speed of 80km/h is being overtaken by a car moving at 100km/h in a clear section of a road. Given that the bus is 21m long and the car is 4m long. How much time (in seconds) will elapse before the car can completely overtake the bus? (3 Marks)

11. A regular n -sided polygon has its interior angle equal to 4 times its exterior. Find n (3 Marks)

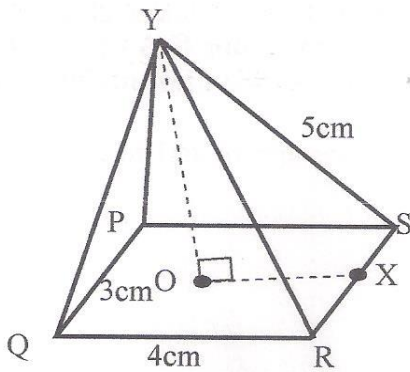
12. The ratio of the lengths of the corresponding sides of two similar rectangular petrol tanks is 3:5. The volume of the smaller tank is 8.1m^3 . Calculate the volume of the larger tank. (3 Marks)

13. ABCD is a rhombus. A is the point (2,1) and C is the point (4,7). Find the equation of the diagonal BD in the form $ax + by = c$ (4 mks)

14. A woman walks directly from point A towards the foot of a tall building 240m away. After covering 180m, he observes that the angle of elevation of the top of the building is 45° . Determine the angle of elevation of the top of the building from A. (3 mks)

15. The G.C.D and L.C.M of three numbers are 3 and 1008 respectively. If two of the numbers are 48 and 72, find the least possible value of the third number. (3 mks)

16. An ant moved from Y to X the midpoint of RS through P in the right pyramid below.



Draw the net of the pyramid showing the path of the ant hence the distance it moved. (4 mks)

SECTION II (50 MARKS)

Answer any five questions in this section

17. Three warships A, B and C are at sea such that ship B is 500km on a bearing 030° from ship A. Ship C is 700km from ship B on a bearing of 120° . An enemy ship D is sighted 800km due south of ship B.

a) Taking a scale of 1cm to represent 100km, locate the positions of ships A, B, C and D. (4 mks)

b) Find the bearing of:

i) Ship A from D (1 mk)

ii) Ship D from C (1 mk)

c) Use scale drawing to determine the distance between

i) D and A (1 mk)

ii) C and D (1 mk)

d) Measure angle DAC and angle BCD (2 mks)

18. (a) A rectangular tank of base 2.4m by 2.8m and a height of 3m contains 3600 litres of water initially. Water flows into the tank at the rate of 0.5 litres per second. Calculate:

(i) The amount needed to fill the tank (2 Marks)

(ii) The time in hours and minutes required to fill the tank (3 Marks)

b) Pipe A can fill an empty tank in 3 hours while pipe B can fill the same tank in 6 hours.

When the tank is full, it can be emptied by pipe C in 8 hours. Pipes A and B are opened at the same time when the tank is empty. If one hour later pipe C is also opened, find the total time taken to fill the tank.

(5 Marks)

19. A solid is made up of a conical frustum and a hemispherical top. The slant height of the frustum is 8cm and its base radius is 4.2cm. If the radius of the hemispherical top is 3.5cm. (a) Find the area of:

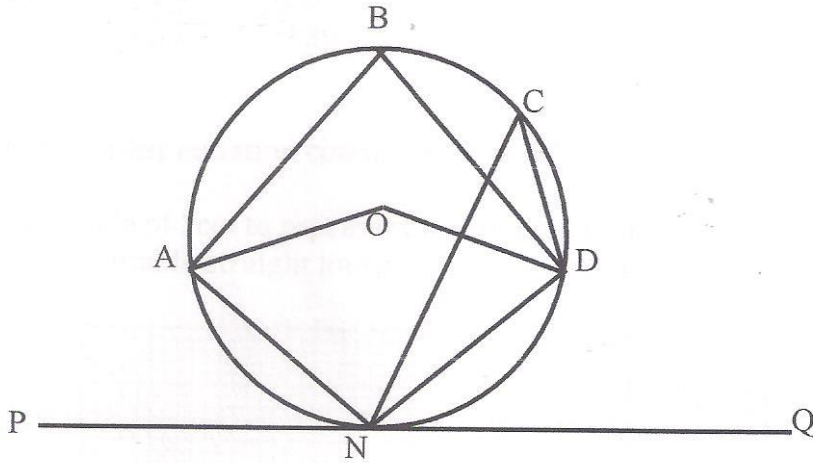
(i) the circular base of the solid (2 Marks)

(ii) the curved surface of the frustum (3 Marks)

(iii) the hemispherical surface (3 Marks)

(b) A similar solid has a total surface area of 81.51cm^2 . Determine the radius of its base.(2 Marks)

20. In the figure below, O is the centre of the circle. PQ is a tangent to the circle at N. Angle NCD is 10° and angle ANP is 30° .



Giving reasons, calculate:

a) Angle DON (2 mks)

b) Angle DNQ (2 mks)

c) Angle DBA (2 mks)

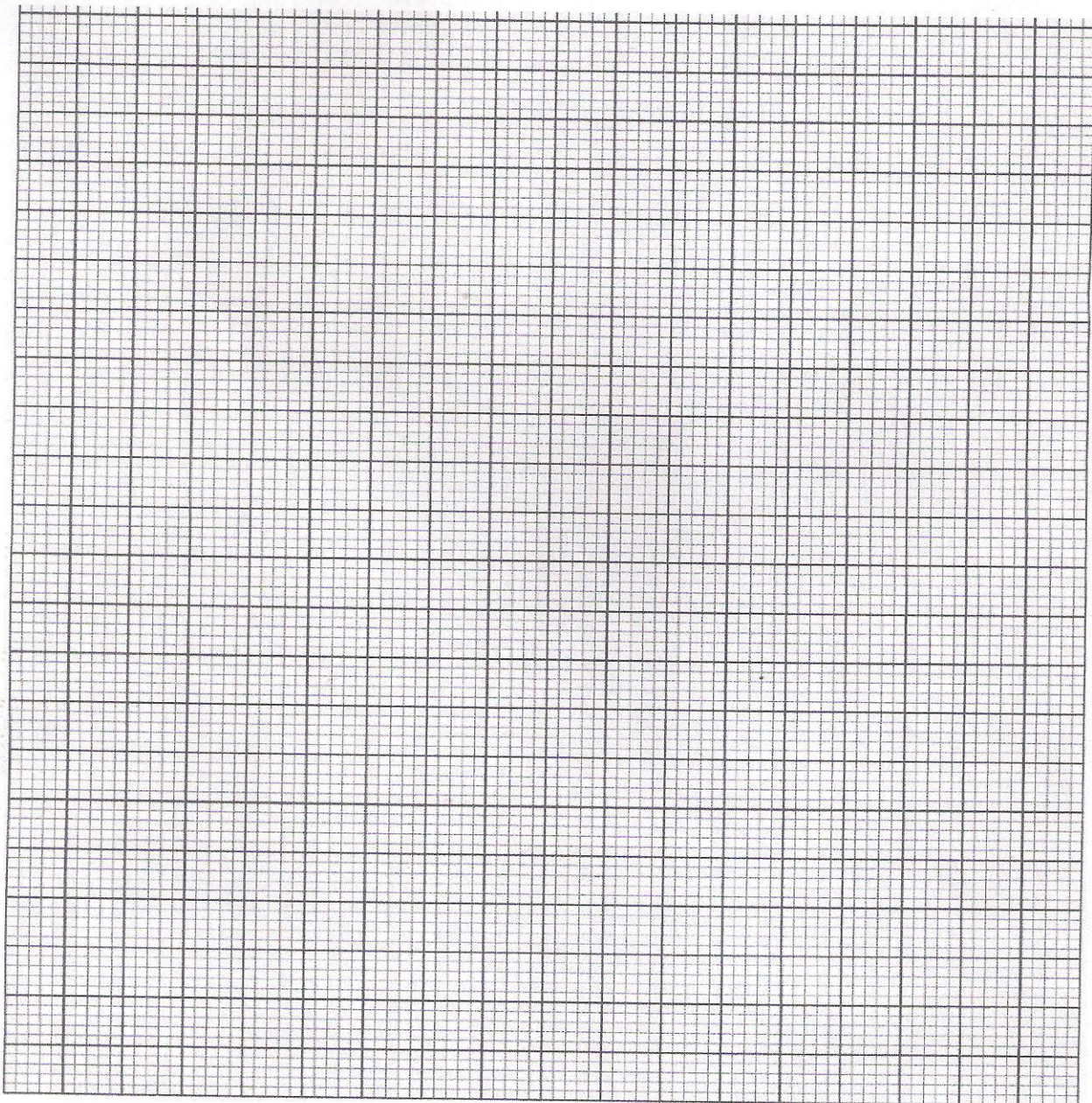
d) Angle ONA (2 mks)

e) Angle ODN (2 mks)

21. Two quantities P Q are connected by the equation $P = KQ^n$. The table below gives the values of P and Q

P	1.2	1.5	2.0	2.5	3.5	4.5
Q	1.58	2.25	3.39	4.74	7.86	11.5

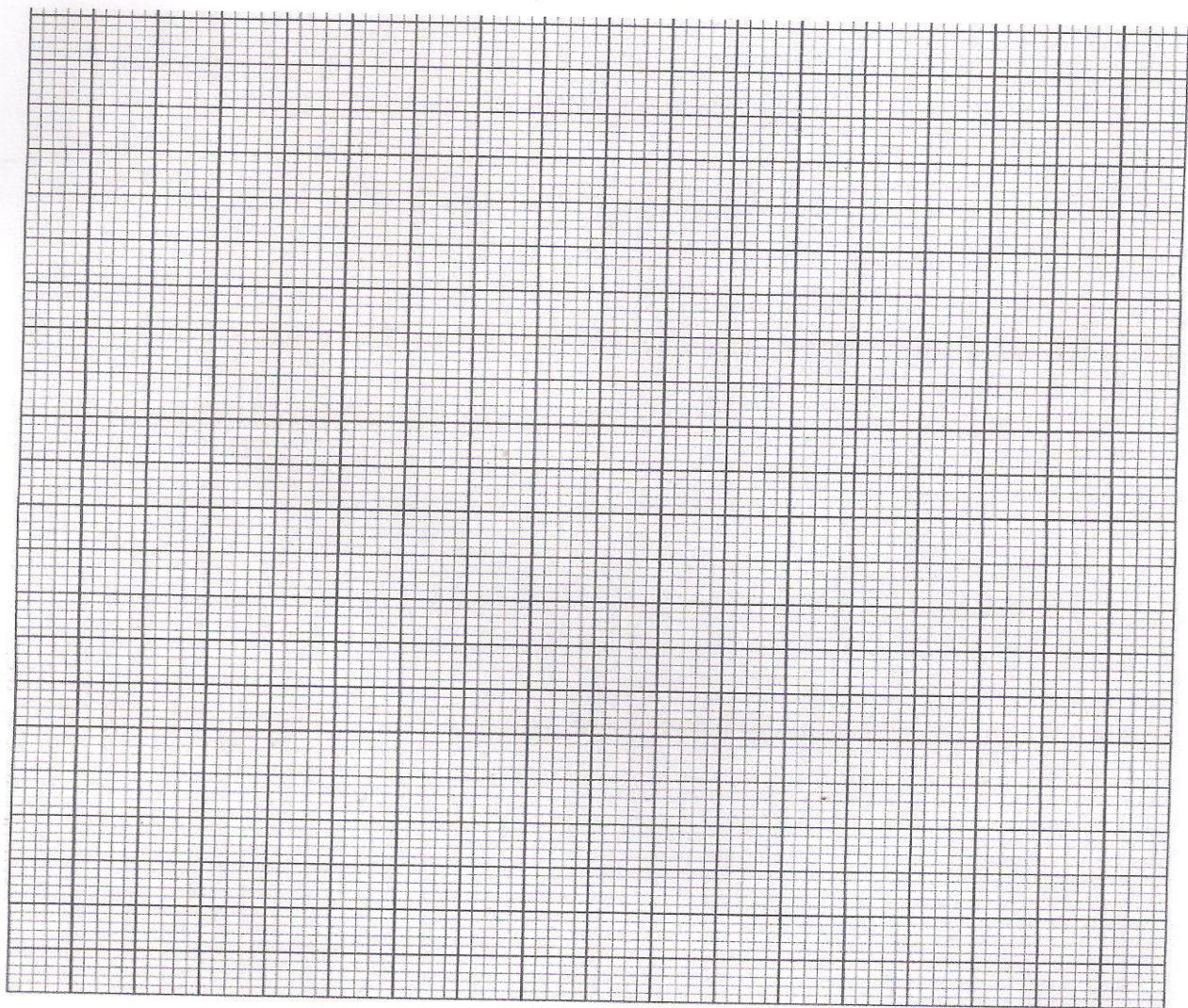
- a) State the linear equation connecting P and Q (1 mk)
- b) Using a scale of 1cm to represent 0.1 units in x – axis and 1cm to represent 0.1 units on y-axis, draw a suitable straight line graph on the grid provided. (5 mks)



c) Use your graph in (b) above to determine the approximate value of K and n (2 mks)

d) From the graph, find the value of Q where P=3 (2 mks)

22. a) Draw $\triangle PQR$ whose vertices are P(1, 1), Q(-3, 2) and R(0, 3) on the grid provided. (2 mks)

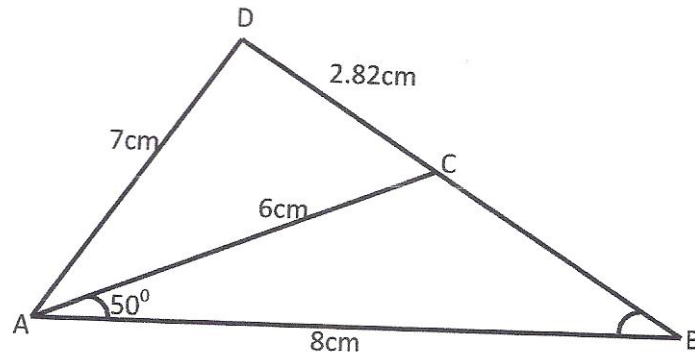


b) Find and draw the image of $\triangle PQR$ under the transformation whose matrix is $\begin{pmatrix} 3 & 0 \\ 1 & 1 \end{pmatrix}$ and label the image $P'Q'R'$
(2 mks)

c) $P'Q'R'$ is then transformed into $P''Q''R''$ by the transformation with the matrix $\begin{pmatrix} \frac{2}{3} & 0 \\ -\frac{2}{3} & 2 \end{pmatrix}$. Find the co-ordinates of $P''Q''R''$ and draw $P''Q''R''$
(3 mks)

d) Describe fully the single transformation which maps PQR onto $P''Q''R''$ find the matrix of this transformation.
(3 mks)

23. In the figure below (not drawn to scale) $AB=8\text{cm}$, $AC = 6\text{cm}$, $AD = 7\text{cm}$, $CD=2.82\text{cm}$ and angle $CAB = 50^\circ$.



Calculate to 2 decimal places

a) The length BC (3 mks)

b) The size of angle ABC (2 mks)

c) The size of angle CAD (3 mks)

d) The area of triangle ACD (2 mks)

24. a) i) Find the co-ordinates of the stationary points of the curve $y = x^3 - 3x + 2$ (4 mks)

ii) For each stationary point determine its nature (2 mks)

b) Determine the y – intercept (2 mks)

c) In the space provided sketch the graph of the function $y = x^3 - 3x + 2$ (2 mks)

MATHEMATICS
PAPER 2
MAY 2019
TIME: 2 ½ HOURS

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR
Kenya Certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES

1. Write your name and index number in the spaces provided above
2. Sign and write the date of examination in the spaces provided above
3. The paper contain two sections: Section I and section II
4. Answer all the questions in section I and strictly any five questions from section II
5. All answers and working must be written in the question paper in the spaces provided below each question
6. Show all the steps in your calculations, giving your answers at each stage in the spaces below each question
7. Non-programmable silent electronic calculators and KNEC mathematical tables may be used, except where stated otherwise

FOR EXAMINERS USE ONLY

SECTION I

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	total

SECTION II

17	18	19	20	21	22	23	24	total

Grand Total

SECTION I (50 MARKS)

1. The data below shows the number of pupils in Nairutia Primary school

42	43	48	40	46	42	44	48	39	40	42
41	47	46	45	49	45	42	40	38	39	40

46 47 42 40 41 43 44 45 46 48

a) Using a class size of 2 organize the data in a grouped frequency table. (2 mks)

b) Determine the mean of the data (2 mks)

2. Simplify $\frac{512^{\frac{4}{3}} \times 27^{\frac{-2}{3}}}{128^2 \times 9^{-2}}$ (3 mks)

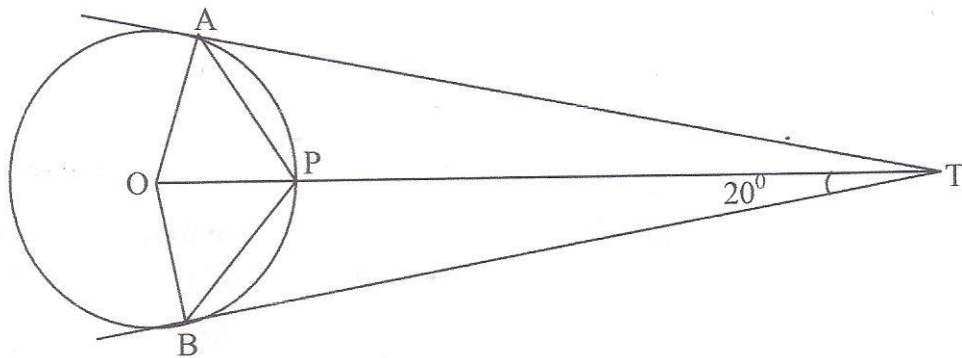
3. The height and radius of a cone are measured as 21cm and 14.0cm respectively. Taking $\pi = 3.142$, find the percentage error in the volume of the cone. (2 mks)

4. Use logarithms, correct to 4 decimal places to evaluate (4 mks)

$$\left(\frac{0.7841 \times \sqrt{0.1356}}{\log 84.92} \right)^{1/3}$$

5. A bag contains 3 red and 5 green marbles. Two marbles are picked from the bag one at a time without replacement. Find the probability that two marbles are picked will be of different colours. (3 mks)

6. In the figure below TA and TB are tangents to the circle centre O. Given that angle ATB = 20° . Find angle PAT.



7. Given that $x = 3i + 2j - 4k$, $y = 3i + 5j - 2k$ and $z = -4i + 3j + 5k$ and that $p = 4x - 2y + 3z$. Find the magnitude of p to 4 s.f. (4 mks)

8. The equation $2x^2 - 12x + 2y^2 + 28y = -44$ represents a circle. Determine the coordinates of the centre and the length of its diameter. (3 mks)

9. Expand $(1 + 2x)^8$ in ascending powers of x up to and including the term in x^3 . Hence evaluate $(1.02)^8$. (4 mks)

10. Express in surd form and simplify by rationalizing the denominator.

(3 mks)

$$\frac{1+\cos 30^\circ}{1-\sin 60^\circ}$$

11. Find the quadratic equation whose roots are $\frac{-3}{4}$ and $\frac{2}{3}$ and write it in the form $ax^2 + bx + c = 0$ where a, b and c are integers. (2 mks)

12. Make n the subject of the formula (3 mks)

$$W = \frac{x^2}{(m-n)(m+n)}$$

13. The velocity v meters per second of a particle in motion is given by the equation: $V = 2t^2 - 4t + 10$, where t is time in seconds. Determine the total distance moved by the particle in the first 3 seconds of motion. (2 mks)

14. The table below shows the number of defective bolts from 40 samples.

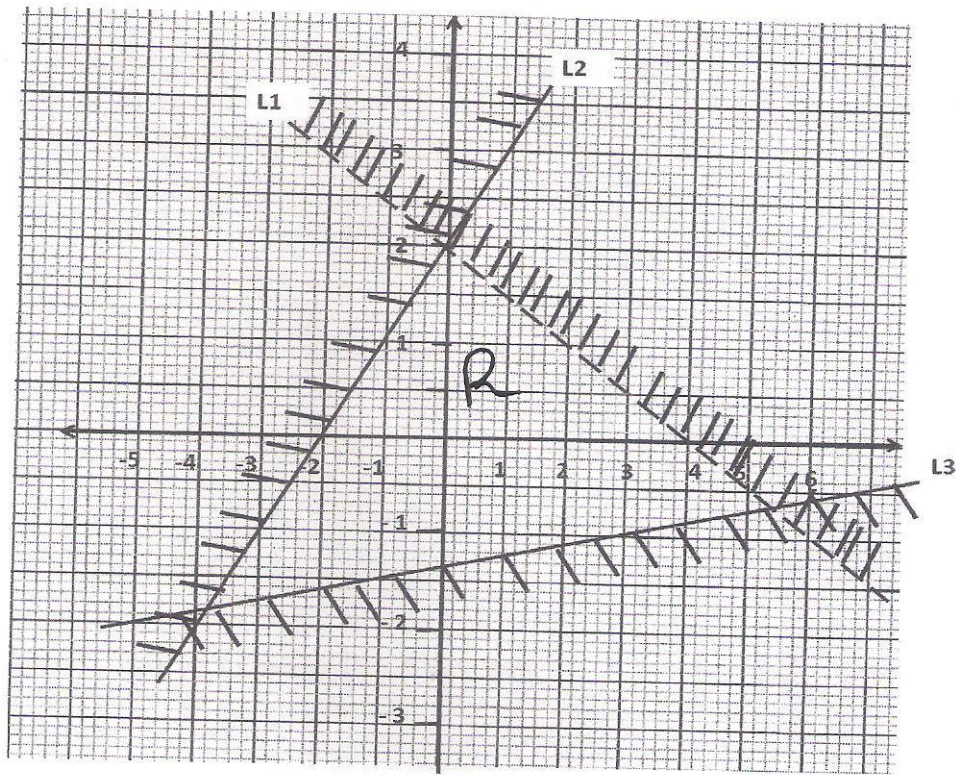
No. of defective bolts (x)	0	1	2	3	4	5
Frequency (y)	20	8	6	4	1	1

Calculate the standard deviation

(3 mks)

15. A bus left town A at 11.45 a.m. and travelled towards town B at an average speed of 60km/h. A matatu left town B at 1.15 p.m. and travelled towards town A along the same road at an average speed of 90km/hr. The distance between the two towns is 540km. Determine the time of day when the two vehicles met. (4 mks)

16. Form the three inequalities that satisfy the given region R. (3 mks)



SECTION II (50 MARKS)

Answer any five questions in this section

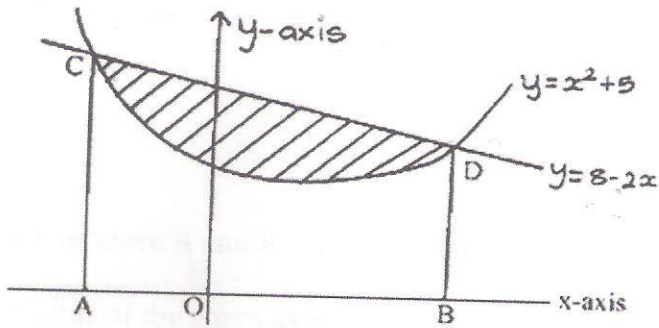
17. Jane is a teacher who has been recruited to teach. She starts with an annual salary of sh.792000. At end of every year her salary increases by 15% of the previous year.

a) Find the salary she gets in her fourth year in the job. (3 mks)

b) In which year will she earn sh.1, 831, 944. (3 mks)

c) Find the total she will have earned in ten years (4 mks)

18. The diagram below, not drawn to scale shows part of the curve of the curve $y = x^2 + 5$ and the line $y = 8 - 2x$. The line intersects the curve at points C and D. Lines AC and BD are parallel to the y-axis.



a) Determine the coordinates of C and D. (4 mks)

b) Use intergration to calculate the area bounded by the curve and the x-axis between the points C and D. (3 mks)

c) Calculate the area enclosed by the lines CD, CA, BD and the x-axis. (3 mks)

d) Hence determine the area of the shaded region. (1 mk)

19. The position of two towns are A (30°S, 20°W) and B(30°S, 80°E) find:

a) The difference in longitude between the two towns. (1 mk)

b) The distance between A and B along parallel of latitude in

i) km (take radius of the earth as 6370km and $\pi = \frac{22}{7}$). (3 mks)

ii) in nm (2 mks)

c) The local time in town B when it is 1.45pm in town A (4 mks)

20. a) Using a ruler and a pair of compasses only, construct triangle ABC such that $AB=AC = 5.4\text{cm}$ and angle $ABC = 30^\circ$. (3 mks)

b) Measure BC (1 mk)

c) A point P is always on the same side of BC as A. Draw the locus of P such that angle BAC is always twice angle BPC. (2 mks)

d) Calculate the area of triangle ABC. (2 mks)

e) Draw a perpendicular from A to meet BC at D. Measure AD. (2 mks)

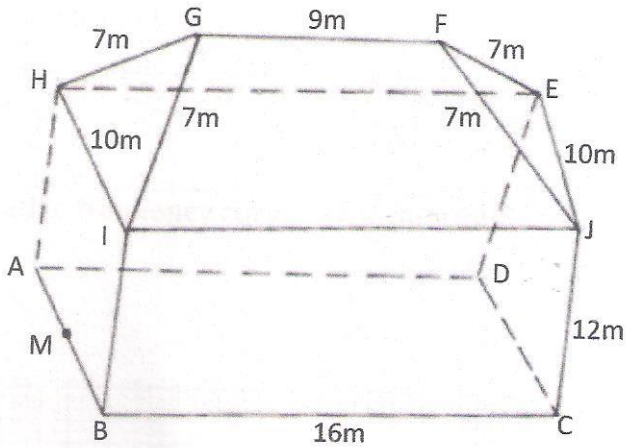
21. a) P, Q and R are three quantities such that P varies directly as the square of Q and inversely as the square root of R.

i) Given that $P = 12$ when $Q = 24$ and $R = 36$, find P when $Q = 27$ and $R = 121$. (3 mks)

ii) If Q increases by 10% and R decreases by 25%, find the percentage increase in P. (4 mks)

b) If Q is inversely proportional to the square root of P and $P = 4$ when $Q = 3$. Calculate the value of P when $Q = 8$. (3 mks)

22.



The figure above shows the structure of a building under construction. $HA = IB = JC = ED = 12\text{m}$ and $BC = AD = IJ = HE = 16\text{m}$; and $AB = DC = HI = EJ = 10\text{m}$ and $HG = IG = FJ = FE = 7\text{m}$ and $GF = 9\text{m}$.

a) The angle face GHI makes with base ABCD. (3 mks)

b) Vertical height of ridge FG above base ABCD (3 mks)

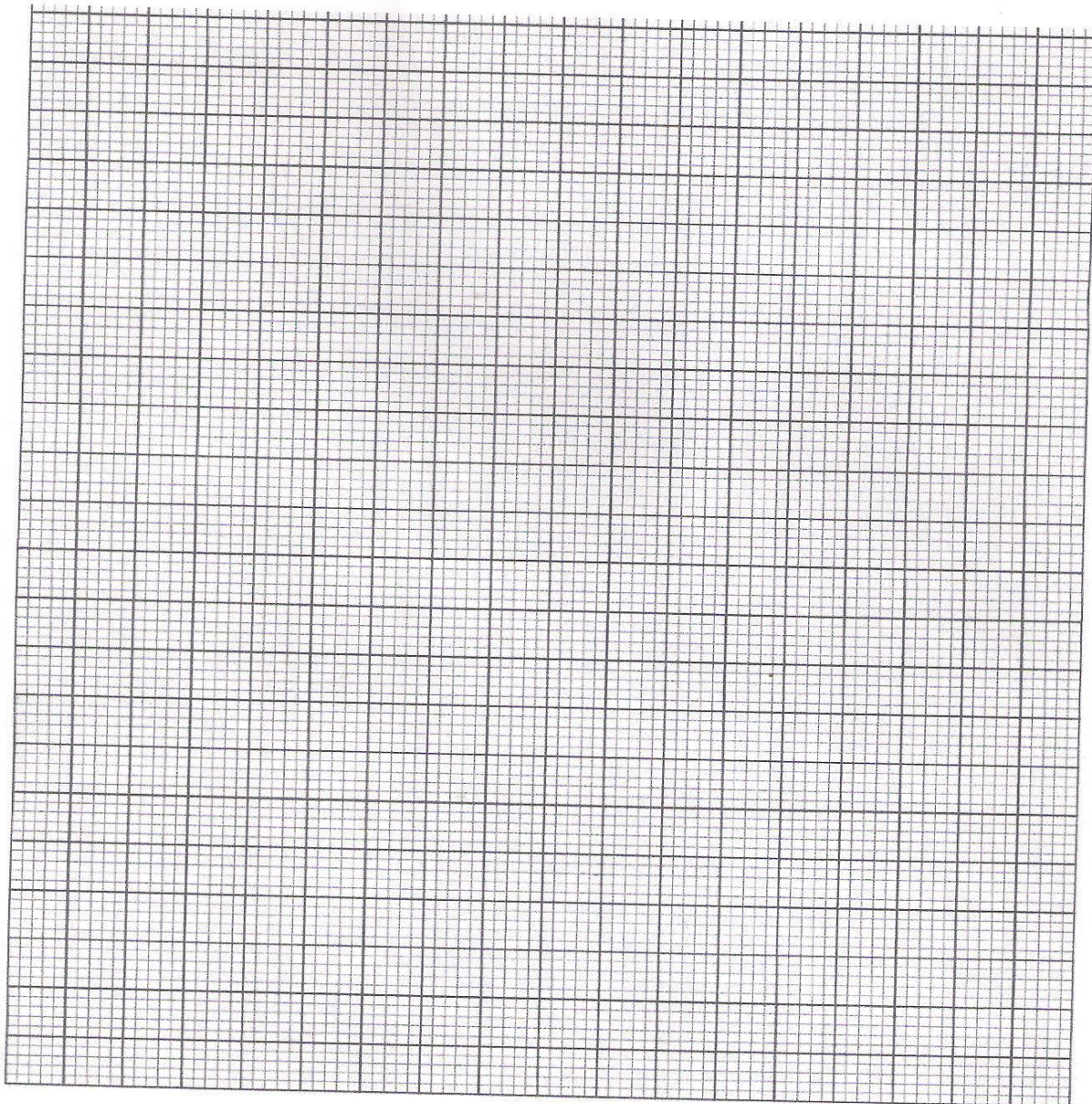
c) angle face GFJI make with ABCD (3 mks)

d) M is midpoint of AB. What is the projection of MF to the base ABCD? (1 mk)

23. The frequency distribution table below shows the marks scored by 117 form four candidates of Sanga High school.

Marks	10 -19	20 – 29	30 – 39	40 – 49	50 – 59	60 – 69	70 – 79
No of students	13	14	18	20	23	17	12

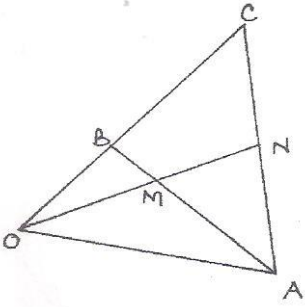
a) Draw a cumulative frequency curve of the distribution. (5 mks)



b) Use your graph to determine:

- i) The median (2 mks)
- ii) Quartile deviation (3 mks)

24. In the figure below, $OA = \mathbf{a}$, $OB = \mathbf{b}$ and $OC = 3OB$.



a) Express in terms of \mathbf{a} and \mathbf{b}

i) \overrightarrow{AB} (1 mk)

ii) \overrightarrow{AC} (1 mk)

b) Given that $\overrightarrow{AM} = \frac{3}{4}\overrightarrow{AB}$ and $\overrightarrow{AN} = \frac{1}{2}\overrightarrow{AC}$, express \overrightarrow{OM} and \overrightarrow{ON} in terms of \mathbf{a} and \mathbf{b} (4 mks)

c) Hence show that O , M and N are collinear. (4 mks)

232/1

PHYSICS

FORM FOUR

PAPER 1

TIME: 2 HOURS

**SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR**

Kenya Certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES

- ❖ *Write your name and index number in the spaces provided above*
- ❖ *Sign and write the date of the examination in the spaces provided*
- ❖ *Attempt **ALL** questions in sections A and B*
- ❖ *All your answers must be written in the spaces provided in this question paper*
- ❖ *All working must be clearly shown*
- ❖ *Non programmable silent electronic calculators and KNEC mathematical table may be used except where stated otherwise*

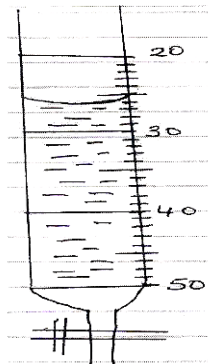
For Examiner's Use Only

Section	Question	Maximum Score	Candidate's Score
A	1 – 8	25	
B	9	09	
	10	07	
	11	08	
	12	06	
	13	04	
	14	08	

	15	04	
	16	10	
	Total	80	

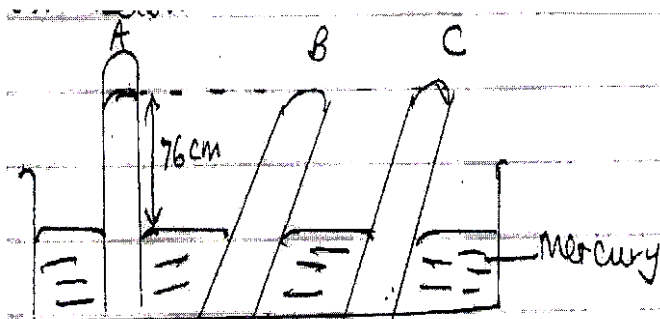
SECTION 25 MARKS

1. The figure drawn shows a burette that was initially filled to the 10cm³ mark.



The volume of the liquid removed from the burette has a mass of 12g. Find the density of the liquid in kg/m³. (3mks)

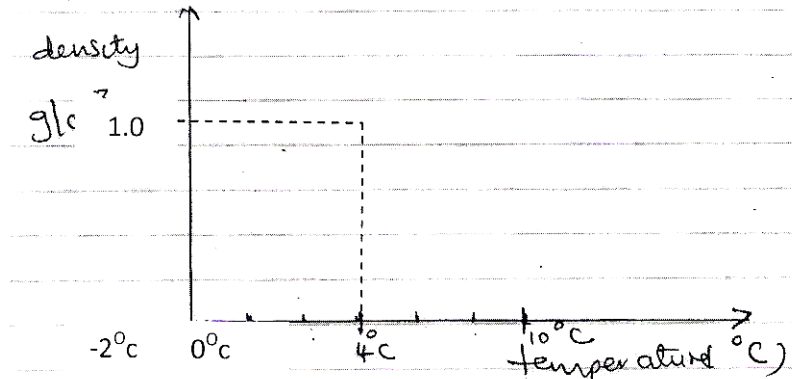
2. Three 1m long tubes A, B and C were filled with mercury and inverted over a dish containing more mercury as shown below.



i) Name the set up displayed by tube A and state its purpose. (2 mks)

ii) B is a true set up while C is faulty indicate the levels of mercury in tubes B and C (1 mk)

3. Water at sea level is heated from -2°C to 10°C . On the sketch below indicate the variation of density of water against temperature.



Explain the shape of the graph drawn. (2 mks)

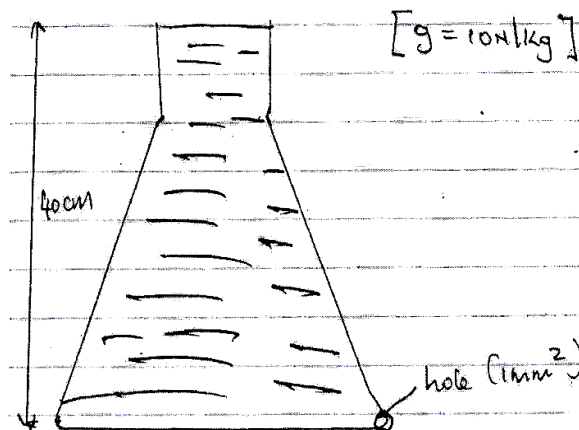
4. Give physics reasons attributed to the following observations in life.

i) Water dams are constructed with thick walls near the bottom than at the top. (1 mk)

ii) Petrol tanks have metallic chains that trail from the rear of the vehicle to the ground. (1 mk)

iii) School hot water tanks are silvery shiny. (1 mk)

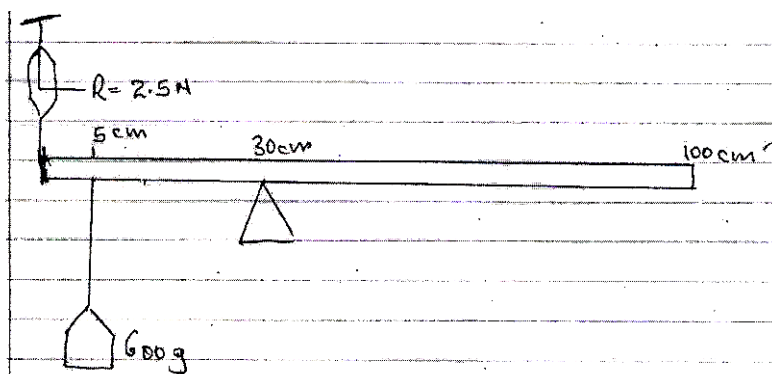
5. A jug is filled with paraffin of density 0.8g/cm^3 to a height of 40cm . A hole 1mm^2 is made at the bottom of the jug. ($g = 10\text{N/kg}$)



Calculate the force at which paraffin leaves the hole immediately it is pierced. (3 mks)

6. i) State two conditions satisfied by a body in a state of equilibrium. (2 mks)

ii) A beam 100cm long is pivoted at the 30cm mark. It is in balance when supported by a spring balance at the 0cm mark.

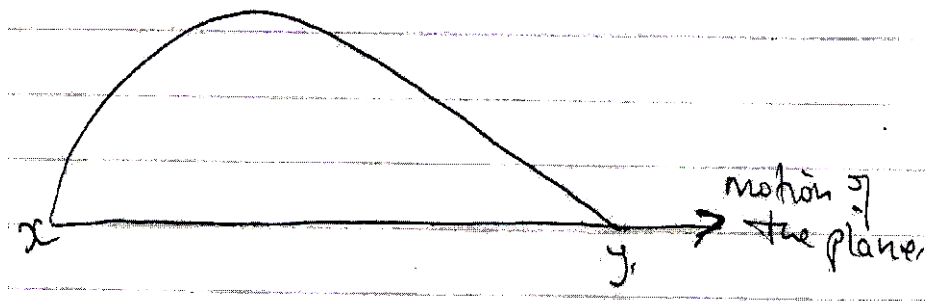


Determine the weight of the beam (3 mks)

7. Give the factors considered by a driver negotiating a corner in order not to have the vehicle skidding off the road. (2 mks)

8. a) State Bernoulli's principle. (1 mk)

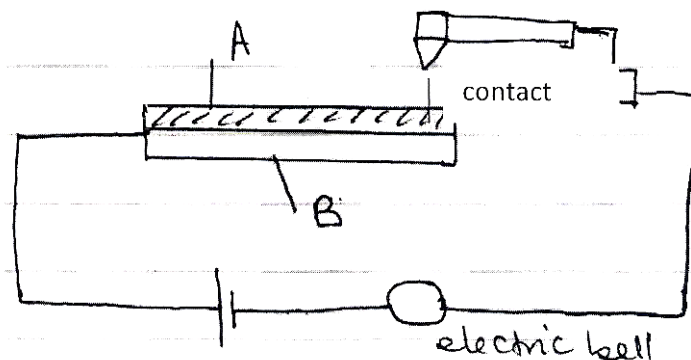
b) The figure below is an example of a wing of an aeroplane.



Explain how the plane moving on the run way is able to take off from the ground. (3 mks)

SECTION B: 55 MARKS

9. The diagram below shows a model of a fire alarm made by a student in a science workshop. The metal strip is made of brass and invar.



a) Label the metal parts A and B (2 mks)

b) The bell rings when the metal strip is heated with a candle flame. Explain. (2 mks)

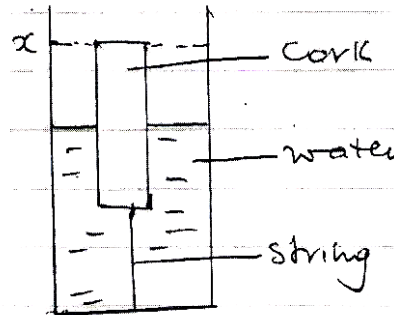
c) An immersion heater rated 180W is used to heat 100g copper calorimeter containing 200g of alcohol for 36 seconds. The temperature of the contents rose from 20°C to 32°C.

i) State any assumption made above. (1 mk)

ii) Calculate the specific heat capacity of alcohol. (SHC of copper = 400J/kg°C) (4 mks)

10. a) State Archimedes principle. (1 mk)

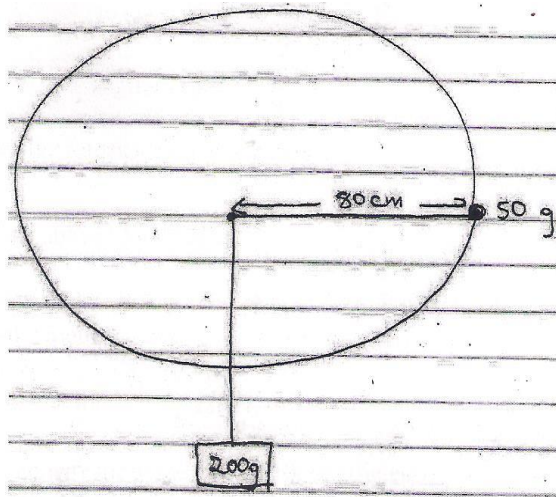
b) A cork is tied to the bottom of a container containing water as shown below.



i) Name the forces acting on the cork. (3 mks)

ii) Water is slowly added into the beaker until the level is at point X of the beaker. State changes that occur to the forces mentioned above as water is added. (3 mks)

11. A 50g is rotated by a student using a string that is attached to a 200g mass at the other end as shown in the diagram.



i) Find the tension in the string. ($g=10\text{N/kg}$) (2 mks)

ii) Determine the angular speed made by the 50g mass when rotated uniformly. (3 mks)

iii) Calculate the number of revolutions made by the 50g mass when rotated uniformly in one second. (3 mks)

12. The table below shows the velocity of a small ball bearing falling in a tall cylinder filled with water.

time(s)	0	1	2	3	4	5	6	7	8	9
velocity cm/s	0	1.1	1.4	1.7	1.9	2.2	2.3	2.3		

i) Complete the table. (1 mk)

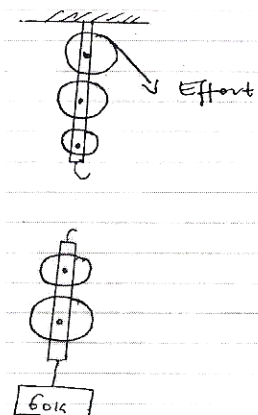
ii) Explain your table values for the time 6 – 9 seconds. (2 mks)

iii) Is the acceleration of the ball increasing or decreasing? Explain your answer. (2 mks)

13. a) A constant mass of hydrogen gas occupies a volume of 4.0cm^3 at a pressure of 2.4×10^5 pascals and a temperature of 288K . Find the volume of the gas at a pressure of 1.6×10^5 Pascals and a temperature of 288K . (3 mks)

b) State the law in operation in (a) above. (1 mk)

14.



a) Thread the above block and tackle. (2 mks)

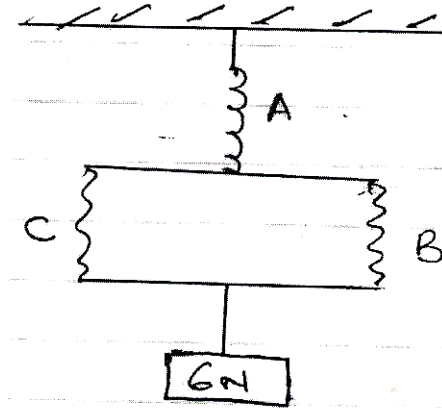
b) The system above has an efficiency of 60%. It used to lift the 60kg mass by a vertical height of 2 metres.

i) Find the work done by effort. (4 mks)

ii) Explain why the system is not 100% efficient. (2 mks)

15. a) State Hooke's Law. (1 mk)

b) Three identical springs each with a spring constant of 10N/m and a weight of 0.5N are used to support a load as shown. Determine the total extension of the system shown below. (3 mks)



16. A body travels with uniform acceleration from a velocity of 26m/s at its 5^{th} second to a velocity of 42m/s at its 9^{th} second.

a) Calculate the acceleration of the body. (2 mks)

b) Find the initial velocity of the body at time $t = 0$ seconds. (2 mks)

c) Displacement made by the body between the 5^{th} and 9^{th} seconds. (3 mks)

d) If the body falling down to the ground is as shown below, indicate the forces acting on it as it falls. (3mks)



232/2
Physics
Paper 2(Theory)
APRIL 2020
2 hours

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR
Kenya Certificate of Secondary Education

Instructions to Candidates

- a) Write your name, admission number, class and school in the spaces provided above,
- b) Write the date of examination and your signature in the spaces provided above.
- c) This paper consists of **TWO** sections; **A** and **B**.
- d) Answer all the questions in section A and B
- e) All workings **MUST** be clearly shown
- f) Non programmable silent electronic calculators may be used.
- g) This paper consists of **11** printed pages.
- h) Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

For Examiner's Use Only			
SECTION	Question	Maximum Score	Candidate's Score
A	1 - 12	25	
B	13	13	
	14	12	
	15	09	
	16	09	
	17	12	

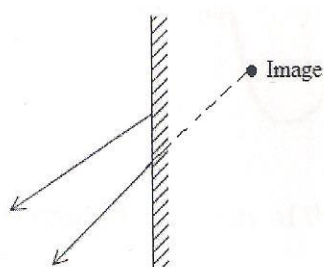
TOTAL

80

SECTION A (25 MARKS)

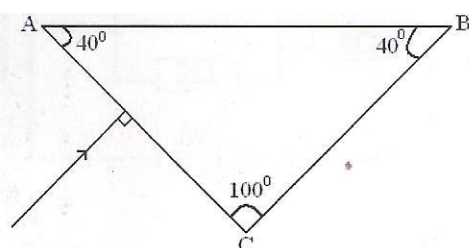
Answer all the questions in this section

1. Figure (1) below shows two rays of light from an object reflected on a plane mirror



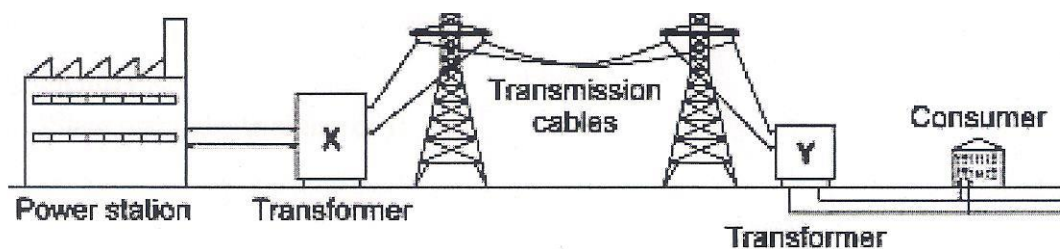
Using proper ray construction, show the object position (2 mks)

2. The fig 2 below shows a ray of light incident on a glass prism



Given that the critical angle for the glass is 39° , sketch on the diagram the path of the ray through the prism. (2 mks)

3. The diagram on fig. 3 shows the National Grid system.



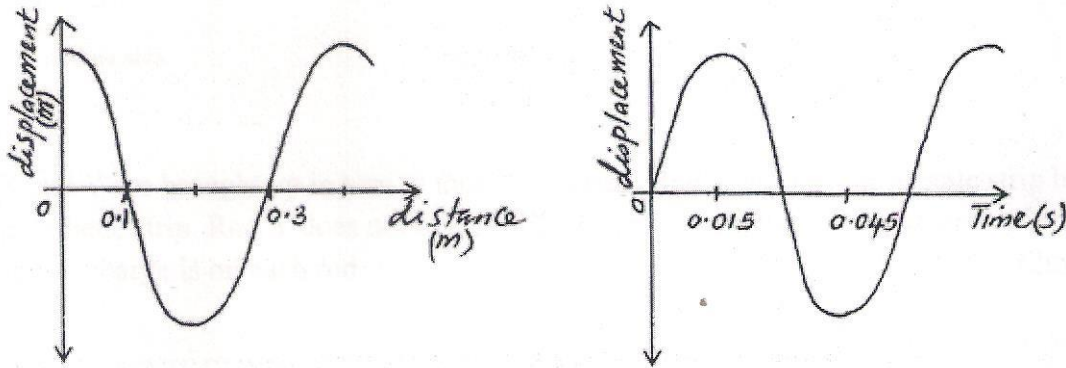
a) What type of transformer is;

X..... (1 mk)

Y..... (1mk)

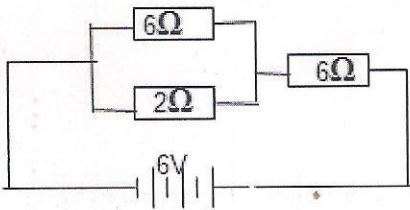
4. State one advantages of using circuit breakers in the consumer unit than using fuse wire. (1 mk)

5. The figures below show two waveforms representing the same wave motion.



Determine the velocity of the wave. (3 mks)

6. Figure 4 below shows a 6V battery connected to an arrangement of resistors. Determine the current flowing through the 2Ω resistor. (3 mks)



7. The figure 7 below shows the electromagnetic spectrum.

radio waves	Infra-red	A	ultraviolet	B	Gamma rays
-------------	-----------	---	-------------	---	------------

a) Identify A (1 mk)

b) State one industrial use of B (1 mk)

8. The diagram (fig 5) shows a positively charged acetate strip and a negatively charged polythene strip that are freely suspended.



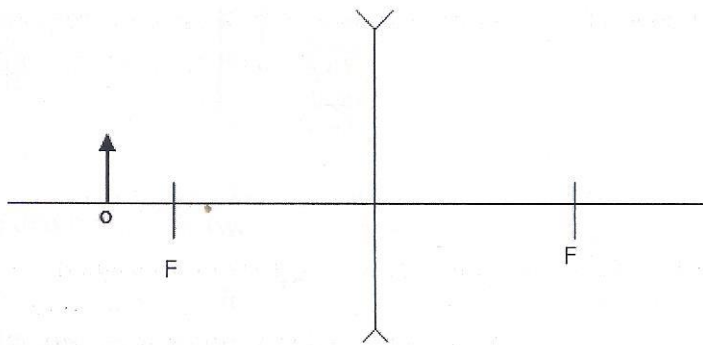
Two rods X and Y are brought up in turn to these two strips. Rod X attracts the acetate strip but repels the polythene strip. Rod Y does not repel either the acetate strip or the polythene strip. State the type of charge is on each rod.

X.....

Y.....

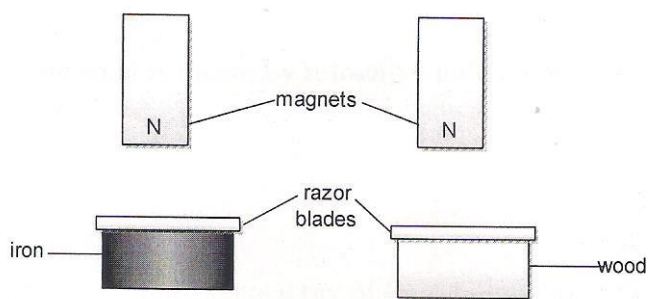
9. State two advantages of an alkaline accumulator over lead acid accumulator. (2 mks)

10. Figure 6 below show a concave lens and object.



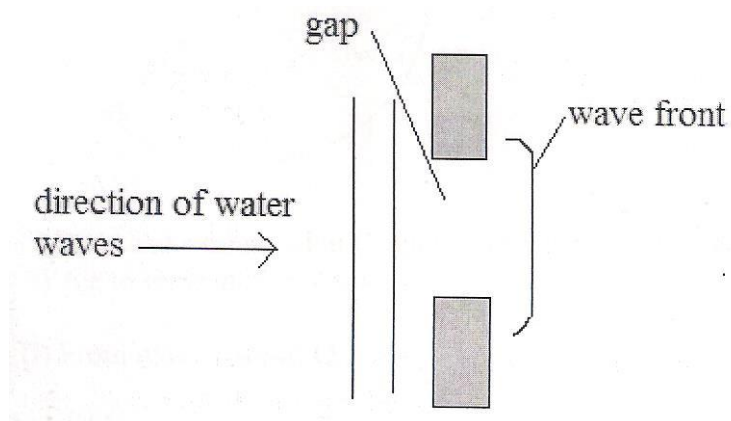
Sketch the rays to show the image formed. (2 mks)

11. Two similar razor blades were placed on a wooden block and the other on an iron block as in figure 7



It was observed that the razor blade on the wooden block is attracted by the magnet while that on the iron block was not. Explain. (2 mks)

12. The figure 8 below shows water waves about to pass through a gap. One wave front is shown after it has passed through the gap.



i) On the diagram, draw two more wave fronts that have passed through the gap. (1 mk)

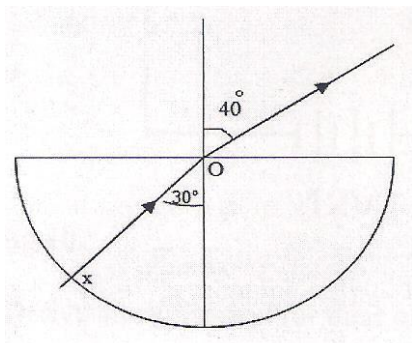
ii) State two changes which would each make the wave fronts become more curved after passing through the gap. (1 mk)

SECTION B (55 MARKS)

Answer all the questions in this section.

13. a) State what is meant by refractive index of a material. (1 mk)

b) Figure 9 represents a ray of light falling normally on the curved surface of a semi-circular plastic block at X, meeting the opposite face at an angle of incidence of 30° and emerging into the air at an angle of 40° .



i) State and explain what happens to the ray as it moves from:

I) Air to glass at X (1 mk)

II) From glass to air at O (1 mk)

ii) Calculate refractive index of the plastic (3 mks)

iii) State the conditions to be satisfied for total internal reflection to occur (2 mks)

iv) Describe how the apparatus above could be used to find the critical angle experimentally. (3 mks)

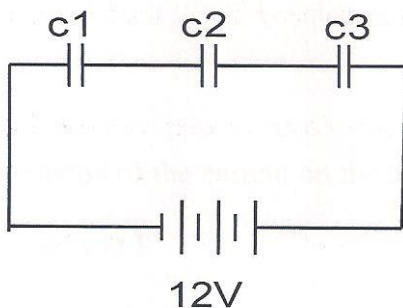
v) Calculate the critical angle for this plastic. (2 mks)

14. a) State what is meant by the term capacitance (1 mk)

b) Distinguish between a paper capacitor and an electrolyte capacitor. (1 mk)

c) State two factors that determine capacitance of a parallel plate capacitor (2 mks)

d) Figure 10 below shows a network of capacitors in series



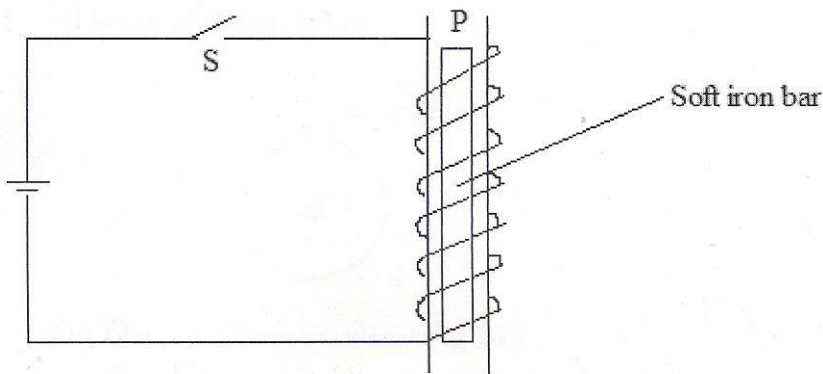
i) Derive an expression for their effective capacitance C_E from first principles. (3 mks)

ii) Given that $C_1 = 10.5\mu\text{F}$, $C_2 = 2\mu\text{F}$ and $C_3 = 3\mu\text{F}$

Calculate effective capacitance C_E in (2) above and hence, determine the charge stored on each capacitor. (3 mks)

e) State two applications of capacitors. (2 mks)

15. a) Use the figure 11 below to answer the questions that follows.



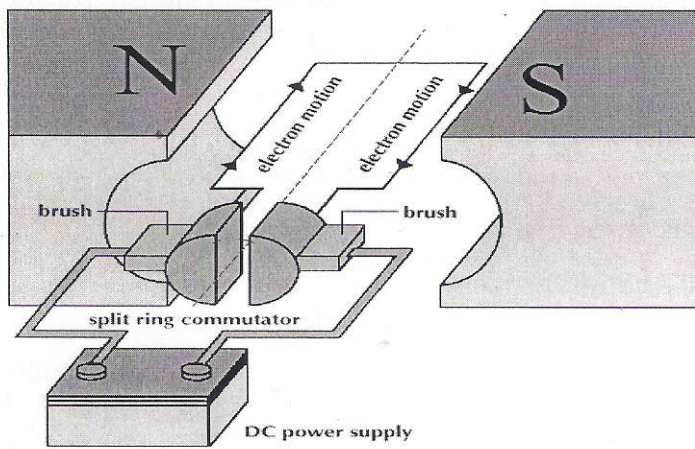
- i) Show the direction of the current on the turns when the switch S is closed. (1 mk)

- ii) State the polarity at P (1 mk)

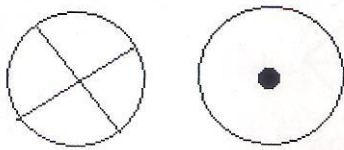
- iii) Explain using domain theory what happens on the soft iron bar. (1 mk)

- iv) If steel bar was used instead, what could be the difference? (2 mks)

b) The following diagram (figure 12), show a part of an electric d.c motor.



- i) On the diagram above show the direction of rotation of the coil. (1 mk)
- ii) State the effect of increasing the number of turns of the rotating coil of an electric motor. (1 mk)
- c) Sketch the magnetic field pattern around the conductor carrying current on figures 13 and 14 shown below. (2 mks)



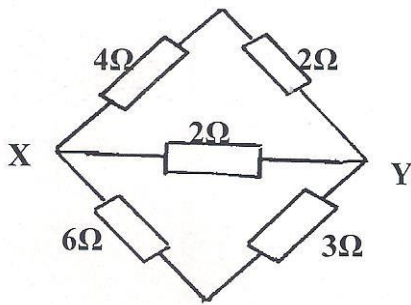
16. a) Distinguish between real image and a virtual image. (2 mks)
- b) The distance between an object and its upright image produced by a curved mirror is 40cm. the image is 3 times as tall as the object.
- i) State the type of mirror used. (1 mk)
- ii) Determine the object distance (2 mks)
- iii) Determine the radius of curvature of the mirror (3 mks)

iv) State one application of the mirror (3 mks)

17. a) State Ohm's law (1 mk)

b) Explain why a 12V car battery is able to start the motor car engine while eight dry cells of 1.5V each connected in series will not. (2 mks)

c) In figure 15 the current in the circuit is 1.80A



i) Find the effective resistance between X and Y (3 mks)

ii) The p.d of the source (2 mks)

iii) Current through the 3Ω resistor (2 mks)

iv) Give two differences between a primary and a secondary cell. (2 mks)

232/3

Physics

Paper 2(Practicals)

APRIL 2020

2 hours

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020 FORM FOUR

Kenya Certificate of Secondary Education

Instructions to candidates:

1. Write your **name** and **index number** in spaces provided **above**.
2. **Sign** and write the date of examination in spaces provided **above**.
3. Answer **all** the questions in spaces provided in the question paper.
4. You are **NOT** allowed to spend the first 15 minutes of 2½ hours allowed for this paper reading the whole paper carefully before commencing the work.
5. Marks are given for clear record of the observations actually made, their suitability, accuracy and the use made of them.
6. Candidates are advised to record their observations as soon as they are made.
7. Non-programmable silent electronic calculators and KNEC Mathematical table may be used.

FOR EXAMINER'S USE ONLY

Part	A					B	
Maximum score	b	c	e	f	G	h	i
Candidate's score	1	1	5	5	3	2	3

Question 2

	b	f	g	h	i	j
Maximum Score	1	6 ½	4	2	2	4 ½
Candidate's Score						

Grand Total

1. Question 1

You are provided with the following apparatus

- A mounted wire labeled N with ends marked A & B
- A voltmeter (0- 3 or 0 - 5V)
- An ammeter
- A switch
- Two dry cells and a cell holder
- Six connecting wire at least two crocodile clips

Procedure.

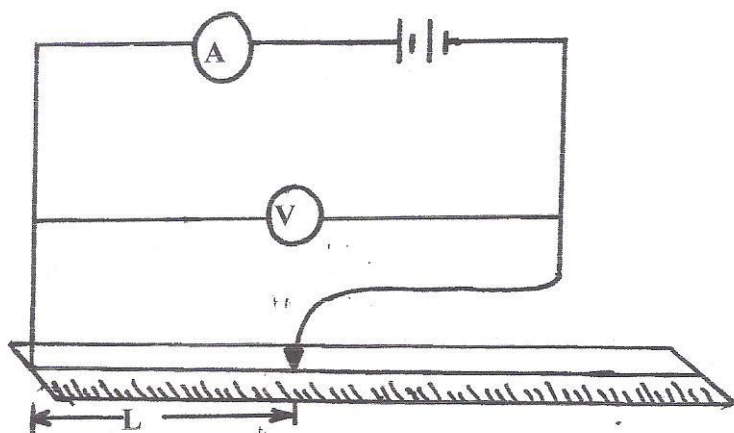
a) Using the micrometer screw gauge measure the diameter d of the wire

$d = \dots\dots\dots$ mm (1 mk)

$d = \dots\dots\dots$ m (1 mk)

b) Calculate the cross-sectional area A of the wire in SI units (2 mks)

c) Set up the circuit as shown below.



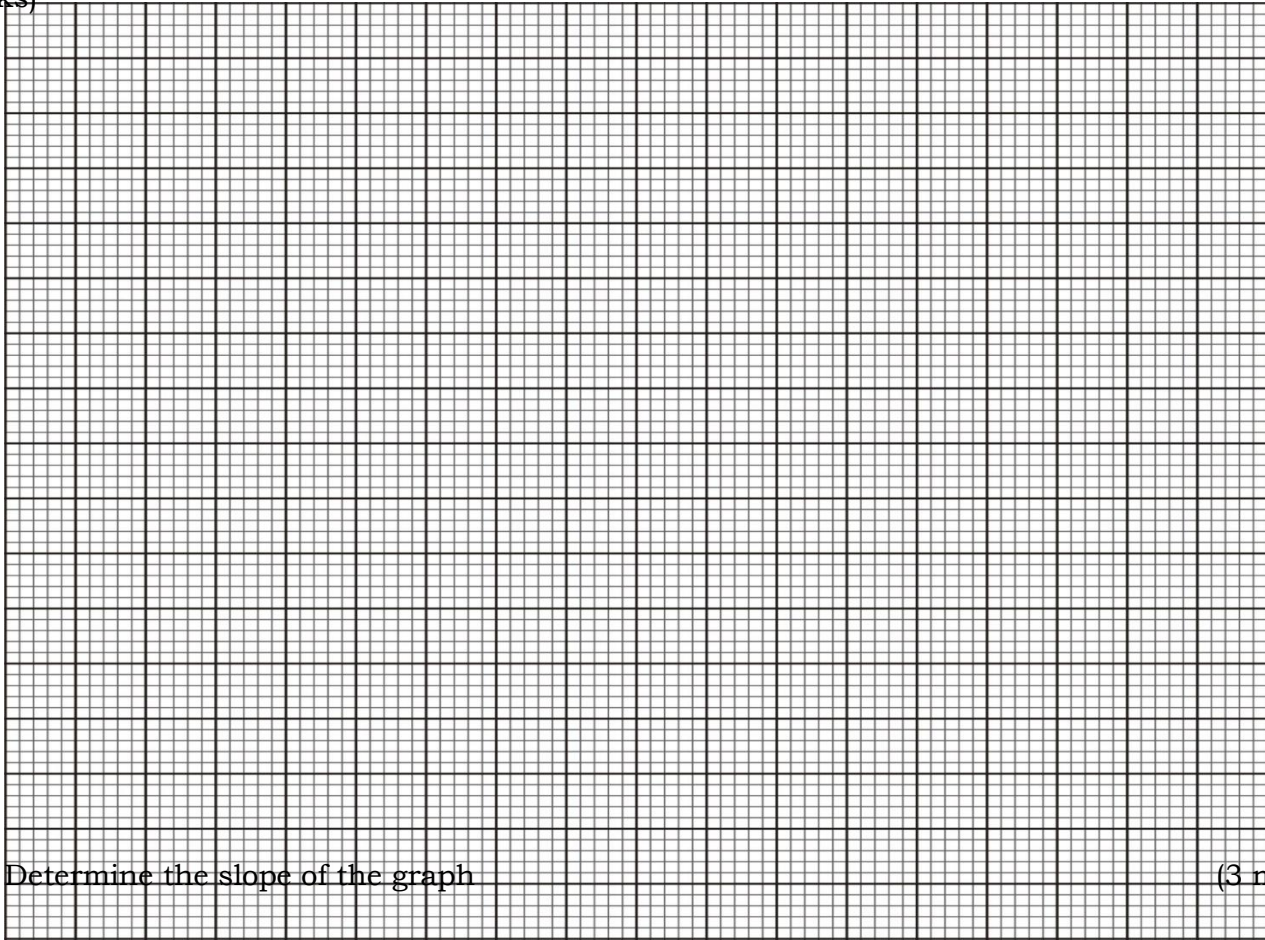
d) Set up the apparatus such that length L is zero (0cm) and record the values of current and voltage in the table below. Repeat for different values of L and record the voltmeter and ammeter readings in the table below.

length L (cm)	0.0	20.0	40.0	60.0	80.0
Current I (A)					
Voltage (V)					

(5 mks)

e) Plot the graph of voltage V (y-axis) against current I (mks)

(5



f) Determine the slope of the graph

(3 mks)

g) Calculate the internal resistance of a cell.

(1 mk)

h) From the graph, determine the e.m.f of the battery (mks)

(2

2. Question 2

Part A

You are provided with the following:

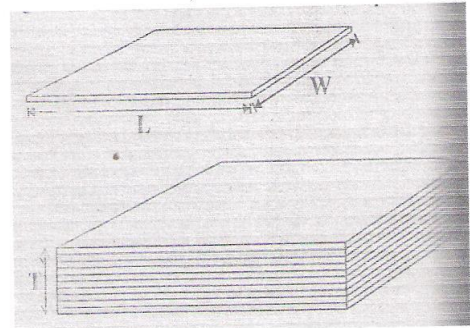
1. Metre rule
2. Retort stand
3. 10 microscope slides
4. A 50g mass
5. A piece of cellotape
6. Vernier calipers
7. 3 pieces of thread

Proceed as follows

a) Using the Vernier caliper provided, measure the length L and the width W of one slide

$L = \dots\dots\dots$ (1mk)

$W = \dots\dots\dots$ (1mk)



b) Stack 10 slides together using the cellotape

i) Measure the thickness T of the stack of microscope slide

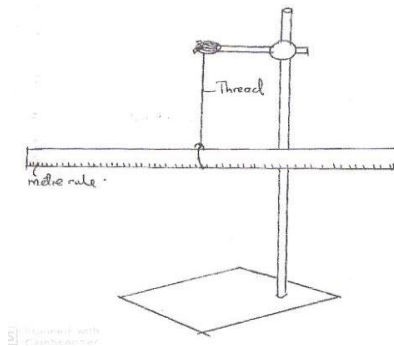
$T = \dots\dots\dots$ (1 mk)

ii) Determine the volume V of the stack of microscope slide

.....

.....

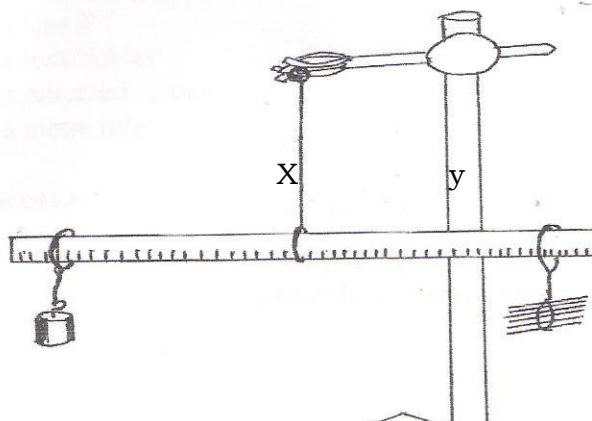
.....



Balance the metre rule at its centre of gravity (c.o.g) as shown above and maintain the position of the fulcrum on the centre of gravity throughout the experiment. Record the balance point.

.....(1mk)

Using the threads provided balance the 50g mass and the stack of slides as shown.



Adjust the position of both the stack and the mass until the rule again balance. (Make distance x and y as large as possible) Record distances x & y

X =cm (1mk)

.....m (½mk)

Y =cm (1mk)

.....m (½mk)

c) Calculate the mass M (in grams) of the stack of slides (3 mks)

.....
.....
.....
.....
.....
.....
.....

d) Determine the density of the glass slide (2 mks)

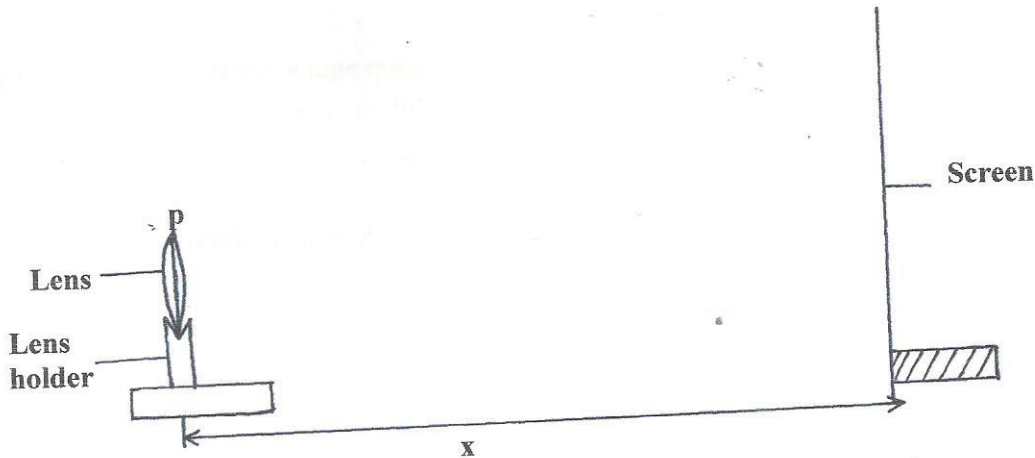
.....
.....
.....
.....
.....

You are provided with:

- A lens P
- A lens holder
- A mounted screen
- A metre rule

Procedure:

i) Set the apparatus as shown in figure 4 below. Focus a sharp image of a distant object on the screen. The object should be at least 10cm away.



a) Measure the distance x in cm between the lens and the screen at which a sharp image is obtained repeat this two times, using different objects and record your readings in table 3 below.

Table 3

Object	Distance X , (cm)
1	
2	

(2 mks)

ii) Calculate the average value of x (2 mks)

iii) What is the physical significance of the result obtained in (iii) above? (1 mk)

iv) Given that $W = \frac{1}{x(\text{in metres})}$ calculate the value of W (2 mks)

446/1

Building and construction

Paper 1

APRIL 2020

2 hours

**SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR**

Kenya Certificate of Secondary Education

SECTION A (40 marks)

Answer all the questions in this section in the spaces provided.

1 Name two tools and two equipment used for setting out a right angle of a building. (2 marks)

2 Describe the following types of foundations and give two examples in each case:

(a) shallow foundations;

(b) deep foundations.

3 State four reasons why clay tiles are not commonly used for roofing.

4 List four undesirable effects of dampness in buildings.

5 (a) Give four requirements of a drainage system.

(b) State the function of a goose neck bend in a cold water service layout.

6 (a) (b) Describe the following members of a scaffold:

(i) standard;

(ii) guard rail.

b) State four limitations in starting a small business related to building construction

7 (a) List two requirements for a safety helmet to be worn on a construction site.

(b) Describe two ways through which moisture can penetrate a building.

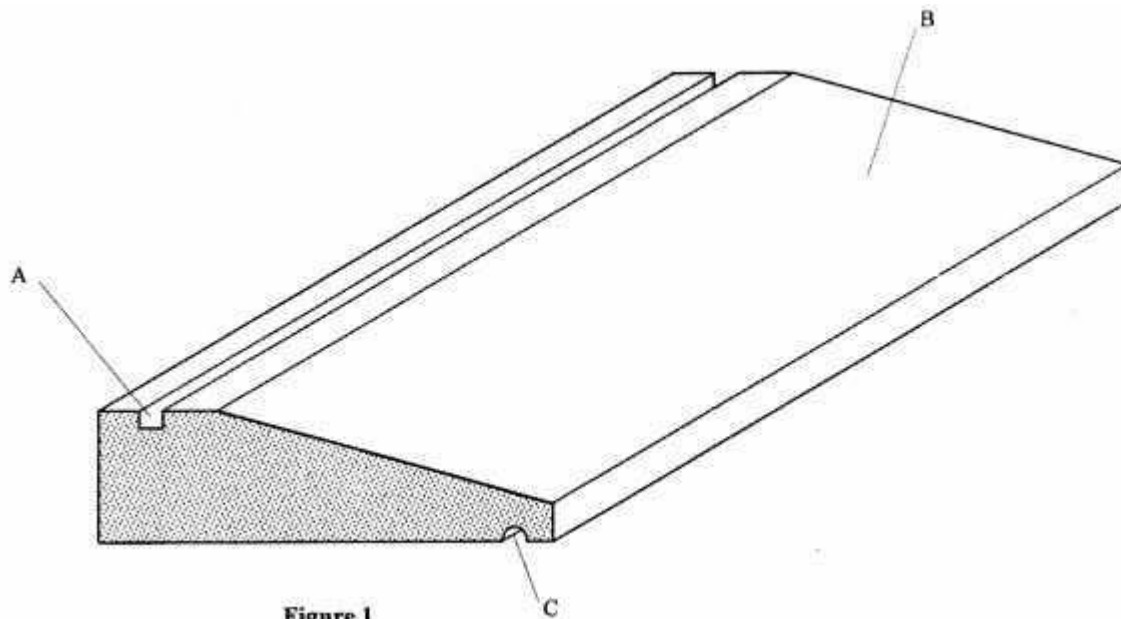
8 Use labelled sketches to show the following features on a wall:

(a) raking back;

(b) tothing.

9.(a) List **two** tools used for landscaping. (1 mark)

(b) Figure 1 shows a window sill. Name the parts labelled A, B and C, giving the function of each part. (3 marks)



10 Figure shows a simple shaped block drawn full size in isometric projection. (2 marks)

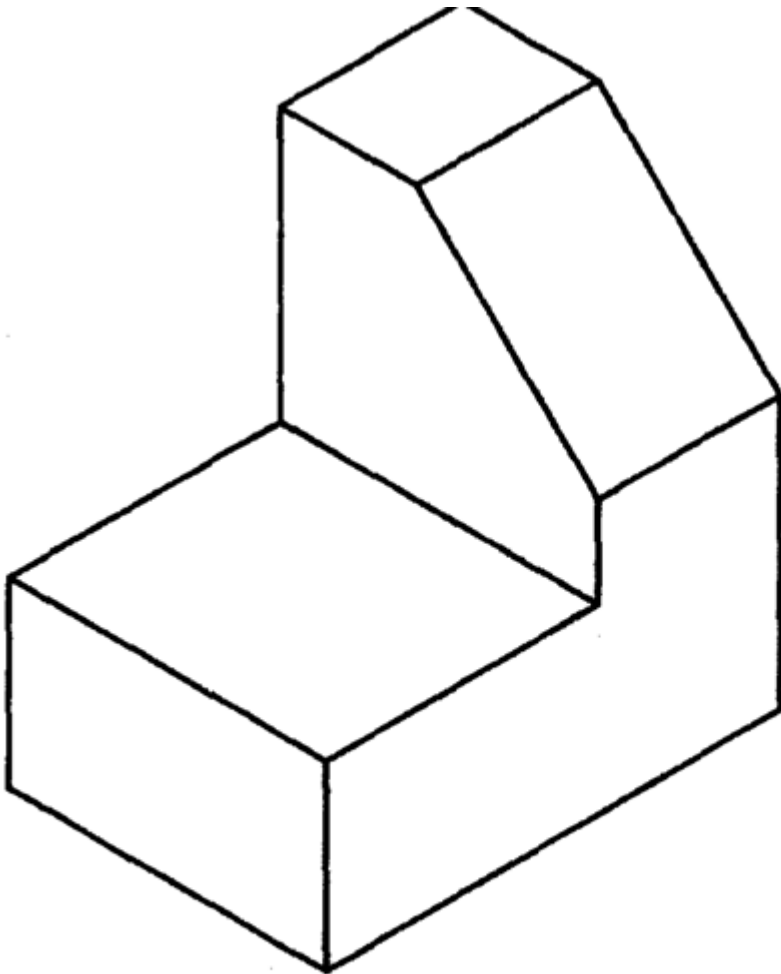


Figure 1

Copy the figure and dimension it fully. (4 marks)

Sketch in 1st angle projection the three orthographic VIEWS of the house

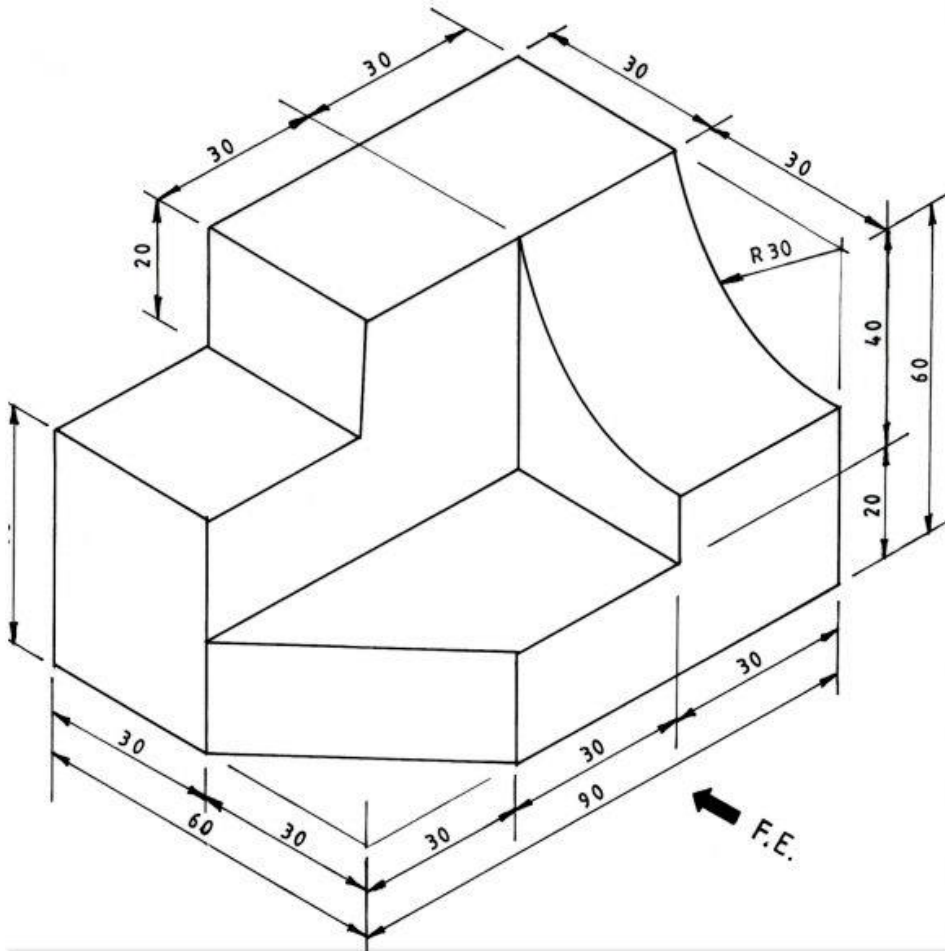
(2 marks)

SECTION B (60 marks)

Answer question 11 on the A3 paper provided and any other three questions from this section in the space provided.

Candidates are advised to spend not more than 25 minutes on question 11.

11. Figure 4 shows a pictorial drawing of a shaped block. (15 marks) To a scale of 1:1, draw three orthographic views of the block in 3'd angle projection. dimensions. (15 marks)



12 (a) State five functional requirements of masonry Walls in a building. (5 marks) (b) Figure 5 shows a floor plan of a house.

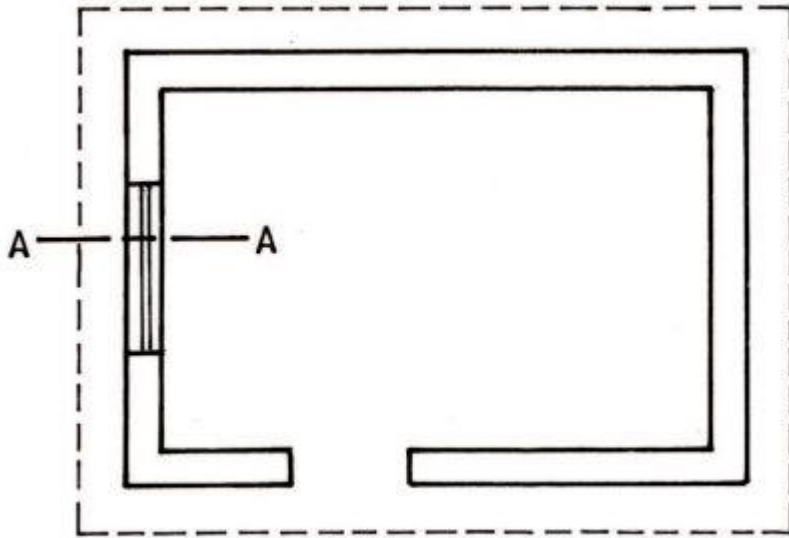


Fig. 5

Sketch and label a vertical section through A - A to show details from the foundation to the roof. (10 marks)

13 (a) (i) Give one advantage of twisted reinforcement bars over the round reinforcement bars when used in concrete.

(ii) State the meaning of each of the items labelled A - F in the reinforcement code given:



(b) Explain the function of each of the following in relation to plumbing works:

(i) cold water cistem;

(ii) water cylinder;

(iii) boiler;

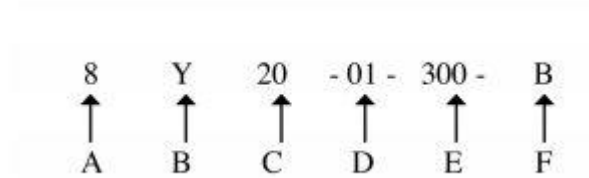
(iv) rising main.

(8 marks)

14 (a) Use labelled sketches to show the difference between a couple roof and a collar roof. (8 marks)

(b) Figure 6 shows the plan of a block wall with a pier.

Fig 6



(7 marks)

Sketch and label a pictorial strip foundation that will carry the wall and show the projection as per the building regulations. (7 marks)

15 (a) State two functions of each of the following:

(i) blinding layer;

(ii) hardcore.

(4 marks)

(b) Sketch and label a cross-section of a trench not more than 1,000 metre deep to show timber supports in hard soils. (5 marks)

(c) Figure 7 shows a timber stud wall with a door opening.

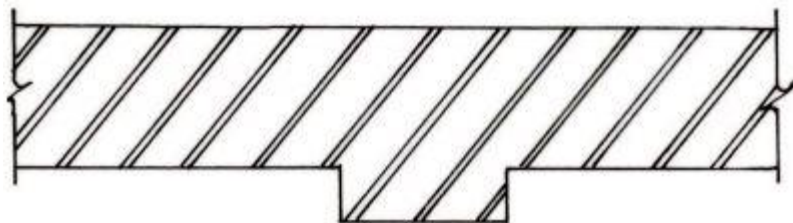


Fig 6

Sketch the details at 'A' to show all the members at the opening. (6 marks)

446/2

Building and construction

Paper 2

APRIL 2020

2 hours

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020 FORM FOUR

Kenya Certificate of Secondary Education

SECTION A (40 marks)

Answer all questions in this section on the answer sheet provided.

1 (a) State three roles of the National Industrial Training Authority (NITA). (3 marks)

(b) Name two methods of sharpening pencils leads and state where each is applied in technical drawing. (2 marks)

2 Sketch the conventional symbol for each of the following as used in drawing:(3 marks)

(a) Planned timber.

(b) Third angle projection.

(c) Earth wire.

3 (a) State two advantages of plywood over solid timber. (2 marks)

(b) State two factors that relate to the quality of a design with regard to the following: 4marks

(i) Material.

(ii) Proportion.

4 (a) Name two types of foundations used on steep slopy sites with stable soil. (2 marks)

(b) State two factors to consider when selecting a site for a building. (2 marks)

5 (a) Explain the term 'services' as used in building construction. (2 marks)

(b) State two conditions necessary when installing pipes to convey hot water. (2 marks)

6. Explain the difference between a load bearing wall and a non-load bearing wall. (4 marks)

7. Explain the following terms as used in concreting: (4 marks)

(a) Batching.

(b) Mixing.

8. Distinguish between rigid and flexible damp-proofing materials and give one example of each. (2marks)

9 Sketch and label each of the following strutting used in timber floors: 4marks

(a) Staggered strutting.

(b) Herringbone strutting.

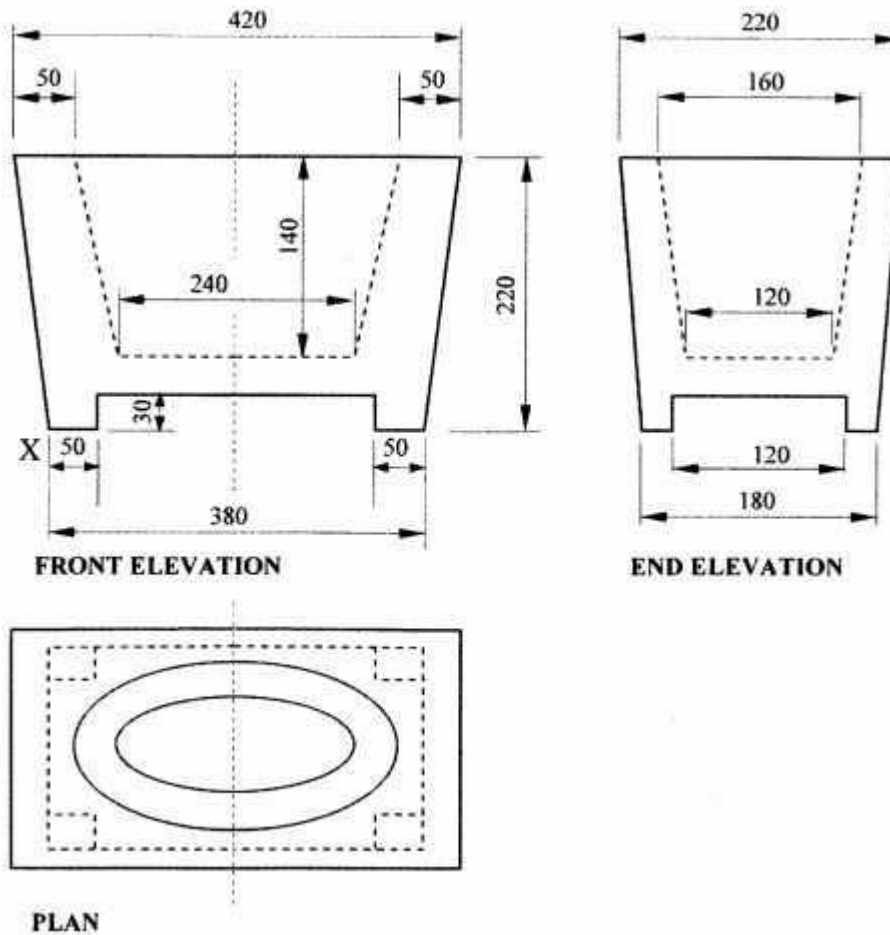
10 Using a pair of compasses and a ruler only. construct a triangle whose base length $AB = 120$ mm. angle $CAB = 60^\circ$ and angle $ABC = 45^\circ$ hence inscribe a circle touching all the sides. (4 marks)

SECTION B (60 marks)

*Answer question **11** and any other **three** questions from this section.*

*Candidates are advised to spend **not more than 25 minutes** on question 11.*

11 Figure 2 shows orthographic views of a vase drawn in first angle projection. To a scale of 1:1, draw an isometric view of the vase with point X as the lowest point. (15 marks)



(15 marks)

12 (a) With the aid of sketches, outline **two** methods of anchoring the sole plate of a timber wall frame on a concrete floor bed. (11 marks)

(b) Using a sketch, explain how to construct a public footpath using concrete slabs. (4 marks)

13 (a) With the aid of a labelled sketch, show the damp proofing details at a junction of a floor slab and an external wall. (6 marks)

(b) Sketch and label horizontal sections to show two methods of fixing a vertical timber cladding on a wall. (9 marks)

14. (a) State three ways of controlling termites on site.

(b) Outline three factors that influence the choice of foundation for a building.

(c) (i) Sketch and label a King Post truss.

(ii) State two advantages and two disadvantages of a direct cold water supply system.

15. (a) Sketch and label a vertical section through a cold water storage cistern. (9 marks)

(b) With the aid of a labelled sketch, explain how a boning rod and a site rail are used to level a trench bottom. (6 marks)

511/1
Music
Paper 2
APRIL 2020
2 hours

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020

FORM FOUR

Kenya Certificate of Secondary Education

MUSIC 511/1
15 MINUTES PER CANDIDATE.

TREBLE AND DESCANT RECORDER/ VOICE

1.



2.



3.



4.

CLARINET/ SAXOPHONE

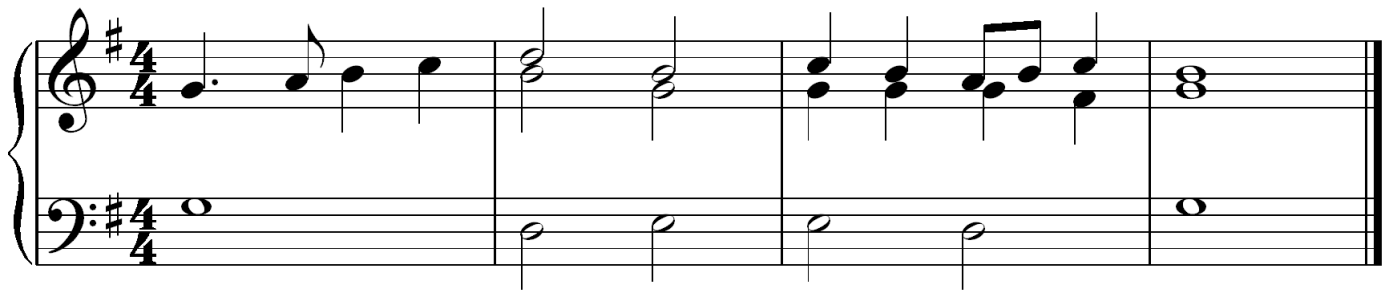
1.



2.



PIANO

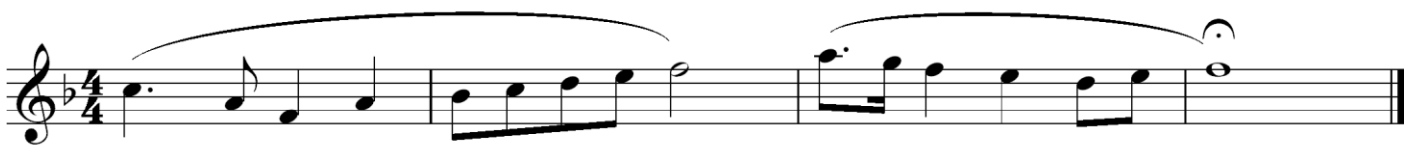


TRUMPET/CORNET

1.



2.



TROMBONE / EUPHONIUM/TUBA



VIOLIN

1.



2.



MUSIC

Paper 3

April

2 ½ hours.

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020 FORM FOUR

Kenya Certificate of Secondary Education

Instructions to Candidates

- i) Write your name and index number in the spaces provided above.
- ii) Sign and write the date of examination in the spaces provided.
- iii) Answer all questions in this paper.
- iv) In question 4 choose **any two** of the questions numbered (a), (b), (c) and (d)
- v) **DO NOT** remove any pages.
- vi) This paper consist of 10 printed pages
- vii) **Candidates should check the question paper to ensure that all the pages are printed as indicated and no questions are missing.**

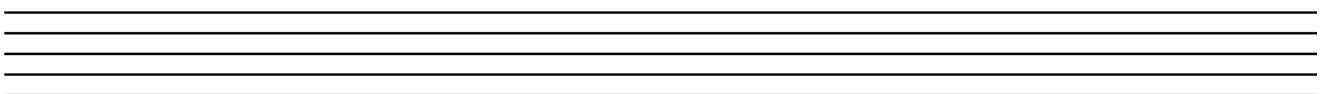
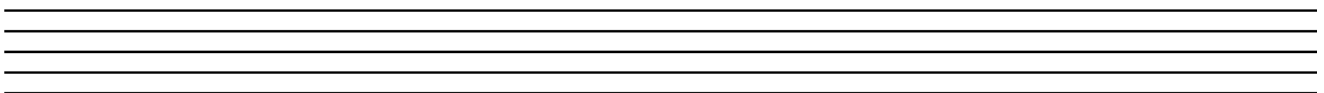
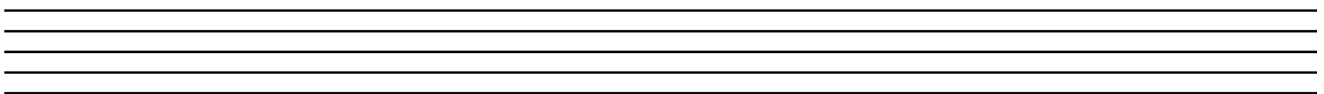
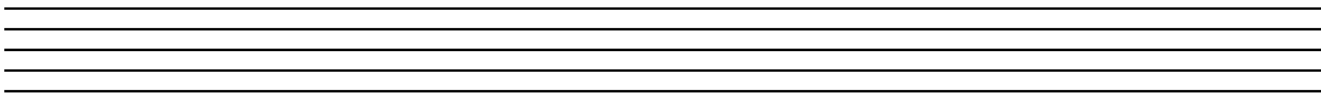
For Examiners Use Only

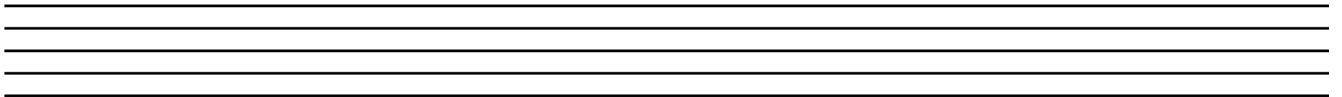
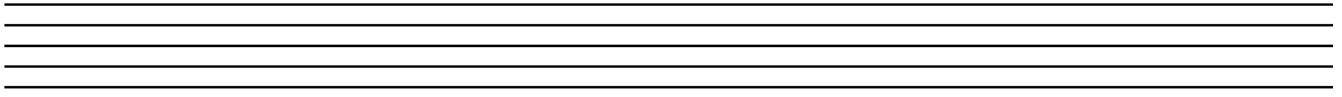
Section	Question	Maximum Score	Candidate's Score
A	1 a	8	
	b	7	
	2	15	
B	3	14	
	4	14	
	5	10	
	6	10	
	7	6	

C	8	16	
Grand Total		100	

SECTION A: BASIC SKILLS

1. (a) Continue the following opening to make a melody of 16 bars for voice with a modulation to the relative minor before returning to the tonic key. Incorporate a duplet and dynamic variations appropriately. (8 marks)





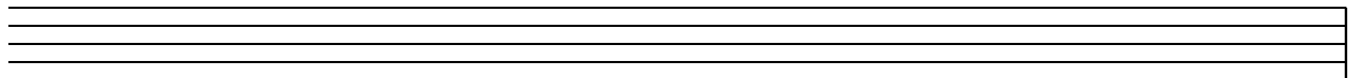
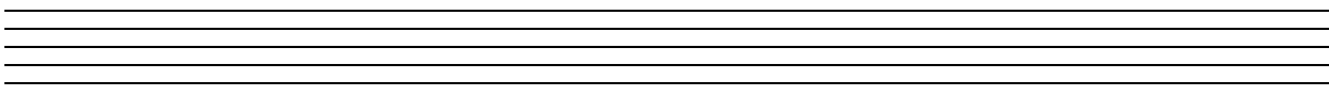
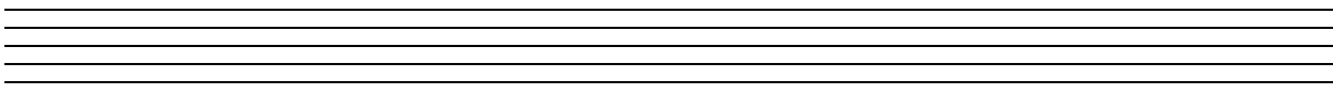
Or (b) Using staff notations write a tune to suite the following lyrics. Add phrase marks. (7marks)

My life flows on endless song,

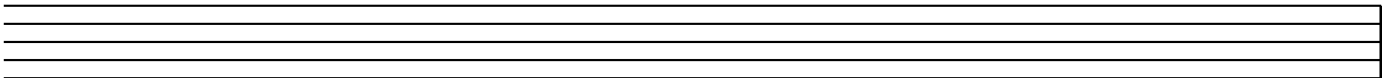
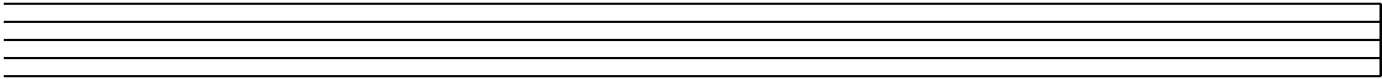
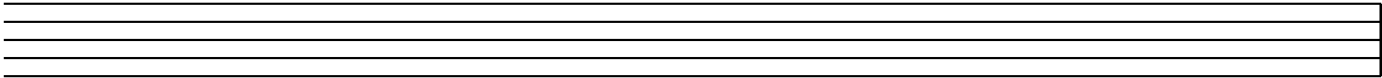
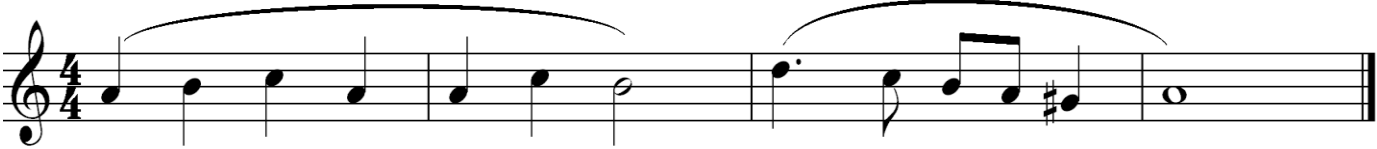
Above earths lamentations,

Through all the tumult and strife,

I hear the music ringing.



2. Harmonize the following melody for Soprano, Alto, Tenor and Bass (SATB). Choose appropriate chords from the following; I, ii, IV, V and vi. Use a cadential **six four** chord. (15 marks)



SECTION B: HISTORY AND ANALYSIS (48 marks)

3. AFRICAN MUSIC

a) Name **three** transverse flutes found in Kenya. (3 marks)

- i.
- ii.
- iii.

b) Differentiate between the following. (2 marks)

i. Method of playing lyres and fiddles

.....
.....
.....

ii. Kayamba and Adongo

.....
.....

c) Name any **four** dances that obtain their names from the instruments that accompany them.(4 marks)

- i.
- ii.
- iii.
- iv.

d) Outline **three** factors that influence sound quality of a membranophone. (3 marks)

.....
.....

e) List any **two** characteristics of a dirge. (2 marks)

.....
.....
.....

4. WESTERN MUSIC

Answer **any two** of the following questions (a), (b), (c) and (d)

(a) Thomas Tallis

(i) What type of works are the following:- (2marks)

Spem in allium.....

Glory to thee oh God this night.....

(ii) State any **two** contributions Tallis made to the development of the Anglican Chant. (2 marks)

.....
.....

(iii) State any **two** musical activities they jointly did with William Byrd. (2 marks)

.....
.....

(iv) What is Tallis's Nationality. (1mark)

.....

b) Wolfgang Amadeus Mozart

i. Why did Mozart rebel against his patron at Salzburg? (1 mark)

.....

ii. Outline four factors that influenced Mozart's compositions. (4 marks)

.....
.....
.....

iii. Identify any four of the following works by Mozart. (2 marks)

The magic flute

Davidde Penitente

Don Giovanni

Eine Kleine nachtmusik

Haffner

Idomeneo

c) Robert Schumann

i State his nationality. (1mark)

.....

ii Outline any **three** characteristics of his music. (3marks)

.....

.....

.....

iii Briefly explain how his family contributed to the spread of his fame. (1mark)

.....

iv Identify the following works by Schumann. (2marks)

Genoveva.....

Liederkreis.....

d) Aaron Copland

(i) State two reasons why his music is labeled as “vernacular style”. (2 marks)

.....

.....

.....

(ii) State any two reasons why Copland modified his style of composition in the late 1930’s (2 marks)

.....
.....

(iii) Identify the genre of the following works by Copland. (3 marks)

- The Cat and the Mouse
- El Salon Mexica
- Of Mice and Men

5. Prescribed African Traditional Music Analysis

Ibodi Dance of the Bakhayo by Busia Municipal Cultural Troupe, PPMC Recording

a. What is the main media in the recording? (2 marks)

.....
.....
.....

b. How does the horn feature in the recording? (2marks)

.....
.....

c. Outline any **four** our styles of performance in this recording. (4marks)

.....
.....
.....
.....

d. State any **two** roles of vocal embellishments. (2 marks)

.....
.....

6. Prescribed Western:

Rondo Alla Turca by W.A. Mozart:Movement 3 from Sonata No. 11, K.331

By use of bar numbers, analyze this work showing the different sections of sonata form. (10 marks)

.....
.....
.....

7. UNPREPARED ANALYSIS

Study the music below and answer the questions that follow.

Allegretto grazioso ♩=80

5
10
Fine
15
20
25
30
D.C al Fine

- a) Identify the melodic techniques used in the bars indicated below. (2marks)
- i) Bar 25- bar 28.....
 - ii) From the beginning to bar 8.....
- b) State how this piece is to be performed in relation to the term **D.C al Fine**. (2mark)

.....
.....
.....

c) Identify the form of this music. (1mark)

.....

d) Name the final cadence of this music. (1mark)

.....

SECTION C (General music knowledge 16 marks)

8. a) Define any **three** of the following; (3marks)

(i) Sonata

.....
.....

(ii) String quartet.

.....
.....

(iii) Serenade

.....
.....

(iv) Opera

.....
.....

(v) Décor.

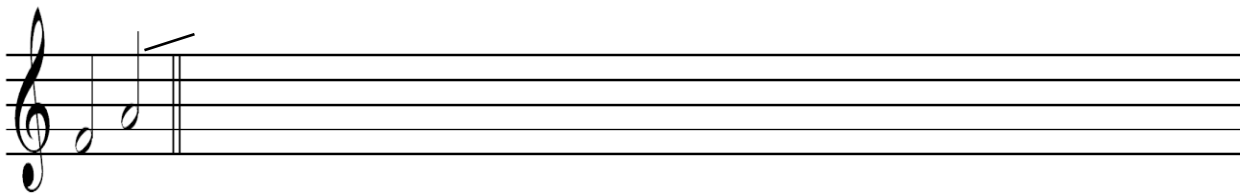
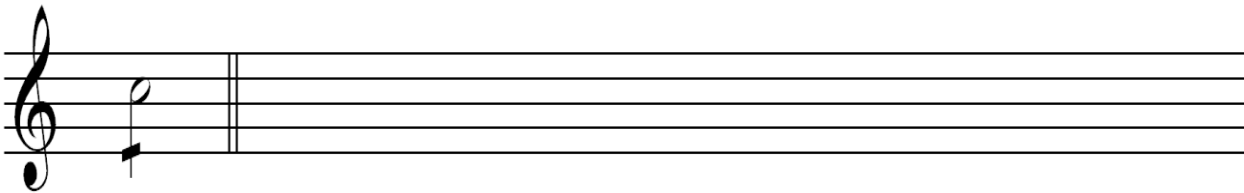
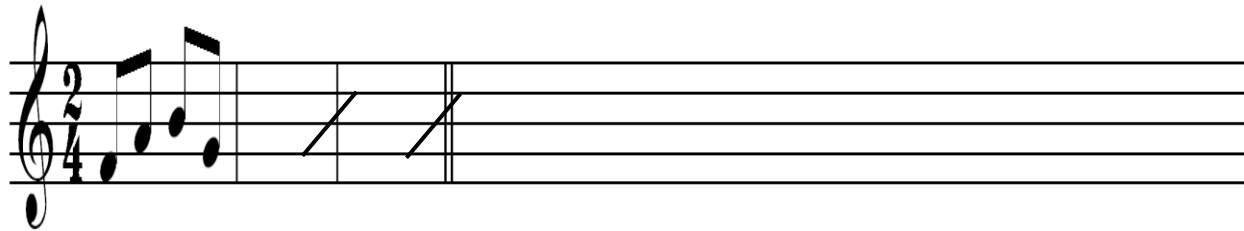
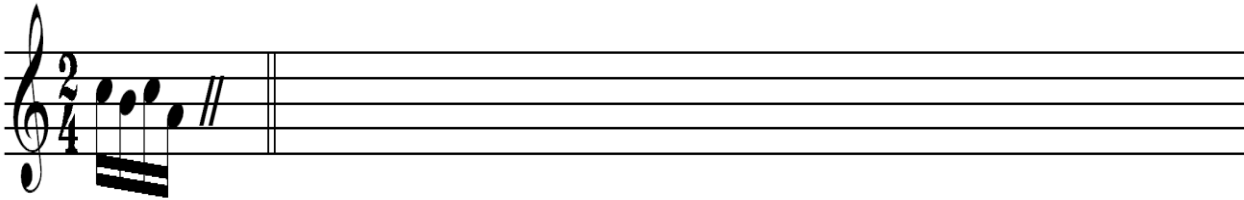
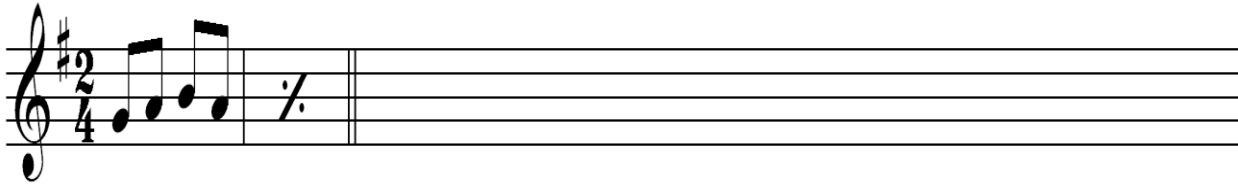
.....
.....

(vi) Choreography

.....
.....

(b) Rewrite the following as they would be played.

(5 marks)



c) State any **three** roles of **ong'eng'o** in a musical performance.

(3 marks)

.....
.....
.....

d) Outline any **two** ways in which preservation of Kenyan traditional music has been hampered. (2 marks)

.....
.....
.....

e) Name any **three** equipment used in a music recording studio.

(3 marks)

.....

501/1
FRENCH
PAPER 1
(Listening Comprehension, Dictation and comprehension)
APRIL - 2020
TIME: 2 ¾ HOURS

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020

FORM FOUR

Kenya Certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES

- Write your name and index number in the spaces provided above.
- This paper has three sections
- In section **I**, you have five minutes to read through the questions before the test starts. Before answering the questions, you will listen to several recorded passages on a tape. For each passage, you will answer questions as indicated to you on the tape.
- In section **II** you will listen to recorded materials once and start writing during the second listening.
- In section **III**, choose one composition from question 1 and one from question 2
- Answer all the questions in the spaces provided.

FOR EXAMINERS USE ONLY

SECTION	MAXIMUM SCORE	CANDIDATE'S SCORE
I	15	
II	05	
III	25	
TOTAL SCORE	45	

This paper consists of 4 printed pages, candidates should check to ascertain that all pages are printed as indicated and that no question is missing.

SECTION I

Listening comprehension

Write answers to question 1-5 in the spaces provided.

PASSAGE 1

1. a) Il s'agit d'un dialogue entre un homme et sa _____ (½ point)
b) Qu'est ce que Julien a reçu pour son anniversaire?
_____ (½ point)
c) Quelles sont les couleurs favorites de Julien?
i) _____ (½ point)
ii) _____ (½ point)
d) Pour fêter l'anniversaire de Julien on a _____ et (1 point)

PASSAGE II

2. a) Ce dialogue parle _____ de Michel qui commence le
_____ (1 ½ point)
b) Selon le dialogue on trouve les _____ de l'homme au _____ national
de Nairobi.
c) Michel pense que ce sont les _____ nationaux que les touristes aiment au
Kenya.
d) Pour Michel les _____ de Mombasa c'est un paradis.

PASSAGE III

3. a) Selon le texte on vend les tickets de lotterie dans un _____ pas
_____ de la gare. (1 point)
b) On parle de combien de personnes dans ce passage? (½ point)
c) La jeune fille a reçu _____ shillings et elle est partie chercher
_____ (1 point)
d) L'homme a disparu parce qu'il a _____ la
_____ (1 point)

501/2
FRENCH
PAPER 2
(Reading Comprehension and Grammar)
APRIL, 2020
TIME: 1 ½ HOURS

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR

Kenya Certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES

- *Write your name and index number in the spaces provided above.*
- *This paper has two sections*
- *Answer all the questions in the spaces provided*
- *Candidates should answer the questions in French*

FOR EXAMINERS USE ONLY

SECTION	MAXIMUM SCORE	CANDIDATE'S SCORE
I	15	
II	15	
TOTAL SCORE	30	

This paper consists of 5 printed pages, candidates should check to ascertain that all pages are printed as indicated and that no question is missing.

SECTION 1

Read the following passages and answer the questions that follow after each passage.

PASSAGE 1

En Juin dernier, le président de la République a demandé au Ministre de Travail de préparer un rapport sur la vie des employés. Le Ministre vient de présenter ce rapport. Il a trouvé que l'écart entre les classes sociales est beaucoup plus grand en France qu'en d'autres pays de l'Union Européenne. A fin de résoudre ce problème, il propose une augmentation de salaire pour les cadres les plus bas; une réduction des heures de travail ainsi que des mesures supplémentaires contre les accidents.

QUESTIONS

1. Quel rapport est présenté au Président de la République?
_____ (½ point)
2. Pour améliorer la vie des employés, il faut
 - i) _____ (1 point)
 - ii) _____ (1 point)
3. A part la France comment est l'écart entre les classes sociales dans l'Union Européenne ?
_____ (½ point)

PASSAGE 2

Chère tante Marie-Ange,

En lisant votre journal, vous êtes très aimable avec nous les jeunes; c'est pourquoi j'ai décidé de vous envoyer un petit mot. Dans ma famille, je suis l'enfant unique et je m'inquiète beaucoup de ma condition féminine. Cependant, il est impossible pour moi d'en parler à ma mère. J'ai déjà quinze ans mais quand je me regarde dans le miroir, je ne vois qu'une gamine très maigre; ma poitrine n'est pas développée comme celle de mes proches amies et le pire c'est que je ne suis pas de grande taille! Selon vous, ma situation est-elle grave? Est-ce que je dois aller voir un médecin? J'attends votre réponse avec beaucoup d'impatience. A très bientôt j'espère.

QUESTIONS

a) i) L'auteur, c'est une fille ou un garçon?

_____ (½ point)

ii) De quel problème parle l'auteur

_____ (½ point)

b) Cet auteur n'est pas content de.....

i) _____ (½ point)

ii) _____ (½ point)

c) Trouvez dans le passage l'expression équivalente du mot "écrire"

_____ (1 point)

d) Quelle solution est suggérée?

_____ (1 point)

PASSAGE 3

La sécheresse, c'est une condition de l'environnement qui est le résultat d'un manqué de pluie adéquate; le niveau moyen de pluie pour une région reste bas et au-dessous du moyen acceptable. Dans les régions sans irrigation, ce manqué a eu de mauvaises conséquences sur l'agriculture. Les périodes de sécheresse sont accompagnées d'habitude de températures très élevées. Ces températures intensifient le stress aux plantes et affectent les produits agricoles. Les feux dans les forêts et les herbes, deviennent plus fréquents et se multiplient vite à cause des conditions sèches. Puis, une utilisation incorrecte de la terre amène souvent à l'érosion causée par le vent.

a) De quelle saison est-ce qu'on parle?

_____ (½ point)

b) Les résultats de ces températures sont

_____ (½ point) aux
plantes et _____ (1 point)

c) Quelle est la cause des feux sauvages?

_____ (1 point)

d) Si on utilise mal le sol, il y aura

_____ (½ point)

PASSAGE 4

Il y a un moyen important pour réduire la pollution: conserver l'énergie. Ceci réduit la pollution de l'air et de l'atmosphère qui est créée par les usines. Une demande diminuée pour le pétrole aurait comme résultat moins de pollution dans les océans. Il serait préférable de conduire moins aussi, l'une des meilleures façons de sauver l'énergie et d'éviter la pollution de l'air. Réutiliser les produits peut prévenir la pollution; par exemple, les bouteilles de lait en verre peuvent être recyclées mais les cartons de lait en papier doivent être jetés. Le recyclage empêche la pollution cause par la fabrication d'un nouveau produit, ainsi que la pollution créée lorsqu'un produit est jeté dehors comme déchet.

a) D'après le texte, à part la pollution de l'air, quelle autre pollution est mentionnée? (1 point)

b) Donnez trois solutions pour réduire la pollution offertes par l'auteur de ce texte.

i) _____ (½ point)

ii) _____ (½ point)

iii) _____ (½ point)

c) Cherchez dans le passage, l'équivalent de:

i) il serait mieux _____ (½ point)

ii) la production _____ (½ point)

iii) quand _____ (½ point)

SECTION II

GRAMMAIRE

(15MKS)

For each of the following questions, complete the response correctly. Avoid unnecessary changes.

EXAMPLE

Je vais au marché de Nairobi.

Hier, _____

Hier, je suis allé au marché de Nairobi.

a) Vas-tu à Mombasa?

Non, _____ (1 point)

b) Tu ne vas pas en ville?

Si, _____ (1 point)

c) Ils viennent voir les travaux?

Hier, _____ (1 point)

d) Est-ce que Madame Eunice boit toujours de la bière?

Non, _____ (1 point)

e) Tu refais ton travail?

Il faut que _____ (1 point)

Fill in the blanks with ONE word only.

Aujourd'hui, _____ ministre de l'Education rencontre les chefs a qui il explique
_____ intentions _____ gouvernement. Cependant, le President est
actuellement _____ vacances, mais il rentre bientôt _____ assister à une réunion
international.

c) Associez les deux colonnes.

1) Combien d'argent est-ce qu'on pare au charcutier?

A) Oui elle m'a beaucoup plu.

2) Qu'est ce que tu as surtout aimé a Paris?

B) Vous en voulez?

3) L'appératif est servi?

C) On lui dois £60.

4) Liz veut travailler chez un vétérinaire

D) On l'a déjà fait.

5) Tu as préparé des pommes?

E) Le promenade en bateau

mouche.

F) Elle adore les animaux

REPONSES

1) _____

2) _____

3) _____

4) _____

5) _____

501/3
FRENCH
PAPER 3
APRIL-2020

SET 2 CHAMPIONS APRIL HOLIDAY EXAMINATION 2020
FORM FOUR
Kenya Certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES

1. Spend 15 minutes with each candidate.
2. Give them 5 minutes to prepare before the exam.
3. Expose them to the following activities.
 - Lecture (5 minutes)
 - Exposé (5 marks)
 - Conversation générale (15 marks)

Total = 25 marks

INSTRUCTIONS TO CANDIDATES

Read through the text overleaf and prepare to read it aloud to the examiner.

- a) This paper contains three sections.
- b) In section I, you will be required to choose one card of the four cards issued, for the reading Aloud section.
- c) In section II, you will be required to choose one card of the five cards issued, for the Exposé section. You have 2 minutes to speak on the subject matter, without interruption from the examiner.
- d) In section III, you will be required to answer the conversation questions from the topics earlier issued.
- e) Each candidate will be given 10 minutes to prepare.

PASSAGE A

- Excusez-moi mademoiselle, mais tu as pris ma place.
- Qu'est-ce que vous dites, monsieur?
- Tu t'es trompée de siège.
- Non monsieur, ce n'est pas vrai!
- Mais si. Regarde mon bille! J' ai réserve le siège numéro trente-cinq.
- Ça oui! Mais moi, je m'assieds sur numéro trente trions.
- Regarde le siège devant. C'est le numéro...
- Ah oui! Je m'excuse bien, j'en suis désolée monsieur. Alors, je me déplace.
- Non, ce n'est rien! Installe-toi. On se déplace quand le bus fait un arrêt. Ce sera à Makindu, je crois.
- Sans doute, oui. Merci bien, vous êtes fort gentil.

SECTION I

Reading Aloud

PASSAGE B

- Alors, ton nom, âge, résidence et numéro de portable?
- Daniella Ladouce, j'ai 19 ans et mon numéro c'est le 35 56 76.
- Merci. Qu'est-ce que tu as?
- De la fièvre, docteur. Et le ventre me fait terriblement mal.
- Beaucoup, docteur.
- La tête et les muscles te font mal aussi?
- Exact. Et le nez fait un découlement... Alors?
- Tu as le H 1 N 1, mais ... n'et t' inquiète pas. Ecoute ce que tu dois faire.
- Oui, oui, monsieur.
- Téléphone a toute ta famille. Dis-lui de se rendre a i' hôpital tout de suite.

SECTION I

Reading Aloud Passage C

C'était le treize September. D'un bout a l'autre du Canada, il y avait des gens qui couraient qui marchaient, qui pédalaient et qui patinaient, parmi eux, il y avait des jeunes et des vieux, des athlètes et des gens ordinaires comme vous et moi. A Montréal 2000 personnes ont participé a la course. Il y avait même une grand-mère de quatre-vingt-dix ans. Elle dit qu'elle voulait participer même si ça allait lui prendre toute la journée.

SECTION I

Reading Aloud Passage D

Il y a très longtemps, certains agriculteurs quittèrent l'Angleterre. Ils avaient l'intention de créer des fermes au Kenya. L'un de ces hommes s'appelait James Fletcher. Il avait une ferme avec des moutons en Angleterre et il voulait créer une ferme au Kenya.

James Fletcher trouva des terrains près de Naivasha. A Naivasha il y avait un joli lac où les flamants rose venaient tous les ans. Il créa sa ferme avec seulement dix moutons. Au bout de cinq ans, Monsieur Fletcher avait un grand troupeau de Moutons.

SECTION II

Candidate's card A

Vous entrez à l'université septembre prochain et il y a beaucoup de temps avant d'y aller. Parlez de ce que vous allez faire en attendant.

Candidate's card B

École interne ou externe? Laquelle préférez-vous?

Candidates card C

Le droit de l'homme n'est pas observe. Discutez.

Candidate's card D

Comment peut-on éviter des drogues dans des institutions éducatif.

Candidate's card E

On parle beaucoup sur le SIDA. Que savez- vous personnellement sur le SIDA.

**SECTION III
CONVERSATION**

The conversation will be on any five of the following topics.

- 1) La famille
- 2) La vie scolaire
- 3) Les sports et les loisirs
- 4) Le tourisme.
- 5) La vie contemporaine.
- 6) La vie à la campagne et la vie en ville.
- 7) La santé et les maladies.
- 8) Les passe- temps.
- 9) La nouvelle technologie.
- 10) L'abus de drogue.

**COMPILED BY MR.GER. O. CHARLES
CHAMPIONS K.C.S.E REVISION SERIES
NATIONAL EXECUTIVE COORDINATOR/EXAMINER HISTORY/ AUTHOR
CHAMPIONS K.C.S.E REVISION HISTORY AND GEOGRAPHY BOOKS**

- ❖ **PAST K.C.SE PAPER ALL SUBJECTS 1996-2019**
- ❖ **MOCK PAPERS UPTO 2019**
- ❖ **SET BOOK VIDEOS 2020**
- ❖ **STUDY GUIDES FOR THE NEW SET BOOKS 2020**
- ❖ **POWER POINT SLIDES FOR ALL SUBJECTS 2020**
- ❖ **LATEST JOINT EXAMS QUESTIONS 2020**
- ❖ **HARD COPY REVISION MATERIALS FOR ALLSUBJECTS**

**CONTACT: 0725 733 640 FOR DELIVERY.
Service Beyond Expectation**