KCSE 2023 REVEALED

ALL SUBJECTS

SERIES 1

An Outline of Possible questions we expect in the Final KCSE 2023 Examinations. A Projection of what is likely to be examined in the much awaited KNEC Exams come November 2023.

SUBJECTS PREDICTED;

Mathematics, English, Kiswahili, Biology, Chemistry, Physics, History and Government, CRE, Geography, Business Studies, Agriculture, Computer Studies & Home-science

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CONFIDENTIAL

For Marking Schemes

Mr Isaboke 0746 222 000 / 0742 999 000

ALL THE BEST IN KCSE!

KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

CHRISTIAN RELIGIOUS EDUCATION

313/1

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

- *Write your name and admission number in the spaces provided above.*
- *This paper consists of six questions.*
- *Answer any **FIVE** questions in the answer sheet provided*
- *Each Question carries 20 marks*

FOR EXAMINERS USE ONLY

Questions No.	1	2	3	4	5	6	GRAND TOTAL
Marks							

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*Answer any **FIVE** questions*

1. (a) Outline the activities that took place in the second account of creation **Genesis 2:4b-25** **(8marks)**

(b) Identify the provisions given to human beings by God in Biblical creation stories **(6marks)**

(c) What are the consequences of breaking taboos in traditional African communities? **(6marks)**

2. (a) State **eight** ways in which God took care of the Israelites during the Exodus **(8marks)**

(b) How did the Israelites worship God when they were in the wilderness? **(5marks)**

(c) Identify **seven** challenges that Christians face while practicing their faith in Kenya today. **(7marks)**

3.(a) Explain **six** ways that king David used to promote the worship of God in Israel **(6marks)**

(b) Identify ways in which King Jeroboam contributed to religious schism between Judah and Israel. **(8marks)**

(c) How does the church help to bring back members who have fallen from faith? **(6marks)**

4. (a) Describe **three** categories of true prophets in the Old Testament. **(6marks)**

(b) State ways in which the rich oppressed the poor during the time of Prophet Amos. **(8marks)**

(c) Give **six** reasons why Christians find it difficult to help the needy in society today **(6marks)**

5.(a) State **seven** promises that the Israelites made when they renewed their covenant with God during the time of Nehemiah (Nehemiah 10: 28- 39) **(7marks)**

(b) Identify the final reforms carried out by Nehemiah to restore the Worship of God in Judah **(6marks)**

(c) What problems do Christian leaders in Kenya face in their work today **(7marks)**

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6. (a) Identify **six** ways in which initiation rites have changed today **(6marks)**

(b) Give **eight** reasons for singing and dancing during initiation ceremonies in traditional African communities. **(8marks)**

(c) Give reasons why female circumcision is being discouraged in Kenya today **(6marks)**

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

CHRISTIAN RELIGIOUS EDUCATION

313/2

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

- *Write your name and admission number in the spaces provided above.*
- *This paper consists of six questions.*
- *Answer any **FIVE** questions in the answer sheet provided*
- *Each Question carries 20 marks*

FOR EXAMINERS USE ONLY

Questions No.	1	2	3	4	5	6	GRAND TOTAL
Marks							

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*Answer any **FIVE** questions*

1. (a) Outline Jeremiah's prophecies about the Messiah (Jeremiah 23: 5-6) **(6marks)**

(b) State **seven** similarities in the annunciation of the birth of John the Baptist and that of Jesus Christ **(7marks)**

(c) What challenges did John the Baptist face during his ministry? **(7marks)**

2.(a) Explain **four** teachings of Jesus on the qualities of a true disciple **(Luke 6:20-49)** **(8marks)**

(b) Outline the activities that took place during the feeding of the 5,000 (**Luke 9:10-17)** **(7marks)**

(c) Give **five** lessons learnt about Jesus from the feeding of the 5,000 **(5marks)**

3. (a) Outline the instructions that Jesus gave to the seventy-two disciples When he sent them on a mission. **(8marks)**

(b) Narrate the parable of the widow and the unjust judge. **(Luke18:1-8)** **(6marks)**

(c) Give **six** reasons why Christians should have faith in God. **(6marks)**

4.(a) Identify the gifts of the Holy Spirit according to Saint Paul. **(I Corinthians 12:7-11).** **(8marks)**

(b) Describe how the unity of believers is expressed in the image of the people of God **(1st Peter 2: 9 - 10).** **(6marks)**

(c) State **six** ways in which Christians are able to identify those who posses the gifts of the **holy spirit** **(6marks)**

5. (a) Outline the traditional African teaching on Leisure **(6marks)**

(b) Identify Christian criteria for evaluating the use of Leisure **(7marks)**

(c) Explain the dangers of using illicit drugs among the youth in Kenya Today **(7marks)**

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6. (a) Give **six** reasons why laws are important to the people of Kenya. **(6marks)**

(b) State **seven** rights of a Kenyan citizen. **(7marks)**

(c) Give reasons why Christians in Kenya are against capital punishment **(7marks)**

KCSE 23

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

HISTORY AND GOVERNMENT

311/1

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

a) *The paper consists of three sections A, B and C*

b) *Answer all question in section A*

c) *Choose any THREE questions in section B and any TWO questions in section C*

FOR EXAMINERS USE ONLY

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

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SECTION A (25MKS)

Answer all questions in this section

1. Identify the branch of history that deals with occupation of people **1mk**

2. Identify two earliest inhabitants in Western Kenya **2mks**

3. Give the name of the clan council of elders among the Nandi **1mk**

4. Give two functions of mission centers established by missionaries **2mks**

5. State one right that is limited for a person held in custody in Kenya 1mk

6. Identify one symbol of national unity **1mk**

7. Give one importance of repeal of section 2A of the constitution **1mk**

8. State two survival right of a child in Kenya **2mks**

9. Name the leader of Imperial British East Africa Company in 1888 **1mk**

10. Name two groups of Luo communities that collaborated with the British **2mks**

11. Identify the main reason why Africans were pushed into the reserves **1mk**

12. State two affiliate trade unions of the Kenya Federation of Registered Trade Union (KFRTU) **2mks**

13. Identify the opposition party formed by Oginga Odinga in 1966 **1mk**

14. Give two classifications of bills in law making **2mks**

15. State the sources of Nyayo philosophy 2mks

16. State two roles of art and theatre in Kenya **2mks**

17. Give one type of expenditure for national government **1mk**

SECTION B (45MARKS)

Answer any three questions

18. a) Outline the results of the Plain Nilotes migration to Kenya **5mks**

b) Describe the social organization of the Akamba **10mks**

19. a) State **five** measures used by the colonial government to provide labour in settler farms **5mks**

b) Explain the results of the Nandi resistance **10mks**

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20. a) Give **five** reasons why Africans moved to urban centres in colonial Kenya **5mks**

b) Explain the role of women in the Mau Mau movement **10mks**

21. a) Give **five** principles of African Socialism **5mks**

b) Explain **five** functions of the National Land Commission **10mks**

SECTION C (30MKS)

Answer any two questions

22. a) State **three** circumstances under which one can lose citizenship by birth **3mks**

b) Identify **six** social and economic issues that cause conflict **12mks.**

23. a) Give **three** groups that monitor human rights in Kenya **3mks**

b) Describe the constitution making process **12mks**

24. a) Identify **three** Principles of the electoral process in Kenya **3mks**

b) Explain challenges facing the county governments **12mks**

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

HISTORY AND GOVERNMENT

311/2

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

a) *The paper consists of three sections A, B and C*

b) *Answer all question in section A*

c) *Choose any THREE questions in section B and any TWO questions in section C*

FOR EXAMINERS USE ONLY

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

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SECTION A (25MKS)

Answer all questions in this section

1. What Pre-history? **1mks**

2. Identify two types of shelters man used during the Middle Stone Age period. **2mks**

3. Give two contributions of Americans to the agrarian revolution. **2mks**

4. Name the two methods of trade. **2mks**

5. State one disadvantage of pack animals in provision of transport. **1mk**

6. Mention two uses of newspapers in the society today. **2mks**

7. State one way in which the use of bronze changed the Africans way of life. **1mk**

8. Identify one factor that facilitated scientific revolution. **1mk**

9. List one factor that undermined Meroe. **1mk**

10. State two functions of the Katikiro among the Buganda in the 19th century. **1mk**

11. Give one source of the British Constitution. **1mk**

12. Identify one African territory that was colonized by the Italians. **1mk**

13. Outline two duties of the emirs in Northern Nigeria during colonialism. **2mks**

14. State one liberation movement that was involved in Mozambique's struggle for independence. **1mk**

15. Give two reasons why USA was neutral in the First World War up-to 1917. **2mks**

16. State two permanent members of the United Nations Organization (UNO) Security council **2mks**

17. Identify one type of elections in Britain. **1mk**

SECTION B (45 MARKS)

Answer any three questions in this section

18. a. State **three** reasons why Africa is considered as the cradle of mankind. **3mks**

b. Explain **six** results of the Agrarian Revolution in Britain. **12mks**

19. a) State **five** challenges faced by traders in the Trans-Saharan trade. **5mks**

b) Discuss **five** reasons for the decline of the Trans-Atlantic trade. **10mks**

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20. a) State **three** advantages of road transport. **3mks**

b) Explain **six** solutions to challenges facing industrialization in the Third World countries. **12mks**

21. a) State **five** causes of the Shona-Ndebele (Chimurenga) war against the British colonization. **5mks**

b) Explain the methods used by nationalists in Ghana in their struggle for independence. **10mks**

SECTION C (30 MARKS)

Answer any two questions in this section

22. a) State five political results of the First World War. **5mks**

b) Explain the causes of the Second World War. **10mks**

23. a) State five achievements of the Commonwealth. **5mks**

b) Explain the challenges facing the Non-Aligned Movement. **10mks**

24. a) State three levels of elections in the United States of America. **3mks**

b) Explain six functions of the president in India. **12mks**

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

GEOGRAPHY

312/1

PAPER 1

TIME: 2¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

a) *Write your name and Admission number in the spaces provided above.*

b) *This paper has **TWO** sections: A and B.*

c) *Answer **ALL** the questions in section A. In section B answer **QUESTION 6** and any other **TWO***

d) *ALL answers **MUST** be written in the Answer Booklet provided.*

e) *Do not remove any pages from this booklet.*

FOR OFFICIAL USE ONLY

SECTION A	6	7	8	9	10	TOTAL

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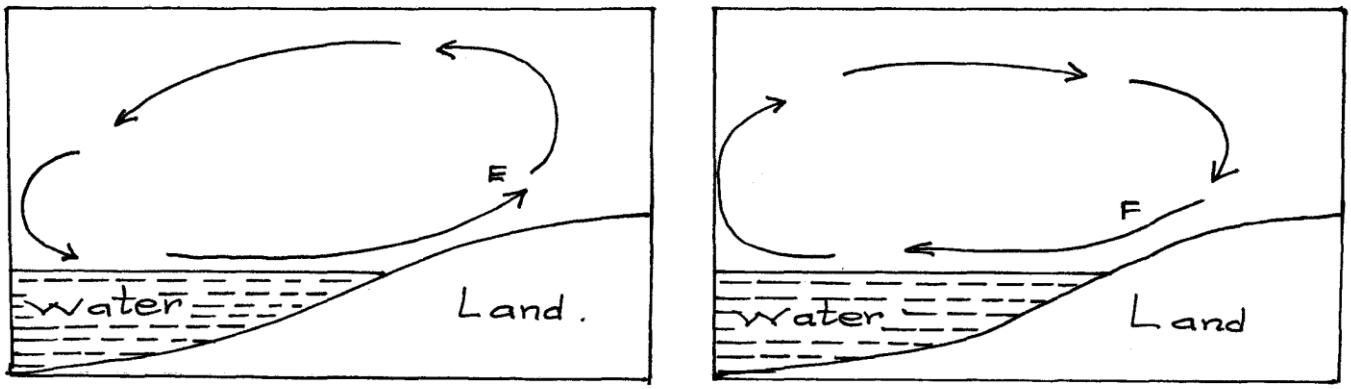
SECTION A (25 MARKS)

*Answer **all** the questions in this section.*

1. a) **Define** the term Geography **(2mks)**

b) What is the relationship between Geography and Biology **(2mks)**

2. a) **Use** the diagram below to answer the following questions



i) Name the air currents marked E. **(1mk)**

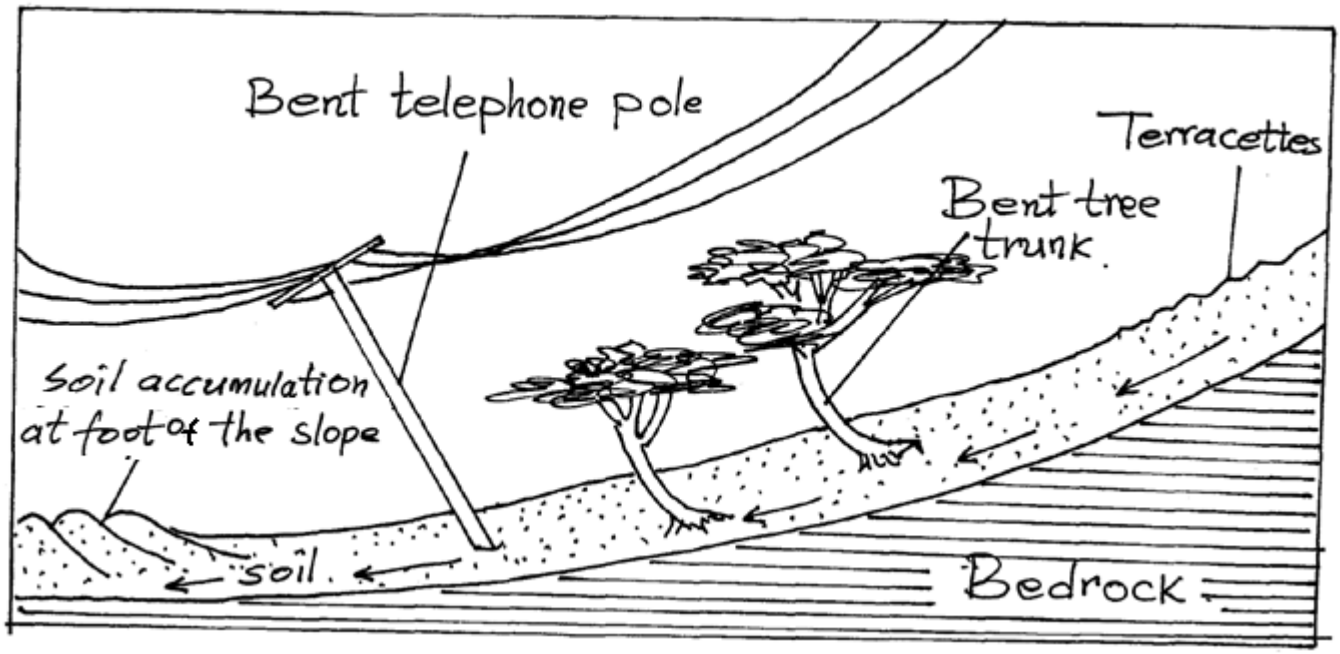
ii) Why does the air current marked F flow at night. **(3mks)**

b) Give reason why air cools as it rises. **(2mks)**

3. (a) **Define** folding. **(2mks)**

b) **List** four types of folds. **(4mks)**

4.) The diagram below illustrates a mass wasting process. Use it to answer question (a) and (b)



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a.) Identify the process. **(1mk)**

b.) Explain how the process occurs . **(3mks)**

5. a.) What is a river profile? **(2mks)**

b.) Name the three stages of a river profile. **(3mks)**

SECTION B

Answer Question 6 and Other Two Question From This Section

6. Study the map of **Kisumu East 1: 50,000 (Sheet 116/2)** provided to answer questions.

(a) i) Convert the map scale into a statement scale. **(2 marks)**

ii) Identify two methods that have been used to represent relief on the map. **(2 marks)**

iii) Name two drainage features found in grid square 0384. **(2 marks)**

(b) Give the six figure grid reference of the Air Photo Principal point to the East of Obumba School. **(2 marks)**

(c) Describe the relief of the area covered by the map. **(5 marks)**

(d) i) Citing evidence, name three social services offered in the area covered by the map. **(6 mrks)**

ii) Explain three factors that may have influenced the distribution of settlements in the area. **(6 marks)**

7. a) i) Define the term rock **(2mks)**

ii.)Give two ways of classifying rocks **(2mks)**

b) Describe the following characteristic of minerals **(6mks)**

- Lustre
- Colour
- Hardness

ii.)Give the changes that occur on sedimentary rocks when subjected to intense heat and pressure **(4mks)**

c. i) State the condition necessary for the growth of coral **(3mks)**

ii.) Describe how coral rocks are formed **(4mks)**

d.)You are planning to carry out a field study on rocks

i.) List two methods of recording data you are likely to use **(2mks)**

ii.)Give two follow up activities of your study **(2mks)**

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8. a.) **What** is Vulcanicity **(2mks)**

b.) i) Apart from Sill name other intrusive Volcanic features **(3mks)**

ii.) Describe how the following features are formed

- A sill. **(5mks)**
- Hotspring. **(5mks)**

iii) **Differentiate** between lava and magma. **(2mks)**

iv.) **Explain** four negative effects of vulcanicity. **(8mks)**

9.) a.) **i) What** is the process through which wave transport the eroded materials along the coast. **(1mk)**

ii.) Give three factors that influence wave deposition. **(3mks)**

b i.) Name two types of submerged coast. **(2mks)**

ii.) State three characteristic of emerged highland coast. **(3mks)**

c.) By the use of well labeled diagrams, describe the formation of a spit. **(7mks)**

d.) Student from Moi secondary school are planning to conduct a field study on wave erosional features to areas along the coast.

i.)Give three activities they will undertake while in the field. **(3mks)**

ii.) Name three erosional features they are likely to identify. **(3mks)**

iii.) Outline three problems they are likely to face while in the fiel*d.* **(3mks)**

10.(a)(i) Identify two processes in which ice erodes **(2mks)**

ii.) Name four types of glacial moraine **(4mks)**

b.) Give three ways in which ice moves **(3mks)**

c.) i) Apart from Aretes, identify three other ice erosional features in highland areas **(3mks)**

ii.)Describe how an Aretes is formed **(5mks)**

d) Explain the significance of upland glaciated features to human activities **(8mks)**

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

GEOGRAPHY

312/2

PAPER 2

TIME: 2¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

a) *Write your name and Admission number in the spaces provided above.*

b) *This paper has **TWO** sections: A and B.*

c) *Answer **ALL** the questions in section A. In section B answer **QUESTION 6** and any other **TWO***

d) *ALL answers **MUST** be written in the Answer Booklet provided.*

e) *Do not remove any pages from this booklet.*

FOR OFFICIAL USE ONLY

SECTION A	6	7	8	9	10	TOTAL

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SECTION A (25 MARKS)

*Answer **all** the questions in this section.*

1. (a) Name two exotic breeds of dairy cattle reared in Kenya. **(2mks)**

(b) State three physical conditions that favour dairy farming in Denmark. **(3mks)**

2. (a) State two climatic conditions that favour the growing of oil palm in Nigeria**.** **(2mks)**

(b) Give two problems experienced in the marketing of palm oil in Nigeria. **(2mks)**

3. The table below shows petroleum production in thousand barrels per day for countries in the Middle East. Use it to answer question (a)

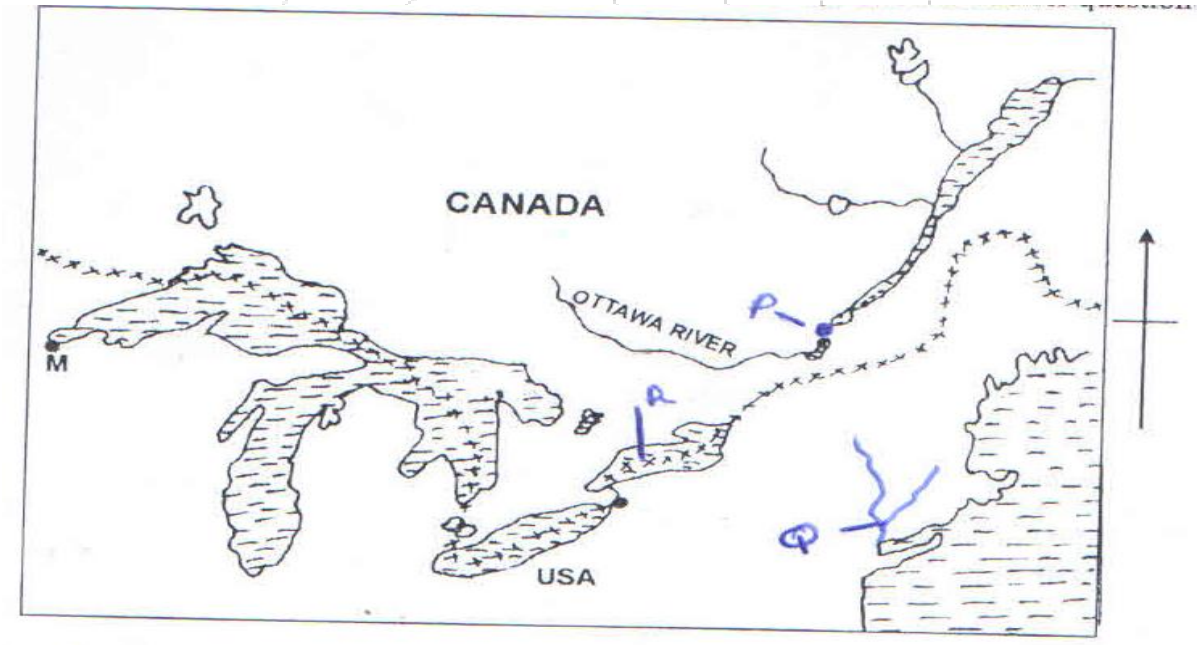
Country	Production in '000' barrels
Iran	3,800
Kuwait	2,550
Qatar	800
Saudi Arabia	9,600
United Arab Emirates	2,000
Iraq	1,900

(a) **(i)** What is the difference in production between the highest and the lowest producer? **(1mk)**

(ii) What is the total amount of petroleum produced in April 2006 in the region? **(2mks)**

(b) State three conditions that are necessary for the formation of petroleum.

4. Below is a sketch map showing part of the Great Lakes and St. Lawrence Sea Way. Use it to answer question (a)



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(a) Name

(i) The port marked P. **(1mk)**

(ii) The canal marked Q. **(1mk)**

(iii) The lake marked R. **(1mk)**

(b) State three ways in which great lakes and St. Lawrence Sea Way has contributed to the growth of industries in the region. **(3mks)**

5. (a) Apart from HIV and AIDS, give other causes of mortality in East Africa.

(c) State two ways in which the spread of HIV and AIDS in Kenya may slow down economic development.

SECTION B (75 MARKS)

(Answer question 6 (compulsory) and any two other questions from this section)

6. The table below shows the number of tourists who visited Kenya from various parts of the world in 2005 and 2006. Use it to answer questions (a) and (b).

Place of origin	2005	2006
Europe	942,000	965,000
Africa	120,000	154,000
Asia	97,000	128,000
North America	94,000	103,000
Australia & New Zealand	19,000	24,000
All other countries	29,000	41,000
Total	1,301,000	1,415,000

Source: Central Bureau of Statistics.

(a) (i) Which continent had the highest increase in the number of tourist visiting Kenya between 2005 and 2006. **(2mks)**

(ii) Calculate the percentage increase of the number of tourists from Newzeland and Australia between 2005 - 2006. **(2mks)**

(iii) Draw a divided rectangle 15cm long to represent the number of tourists 2006. **(10mks)**

(b) (i) State two advantages of using rectangles to represent geographical data. **(2mks)**

(ii) Give four reasons why in 2005 and 2006 there were more tourists visiting Kenya from Europe compared to those from other parts of the world. **(4mks)**

(c) Give five reasons why domestic tourism is being encouraged in Kenya. **(5mks)**

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7. (a) State three physical conditions that favour coffee growing in the central Highlands of Kenya. **(3mks)**

(b) Describe the stages involved in coffee production from picking to marketing. **(8mks)**

(c) Explain four problems facing coffee farming in Brazil. **(8mks)**

(d)Your geography class carried out a field study on coffee farm.

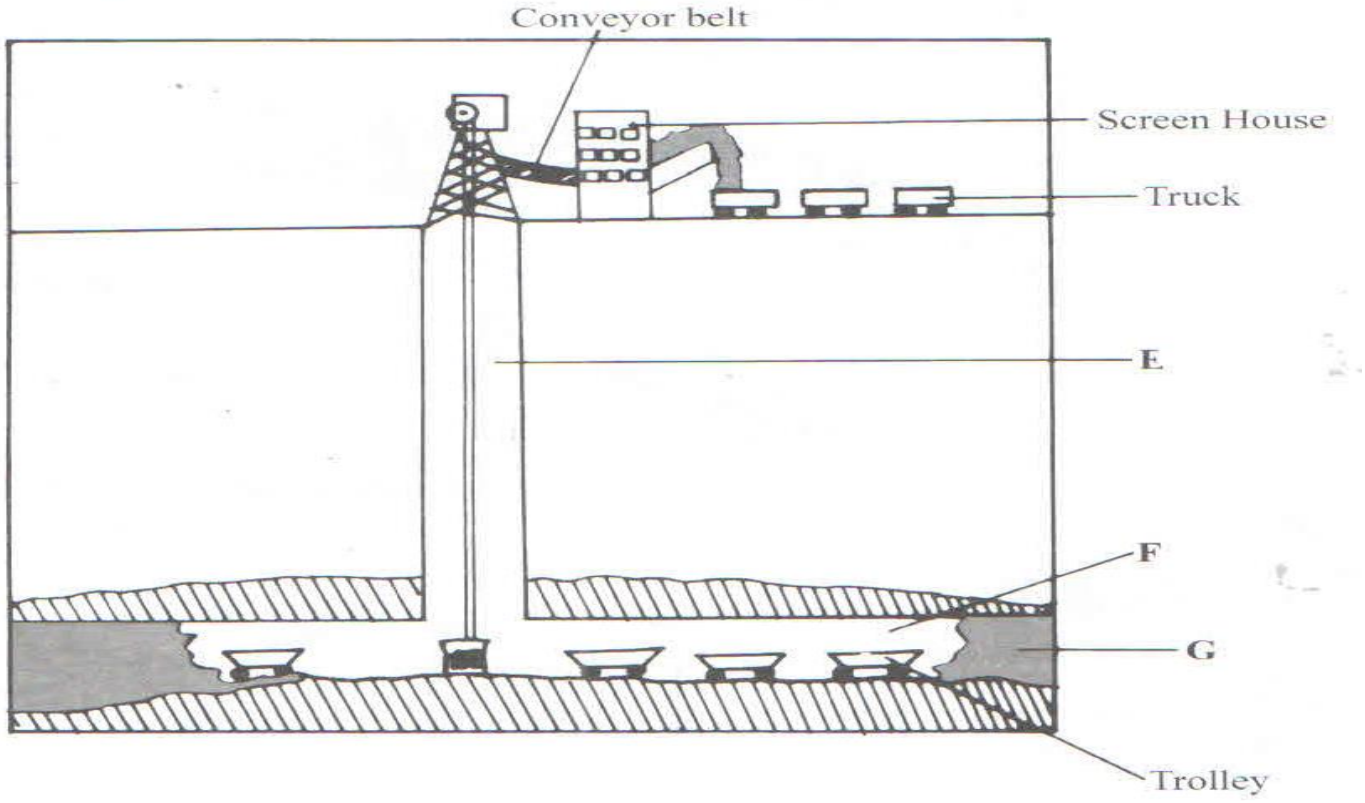
(i) State four methods the class may have used to collect data. **(4mks)**

(ii)During the field the class collected data on quantities of coffee produced in the farm in the farm in the last five years. State two methods the class may have used to present data. **(2mks)**

8. (a)(i) Name three places in Kenya where Limestone is mined. **(3mks)**

(ii) State two uses of trona? **(2mks)**

(b)(i) The diagram below shows shaft mining. Name the parts marked E, F and G. **(3mks)**



(ii) State two problems associated with shaft mining. **(2mks)**

(c) Explain four ways in which gold mining has contributed to the economy of South Africa. **(8mks)**

(d) Explain three negative effects of mining on the environment. **(6mks)**

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9. (a)(i) What is forestry? **(2mk)**

(ii) Explain three factors the growth of natural forests on the slopes of Mt. Kenya. **(6mks)**

(iii) State five factors that have led to the reduction of the area under forests on the slopes of Mt. Kenya. **(5mks)**

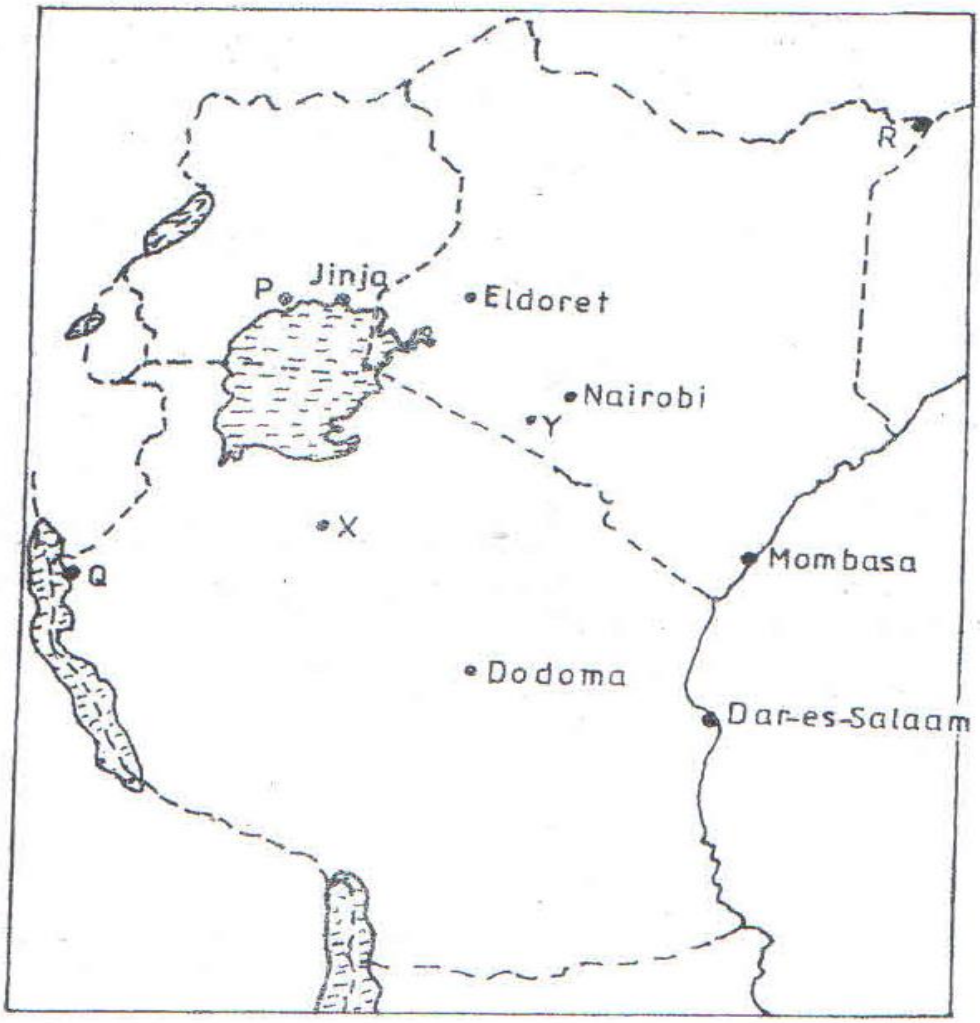
(b) Explain four measures that the government of Kenya is taking to conserve forests in the country. **(8mks)**

(c) Give the differences in the exploitation of softwood forests in Kenya and Canada under the following sub – headings.

(i) Period of harvesting. **(2mks)**

(ii) Transportation. **(2mks)**

10. The map below shows the location of some urban centres in East Africa. Use it to answer question (a).



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(a) (i) Name the town marked P,Q and R. **(3mks)**

(ii) Name the minerals that influenced the growth of the town marked X and Y. **(2mks)**

(b) Explain four factors that have led to the growth of Eldoret as a major town in Kenya.

(c) Compare the ports of Mombasa and Rotterdam under the following headings

(i) Site **(2mks)**

(ii) The hinterland. **(2mks)**

(iii) Transport links to the interior. **(2mks)**

(iv) Port facilities. **(2mks)**

(d) Explain two negative effects of urbanization on the neighbouring agricultural areas. **(4mks)**

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

ENGLISH

101/1

PAPER 1 *(Functional skills)*

TIME: 2 HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO STUDENTS

- *Write your **name and Index number** in the spaces provided.*
- *Sign and write the date of the examination in the spaces provided.*
- *Answer **all** questions in the spaces provided*
- *All your answers must be written in the spaces provided in this question paper.*
- *Candidates must answer all questions in English.*

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QUESTION	MAXIMUM SCORE	STUDENT'S SCORE
1	20	
2	10	
3	30	
TOTAL	60	

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*Answer **all** questions*

1. Imagine you are the school captain. One of the students in your school has been invited for a two weeks Young Leadership Program to be held during the holiday. The organizing committee requires further information about the student and has asked you to write a recommendation letter. Write the **Recommendation letter** addressed to;

The Secretary,

Young Leadership Program

P.O Box 16950,

00100

Nairobi

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2. *Read the passage below and fill the blanks provided with a suitable word.* ***(10 marks)***

Conducting a job search 1_____the Internet has definitely2_____-_____how job seekers contact hiring 3_____. The availability of copying and pasting a text version CV into a format 4_____ a company's Website has laid the foundation for an easier and 5_____ convenient process. 6_____ the Internet's convenience, a breeding ground for scam artists continues to 7_____each year as well. Identity thefts have increased to an overwhelming 10 million 8_____ per year and many of them are the result of phishing-not surprisingly, the employment industry is 9_____ attack as well. Knowing what to look for and how to stop fraud can be the best deterrent to ensuring you have a safe experience while conducting your 10_____ search.

3. Oral skills

a) Read the poem below and answer the questions that follow

Breakthrough

When I reached the threshold
The gate was quickly locked
Though loud and long knocked
They left me in the cold

I stood outside for long
Wondering what was wrong
Honour wouldn't let me
A peeping to be

When night tiptoed behind
Me a stranded pilgrim
Ah, I made up my mind
To fight on for my dream

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I crashed open the gate

Uncaring it was wrong

Wow, I was hugged with a song –

A welcome initiate

(Anonymous)

i) How has rhythm been achieved in the poem**?** **(2 marks)**

……

……

……

ii) How would you say the last two lines of the poem and why? **(2 marks)**

……

……

……

iii) Which words would you stress in the first stanza line 4 of this poem? **(2 marks)**

……

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……

b) Identify the silent letters in the following words **(4 marks)**

i) Honour

……

ii) Could

……

iii) Badge

……

iv) Receipt

……

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c) Identify the odd one out in each of the following sets of words **(4 marks)**

i) Respect, resist, religion, referee ……

ii) Resign, resolve, advise, waste……

iii) Usual, visual, pleasure, passion……

iv) Chef, chin, chic, chauffer……..

d) The underlining indicates the stressed word in the sentences below. Briefly explain what each sentence means. **(3 marks)**

i) Amanda rode the bus to school

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ii) Amanda rode the bus to school

……

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iii) Amanda rode the bus to school

……

……

e) A Non-governmental Organization is seeking to recruit form four graduates to serve as clerks. You have been invited for an interview. Explain briefly what you will do before and during the interview. **(6 marks)**

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f) Read the following telephone conversation and answer the questions that follow.

Secretary: (phone rings) Hello, Masomo Secondary School. How may I help you?

Caller: I want to speak to my mother.

Secretary: May I know who your mother is please?

Caller: (impatient and irritated) I have said I want to speak to my mother.

Secretary: Excuse me, I don't know who your mother is. Could you please tell me her name?

Caller: (shouting) you have been working in that institution for the last ten years and you don't know Mrs. Marita?

Secretary: (politely) oh, Mrs. Marita? She has just stepped out shortly. May I take a message for her please?

Caller: (bangs the receiver).

a) Identify three instances that show the caller's lack of etiquette **(3 marks)**

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b) What shows that the secretary demonstrates professional conversational skills during the telephone conversation? **(4 marks)**

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

ENGLISH

101/2

PAPER 2

(Comprehension, Literary appreciation and Grammar)

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO STUDENTS

i. *Write your* ***name, admission number*** *and* ***class*** *in the spaces provided.*

ii. *Sign and write the date of the examination in the spaces provided.*

iii. *Answer* ***all*** *the questions in the spaces provided.*

iv. *Candidates must answer all the questions in* ***English.***

FOR EXAMINERS' USE ONLY

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

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

When in early 1970s ultrasound confronted me with the sight of the embryo in a womb, I simply lost my faith in abortion on demand. I did not hold onto my old **convictions**. The change was in its way a clean and surgical conversion. I am by nature one that works out the conflicting data, weighs the opposing argument with great care, makes a decision and then acts upon it with no lingering backward glances.

By 1984 however, I had begun to ask myself more questions about abortion: What actually goes on in an abortion? I had done many but abortion is a blind procedure. The doctor does not see what he is doing. He puts an instrument into a uterus and he turns on a mortar and a suction machine goes on and something is vacuumed out; it ends up as little pile of meat in a gauze bag. I wanted to know what happened, so in 1984 I said to a friend of mine who was doing fifteen or maybe twenty abortions a day:' Look ,do me a favour,Jay .Next Saturday when you are doing all these abortions put an ultra sound on the mother and tape it on me."

He did, and when he looked at the tapes with me in the editing studio, he was so affected that he never did another abortion. Although I had not performed an abortion in five years, I was shaken to the very roots of my soul by what I saw. The tapes were shockingly amazing. Some of the tapes weren't of very good quality but I selected one that was of better quality than the others and began to show it at pro- life gatherings around the country.(I had my first contact with pro-life movement in 1981 when the then president of the National Right to Life Committee, Carolyn Gerster, had gotten in touch with me).

At the time, I was speaking at a pro-life meetings around the country in weekends, and the response to the tape was so intense and dramatic that finally I was approached by a man named Don Smith, who wanted to make my tape into a film. I agreed that it would be a good idea. That is how *The Silent Scream*, which was to generate so many furore, came to be made. We showed it for the first time in Fort Lauderdale, Florida, on January3, 1985. The reaction was instantaneous. Everybody was up in arms because *The Silent Scream* represented an enormous threat to the abortion forces, and because it **escalated** the war (it is not really a debate- we don't debate with each, we scream at one another). For the first time, we had the technology, and they had nothing.

The *Silent Scream* depicted a twelve- week- foetus being torn to pieces in the uterus by the combination of suction and crushing instrumentation by the abortionist. It was so powerful that pro choicers trotted out their heaviest hitters to denounce the tape. They very cleverly deflected the impact of the film into an academic cul- de- suc: a dispute regarding whether the foetus feels pain during an abortion. The **impetus** for the debate came from an on – the- record musing by the then President, Ronald Reagan, as to how much pain the foetus feels during an abortion.

(Source: The Hand of God: A journey from death to life by the Abortion doctor who changed his mind- Bernard N. Nathanson, MD)

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a) Based on your understanding of the entire passage, comment on the nature of the writer's 'old convictions'**.** **(2 marks)**

……

……

……

b) Explain why it was easy for doctors such as the writer to carry out abortions prior to introduction of ultrasound technology? **(2 marks)**

……

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c) What are the names that are commonly used to refer to the two opposing groups mentioned in the passage. **(2 marks)**

……

……

……

d) Briefly describe, in your own words, how those who supported abortion tried to undermine the impact of '*The Silent Scream'*. **(2 marks)**

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……

e) " I was shaken to the very roots of my soul by what I saw''. Rewrite this sentence beginning: **(What…)** **(1 mark)**

……

……

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f) Make notes on the way abortion is carried out according to this passage. **(4 marks)**

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g) Identify and illustrate the use of parenthesis in the passage, give two examples. **(2 marks)**

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h) Provide one example from the passage to illustrate the need for leaders to weigh their words carefully. **(2 marks)**

……

……

i) Explain the meaning of the following words as used in the passage. **(3 marks)**

i)convictions……

ii)escalated……

iii)impetus……

2. Read the extract below and answer the questions that follow.

Helmer: You blind, foolish woman!

Nora: I must try and get some sense, Torvald.

Helmer: To desert your home, your husband and your children! And you don't consider what people will say!

Nora: I cannot consider that at all. I only know that it is necessary for me.

Helmer: It's shocking. This is how you would neglect your most sacred duties.

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Nora: What do you consider my most sacred duties?

Helmer: Do I need to tell you that? Are they not your duties to your husband and your children?

Nora: I have other duties just as sacred.

Helmer: That you have not. What duties could those be?

Nora: Duties to myself.

Helmer: Before all else, you are a wife and a mother.

Nora: I don't believe that any longer. I believe that before all else I am a reasonable human being, just as you are – or, at all events, that I must try and become one. I know quite well, Torvald, that most people would think you right, and that views of that kind are to be found in books; but I can no longer content myself with what most people say, or with what is found in books. I must think over things for myself and get to understand them.

Helmer: Can you not understand your place in your own home? Have you not a reliable guide in such matters as that? – have you no religion?

Nora: I am afraid, Torvald, I do not exactly know what religion is.

Helmer: What are you saying?

Nora: I know nothing but what the clergyman said, when I went to be confirmed. He told us that religion was this, and that, and the other. When I am away from all this, and am alone, I will look into that matter too. I will see if what the clergyman said is true, or at all events if it is true from me.

Helmer: This is unheard of in a girl of your age! But if religion cannot lead you aright, let me try and awaken your conscience. I suppose you have some moral sense? Or – answer me – am I to think you have none?

Nora: I assure you, Torvald, that is not an easy question to answer. I really don't know. The things perplexes me altogether. I only know that you and I look at it in quite a different light. I am learning, too, that the law is quite another thing from what I supposed; but I find it impossible to convince myself that the law is right. According to it a woman has no right to spare her old dying father, or to save her husband's life. I can't believe that.

Helmer: You talk like a child. You don't understand the conditions of the world in which you live.

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QUESTIONS

a) Place the excerpt in its immediate context **(4 Marks)**

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b) Contrast the character traits of Nora and Helmer in this excerpt **(4 Marks)**

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c) Discuss **two** themes evident in this excerpt. **(4 Marks)**

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d) Identify and illustrate one style used in this excerpt. **(2 Marks)**

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e) From elsewhere in this play, mention how Nora spares her old dying father and saves her husband's life. **(4 Marks)**

……

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f) Identify Nora's tone in this extract. **(2 Marks)**

……

……

……

g) "You talk like a child." Which other two characters treat Nora as a child? **(2 Marks)**

……

……

……

h) Give the meaning of the following words as used in this excerpt. **(3 Marks)**

(a) Perplexes –

……

……

(b) Content-

……

……

(c) Conscience-

……

……

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3. *Read the poem given below and answer the questions that follow.*

AFTER THE WAR

The outcome? Conflicting rumours
As to what faction murdered
The one man who, had he survived
Might have ruled us without corruption.
Not that it matters now:
We're busy collecting the dead.
Counting them, hard though it is
To be sure what side they were on
What's left of their bodies and faces
Tells of no need but for burial
And mutilation was practiced
By right, left and centre alike.
As for the children and women
Who knows what they wanted
Apart from the usual things?

Food is scarce now, and men are scarce
Whole villages burnt to the ground
New cities in disrepair.
Their war is over. Somebody must have won.
Somebody will have won. When peace is declared.

a. According to the poem what are the consequences of war? **(4 Marks)**

……

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b. Identify two stylistic devices the poet employed and state their effectiveness. **(6 Marks)**

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……

……

c. What is the poet's attitude towards war? **(2 Marks)**

……

……

……

d. What meanings do the following lines convey?

i. Food is scarce now, and men are scarce. **(2 Marks)**

……

……

……

ii. Whole villages burnt to the ground. **(2 Marks)**

……

……

……

e. From the poem, why would you say that war is a no win situation? **(2 marks)**

……

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f. What is the mood of the poem? **(2 Marks)**

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……

4.a) *Rewrite the following sentences according to the instructions given without changing the meaning.* **(3 marks)**

i. Maria said the young men had stolen her sweet potatoes. (Rewrite beginning with: Maria accused…)

……

……

ii. It required a lot of planning and great courage to introduce free primary education in Kenya. (Begin: The…)

……

……

iii. The judges declared that Cheptoo had won. (To end with: … winner)

……

……

b) *<u>Use the correct form of the word in brackets in each of the sentences below</u>* ***(3 marks)***

i. The movie introduction was ……(a spectacle)

ii. Maimuna is an …… girl. (adventure)

iii. His punishment will be …….. to the others. (deter)

c) *Supply a question tag to the following sentences.* ***(2Marks)***

i) I am tall.

……

ii) Get out.

……

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d) *Use a preposition to complete the following sentences* ***(2marks)***

i.The buffalo charged .....Lilian

ii. The thief was oblivious..... the trap

e) *Use a phrasal verb to replace the underlined words* ***(3marks)***

i) The young man <u>resembles</u> his father.

……

ii) I cannot <u>understand</u> what he is saying.

……

iii) The meeting was <u>cancelled</u> at the last minute.

……

f) *Explain two different meanings of the following sentence.* ***(2 marks)***

i.The chicken is ready to eat.

……

……

……

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

ENGLISH

101/3

PAPER 3

(Creative composition and essays based on set text)

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS

a) *Answer **THREE** questions only*
b) *Questions **ONE** and **TWO** are compulsory*
c) *In question **THREE** choose only one of the optional texts you have prepared on*
d) *Each of your essays **MUST NOT** exceed 450 words*
e) *Each of your essay must **not** exceed **450** words.*
f) *Candidates must answer the questions in English.*

FOR EXAMINER'S USE ONLY

Question	Maximum Score	Candidate's Score
1	20	
2	20	
3	20	
Total Score		

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Answer ***three*** *questions only*

1. Imaginative Composition (Compulsory)

Either

(a) Write a story ending

……it was the most traumatic day I have ever had.

(b) Write a composition explaining how the emergence of religious cults in Kenya can be fought by both the government and the society.

2. The Compulsory Set Text

H. R. Ole Kulet, *Blossoms of the Savannah*

Someone's appearance is not always the reflection of their true being. With relevant examples from *Blossoms of the Savannah*, discuss this assertion.

3. The Optional Set Texts

*Answer any **one** of the following three questions*

Either

(a) The short story

Godwin siundu, *A Silent Song and Other Stories*

Life for people living with disabilities may be made better if they are accorded all the support they may need. Referring to the short story "A Silent Song" by Leonard Kibera, write an essay to show how the lives of people living with disabilities can be made worthwhile.

Or

(b) The Play

David Mulwa, *Inheritance*

It is not enough to heap blame of citizens suffering on their leader alone as his cronies and close allies have a role to play in the woes the citizens undergo. Basing your argument on the play 'Inheritance', discuss this assertion.

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Or

(c) The novel

Kazuo Ishiguro, *An Artist of the Floating World*

War causes untold suffering to the people. Using illustrations from the novel 'An Artist of the Floating World' by Kazuo Ishiguro, discuss this statement.

KCSE 23

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

KISWAHILI

102/1

KARATASI YA 1 (INSHA)

MUDA: SAA 1¾

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

MAAGIZO

(a) Andika insha mbili. Insha ya kwanza ni ya lazima.

(b) Kisha chagua insha nyingine moja kati ya hizo tatu zilizobaki.

(c) Kila insha isipungue maneno 400.

(d) Kila insha ina alama 20.

(e) Kila insha lazima iandikwe kwa lugha ya Kiswahili.

KWA MATUMIZI YA MTAHINI PEKEE

SWALI	UPEO	ALAMA
1	20	
	20	
	40	

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1. Lazima

Wewe ni Mwenyekiti wa Tume ya kupigana na ufisadi nchini. Umealikwa kuhutubia magavana kuhusu athari za ufisadi huku ukipendekeza hatua za kukabiliana na jinamizi hili. Andika hotuba utakayoiwasilisha.

2. Mitandao ya kijamii ina madhara mengi kuliko faida. Jadili.

3. Andika kisa kitakachodhihirisha maana ya methali: Achezeaye tope humrukia.

4. Andika insha itakayoanza kwa maneno yafuatayo:

Mara nilisikia ukemi mkali kutoka nje. Majibwa yalibweka kwa mfululizo kana kwamba yanasemezana**…**

KCSE 2023

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

KISWAHILI

102/2

KARATASI YA 2 (LUGHA)

MUDA: SAA 2½

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

MAAGIZO

a) *Jibu maswali* ***yote*** .

b) *Majibu yote yaandikwe katika* ***nafasi*** *ulizoachiwa katika kitabu hiki cha maswali.*

c) *Majibu yote ni* ***lazima*** *yaandikwe kwa lugha ya Kiswahili.*

KWA MATUMIZI YA MTAHINI PEKEE

Swali	Upeo	Alama
1	15	
2	15	
3	40	
4	10	
JUMLA	80	

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1. UFAHAMU ` **(alama 15)**

Unafiki katika dini pia unadhihirika kupitia injili ya ufanisi ambayo siku hizi inaenezwa kama moto kichakani ikilinganishwa na walivyosisitiza mitume kuwa, watu watubu na kuishi maisha ya utakatifu. Si ajabu kumsikia mchungaji akiitisha shilingi elfu moja ili kupata thibitisho la iwapo jina lako linapatikana katika kitabu cha uzima wa milele. Huu ni unafiki kwa sababu maandiko matakatifu hayakubaliani na hilo. Waumini hujikuta wakinunua miujiza. Viongozi wanafiki huwaambia watoe kiasi fulani cha pesa ili kupona kutokana na magonjwa sugu kama vile ukimwi,saratani, kupinda kwa midomo na kadhalika.

Nyadhifa katika dini pia huwavutia watu wengi.Utawapata baadhi ya viongozi wa dini wakitumia kila njia kubaki uongozini. Wao huwezah ata kuwanunua wafuasi ili wawapigie kura ama kuwaunga mkono

katika kinyang'anyiro cha cheo fulani. Uongozi hutoka kwa Mungu. Hata hivyo, baadhi ya viongozi wanaohubiri neno hilo la Mungu, utawapata wakiwa na mikutano ya siri ili kuwashawishi waumini kuhakikisha kuwa wamebaki uongozini.

Haina haja ya kusaza waumini. Baadhi yao pia ni wanafiki. Utawapata wakishiriki kikamilifu katika masuala ya dini, ilhali nia yao ni tofauti. Vijana waliopatikana katika msikiti huko Mombasa wakipewa 'mafunzo

va kidini ilhali bunduki na risasi pia zinapatikana mumo humo msikitini, ni mfano wa **ulaghai** na unafiki katika dini, (iwapo taarifa hizo ni za kweli). Wahubiri waliokuwa wakiendesha mafunzo hayo, ni wanafiki

kwa sababu nia yao katika nyumba ya Mungu ilikuwa mbaya ndiposa makabiliano kati yao na polisi ilichukua muda wa saa saba hivi.

Unafiki pia hujitokeza wakati ambapo baadhi ya viongozi wa dini hutumia dini kama daraja ya kuingia katika ulingo wa siasa. Wao hutumia madhabahu kufanyia kampeni ili kujitosheleza kisiasa. Kupinga maovu ya kisiasa kupitia dini ni sawa. Hata hivyo, kutumia dini kujipatia umaarufu ni kosa la kinafiki.

Ni ombi langu kuwa dini itatumiwa kulisha kondoo wala si **kuwapunja.** Maandiko matakatifu yanapigia debe utakatifu katika dini wala si ulaghai na unafiki. Lazima kila muumini atoe zaka na sadaka kama ilivyo katika

neno la Mungu. Hata hivyo nafasi hii isitumiwe na viongozi wenye ulafi kuwanyonya waumini wao. Mahali patakatifu ni lazima paheshimiwe wala pasitumiwe kama nyumba ya kupanga mashambulizi na maovu kwa wanadamu wasiokuwa na hatia.

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a) Kipe kifungu hiki anwani mwafaka. **(alama 1)**

……

……

b) Onyesha msambao wa unafiki katika dini. **(alama 4)**

……

……

……

……

……

c) Kwa nini waumini wanaonekana kuchanganyikiwa? **(alama 2)**

……

……

……

d) Kwa nini injili ya ufanisi imeshamiri kuliko ile ya toba? **(alama 2)**

……

……

……

e) Viongozi wengi wa kidini hawataki kung'atuka uongozini. Toa sababu moja. **(alama 2)**

……

……

……

f) Waumini wanalaumiwa kwa nini? **(alama 2)**

……

……

……

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g) Eleza maana ya maneno yafuatayo kama yalivyo tumika katika kifungu. **(alama 2)**

i) ulaghai

……

……

ii) kuwapunja

……

……

2. MUHTASARI

Kila niwazapo kisa hiki, machozi hunitoka si haba. Hali ya huzuni ikanikumbatia kusadifu kusononeka. Nikawa sina sinani majibu kwa maswali kochokocho. Ama kweli "majuto ni mjukuu huja kinyume".

Katika kijiji chetu cha Kazamwendo, tuliishi pamoja kwa umoja na udugu ukazagaa kotekote. Wanakijiji walisaidiana kwa lolote lile, shida ya mmoja ikawa shida ya wote. Ungewakuta wavyele waliobugia chumvi nyingi wakiwapa nasaha vijana kwa hekima isiyo na kifani. Tabia ya ufuska ikakemewa na maadili ya utu wema yakafunzwa kwa wote. Utovu wa nidhamu ukakashifiwa pasi na maficho wala tasfida.

Kukaja siku moja akatokea barobaro kutoka mjini. Asili yake ikawa kizungumkuti na hata jina lake halisi halikufahamika. Kila mmoja alimwita jina la utani "Mpanzi". Ni wazi alikuwa na fedha na alivalia nadhifu. Fauka ya hayo, alipenda anasa sana. Vijana wengi kijijini walimfuata ili angalau wajinasibishe kwake. Miongoni mwa waathiriwa waliovutiwa na Mpanzi alikuwa Maria, mkoi wangu tuliyeishi pamoja tangu utotoni, tukicheza pamoja na hata kusoma shule moja.

Ushirika wa Maria na Mpanzi ulielekeza mabadiliko makubwa katika tabia yake. Dharau ikachukua nafasi ya heshima, kiburi kikachukua nafasi ya unyenyekevu na aibu akaipa kisogo. Akakataa katakata kutangamana na wanakijiji wenzake akiwaita "washamba". Kila mtu alistaajabishwa na yale mabadiliko ya kighafla yaliyompata Maria kwa kuwa hapo awali, licha ya kurembeka mithili ya tausi alikuwa na nidhamu ya hali ya juu akiwaheshimu wote na kijiheshimu pia.

Maji yalizidi unga binti ya watu alipoanza kukwepa nyumbani akienda densini au ukipenda kwenye disko. Huko akatangamanana watu asiowajua walomwingiza katika uraibu wa ulevi na mapenzi haramu. Akabadilisha wanaume kama nguo ili apate fedha za kustarehe kutimiza raha na buraha. Mavazi yakawa minisketi au tumboketi. Akatembea nusu-uchi na wakati mwingine mavazi yakimbana huku akizua ashiki za kifisi mioyoni mwa wanaume. Akafaulu azimo lake na akafuatwa na wengi.

Waviele walipoona hivyo, wakajaribu kwa juhudi na adili kumnasihi lakini akawa hasikii la mwadhini wala la mteka maji msikitini. Wakamwachia ulimwengu. Muda hakuisha mwingi Maria akaanza kuugua. Ikaanza kana kwamba ni kikohozi cha kawaida, kisha upele mwilini, afya ikadhoofika kiasi cha nyama kuganda kwenye mifupa.ungemtazama ungefikiri ni kiwiliwili cha mtu. Uchunguzi wa daktari ulibainisha wazi kuwa alikuwa ameambukizwa ugonjwa wa ukimwi. Mtoto wa tatu akalia

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kwa uchungu na majuto mengi. Akaomba kuwaona wanakijiji wote. Walipoitikia mwito wake aliwaomba msamaha kwa majozi huku akidondoa orodha ndfu ya majina ya watu aliofanya nao mahaba. Kwa sauti hafifu alisema "Taf-taf-adh-ali m-m-mnisamehe, nilidanganywa na mpanzi, nikasusia ushauri wa wazazi wangu. Nikaasi mema niliyopewa. Nawaomba muichukulie hali yangu kama funzo. Msife moyo kwa yote, siku hizi madktari husema ugonjwa huu hauna tiba lakini una kinga. Heri muende mpimwe mjue hali zenye za afya. Msiugue kama mimi ilhali kuna dawa zinazoweza kupunguza makali ya viini vya ugonjwa huu." Mara pu! Akaanguka chini na kukata roho.

Hali ya simamzi na majonzi ikakithiri maana ilikuwa dhahiri shairi watu wengi wengi walikuwa wameathirika. Fikira za kufa kwa wazazi na kuwaacha mayatima wachanga katika kijiji ziliwazuga. Siku ya mazishi ukumbi ulijaa hadi pomoni. Jamaa na marafaiki walliwasihi kumpa buriani. Muhubiri aliposimama kuhutubia waombolezaji alitamka "Maandiko yanasema kuna njia panda-njema kwa macho ya mwanadamu yenye hatima ya mauti na njema kwa mtazamo wa Mungu yenye mwisho mzuri. Kila mtu aepukane na uozo na msishiriki ngono kiholela. Waliooa wawe waaminifu ;waache "mipango ya kando." Sote tuishi kwa kumcha Mungu ili tupone. Wote walisikiza wasia huo kwa umakini na utulivu. Maria alipozikwa, watu walirejea kwao huku wakiungama kuwa "Majuto ni mjukuu huja baadaye".

a) Fupisha ujumbe wa aya ya **pili, tatu** na **nne** kwa maneno 50. **(Alama 7,**

mtiririko 1)

Matayarisho

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Jibu

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(b)Eleza kwa maneno 60 masuala ambayo mwandishi anaibua katika aya **mbili** za mwisho.

(Alama 8, mtiririko 1)

Matayarisho

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Jibu

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3) MATUMIZI YA LUGHA **(alama40)**

(a) Linganisha na ulinganue sauti **ny** na **ng'.** **(alama 2)**

……

……

……

(b) Onyesha **shadda** katika maneno yafuatayo. **(alama1)**

(i)chekesha……

(ii)embe……

(c) Kamilisha majina ya **makundi** yafuatayo. **(alama 2)**

(i)…… cha nyanya

(ii)…….. cha funguo

(d) Andika sentensi upya ukitumia aina za **viwakilishi** vilivyo katika mabano. **(alama 2)**

(i) Baadaye…… walitoa ushahidi .(nafsi)

(ii)Bilauri hii ina maji .**Bilauri** iliyowekwa pale ina maziwa.(Kiwakilishi cha pekee badala ya neno lililokolezwa wino)

……

……

(e) Andika katika **usemi** halisi. (alama3)

Daktari alitaka kujua matatizo aliyokuwa nayo.

……

(f) Eleza matumizi ya **na** katika sentensi ifuatayo: **(alama2)**

Walimu na wanafunzi wana nafasi nzuri ya kuwashauri wanafunzi wanaopotoshwa na wenzao.

……

……

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(g) Andika **wingi** wa sentensi : (alama 2)

Wembe ule ni mkali sana.

……

……

(h) Bainisha aina za **shamirisho** na **chagizo** katika sentensi ifuatayo: **(alama 3)**

Seremala alimtengenezea mwalimu mkuu madawati ishirini juzi.

……

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(i) Tunga sentensi ukitumia neno **mpaka** kama : **(alama 4)**

(i)nomino……

……

(ii)kitenzi……

……

(iii)kielezi……

……

(iv)kihusishi……

……

(j)Ainisha viambishi katika neno: **(alama 2)**

Tutaonana

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……

……

(k)**Akifisha** sentensi ifuatayo. **(alama 3)**

mody alitusomea aya mbili kutoka kitabu maisha ya kisiwa cha hazina.

……

……

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(l)Ainisha **virai** vilivyopigiwa mstari. **(alama 2)**

Mawingu mazito ajabu yalijitandaza kwenye anga .

……

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(m)Tunga sentensi yenye **muundo** ufuatao : **(alama 3)**

KN(N+RV) + KT(T+RE)

……

……

(n) Tumia vishazi vifuatavyo kuunda sentensi kulingana na maagizo. **(alama 2)**

Wanasayansi walifanya majaribio .

Wanasayansi walipata tiba ya ugonjwa huo.(Tumia **ka** ya kuonyesha tukio moja ni matokeo ya tukio lingine)

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(O)Nyambua vitenzi vifuatavyo katika hali uliyopewa kisha uvitungie sentensi: **(alama 2)**

(i)la (kutendeshana)

……

……

(ii) panga (kutendeshewa)

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……

(p)Kamilisha sentensi ifuatayo kwa kutumia **kinyume** cha kitenzi kilichopigiwa mstari. **(alama 1)**

(ii)Mafundi wataezeka……. paa la mabati.

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(q) Eleza matumizi ya **ki** katika sentensi ifuatayo: **(alama 4)**

Kijakazi na kitoto wamekuwa wakila wakiimba kikasuku.

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4. ISIMU JAMII (Alama 10)

Soma makala yafuatayo kisha ujibu maswali.

Msemaji 1:Wale wanaounga mkono mswada huu wa Finance waseme ndiyo!

Sauti:Ndiyooooooooo!

Msemaji 1:Wale wanaopinga mswada waseme laa!

Sauti: Laaaa!

Msemaji 1: Waliounga mkono mjadala wameshinda.

Msemaji 2:Hoja ya nidhamu please!

Msemaji 1: Mheshimiwa,sheria nambari 200 , kifungu cha 6, yazuia mjadala zaidi.

Naomba kuvunja baraza.

a)Bainisha sajili ya mazungumzo haya. ` **(alama 2)**

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……

b)Eleza sifa zozote nne zinazojitokeza katika sajili uliyobainisha katika (a). **(alama 4)**

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c) Eleza jinsi mazingira hudhibiti mazungumzo: **(alama 4)**

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KCSE 23

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

KISWAHILI

102/3

KARATASI YA 3 (FASIHI)

MUDA: SAA 2½

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

MAAGIZO:

a) *Andika jina lako na nambari yako ya usajili katika nafasi ulizoachiwa hapo juu*

b) *Tia sahihi kisha uandike tarehe*

c) *Jibu maswali* ***manne*** *pekee*

d) *Swali la kwanza ni la lazima*

e) *Maswali hayo mengine* ***matatu*** *yachaguliwe kutoka sehemu nne zilizobaki yaani Tamthilia, Riwaya, Ushairi na Hadithi Fupi*

f) *Usijibu maswali* ***mawili*** *kutoka sehemu moja*

g) *Majibu yote* ***lazima*** *yaandikwe kwa lugha ya Kiswahili*

KWA MATUMIZI YA MTAHINI PEKEE

Swali	Upeo	Alama
1	20	
	20	
	20	
	20	
Jumla	**80**	

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SEHEMU YA A: TAMTHILIA

T.M Arege: Bembea ya Maisha

1.LAZIMA

(a) Tumbo lenyewe limeshafanya mazoea. Ardhi hiyo ya kulimwa na kuzalisha chakula iko wapi? Hata ingekuwepo mvua yenyewe imefanya ugeni. Imeadimika afadhali wali wa daku. Sasa ni wakati wa kujifunga masombo…

i) Eleza muktadha wa dondoo hili**.** **(alama 4)**

ii) Fafanua sifa za msemaji wa maneno haya. **(alama 2)**

iii) Eleza vipengele **vinne** vya kimtindo vinavyobainika katika dondoo hili. **(alama 4)**

(b) Eleza jinsi maudhui ya **uwajibikaji** yanavyojitokeza katika tamthilia ya Bembea ya Maisha. **(alama 10)**

SEHEMU B: RIWAYA

A. Matei: Chozi la Heri

Jibu swali la 2 au la 3

2 (a) “Anayeusikiliza wimbo huu anauona mrefu kuliko zile ambazo mja huyu huimba kila siku.”

(i) Eleza muktadha wa dondoo hili**.** **(alama 4)**

(ii) Eleza aina ya “wimbo huu**”.** **(alama 2)**

(iii) Eleza aina **mbili** za taswira zinazojitokeza kwenye “wimbo huu”. **(alama 4)**

(iv) Eleza maudhui mbalimbali yanayojitokeza kwenye “wimbo huu”. **(alama 10)**

3. “Nakumbuka asubuhi ya pili baada ya mtafaruku kuanza. Nilikuwa sebuleni na mwanangu tukitizama runinga”.

(a) Eleza muktadha wa dondoo hili. **(alama 4)**

(b) Eleza umuhimu wa mandhari ya dondoo hili. **(alama 6)**

(c) Tambua mbinu kuu ya kimtindo iliyotumika katika dondoo. **(alama 2)**

(d) Kwa kutolea mifano mwafaka eleza jinsi mbinu uliyotaja hapo juu ilivyotumika kukuza maudhui riwayani. **(alama 8)**

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SEHEMU YA C: USHAIRI

Jibu swali la 4 au la 5

4.Soma shairi lifuatalo kisha ujibu maswali.

Mtu ni afiya yake, ndio uzima wa mtu,
Mtu ni kuwa na chake, hakuwi ela kwa kitu,
Mtu ni bahati yake, kupendekeza kwa watu,
Mtu si fakhari kwake, kuitwa nyama ya mwitu.

Mtu ni ulimi wake, kunena vyema na watu,
Mtu ni kijungu chake, kuweka mawe matatu,
Mtu ni mwenda kwa lake, mtoshwa na kila kitu,
Mtu si uzuri kwake, kuitwa nyama ya mwitu.

Mtu ni mwenye nadhari, apimaye kila kitu,
Mtu ni moyo hariri, mwenye imani na watu,
Mtu ni alo na ari, shika sana mwana kwetu,
Mtu si yake fakhari, kuitwa nyama ya mwitu.

Mtu ni mkono wazi, mtasada kuna watu,
Mtu ni mwenye maozi, ku oneya kila kitu,
Mtu ni alo tulizi, asopenda utukutu,
Mtu si jambo pendezi, kuitwa nyama ya mwitu.

Mtu ni mwenye ahadi, ndio u'ngwana na utu,
Mtu ni alo baridi, mbe mbelezi wa watu,
Mtu ni moyo asadi, aso onewa na mtu,
Mtu si yake ifadi, kuitwa nyama ya mwitu.
Mtu niliyo yanena, pima sana ewe mtu,
Mtu si kujatukana, kukirihi nyoyo watu,
Mtu nakupa maana, wende nyendo za kiutu,
Mtu si uzuri sana, kuitwa nyama ya mwitu.

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MASWALI

(a) Jadili ujumbe wa mshairi. **(alama 2)**

(b) Ainisha shairi kutegema: **(alama 2)**

i) Mpangilio wa maneno.

ii) Vina.

iii) Idadi ya mishororo.

iv) Idadi ya vipande.

(c)Eleza mbinu **nne** za kimtindo ambazo zimetumiwa. **(alama 4)**

d) Thibitisha matumizi ya uhuru wa kishairi. **(alama 3)**

(e) Andika ubeti wa pili kwa lugha tutumbi. **(alama 4)**

(f) Fafanua nafsi-neni na nafsi-nenewa katika shairi hili. **(alama 2)**

(g) Kwa kutolea mifano, eleza aina **tatu** za urudiaji zinazojitokeza kwenye shairi hili. **(alama 3)**

5.Soma shairi lifuatalo kisha ujibu maswali.

Nikiwa na njaa na matambara mwilini,
Nimehudumika kama hayawani,
Kupigwa na kutukanwa,
Kimya kama kupita kwa shetani,
Nafasi ya kupumzika hakuna,
Ya kulala hakuna,
Ya kuwaza hakuna,
Basi kwani hili kufanyika,
Ni kosa gani lilotendeka,
Lilonileta adhabu hii isomalilizika?

Ewe mwewe urukaye juu angani,
Wajua lililomo mwangu moyoni,
Niambie pale mipunga inapopepea,
Ikatema miale ya jua,
Mamangu bado angali amesimama akisubiri?
Je nadhari hujitokeza usoni,
Ikielekea huku kizuizini?

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Mpenzi mama, nitarudi nyumbani,

Nitarudi hata kama ni kifoni,

Hata kama maiti yangu imekatikakatika,

Vipande elfu, elfu kumi, Nitarudi nyumbani,

Nikipenya kwenye ukuta huu, Nikipitia mwingine kama shetani,

Nitarudi mpenzi mama…Hata kama kifoni!

Maswali

(a) Lipe shairi hili kichwa mwafaka**.** **(alama 1)**

(b) Tambua **nafsi-neni** katika shairi hili**.** **(alama 2)**

(c) Eleza toni **mbili** zinazojitokeza katika shairi hili. **(alama 2)**

(d) Eleza mambo **manne** ambayo mshairi analalamikia. **(alama 4)**

(e) Fafanua **dhamira** katika shairi hili. **(alama 2)**

(f) Thibitisha kuwa hili ni **shairi huru**. **(alama 2)**

(g) Taja na ufafanue sifa **mbili** za nafsi neni**.** **(alama 2)**

(h) Fafanua mbinu **tatu** za kimtindo zilizotumika katika ubeti wa tatu. **(alama 3)**

(i) Eleza maana ya maneno yafuatayo kama yalivyotumiwa katika shairi hili. **(alama 2)**

i) Hayawani

ii) Nadhari

SEHEMU D: HADITHI FUPI

D.W Lutomia na P. Muthama(wah): Mapambazuko ya Machweo na Hadithi nyingine

Jibu swali la 6 au la 7

D.W Lutomia: Msiba wa kujitakia

6 (a) "Wetu ni wetu, hata akiwa mbaya…ni wetu."

(i) Eleza muktadha wa dondoo hili. **(alama 4)**

(ii) Eleza sifa za huyu anayeshikilia msimamo wa "mtu wetu**".** **(alama 2)**

(iii) Eleza mbinu **mbili** za kimtindo zinazojitokeza kwenye dondoo hili. **(alama 4)**

(iv) Kwa kurejelea hadithi "Msiba wa Kujitakia", eleza misimamo mbalimbali ya mwandishi. **(alama 10)**

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R.Wangari: Fadhila za Punda

7. (a) Changanua mtindo katika kifungu kifuatacho. **(alama 10)**

Alasiri ile, baada ya ibada mbili, mhubiri akawa hoi kwa **mavune**. Akatamani kufika nyumbani apumzike, kazi ya kuwalisha kondoo wa Mungu si kazi rahisi. Wamefika nusu safari, bintiye katulia kama maji mtungini. Akimtazama kipembe, anamkumbusha marehemu mkewe.Miaka mitatu sasa na dhiki ya kuondokewa haijamwisha. Alihisi ukiwa, akatamani mwenziye.Sasa kazi kukilea kitoto chao, kibinti hiki kilicho mlanda mamake kama shilingi kwa ya pili. Nyumba ilijaa kicheko alipokuwa hai mamake Lilia. Kama si bintiye ambaye ulimi wake hautulii, **kihoro** kingemvamia labda hata kumvuta kuelekea kaburini. Lakini Lilia, malaika wake, hampi utulivu wa kuwaza sana kuhusu upweke wake. Ilimshangaza sasa kuwa kanyamaza vile. Kumbe kwa muda tu!

(b) Kwa kutolea mifano mwafaka eleza jinsi hadithi "Kila Mchezea Wembe" ilivyotumia kinaya kufanikisha ujumbe wake. **(alama 10)**

SEHEMU E: FASIHI SIMULIZI

8(a) **Soma kifungu kifuatacho kisha ujibu maswali.**

Ikiwa kweli wewe ni mkaza mwanangu,
Nami ndimi nilompa uhai mwana unoringia,
Anokufanya upite ukinitemea mate,
Chakula kuninyima, wajukuu kunikataza ushirika,
Mungu na waone chozi langu, wasikie kilio changu,
Mizimu nawaone uchungu wangu, radhi zao wasiwahi kukupa,
Laana wakumiminie, uje kulizwa mara mia na wanao,
Usiwahi kufurahia hata siku moja pato lao,
Watalokupa likuletee simanzi badala ya furaha,
Wakaza wanao wasikuuguze katika utu uzima wako!

(i) Tambua aina ya mazungumzo haya na utoe sababu. **(alama 2)**

(ii) Eleza sifa **mbili** za nafsi nenewa. **(alama 2)**

(iii) Taja na ueleze sifa **nne** za kipera hiki cha fasihi simulizi. **(alama 4)**

(iv) Unanuia kutumia mbinu ya maandishi kuhifadhi kipera hiki cha fasihi simulizi. Eleza faida na hasara za kutumia mbinu hii. **(alama 6)**

(b) Eleza faida tatu na hasara tatu za miviga . **(alama 6)**

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

AGRICULTURE

443/1

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

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.*
3. *This paper consists of **THREE** sections; **A, B**, and **C**.*
4. *Answer all questions in sections A and **B**.*
5. *Answer any **TWO** questions in section **C**.*
6. *All the questions should be answered in the spaces provided*

For Examiners' Use Only

Section	Questions	Maximum Score	Candidates score
A	1-17	30	
B	18-21	20	
C		20	
		20	
TOTAL SCORE		90	

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SECTION A (30MKS)

Answer **ALL** the questions in this section.

1. Give four reasons why ranching is important in the arid and the semi-arid areas of Kenya. **(2mks)**

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……

2. Explain three ways on how good transport and communication net-work improves agricultural production**.** **(1 1/2mks)**

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3. (a) A maize farmer at Lumakanda ploughed his land twice using a tractor-drawn disc plough. What name do we give to the second ploughing**.** **(1/2mk)**

……

(b) State three reasons why rolling of land is recommended before planting some crops. **(1 1/2mks)**

……

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……

4. Define the following terms as used in agriculture. **(2mks)**

(a) Drainage

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……

(b) Pumping of water

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……

(c) Piping of water

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……

(d) Irrigation

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……

5. What is soil fertility**?** **($^{1}/_{2}$mk)**

……

……

6. (a) A farmer at Bulimbo would obtain Kshs.240,000, if he grew beans, Kshs.200,000 for maize and kshs.300,000 if he grew sugarcane on his 2 acres piece of land. He chooses to grow sugarcane. What was the opportunity cost? **(1mk)**

……

……

(b) Give two conditions under which opportunity cost exists. **(1mk)**

……

……

7.(a) What is elasticity of demand? **(1mk)**

……

……

(b) State two conditions that exists for a market to be purely competitive. **(1mk)**

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……

8. Maize is grown in a plot measuring 4m x 3m at spacing of 7cm x 30cm, 2 seeds per hole.

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The outer rows begins 35cm all ground the width of the plot.

(i) Calculate the number of rows falling on the width side of the plot. **(1mk)**

……

……

……

(ii) Calculate the number of plants per row**.** **(1mk)**

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……

……

9. Give two activities carried out during hardening off of tomato seedlings**.** **(1mk)**

……

……

10. (a) State three disadvantages of traditional stores. **($1\frac{1}{2}$mks)**

……

……

……

(b) Give the meaning of the following practices in crop production. **($1\frac{1}{2}$mks)**

(i) Changing of cycle

……

……

(ii) Training

……

……

(iii) Tipping

……

……

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11. (a) Name three early maturing cabbage varieties. **(1/2mk)**

……

……

……

(b) Give a reason why well rotten manure is not recommended in production of carrots**. (1/2mk)**

……

……

12. (a) Explain two ways how trees help in soil and water conservation. **(1mk)**

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……

……

(b) Differentiate between level and graded terraces**.** **(1mk)**

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13. Distinguish between the intensity of defoliation and frequency of defoliation in pasture management**.** **(1mk)**

……

……

……

14. (a) List two signs shown by crops when they are attacked by nematodes. **(1mk)**

……

……

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(b) Define the term "economic injury level" (EIL) of a crop**.** **(1mk)**

……

……

15. Give two reasons why a bean plant growing in a carrot crop field may be treated as a weed. **(1mk)**

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……

……

16. Fill in the missing blanks in the table below**.** **(2mks)**

Fixed factor land (Ha)	Variable input NCK fertilizer (kg)	Total product maize (90kg bag)	Marginal product maize (90kg bag)	Average products maize (90kg bag)
1	30	10	10	(c)
1	60	27	(a)	13.5
1	90	42	15	14
1	120	56	(b)	(d)

17.(a) What is the meaning of the following in agroforestry**.** **(1mk)**

(i) Pruning

……

……

(ii) Looping

……

……

(b) Name two trees that are used as livestock feeds. **(1mk)**

……

……

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SECTION B (20MKS)

*Answer **ALL** the questions in this section.*

18. The Sacred Heart Girls High School, Mukumu Form Four student was to apply a compound fertilizer **5:20:10** at the rate of 200kg/Ha on her agricultural project plot measuring 3m x 4m.

(a) (What do the figures 5 and 10 in the compound fertilizer stand for? **(2mks)**

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……

……

(b) Calculate the amount of fertilizer she would require for the plot. ***(show your working)*** **(3mks)**

……

……

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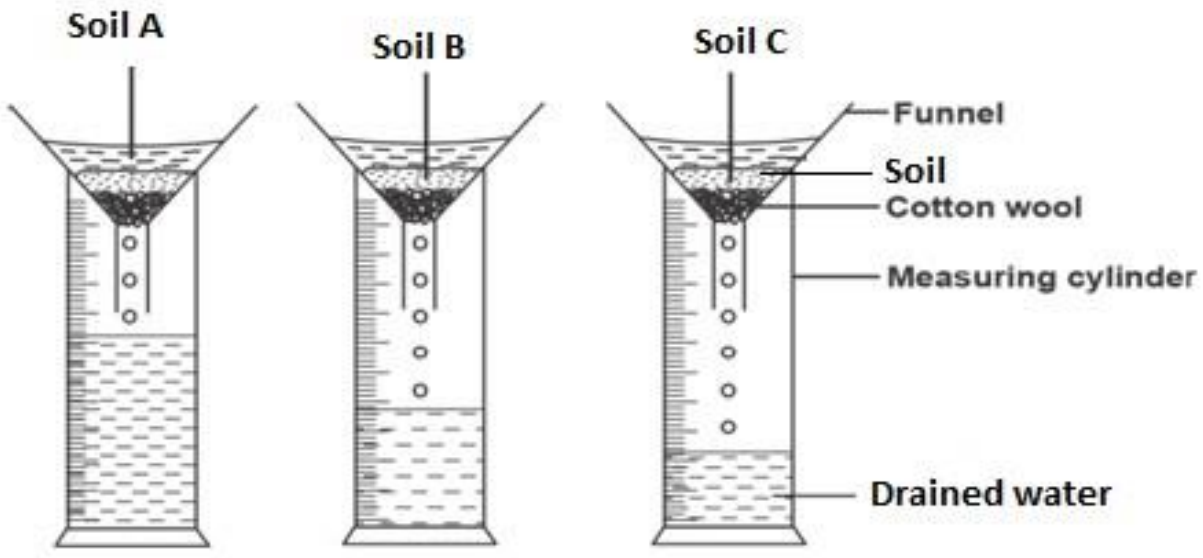
……

……

19. The diagram below illustrates an experiment on soil.



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(a) State the aim of the experiment**.** **(1mk)**

……

……

(b) If the volume of water illustrated in the measuring cylinder was observed after the hour. Identify the soil sample **A** and **B.** **(2mks)**

……

……

(c) State two ways in which the soil structure of the sample labelled **C** above can be improved**.** **(2mks)**

……

……

……

20. The diagram below shows a crop disease. Use it to answer questions that follow.



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(a) Identify the crop disease. **(1mk)**

……

(b) Name two other crops apart from the one shown above that are attacked by the same disease. **(2mks)**

……

……

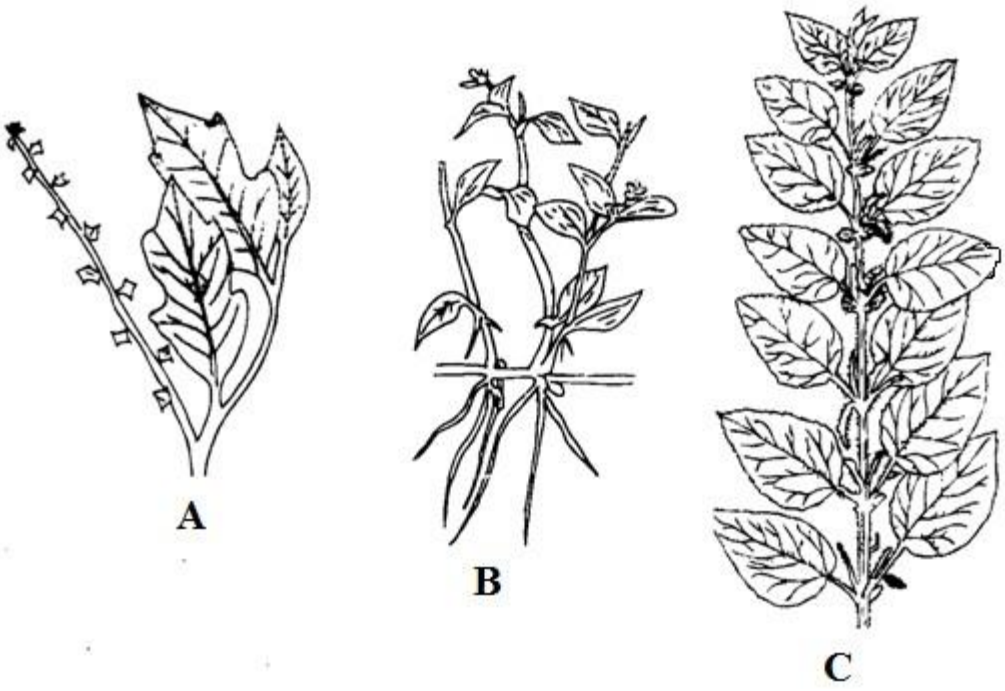
(c) State two control measures of the above disease**.** **(2mks)**

……

……

……

21. The diagrams below show some common weeds in East Africa.



(a) Name the class of weeds that in which the above weeds belong basing on morphology. **(1mk)**

……

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(b) Identify two weeds that lower the work output of human labour on the farm. **(2mks)**

……

……

(c) Give two reasons why it is difficult to control weed **B** by cultivation. **(2mks)**

……

……

……

SECTION C (40MKS)

*Answer **ANY TWO** questions in this section.*

22. (a) Describe the production of tomatoes (Lycoperscon escalentum)

i) Ecological requirements. **(3mks)**

ii) Transplanting **(3mks)**

iii) Field management practices **(4mks)**

(b) State five measures of which are taken to minimize water pollution in the farm. **(5mks)**

(c) Describe precautions to be observed when harvesting pyrethrum**.** **(5mks)**

23. (a) Describe six physical /structural methods of controlling soil erosion. **(6mks)**

(b) Explain four practices of maintaining soil fertility**.** **(4mks)**

(c) Describe five principles of crop rotation. **(5mks)**

(d) State five conditions that necessitate effective settlement of people. **(5mks)**

24. (a) Describe six importances of budding and grafting in crop propagation. **(6mks)**

(b) State six factors that will lead to wider spacing when planting a crop. **(6mks)**

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(c) The following information was obtained from Mr. Oseso's Farming Enterprise. Use it to prepare cash analysis for the year. **(8mks)**

Kshs.

30/6/2003	-	Cash at bank (opening balance)	50,000
01/7/2003	-	Bought 20 empty egg trays	400
01/7/2003	-	Bought 5 bags of DAP fertilizer	10,000
01/7/2003	-	Sold 10 trays of eggs	12,000
01/7/2003	-	Bought 5 bags of broilers starter	7,500
01/7/2003	-	Sold milk 200kg bag	4,000
20/7/2003	-	Sold maize	6,000
30/7/2003	-	Bought milk churn	500
31/12/2003	Closed the financial year		

KCSE 23

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

AGRICULTURE

443/2

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

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.*
3. *This paper consists of **THREE** sections; **A, B**, and **C**.*
4. *Answer all questions in sections A and **B**.*
5. *Answer any **TWO** questions in section **C**.*
6. *All the questions should be answered in the spaces provided*

FOR EXAMINERS' USE ONLY

Section	Questions	Maximum Score	Candidates score
A	1-12	30	
B	13-16	20	
C		20	
		20	
TOTAL SCORE		**90**	

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SECTION A: (30 MARKS)

***Answer ALL** questions in this section*

1. (a) Name **three** factors that dictate distribution of livestock in Kenya**.** **(1½ mks)**

……

……

……

(b) Name a breed of goats that is brown in colour with two white stripes running from the eyes to the nose. **(1/2 mks)**

……

2. (a) Give **two** reasons why proper storage of tools is important. **(1mk)**

……

……

……

(b) Name **two** tools that are recommended for layout and marking**.** **(1mk)**

……

……

3. (a) How does a vaccine work? **(1mk)**

……

……

(b) What **causes** the following conditions in livestock?

(i) Osteomalacia **(½ mk)**

……

(ii) Parturient paresis (milk fever) **(1/2 mk)**

……

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4. Name **four** tick borne diseases in livestock. **(2mks)**

……

……

……

……

5. (a) What is the function of esophageal groove in a **ruminant** **(1mk)**

……

……

(b) List **two** methods of ration computation. **(2mks)**

……

……

……

6. State **four** advantages of using contemporary comparison as a method of selection in livestock. **(2mks)**

……

……

……

……

7. (a) What is a notifiable disease? **(1/2mks)**

……

……

(b) List **three** examples of notifiable diseases. **(1½mks)**

……

……

……

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8. Give **four** causes of high mortality in Piglets**.** **(2mks)**

……

……

……

……

9. (a) State **two** disadvantages of using metal frames in construction of farm building. **(1mk)**

……

……

(b) List any **two** wood preservatives. **(1mk)**

……

……

10. **(a)** State **four** factors to consider when selecting eggs for incubation. **(2mks)**

……

……

……

……

(b) State **four** functions of the egg shell**.** **(2mks)**

……

……

……

……

11.(a) State **four** qualities of colostrum which make it suitable for feeding newly born calf. (2mks)

……

……

……

……

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(b) What is **dry cow therapy**? **(1mk)**

……

……

12.(a) State **four** field conditions under which a disc plough is preferred instead of mouldboard plough. **(2mks)**

……

……

……

……

(b) Name **four** implements that are operated by the power take off (P.T.O) shaft**.** **(2mks)**

……

……

……

……

SECTION B (20 MARKS)

***Answer ALL** questions in this section*

13. The diagram below shows an auger bit. Use it to answer questions that follow:



(a) Name the part labelled **X a**nd **Y**. **(2mks)**

X:……..

Y:……

(b) Give the function of the part labelled N. **(1mk)**

N……

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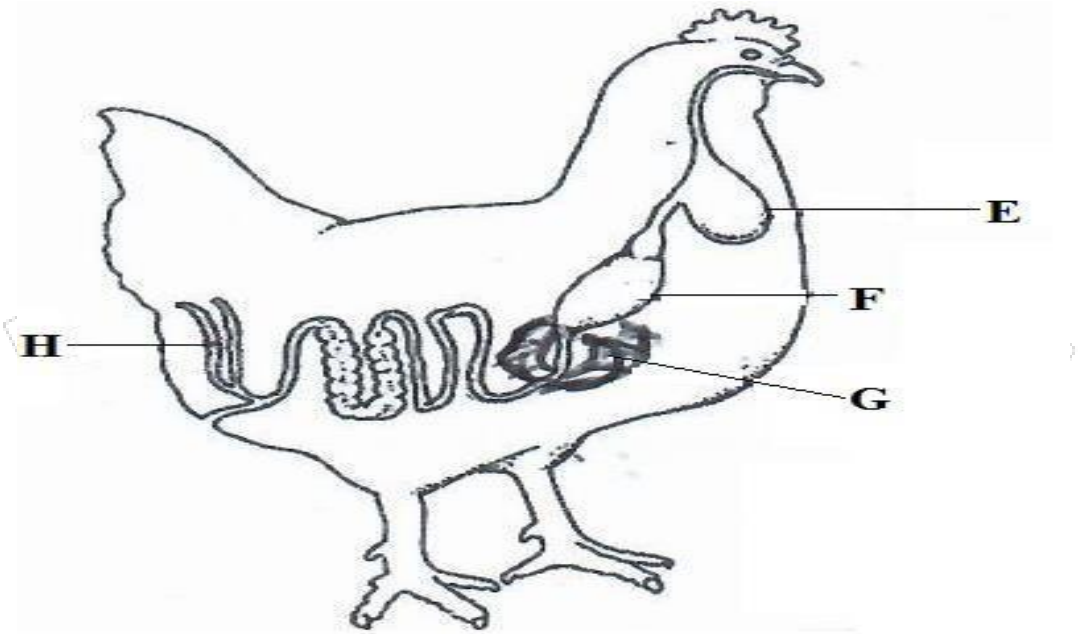
(c) List two other bits other than the one shown above. **(2mks)**

……

……

14.The diagram below shows the digestive system in poultry. Use it to answer the following questions.



(a) Name the parts labelled **E** and **H.** **(2mks)**

E:……

H:……

(b) Give the function of part **F.** **(1mk)**

……

……

(c) State **two** ways in which the part labelled **G** is adapted to its function**.** **(2mks)**

……

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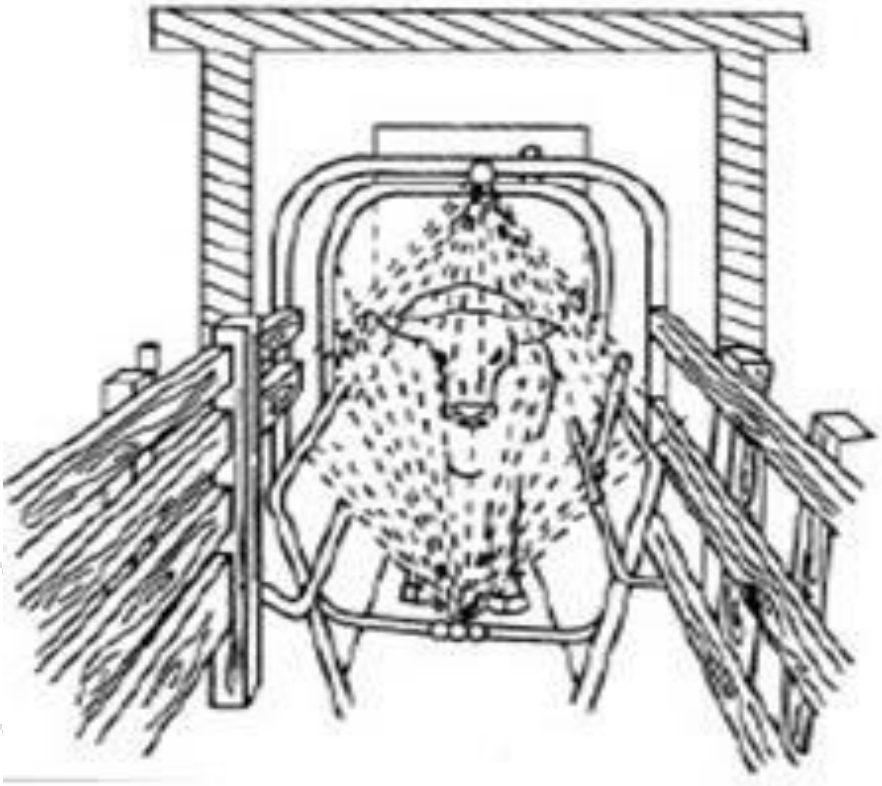
15. The diagram below shows a routine practice being carried out on an animal. Study it and answer the questions that follow.



(a) Identify the practice. **(1mk)**

……

(b) Name the structure in which the practice is being carried out**.** **(1mk)**

……

(c) State three advantages of using the above structure instead of plunge dip. **(3mks)**

……

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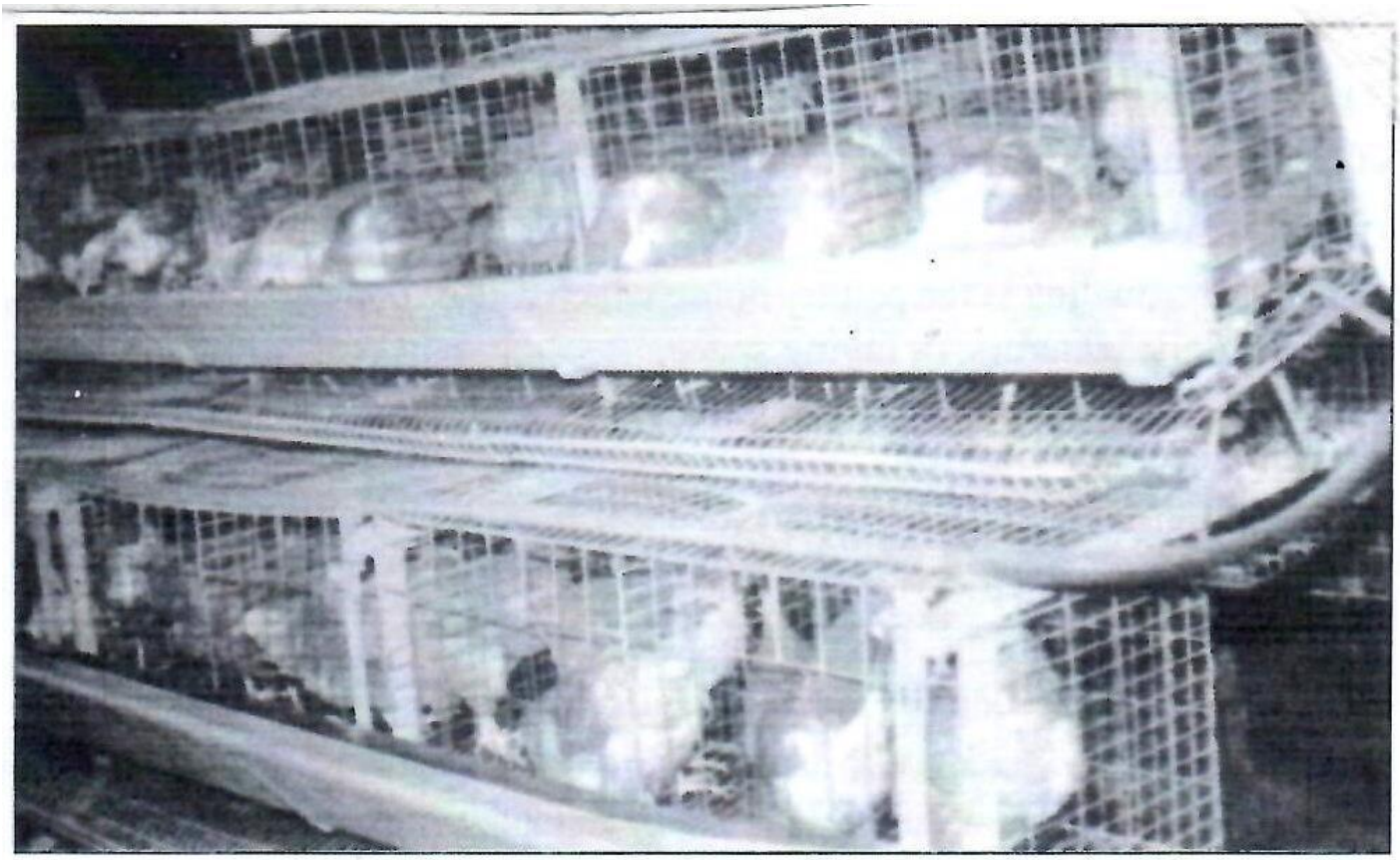
16. Study the picture of the system of rearing poultry and use it to answer questions that follow:



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

……

(b) Name two other systems of rearing poultry apart from the one shown above. **(2mks)**

……

……

……

(c) State two advantages of using the above system**.** **(2mks)**

……

……

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SECTION C (40 MARKS)

Answer ANY TWO questions from this section

17. (a) Describe gumboro disease under the following sub-headings

i) Animals affected **(1mk)**

ii) Causal organism **(1mk)**

iii) Incubation **(1mk)**

iv) Symptoms of attack **(5mks)**

v) Control **(2mks)**

(b) Describe **five** characteristic of Romney marsh dual purpose sheep**.** **(5mks)**

(c) State **five** functions of the lubrication system. **(5mks)**

18. (a) Describe how natural incubation is carried out and managed. **(8mks)**

(b) Explain seven mechanical methods of controlling ticks. **(7mks)**

(c) **State five** advantages of embryo transplant. **(5mks)**

19. (a) Describe the procedure of training a calf for bucket feeding. **(7mks)**

(b) Describe **Eigh**t measures to be observed when handling bees. **(8mks**

(c) State **five** signs of ill-health observed on the animal's skin and coat. **(5mks).**

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

BUSINESS STUDIES

565/1

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

(a) *Write your name, admission number and class in the spaces provided above.*

(b) *This paper consist of 25 questions*

(c) *Answer* ***all*** *the questions in the spaces provided*

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

16	17	18	19	20	21	22	23	24	25

TOTAL

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*Answer **all** the questions*

1. Outline **four** ways in which business studies may be of benefit to an individual. **(4mks)**

……

……

……

……

2. Highlight **four** demographic factors that may affect the performance of a business. **(4mks)**

……

……

……

……

3. Mention the factor of production to which each of the following resources relate. **(4mks)**

Resource	Factor of production
(a) Manager	
(b) Cotton	
(c) Owner	
(d) Factory	

4. Fill in the missing figures in the following table. **(4mks)**

Liabilities	Capital	Fixed assets	Current assets
401,400	640,900	750,700	**W**
X	739,200	925,600	259,100
586,800	**Y**	980,250	205,100
436,000	340,000	**Z**	264,900

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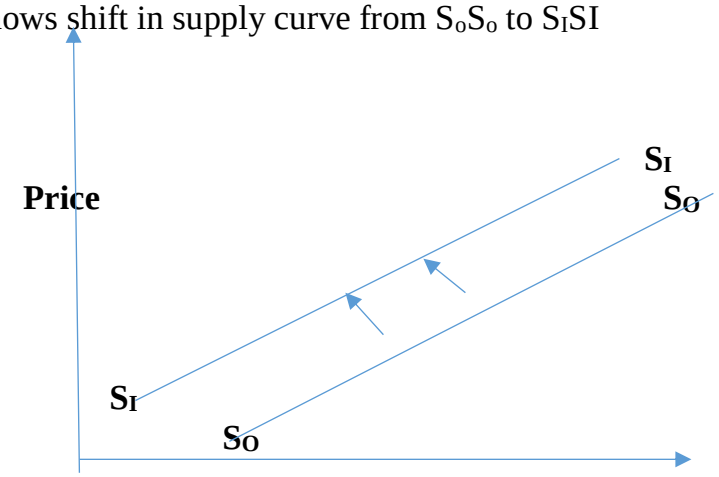
5. The diagram below shows shift in supply curve from S_oS_o to S_ISI



State **four** factors that may account for the above shift. **(4mks)**

……

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……

6. The management of Rembo traders operates an open office layout. State four advantages the management gets from this layout. **(4mks)**

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……

……

……

7. State **four** differences between Life Assurance and General insurance. **(4mks)**

Life Assurance	**General Insurance**
(a)	
(b)	
(c)	
(d)	

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8. State **four** benefits that a trader may get by advertising products in a newspaper. **(4mks)**

……

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9. Highlight **four** problems which may be encountered when measuring national income using output approach. **(4mks)**

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10. Highlight the role of consumer organisations in consumer protection. **(4mks)**

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11. Maendeleo Traders had the following Assets and Liabilities as at January 2020

Furniture	300,000
Equipment	50,000
Debtors	45,000
Cash	7,000
Creditors	48,000

For the year ended 31st December 2020 there was

(i) Additional capital introduced amounting to Sh. 34,000

(ii) Drawings made during the year amounting to Sh. 20,000

(iii) Net profit amounting to Sh 34,000

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Determine the capital of the business as at 31st December 2020. **(4mks)**

……

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12. Farida company has developed a new product in the market. Outline four methods that may be used to determine the price of the product. **(4mks)**

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13. Outline **four** current trends in the transport sector in Kenya. **(4mks)**

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14. State **four** features of a parastatal. **(4mks)**

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15. Indicate the type of journal in which each of the following transactions would be recorded.

(4 mks)

	Transaction	**Journal**
(i)	Purchase of goods on credit	
(ii)	Sale of Machinery on credit	
(iii)	Goods previously bought on credit returned to the suppliers	
(iv)	Correction of an error in account	

16. State the type of unemployment described in each of the following:- **(4MKS)**

(a) Where people have temporarily lost jobs and are seeking for new ones.

_____

(b) Where people are rendered jobless at a certain period of the year.

_____

(c) Where people lost jobs due to change in technology.

_____

(d) Where people lose jobs during a period of economic recession.

_____

17. The following balances were extracted from the books of Haraka Traders as at 30th June 2023.

	Shs
Sales	1,400
Carriage outwards	6,000
Discount allowed	11,000
Discount received	5,000
Returns inwards	12,000
Commission received	3,000
Purchases	2,000
Bank	50,000
Cash	80,000
Debtors	20,000
Capital	150,000
Creditors	9,000

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Prepare Haraka Traders Trial balance as at 30th June 2023

18. Outline four factors which may limit the effectiveness of a warehouse. **(4MKS)**

……

……

……

……

19. Mention the type of document described in the statements below: (4MKS)

(a) A document sent with the purpose of correcting an overcharge._____

(b) A document sent to reply to a specific letter of inquiry._____

(c) A document sent to demand for payment of goods sold._____

(d) A document sent to request the seller to supply goods indicated._____

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20. The following information relates to Uwezo traders for the year ended 31st December 2023.

(4MKS)

Sales	480,000
Stock (1/1/2023	60,000
Stock (31/12/2023	30,000
Margin	25%

Determine:

(a) Gross profit **(1 mk)**

(b) Cost of sales **(1 mk)**

(c) Rate of stock turn over. **(2 mks)**

21. Outline **four** features of money that enables it to facilitate the exchange of goods and services.

(4 mks)

……

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22. Mention **four** circumstances under which a partnership may be dissolved. **(4mks)**

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23. Highlight **four** challenges of locating firms at a central place. **(4mks)**

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24. State **four** uses of cash book. **(4mks)**

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……

25. Outline **four** characteristics of basic wants. **(4mks)**

……

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

BUSINESS STUDIES

565/2

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

a) *Write your name and stream in the space provided above.*
b) *This paper consists of six questions*
c) *Answer any **five** questions of your choice in the spaces provided.*
d) *All questions carry equal marks*
e) *Students should answer the questions in English.*

For Examiner's Use Only

Question	Maximum Score	Candidate's Score
1	20	
2	20	
3	20	
4	20	
5	20	
6	20	
Total		

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*Answer any **five** questions*

1(a) Explain five differences between a public corporation and a public limited company. **(10 mks)**

(b) Explain five factors that would lead to increase in the level of National income. **(10 mks)**

2(a) Explain five factors that hinder entrepreneurial activities in a country. **(10 mks)**

(b) Makhisa traders started a business on 1st January 2022 with cash in hand sh. 50,000 and cash at bank sh. 19,000. His transactions during the month of January, 2022 were as follows:

Jan 1	:	Bought furniture worth sh. 10,000 by cash.
Jan 2	:	Deposited sh. 5,000 cash in the business bank account from the cash till.
Jan 5	:	Sold goods to Michael worth sh. 7,900 on credit.
Jan 12	:	Makhisa disposed off a van at sh. 70,000 receiving Payment of sh. 27,000 by cheque and a balance in cash.
Jan 15	:	Paid rent sh. 1,700 cash.
Jan 16	:	Paid salaries sh. 2,200 by cheque.
Jan 20	:	Received donations sh. 15,000 by cheque.
Jan 22	:	Withdrew cash sh. 10,000 for personal use.
Jan 28	:	Transferred all cash into the bank except sh. 1,000.

Required:

Prepare a two column cash book for Makhisa traders for the month of January, 2022. **(10 mks)**

3(a) Explain five roles of middlemen in the chain of distribution. **(10 mks)**

(b) Explain five principles of insurance. **(10 mks)**

4(a) Explain five benefits of mobile banking to customers. **(10 mks)**

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(b) The following trial balance was extracted from the books of Atiti trader for the year ended 31st December 2021.

Atiti Traders

Trial Balance

As at 31/2/2021

Details	Dr (Shs)	Cr (Shs)
Capital		250,000
Drawings	33,000	
Stock (1/1/2021)	47,000	
Purchases	300,000	
Sales		420,000
Returns	4,000	7,000
Carriage outwards	10,000	
Carriage inwards	28,000	
Discounts	4,000	14,000
Motor vehicle	130,000	
Furniture	25,000	55,000
Creditors		
Premises	100,000	
Debtors	50,000	
Bad debts	15,000	
	746,000	746,000

Additional information.

Stock at 31st December 2021 was valued sh. 55,000.

Required

Prepare

(i) Trading, profit and loss account for the year ended 31st December 2021.

(ii) Balance sheet as at 31/12/2021.

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5(a) Explain five ways in which inflation can be controlled by the government. **(10 mks)**

(b) Explain five barriers to effective communication. **(10 mks)**

6(a) Explain five disadvantages of using direct taxes to raise government revenue. **(10 mks)**

(b) Explain five circumstances in which a firm may acquire monopoly Power. **(10 mks)**

KCSE 23

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

BIOLOGY

231/1

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

- *Write your name and Index Number in the spaces provided above.*
- *Sign and write date of examination in the spaces provided above.*
- *Answer **ALL** questions in the spaces provided.*

FOR EXAMINERS USE ONLY.

Question	Maximum Score	Candidates Score
1 – 28	80	

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*Answer **ALL** questions*

1. Name the antigens present in red blood cells of a person whose blood group is B positive. **(2mks)**

……

……

2. Give reasons for the following structural modifications in axial skeleton of humans

(i) Fused sacral vertebrae **(1mk)**

……

……

(ii) Long transverse process in lumbar vertebrae. **(1mk)**

……

……

3. (a) What is adaptive radiation? **(1mk)**

……

……

(b) State two ways in which Homo sapiens differs from Homo habilis **(2mks)**

……

……

……

4. State three characteristics of class Reptilia. **(3mks)**

……

……

……

……

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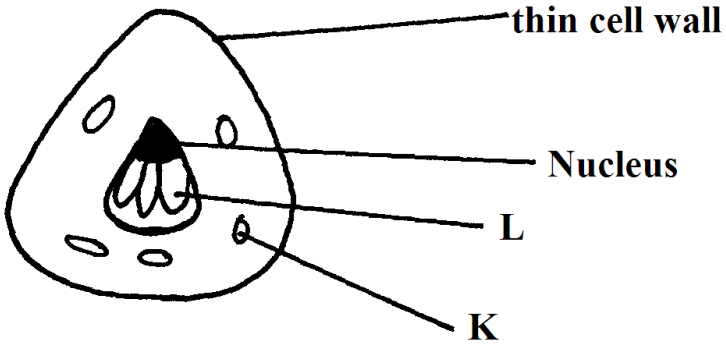
5. The diagram below represents the structure of a yeast cell as seen under a light microscope.



(a) Name parts labeled **(2mks)**

L……...

K……..

6. (a) Which part of plant normally shows

(i) Increased growth at lower auxin concentration **(1mk)**

……

(ii) Decreased growth at lower auxin concentration **(1mk)**

……

7. State the functions of the following parts of a light microscope.

(i) Fine adjustment knob **(1mk)**

……

(ii) Condenser **(1mk)**

……

8. Give a reason for the following features present in human trachea

(i) Ring of cartilage **(1mk)**

……

……

(ii) Presence of cilia **(1mk)**

……

……

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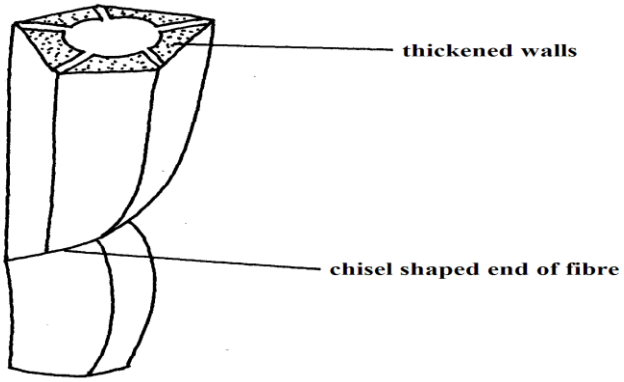
9. The diagram below shows a plant supportive tissue



(a) Identify the tissue **(1mk)**

……

(b) State two similarities between tissue named in 9(a) above and one conducting water in dicotyledonous plant. **(2mks)**

……

……

……

10. A wild beast in Masai Mara National Park was found to be infested with a lot of ticks. State the trophic level occupied by the following organisms:

(a) **(i)** Wild beast **(1mk)**

……

(ii) Ticks **(1mk)**

……

(b) Sketch a pyramid of numbers to represent above feeding relationship. **(1mk)**

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11. **(a)** Name the causative agent of the following diseases in humans.

(i) Bilharziasis **(1mk)**

……

(ii) Syphillis **(1mk)**

……

(b) Describe the following defects:

(i) Varicose veins **(1mk)**

……

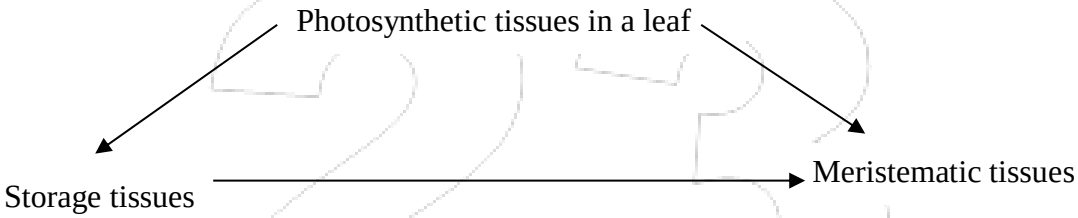
……

(ii) Thrombosis **(1mk)**

……

……

12. The flow chart below shows the movement and fate of carbohydrate synthesized by green plants.



(a) Name the type of carbohydrate that is

(i) Transported from leaf to other parts of plant **(1mk)**

……

(ii) Found in storage tissues **(1mk)**

……

(b) Name two main photosynthetic tissues found in a leaf **(2mks)**

……

……

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13. State the roles of the following cell organelles in a cell

(a) Lysosomes **(2mks)**

……

……

……

(b) Centrioles **(1mk)**

……

……

14. Name the physiological process involve in the movement of the following substances in and out of the cell.

(a) Mineral salts **(1mk)**

……

(b) Water **(1mk)**

……

15. Below is the dental formula of an organism

$$i\frac{3}{3}\ C\frac{1}{1}\ Pm\frac{4}{4}\ \ m\frac{2}{3}$$

(i) Calculate the total number of teeth in the jaw of the animal **(2mks)**

(ii) With a reason, identify the type of dentition for the organism **(2mks)**

……

……

……

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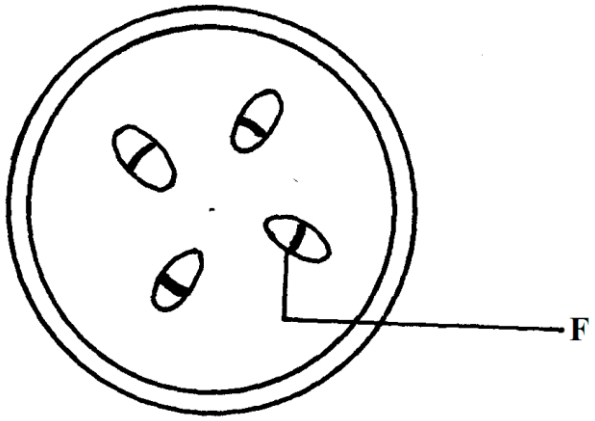
16. The diagram below shows a section through a plant organ



(a) (i) Name the class of the plant from which the section was obtained **(1mk)**

……

(ii) Give a reason for your answer in a(i) above **(1mk)**

……

……

17. (a) Name two structures for gaseous exchange in aquatic plants. **(2mks)**

……

……

(b) State one adaption of the above named structures. **(1mk)**

……

……

18. During a biological trip, plants that had flowers drew the attention of students

(**a)** Name the subdivision of the plants **(1mk)**

……

(b) Name two possible characteristics that students would use to conclude that they were insect pollinated. **(2mks)**

……

……

……

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19. Define the following terms

(a) Homologous structures **(1mk)**

……

……

(b) Vestigial structures **(1mk)**

……

……

20. Name the type of responses exhibited by the following

(a) Pollen tube growth towards the embryo sac **(1mk)**

……

(b) Maggot moving from the lit part of boiling tube to the part painted black **(1mk)**

……

(c) Folding of the leaves of the **Mimosa Pudica** plant on touch **(1mk)**

……

21. Insulin is a hormone synthesized using bacteria DNA. It is possible to obtain from hospitals because of the new technology

(a) Name the technology used in the case above. **(1mk)**

……

(b) Why were bacteria preferred in the medicine production **(2mks**

……

……

……

22. **(a)** State the role of the following parts of ear in the hearing process

(i) Ear drum **(1mk)**

……

……

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(ii) Cochlea **(1mk)**

……

……

(b) Explain why the body temperature of a healthy human being may rise up to 39^0C on a hot humid day. **(3mks)**

……

……

……

……

……

23. Explain what happens to human body when glucose level is above normal **(3mks)**

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……

24. Name three mechanisms that ensure cross pollination takes place in flowering plants. **(3mks)**

……

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……

……

25. State the functional difference between sensory and motor neurons **(1mk)**

……

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……

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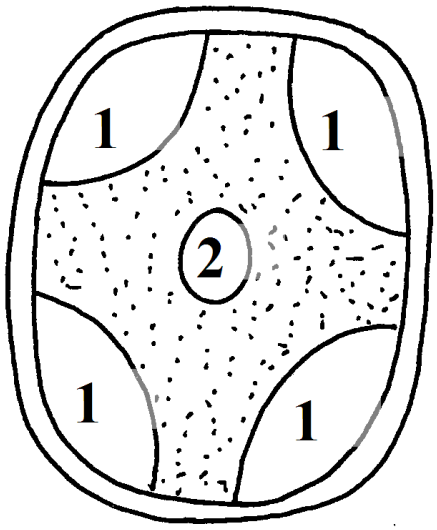
26. Give two reasons why class insecta is the most numerous among members of phylum arthropoda. **(2mks)**

……

……

……

27. The diagram below shows the appearance of a plant cell after it had been placed in a strong salt solution



(a) Name the process that occurred in the cell shown above. **(1mk)**

……

(b) (i) Which substance is present in the regions marked 1? **(1mk)**

……

(ii) Give reasons for your answer in b(i) above **(2mks)**

……

……

……

28. State two roles of a fruit to a plant **(2mks)**

……

……

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29. What is the importance of the following in an ecosystem?

(i) Bacteria and fungi **(1mk)**

……

……

(ii) Predators **(1mk)**

……

……

30. Outline three roles of active transport in the human body. **(3mks)**

……

……

……

……

……

KCSE 23

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

BIOLOGY

231/2

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

1) *Write your name, admission number and class in the spaces provided above.*
2) *Answer all the questions in Section A in the spaces provided.*
3) *In section B answer question 6 Compulsory and Either Question 7 or 8*

FOR EXAMINERS USE ONLY

Questions	Questions	Maximum Score	Candidate Score
A	1	8	
	2	8	
	3	8	
	4	8	
	5	8	
B	6	20	
	7	20	
	8	20	
TOTAL		**80**	

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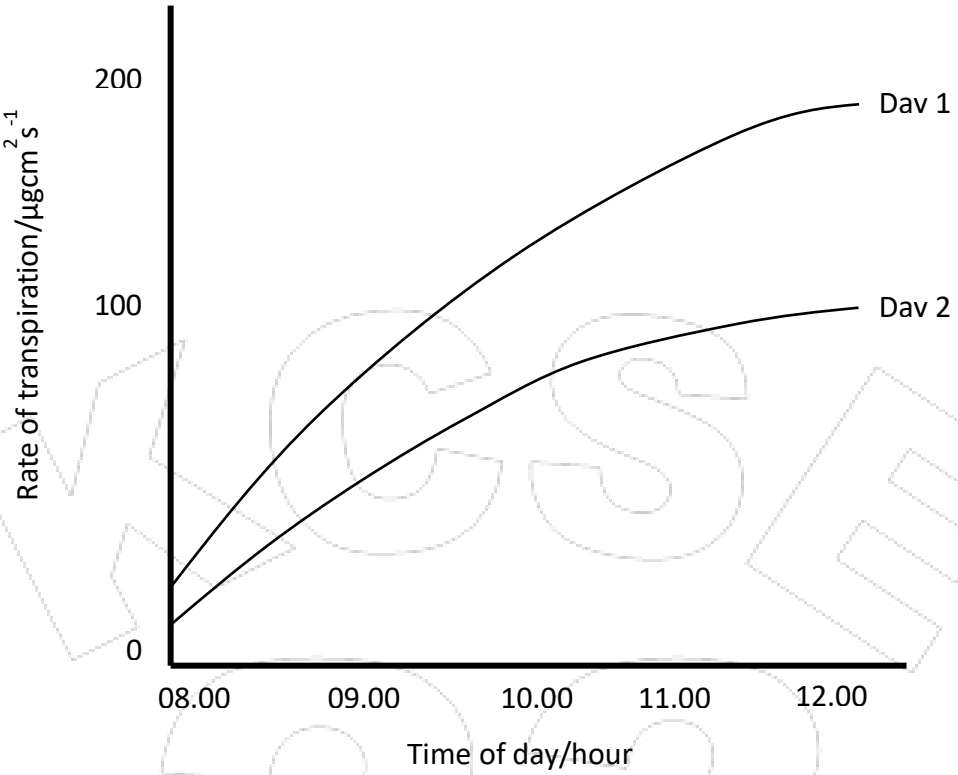
SECTION A (40 marks)

*Answer **all** the questions in this section in the spaces provided.*

1. The graph below shows the rate of transpiration of the same plants on two consecutive mornings, day 1 and 2.



a) (i) Give two environmental factors that could account for the difference between day 1 and day 2 **(2mks)**

……

……

……

(ii) Explain how the environmental factors named (a) (ii) above could have caused the difference between day 1 and day 2. **(2mks)**

……

……

……

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b) Name two forces involved in movement of water up the xylem. **(2mks)**

……

……

c) Name the strengthening material found in the following tissue in a stem:

i) Sclerenchyma **(1mark)**

……

ii) Collenchyma **(1 mark)**

……

2. a) A young mother delivered a baby at Muranga Hospital, which was taken to the nursery shortly after delivery. When she was brought the baby later, she felt that it was the wrong baby. When she got home, she decided to contest the issue in a court of law. The blood tests showed that she was blood group AB and her husband was group O and the baby was blood group O. Use a genetic cross to find out if her claims were true. **(5mks)**

……

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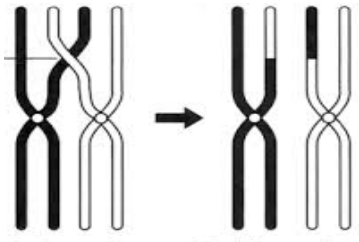
b) The figure below is a diagram of a pair of homologous chromosomes during meiosis.



i) Name the process shown above **(1mk)**

……

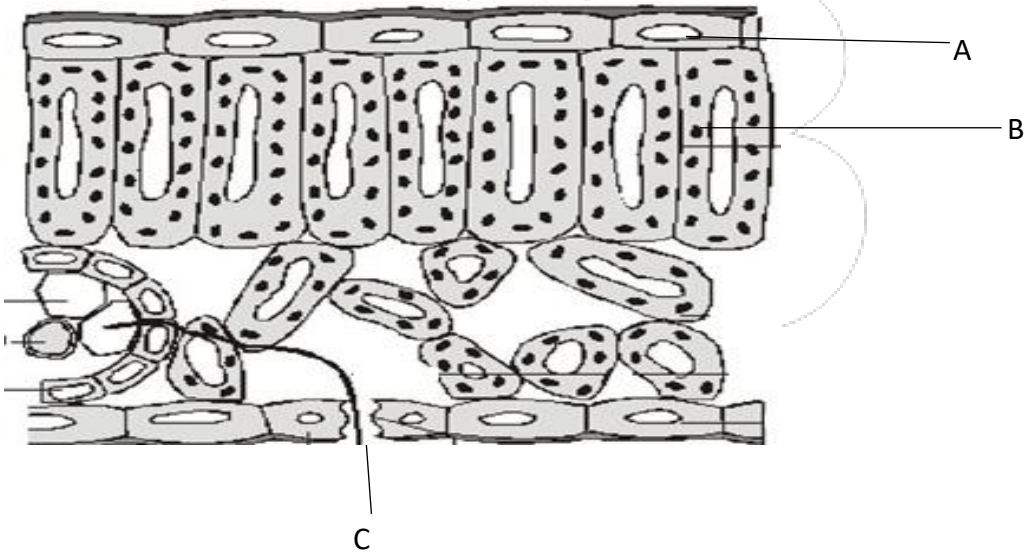
ii) Explain the effect of the process named in (b) (i) above on linked genes**.** **(2mks)**

……

……

……

3. The diagram below shows a vertical section through the part of a leaf of a mesophyte.



a) Label cell A and organelle B **(2marks)**

A-……

B-……...

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b) State two functions of the part labelled C. **(2mks)**

……

……

c) Give two differences between the structure shown above and that of a floating hydrophyte.

(2marks)

……

……

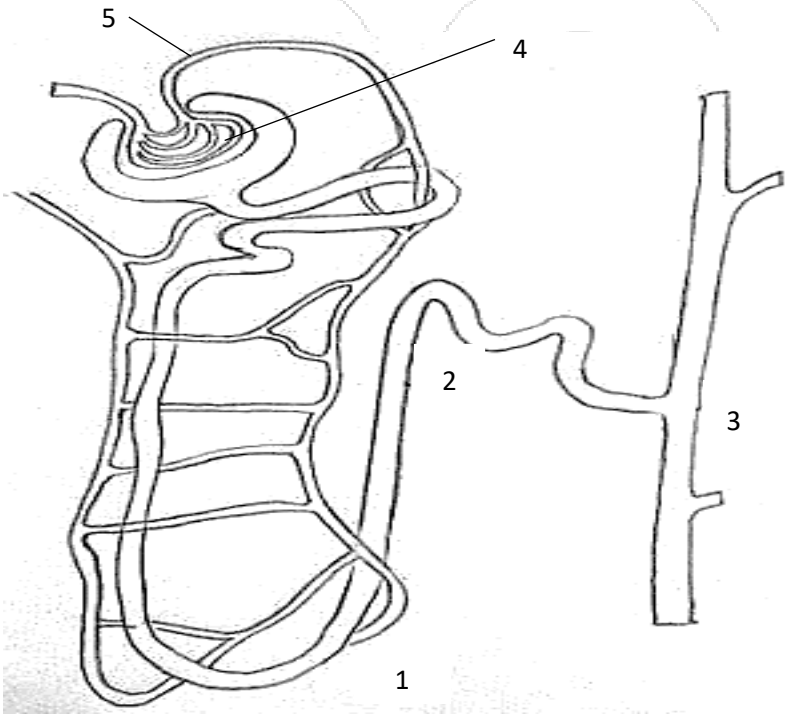
……

d) Give two observable features that adapts the structure above to photosynthesis. **(2 marks)**

……

……

4. Below is a diagram of a mammalian nephron. Use it to answer the questions that follow.



a) Name part 4. **(1mark)**

……

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b) Explain what happens to the concentration of sodium ions between 1 and 2. **(2 marks)**

……

……

……

c) i) Name the hormone that controls the amount of urine produced in the kidneys**.** **(1 mark)**

……

ii)How will the concentration of urine be affected at region 3 in the absence of the hormone mentioned in (c) (i) above. **(2mks)**

……

……

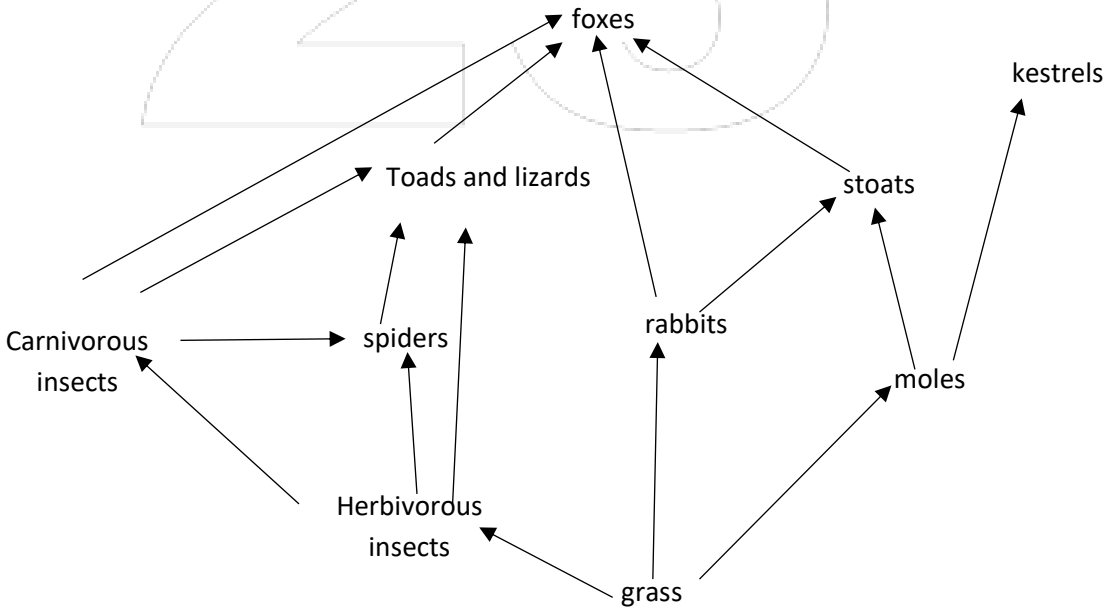
……

d) What will happen at point 4 if there was partial constriction at point 5? **(2marks)**

……

……

5. The diagram below shows a food web. Study it and answer the questions that follow.



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a) Write two food chains with foxes as the quaternary consumer. **(2mk)**

……

……

b) Name the organism with

i) The highest biomass **(1 mark)**

……

ii) The highest number of predators **(1 mark)**

……

c) State two possible effects on the ecosystem if kestrels migrated. **(2 marks)**

……

……

d) Explain why primary productivity reduces with increase in depth in an aquatic ecosystem.

(2marks)

……

……

……

SECTION B

Answer question 6 ***(compulsory)*** *and* ***either*** *question 7* ***or*** *8*

6. During germination and growth of a cereal, the dry weight of endosperm, the embryo and total dry weight were determined at two-day intervals. The results are shown in the table below.

Time after planting	Dry weight of endosperm	Dry weight of embryo (mg)	Total dry weight (mg)
0	43	2	45
2	40	2	42
4	33	7	40
6	20	17	37
8	10	25	35
10	6	33	39

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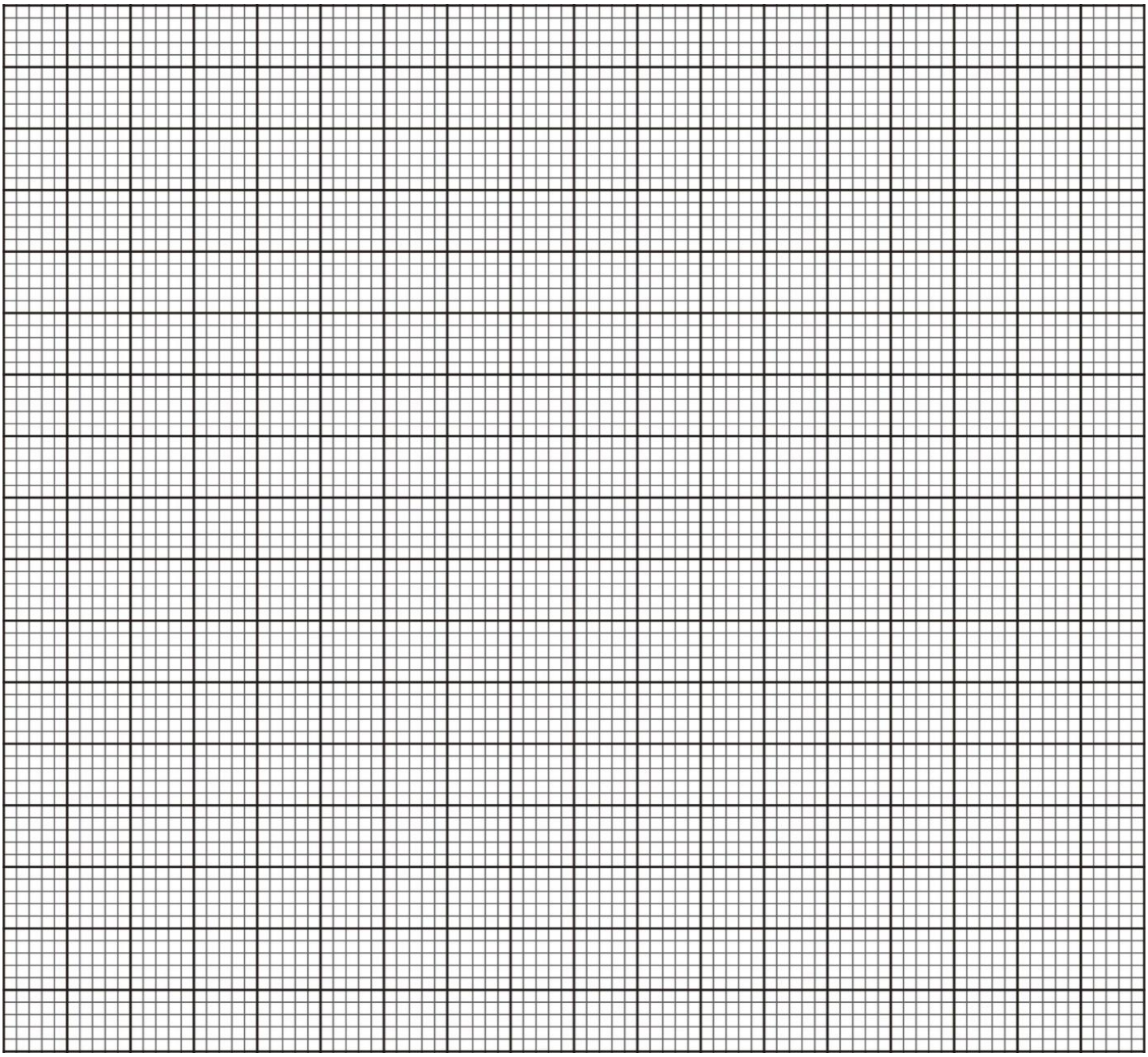
a) Using the same axes, draw graphs of dry weight of endosperm, embryo and the total dry weight against time. **(8 marks)**



b) What is the total dry weight on day 5? **(1mark)**

……

……

……

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c) Account for:

i) Decrease in dry weight for endosperm from day 0 to 10. **(2 marks)**

……

……

……

……

ii) Increase in dry weight of embryo from day 0 to 10. **(2 marks)**

……

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……

……

iii) Decrease in total dry weight from day 0 to day 8. **(2 marks)**

……

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……

……

iv) Increase in total dry weight after day 8 **(1 mark)**

……

……

……

d) State two factors that causes seed dormancy in each of the following:

i) Within a seed **(2 mark)**

……

……

ii) Outside a seed. **(2 mark)**

……

……

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7. a) A student sitting under a shade of a tree, on a sunny day, shifted the eyes from looking at an aero plane in the sky to reading a page on her book. Describe the changes that occurred in her eye. **(15 marks)**

b) Explain how a neuron is adapted to its function. **(5marks)**

8. a) Describe digestion of milk in the stomach **(10 marks)**

b) Describe assimilation of the end products of digestion in mammals. **(10 marks)**

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

BIOLOGY

231/3

PAPER 3 (PRACTICAL)

TIME: 1¾ HOURS

SCHOOL…… SIGN……

Kenya Certificate of Secondary Education.

CONFIDENTIAL INSTRUCTIONS TO SCHOOLS

REQUIREMENTS

Each candidate will require;

- 50ml of Solution W- Starch solution, prepared with warm water.
- Solid Q -5g of Diastase in a stoppered container
- 4 test tubes in a rack
- 4 Droppers
- 100ml plastic beaker
- 10ml measuring cylinder
- Test tube holder
- Spatula
- Three labels
- Means of timing(Wall clock/stop watch)

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Access to

- ❖ Benedict's solution placed in a test tube with a dropper
- ❖ 1M Hydrochloric acid with dropper.
- ❖ Iodine solution with a dropper
- ❖ Source of heat
- ❖ Hot water bath maintained at 37^0C

NB// Question 2 and 3 Photos should be coloured

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

BIOLOGY

231/3

PAPER 3 (PRACTICAL)

TIME: 1¾ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

- ***a)*** *Write your name, Admission number and class in the spaces provided*
- ***b)*** *Sign and write the date of examination in the spaces provided above.*
- ***c)*** *Answer all questions in the spaces provided in the question paper.*
- ***d)*** *You are required to spend the first 15 minutes of first hours allowed for this paper reading the whole paper before commencing your work.*
- ***e)*** *Answers MUST be written on the spaces provided after each question.*
- ***f)*** *Candidates may be penalized for recording irrelevant information and incorrect spelling especially of technical terms.*

FOR EXAMINERS USE ONLY

QUESTION	Max Score	Candidate Score
1	14	
2	15	
3	11	
TOTAL SCORE	40	

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1.You are provided with solution W ,Solid Q, Iodine solution ,Benedict's solution, Hydrochloric acid and Water bath.

a)Using reagents provided carry out tests to determine the food substance present in solution W

Record the procedure ,observation and conclusion in the table below **6mks**

Food test	**Procedure**	**Observation**	**Conclusion**

b)Label three test tubes as A, B and C. Place 3ml of Solution W into each test tube. Divide solid Q into three equal portions.

To the test tube A add one portion of solid Q and shake thoroughly

To the test tube B add the second portion of Solid Q shake thoroughly and heat to boil.

To the test tube C add the third portion of solid Q, followed by 8 drops of 2M hydrochloric acid and shake to mix.

Place the three set ups into a water bath maintained at 37°c for 40 minutes.

Add equal amounts of Benedict's solution to each of three test tubes and heat to boil. Record your observation.

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Set up A ……1mk

B ……1mk

C ……...1mk

Account for your observations above **3mks**

……

……

……

……

c) Name any other factor that affects the reaction above. **(1mk)**

……

d) Give a reason why temperature of the water bath was maintained at 37°c **(1mk)**

……

……

2 .a) You are provided with Flower specimen **K**. Use it to answer the questions that follow



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i) Name the type of gynoecium in the flower**.** **(1mk)**

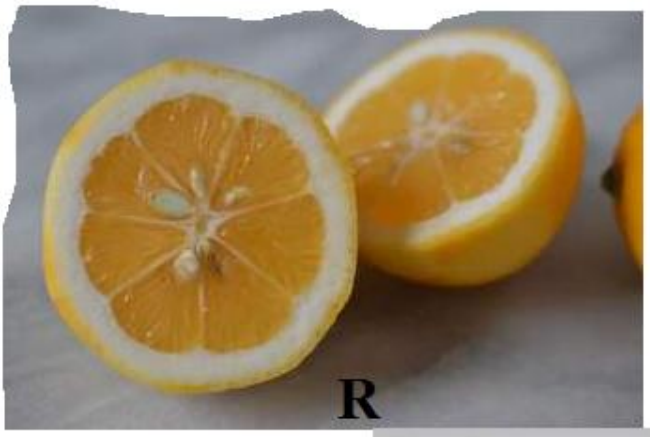
……

ii) With a reason state the agent of pollination.

Agent of pollination……..……1mk

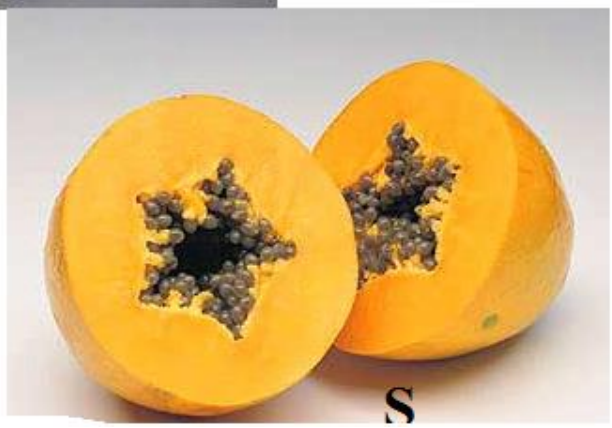
Reason …….. 1mk

b) The photographs labelled **Q, R**,and **S** are sections of some plant parts.





Q



(i) Name the type of placentation in the specimens shown in photographs **Q, R** and **S** .With Reasons **(6 marks)**

Fruit	**Placentation**	Reason
Q R S		

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(ii) Giving a reason in each case, name the mode of dispersal of the specimen in photograph **Q** and **S** **(4marks)**

Q

Mode ……..……

Reason

……

……

S

Mode ……..……

Reason

……

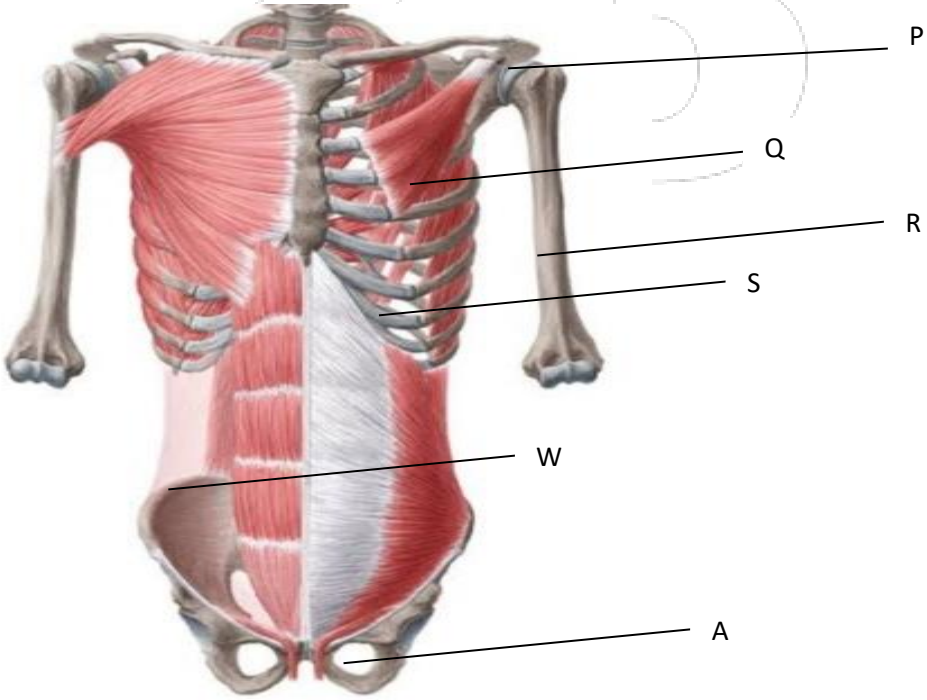
……

iii) What type of fruit is R .Give a reason. **(2mks)**

……

……

3. The diagram below represents a section of human skeleton and muscles.



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a)i)Name the parts labelled :

W……..1mk

S……..1mk

R……..1mk

Q …….. 1mk

ii) What is the significance of part **A** **(1mk)**

……

……

(iii)Describe the role of Q during inhalation**.** **(2mks)**

……

……

……

(iv)Name the type of muscle on the diagram above. **(1mk)**

……

v)What type of joint is at P**.** **(1mk)**

……

b)Name the bone that articulate with R at:

i)Proximal **end** **(1mk)**

ii) Distal end **(1mk)**

END

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

CHEMISTRY

233/1

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

- *Write your name, admission number, class, date and then sign in the spaces provided.*
- *Answer **all** questions in the spaces provided.*
- *KNEC mathematical tables and silent electronic calculators **may** be used for calculations.*
- *All workings **must** be clearly shown where necessary.*

FOR EXAMINERS USE ONLY

QUESTIONS	MAXIMUM SCORE	STUDENTS SCORE
1-29	80	

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1.When magnesium metal is burnt in air, a white ash is formed. Write the formula of the two components of the white ash. **(2marks)**

……

……

……

2. What type of bond is formed when sodium and chlorine react? Explain. **(2marks)**

(Atomic numbers: Na = 11 and Cl = 17)

……

……

……

3. When solid Sodium carbonate was added to a solution of hydrogen chloride in methylbenzene, there was no apparent reaction. On addition of water to the resulting mixture, there was vigorous effervescence. Explain these observations. **(3marks)**

……

……

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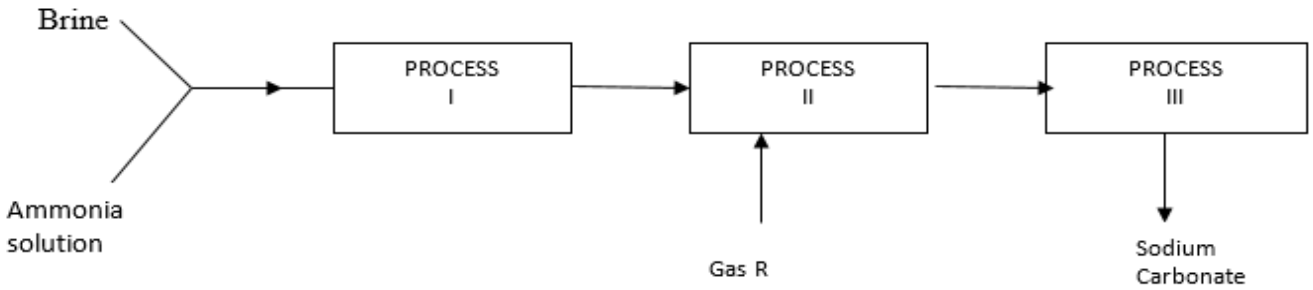
……

……

4. Below is a simplified scheme of Solvay process. Study it and answer the questions that follow:



a) Identify gas R. **(1mark)**

……

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b) Write an equation for the process III. **(1mark)**

……

c) Give **two** use of sodium carbonate. **(1mark)**

……

……

5. When potassium nitrate is heated, it produces potassium nitrite and gas C.

(a) Identify gas **C** **(1mark)**

……

(b) Name the type of reaction undergone by the potassium nitrate **(1mark)**

……

6. When a few drops of aqueous ammonia were added to copper (II) nitrate solution, a light blue precipitate was formed. On addition of more aqueous ammonia, a deep blue solution was formed. Identify the substance responsible for the:

a. Light blue precipitate. **(1mark)**

……

b. Deep blue solution. **(1mark)**

……

7. The first step in the industrial manufacture of nitric (v) acid is the catalytic oxidation of ammonia gas.

(a) What is the name of the catalyst used? **(1 mark)**

……

(b) Write the equation for the catalytic oxidation of ammonia gas. **(1mark)**

……

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(c) Nitric acid is used to manufacture ammonium nitrate, state two uses of ammonium nitrate.

(1mark)

……

……

8. a) **Complete** the table below to show the colour of the given indicator in**.** **(1mark)**

Indicator	Colour in	
	Acid solution	Basic solution
Methyl orange	…….	Yellow
Phenolphthalein	Colorless	……

b) How does the pH value of 0.1 M potassium hydroxide solution compare with that of 0.1M aqueous ammonia? Explain. **(2marks)**

……

……

……

9. Sketch and label a graph to show activation energy in an endothermic reaction. **(3marks)**

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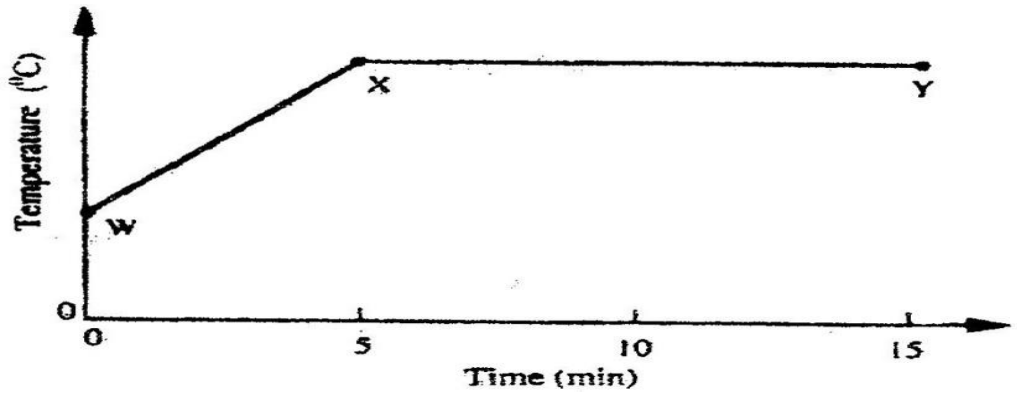
10. The graph below shows a curve obtained when water at 20°C was heated for 15 minutes.



a) What happens to the water molecules between points W and x? **(1mark)**

……

……

b) In which part of the curve does a change of state occur? **(1mark)**

……

c)State one application of the effect of impurities on melting point of substances**.** **(1mark)**

……

……

11. In an experiment, magnesium reacted with copper (ii) sulphate solution.

a) What type of reaction is illustrated**.** **(1mark)**

……

b) state two observations made. **(2marks)**

……

……

12. 15.0cm^3 of ethanoic acid (CH_3COOH) was dissolved in water to make 500cm^3 of solution. Calculate the concentration of the solution in moles per litre. (C=12.0; H=1.0; O=16.0; density of ethanoic acid is 1.05 g/cm^3). **(3marks)**

……

……

……

……

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13. In an experiment, a few drops of concentrated nitric (v) acid were added to aqueous iron (II) sulphate in a test tube. Excess sodium hydroxide solution was then added to the mixture.

a) State the observations that were made when:

i)Concentrated nitric (v) acid was added to aqueous iron (II) sulphate**.** **(1mark)**

……

……

ii) Excess sodium hydroxide was added to the mixture. **(1mark)**

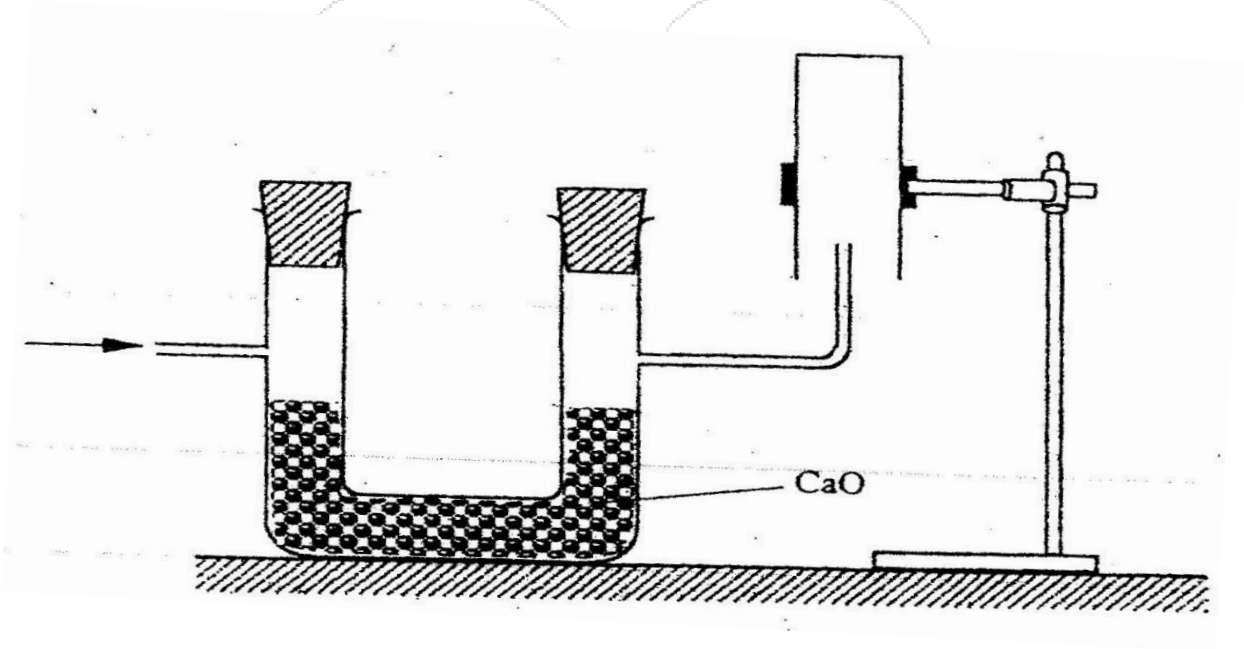
……

……

b) Write the ionic equation for the reaction which occurred in (a) (ii) above. **(1mark)**

……

14. The set-up below was used to collect a dry sample of a gas.



a) Give two reasons why the set-up cannot be used to collect carbon (iv) oxide gas. **(2marks)**

……

……

……

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b) Name a gas that can be collected by the above set up**.** **(1mark)**

……

15 The basic raw material for extraction of aluminium is bauxite

a) Name the method that is used to extract aluminium from bauxite. **(1mark)**

……

b) Write the chemical formula of the major component of bauxite. **(1mark)**

……

c) Name two major impurities in bauxite. **(1mark)**

……

……

16. During the electrolysis of aqueous silver nitrate, a current of 5.0A was passed through the electrolysis for 3 hours.

a) Write the equation for reaction which took place at the cathode. **(1mark)**

……

b) Calculate the mass of silver deposited at the cathode. (Ag = 108; IF=96500C). **(2marks)**

……

……

……

……

……

17. A compound whose general formula is $M(OH)_3$ reacts as shown by the equation below.

$M(OH)_{3(s)} + OH_{(aq)} \longrightarrow M(OH)_{4(aq)}$

$M(OH)_{3(s)} + 3H^+_{(aq)} \longrightarrow M^{3+}_{(aq)} + 3H_2O_{(i)}$

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(a) What name is given to compounds which behave like $M(OH)_3$ in the two Reactions **(1 mark)**

……

……

……

(b) Name two elements whose hydroxides behave like that of **M** **(2 marks)**

……

……

18. a) State the Graham's law of diffusion. **(1mark)**

……

……

b) The molar masses of gases W and X are 16.0 and 44.0 respectively. If the rate of diffusion of W through a porous material is $12cm^3s^{-1}$, calculate the rate of diffusion of X through the same material. **(2marks)**

……

……

……

19. In a closed system, aqueous iron (III) chloride reacts with sulphide gas as shown in the equation below.

$$2FeCl_{3(aq)} + H_2S_{(g)} \rightleftharpoons 2FeCl_{2(aq)}\ 2HCl_{(aq)} + S_{(s)}$$

State and explain the effects on the position of equilibrium point when dilute hydrochloric acid is added to the system at equilibrium. **(2marks)**

……

……

……

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20.In an experiment to determine the percentage of magnesium hydroxide in an anti-acid, a solution containing 0.50 g of the anti-acid was neutralized by 23.0 cm^3 of 0.1M hydrochloric acid (Relative formula mass of magnesium hydroxide =58)

Determine the,

a) Mass of magnesium hydroxide in the anti-acid. **2marks)**

……

……

……

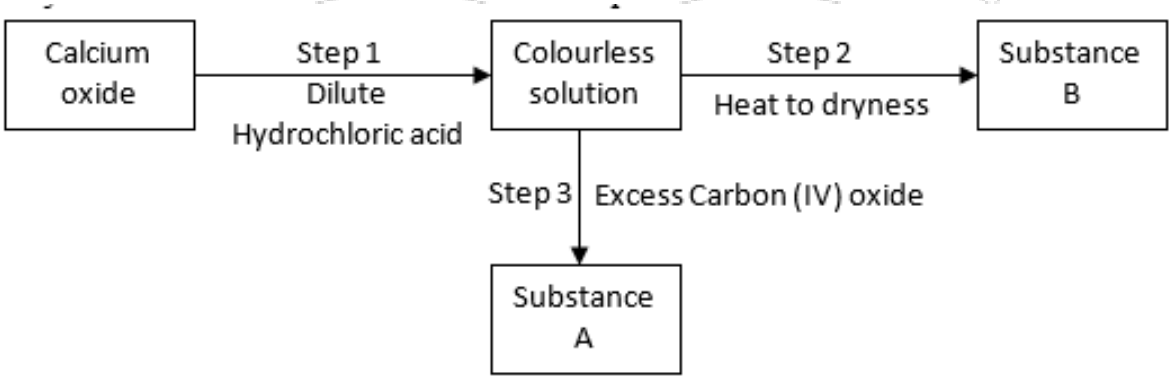
b) Percentage of magnesium hydroxide in the anti-acid . **(1mark)**

……

……

……

21. Study the flow chart below and answer the questions that follow.



a) Give the name of the process that takes place in step 1. **(1mark)**

……

b) Give;

(i) The name of substance A**.** **(1mark)**

……

(ii) One use of substance B**.** **(1mark)**

……

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22. Starting with 50 cm^3 of 2.8M sodium hydroxide, describe how a sample of pure sodium sulphate crystals can be prepared. **(3 marks)**

……

……

……

……

……

……

23. Use the information below to answer the questions that follow:

Equation	Enthalpy of formation
$H_2(g) + ½ O_2(g) \rightarrow H_2O(l)$	$\triangle H = -286\ kjmol^{-1}$
$C(s) + O_2(g) \rightarrow CO_2(g)$	$\triangle H = -394 kjmol^{-1}$
$2C(s) + 3H_2(g) + ½ O_2 \rightarrow C_2H_5OH(i)$;	$\triangle H = 277 kjmol^{-1}$

a) Define the term "enthalpy of formation of a compound **(1mark)**

……

……

……

b) Calculate the molar enthalpy of combustion, $\triangle H_c$ of ethanol:

$C_2H_5OH(l) + 3O_2(g) \rightarrow 2CO_2(g) + 3H_2O(l)$ **(2marks)**

……

……

……

……

……

……

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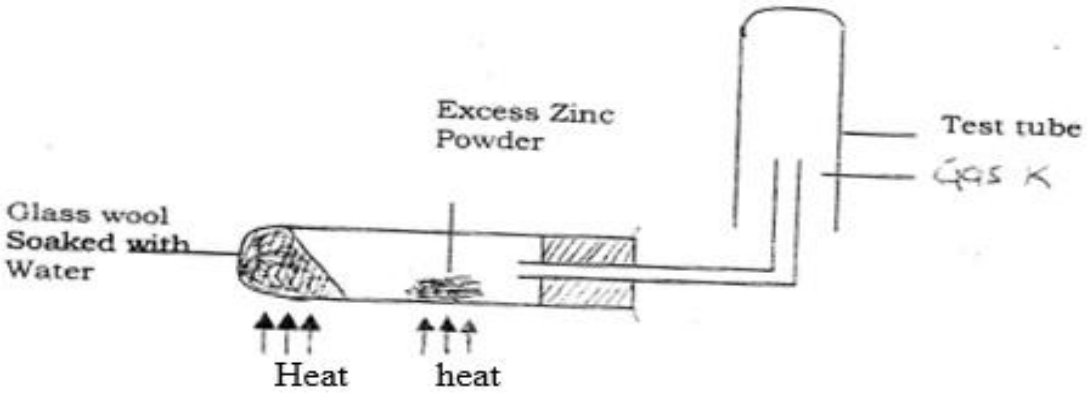
24. A student set up the experiment below to collect gas K, the glass wool was heated before heating the Zinc powder.



a) Explain why was it necessary to heat the moist glass wool before heating zinc powder. **(2mks)**

……

……

……

b) Identify gas K. **(1mark)**

……

25. Compound W (not its actual symbol) is a solid with a giant ionic structure. In what form would the compound conduct an electric current, explain. **(2marks)**

……

……

……

26.Pentane and ethanol are miscible. Describe how water could be used to separate a mixture of pentane and ethanol. **(3marks)**

……

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……

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27. But -2- ene undergoes hydrogenation according to the equation given below

$CH_3CH = CHCH_3 (g) + H_2 (g) \rightarrow CH_3CH_2CH_2CH_3 (g)$

(a) Name the product formed when but -2 – ene reacts with hydrogen gas. **(1mark)**

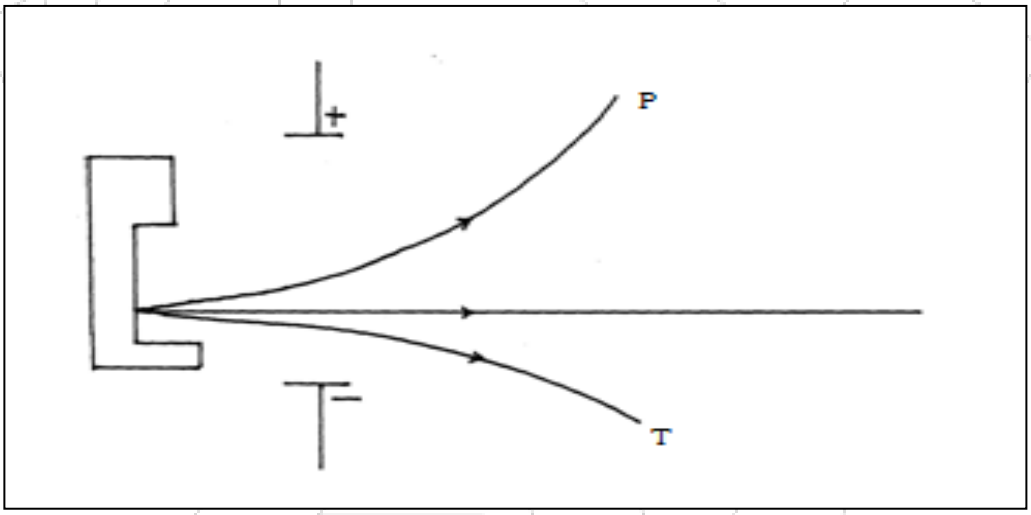
……

(b) State one industrial use of hydrogenation. **(1mark)**

……

……

28. The figure below shows the behaviour of emissions by a radioactive isotope x. Use it to answer the question follow



(a) Why does isotope **X** emits radiations. **(1mark)**

……

……

(b) Name the radiation labelled **T** **(1mark)**

……

c)What is half-life **(1mark)**

……

……

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29.a) State two reasons why cars are **painted** **(1mark)**

……

……

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b) Explain why electric cars are better than ordinary fuel cars. **(2marks)**

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KCSE 23

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

CHEMISTRY

233/2

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

(a) *Write your name and admission number in the spaces provided above.*
(b) *Answer* ***all*** *the questions in the spaces provided in the question paper.*
(c) *Non-programmable silent electronic calculators and KNEC mathematical tables may be used.*
(d) *All working* ***must*** *be clearly shown where necessary.*
(e) *Candidates should answer the questions in English.*

FOR EXAMINER'S USE ONLY

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

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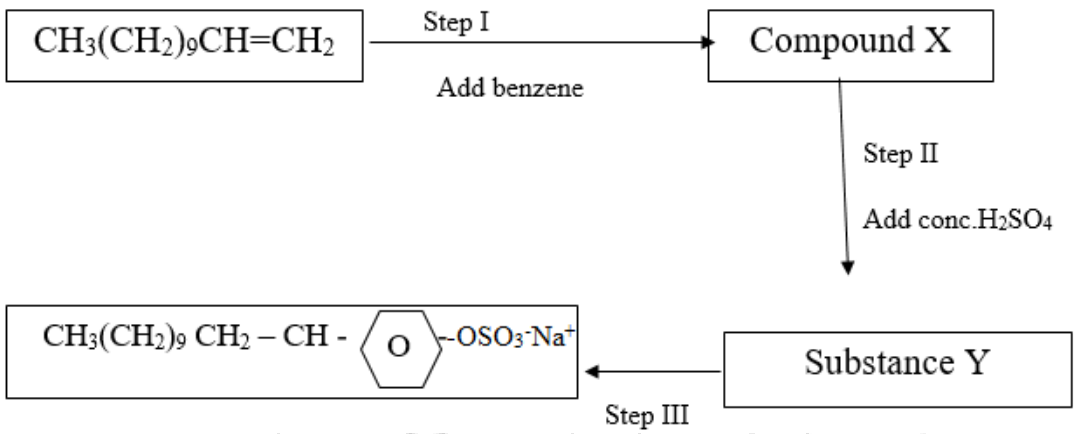
*Answer **all** the questions*

1. (a) Detergents are substances that improves cleansing properties of what. Name two substances that are added to detergents to make them more effective in cleansings. **(1mark)**

……

……

(b) The flow chart below shows steps in the manufacture of soapless detergent. Study it and answer the questions that follow.



(i) State the condition necessary for Step I**.** **(1mark)**

……

……

(ii) Write an equation for the reaction in step I (benzene, C_6H_6 is represented as). — **(1 mark)**

……

……

(c) (i) Name the process in step III**.** **(1mark)**

……

(ii) Give the reagent in step III. **(1mark)**

……

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(iii) Give the name of the product of step III. **(1mark)**

……

(d) Explain:

(i) One advantage of soapless detergents over soaps. **(1mark)**

……

……

(ii) One disadvantage of soapless detergents over soaps. **(1mark)**

……

……

(e) Pentanoic acid reacts with butan-1-ol to form an organic compound.

(i) What is the name given to the above type of reaction? **(1mark)**

……

……

(ii) A certain catalyst must be added to the mixture to increase the rate of reaction.

Name the catalyst**.** **(1mark)**

……

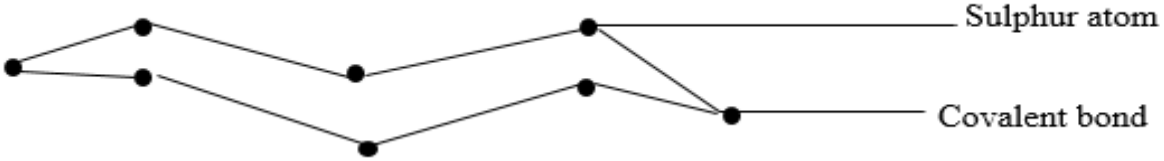
……

Explain the role of the catalyst in the above reaction**.** **(1 mark)**

……

……

2. Study the structure below and use it to answer the questions that follows



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(a) State two observations made when the molecule is heated to a temperature of 113°c. **(2 marks)**

……

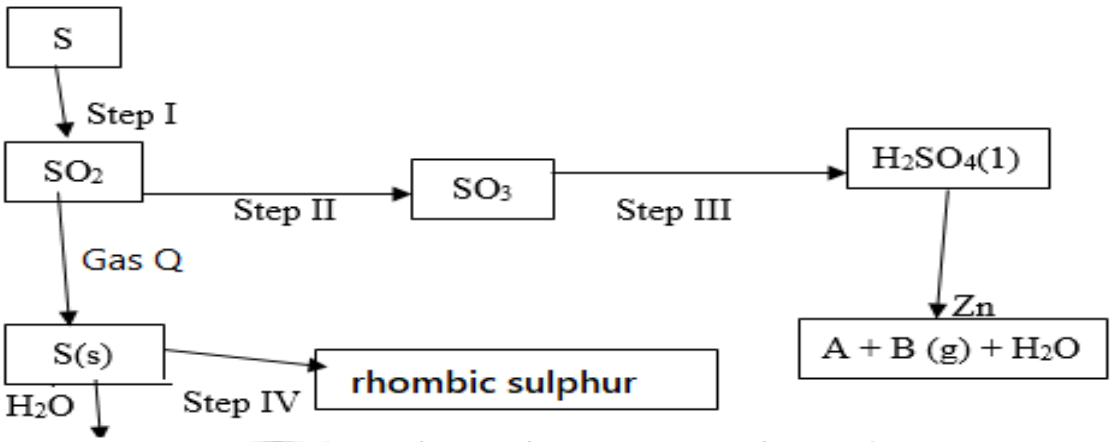
……

……

(b) Write an equation of the reaction between sulphur atom with hydrogen gas. **(1mark)**

……

(c) Below is a flow chart. Use it to answer the questions that follow.



Name: **(2 marks)**

(i) Gas Q……**(ii) Gas B** ……

(d) (i) State the observations made in step I. **(2marks)**

……

……

……

(ii) Step I and Step II occur in the Contact process. State the optimum conditions necessary for Step II to occur. **(2marks)**

……

……

……

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(iii) Name the reagent used in Step IV. **(1 mark)**

……

……

(iv) Explain why water is not used in Step III. **(1 mark)**

……

……

(e) Sulphur (iv) oxide is a major environmental pollutant and should not be emitted into the atmosphere. Name the reagent used to achieve this. **(1 mark)**

……

……

(f) Explain the role of Sulphur in vulcanization of rubber. **(1 mark)**

……

……

3. Study the Standard electrode potential for the half-cell given below and use it to answer the questions that follow. The letters do not represent the actual symbols of elements.

	Eθ (volts)
$P^{+}_{(aq)} + e^{-} \longrightarrow P(s)$	-2.92
$Q^{+}_{(aq)} + e^{-} \longrightarrow Q(s)$	+0.52
$R^{+}_{(aq)} + e^{-} \longrightarrow \frac{1}{2}R_2(g)$	0.00
$S^{2+}_{(aq)} + 2e^{-} \longrightarrow S(s)$	-0.44
$\frac{1}{2}T_{2(g)} + e^{-} \longrightarrow T^{-}_{(aq)}$	+1.36

(a) Identify the strongest oxidizing agent. Give a reason for your answer. **(2 marks)**

……

……

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(b) Which half cells would produce the highest potential difference when combined? **(1 mark)**

……

……

(c) Predict whether the reaction represented below can take place. **(2 marks)**

$$S_{(s)} + P^{+}_{(aq)} \longrightarrow S^{2+}_{(aq)} + P_{(s)}$$

……

……

……

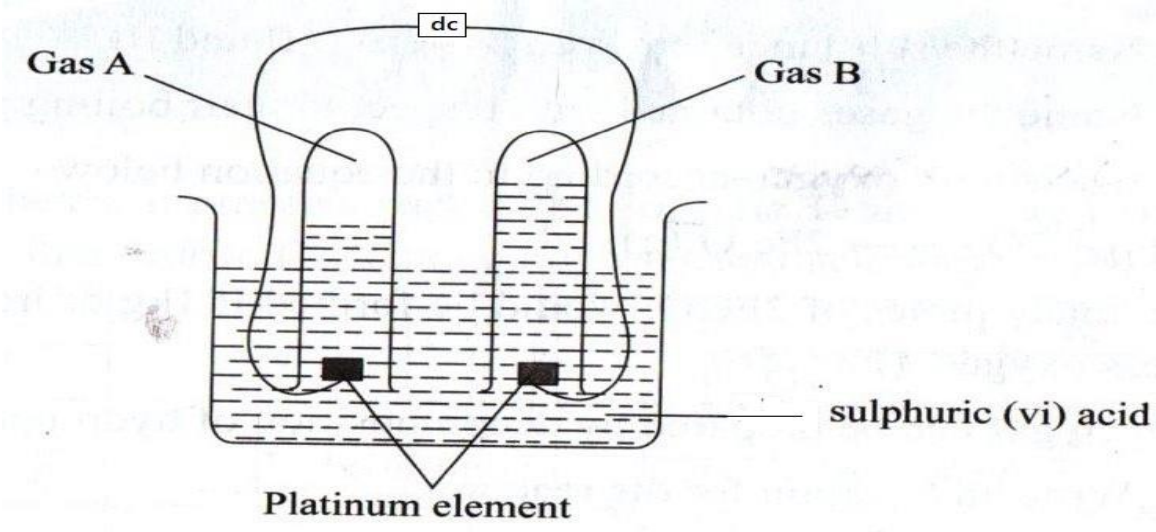
(d) Write a cell representation for the cell that would be constructed by combining P and Q.**(2 mks)**

……

……

……

(e) 100 cm^3 of 2M sulphuric acid was electrolyzed using the set up represented by the following diagram.



(i) Write an equation for the reaction that produces gas B.

……

……

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(ii) Describe how gas A can be identified. **(1 mark)**

……

……

……

(iii) Explain the differences in the volumes of gases produced at the electrodes. **(2 marks)**

……

……

……

(f) An electric current is passed through a solution for 18 minutes. The volume of gas produced at the cathode is 480 cm3.Calculate the current used. (Molar gas volume at rtp = 24 dm3 IF = 96500 C) **(2 marks)**

……

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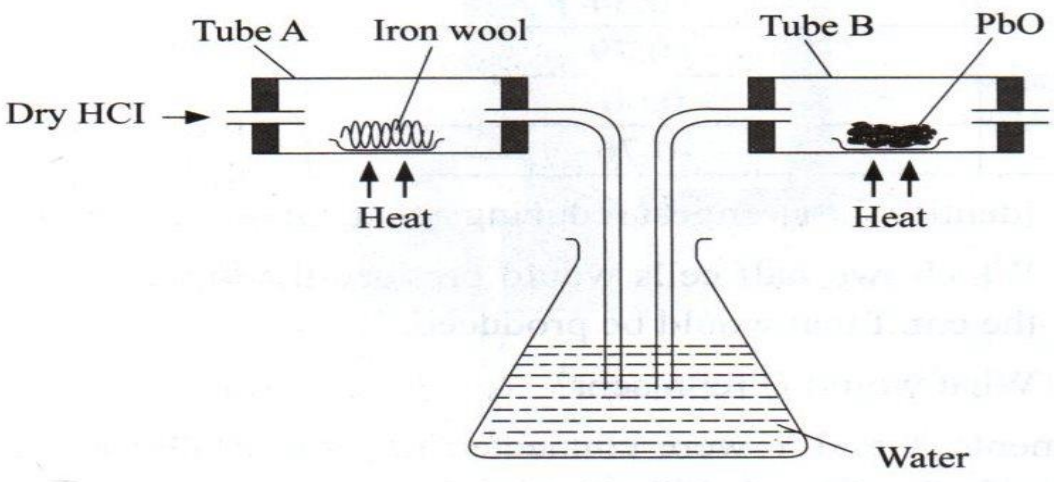
4. In an experiment, dry hydrogen chloride gas was passed through heated iron wool as shown in the diagram below. The gas produced was then passed through heated lead (II) oxide.



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(a) (i) State the function of water in the flask. **(1 mark)**

……

……

(ii) Write the equation for the reactions that took place in tubes labeled A and B. **(2 marks)**

Tube A

……

Tube B

……

(iii) Explain how the total mass of tube B and its contents would compare before and after the experiment. **(2 marks)**

……

……

……

(b) Chlorine gas and hydrogen chloride gas can be prepared using the following reagents: sodium chloride, concentrated Sulphuric (VI) acid and potassium manganate (VII) and hydrochloric acid.

(i) State the role of each of the following in the reaction. **(1 mark)**

Concentrated Sulphuric (vi) acid

……

……

Potassium manganate VII. **(1 mark)**

……

……

(ii) Name the bleaching agent formed when chlorine gas is passed through cold dilute sodium hydroxide solution. **(1 mark)**

……

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(iii) Apart from bleaching action, state the other use of compound formed in (ii) above**. (1 mark)**

……

……

(c) 1.9 g of magnesium chloride were dissolved in water. Silver nitrate solution was then added until in excess. Calculate the mass of $AgNO_3$ that was needed for the complete reaction.**(2 mks)**

(Ag = 108, O = 16, N = 1, Mg = 24, Cl = 35.5)

……

……

……

5. Use the grid below to answer the questions that follow (the letters do not represent the actual symbols of the elements)

A								
F	J				M		O	
G			K	L		N	P	Q
H								

(a) Give the family name to which elements in the shaded area belong. **(1 mark)**

……

(b) State and explain the difference in reactivity between G and J. **(2 marks)**

……

……

……

(c) How does the atomic radius of K compare to that of L? Explain. **(2 marks)**

……

……

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(d) Element R forms an oxide of formula RO_2 and it belongs to period 2.

Indicate on the grid the position of R. **(1mark)**

(e) Give the formula of the compound formed between K and P. **(1mark)**

……

……

(f) Give the type of bond formed when F reacts with O. Explain. **(2 marks)**

……

……

……

(g) Give the electronic arrangements of the ions of G and M. **(1mark)**

G……

M……

h) Element A can fit in two groups. Name the two groups and explain**.** **(2 marks)**

……

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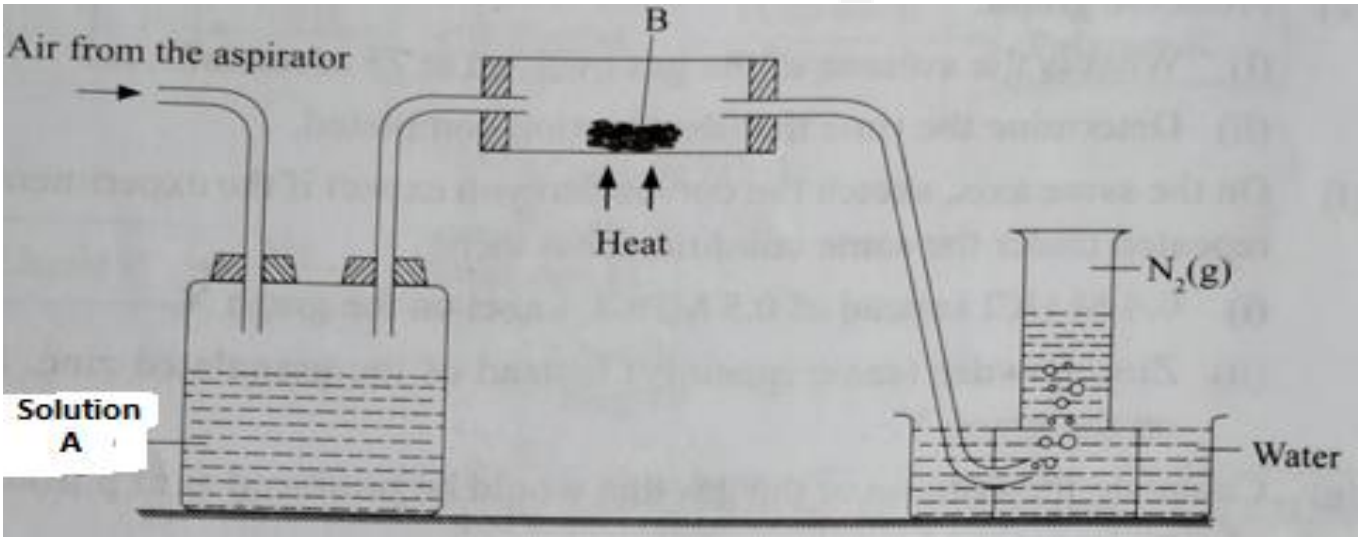
6. An experiment was carried out using the apparatus as shown below to prepare a sample of nitrogen gas from air.



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(a) Identify one mistake in the setup. **(1mark)**

……

……

(b) Name what is contained in: **(2marks)**

(i) Bottle A ……..

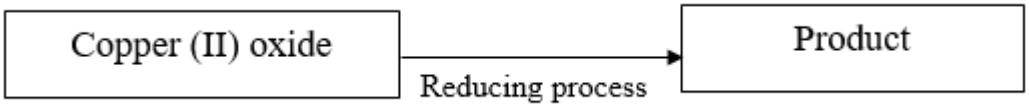
(ii) Tube B ……

(c) The nitrogen prepared by his method is denser than nitrogen prepared by fractional distillation of liquid air. Explain. **(1mark)**

……

……

(d) Use the flow diagram to answer the questions



(i) Give the formulae of three gases which can reduce hot copper (II) oxide. **(3 marks)**

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(ii) Explain what will be observed when the above reaction takes place. **(1 mark)**

……

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(e) In the Haber process, the optimum yield of ammonia is obtained when a temperature of 450°c,a pressure of 200 atmospheres and an iron catalyst are used.

$$N_{2(g)} + 3H_{2\,(g)} \rightleftharpoons 2NH_{3(g)} \quad \Delta H = -92\ kJ/mol$$

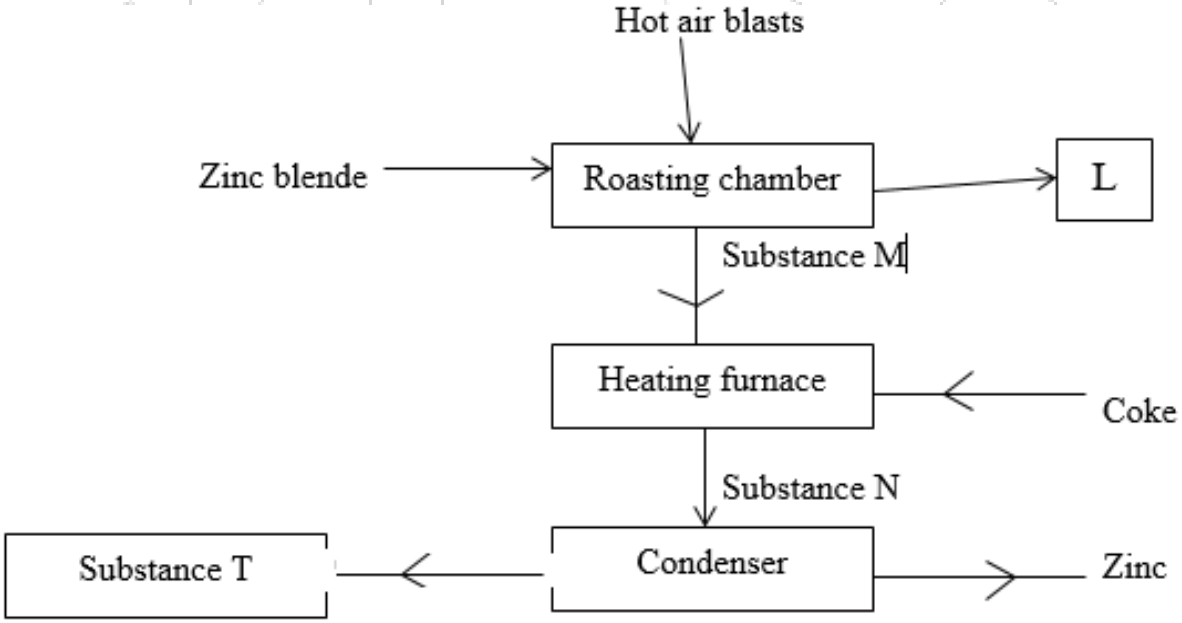
How is the yield of ammonia affected if the temperature is raised to 600° C. Give a reason? **(2mks)**

……

……

……

7. The flow chart below illustrates extraction of Zinc from zinc blende. Study it and answer the questions that follow



(a) Give an equation for the reaction in roasting furnace. **(1 mark)**

……

……

(b) Name each of the substances marked L and N. **(2 marks)**

……

……

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(c) Why is it necessary to condense substance N? **(1 mark)**

……

……

(d) Which other factory can be set up near the zinc extraction plant. Explain. **(2marks)**

……

……

……

(e) Give one use of zinc metal. **(1 mark)**

……

(f) (i) Zinc sulphide and sulphuric acid react according to the following equation.:

$$ZnS_{(s)} + H_2SO_{4(aq)} \longrightarrow ZnSO_{4(aq)} + H_2S_{(g)}$$

2.91g of zinc sulphide reacted with 100cm^3 of 0.2M Sulphuric acid. Determine the reagent that was in excess. (Zn = 65.0, S = 32.0). **(2 marks)**

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(ii) Calculate the volume of hydrogen sulphide H_2S) gas produced in the reaction above at rtp. Molar gas volume 24 dm^3**)** **(2 marks)**

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

CHEMISTRY

233/3

PAPER 3 (PRACTICAL)

TIME: 2¼ HOURS

SCHOOL…… SIGN……

Kenya Certificate of Secondary Education.

CONFIDENTIAL

In addition to the apparatus and the fitting found in a chemistry laboratory, each candidate will required the following

1. *About 70cm^3 of solution P.*
2. *About 80cm^3 of solution S*
3. *Exactly 7.5 cm solid R (May be fold twice)*
4. *One thermometer -10℃ - 110℃*
5. *One stop watch / clock*
6. *One 100ml plastic beaker*
7. *One burette 0 – 50ml*
8. *One pipette 25ml and a pipette filler*
9. *One volumetric flask 250 ml*
10. *About 500cm^3 of distilled water supplied in a wash bottle*
11. *One label*
12. *Two conical flasks*
13. *10ml measuring cylinder*
14. *Five clean dry test – tube in a test tube rack.*
15. *Glass rod*
16. *One boiling tube*
17. *One spatula*
18. *One test – tube holder*
19. *Filter funnel*

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20. PH chart
21. 5ml of solution Q
22. About 0.5g of anhydrous sodium carbonate
23. About 0.5g of solid E

Access to:

1. Bunsen burner
2. 2M sodium hydroxide provided with a dropper
3. Phenolphthalein indicator supplied with a dropper
4. Lead (II) nitrate solution supplied with a dropper
5. Barium nitrate solution supplied with a dropper
6. 2M aqueous ammonia
7. Universal indicator solution
8. Acidified potassium manganate (VII)
9. 2M Nitric (V) acid

NOTE

1. Solution P is prepared by adding exactly 27.2 cm^3 of concentrated sulphuric (VI) acid of specific gravity
(density) 1.84g / cm^3 to about 600cm^3 of distilled water and diluting to one litre of solution
2. Sodium hydroxide is prepared by dissolving exactly 10g of sodium pellets in about 800cm^3 of distilled water and diluting to one litre of solution
3. Solid R is exctaly 7.5cm magnesium ribbon
4. Lead (II) Nitrate solution is prepared by dissolving 33.1g of lead (II) Nitrate solid to 1 litre of distilled water
5. Barium Nitrate solution is prepared by dissolving 26.1g of Barium Nitrate in 1 litre of distilled water.
6. Solution Q made by mixing sodium sulphate and zinc sulphate in the ratio of 1:1 and dissolving in 10ml of distilled water
7. 2M Nitric (V) acid is prepared by dissolving 134cm^3 of concentrated Nitric (V) acid of specific gravity 1.42 g/cm^3 to about 600cm^3 of distilled and diluting to 1 litre of solution
8. 2M sodium hydroxide solution is prepared by dissolving 80g of sodium hydroxide pellets to about 800cm^3 of distilled water and diluting to 1 litre of solution
9. Solution Y -Acidified Potassium Manganate (VII)prepared by dissolving 9g of solid Potassium Manganate (VII) in about 600cm^3 of 2M Sulphuric (VI) acid and adding distilled water to make a litre of solution.
10. Solid E is oxalic acid

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

CHEMISTRY

233/3

PAPER 3 (PRACTICAL)

TIME: 2¼ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

- *Write your name and index number in the spaces provided above and sign*
- *Answer ALL the questions in the spaces provided.*
- *Mathematical tables and electronic calculators may be used*
- *All working MUST be clearly shown where necessary*
- *You are not allowed to start working with the apparatus for the first 15 minutes of the 2¼ hours allowed time for the paper. Use the 15 minutes to read through the question paper and note the chemicals you require.*

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QUESTION	MAXIMUM SCORE	CANDIDATES SCORE
1	22	
2	10	
3	08	
	40	

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1. You are provided with :-

- Sulphuric (VI) acid, solution P
- 0.25M sodium hydroxide, solution S
- Solid R

You are required to determine the concentration of sulphuric (VI) acid in moles per litre

PROCEDURE I

Using a burette, place 50.0cm^3 of sulphuric (VI) acid, solution P in a 100ml beaker. Measure the temperature of the solution after every half – minute and record the values in table 1 .At exactly 1 ½ minute, add solid R to the acid. Stir the mixture gently with the thermometer ensuring the solid is intact in the solution and note the temperature of the mixture after every half – minute and record the values in table 1.

a) ***Table 1***

Time (minute)	0	½	1	1 ½	2	2 ½	3	3 ½	4	4 ½	5	5 ½	6
Temperature (°C)				X									

(3mks)

b) Plot a graph of temperature (y – axis) against time. **(3mks)**

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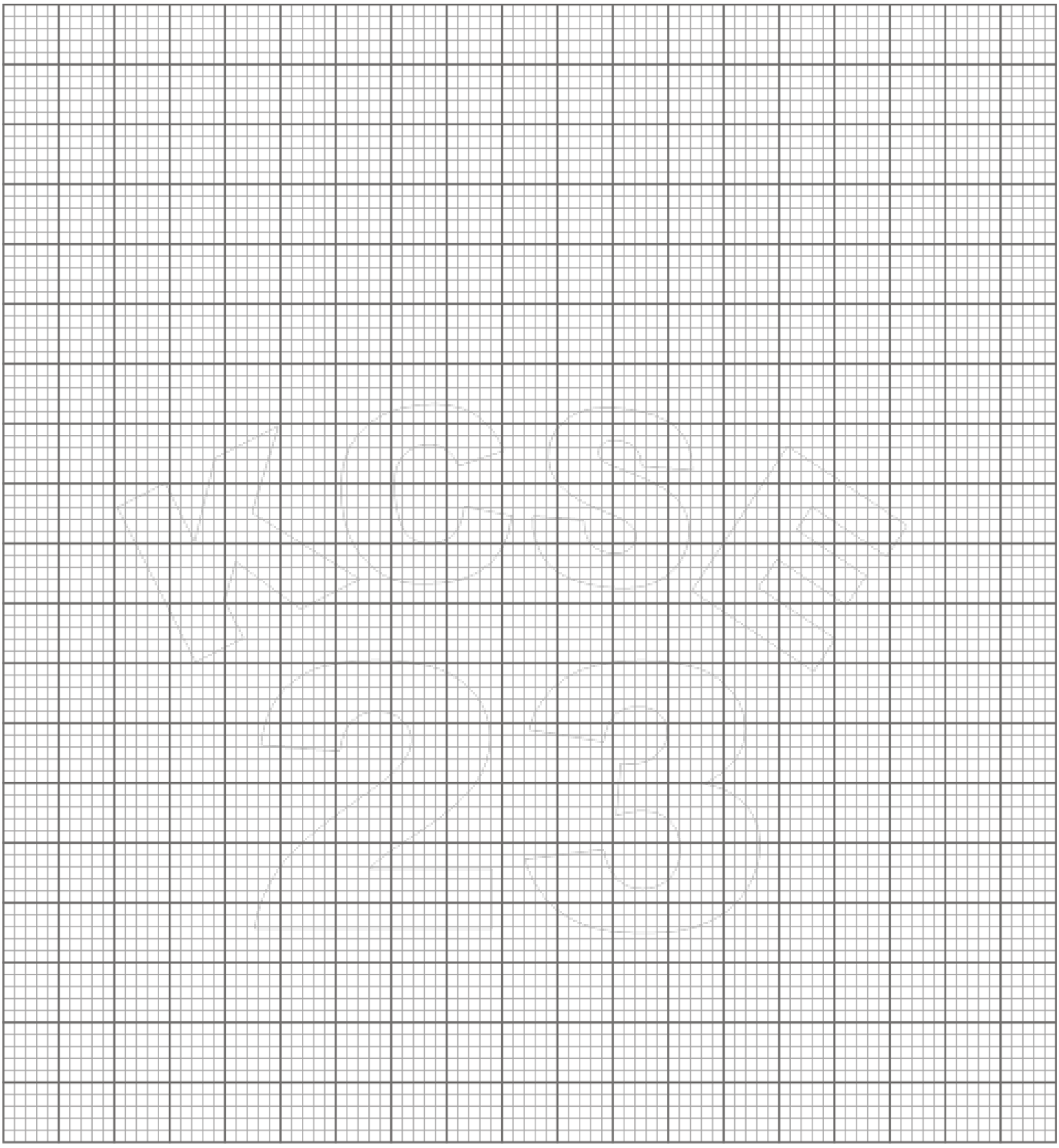

ii) Using the graph, determine the highest change in temperature. **(1mk)**

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iii) Calculate the heat change for the reaction (Assume that the specific heat capacity of the mixture is $4.2Jg^{-1}\ k^{-1}$ and density of the mixture is $1g/\ cm)^3$. **(2mks)**

iv) Given that the molar heat of reaction of sulphuric (VI) acid with solid R is 320 kJ mol^{-1}, calculate the number of moles of sulphuric acid that were used during the reaction. **(2mks)**

PROCEDURE II

Transfer ALL the contents of the 100 ml beaker used in procedure I into a 250ml volumetric flask. Add distilled water to make up to the mark. Label this solution Q.

Rinse the burette and fill it with sodium hydroxide, solution S

Using a pipette and a pipette filler, place 25.0 cm^3 of solution Q into a 250ml conical flask. Add two or three drops of phenolphthalein indicator and titrate against sodium hydroxide. Record your results in table 2. Repeat the titration two more times and complete table 2. ***Table 2***

Experiment	**I**	**II**	**III**
Final burette reading (cm^3)			
Initial burette reading (cm^3)			
Volume of solution S used (cm^3)			

(4mks)

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a) Calculate the :-

i) Average volume of solution S used**.** **(1mk)**

ii) the number of moles of sodium hydroxide used. **(1mk)**

iii) Sulphuric (VI) acid in $25cm^3$ of solution Q **(1mk)**

iv) Sulphuric (VI) acid in $250cm^3$ of solution Q. **(1mk)**

d) Calculate the number of moles of sulphuric (VI) in $50cm^3$ of solution P**.** **(1mk)**

e) Calculate the concentration of the original sulphuric (VI) acid solution P in moles per litre

(2mks)

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2. You are provided with solution **Q**. Carry out the tests shown below and answer the questions that follow.

(a) Dip a clean glass rod in solution **Q** provided and heat it using a non-luminous flame.

Observations	**Inferences**
(1 mark)	(1mark)

Divide the above solution Q into four portions

(b) To about $1cm^3$ of the solution add 2M sodium hydroxide dropwise until excess.

Observations	**Inferences**
(1 mark)	(1 mark)

(c) To the second portion add 2M ammonia solution dropwise until excess.

Observations	**Inferences**
(1 mark)	(1mark)

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(d) To 1cm^3 of solution **Q** add a few drops of Lead (II) nitrate solution.

Observations	Inferences
(1 mark)	(1 mark)

(e) To 1cm^3 of solution **Q** add four drops of barium nitrate solution followed by a few drops of 2M nitric (V) acid.

Observations	Inferences
(1 mark)	(1 mark)

3. You are provided with substance E. Carry out tests on it.

a) (i) Place about one third of solid E on a metallic spatula and ignite it in a flame.

Observations	Inferences
(1mk)	(1mk)

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Place the remaining solid E boiling tube and add about $5cm^3$ of distilled water. Shake the contents and divide into 3 portions.

ii) To portion one add 3 drops of Universal indicator

Observations	Inferences
(1 mk)	(1 mk)

(b) To the second portion add all the sodium carbonate provided

Observations	Inferences
(1mk)	(1 mk)

(c) To third portion add 2 drops of acidified potassium manganate (VII) solution. Warm the mixture

Observations	Inferences
(1mk)	(1 mk)

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

PHYSICS

232/1

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

INSTRUCTIONS TO CANDIDATES

1. *Write your **name, admission number and index number** in the spaces provided*
2. *Sign and write the date of examination in the spaces provided*
3. *This paper consists of **TWO** sections **A** and **B***
4. *Answer **ALL** questions in the spaces provided*
5. *Answers must be in ink and English*
5. *Mathematical table and electronic calculators may be used.*
6. ***ALL** working **MUST** be shown clearly where necessary.*

Take: acceleration due to gravity g = 10m/s^2

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SECTION	QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORES
A	1 - 12	25	
B	13	11	
	14	11	
	15	13	
	16	09	
	17	11	
	TOTAL SCORE	80	

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SECTION A (25 MARKS)

Attempt ALL questions in this section.

1. Name the branch of physics that deals with solar water heating system. **(1 mark)**

……

2. Define the term "Ideal gas" as used in gas laws **(1 mark)**

……

……

3. At Thompson falls water, falls through a height of 30m. Calculate the final temperature if the temperature at the top is 14°C (**Take g = 10 N/kg and s.h.c of water = 4200 J/kgK) (3 marks)**

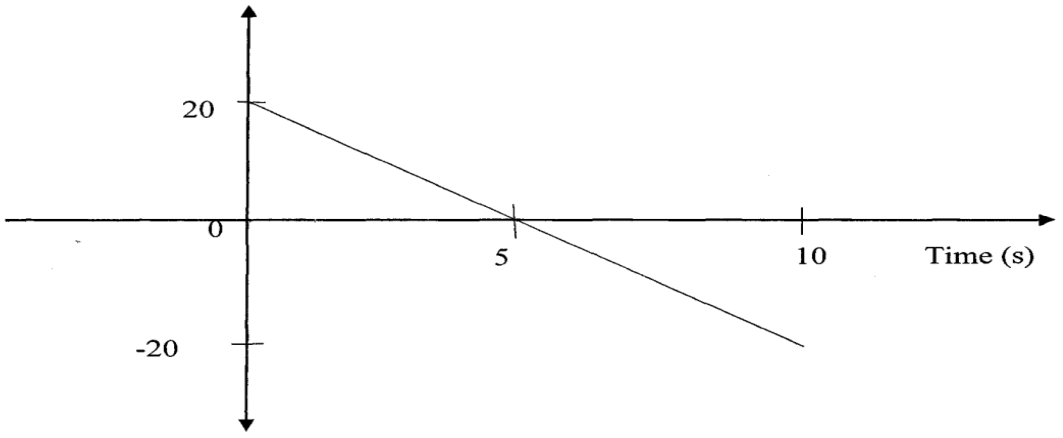
4. State two conditions that must be fulfilled for a body to be in equilibrium **(2 marks)**

……

……

……

5. The figure below shows a graph of velocity against time for a moving body.



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Determine the distance covered by the body during the 10 seconds **(3 marks)**

6. Smoke is enclosed in smoke cell and sealed. When illuminated and viewed under a microscope, it is observed to be moving in continuous random motion. State and explain the observation when cold water is poured on the smoke cell. **(2 marks)**

……

……

……

……

7. The pressure inside a submarine is maintained at 500m of mercury(500mHg). Determine the depth at which the submarine will be safe from implosion taking the density of water as $1.025g/cm^3$ and atmospheric pressure = 760cmHg. (Take the density of mercury as 13600 Kg/m^3) **(3 marks)**

8. Explain why two cars are likely to crush as they travel at high velocities sideways. **(2 marks)**

……

……

……

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9. When a body of mass 0.25kg is acted on by a force, its velocity changes from 5.0 m/s to 7.5m/s, determine the impulse of the force**.** **(2 marks)**

10. State two factors that affect the spring constant of springs made from the same wire. **(2mks)**

……

……

……

11. Draw a well labeled diagram of a clinical thermometer. **(3 marks)**

12. Differentiate between solids, liquids and gases in terms of thermal conductivity. **(1 mark)**

……

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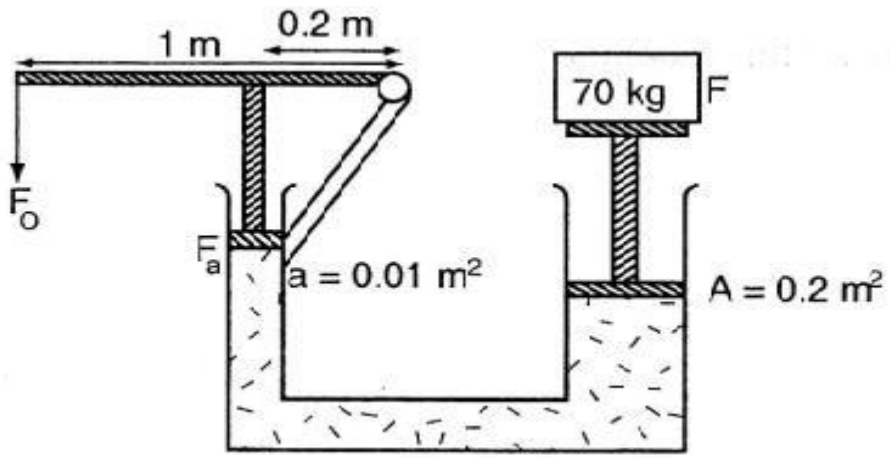
SECTION B (55 MARKS)

Attempt ALL questions in this section.

13. The figure below shows a hydraulic press supporting a load F.



a) What properties of oils make them suitable for use in hydraulic machines such as the one above?
(2marks)

……

……

……

b) If A and a are areas of cross-section of the pistons, and the lengths of the arm are as given, find:

i. The force F_a **(2 marks)**

ii. The force F_0 **(2 marks)**

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c) The mechanical advantage of the machine **(1mark)**

d) The velocity ratio of the machine **(3 marks)**

e) State one reason why the efficiency of a pulley system is always less than 100**%** **(1 mark)**

……

……

14. a) State Newton's third law of motion. **(1 mark)**

……

……

b) Distinguish between elastic and inelastic collision. **(2 marks)**

……

……

……

c) A mini bus of mass 2000kg travelling at a constant velocity of 20m/s collides with a stationary car of mass 1000kg. The impact takes 2 seconds before the two moves together at a constant velocity for half a minute. Calculate.

i) The common velocity **(3 marks)**

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ii) The distance moved after impact. **(2 marks)**

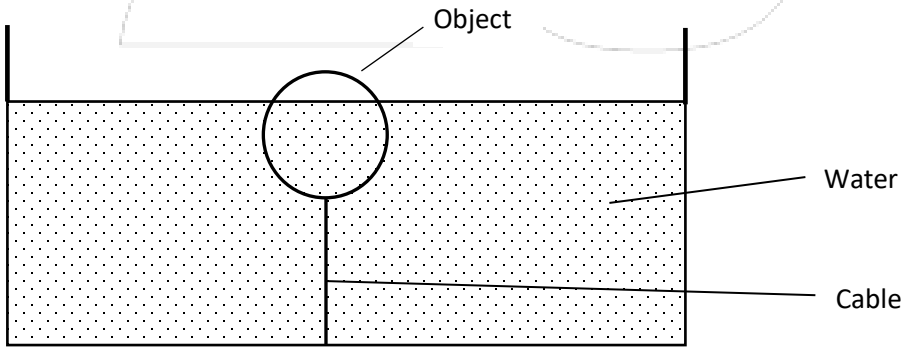
iii) The change in Kinetic energy. **(3 marks)**

15. a) State the law of floatation. **(1 mark)**

……

……

b) The figure below shows a floating object of volume 4000cm^3 and mass 10g. It is held as shown in water of density 1.25g/cm^3 by a light cable at the bottom so that ¾ of the volume of the object is below the water surface (Assume the upthrust due to air is negligible).



i) Calculate the volume of the object under water**.** **(2 marks)**

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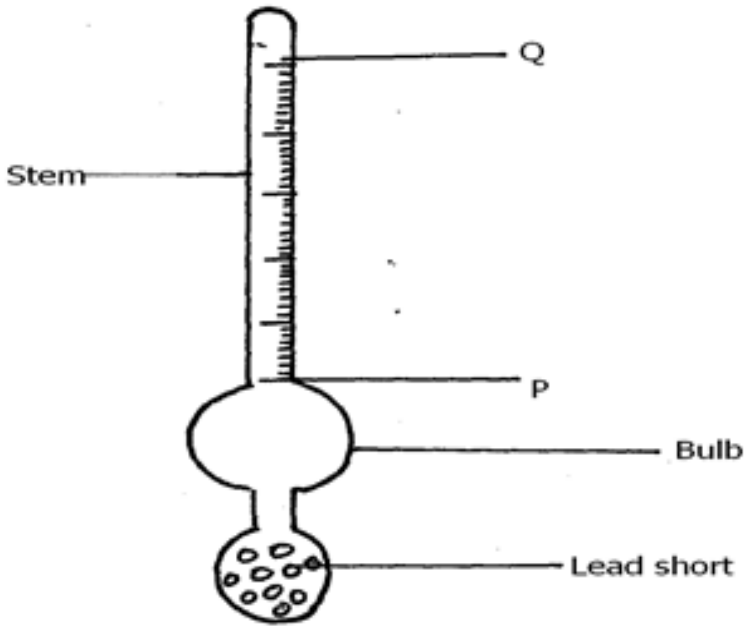
ii) Calculate the weight of water displaced. **(3 marks)**

iii) Determine the tension in the cable. **(2 marks)**

iv) Calculate the density of the object. **(2 marks)**

c) The diagram below shows a car acid hydrometer.



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(i) Indicate on the diagram above the minimum and the maximum measurement to be taken.

(1 mark)

(ii) State the reason why

I. The bulb is wide**.** **(1 mark)**

……

……

II. Lead shots are used **(1 mark)**

……

……

16. (a) State what is meant by the term 'specific latent heat of vaporization' **(1mark)**

……

……

b) In an experiment to determine the specific latent heat of vaporization of water, steam at 100°C was passed into water at 5°C contained in a well-lagged copper calorimeter. The following measurements were made;

Mass of calorimeter 50g
Initial mass of water 70g
Final mass of calorimeter + water + condensed steam = 123g
Final temperature of mixture = 30°C
(Specific heat capacity of water =4200 Jkg^{-1} K^{-1}, specific heat capacity for copper =390 Jkg^{-1} K^{-1})

(i) Determine the:

I. Mass of condensed steam **(2 marks)**

II. Heat gained by the calorimeter and water **(3 marks)**

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(ii) Given that L is the specific latent heat of vaporization of steam, determine the value of L.

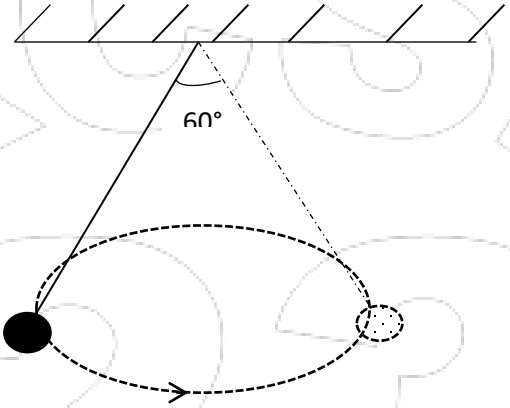
(3 marks)

17. a) Define the term angular velocity. **(1 mark)**

……

……

b) A body of mass 5 kg is whirled horizontally making a conical pendulum as shown in the diagram below



i. State what happens when the speed of whirling is increased **(1 mark)**

……

……

ii. If the radius of the path is 50cm and the centripetal force is 285N. Determine the linear velocity of the **mass** **(3 marks)**

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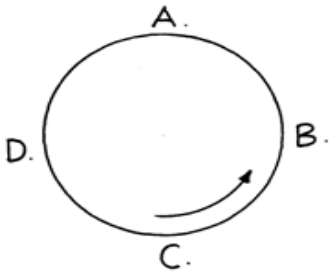
c) A stone is whirled in a vertical circle as shown in the figure below using a string of length 40 cm. A, B, C and D are various positions of the stone in its motion. The stone makes 2 revolutions per second and has a mass of 100g.



i) Calculate:

I. The angular velocity **(2 marks)**

II. The tension on the string at position **A** **(3 marks)**

(ii) At C where the stone has acquired a constant angular speed, the string cuts. What is the name given to the path followed by the stone**?** **(1 mark)**

……

……

……

----------THIS IS THE LAST PRINTED PAGE----------

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

PHYSICS

232/2

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

A) *This paper consists of two sections A and B.*

B) *Answer all the questions in sections A and B in the spaces provided.*

C) *Non-programmable silent electronic calculators may be used.*

FOR EXAMINER'S USE ONLY.

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1-13	25	
B	14	10	
	15	13	
	16	11	
	17	11	
	18	10	
TOTAL		**80**	

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SECTION A: (25MARKS)

1. What is observed when the hole of a pinhole camera is enlarged? **(1mk)**

……

……

2. State one use of a charged electroscope **(1mk)**

……

……

3. The chart below shows an arrangement of a section of the electromagnetic spectrum

P	Q	R	UV Light	S	Gamma rays

Name the radiation represented by letter Q **(1mk)**

……

4. Draw a circuit diagram to show P-N junction diode in the forward biased mode. **(2mks)**

……

……

……

……

5. Explain why the walls of studio are padded with woolen **materials** **(1mk)**

……

……

6. (a) Define half- life as used in radioactivity **(1mk)**

……

……

……

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(b) The initial mass of a radioactive substance is 20g.The substance has half-life of 5yrs.Detemine the mass remaining after 20yrs. **(2mks)**

……

……

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……

7. Give a reason why it is necessary to leave the caps of the cells open when charging lead-acid accumulator **(1mk)**

……

……

8. (a) State one property of soft iron that makes it suitable for use as a transformer core. **(1mk)**

……

(b) The primary coil of a transformer has 1200 turns and the secondary coil has 60 turns. The transformer is connected to a 240V a.c source. Determine the output voltage. **(3mks)**

……

……

……

……

9. State two ways of minimizing electrical power losses during transmission **(2mks)**

……

……

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10. A convex mirror is preferred to a plane mirror for use as a driving mirror. Explain why. **(1mk)**

……

……

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11. An electric bulb is rated 60W, 240V. Determine the current that flows through it when it is connected to a 240v supply **(2mks**

……

……

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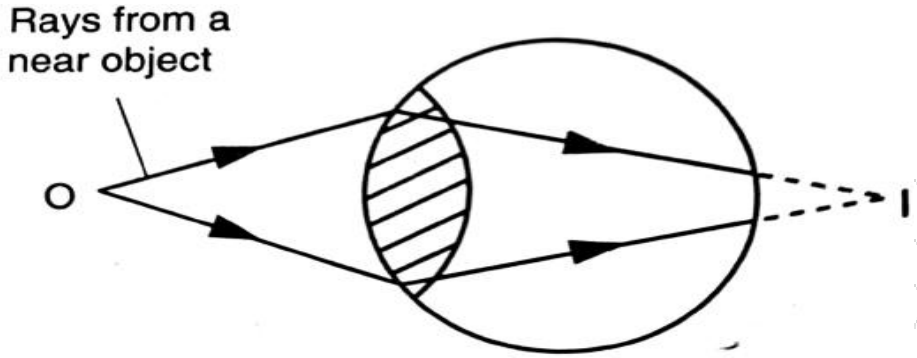
12. The figure below shows a defect of vision



(i) Name the defect**.** **(1mk)**

……

(ii) List two possible causes of the defect. **(2mks)**

……

……

……

13. A broadcasting station produces radio waves of wavelength 600m. Determine their frequency in MHz (speed of air is $3X10^8$m/s**)** **(3mks)**

……

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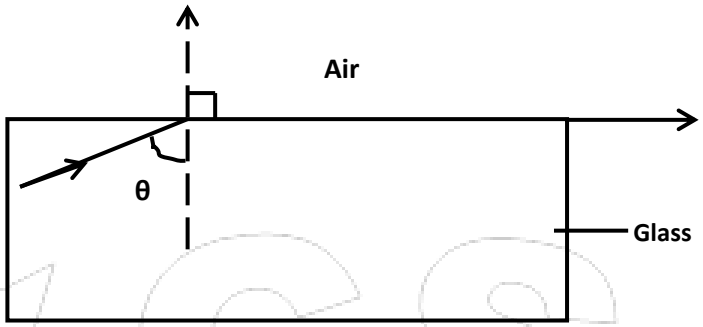
SECTION B (55MARKS)

14. (a) Define the refractive index of a **medium** **(1mk)**

……

……

(b) The figure below shows a ray of light incident on a glass-air interface



Given that the refractive index of the glass is 1.5, determine angle θ **(3mks)**

……

……

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……

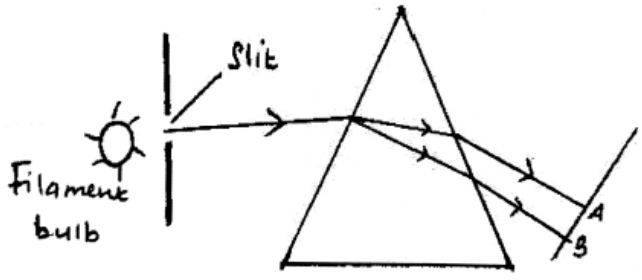
……

(c) State one condition for total internal reflection to occur **(1mk)**

……

……

(d) The diagram below shows a narrow beam of white light shone onto a glass prism



(i) What is the phenomena represented in the diagram? **(1mk)**

……

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(ii) Name the colours at A and at B **(2mks)**

……

……

(iii) Explain the reason for your suggestion of the colours named above. **(1mk)**

……

……

(iv) What is the purpose of the slit. **(1mk)**

……

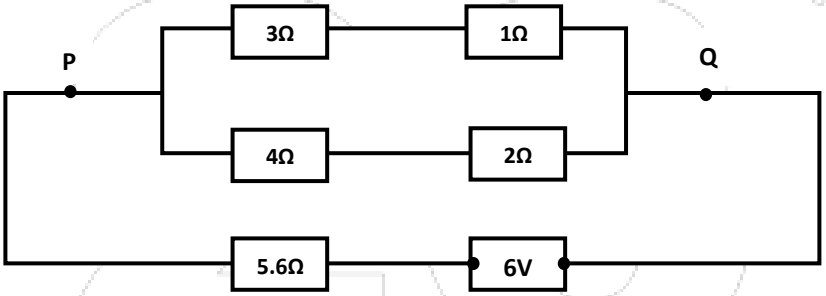
……

15. (a) State one factor that affect the resistance of a metallic conductor (**1mk)**

……

……

(b) The figure below shows resistors in a circuit. The internal resistance of the battery is negligible



(i) Calculate the effective resistance of the **circuit** **(2mks)**

……

……

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(ii) Find the total current in the **circuit** **(2mks)**

……

……

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(iii) Find the P.d between P and **Q** **(2mks)**

……

……

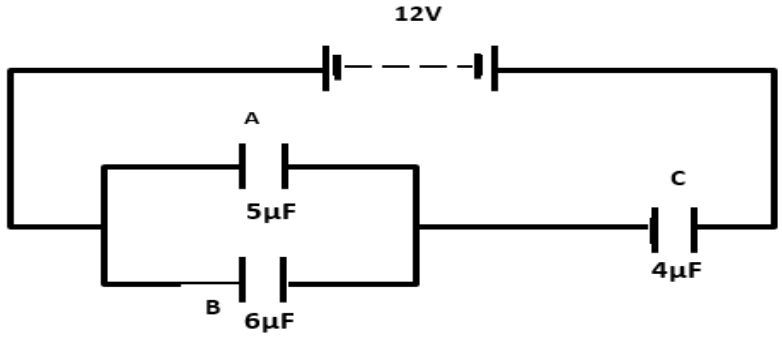
……

(c) What is the effect of decreasing the distance between the plates of a parallel plate capacitor on the capacitance **(1mk)**

……

……

(d) The figure below shows electrical circuit with three capacitors A, B and C of capacitance 5µF, 6µF and 4µF respectively connected to a 12V battery



Determine

(i) The combined capacitance of the three capacitors **(2mks)**

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……

(ii) The potential difference across the capacitor B **(3mks)**

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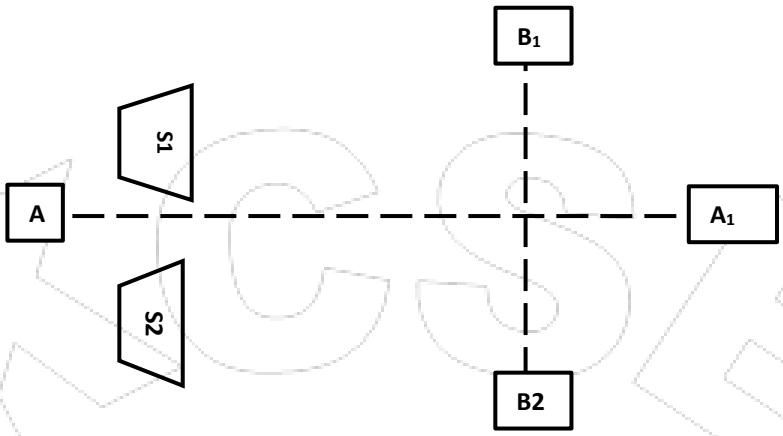
16. (a) Name two factors which determine the frequency of sound from a stretched wire at room **temperature** **(2mks)**

……

……

……

(b) The figure below shows two loud speakers S_1 and S_2 connected to a signal generator



(i) An observer walks along B_1B_2. State what is observed. **(1mk)**

……

……

(ii) Give reasons for observation above (**2mks)**

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(iii) Another observer walks along AA_1, state and explain what he observed **(2mks)**

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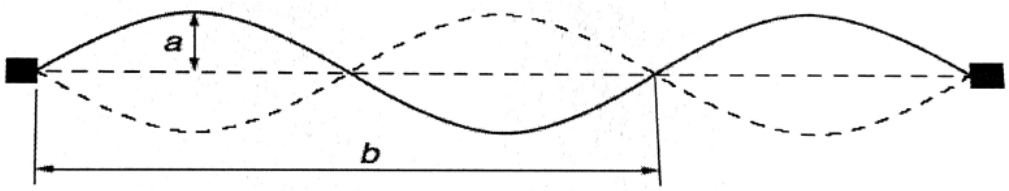
(c) A stretched string is vibrating between two fixed ends. The figure shows how the string is vibrating



(i) State the name of: **(2mks)**

[I] Distance a:

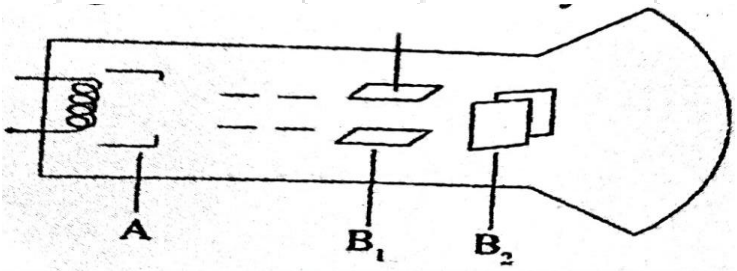
……

[I] Distance b:

……

(ii) On the diagram, label the node and the antinode **(2mks)**

17. The figure below shows a block diagram of a cathode ray oscilloscope(CRO)



(a)(i) State the names of the parts labelled B_1 and B_2 **(2mks)**

……

……

……

(ii)State and explain the function of the part marked A **(2mks)**

……

……

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(**ii)**Why is the tube highly evacuated? **(1mk)**

……

……

(b)Give a reason why the target in an X-ray tube is made of tungsten or molebdnum **(1mk)**

……

……

……

(c) X-rays are used for detecting cracks inside metal beams.State with a reason which type of X-rays is used. **(2mks)**

……

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……

(d) In a certain X-ray tube the electrons are accelerated by a p.d of 12kV.Assuming all the energy goes to produce X-rays, determine the frequency of the X-rays produced .(Planks constant $h=6.62x10^{-34}$ Js and charge of an electron $=1.6x10^{-19}$C) **(2mks)**

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18.(a) state two factors that affect photoelectric emission **(2mks)**

……

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(b) Light of wavelength $4.0x10^{-7}$ m is incident on two different metal surfaces ,nickel and potassium (Take speed of light as $3.0x10^{8}$ m/s and planks constant $h=6.63x10^{-34}$Js)

(i)Determine the energy of the incident radiation **(3mks)**

……

……

……

……

(ii)If the work function of nickel is $8.0x10^{-19}$ J and that of potassium metal is $3.68x10^{-19}$J,state with a reason which of the two metals given light will eject electrons **(2mks)**

……

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(**iii)Determine** the velocity of the emitted electrons from the metal surface in b(ii).(Take mass of an electron as $9.1x10^{-31}$ kg) **(3mks)**

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

PHYSICS

232/3

PAPER 3 (PRACTICAL)

TIME: 2½ HOURS

SCHOOL…… SIGN……

PHYSICS CONFIDENTIAL

QUESTION 1

You are provided with:

- Two new dry cells (size D).
- A cell holder.
- An ammeter (0 – 2.5A) OR (0 – 1A)
- A voltmeter (0 – 5V)
- connecting wires 2 with crocodile clips.
- Nichrome wire 1.0m long mounted on a scale (SWG 28) labelled X.
- A micrometer screw gauge (to be shared)

QUESTION 2

a) ***Each student should have the following:***

- Four optical pins
- Alcohol Thermometer
- 250 ml beaker
- Plain paper (A4 size)
- Soft board
- Stopwatch
- Source of boiling water
- Four thumb tucks
- Equilateral triangular glass prism
- Complete geometrical set

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

PHYSICS

232/3

PAPER 3 (PRACTICAL)

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Instructions to Candidates

(a) *Write your name and admission number in the spaces provided.*

(b) *Answer **ALL** questions in the spaces provided in the question paper.*

(c) *You are supposed to spend the first **15 minutes** of the $2\frac{1}{2}$ hours allowed for this paper reading the whole paper carefully before commencing the work.*

(d) *Marks are given for a clear record of the observations actually made, their suitability, accuracy and the use made of them.*

(e) *Candidates are advised to record their observation as soon as they are made.*

(f) *Non programmable silent electronic calculators may be used.*

For Examiner's Use Only

Question 1

	B	d	e	f	g	h
Maximum Score	1	5	5	3	3	3
Candidate's Score						

TOTAL ☐

Question 2

	b	d	e	f	g	h	i	j	k
Maximum Score	1	3	1	3	2	1	3	4	2
Candidate's Score									

TOTAL ☐

☐

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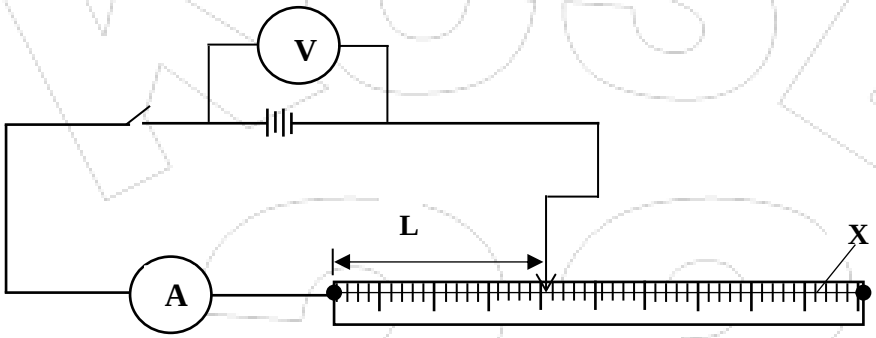
1. You are provided with the following:

- 2 new dry cells size D.
- A cell holder.
- A switch.
- An ammeter (0 – 1A)
- A voltmeter (0 – 5V)
- 6 connecting wires, 3 with crocodile clips.
- Nichrome wire mounted on the metre rule labelled X.
- A micrometer screw gauge (to be shared).

Proceed as follows:

(a) Connect the circuit as shown in the figure below.



(b) Measure the voltage, E before closing the switch.

E = …… **(1mk)**

(c) Adjust the length L of the wire 0.2m, close the switch S and read the value of current and record in the table below.

(d) Repeat the procedure in (c) above for the value of length, **L** and fill the table for $\frac{1}{I}$. **(5mks)**

Length (m)	**0.2**	**0.3**	**0.4**	**0.5**	**0.6**	**0.7**
Current I(A)						
$\frac{1}{I}(A^{-1})$						

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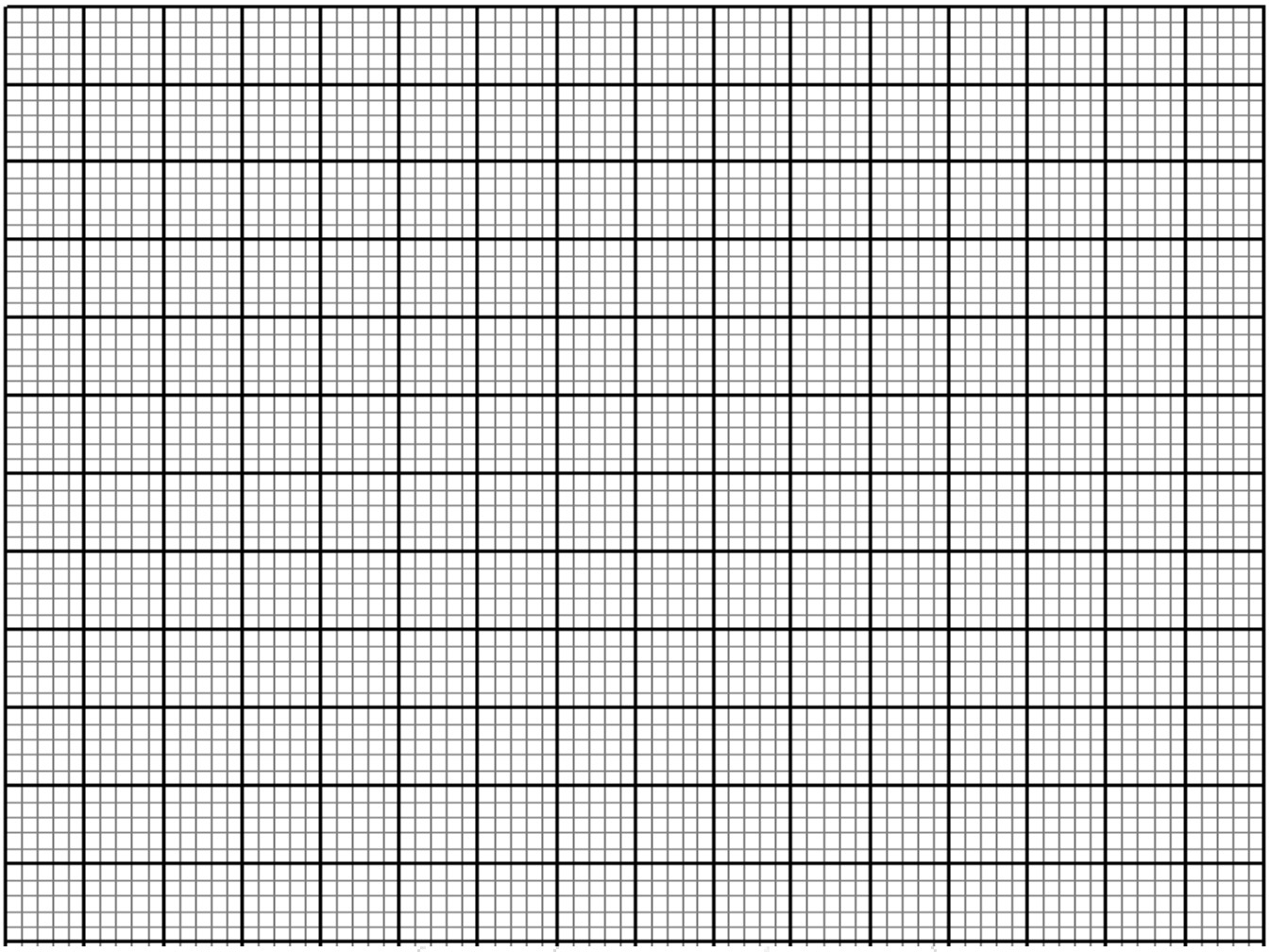
(e) On the grid provided plot a graph of $\frac{1}{I}$ (y axis) against L. **(5mks)**



(f) Determine the gradient of the graph. **(3mks)**

(g) **(i)**Measure the diameter of the wire in three points using micrometer screw gauge. **(1mk)**

d_1 = …… d_2 = …… d_3 = ……..…

Averaged d = ……..….. (1mk)

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(ii) Determine the cross-section area, A of the wire. **(1mk)**

(h) From the equation $\frac{1}{I} = \frac{KL}{AE} + \frac{Q}{E}$ determine;

(i) the value of K. **(2mks)**

(ii) the value of Q. **(1mk)**

QUESTION 2

PART A

b) ***You are provided with the following:*** Triangular glass prism

Four optical pins	Thermometer
250 ml beaker	Plain paper
Soft board	Stopwatch
source of boiling water	Four office pins

Proceed as follows

a) Fix the plain paper on the soft board using the office pins.

b) On the plain paper, draw line XY. Mark a point M on its midpoint. Draw a normal N at M to XY. Draw line RM such that angle RMN = 50°.

(This paper will be collected at the end of the experiment) **(1mk)**

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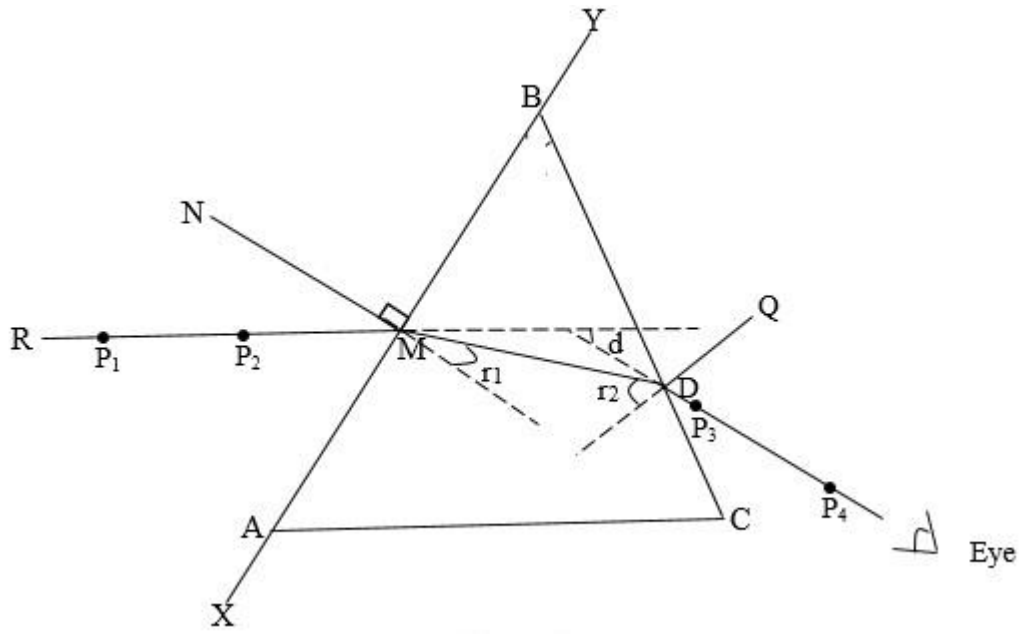

c) Place the glass prism such that one edge AB of the prism is in line with XY. Accurately draw the outline ABC of the prism

d) Place optical pins $\mathbf{P_1}$ and $\mathbf{P_2}$ on the line RM

c) Through edge BC observe the images of $\mathbf{P_1}$ and $\mathbf{P_2}$. Fix $\mathbf{P_3}$ and $\mathbf{P_4}$ so that $\mathbf{P_1}$, $\mathbf{P_2}$, $\mathbf{P_3}$ and $\mathbf{P_4}$ lie on straight line.

d) Remove the pins; construct straight line from $\mathbf{P_4}$ through $\mathbf{P_3}$ to meet side BC at D, join M to D.

i) Measure angle $\mathbf{r_1}$. **(1mk)**

$\mathbf{r_1}$ = ……..

ii) Produce $\mathbf{P_4P_3}$ to meet RM produced. Measure angle **d**. **(1mk)**

d……..

iii) Draw the normal at D and measure the angle $\mathbf{r_2}$. **(1mk)**

$\mathbf{r_2}$ …….

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e) Given that R= $\mathbf{r_1}$+ $\mathbf{r_2}$. Calculate **R** **(1mk)**

f) Given that $\mathbf{n} = \frac{\sin\left(\frac{R+d}{2}\right)}{\sin\left(\frac{R}{2}\right)}$, find the value of n. **(3mks)**

g) Given that $\boldsymbol{n \sin k = 1}$, find the value of k **(2mks)**

h) What Physical property does **n** represent? **(1mk)**

PART B

(Read all the instruction before starting this part)

i) (I) Using the thermometer, measure and record the temperature of the room, $\boldsymbol{\theta}$.

$\boldsymbol{\theta}$……℃. **(1mk)**

(II) Using the 250 ml beaker, collect 200 ml of hot water from the boiling source. Place the thermometer into the hot water and wait until it cools to **80** ℃ the start the stopwatch and record time $\mathbf{t_1}$ it takes to cool to **75** ℃**.**

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t_1 ..... seconds. **(1mk)**

(III) Wait until the water cools to **70** ℃ and then start the stopwatch and record the time t_2 it takes the water to cool to **65** ℃

t_2 …….. seconds. **(1mk)**

j) Determine the rate of temperature change $\boldsymbol{\rho}$ and $\boldsymbol{\beta}$ in the two intervals.

(i) $\boldsymbol{\rho = \frac{77.5-\theta}{t_1}}$ **(2mks)**

(ii) $\boldsymbol{\beta = \frac{67.5-\theta}{t_2}}$ **(2mks)**

k) State with reason how the rate of change of temperature between **50** ℃ and **45** ℃ compares with $\boldsymbol{\rho}$ **(2mks)**

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

MATHEMATICS

121/1

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

INSTRUCTIONS TO CANDIDATES:

- *Write your **name**, **admission numbe**r and write **date** of examination in the spaces provided*
- *The paper contains **two** sections. Section I and Section II.*
- *Answer **ALL** the questions in section I and any **five** questions in section II.*
- *Answers and working **must** be written on the question paper in the spaces provided below each question.*
- *Show all steps in your calculations below each question.*
- *Marks may be given for correct working even if the answer is wrong.*
- *Non programmable silent electronic calculators and KNEC mathematical table may be used, except where stated otherwise.*

FOR EXAMINERS USE ONLY

SECTION I

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	**TOTAL**
Marks																	

SECTION II

Question	17	18	19	20	21	22	23	24	**TOTAL**
Marks									

GRAND TOTAL

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SECTION I (50MARKS)

Answer ALL Questions in this Section

1. Evaluate the following; **(3 marks)**

$$\frac{\frac{2}{3} - 1\frac{1}{4} + \frac{5}{6}}{\frac{2}{7} + 3\frac{1}{5}\ of\ \frac{7}{8} \div \frac{6}{11} - \left[5\frac{1}{3} + \frac{9}{10}\right]}$$

2. Use square roots, reciprocal and square tables to evaluate to 4 significant figures the expression;

$(0.06458)^{\frac{1}{2}} + \left(\frac{2}{0.4327}\right)^2$ **(3 marks)**

3. Solve for x in the equation $\frac{1}{2}\log_2 81 + \log_2(x^2 - \frac{x}{3}) = 1$ **(3marks)**

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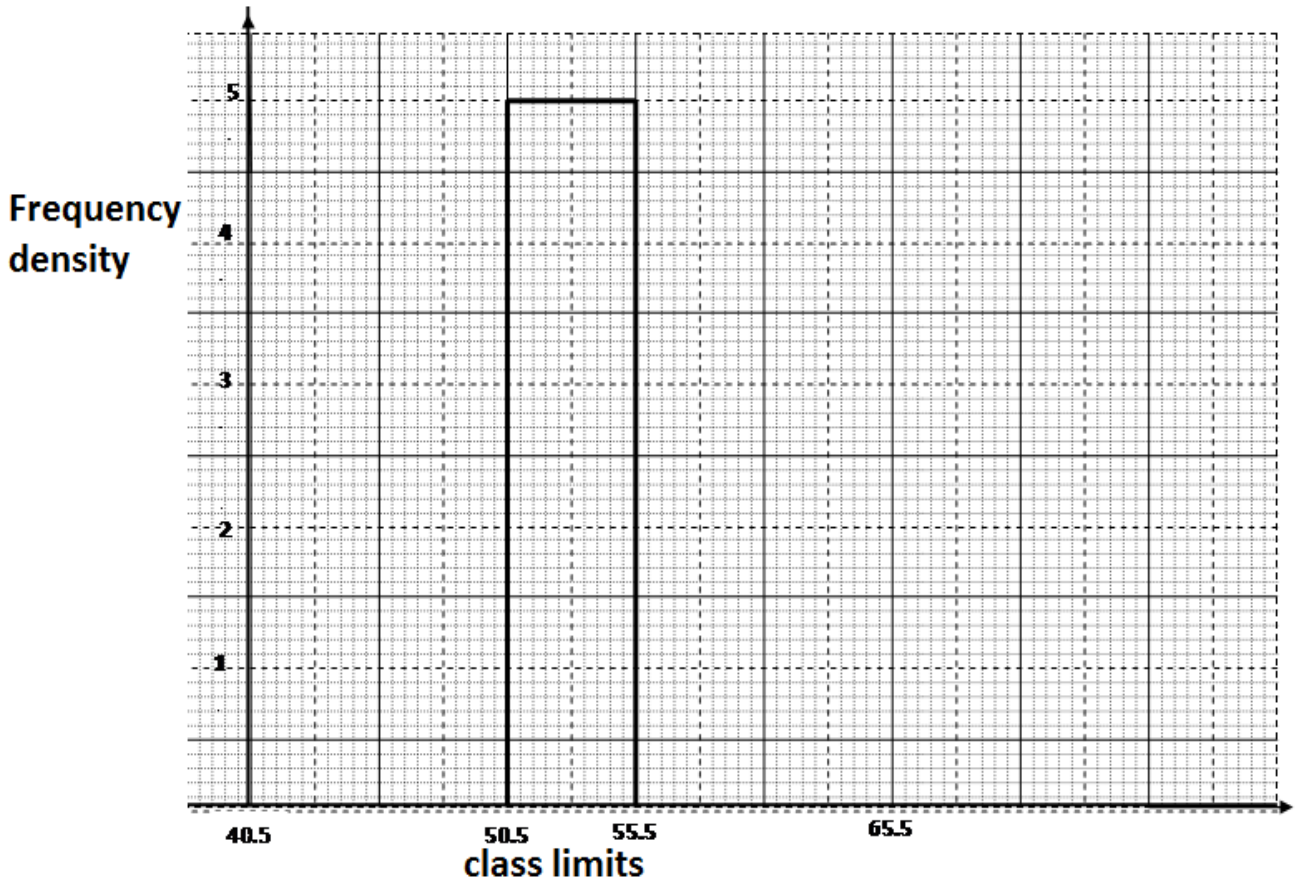
4. A farmer has a piece of land measuring 840m by 396m. He divides it into square plots of equal size. Find the maximum area of one plot. **(3 marks)**

5. The following data was obtained from the mass of a certain animal. Complete the tableand the histogram below. **(3 marks)**

Mass(kg)	frequency
41-50	20
51-55	
56-65	40



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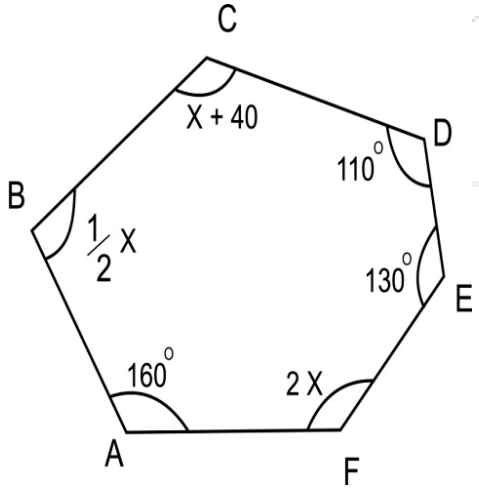
6. Solve the following inequalities and state the integral values **(3 marks)**

$2x - 2 \leq 3x + 1 < x + 11$

7. The figure below shows a regular polygon A B C D E F with the interior angles indicated. Find the value of the smallest angle in the polygon. **(3 marks)**



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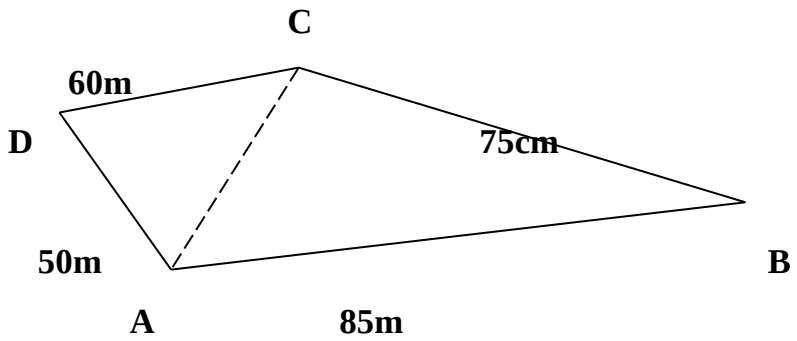
8. The figure below represents a plot of land ABCD such that AB=85m, BC=75m, CD=60m, DA=50m and angle ACB = 90^0. (Not drawn to scale).



Determine the area of the plot, in hectares, correct to two decimal places. **(3marks)**

9. A rectangular tank has a hole in it such that $11cm^3$ of water leaks out every 5 seconds. Using π as 3.142. Calculate:-

(i) The capacity of the water lost from the tank every hour. **(2marks)**

(ii) The time it takes to fill a cylindrical tank of radius 30cm and height 30cm into which the leaking water drains; in hours to 4 significant figures. **(2marks)**

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10. Find the value of x if. **(3 marks)**

$$\left(\frac{27}{8}\right)^{x+7} = \left(\frac{4}{9}\right)^{-3x}$$

11. The image of a point K(1,2) after translation is K^1 (-1,2). What is the coordinate of the point R whose image is R^1 (-3,3) after undergoing the same translation. **(3 marks)**

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12. Mugo, a fruit vendor obtained a total of Kshs. 6144 from her sales of oranges on Monday at Kshs. 8.00 each. She had bought 560 more oranges to add to what had remained on Sunday where she had sold 240 more oranges than on Saturday. She had sold 750 oranges on Saturday. Calculate the total number of oranges Mugo had bought on Saturday. **(4 marks)**

13. Simplify the following expression by reducing it to a single fraction. **(3 marks)**

$$\frac{2x-3}{3} - \frac{x-2}{2} - \frac{1-x}{4}$$

14. Water and ethanol are mixed such that the ratio of the volume of water to that of ethanol is 3: 1. Taking the density of water as 1 g/cm^3 and that of ethanol as 1.2g/cm^3, find the mass in grams of 2.5 litres of the mixture. **(3 marks)**

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15. A Kenyan bureau buys and sells foreign currencies as shown below

	Buying (In Kenya shillings)	Selling (In Kenya Shillings)
1 Hong Kong dollar	9.74	9.77
100 Japanese Yen	75.08	75.12

A tourists arrived in Kenya with 105 000 Hong Kong dollars and changed the whole amount to Kenyan shillings.While in Kenya, she pent Kshs 403 897 and changed the balance to Japanese Yen before leaving for Tokyo. Calculate the amount, in Japanese Yen that she received.

(3 marks)

16. Draw triangle ABC such that AB=4.4cm, BC=4cm and angle ABC=120^0, construct an orthocenter of the triangle ABC and mark it X. **(3 marks)**

KCSE 23

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SECTION II (50 MARKS)

Answer FIVE questions ONLY from this section

17. A line L_1 passes through the points $(-2, 3)$ and $(-1, 6)$ and is perpendicular to L_2at $(-1, 6)$.

a) Find the equation of L_1. **(2 marks)**

b) Find the equation of L_2 in the form $ax + by - c = 0$ where a, b and c are constants. **(2 marks)**

c) Given that another line L_3 is parallel to L_1 and passes through point $(1,2)$, find the x and y intercepts of L_3 . **(3 marks)**

d) Find the point of intersection of $L_2$and L_3. **(3 marks)**

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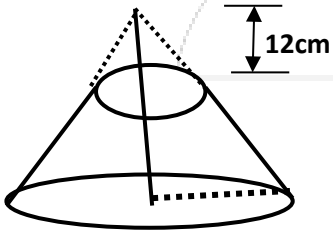
18. A sector of angle 108^0 is cut from a circle of radius 20 cm. It is folded to form a cone.
Calculate to 1 decimal place**: (use $\pi = \frac{22}{7}$)**

(a) The curved surface area of the cone. **(2 marks)**

(b) The base radius of the cone. **(3 marks)**

(c) The vertical height of the cone. **(2 marks)**

(d) If 12 cm of the cone is chopped off to form a frustum as shown below.



Calculate the volume of the frustum formed. **(3 marks)**

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19. A village Q is 7 km from village P on a bearing of 045^0. Village R is 5 km from village Q on abearing of 120^0 and village S is 4 km from village R on a bearing of 270^0.

a) Taking a scale of 1 m to represent 1 Km, locate the three villages. **(3 marks)**

b) Use the scale drawing to find the:

i. Distance and bearing of the village R from village P. **(2 marks)**

ii. Distance and bearing of village P from village S. **(2 marks)**

c) Calculate the area enclosed by the three villages **(3 marks)**

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20. The floor of a rectangular room can be covered completely by a carpet costing sh. 200 per square metre. The total cost of the carpet would be sh. 5600. Taking the length of the room to be x m;

a) Express width of the room in terms of x **(2marks)**

b) If a uniform width of $\frac{1}{2}$ m is left uncovered all round. The cost is sh. 2000 less. Form and solve an equation to determine the value of x. **(5marks)**

c) Later it was decided that the floor left uncovered in (b) above should also be covered. However the cost of the carpet had then gone up by sh. 150 per square metre. Determine the cost in covering the previously uncovered region. **(3marks)**

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21. a)Given that the matrix $A = \begin{pmatrix} 2 & 3 \\ 3 & 4 \end{pmatrix}$, find A^{-1}, the inverse of A. **(2 marks)**

b) Kariuki bought 400 goats and 600 sheep for a total of Kshs 1,700,000. Maina bought 180 goats and 240 sheep for a total of Kshs 720,000. If the price of a goat is sh. X and that of a sheep is shs y,

i) Form two equations to represent the above information. **(2 marks)**

ii) Use the matrix A^{-1} to find the price of one goat and one sheep. **(3 marks)**

c) John bought 450 goats and 720 sheep. He was given a total discount of shs 66,600.
If the discount on the price of a goat was 2%, calculate the percentage discount on the price of a goat. **(3 marks)**

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22. The distance between two towns A and B is 460 km. a minibus left town A at 8.45 am and travelled towards Bat an average speed of 65km/hr. A matatu left B at 10.55 am on the same day and travelled towards A at an average speed of 80km/hr.

(a) How far from town B did they meet? **(4 marks)**

(b) At what time did the two vehicles meet? **(2 marks)**

(c) A motorist started from his home at 9.15am on the same day and travelled to B at an average speed of 120km/hr. he arrived at the same time as the minibus. Calculate the distance from B to his home. **(4 marks)**

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23. Three partners Mutua, Muthoka and Mwikali contributed Sh. 600,000, Sh. 400,000 and Sh. 800,000 respectively to start a business of a matatu plying Mbumbuni – Machakos route. The matatu carries 14 passengers with each paying Sh. 250. The matatu makes two round trips each day and ever full. Each day Sh. 6000 is used to cover running costs and wages.

(a) Calculate their net profit per day. **(2 marks)**

(b) The matatu works for 25 days per month and is serviced every month at a cost of KSh.10,000. Calculate their monthly profit in June. **(1 mark)**

(c) The three partners agreed to save 40% of the profit, 24% is shared equally and the rest to be shared in the ratioof their contribution. Calculate Muthoka's share in the month of June.

(4 marks)

(d) The matatu developed mechanical problems and they decided to sell it through an agent who charged a commission of 5% on selling price. Each partner received KSh. 475,000 from the agent after he had taken his commission. Determine the price at which the agent sold the matatu.

(3 marks)

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24. The displacement S metres of a body moving along a straight line after t seconds is given by $S = -2t^3 + \frac{3}{2}t^2 + 3t$

(a) Find its initial acceleration. **(3 marks)**

(b) Calculate:-

(i) The time when the body was momentarily at rest. **(3 marks)**

(ii) Its displacement by the time it comes to rest momentarily **(2 marks)**

(c) Calculate the maximum velocity attained **(2 marks)**

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

MATHEMATICS

121/2

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

INSTRUCTIONS TO CANDIDATES:

- *Write your **name**, **admission numbe**r and write **date** of examination in the spaces provided*
- *The paper contains **two** sections. Section I and Section II.*
- *Answer **ALL** the questions in section I and any **five** questions in section II.*
- *Answers and working **must** be written on the question paper in the spaces provided below each question.*
- *Show all steps in your calculations below each question.*
- *Marks may be given for correct working even if the answer is wrong.*
- *Non programmable silent electronic calculators and KNEC mathematical table may be used, except where stated otherwise.*

FOR EXAMINERS USE ONLY

SECTION I

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	**TOTAL**
Marks																	

SECTION II

Question	17	18	19	20	21	22	23	24	**TOTAL**
Marks									

GRAND TOTAL

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SECTION I (50MARKS)

Answer ALL Questions in this Section

1. Use Logarithms correct to four significant figures to evaluate. **(4marks)**

$$\sqrt[3]{\frac{24.36 \times 0.066547}{1.48^2}}$$

2. Find the value of x given that the matrix $\begin{bmatrix} x+7 & 4 \\ -3 & x \end{bmatrix}$ is singular **(3 marks)**

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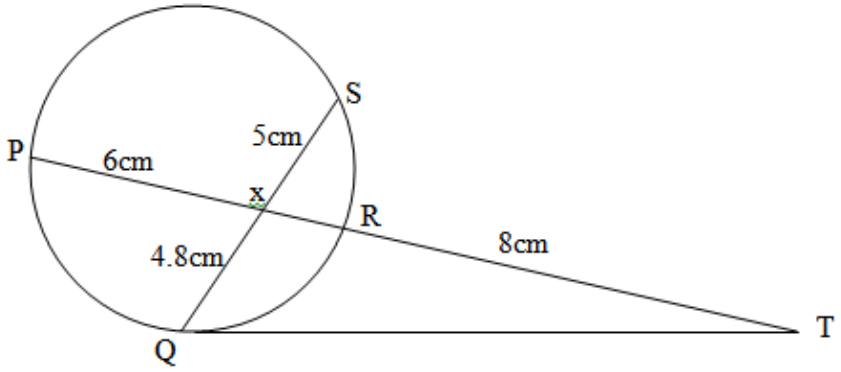
3. In the figure below QT is a tangent to the circle at Q. PXRT and QXS are straight lines.

PX = 6cm, RT = 8cm, QX = 4.8cm and XS = 5cm.



Find the length of QT **(3 marks)**

4. Use the trapezium rule with seven ordinates to find the area bounded by the curve $y = x^2 + 1$ lines x = -2, x = 4 and x – axis **(3 marks)**

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5. Given that $x = \sqrt{\frac{tp}{2\,m+p}}$ make p the subject of the formula **(3 marks)**

6. (a) Construct triangle PQR such that PQ = 7cm, QR = 5cm and $< PQR = 30°$ (**2 marks)**

(b) Construct the focus L_1 of points equidistant from P and Q to meet the locus L2 of points equidistant from Q and R **(2 marks)**

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7. The points (5, 5) and (-3, -1) are ends of a diameter of a circle centre A. Determine:

a) The coordinates of A. **(1 mark)**

b) The equation of a circle expressing it in form $x^2 + y^2 + ax + by + c = 0$ **(2 marks)**

8. A transformation is represented by the matrix $\begin{bmatrix} 1 & 3 \\ 4 & 2 \end{bmatrix}$. This transformation maps a triangle ABC of the area 12.5cm^2 onto another triangle A′B′C′. Find the area of triangle A′B′C′. **(3marks)**

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9. Pipe A can fill a tank in 2 hours, pipes B and C can empty the tank in 5 hours and 6 hours respectively. How long would it take

(a) To fill the tank if A and B are left open and C closed **(2 Marks)**

(b) To fill the tank with all the pipes open **(2 Marks)**

10. **i)** Expand and simplify $(1-3x)^5$ upto the term in x^3 **(2 marks)**

ii) Hence use your expansion to estimate $(0.97)^5$ correct to 4d.p. **(2 marks)**

11. Solve for x in the equation:

$2cos4x = -1$ for $0^0 \leq x \leq 180^0$ **(3 marks)**

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12. Wanjiku pays for a car on hire purchase in 15 monthly instalments. The cash price of the car is Ksh.300, 000 and the interest rate is 15%p.a. A deposit of Ksh.75, 000 is made. Calculate her monthly repayments. **(3 marks)**

13. The gradient function of a curve is given $\frac{dy}{dx} = 3x^2 - 8x + 2$. If the curve passes through the point, (2, –2), find its equation. **(3 marks)**

14. Simplify the following surds leaving your answer in the form $a + b\sqrt{c}$ **(3marks)**

$$\frac{\sqrt{5}}{2\sqrt{2} - \sqrt{5}} + \frac{\sqrt{2}}{2\sqrt{2} + \sqrt{5}}$$

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15. The sum of two numbers is 24. The difference of their squares is 144. What are the two numbers? **(3marks)**

16. The data below represents the marks scored by 9 form 4 students in an exam:

40, 37, 39, 40,41,43,44, 37,44

Calculate the interquartile range of the above data **(3 marks)**

KCSE 23

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SECTION II (50 MARKS)

Answer five questions only from this section

17. The following table shows the rate at which income tax was charged during the year 2021

Monthly taxable income in Ksh.	Tax rate %
0 – 9860	10
9861 – 19720	15
19721 – 29580	20
29581 – 39440	25
39441 – 49300	30
49301 – 59160	35
over 59160	40

Maina earns a basic salary of Ksh.42000 and a monthly house allowance of sh.13000. He contributes 7.5 % of his basic salary to pension scheme. This contribution is exempted from taxation. He is entitled to a personal relief of sh.2400 per month. Calculate:

a) His monthly Taxable income **(2 marks)**

b) Calculate his net monthly tax **(6 marks)**

c) Maina's monthly salary **(2 marks)**

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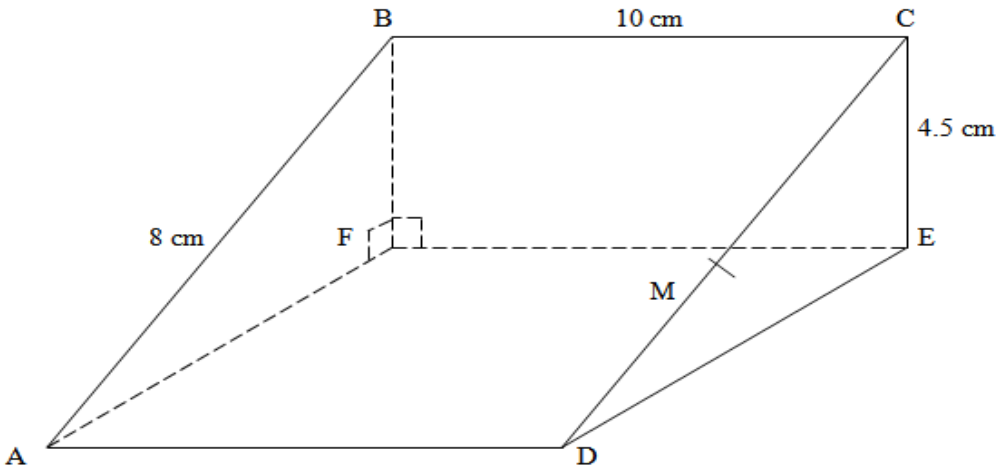
18.



The above diagram represents a wooden prism. ABCD is a rectangle. Points E and F are directly below C and B respectively. M is the mid-point of CD. AB = 8 cm, BC = 10 cm and CE = 4.5 cm.

(a) Calculate the size of angle CDE **(2 marks)**

(b) Calculate the

(i) Length of AC **(2 marks)**

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(ii) Angle AC makes with the plane ADEF **(2 marks)**

(c) Find the:

(i) Length of MB **(2 marks)**

(ii) Angle CBM **(2 marks)**

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19. An aeroplane left town $P(65^oN, 15^oE)$ to another town $Q(65^oN, 165^oW)$ at a speed of 200 knots using the shortest route. $(Take\ \pi = \frac{22}{7}, R = 6370km)$

a) Find

i) The shortest distance travelled in nautical miles. **(3 marks)**

ii) The time taken from P to Q in hours. **(2 marks)**

b) Another plane left P at 1.30 p.m local time and travelled to T (65^0N, 60 ^{0}E) along the parallel of latitude. Find

i) The distance between P and Q to the nearest kilometres. **(3 marks)**

ii) The local time of arrival at T if the plane flew at 470km/hr. **(2 marks)**

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20. The probability that a student goes to school by a boda-boda is $\frac{2}{3}$ and by a matatu is $\frac{1}{4}$. If he uses a boda-boda the probability that he is late is $\frac{2}{5}$ and if he uses matatu the probability of being late is $\frac{3}{10}$. If he uses other means of transport the probability of being late is $\frac{3}{20}$.

a) Draw a tree diagram to represent this information. **(3marks)**

b) Find the probability that he will be late for school. **(3marks)**

c) Find the probability that he will be late for school if he does not use a matatu **(2marks)**

d) What is the probability that he will not be late to school? **(2marks)**

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21. A farmer has 50 acres of land. He has a capital Shs. 2,400 to grow carrots and potatoes as cash crops. The cost of growing carrots is Shs.40 per acre and that of growing potatoes is Shs.60 per acre. He estimates that the respective profits per acre are Shs.30 (on carrots) and Shs. 40 (on potatoes). By letting x and y to represent the acres of carrots and potatoes respectively:-

a) Form suitable inequalities to represent this information. **(4marks)**

KCSE 23

b) b) By representing this information on a graph, determine on how many acres he should grow each crop for maximum profit **(4marks)**

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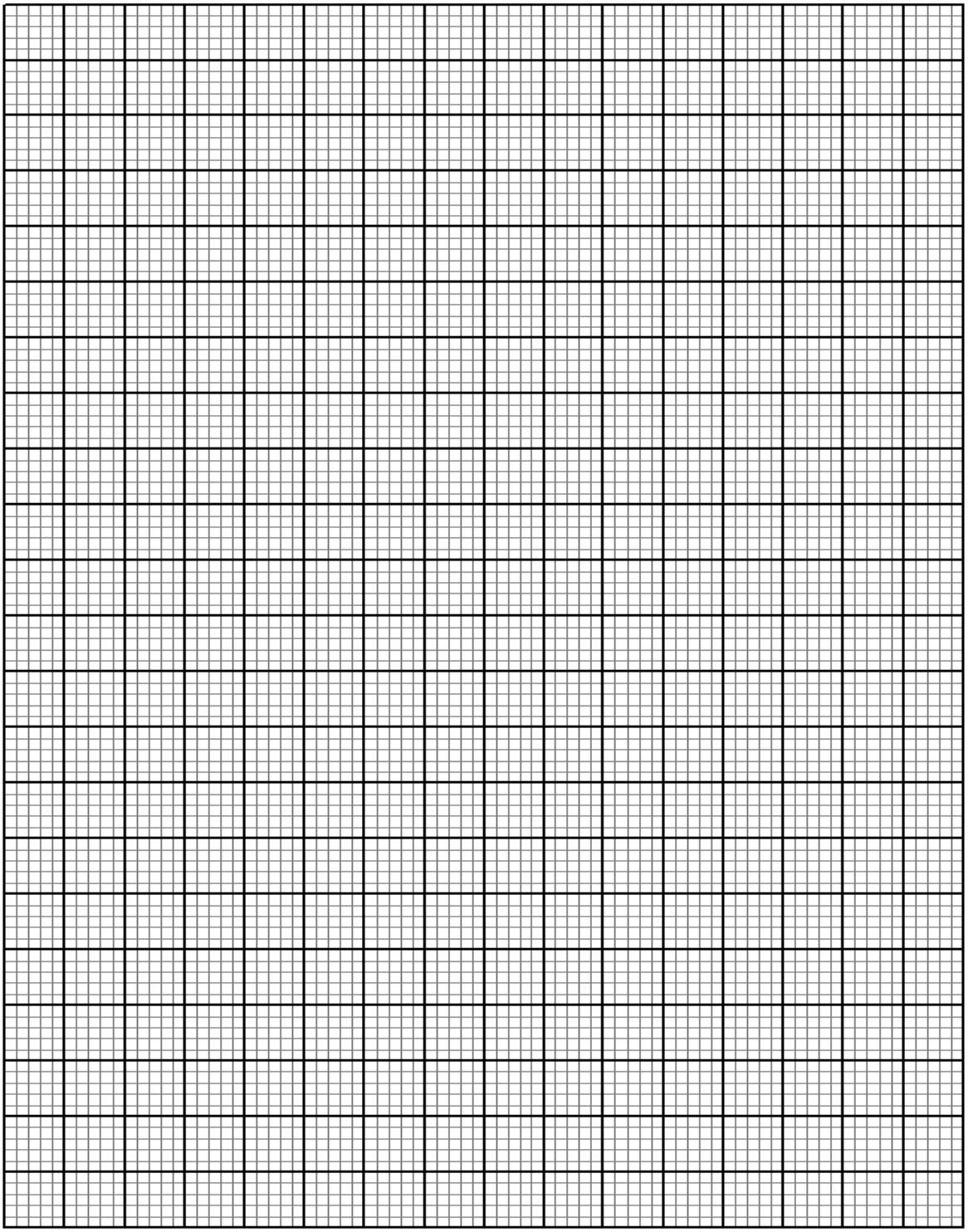

c) Find the maximum profit. **(2marks)**

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22. The 2nd and 5th terms of an arithmetic progression are 8 and 17 respectively. The 2nd, 10th and 42nd terms of the A.P. form the first three terms of a geometric progression. Find

(a) the 1st term and the common difference. **(3marks)**

(b) the first three terms of the G.P and the 10th term of the G.P. **(4marks)**

(c) The sum of the first 10 terms of the G.P. **(3marks)**

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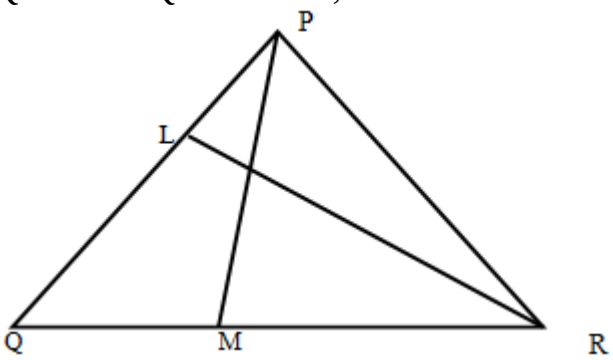
23. In the triangle PQR below L and M are points on PQ and QR respectively such that PL:LQ=1:3 and QM:MR=1:2, PM and RL intersect at X, given that **PQ** = **b** and **PR** = **c**



(a) Express the following vectors in terms of **b** and **c**

(i) **QR** **(1mark)**

(ii) **PM** **(1mark)**

(iii) **RL** **(1mark)**

(b) By taking PX = h**PM** and RX = k**RL** where h and k are constants find two expressions of PX in terms of h, k, **b** and **c**. Hence determine the values of the constant h and k. **(6marks)**

(c) Determine the ratio LX:XR **(1mark)**

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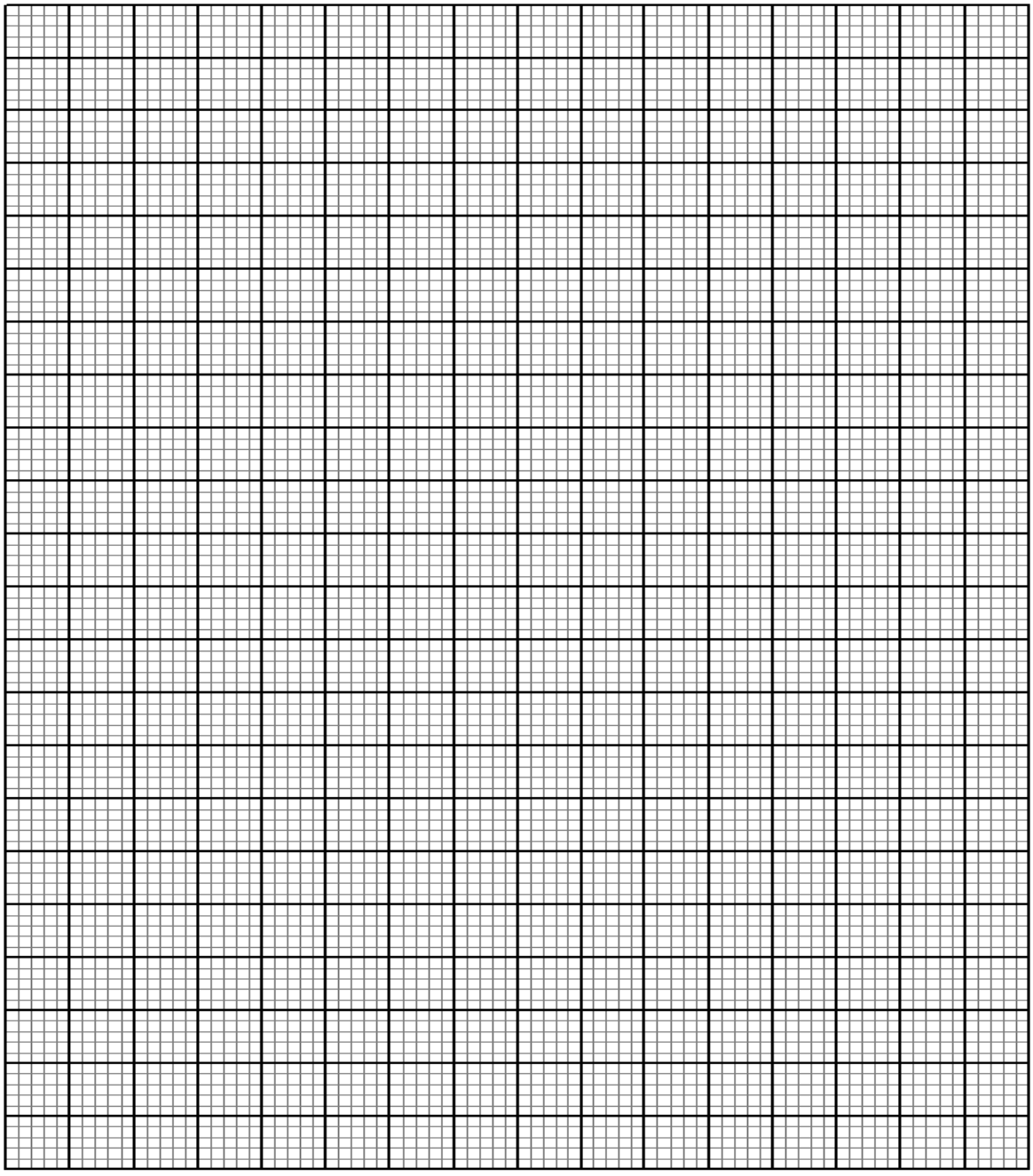
24. Given that $y = 2\sin 2x$ and $y = 3\cos (x + 45)^o$

a) Complete the table below. **(2mks)**

X	0^0	20^0	40^0	60^0	80^0	100^0	120^0	140^0	160^0	180^0
$2\sin 2x$	0		1.97		0.68	-0.68	-1.73		-1.29	0.00
$3\cos (x + 45^0)$	2.12	1.27		-0.78		-2.46			-2.72	-2.12

b) Use the data to draw the graphs of $y = 2 \sin 2x$ and $y = 3 \cos (x + 45^o)$ for $0^o \leq x \leq 180^o$ onthe same axes. **(4marks)**



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a. State the amplitude and period of each curve. **(2marks)**

b. Use the graph to solve the equation $2 \sin 2x - 3\cos(x + 45^0) = 0$ for $0^0 \leq x \leq 180^0$ **(2marks)**

KCSE 23

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

COMPUTER STUDIES

451/1

PAPER 1 (THEORY)

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

Instructions to Candidates

i) *Write your name and admission number in the spaces provided above.*

ii) *This Paper consists of two sections **A** and **B**.*

iii) *Answer **ALL** the questions in section **A**.*

iv) *Answer **question 16 (compulsory)** and any other **THREE** questions from section **B**.*

v) ***All** answers should be written in the spaces provided.*

FOR EXAMINER'S USE ONLY

Section	Questions	Candidate's score
A	1- 15	
B	16	
	17	
	18	
	19	
	20	
	TOTAL SCORE	

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1. Identify the devices shown below **(2Mks)**






i. **ii.** **iii.** **iv.**

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2. With the increase use of computers and widening technological gap, problems associated with its use also increase. List **four** problems associated to this in African countries. **(4mks)**

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3. Explain the following terms associated with VDU. **(3mks)**

a) Resolution

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b) Dot pitch

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C) Display size

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4. Explain **three** ways in which a computer system can be used in electing a school captain. **(3mks)**

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5. Bamburi cement employed check roll clerks, record clerks, copy typists and messenger. The company intends to introduce a computerized system in all the departments. Suggest **three** reasons that would make workers unhappy with the new system. **(3mks)**

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6. Highlight the functions of each button on the navigation toolbar of a web browser. **(4mks)**

a. Back button

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b. Refresh button

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c. Home button

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d. Favorites button.

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7. Give **three** general rules that must be observed to keep within the law when working with data and information. **(3mks)**

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8. State **two** properties that an operating system displays about a file. **(2mks)**

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9. Keyboard keys can be classified into different categories one of them is alphanumeric keys. Outline three of its features **(3mks)**

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10. Define the following terms as used in data processing. **(2mks)**

a. Data logging

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b. Interactive processing

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11. Explain the functions of the following network devices **repeater** and **router**. **(2mks)**

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12. Environmental protection agency (EPA) is very useful body in energy consumption and radiation. Briefly explain its role **(1mk)**

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b. Explain how information and communication technology has contributed adversely to environmental pollution. **(2mks)**

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13.a) Give two reasons why primary key is important in database **(2mks)**

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(b) Like "K*" interpret this syntax in criteria query generation and give an Example **(2mks)**

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14. Describe **two** situations in the bus transport industry where computerized systems could replace human employees. **(2mks)**

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15. State **two** ways of warm booting a computer. **(2mks)**

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SECTION B: (60 MARKS)

Answer question 16 (compulsory) and any other THREE questions from this section.

16. (a) Study the Pseudo code **below** and answer the questions that follows.

```
BEGIN
Print "enter the value of A and B";
Read A, B
Y=A+B
While Y< 20 Do
BEGIN
PRINT Y
A=B
B=Y
Y=B+A
ENDWHILE
PRINT A, B, Y;
END
```

i. Assuming the user keys in 2 and 4 when prompted to enter the values for A and B respectively, determine the values of A, B and Y show your working. **(4 marks)**

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ii. State the control structures used in the above pseudocode. **(2 mk)**

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iii. Draw a flowchart that would be used in place of the pseudocode. **(6mks)**

(b) Give three examples of Iteration construct. **(3marks)**

17. (a) Due to the rapid use of technology there are so many emerging issues e.g. cloud computing.

i. What is cloud computing? **(2mk)**

ii. State three benefits of cloud computing **(3mks)**

iii. List three examples of cloud computing **(3mks)**

(b) i. What is multimedia? **(1mks)**

ii. State two components of multimedia systems. **(2mks)**

(c) Describe the following data types as used in database. **(4mks)**

i) Number

ii) Memo

iii)Ole object

iv) Currency

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18. a.(i) List down three advantages of ATM cards. **(3mks)**

(ii) State four components of an electronics point of sale. **(2mks)**

b. Give three reasons why a manager may prefer to teleconference during meetings. **(3mks)**

c. Digestive Biscuit Company would like to introduce use of a new information system. State three reasons why the company would like to introduce a new information system**?** **(3mks)**

d. Give two responsibilities that are carried out by:

i.Database Administrator **(2mks)**

ii. Software Engineer **(2mks)**

19. a) Distinguish between physical and logical topology as used in networking **2mks)**

b) Using a illustration explains Multipoint transmission. **(3mks)**

c) i) What is interrupt **(1mks)**

ii) Explain three causes of interrupt **(3mks)**

d) Describe the following menu tools as used in Ms. Word **(6mks)**

i) Print layout:

ii) Web layout:

iii) Page layout

20.a) Twos complements is the most popular way of representing negative numbers in computers system. List **two** advantages of using this method. **(2mks)**

b) List three common ways of representing a signed binary number in computer technology **(3mks)**

c) Convert the following binary numbers to their octal equivalents;

i) 111010.0111_2 **(2mks)**

ii) 110111011.11_2 **(2mks)**

d) What is the hexadecimal equivalent of 747_8? **(3mks).**

e) Using two's complement, work out $+21_{10} + (-7_{10})$, giving your answer in decimal notation **(3mks)**

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

COMPUTER STUDIES

451/2

PAPER 2 (PRACTICAL)

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES.

*Type your **name** and **index** number at the top right hand corner of each printout.*

- *Sign and write the date of the examination below the name and index number on each printout.*
- *Write your name and index number on the compact disks*
- *Write the name and version of the software used for each question attempted in the answersheet.*
- *Passwords **should not** be used while saving in the compact disks*
- *Answer all the **questions***
- *All questions carry equal marks.*
- *All answers **must** be saved in your compact disks*
- *Make a printout of the answers on the answers sheets provided.*
- *Hand in **all** the printouts and the compact disks*

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1. The table below shows the standing of the teams in the SUPAMO Premier League after the first week's fixtures. Copy the data exactly as it appears into a worksheet as save the work as SPAMO. **[10mks]**

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	**1. SUPAMO Premier League**												
2													
3	Pos	Team	P	W	D	L	GF	GA	GD	Pts		Points	
4		Sunshine Sec		0	1	0	0	0				Won =	3
5		Pangani High		1	0	0	2	0				Drawn =	2
6		Moi Girls Nairobi		1	0	0	5	0				Lost =	0
7		Alliance High		0	0	1	3	4					
8		Nakuru High		0	1	0	2	2					
9		Kisumu Girls		1	0	0	4	3					
10		Mombasa High		0	0	1	0	5					
11		MakueniGirls		0	0	1	0	2					
12		Kakamega High		0	1	0	2	2					
13		Turkana Girls		0	1	0	0	0					
14													
15		Highest											
16		Lowest											
17		Average											

i. Calculate the following for each team.

a) Games Played (P), based on those Won, Drawn and Lost (W, D and L). **[3mks]**

b) Goal Difference (GD), based on Goals Foul and Goals Against (GF and GA). **[3mks]**

c) Points (Pts) based on the data in the "Points" table. **[6mks]**

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ii. For each of the stats (P, W, D, L, GF, GA, GD and Pts), Calculate the highest values, the lowest values and the average values, (average shown to one decimal place). **[7mks]**

iii. Create a column chart on a separate worksheet that shows the Goal Difference of teams**. [8mks]**

iv. Sort the teams by their Points, (Goal Difference is used for team's level on points). Fill in the Position (Pos) of the teams. Save as SUPAMO week1.xls **[4mks]**

v. The following are the results of the second week's fixtures **[6mks]**

Moi Girls Nairobi	6 – 1	Makueni Girls
Pangani High	3 – 2	Alliance High
Turkana Girls	1 – 0	Kakamega High
Nakuru High	1 – 1	Sunshine Sec

Make the necessary changes to the table for week 1 and save the work as SUPAMO week2.xls

vi. Print SPAMO, SUPAMO week1, and SUPAMO week2 **(3mks).**

2. The **figure on page 4** shows the design of an Admission form. The form is supposed to be filled in duplicate. Use a desktop publishing package to design the admission forms as follows;

(a) Create a new publication named **Admission form** with the following page layout.

(i) Paper size: A4,

(ii) Orientation : landscape,

(iii) Margins: 2.92 cm or 0.5 inches all round. **(4 marks)**

(b) Enter the text and objects and format them as they appear in the **Figure.** The space between the two application forms measures 0.2 inches or 0.50cm. **(45 marks)**

(c) Save and print the publication **(1mark)**

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KCSE Marking Schemes - 0746 222 000 / 0742 999 000

SUPAMO HIGH SCHOOL



P.O.BOX 4768
NAIROBI
CELL: 0000666677
FAX:2465
Email:supamo@yahoo.com
Website: www.supamo.com



Section 1: CHILD'S PERSONAL DETAILS

Family Name		Father's Name			
Date of Birth					
Nationality		Male		Female	
Address			Residence		
Parent's Telephone Numbers			Mobile		
			Office		

Name and classes of any brother (s) /sister (s) already attending the school

_____

_____

Language (s) commonly spoken at home: (1)_____

(2)_____

Section 2: ACADEMIC DETAILS

Class in which admission is sought:_____

SUPAMO HIGH SCHOOL



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_____

_____

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(2)_____

Section 2: ACADEMIC DETAILS

Class in which admission is sought:_____

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

HOME SCIENCE

441/1

PAPER 1 (THEORY)

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES:

- *Write your **name** and **index number** in the spaces provided.*
- *This paper consists of three section **A,B** and **C***
- *Answer **all** the questions in section **A** and **B***
- *Answer any **two** questions in section **C.***
- *Answers should be written in the spaces provided in this booklet.*

For Examiner's Use Only:

QUESTIONS	MAXIMUM SCORE	CANDIDATES SCORE
1-15	40	
16	20	
17	20	
18	20	
19	20	
Total	**100**	

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SECTION A. (40 MARKS)

Answer All the questions in this section in the spaces provided.

1. What is a recipe? **(1mk)**

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……

2. Differentiate between macro and micro nutrients **(1mk)**

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3. List four diseases in the immunization schedule for babies. **(2mks)**

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4. Give two examples of each of the following

i). Conspicous seams **(1mk)**

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ii). Inconspicous seams **(1mk)**

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……

5. List 2 insects which can cause poisonous stings **(2mks)**

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6. Name two opportunistic diseases related to HIV and AIDs **(2mks)**

……

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7. Give two symptoms of toxemia in pregnancy. **(2mks)**

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8. Mention two methods of preserving fruits without use of a refrigerator. **(2mks)**

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9. Name the biological agent used in breed making **(1mk)**

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10. Define blanching **(1mk)**

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……

11. Give two reasons why blanching is done **(2mks)**

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……

12. Give another name for the following nutrients **(2mks)**

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13. List four items in a first aid kit that can be used to manage a sprain.

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14. State two uses of interfacing in garment construction **(2mks)**

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15. State two functions of amniotic fluid in relation to pregnancy **(2mks)**

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16. Give two reasons for basting foods while cooking **(2mks)**

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17. Highlight two disadvantages of rechauffe dishes. **(2mks)**

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18. Whats the difference between a cesspool and a soakpit **(2mks)**

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19. Identify four types of repairs done on clothes **(2mks)**

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20. Outline four ways of introducing air mechanically into flour mixtures. **(2mks)**

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21. Give four principles of food preservation **(2mks)**

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22. List any four resources that a consumer can lack. **(2mks)**

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SECTION B: 20 MARKS

COMPULSORY

23. You have been assigned to carry out some household chores.

a). thoroughly clean a wooden chopping board in readiness for use in the kitchen. **(5mks)**

b). Outline how to weekly clean a hurricane lamp. **(8mks)**

c). Launder a fast coloured knitted cotton T-shirt. **(7mks)**

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SECTION C (40MKS)

Answer Any Two questions from this section in the spaces provided at the end of this section.

24. a). Give five reasons why it would not be advisable to buy a refrigerator on higher purchase. **(5mks)**

b). State five advantages of budgeting family income **(10mks)**

c). Outline any five factors to consider when buying fabrics for soft furnishing **(5mks)**

25. a). Explain the meaning of the following terms in meal planning and management **(3mks)**

i). Accompaniment

ii). Savoury foods

iii). Flavourings

b). State five characteristics of buffet service. **(5mks)**

c). Outline any six changes that may require a doctor's attention while nursing a patient **(6mks)**

d). Explain three ways of meeting the nutritional needs of a patient recovering at home **(6mks)**

26. a). Explain four factors that may influence the frequency of cleaning a house. **(8mks)**

b). Explain three processes carried out on a fabric before laying out patterns. **(6mks)**

c). Outline six qualities of a well made cuff. **(6mks)**

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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

HOME SCIENCE

441/2

PAPER 2 (PRACTICAL)

TIME: 2½ HOURS

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education.

CLOTHING AND TEXTILE

HOME SCIENCE

(CLOTHING CONSTRUCTION)

PAPER 2 – PRACTICAL

TIME: 2 ½ HOURS

A pattern of an Apron is provided. You are advised to study the sketches, the question paper and the layout carefully before you begin the test.

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MATERIALS PROVIDED:

1. Pattern pieces.

A Apron skirt

B Bib

C Waistband

D Frill

E Pocket

2. Plain light weight cotton fabric 80cm long by 114cm wide.

3. Sewing thread to match the fabric.

THE TEST:

Using the materials provided, cut out and make the apron to show the following.

(a) The preparation of the bib.

(b) The attachment of the bib to the waistband.

(c) The preparation of the pleats on the frill.

(d) Attaching the frill onto the skirt using an overlaid seam.

(e) Starting from the right hand edge, neaten 8cm of the overlaid seam using loop stitches.

(f) Machine hemming the right hand edge of the skirt.

(g) Preparation of the pocket and attaching it on the skirt of apron.

(h) Working of gathers on the skirt.

(i) Machining the skirt onto the overlap of the waistband.

(j) Holding the under lap onto the skirt using long and short tacking stitches. Do not hem.

(k) Working of buttonhole.

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 neatly and place it in the envelope provided. Do not put scraps of fabric in the envelope.

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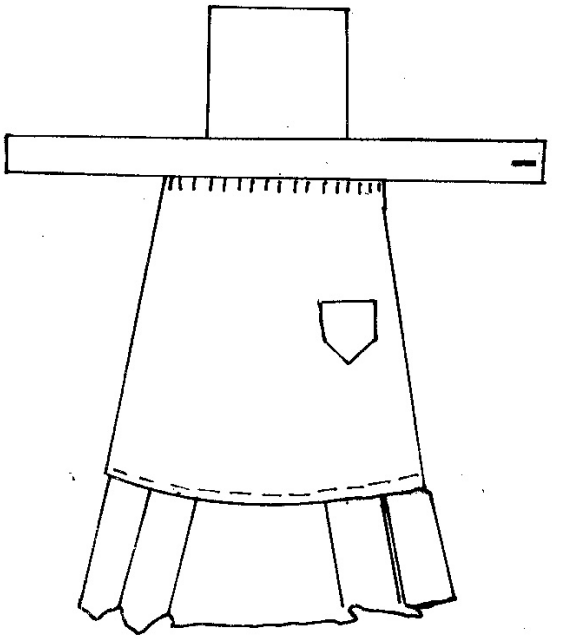
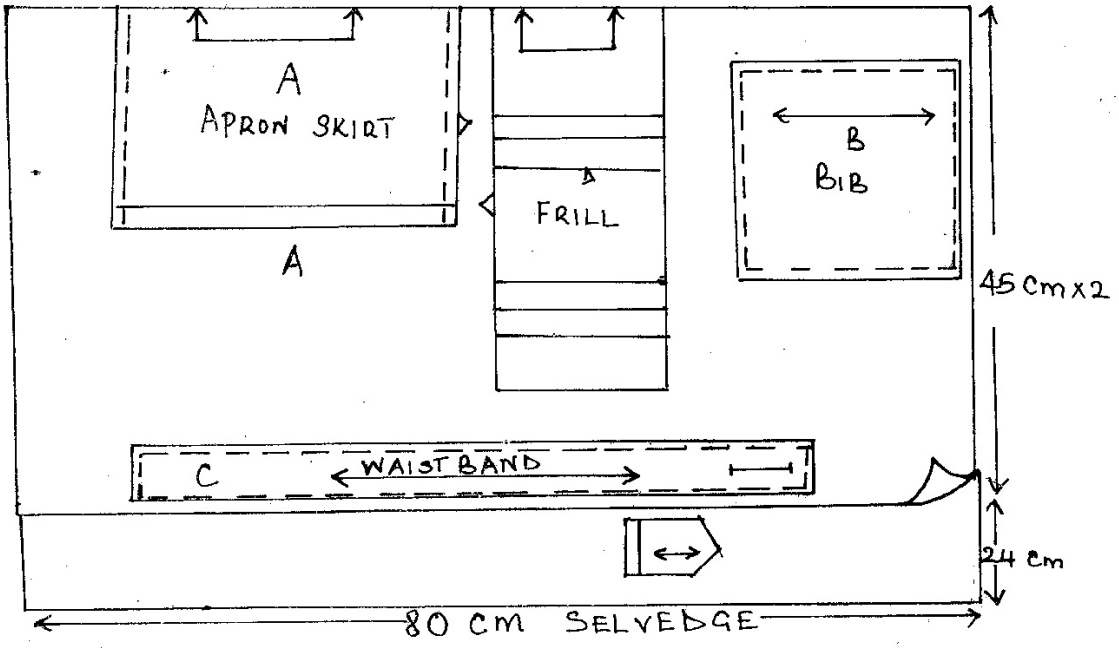


FRONT VIEW

LAYOUT (NOT DRAWN TO SCALE)



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KCSE 2023 REVEALED EXAM

PREDICTION SERIES 1

HOME SCIENCE

441/3

PAPER 3 (PRACTICAL)

TIME: 1¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

441/3

HOME SCIENCE

(FOOD AND NUTRITION)

PAPER 3

PRACTICAL

TIME: 1 ¾ HOURS

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THE TEST

You are expecting **two of your friends** for breakfast before you proceed to a meeting. Prepare, cook and present **a full breakfast** for **them** using the ingredients listed below.

Ingredients

Margarine

Tea leaves/cocoa

Bread

Eggs/sausages

Sugar

Plain wheat flour/ Bread

Oil

Tomatoes

Salt

Milk

Millet flour/corn flakes

Fruits in season

PLANNING SESSION- 30 minutes

Use separate sheets of paper for each task listed below and a carbon paper to make duplicate copies.

Then proceed as follows:

1. Identify dishes and write down their recipes;
2. Write down your order of work;
3. Make a list of the foodstuffs, materials and equipment you will require.

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