KCSE 2024 MOCKS

ALL SUBJECTS

The Second Annual Joint Mock Trial Evaluation test for Select National Schools for the current KCSE 2024 Candidates in the Republic of Kenya.

SUBJECTS TESTED;

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

SERIES 1

For Marking Schemes

Mr Isaboke 0746 222 000 / 0742 999 000

MWALIMU CONSULTANCY

KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

313/1

CHRISTIAN RELIGIOUS EDUCATION

PAPER 1

TIME: 2½ 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*

b) *Sign and write the date in the spaces provided.*

c) *This paper consists of six questions.*

d) *Answer any **five** questions in the foolscaps provided*

e) *Each question has **20** marks*

f) *Candidates are expected to write answers in **English***

g) ***Ensure that all pages are printed as indicated and that no questions are missing.***

FOR EXAMINER'S USE ONLY

Question	1	2	3	4	5	6	TOTAL SCORE
Candidates Score							

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Answer any five questions in the answer booklet provided.

1a) State **six** similarities found in both biblical and Traditional African view on **creation. (6 marks)**

b) From the story of the fall of human being in Genesis chapter 3, state the effects of **sin. (7 marks)**

c) What are the consequences of breaking taboos in Traditional African **communities? (7 marks)**

2a) Describe the background to the call of Abraham (**Genesis 11:26-31)** **(6 marks)**

b) Give **seven** similarities between the Jewish and Traditional African practice of Circumcision **(7 marks)**

c) Identify lessons that Christians learn about God from the call of Abraham **(7 marks)**

3a) Describe the contest at Mount Carmel during the time of Prophet **Elijah (I kings 18:19-39) (8 marks)**

b) State seven effects of idolatry in Israel during the time of Elijah. **(7 marks)**

c) Identify **five** modern forms of idolatry in the society today. **(5 marks)**

4a) Identify the role of prophets in the Old Testament**.** **(7 marks)**

b) Outline **seven** reasons why prophet Amos condemned idolatry in Israel. **(7 marks)**

c) State the relevance of Israel's election to Christians. **(6 marks)**

5a) State the promises that the Israelites made when they renewed their covenant with God during the time of Nehemiah. **(8 marks)**

b) Identify **six** ways in which Nehemiah demonstrated qualities of a good leader during his time **(6 marks)**

c) State **six** problems that church leaders in Kenya face their work**.** **(6 marks)**

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6a) Outline the causes of death in Traditional African communities. **(7 marks)**

b) Explain the significance of rituals performed after the death of a person in traditional African communities. **(7 marks)**

c) Describe **six** ways in which people in Traditional African community communicate with God **(6 marks)**

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KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

313/2

CHRISTIAN RELIGIOUS EDUCATION

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 admission number in the spaces provided*

b) *Sign and write the date in the spaces provided.*

c) *This paper consists of six questions.*

d) *Answer any **five** questions in the foolscaps provided*

e) *Each question has **20** marks*

f) *Candidates are expected to write answers in **English***

g) ***Ensure that all pages are printed as indicated and that no questions are missing.***

FOR EXAMINER'S USE ONLY

Question	1	2	3	4	5	6	TOTAL SCORE
Candidates Score							

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Answer any five questions in the answer booklet provided.

1. a) Outline Nathan's prophecies concerning the messiah **2nd Samuel 7:3-17** **(6 marks)**

b) Describe **four** activities which took place during the dedication of Jesus in the temple (Luke 2:22-40) **(8 marks)**

c) List **six** virtues Christians acquire when celebrating the birth of Jesus **(6 marks)**

2. a) Describe the incident in which Jesus calmed the storm(Luke 8:22-25) **(8 marks)**

b) Explain the significance of transfiguration of Jesus. **(7 marks)**

c) Give the lessons that Christians learn from the transfiguration of Jesus **(5 marks)**

3. a) Give reasons why Jesus used the parable of the lost son in his teaching**.** **(6 marks)**

b) Explain the teachings of Jesus on the power of faith. **(7 marks)**

c) Give **seven** reasons why Christians should have faith in God **(7 marks)**

4. a) Describe how the unity of believers is expressed in the body of Christ **(8 marks)**

b) Give ways in which unity of believers was demonstrated in the early church **(6 marks)**

c) Identify **six** factors that hinder effective cooperation among Christians in Kenya today **(6 marks)**

5. a) Give similarities between the traditional African and Christian view on work **(7marks)**

b) Outline secular attitude to work **(7marks)**

c) Give reasons why manual work is important in Kenya today **(6marks)**

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6 a) Explain **four** negative effects of the introduction of money economy in Traditional African communities. **(8 marks)**

b) State the importance of paying taxes as a Christian to the government of Kenya. **(6 marks)**

c) Give ways in which Christians in Kenya can help to narrow the gap between the rich and the poor **(6 marks)**

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KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

311/1

HISTORY AND GOVERNMENT

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

a. *Write your name, Admission number, Class, sign and date in the spaces provided.*

b. *This paper consists of three sections A, B and C.*

c. *Answer all the questions in section A, three questions from section B and two questions from section C.*

d. *This paper consists of 3 printed pages.*

e. *Candidates should check the question paper to ascertain that all the pages are printed and that no questions are missing.*

f. *Candidates should answer the questions in English.*

FOR EXAMINERS USE ONLY

QUESTION	1-17	18	19	20	21	22	23	24	TOTAL SCORE
CANDIDATE'S SCORE									

For Marking Schemes Contact 0746 222 000 / 0742 999 000

SECTION A (25 marks)

Answer ALL questions in this section

1. Identify the **main** source of information on Kenyan communities. **1mark**
2. State the dispersal point of the river-lake Nilotes in Uganda before arriving to Kenya. **1mark**
3. Identify the basic political unit of the Maasai during the pre-colonial period. **1mark**
4. Name the missionary who translated the New Testament to Kiswahili. **1mark**
5. Define the term democracy**.** **1mark**
6. Give two ways in which people are eligible for registration as Kenyan citizens**.** **2marks**
7. State **two** ways in which the constitution of Kenya promotes National Unity. **2marks**
8. Give the **main** type of constitution used in Kenya. **1mark**
9. State **one** economic benefits of the Kenya-Uganda railway during the colonial period. **1mark**
10. Give **two** ways through which the colonial government controlled African migration to urban centres. **2marks**
11. Outline **two** roles of polling clerks in Kenya. **2marks**
12. Identify **two** terms of Anglo-German Treaty of 1886. **2marks**
13. Give **two** reasons why Nabongo Mumia collaborated with the British. **2marks**
14. Identify **two** types of land ownership in Kenya. **2marks**
15. Give the **main** role of the court of appeal in Kenya. **1mark**
16. Name **two** settlement schemes established after independence to settle the landless. **2marks**
17. Identify **one** example of direct tax in Kenya. **1mark**

SECTION B (45 marks)

Answer ANY THREE questions from this section.

18. **a)** Give **five** reasons for migration of Abagusii into Kenya during the pre-colonial period. **5marks**

b) Describe the political organization of the Akamba during the pre-colonial period.**10marks**

19. a) Give **three** reasons why the early visitors came to the Kenyan coast before 1500AD.

3marks

b) Explain **six** factors that contributed to the development of trade between the Kenyan coast and the outside world by 1500. **12marks**

20. a) Outline **five** methods used by the colonial government to obtain African labour

5 marks

b) Explain **five** reasons why farmers in colonial Kenya were not allowed to grow coffee.

10 marks

21. a) Name **five** education commissions that were formed in post-independence Kenya.

5marks

b) Explain **five** ways in which the Harambee philosophy has promoted the development of education in Kenya since independence. **10marks**

SECTION C (30 marks)

Answer ANY TWO questions from this section.

22. a) State **three** survival rights of a child in Kenya. **3marks**

b) Explain **six** socio-economic responsibilities of a Kenyan citizen. **12marks**

23. a) State **five** factors that may interfere with free and fair elections in Kenya. **5marks**

b) Explain **five** functions of the speaker of the National Assembly. **10marks**

24. a) Outline the composition of the County Assembly in Kenya. **3marks**

b) Explain **six** challenges facing County Government in Kenya. **12marks**

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KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

311/2

HISTORY AND GOVERNMENT

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

a. Write your name, admission number, class, sign and date in the spaces provided.
b. This paper consists of three sections A, B and C.
c. Answer all the questions in section A, three questions from section B and two questions from section C.
d. This paper consists of 3 printed pages.
e. Candidates should check the question paper to ascertain that all the pages are printed and that no questions are missing.
f. Candidates should answer the questions in English.

FOR EXAMINERS USE ONLY

QUESTION	1-17	18	19	20	21	22	23	24	TOTAL SCORE
CANDIDATE'S SCORE									

SECTION A (25 marks)

Answer ALL questions in this section

1. Identify **two** forms of Monarchical Government. **(2marks)**

2. Name the family group that early human beings developed from. **(1mark)**

3. Give the **main** item of trade from North Africa during the Trans-Saharan trade. **(1mark)**

4. Identify the method used to plant cereal crops when early agriculture began. **(1mark)**

5. Identify **two** uses of Bronze in Ancient Africa. **(2marks)**

6. State the **main** advantage of using air transport. **(1mark)**

7. Give **two** functions of the Saza chiefs among the Buganda in the 19th century. **(2marks)**

8. Give **one** disadvantage of Space Exploration. **(1mark)**

9. Give the reason why Kwame Nkrumah broke away from United Gold Coast Convention Party (UGCC) to form Convention people's Party (CPP) **(1mark)**

10. List **two** leaders who signed the treaty leading to rebirth of the East African Community**.** **(2marks)**

11. Identify **two** factors that led to decline of ancient town of Kilwa. **(2marks)**

12. Identify the **main** function of the International Court of Justice. **(2marks)**

13. Give **two** conditions for one to be assimilated in French West Africa. **(1marks)**

14. Name **two** titles used to refer to the Swahili officials in the German colonial administration in Tanganyika. **(2marks)**

15. Give **two** benefits of Indirect rule in Northern Nigeria. **(2marks)**

16. Give **one** member state of Commonwealth in West Africa. **(1mark)**

17. Name **one** house of parliament in India. **(1mark)**

SECTION B (45 marks)

Answer ANY THREE questions from this section.

18. (a) State **five** reasons why early man hunted in groups during the Stone Age period.**(5marks)**

(b) Explain **five** factors that favored early Agriculture in Mesopotamia. **(10marks)**

19. (a) State **five** reasons why pre-colonial communities in Africa engaged in trade. **(5marks)**

(b) Explain **five** factors that have led to industrial growth in South Africa. **(10marks)**

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20. (a) Give **three** reasons why the second location of Samori Toure's empire was not as good as the first one during the war with the French. **(3marks)**

(b) Explain **six** results of the British Ndebele war of 1893. **(12marks)**

21. (a) State **five** ways in which president Nyerere of Tanzania assisted liberation movement of Mozambique. **(5marks)**

(b) Explain **five** political challenges that have faced the Democratic Republic of Congo since independence. **(10marks)**

SECTION C (30 marks)

Answer ANY TWO questions from this section.

22. (a) State **three** ways in which the treaty of Versailles affected Germany. **(3marks)**

(b) Explain **six** reasons why the League of Nations failed to preserve world peace. **(12marks)**

23. (a) State **five** factors that led to the development of the Cold War. **(5marks)**

(b) Explain **five** reasons why Pan-African Movement was not properly established in Africa by 1945. **(10marks)**

24. (a) State **five** functions of the Prime Minister in Britain. **(5marks)**

(b) Explain **five** functions of State Governments in USA. **(10marks)**

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KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

312/1

GEOGRAPHY

PAPER 1

TIME: 2¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

- *This paper has two sections: **A** and **B**.*
- *Answer **all** the questions in section **A**.*
- *Answer question **6** and any other **two** questions from section **B**.*
- *All answers must be written in separate answer sheets provided.*
- *This paper consists of 5 printed pages.*

FOR EXAMINERS USE

SECTION	QUESTION	CANDITATE SCORE
A	1 - 5	
B	6	
	7	
	8	
	9	
	10	
TOTAL		

SECTION A

Answer all questions in this section

1. (a) Give three reasons why it is important to study geography. **(3 marks)**

(b) What is the relationship between geography and mathematics? **(2 marks)**

2. (a) Give two types of igneous rocks. **(2 marks)**

(b) State three conditions necessary for the growth of coral polyps. **(3 marks)**

3. (a) Apart from the sun, name three other components of the solar system **(3marks)**

(b) Give two reasons why the sun is considered a unique star. **(2marks)**

4. (a) Give three reasons for studying of plate tectonic theory **(3 marks)**

(b) List two types of tectonic **boundaries** **(2 marks)**

5. (a) What is river regime **(2 marks)**

(b) State three factors influencing river regime **(3 marks)**

SECTION B

Answer question 6 and any other two questions from this section

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

(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 marks)**

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

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7. (a) State four causes of mechanical weathering. **(4 marks)**

(b) (i) Describe the carbonation process of chemical weathering. **(3 marks)**

(ii) Name two rocks that can be weathered through the carbonation process. **(2 marks)**

(iii) Name three features that can be formed on the earth's surface as the carbonation process of weathering takes place. **3 marks)**

(c) (i) What is an exfoliation dome? **(2 mark)**

(ii) Describe how an exfoliation dome is formed. **(3 marks)**

(d) Explain four ways in which weathering influence man's activities. **(8marks)**

8. a) i) What is a coast? **(2marks)**

ii) Name three types of **coasts** **(3marks)**

iii) Distinguish between a coast line and shore line. **(2marks)**

b) (i) Give three types of ocean tides **(3marks)**

ii) Describe how blow hole and geo are formed

- Blow hole **(3marks)**
- Geo **(2marks)**

c) i) Name two features that result from the process of Long shore drift. **(2marks)**

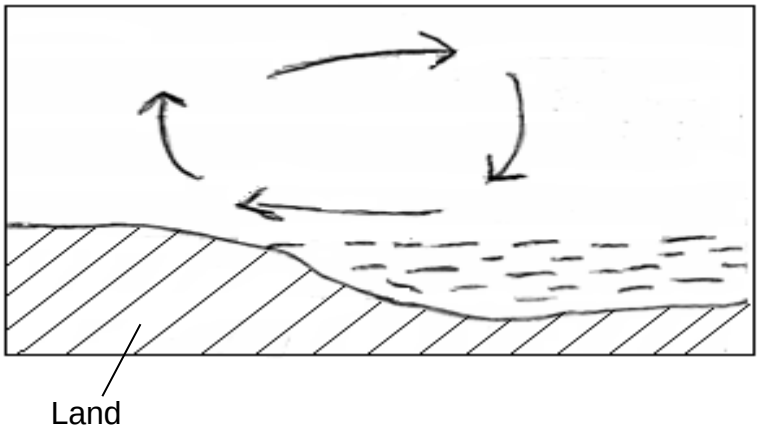
ii) Describe the process of Long shore drift. **(3marks)**

d) Students of Mwatate School conduct a field study on coastal emergence along the coast of Kenya.

i) State two objectives of their study **(2marks)**

ii) List three major evidences they identified to prove that the coast of Kenya is partly as a result of coastal emergence. **(3 marks)**

9. (a) The diagram below shows a local wind. Use it to answer questions that follow.

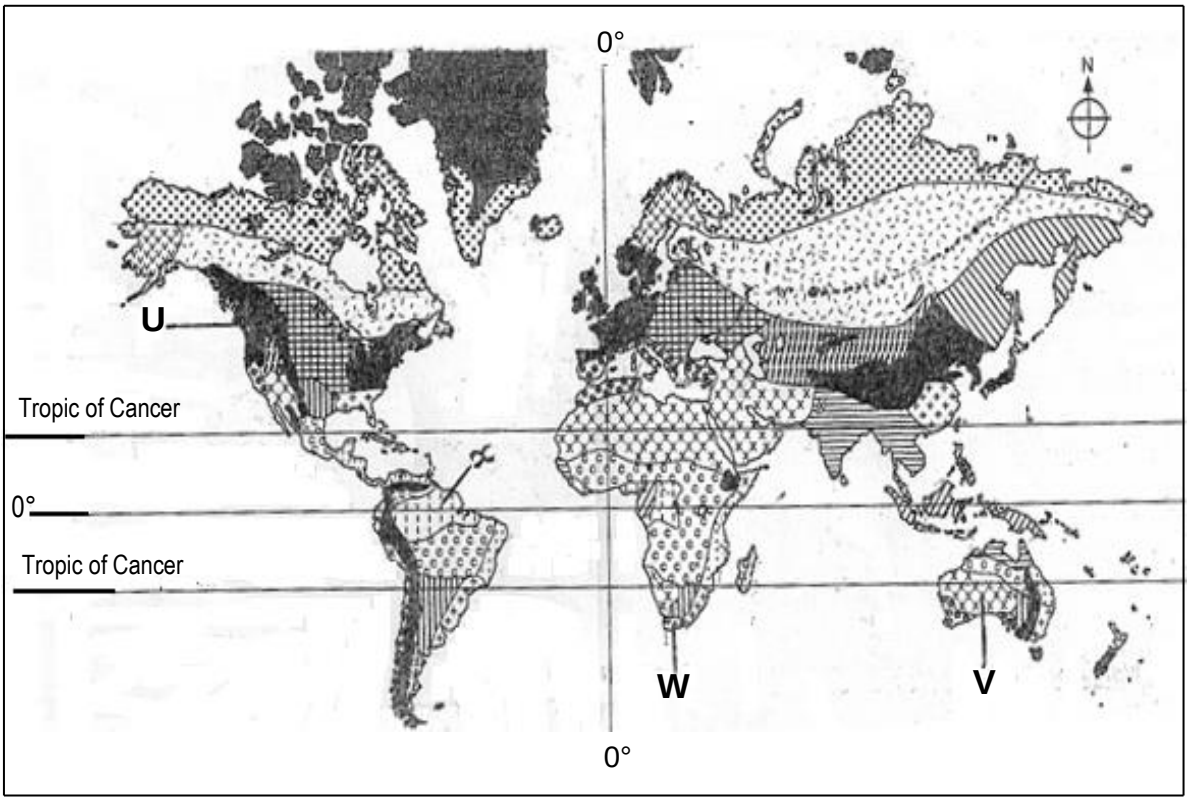


i) Name the type of local wind. **(1mark)**

ii) Describe how the local wind develops. **(3marks)**

b) Describe the formation of relief rainfall. **(6marks)**

c) The world map below shows the climatic regions. Use it to answer questions that follow:



i) Identify the climatic regions marked U, V and W. **(3marks)**

ii) State six characteristics of climate marked X. **(6marks)**

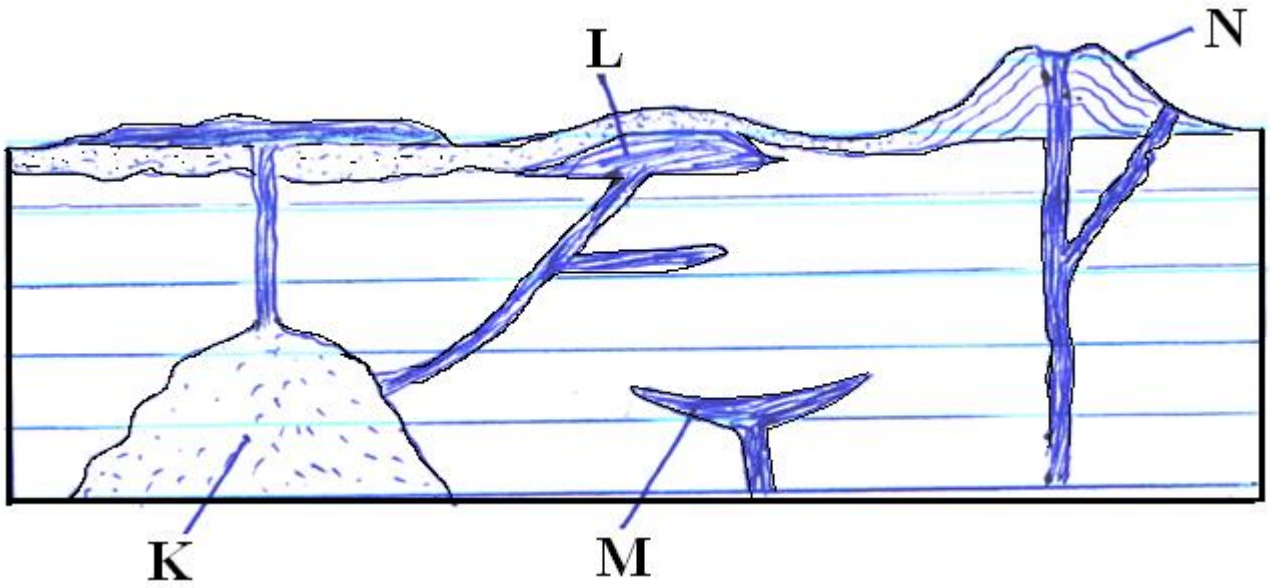
d. i) What is Micro climate? **(2marks)**

ii) State four effects of global warming on human activities. **(4marks)**

10.(a) (i) Give two types of magma **(2marks)**

(ii) Name two types of volcanic eruptions. **(2marks)**

(b) The diagram below represents features of vulcanicity. Use it to answer questions that follow.



(i) Name the features **K,L and M**. **(3marks)**

(ii) Give two examples of the features labeled **N** in East Africa. **(2marks)**

(c) Describe how an explosion caldera is formed. **(6 marks)**

(d) Explain two ways in which geysers and hot springs at Olkaria are of significance to the economy of Kenya. **(4marks)**

(e) Students from Kisau girls intend to conduct a field study on volcanic features in the rift valley of Kenya.

(i) Other than Olkaria, name two other places they are likely to observe hot springs. **(2marks)**

(ii) State two methods of data recording they are likely to use during the study. **(2marks)**

(iii) State two problems they are likely to encounter during the study. **(2marks)**

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KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

312/2

GEOGRAPHY

PAPER 2

TIME: 2¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

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- *Answer **all** the questions in section **A**.*
- *Answer question **6** and any other **two** questions from section **B**.*
- *All answers must be written in separate answer sheets provided.*
- *This paper consists of 5 printed pages.*

FOR EXAMINERS USE

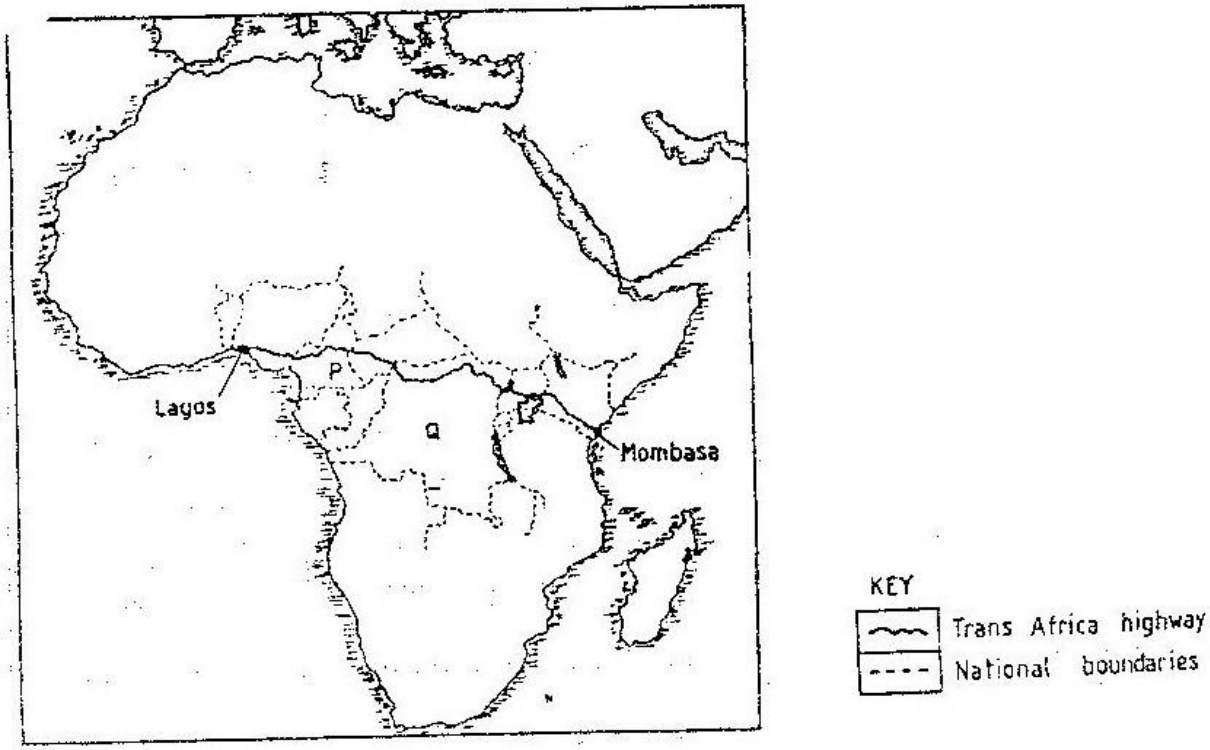
SECTION	QUESTION	CANDITATE SCORE
A	1 - 5	
B	6	
	7	
	8	
	9	
	10	
TOTAL		

For Marking Schemes Contact 0746 222 000 / 0742 999 000

SECTION A

Answer all the questions in this section

1. The map below shows the Trans- Africa highway from Mombasa to Lagos. Use it to answer question (a)



(a). Name the countries marked **P** and **Q**. **(2mks)**

(b) State **three** reasons why it is difficult to transport goods from Mombasa to Lagos along the highway **(3mks)**

2.a) Give **three** reasons why hardwood tree species in Kenya are in danger of extinction **(3mks)**

b) State **two** ways in which softwood forest in Kenya differ from those of Canada. **(2mks)**

3(a) A part from rural – rural migration, list **three** other types of migrations in Kenya. **(3mks)**

(b) Give **two** causes of rural – rural migration in Kenya **(2mks)**

4. (a) Name **two** rivers in Kenya which cause large scale flooding **(2mks)**

(b) State three methods through which floods can be controlled. **(3mks)**

5. (a) Name **three** types of beef cattle reared in Argentina. **(3mks)**

(b) Give two ports in Argentina through which processed beef is exported to overseas markets **(2mks)**

SECTION B

Answer question 6 and any other two questions from this section

6. The table below shows the quantity of minerals produced in Kenya in tonnes between years 2001 and 2005. Use it to answer questions (a) (i) and (ii).

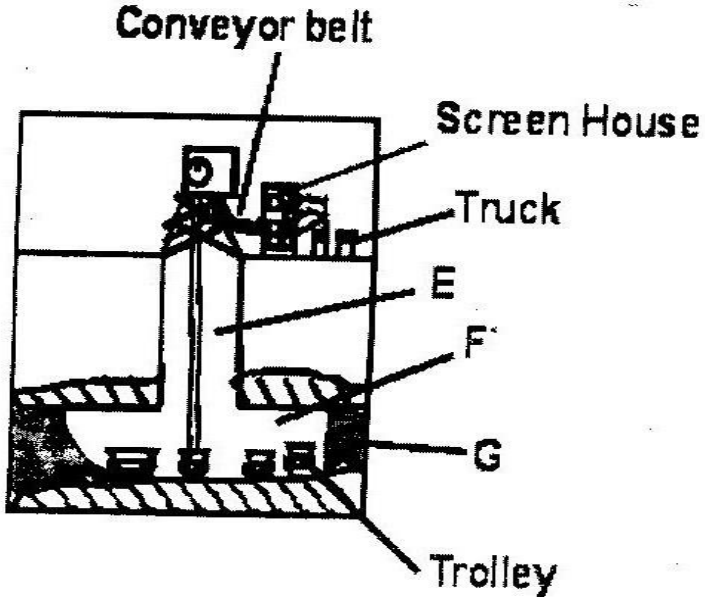
Mineral/Year	2001	2002	2003	2004	2005
Soda ash	297,789	304, 110	352, 560	353, 835	360, 161
Fluorspar	11,885	85,015	80, 201	117, 986	26, 595
Salt	5,664	18,848	21,199	31,139	26,595
Others	6,093	7,000	4,971	6,315	8,972
TOTALS	**321,431**	**414,973**	**458,931**	**509,275**	**422,323**

(a) (i) Calculate the **average** annual production of soda ash over the 5 years period. **(2mks)**

(ii) Using a scale of 1cm represent 100,000 tonnes, draw **proportional circles** representing total mineral production for years 2001, 2002, and 2004. Use diameter method. **(7mks)**

(b) State **two** uses of soda **ash** **(2mks)**

c) The diagram below shows shaft mining.



i) Name the parts marked **E, F** and **G.** **(3mks)**

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

d (i State **three** negative effects of mining on the environment **(3mks)**

(ii) Explain three ways in which gold mining has contributed to the economy of South Africa.

(6mks

7.a) i) Name **two** historical sites on the Kenyan coastal region that attracts tourists **(2mks)**

(ii) Explain the **differences** between the tourist attractions in East Africa and Switzerland under the following sub- headings

- Climate (**2mks)**
- **Culture** **(2mks)**

b) Explain **four** benefits that Kenya derives from tourism **(8mks)**

(c) Explain **three** measures that Kenya should take in order to attract more tourists **(6mks**

(d) Some students carried out a field study on inland tourist sites.

(i) Identify **two** sampling techniques the students may have used during the study. **(2mks)**

(ii) Give **three** advantages of sampling the area of study. **(3mks)**

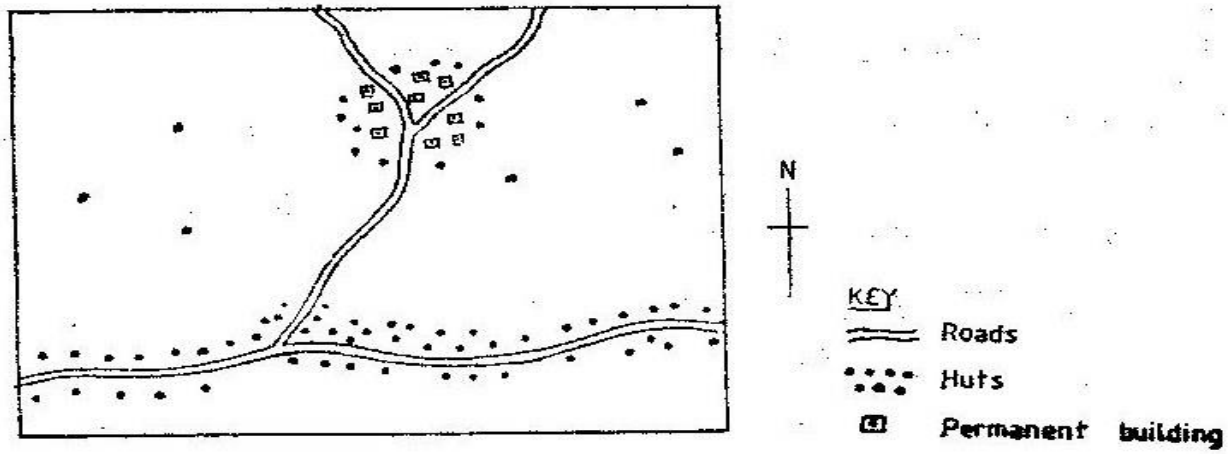
8.(a) (i) State **five** problems experienced in irrigation farming in Kenya **(5mks)**

(ii) Explain **three** conditions that favour irrigation farming in Kenya **(6mks)**

(b) Describe the **stages** in the reclamation of land from the sea in the Netherlands **(6mks)**

(c) Explain **four** benefits of land reclamation in the Netherlands **(8mks)**

9. Study the map below and answer the questions that follow



(a) Name the main settlement pattern in:

i) The **northern** part of the map. **(1mk)**

ii) The **southern** part of the map. **(1mk)**

b) State **four** factors that led to the development of Kisumu **town** **(4mks)**

c) List **five** functions of New York City **(5mks)**

d) Explain **four** problems facing urban centres in Kenya **(8mks)**

(e) You intend to carry out a field study in the nearby urban center

(i) State **three** reasons why you will conduct a pre-visit to the area of study **(3mks)**

(ii) Give **three** advantages of studying the nearby urban center through field work**.** **(3mks)**

10(a) (i) Define the term international trade **(2mks)**

ii) Name **three** major imports from Europe to Kenya **(3mks)**

b) State **four** factors that influence external trade in Kenya **(4mks)**

c) Explain **four** ways through which Kenya will benefit from the renewed East Africa Cooperation **(8mks)**

d) Explain **four** negative effects of international trade **(8mks)**

KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

101/1

ENGLISH

PAPER 1 *(Functional Writing)*

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. *Answer **all** questios.*
3. *Candidates should check to ascertain that no questions are missing.*
4. *Candidates **must** answer the questions in English.*
5. *This paper consists of **seven** printed pages.*

For Examiner's Use Only

Question	Maximum Score	Candidate's Score
1	20	
2	10	
3	30	
	Total Score	

Q1. **Mr Isaboke** is a friend of yours living in **United States** and has written to you an e-mail informing you that he sat for his high school examinations and achieved good grades. He is to join **Havard University** in **United States** to study **Medicine.**

a) Reply to his email congratulating him for the exemplary performance and remember to send a copy to **Amos Obiero** **(10mks)**

b) He is interested in African dishes and has requested for a recipe of your favourite meal that he wishes to prepare for his four friends. Write the recipe that you would send to him. **(10mks)**

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2. Read the passage below and fill in each blank space with an appropriate word. (10mks

Environment forms the resource base 1…….our economic and social development and impacts on all economic sectors, all of which rely heavily 2……...the exploitation of environmental resources. It is, therefore, imperative that this vital natural resource capital be 3 ..... Our national forest 4……..currently stands at less than 2% which is far 5…….the 10% advocated for by the United Nations. This 6…….. coverage is due to the high rate of degradation which is a result of increased competition for resources by a 7…… growing population and failure to adhere to the principles of sustainable utilization of resources.

In order to 8 ……..….this challenge, the Ministry of Environment has 9……..……. on interventions to rehabilitate and restore our environmental resource base through reforestation of degraded water 10……. areas and their rehabilitation. ***(Adapted from The Economic Significance of Natural Resources in Kenya.)***

3. (a) Study the following item of oral literature and answer the questions that follow:

Lola lulola lulala lula (Maragoli)

(i) Identify this item and support your answer. **(2mks)**

……

……

……

(ii) Give **two** functions of this item? **(2mks)**

……

……

(iii) You are doing a research on oral literature materials from the community near your school. What problems are you likely to face in the field work? **(2mks)**

……

……

……

……

(iv) What would be the effect of translating the oral literature materials collected? **(2mks)**

……

……

……

……

(b) A friend of yours is scheduled to chair a certain meeting. What four things do you think she should do to ensure that there is effective communication during the meeting? **(4mks)**

……

……

……

……

……

……

(c) Identify the intonation you would use in the following sentences. **(4mks)**

(i) Have you taken your lunch? …….

(ii) How can you say that? ……

(iii) We have won the match. …….

(iv) What did you say? ……..

d) Identify the silent letters in the following words **(2mks)**

i) Honest ……..

ii) Comb……

iii) Whet……..

iv) Hymn…….

e) Provide a word similar in pronunciation to each of the following (3mks)

i. Gorilla …….

ii. Close ……..

iii. Cent ……..

f) Your friend is visiting your school for the first time. Which things will you consider when giving her directions to make sure it is accurate. **(3mks)**

……

……

……

……

g) Complete the following conversation appropriately.

Delphine: (***Telephone rings***) Hello. This is the secretary Karoti Girls High School.
How can I help you please?

Cess: ……
.....……(1mk)

Delphine: I‟m sorry. Ms Oketch is in a conference out of town. Could you kindly leave a message for her?

Cess: ……
…….……(1mk)

Delphine: Sorry. I didn't get the last two digits of the number?

Cess: ……
……(1mk)

Delphine: ……
…… (1mk)

Cess: Correct.

Delphine: …… (1mk)

Cess: Yes, let her know I'll be expecting her call.

Delphine: Okay, goodbye.

Cess: ……
…… …(1mk)

KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

101/2

ENGLISH

PAPER 2

(Comprehension, Literary appreciation and Grammar)

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTION 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 should check the question paper and ascertain that all the pages are printed as indicated and that no question is missing.*
v. *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	

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)

QUESTIONS

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)**

……

……

……

……

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)**

……

……

……

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)**

……

……

……

……

……

……

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.

"Mother thinks that's big-big enough. Are you ready for tomorrow?"

"As ready as I ever will be, I guess, mother." He went and sat beside her."And do you still think the summit will adopt Way Omega?"

"Only twelve hours to go before we find out."

"Sorry. Is it just me or has it actually got colder over the past two days? You don't sound soupbeat today as you did two days ago."

"Only twelve hours. We can wait."

"By the way, guess who I ran into downstairs? Someone by the name of Longway. I wastracking down a man they call their guide and thought this fellow might be him. Do youknow him?"

Dr Abiola did not answer.

"Well, do you know Mr Longway or not?"

"Yes, Ms McKenzie, I do. You might as well knqw this now: I am their guide."

What

"Promise you will keep that to yourself, okay?""I promise."

"Apart from Mr Longway, whom you know, there are four other people I'm working with onthe periphery. Instead of adopting Way Omega, this group wants the summit to adopt Path Alpha.

"It wants the summit to adopt what instead?"

"Path Alpha - it's a rival to Way Omega. The trouble there is that Path Alpha isn't even on the summit's agenda."

"So, Mr Longway and company want me to help them put it there."

"Wait a minute. Only two days ago you said you were to help heads of state adopt Way Omega. Now you ay other people want you to help them adopt Path Alpha, a rival to WayOmega. What's going on here?"

"Here is what's going on. I came to advocate for Way Omega, and I will."In doing that I'll draw on other alternatives, including Path Alpha."

"You will? Then remind me: /AVfiy did I promise to keep your identity to myself?" "Because I'm hiding from Way Omega my links to Path Alpha. Look. Some heads of state —not all, but some — believe I should be focusing exclusively on Way Omega. If they heard about my links to Path Alpha, they would demand my scalp.

QUESTIONS

(a) Place this excerpt to its immediate context. **(4 marks)**

.....

.....

.....

.....

(b) Identify and illustrate two-character traits of Abiola and one character trait of FionaMcKenzie in the excerpt. **(6 marks)**

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……

(c) Discuss two themes evident in the excerpt. **(4 marks)**

……

……

……

……

(d) **(i)** Instead of adopting Way Omega, the group wants the summit to adopt PathAlpha.***(Replace "instead" with a complex preposition)***. **(1 mark)**

(ii) Wait a minute. ***(Add a suitable question tag)***

iii) So, Mr Longway and company want me to help them put it there.***(Report)***

(e) Pick and illustrate two stylistic devices used by the author in the excerpt. **(4 marks)**

……

……

……

……

……

(f) Explain the meaning of the following words and phrases used in the excerpt. **(4marks)**

……

……

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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)**

……

……

……

……

……

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

……

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……

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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)**

……

……

……

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

……

……

……

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) Use the correct form of the word in brackets in each of the sentences below ***(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.

.....

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.

.....

.....

.....

.....

KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

101/3

ENGLISH

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) *This paper consists of 2 printed pages.*
f) *Each of your essay must **not** exceed **450** words.*
g) *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	

For Marking Schemes Contact 0746 222 000 / 0742 999 000

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

1. Imaginative Composition (Compulsory) (20 marks)

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 (20 marks)

John Lara, *The Samaritan*

The term "dirty game" has long been applied to politics. Provide evidence to support the assertion made, citing **The Samaritan by John Lara.**

3. The Optional Set Texts (20 marks)

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

(a) The Play

Adipo Sidang, *Parliament of Owl*

"*Life is full of ironies."* Using illustrations from ***Parliament of Owls,*** by **Adipo Sidang**, write an essay to justify this statement.

Or

(b) 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.

For Marking Schemes Contact 0746 222 000 / 0742 999 000

KCSE 2024 MOCK EXAMINATIONS

MFULULIZO WA 1

102/1

KISWAHILI

KARATASI YA 1

INSHA

MUDA: SAA 1¾

JINA……

SHULE…… SAHIHI……

NAMBARI YA USAJILI…… MKONDO……

Cheti cha Kuhitimu Kisomo cha Sekondari (KCSE)

MAAGIZO

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

b) *Kisha chagua insha nyingine moja kati ya tatu zilizobakia.*

c) *Kila insha isipungue maneno **400.***

d) *Kila insha ina alama **20.***

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

f) *Karatasi hii ina kurasa mbili zilizopigwa chapa.*

KWA MATUMIZI YA MTAHINI PEKEE

Swali	Upeo	Alama
1	20	
	20	
Jumla	40	

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MASWALI

1. **Lazima**

Kama mhariri wa gazeti la Angaza, andika tahariri ukitoa maoni yako kuhusu changamoto zinazotokana na mfumo mpya wa elimu ya umilisi.

2. Fafanua madhara ya mitandao ya kijamii na utandawazi kwa jamii.

3. Buni kisa chenye kudhihirisha maana ya methali hii:

Usitukane wakunga na uzazi ungalipo.

4. Andika insha itakayochukua mwisho huu.

… nilipotua nchini mwetu, nilishusha pumzi, nikashukuru Maulana kwa kuponea chupuchupu katika uvamizi huo.

For Marking Schemes Contact 0746 222 000 / 0742 999 000

KCSE 2024 MOCK EXAMINATIONS

MFULULIZO WA 1

102/2

KISWAHILI

KARATASI YA 2

LUGHA

MUDA: SAA 2½

JINA……

SHULE…… SAHIHI……

NAMBARI YA USAJILI…… MKONDO……

Cheti cha Kuhitimu Kisomo cha Sekondari (KCSE)

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.*

d) *Watahiniwa ni lazima wahakikishe kwamba kurasa zote za karatasi hii **zimepigwa chapa** sawasawa na kuwa **maswali yote yamo.***

Kwa matumizi ya mtahini pekee

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

For Marking Schemes Contact 0746 222 000 / 0742 999 000

1. <u>UFAHAMU</u> ` **(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.

<u>MASWALI</u>

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)**

……

……

……

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 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)**

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(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)

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

Daktari alitaka kujua matatizo aliyokuwa nayo.

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(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.

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(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……

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(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 <u>mazito ajabu</u> yalijitandaza <u>kwenye anga</u> .

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

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

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(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)

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(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.

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

Kijakazi na kitoto wamekuwa wakila wakiimba kikasuku.

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3. **ISIMUJAMII (Alama 10)**

Soma makala yafuatayo kisha ujibu maswali.

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

Sauti:Ndiyooooooo!

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 2024 MOCK EXAMINATIONS

MFULULIZO WA 1

102/3

KISWAHILI

KARATASI YA 3

FASIHI

MUDA: SAA 2½

JINA……

SHULE…… SAHIHI……

NAMBARI YA USAJILI…… MKONDO……

Cheti cha Kuhitimu Kisomo cha Sekondari (KCSE)

MAAGIZO

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

b) *Tia sahihi yako kisha uandike tarehe ya mtihani katika nafasi ulizoachiwa hapo juu.*

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

d) *Swali la* ***kwanza*** *ni la* ***lazima*****.**

e) *Maswali hayo mengine* ***matatu*** *yachaguliwe kutoka sehemu nne zilizobaki yaani; Riwaya, Ushairi, Hadithi fupi na Fasihi Simulizi.*

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	
2	20	
3	20	
4	20	
JUMLA	80	

For Marking Schemes Contact 0746 222 000 / 0742 999 000

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 Clara Momanyi: Nguu za Jadi

Jibu swali la 2 au la 3

2 *"Ile ilikuwa kesi ya mwisho aliyokata. -Alinyanganywa leseni ya uanasheria, akashushwa madaraka."*

a. Eleza muktadha wa dondoo hili_ **(al.4)**

b. Tambua maudhui yanayojitokeza dondoo hili_ **a1.8)**

c. Fafanua umuhimu wa mandhari ya dondoo hili_ **(al.8)**

3. Eleza jinsi Mrima amejenga maudhui riwayani. **a1.20)**

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.

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?

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)**

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)**

HUU NDIO UKURASA WA MWISHO ULIOPIGWA CHAPA.

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KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

443/1

AGRICULTURE

PAPER 1 *(Theory)*

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO STUDENTS

a) *Write your name and Admission number in the spaces provided at the top of this page s*
b) *This paper consists of three sections: A, B and C*
c) *Answer all questions in sections A and B*
d) *Answer any two questions in section C*
e) *All answers should be written in the spaces provided*
f) *Candidate should answer the questions in English*

FOR EXAMINER'S USE ONLY

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATE SCORE
A	1-20	30	
B	21-24	20	
C		20	
		20	
	TOTAL SCORE	90	

SECTION A. (3O MARKS)

Answer all questions in this section in the spaces provided.

1. What is organic farming? **(1 mark)**

……

……

2. Give **three** reasons why burning is discouraged in land-clearing **(1½ marks)**

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3. Give **two** cultural methods of controlling bollworms in a tomato crop. **(1mark)**

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4. State **three** ways through which agricultural activities pollute water **(1½ marks)**

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5. List **two** advantages of proper stocking rate in pasture management **(1mark)**

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6. State **three** ways through which mono-cropping leads to loss of soil fertility **(1½ marks)**

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7. State the law of diminishing returns in economics **(1mark)**

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8. State **four** factors to consider when deciding on a farming system to undertake **(2 marks)**

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9. Give **two** benefits of earthing-up in Irish potatoes production **(1mark)**

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10. List **four** steps followed in land adjudication **(2 marks)**

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11. Give **two** factors that determines the depth of ploughing **(1mark)**

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12. List **four** methods of fertilizer application **(2marks)**

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13. Give **four** precautionary measures that a farmer should put into consideration when harvesting cotton **(2 marks)**

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14. State **four** factors that should be considered before deciding to use a chemical method of pest control. **(2 marks)**

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15. State **four** ways in which grass cover help to conserve soil **(2 marks)**

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16. Give **four** advantages of rotational grazing **(2 marks)**

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17. State **three** advantages of landlordism and tenancy land tenure system **(1½ marks)**

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18. State **three** benefits of using tissue culture in crop propagation **(1½ marks)**

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……

19. How are following conditions prevented in carrot production **(1½ marks)**

i) Cracking……..

ii) Forking……..

iii) Greening……

20. List **two** micro-catchments systems in water harvesting **(1 mark)**

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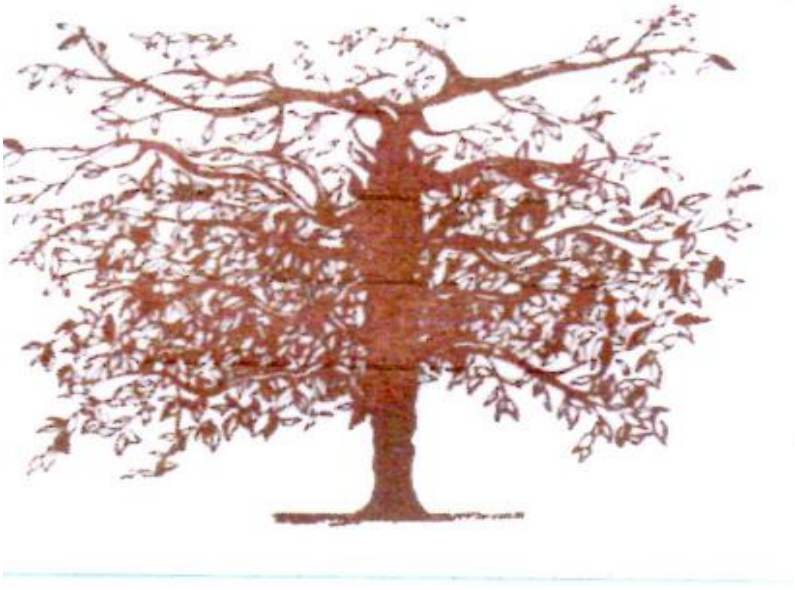
……

Section B: (20 Marks)

Answer all questions in this Section on the spaces provided

21. The diagram below shows a pruning method in coffee. Study it and answer the questions that follow



a) Identify the pruning method illustrated above **(1mark)**

……

b) Explain how the pruning illustrated above is carried out **(2½ marks)**

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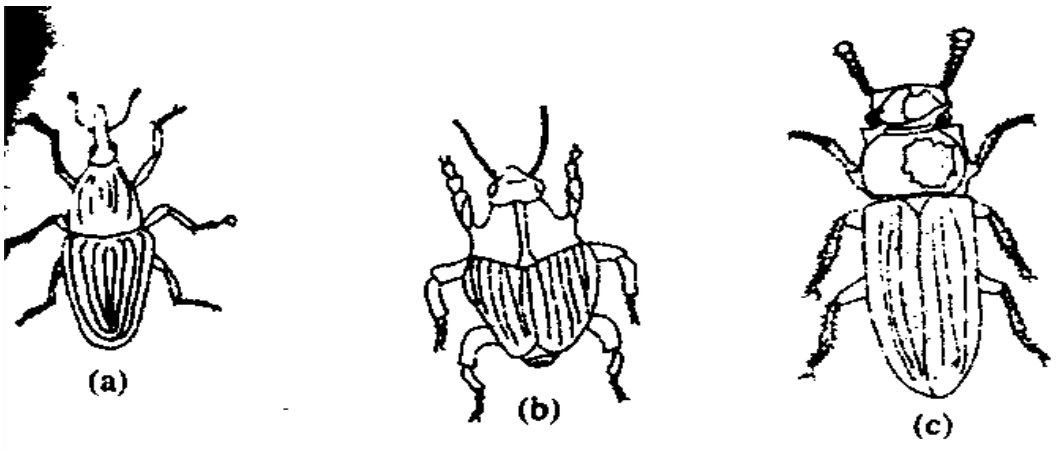
c) State **three** reasons for pruning in coffee **(1½ marks)**

……

……

……

22. The diagrams below shows some storage pests. Study them and answer the questions that follow



a) Identify the pest a, b and c **(3marks)**

a) .....

b) .....

c) .....

ii) State **two** kinds of damages they cause to stored produce **(1mark)**

……

……

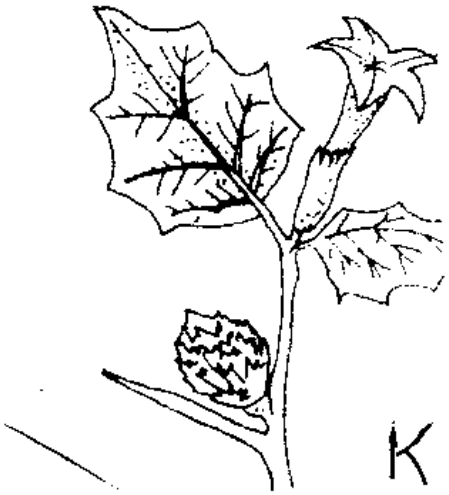
iii) State **two** methods which can be used to control storage pests **(1mark)**

……

……

23. The diagram below shows two different weeds x and k. Study them and answer the questions that follow





a) Identify the weeds x and k **(2 marks)**

X ……..

K ……..

b) On basis of plants morphology, identify the class of weed x **(1 mark)**

……

c) Give **one** disadvantage of weed k **(1 mark)**

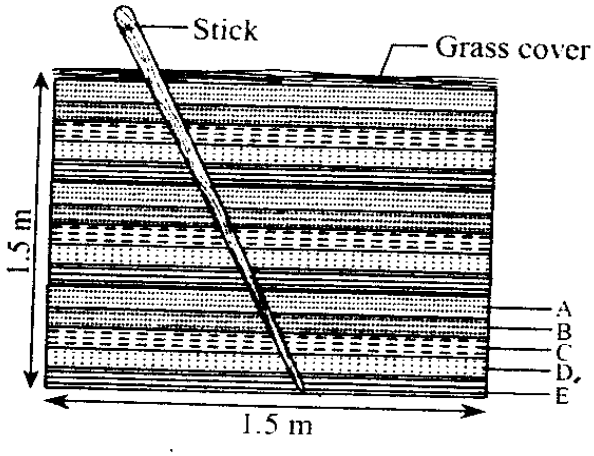
……

d) Give **one** beneficial use of weed x **(1mark)**

……

……

24. Below is a diagram of a compost pit. Study it and answer the questions that follow



i. Identify the layers A, B, C, D and E **(2½ marks)**

A……

B……

C……

D……

E……

ii. State **two** importance reasons of layer B **(1 mark)**

……

……

……

iii. State the functions of the stick and the grass cover **(1 mark)**

……

……

……

iv. Name the other method of making compost manure **(½ mark)**

……

……

SECTION C: (40 MARKS)

Answer any two questions in section on the spaces provided after question 24

25. a) Describe the risks and uncertainties encountered by wheat farmers in Kenya. **(7 marks)**

b) State the importance of Agroforestry **(7 marks)**

c) Outline **six** factors that affect rooting of cuttings **(6 marks)**

26. a) Discuss the influences of soil structure on crop production **(7 marks)**

b) Outline **six** factors that influences price of a commodity or service **(7 marks)**

c) Explain **six** types of pesticides according to their mode of action **(6 marks)**

27. a) Describe the uses of farm accounts in the farm **(8 marks)**

b) Explain **six** advantages of using seeds for crop propagation **(6 marks)**

c) Discuss factors to consider when selecting implements to use for primary cultivation **(6marks)**

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KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

443/2

AGRICULTURE

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO STUDENTS

b) *Write your name and Admission number in the spaces provided at the top of this page*

c) *This paper consists of three sections: **A** , **B** and **C***

d) *Answer all questions in sections **A** and **B***

e) *Answer any two questions in section **C***

f) *All answers should be written in the spaces provided*

g) *Candidate should answer the questions in English*

FOR EXAMINER'S USE ONLY

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1-19	30	
B	20-23	20	
C		20	
		20	
	TOTAL SCORE	**90**	

SECTION A (30 Marks)

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

1. State the functional difference between a **rasp** and a **bustard file**. **(1 mark)**

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2. List **two** pork breeds of pigs. **(1 mark)**

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3. Differentiate between the terms **type** and **breed** as used in livestock production when studying breeds of livestock. **(2 marks)**

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4. Name **two** developmental stages of a liver fluke in water snail. **(1 mark)**

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5. Name the term used to indicate the act of parturition in the following animals. **(2marks)**

Animal	Parturition term used
Cattle	
Pigs	
Sheep	
Goats	

6. Give **four** importance of docking in sheep management **(2 marks)**

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7. What does the term Epistasis mean in livestock improvement? **(1 mark)**

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8. Give **two** disadvantages of using a spray race. **(1 mark)**

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9. Outline **four** symptoms of coccidiosis disease in kids. **(2 marks)**

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10. Name **four** causes of stress in a flock of layers. **(2 marks)**

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11. State **four** advantages of natural feeding in calf rearing. **(2 marks)**

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12. Give **four** implements that obtain power from power take off shaft (PTO) of a tractor.
(2 marks)

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13. State **four** harmful effects of keds. **(*melophagus ovinus*).** **(2 marks)**

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14. List **four** enzymes produced in the jejunum. **(2 marks)**

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15. Give **two** methods of applying acaricides on animals. **(1 mark)**

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16. List **four** components of power transmission system. **(2 marks)**

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17. Give **four** maintance practices carried out on chisels**.** **(2 marks)**

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18. Name **two** bloodless methods of castration. **(1 mark)**

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19. State **two** uses for which wind power is harnessed. **(1 mark)**

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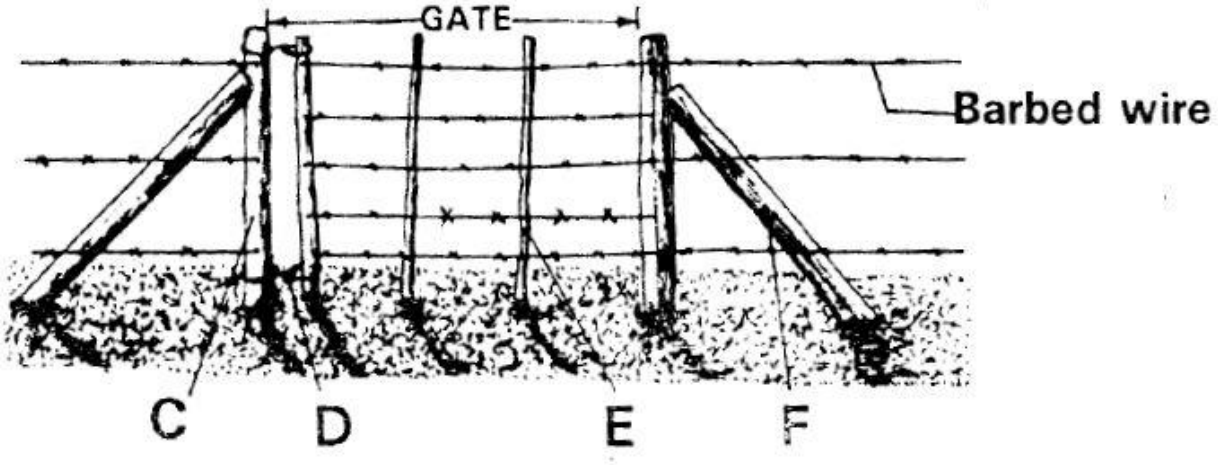
SECTION B (20 Marks)

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

20. Study the farm structure below and answer the questions that follow.



a) Identify the type of gate illustrated above. **(1 mark)**

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b) Distinguish between a **pass** and a **gate.** **(1 mark)**

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c) List **four** types of tools used in the establishment of the structure above**.** **(2 marks)**

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d) State **one** practice maintenance carried out on the structure. **(1 mark)**

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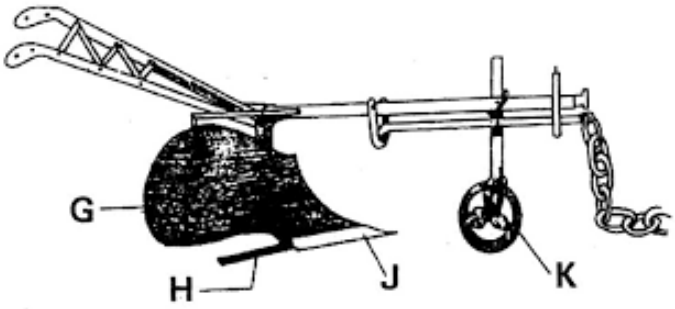
21 Below are farm implements, study them and answer the questions that follow.



U



V

a) Name the farm implements shown above. **(2 marks)**

U…….

V……

a) Identify the parts labeled H and G above. **(2 marks)**

H…….....

G ……

b) State **one** field condition under which the implement U can be used. **(1 mark)**

……..

22 The photographs below show a rearing practice carried out on farm animals. Study them carefully and answer the questions that follow.





a. Name the routine management practice shown above. **(1 mark)**

……

b. Name the tool shown above used to carry out the practice. **(1 mark)**

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c. State three reasons for carrying out the practice shown above. **(3 marks)**

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23. Below is a photograph of a rabbit breed, study it and answer the questions that follow.



a) Identify **two** observable characteristics used to identify the above rabbit breed. **(2 marks)**

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b) State **one** reason why the above rabbit breed is preferred by most farmers. **(1 mark)**

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c) Give **two** reasons why rabbit keeping is gaining more popularity in Kenya. **(2 marks)**

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SECTION C (40 Marks)

*Answer any **two** questions from this section in the spaces provided after question 23*

24. a) Describe East Coast Fever under the following sub-headings.

i) Causal organism **(1 mark)**

ii) Symptoms **(5 marks)**

iii) Control measures **(4 marks)**

b) Describe the requirements of deep litter system. **(5 marks)**

c) State the principles considered while controlling endo-parasites**.** **(5 marks)**

25. a) Describe the daily maintenance /short-term services of a tractor. **(9 marks)**

b) State the characteristics of indigenous cattle that make them survive in marginal areas. **(5 marks)**

c) Explain **six** ways of improving power output while using draught animals. **(6 marks)**

26. a) Explain the role of livestock industry in Kenya's Economy. **(6 marks)**

b) State five sources of carbohydrates in livestock nutrition. **(5 marks)**

c) Describe the procedure of harvesting honey in a Kenya Top Bar Hive . **(5 marks)**

d) State **four** properties of concrete that make it more suitable in construction of farm structures. **(4 marks)**

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KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

565/1

BUSINESS STUDIES

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

a) *Write your name and index number in the spaces provided above.*
b) *Sign and write the date of the examination in the spaces provided above.*
c) *This paper consists of 25 questions.*
d) *Answer all the questions in this paper.*
e) *All your answer must be written in the spaces provided in the question paper*
f) *Non –programmable silent electronic calculator may be used.*
g) *Candidates must answer the questions in English.*

FOR EXAMINER'S USE ONLY

Question	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Candidate's score																

17	18	19	20	21	22	23	24	25	TOTAL MARK

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1. Give four features of Basic human wants**.** **(4 marks)**

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2. State four essential elements of effective communication. **(4 marks)**

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3. Outline four sources of government revenue. **(4 marks)**

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4. State four ways in which a good filing system may facilitate the operation of an office. **(4 mks)**

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5. Outline four circumstances in which the government may be involved in businesses. **(4 mks)**

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6. Outline four reasons that may make a producer to by-pass the wholesaler when distributing goods**.** **(4 marks)**

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7. Highlight four ways in which inflation is beneficial to a country**.** **(4 marks)**

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8. Highlight four types of demand**.** **(4 marks)**

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9. Classify the following resources as natural, man-made or human. **(4 marks)**

RESOURCES	**CLASSIFICATION**
a) Engineer	
b) Boat	
c) Soda ash	
d) Driver	

10. The following trial balance was wrongly prepared by Shida Shida traders.

Shida Shida Traders

Trial Balance

For the year ended 31/12/2023

ITEMS	CREDIT	DEBIT
Building	400, 000	
Return inward		5,400
Carriage inward	4,000	
Carriage outward		6,800
Rent received	1,200	
Creditor	10,100	
Debtor		17,900
Return outward	800	
Stock	8,000	
Bank overdraft	19,500	
Prepaid insurance		9,000
Motor vehicle		200,000
Capital		619,500

Prepare the correct trial balance of Shida Shida Traders**.** **(5 marks)**

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11. Outline four differences between ordinary shares and preference shares. **(4 marks)**

Ordinary shares	Preference shares
a)	a)
b)	b)
c)	c)
d)	d)

12. State the financial ratio described by each of the statement below. **(4 marks)**

Statement	Ratio
a) Determine the rate at which goods move in and out of the Business.	
b) Determine whether it was worth investing in the Business.	
c) Compare current assets with current liabilities	
d) Gross profit expressed as percentage of net sales.	

13. Highlight four causes of unemployment. **(4 marks)**

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14. Outline four characteristics of an open air market. **(4 marks)**

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15. Indicate the effect of each of the following transactions on assets, liabilities and capital by using increase, decrease or no effect. **(4 marks)**

Transaction	Assets	Liabilities	Capital
a) Cashed a cheque for personal use.			
b) Bought premises on credit.			
c) Paid a creditor by cash.			
d) Converted a personal car into business use.			

16. Outline four functions of an entrepreneur**.** **(4 marks)**

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17. State four reasons why flower exporter would transport their produce by Air rather than by sea. **(4 marks)**

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18. State four types of advertising. **(4 marks)**

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19. Give four basic features of a market. **(4 marks)**

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20. Highlight four factors that limit the growth of a country's National income. **(4 marks)**

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21. List four books of original entry that may be used to record transactions affecting stock.**(4 mks)**

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22. Outline four services offered by commercial banks to their customers**.** **(4 marks)**

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23. Outline four goals of development in Kenya. **(4 marks)**

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24. Highlight four ways in which the balance of payment of a country may be improved.

(4 marks)

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25. The following balances were extracted from the books of Twain Traders on **30th April 2024.**

Premises	202,000
Creditors	60,500
Bank	5,200
Debtors	18,800
Bank overdraft	52,200

Determine the net worth of the business as at 30th April 2023. **(3 marks)**

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KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

565/2

BUSINESS STUDIES

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 index number in the spaces provided above.*
b) *Sign and write the date of the examination in the spaces provided above.*
c) *This paper consists of 6 questions.*
d) *Answer any **five** questions in the spaces provided.*
e) *All questions carry equal marks*
f) *Non –programmable silent electronic calculator may be used.*
g) *Candidates must answer the questions in English.*

FOR EXAMINER'S USE ONLY

Question	Maximum score	Candidate's score
	20	
	20	
	20	
	20	
	20	
TOTAL		

1. (a) Highlight **five** ways in which micro environment can lead to success of a business.

(10 marks)

(b) Explain **five** advantages of locating firms to different parts of the country. **(10 marks)**

2. (a) Outline **five** circumstance a firm may find it necessary to advertise its products. **(10 mks)**

(b) Explain **five** areas in which government expenditure can be channelled to stabilize the economy of a country**.** **(10 marks)**

3. (a) Explain **five** ways in which consumers may benefit from warehousing. **(10 marks)**

(b) Highlight **five** reasons why some African countries are reluctant in implementing free trade agreement. **(10 marks)**

4. (a) Explain **five** benefits that a firm may enjoy by preparing a business plan. **(10 marks)**

(b) The following balances were extracted from the books of Tango Traders on 31st December 2020.

Item	**Shs.**
Building	208, 000
Bank overdraft	125, 000
Debtors	43, 000
Creditors	118, 000
Motor vehicle	660, 000
Closing stock	80,000
Lighting	10, 000
Discount allowed	10, 800
Rent income	40, 800
Repairs on buildings	4, 600
Interest on loans	8, 900
Capital	711, 500

Additional information

Gross profit margin is stated at 20%.

Cost of goods sold Sh. 120, 000.

Prepare:

i) Profit & loss account for the year ended 31st December 2020**.** **(5 marks)**

ii) Balance sheet as at 31st December 2020**.** **(5 marks)**

5. (a) Explain **five** features of oligopoly market structure**.** **(10 marks)**

(b) Explain **five** problems faced by public corporations in Kenya. **(10 marks)**

6. (a) Explain **five** types of small scale retail shops with a fixed premise. **(10 marks)**

(b) Use the following transactions to prepare Tikoi Traders Two Column Cash Book for the month of June 2022. **(10 marks)**

1st June: Had Sh. 10, 500 in cash and Sh. 6, 500 at the bank.

2nd June: Received a cheque of Sh. 50, 000 from Tosh.

4th June: Paid wages Sh. 2, 500 cash.

6th June: Sold goods worth Sh. 9, 250 cash.

7th June: Withdrew Sh. 5, 500 from the bank for family use.

9th June: Purchased goods worth Sh. 15, 800 by cheque.

12th June: Paid Gael, a creditor by Cheque Sh. 5, 000.

15th June: Brought into the business additional cash of Sh. 15, 000 from private sources.

20th June: Deposited Sh. 8, 500 from the office into the business bank account.

28th June: Used all the cash in hand to purchase equipments leaving no balance.

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KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

231/1

BIOLOGY

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 admission number in the spaces provided.*
- *Answer **all** questions in the spaces provided*
- *Candidates should check the question paper to ascertain all the pages are printed as indicated and no questions are missing.*

For Examiners Use Only

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	26	GRAND TOTAL

1. a) Name the **one** chemicals of a life that makes up **protoplasm** **(1mark)**

……

b) State **Two** disadvantages of using fats as respiratory substrates **(2marks)**

……

……

2. (a)Name the type of gene mutation that results in loss of skin **pigment** **(1mark)**

……

……

b) Explain how sunlight contributes to stronger bones and teeth in human beings **(2marks)**

……

……

……

3. Name the main target organ of the following hormones: **(2marks)**

a) Antidiuretic….. …….

b) Glucagon…….

4. a) What is Binary Fission? **(1mark)**

……

……

b) Give **Two** disadvantages of sexual **reproduction** **(2marks)**

……

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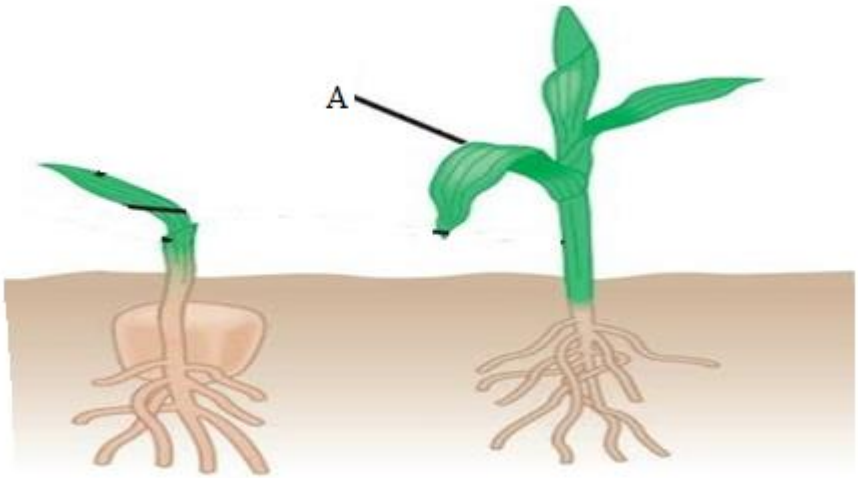
……

5. The diagram shown below represents a seedling. Use it to answer questions that follow



a)(i) Name Class in which the seedling **belong** **(1mark)**

……

(ii) Give reasons for your answer in a (i) above **(2marks)**

……

……

……

b) Explain why the biomass of part labelled **A** will be lower compared to the one found in the seed stage of the same plant **(2marks)**

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6. A solution of sugarcane was boiled with hydrochloric acid. Sodium hydrogen carbonate was added and the mixture heated with Benedict's solution. An orange precipitate was formed.

a) Why was the solution boiled with hydrochloric acid**?** **(1mark)**

……

……

b) To which class of carbohydrates does sugarcane belong**?** **(1mark)**

……

……

c) Name the type of reaction that takes place when:

Simple sugars combine to form complex sugar. **(1mark)**

……

d) State the form in which carbohydrates are stored in **animals** **(1mark)**

……

7. a) State **Two** ways in which blood clotting is important to a human being **(2marks)**

……

……

……

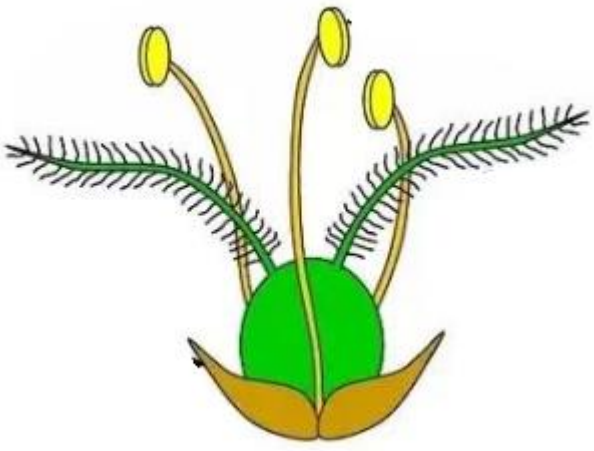
b) What are the roles of thrombokinase enzyme during blood clotting**?** **(2marks)**

……

……

……

8. The diagram shown below represents a flower



a) Name the agent of pollination for the flower shown above **(1mark)**

……

b) Give **Two** reasons for your answer in a) above **(2marks)**

……

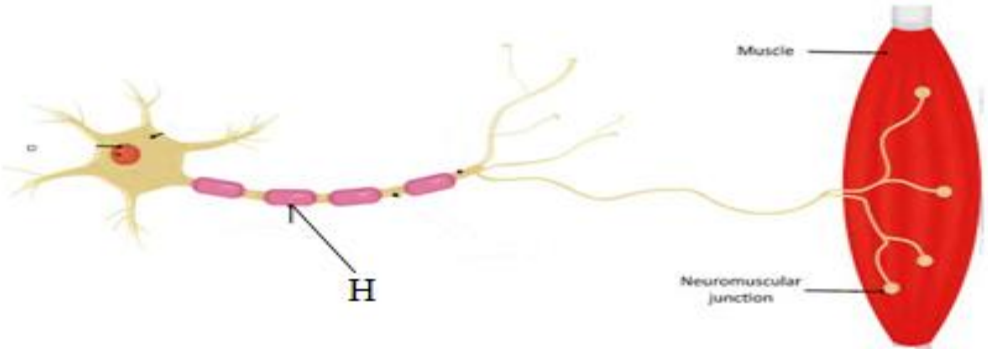
……

……

9. State the differences between cones and rods in terms of the following **(2marks)**

Feature	**Cone**	**Rod**
Visual acuity	High	
Photochemical	Low	

10. Use the diagram of a nerve cell shown below to answer questions that follow



a) With a reason, give the identity of the nerve cell **(2marks)**

Identity …….

Reason ……...

b) Explain the significance of absence of part labelled **H** in nerve cells found in the brain.**(1 mrks)**

……

……

……

11. Give **Three** features that make modern man to be more adaptable to the environment

(3marks)

……

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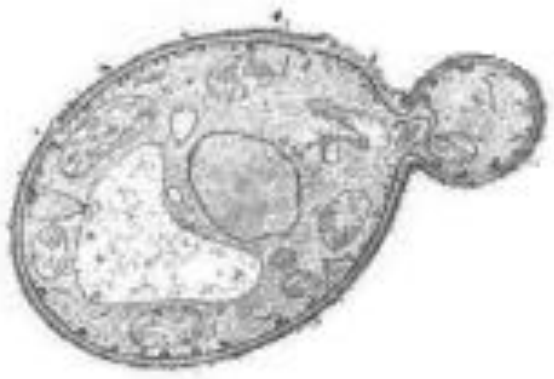
……

12. The diagram below represents a living organism



a) State **Two** economic importance of the above organism in the food industry **(2marks)**

……

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……

b) Why does the rate of respiration reduce under the following conditions? **(2marks)**

i) Low temperature

……

……

ii) Metabolic poison

……

……

13. State **Two** reasons why Biotechnology is important in modern **science** **(2marks)**

……

……

……

14. Fill in the table shown below to give differences between biceps and gut muscles **(3marks)**

	Biceps	Gut muscles
I		
II		
III		

15. Explain how variation is important in the process of evolution? **(2marks)**

……

……

……

16. Explain the term negative **feedback** **(1mark)**

……

……

17. State **Two** contributions of Carolus Linnaeus (1708 – 1778) to **taxonomy** **(2marks)**

……

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……

18. a) In an experiment, Venna counted 9 cells along the diameter of field of view of a light microscope measuring 3.0mm. Determine the diameter of one cell in micrometers **(3marks)**

……

……

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……

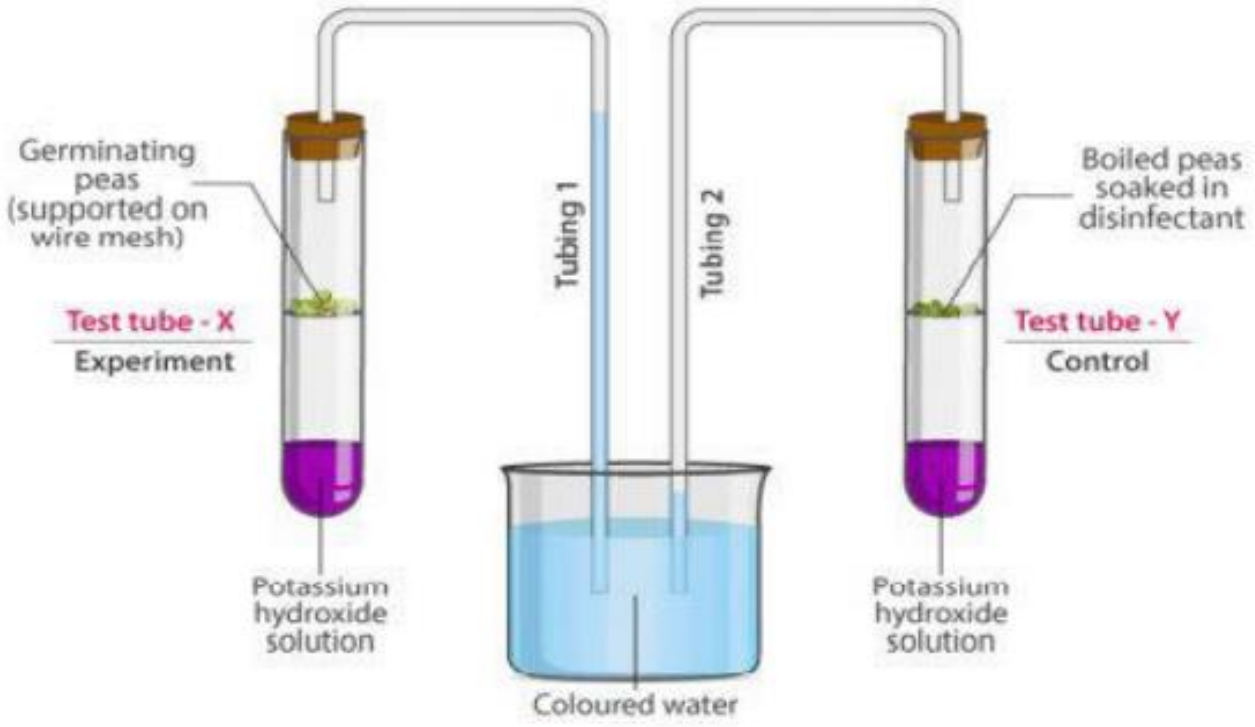
……

b) Why is electron microscope safer to the eye than light microscope during use? **(1mark)**

……

……

19. The following diagram represents results of an experiment carried out on two sets of germinating seeds.



a) Account for the result shown in test tube **X** **(2marks)**

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……

b) What is the importance of dipping the boiled seeds in a disinfectant in test tube **Y**? **(1mark)**

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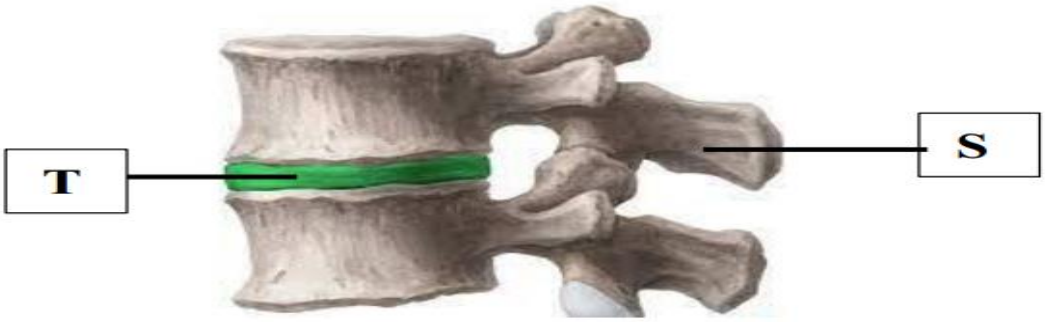
20. The diagram shown below represents a section of the vertebral column



a) Name the part labelled **S**

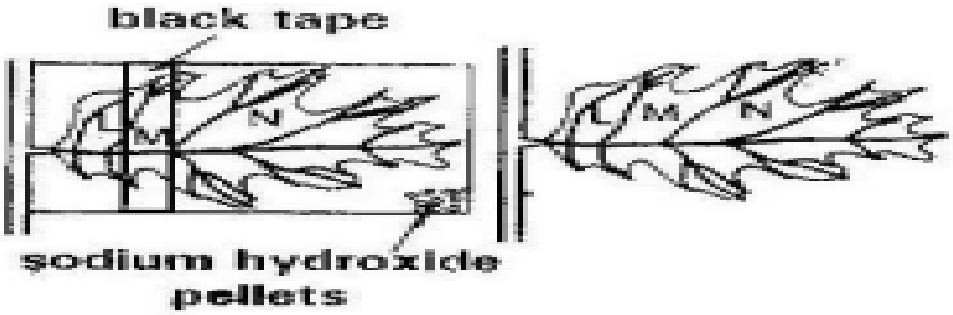
……

b) State **TWO** ways in which part **T** is important to movement in human **beings** **(2 marks)**

……

……

21. The diagram below shows an experiment carried out to investigate photosynthesis in a potted plant which has been kept in the dark for 48 hours.



The setup was left in the sunshine for 6 hours. The leaf was tested for starch using iodine solution at the end of the experiment.

a) What would be the colours of the regions of the leaf marked L, M and N**?** **(3marks)**

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b) What is the function of the sodium hydroxide pellets? **(1mark)**

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22. (a) In fruit flies (Drosophila) the gene for red eyes (R) is dominant over the one for white – eye (r). In a true breeding white – eyed male, all the offspring will be red eyed. However, if a true – breeding white-eyed female is mated with a true- breeding red- eyed male, all the female offspring will be red – eyed. Explain this apparent contradiction. **(1mark)**

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……

(b) Work out the expected FI genotypes if a red- eyed female offspring from the cross- described in (a) above is mated with red- eyed males**.** **(4marks)**

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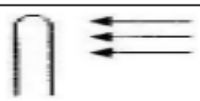
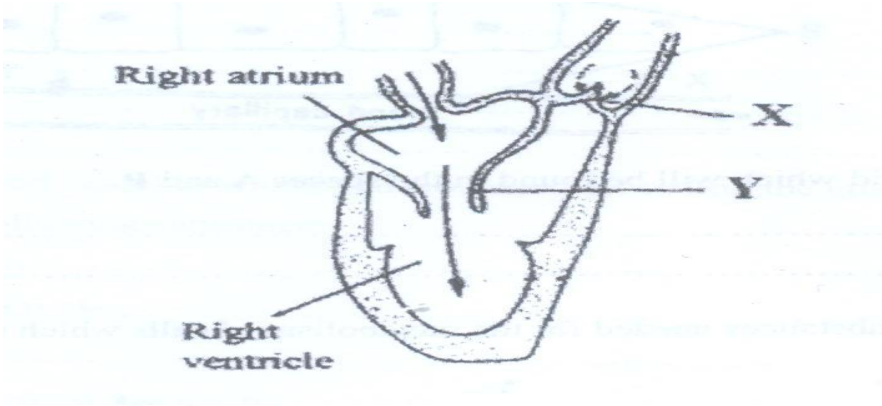
23. An experiment was set up to investigate the effect of unilateral/unidirectional light in growth of maize seedlings. The diagram in the table below represents experimental set up at the beginning. The tip of D is covered by an aluminium foil.

Experimental set up	Beginning of experiment	Expected results
C		
D		
B		

Using diagrams, complete the table to show the expected results in experimental set up.**(3 marks)**

24. Use the figure below to answer the questions that follow.



(a) Identify the cardiac cycle represented by the diagram**.** **(1mark)**

……

(b)Identify the valves **X** and **Y** **(2marks)**

X.....

Y.....

25. How does sunken stomata help in lowering transpiration? **(3marks)**

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26. a) Name the hormone that stimulate the maturation of the graafian follicles to release a mature ovum in female reproductive cycle. **(1mark)**

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b) Explain why menstruation does not take place after fertilization in human beings. **(2marks)**

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KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

231/2

BIOLOGY

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 Admission Number in the spaces provided above.*
2. *Sign and write the date of examination in the spaces provided above.*
3. *This paper consists of two sections: **A** and **B**. Answer **ALL** questions in section **A** in the spaces provided. In section **B,** answer question 6 (**compulsory**) and either question 7 or 8 in the spaces provided after question 8.*

FOR EXAMINERS' USE ONLY

Section	Questions	Maximum Score	Candidate's Score
A	1	8	
	2	8	
	3	8	
	4	8	
	5	8	
B	6	20	
	7 /8	20	
Total Score		**80**	

SECTION A (40 MARKS)

Answer all questions in this section in the spaces provided.

1. In certain breeds of rats, a pure breeding of black rat was crossed with a pure breeding white rat. The offspring had a coat with white and black strands that appeared grey in colour.

a) Using letter B to represent the gene for black coat colour and W to represent the gene for white coat colour, work out the genotypic ratio of F2 **generation** **(5 mks)**

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b) Give one example in human beings where genes behave the same as described in (a) above **(1 mk)**

……

c)(i) What is **polyploidy** **(1 mk)**

……

……

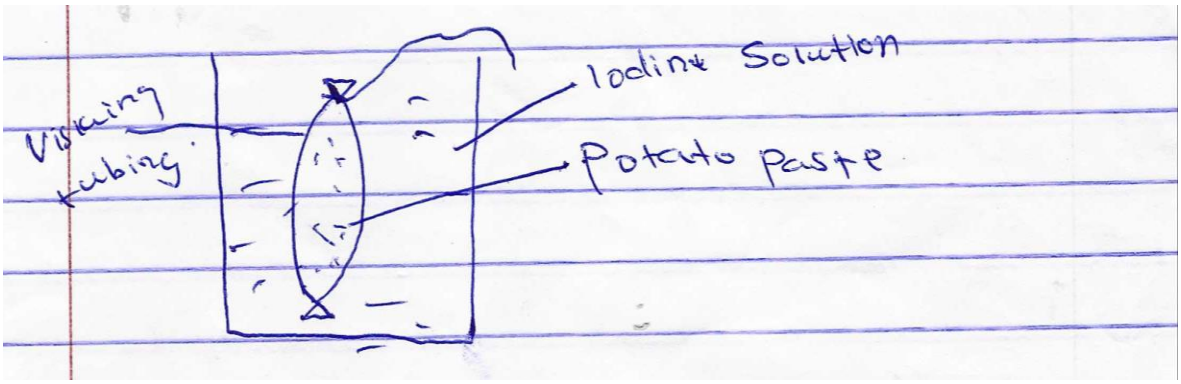
……

(ii) Give one advantage of polyploidy in organisms **(1 mks)**

……

……

2. In a practical investigation a raw potato was peeled, mashed into a fine paste and was treated as shown in the set-up below



a) Name the physiological process being investigated **(1 mk)**

……

b)State the expected colour change of the solution inside and outside the visking tubing after 40 minutes

inside……..…….. **(1 mk)**

outside…… **(1 mk)**

c)Explain the observation made in (b) **above** **(2 mks)**

……

……

……

d) Distinguish between the following terms

i) Haemolysis and **plasmolysis** **(2 mks)**

……

……

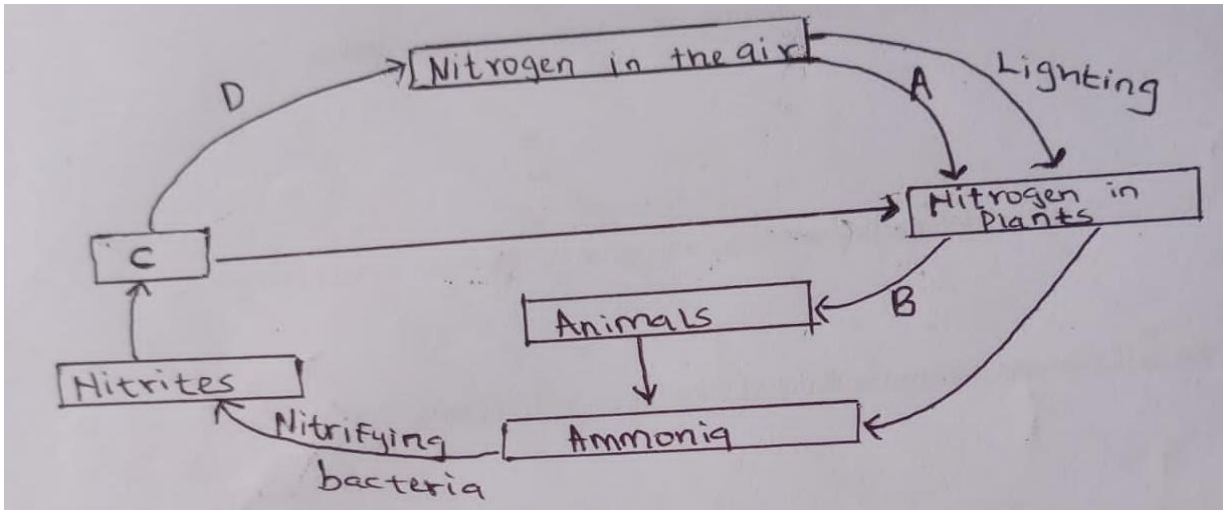
……

……

ii) Give the role osmosis in plants **(1 mk)**

……

3. The diagram below represents the nitrogen cycle. Study it and answer the questions that follow.



(a) Name the process represented by B. **(1 mk)**

……

(b) Identify organisms responsible for;

i) process A …….. **(1 mk)**

ii) process D ……. **(1 mk)**

(**iii)** Name the compound represented by C. **(1 mk)**

……

(c) Name the method of population estimation in the following;

(i) When studying the population of fish in a dam. **(1mk)**

……

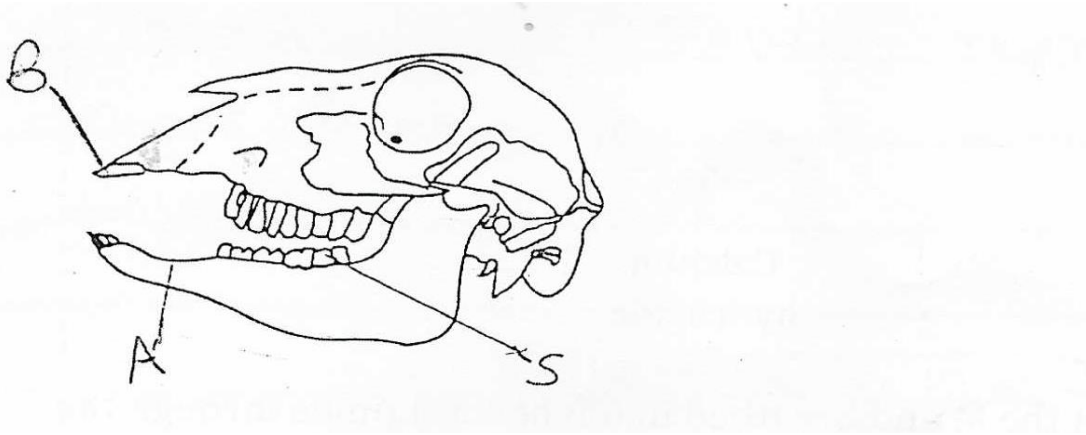
(**ii)** When studying cabbages in one acre of land. **(1mk)**

……

(d) Name two waterborne diseases and causative agents that affect human beings from kingdom Monera**.** **(2mks)**

Disease	**Causative agent**

4. Study the diagram below and answer the question that follow



a)(i) Identify the mode of feeding of the organism. **(1 mk)**

……

(ii) Name the parts labelled A and B . **(2 mks)**

……

……

b) How is the tooth S in the photograph above adapted for its **functions** **(1 mk)**

……

……

c) What are the functions of the part labelled A. **(2 mks)**

……

……

……

d) Distinguish between the terms homodont and heterodont **(2 mks)**

……

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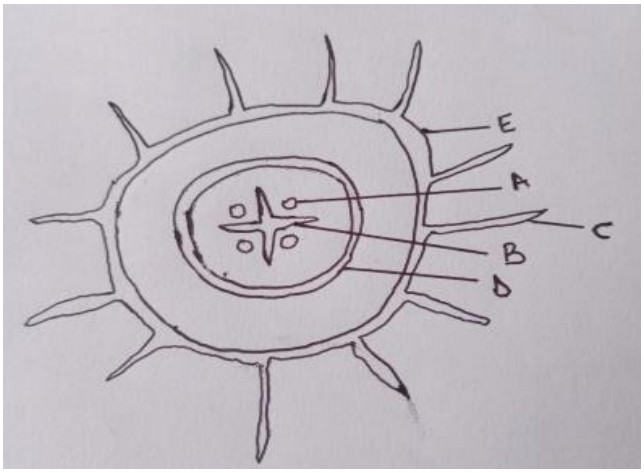
……

5. The diagram below represents a transverse section through a plant organ



a) (i) From which organ was the section obtained **(1 mk)**

……

(ii) Give two reasons for your answer in (a) **above** **(2 mks)**

……

……

……

b) How is part C adapted to its functions **(2 mks)**

……

……

……

……

c) State two structural differences between an arteries and veins **(2 mks)**

……

……

……

……

d) Give one defect that affect the arteries in human beings **(1 mk)**

……

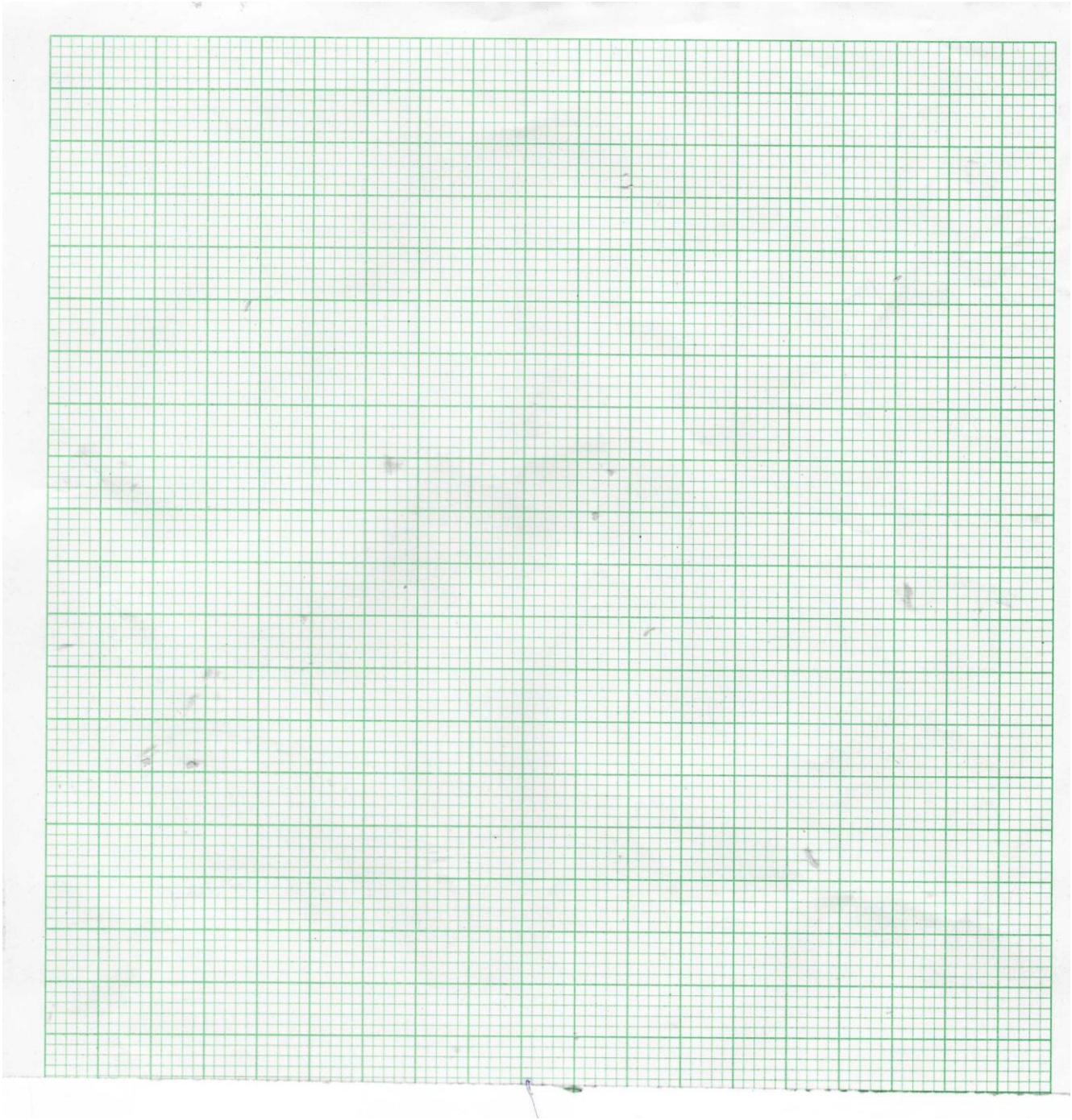
SECTION B(40 MARKS

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

6. Two sets of bean seeds were germinated, set A was placed in normal daylight condition in the laboratory while set B was placed in a dark cupboard. After a few days later the shoots were measured twice daily and their mean lengths recorded as shown in the table below.

Time in hours	0	12	24	36	48	60	72	84
Set A length (mm)	13	15	21	24	29	32	48	55
Set B length (mm)	18	24	29	36	49	63	81	95

(a) Using a suitable scale draw the graphs of the mean lengths in set A and B against time **(8 mks)**



For Marking Schemes Contact 0746 222 000 / 0742 999 000

b) From the graph state the mean shoot length of each set of seedlings at the 54th hour **(1 mk)**

……

c)Account for the difference of curve B and A . **(3mks)**

……

……

……

……

d)Explain what would happen to set-up B if it were allowed to continue to grow under condition of darkness. **(4mks)**

……

……

……

……

……

e) State three external conditions which should be constant for both set-ups **(3 mks)**

……

……

……

(f) Give one survival value of phototropism in plants. **(1 mk)**

……

7.(a) Giving relevant examples,explain how seeds and fruits are adapted to animal Dispersal **(6 mks)**

b)Describe the process of double fertilization in flowering plants **(14 mks)**

8(a) Distinguish between excretion and secretion **(2 mks)**

b) Explain the main homeostatic function of the mammalian liver **(18 mks)**

KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

231/3

BIOLOGY

PAPER 3

TIME: 1¾ HOURS

SCHOOL…… SIGN……

(Kenya Certificate of Secondary Education)

CONFIDENTIAL

INSTRUCTIONS TO SCHOOLS

Each student should be provided with the following:

Question 1

1. *4 test tubes per rack*
2. *Solution R – 1% starch solution*
3. *Solution T – Distilled water*
4. *Two labels*
5. *15 cm string (2 strings)*
6. *10 cm long visking tubing*
7. *Iodine solution*
8. *50 ml beaker*
9. *Specimen Q-Dry maize seed/fruit/grain.*
10. *Scalpel*
11. *Pair of forceps (or access to)*

NOTE; ALL PHOTOGRAPHS IN PP1 AND PP3 MUST BE COLOURED

For Marking Schemes Contact 0746 222 000 / 0742 999 000

KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

231/3

BIOLOGY

PAPER 3 (PRACTICAL)

TIME: 1¾ 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.*
- *Sign and write **date** of examination in the spaces provided above*
- *Answer **all** the questions in section **in the spaces** provided after each question only*
- *You are required to spend the first 15 minutes of the 1 ¾ hours allowed for this paper, reading the whole paper carefully before starting to do this paper.*

FOR EXAMINER'S USE ONLY:

QUESTIONS	MAXIMUM SCORE	CANDIDATE'S SCORE
1	16	
2	11	
3	13	
TOTAL	**40**	

For Marking Schemes Contact 0746 222 000 / 0742 999 000

1. You are provided with two test-tubes. Label them as A and B. You are required to prepare the contents of test tube A and B as follows. To test tube A, add 2 cm^3 of solution R provided and test using the provided reagent. To test tube B, add 2 cm^3 of solution T provided and test using the provided reagent. **(5 Marks)**

(a)

Test tube	Procedure	Observation	Conclusion
A			
B			

(b) To the provided visking tubing tie one end with the provided string and add solution R. Tie the remaining end and immerse it in a solution of iodine solution in a beaker (50ml). After 5-10 minutes remove it from the beaker and observe.

(i) What was your observation of the contents of the visking tubing at the end of experiment?

(1 Mark)

……

(ii) Account for your results in (i) above. **(4 Marks)**

……

……

……

……

……

……

(c) Explain **two** roles of physiological process under investigation in (c) above in living organisms.

(2 Marks)

……

……

……

……

d) You are provided with specimen Q. Cut a longitudinal section specimen of specimen Q to make two parts. Add one drop of iodine solution on the surface of one of the exposed surfaces.

(i) State the observation **(1 Mark)**

……

(ii) Explain the observations made in d(i) above. **(3 Marks)**

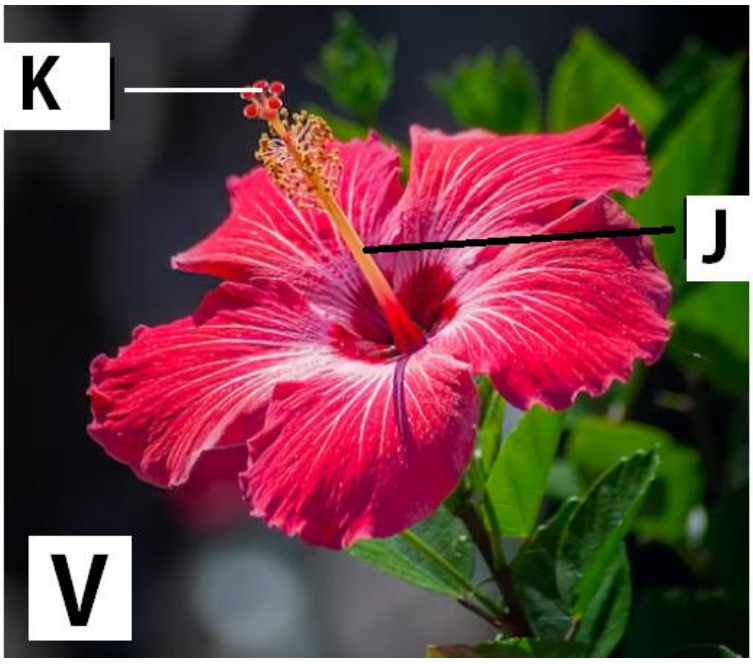
……

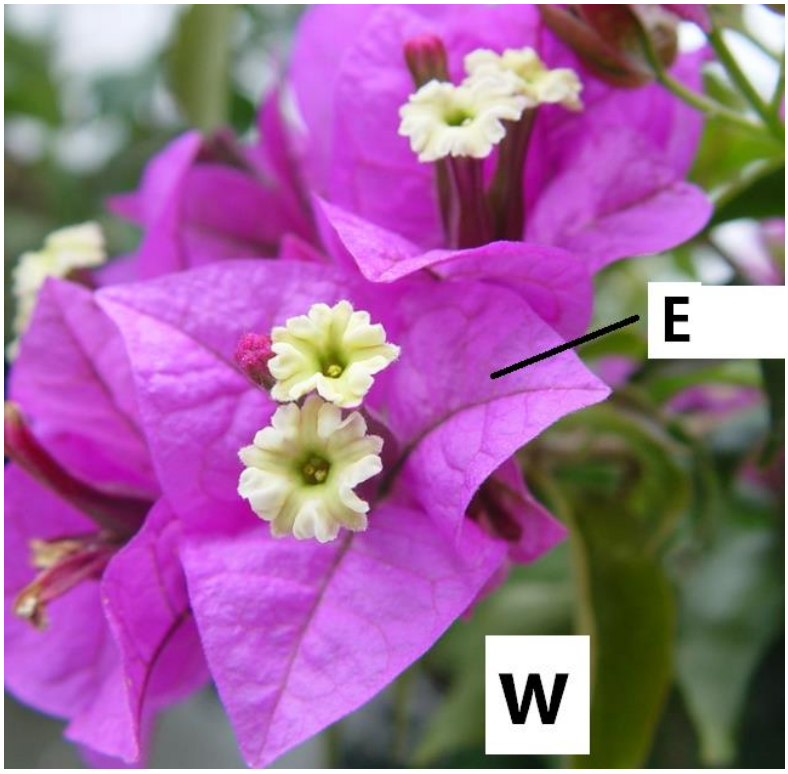
……

……

……

2. The photographs below shows different types of flowers. Photograph V is a flower obtained from a Hibiscus plant while photograph W is a flower obtained from Bougainvillea plant.





(a) On the photograph, name the part labelled J and K **(2 Mark)**

(b) (i) Name the agent of pollination for the flowers in the photograph **(1 Mark)**

……

(ii) State **three** observations on the photographs that support the answer you have given in (b)(i) above **(3 Marks)**

……

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……

(c) (i) Name the class of plant from which the photograph V was taken **(1 Mark)**

……

(ii) Using observable features on the photograph, give the three reasons for your answer in c (i) above (**3 Marks**)

……

……

……

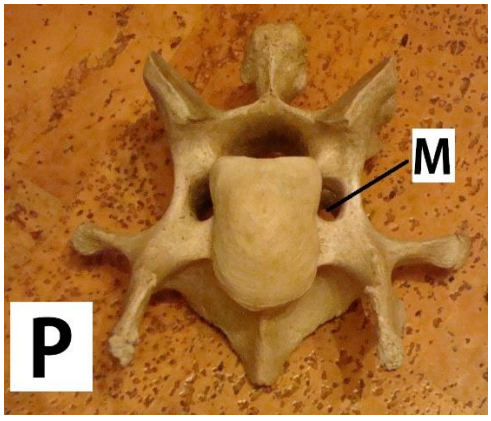
……

(iii) Name part labelled E on the photograph W **(1 Marks)**

……

3. The photographs below were taken from specimens obtained from mammalian skeleton. Evaluate them and use them for answering questions.













(a) Identify the bone labelled X, Y, and T **(3 Marks)**

X……

Y……

T ……

(b) State the function of part labelled M in bone P **(1 Mark)**

……

(c) (i) Name the type of joint formed in the proximal end of bone T **(1 Mark)**

……

(ii) State **two** characteristics of the joint named in c(i) above **(2 Marks)**

……

……

(iii) On the image U, label **two** parts. **(2 Marks)**

(d) Discuss various adaptations of bone W to its functions **(4 Marks)**

……

……

……

……

……

……

……

KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

233/1

CHEMISTRY

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	

For Marking Schemes Contact 0746 222 000 / 0742 999 000

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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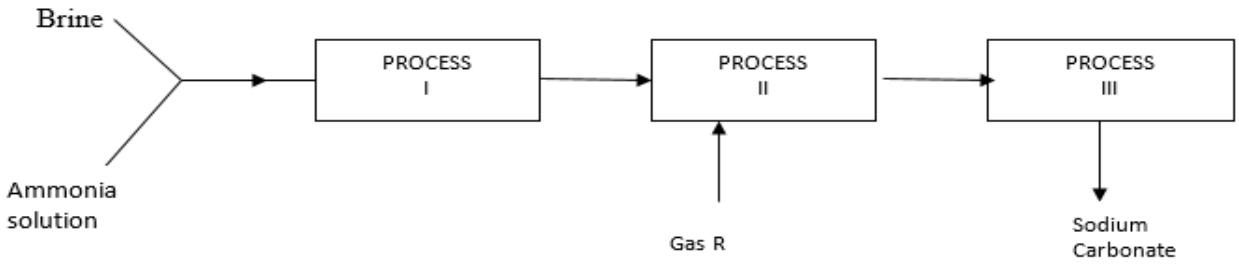
……

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



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

……

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)**

……

……

(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)**

……

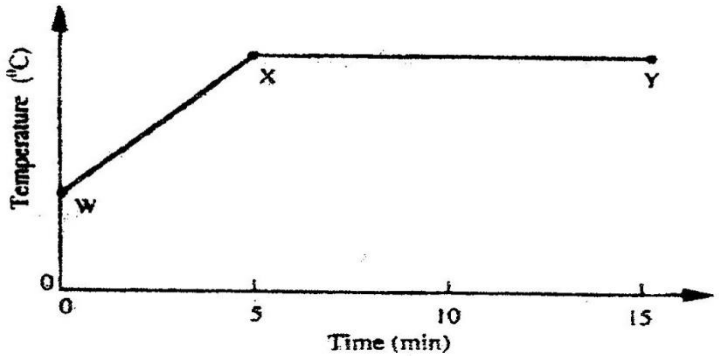
……

……

……

9. Sketch and label a graph to show activation energy in an endothermic reaction. **(3marks)**

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)**

……

……

……

……

……

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)**

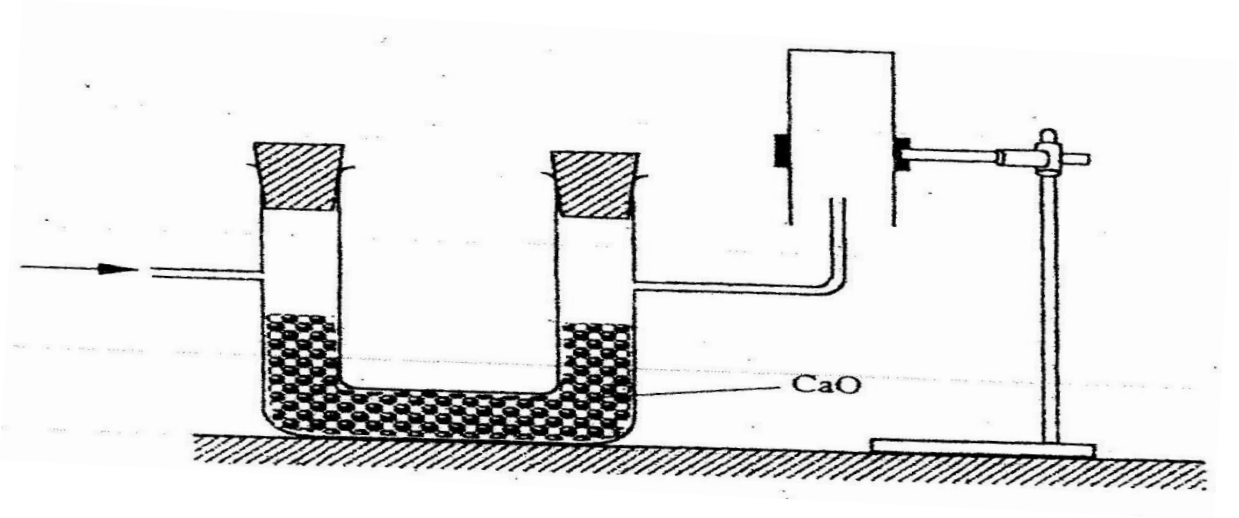
……

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)**

……

……

……

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.

$M(OH)_{3(s)} + OH_{(aq)} \rightarrow M(OH)_{4(aq)}$

$M(OH)_{3(s)} + 3H^+_{(aq)} \rightarrow M^{3+}_{(aq)} + 3H_2O_{(i)}$

(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)**

……

……

……

……

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)**

……

……

……

……

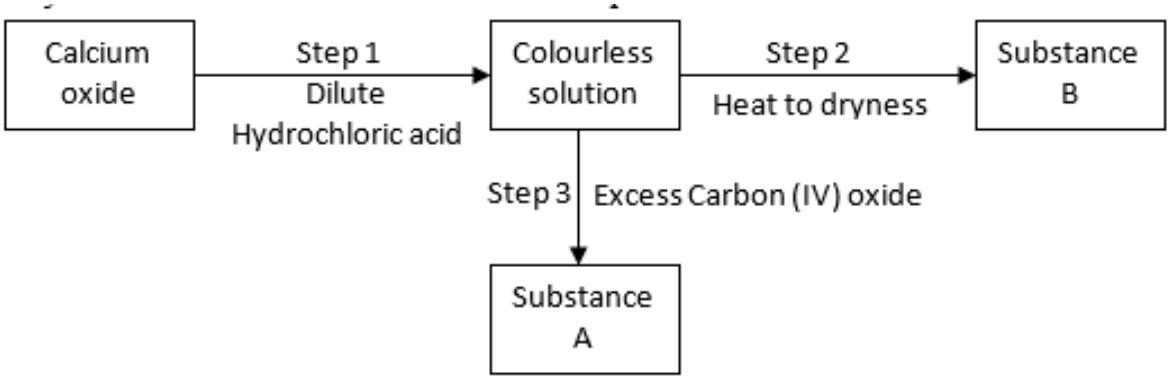
b) Percentage of magnesium hydroxide in the anti-acid . **(1mark)**

……

……

……

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)**

……

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) → H_2O (l)	$\triangle H$= -286 kjmol^{-1}
C(s) + O_2 (g) → CO_2 (g)	$\triangle H$= -394kjmol^{-1}
2C(s) + 3H_2 (g) + ½ O_2 → C_2H_5OH (i);	$\triangle H$=277kjmol^{-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) → 2CO_2 (g) +3H_2O (l) **(2mks)**

……

……

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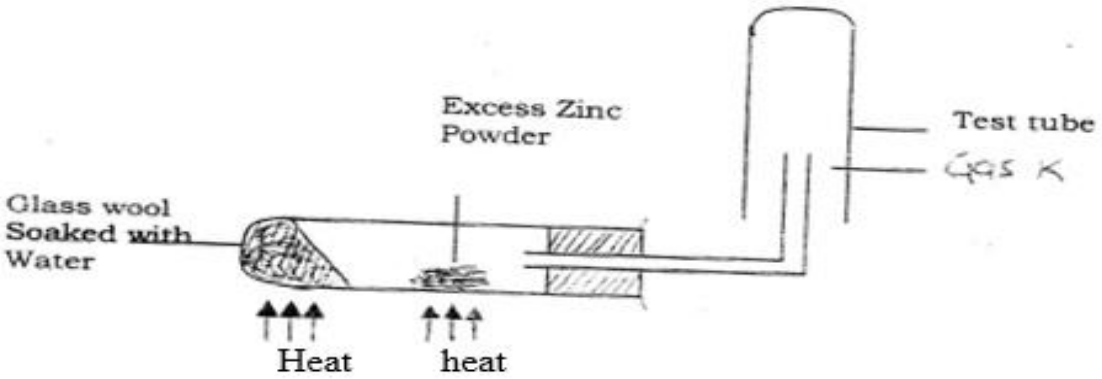
……

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. **(2marks)**

……

……

……

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)**

……

……

……

……

27. But -2- ene undergoes hydrogenation according to the equation given below

$$CH_3CH = CHCH_3\ (g) + H_2\ (g) \rightarrow CH_3CH_2CH_2CH_3\ (g)$$

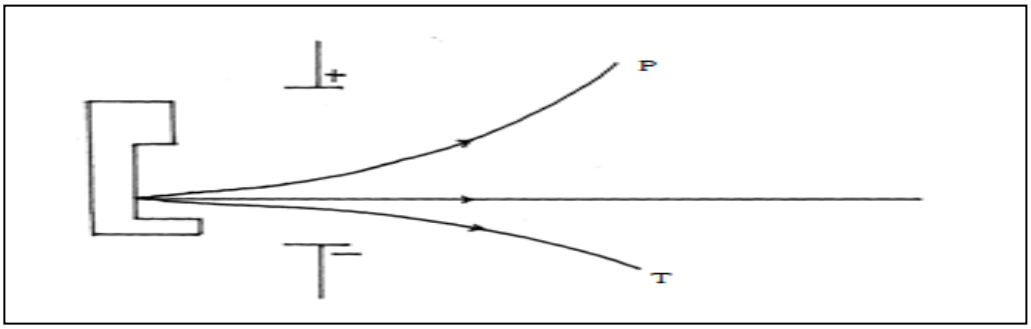
(a) Name the product formed when but -2 – ene reacts with hydrogen gas. **(1mark)**

……

(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)**

……

……

29.a) State two reasons why cars are **painted** **(1mark)**

……

……

……

……

b) Explain why electric cars are better than ordinary fuel cars. **(2marks)**

……

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KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

233/2

CHEMISTRY

PAPER 2

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	

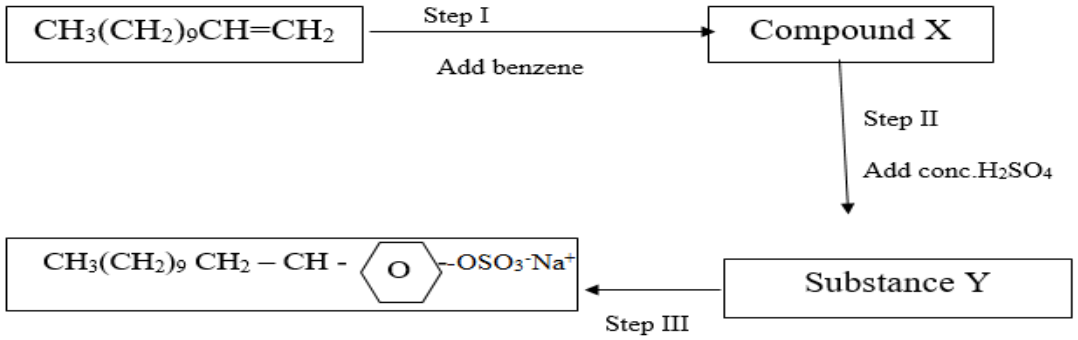
For Marking Schemes Contact 0746 222 000 / 0742 999 000

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):— O — **(1 mark)**

……

……

(c) (i) Name the process in step III. **(1mark)**

……

(ii) Give the reagent in step III. **(1mark)**

……

(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)**

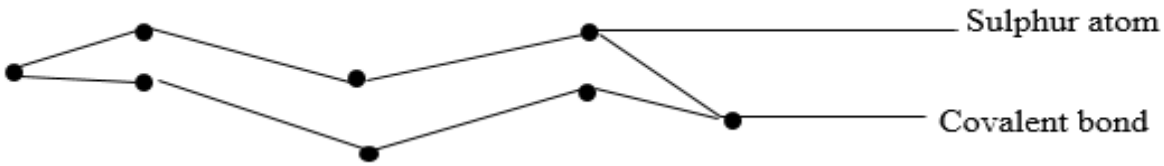
.....

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



(a) State two observations made when the molecule is heated to a temperature of 113°c**. (2 mks)**

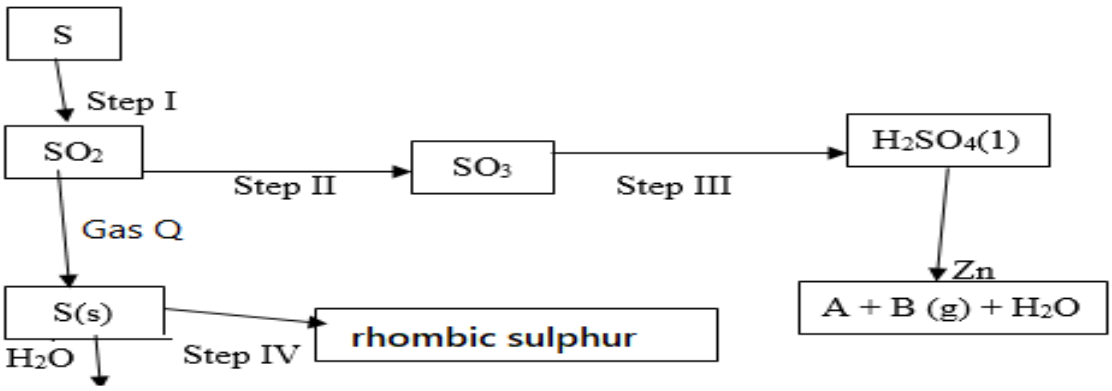
.....

.....

(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)**

……

……

……

(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)**

……

……

……

(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)**

……

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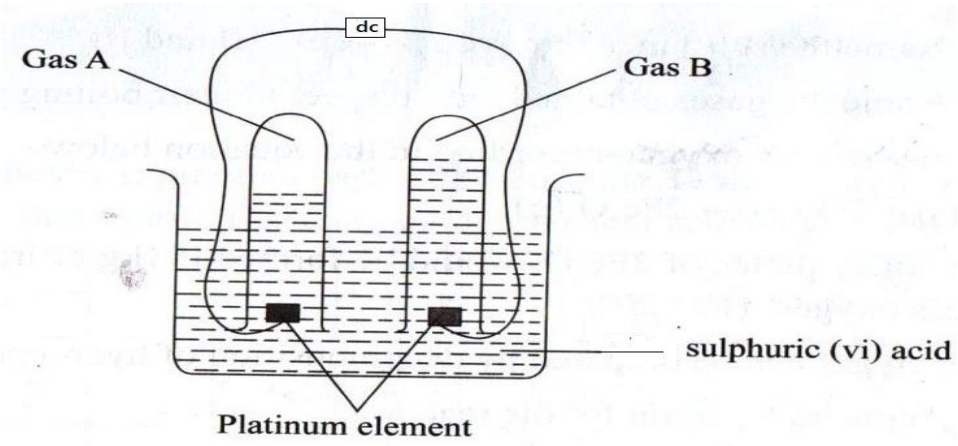
……

(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.

……

……

(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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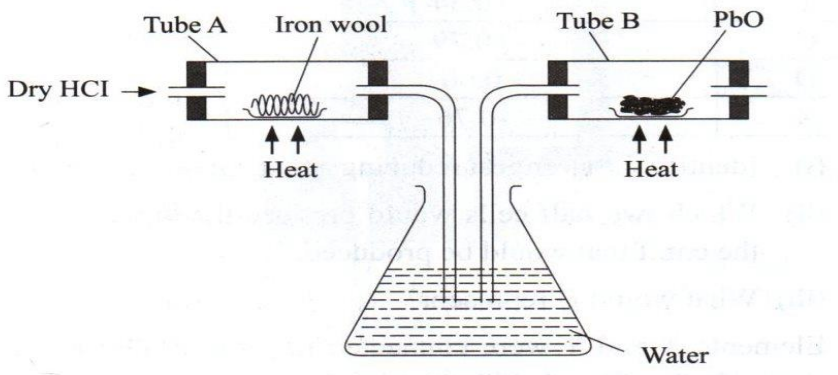
……

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.



(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)**

……

(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 marks) (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)**

……

……

……

(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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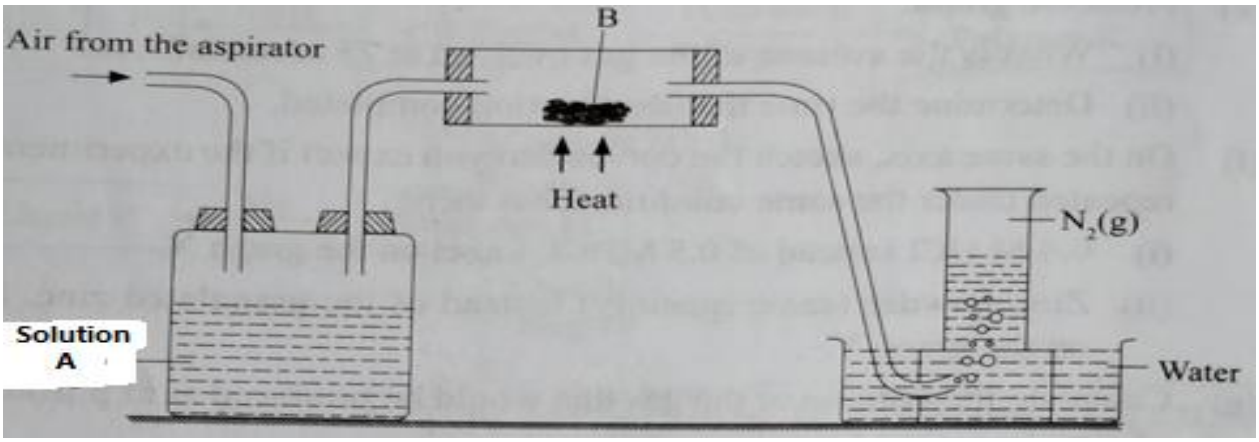
6. An experiment was carried out using the apparatus as shown below to prepare a sample of nitrogen gas from air.



(a) Identify one mistake in the setup. **(1mark)**

……

……

(b) Name what is contained in: **(2marks)**

(i) Bottle A ……..

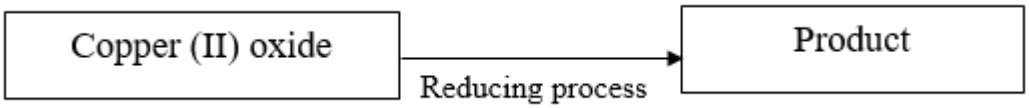
(ii) Tube B ……

(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)**

……

……

……

……

(ii) Explain what will be observed when the above reaction takes place. **(1 mark)**

……

……

……

(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)**

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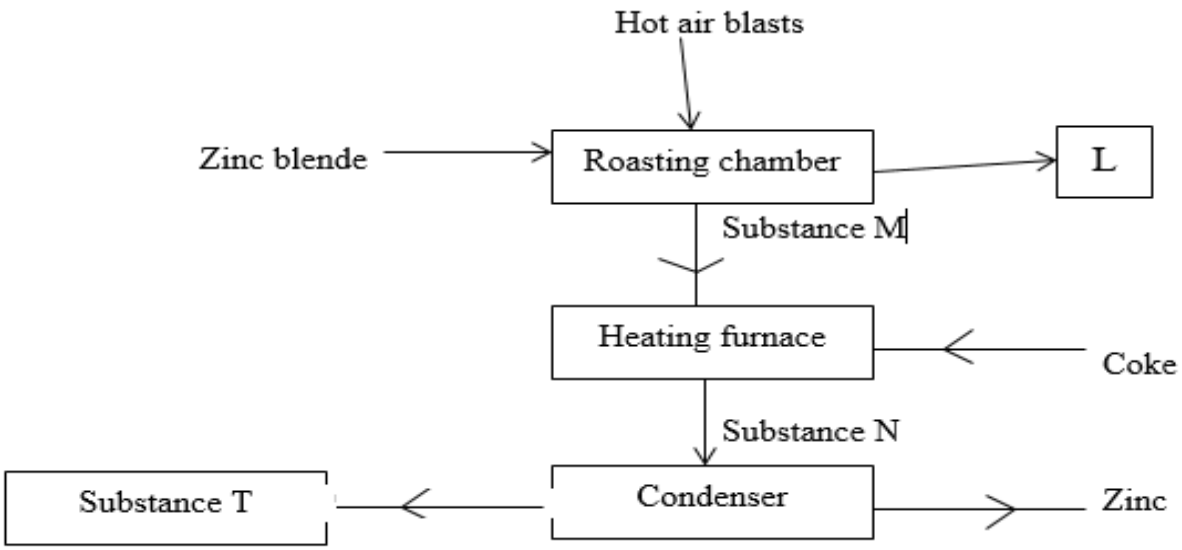
……

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)**

……

……

(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 2024 MOCK EXAMINATIONS

TEST SERIES 1

233/3

CHEMISTRY

PAPER 3

TIME: 2¼ HOURS

SCHOOL…… SIGN……

(Kenya Certificate of Secondary Education)

CONFIDENTIAL

1. Apart from the school laboratory fittings supply the following

(i). 100cm^3 solution A - 0.02M Acidified potassium manganite (VII) ($H^+/KMnO_4$)

(ii). 100cm^3 Solution B - 0.05M Oxalic acid

(iii). 100cm^3 Solution C - containing 4.9g of $(NH_4)_2SO_4$ $FeSO_4.6H_2O$ in 250cm^3 of solution)

(iv). 50ml measuring cylinder

(v). 5 Test tubes

(vi). 1 boiling tube

(vii). 250ml beaker

(viii). Thermometer

(ix). Stopwatch

(x). Burette

(xi). Pipette

(xii). Two conical flasks

(xiii). About 0.5g of solid Q ($ZnSO_4$)

(xiv). Distilled water

(xv). About 0.5g of solid L (oxalic acid)

(xvi). Red and blue litmus papers

(xvii). Metallic spatula

(xviii) test tube holder

(xix) 0.5g sodium carbonate

ACCESS TO:

i. 1 M Sodium hydroxide solution.
ii. 1M Ammonia solution.
i. 0.5M Acidified Barium Nitrate solution.
ii. 1M sulphuric (VI) acid.
iii. Acidified potassium Manganate (VII)
iv. Source of heat.

NB

1. Solution A 0.02M of $H^+/KMnO_4$ is prepared by dissolving 3.16g of $KMnO_4$ in 400cm^3 of 2M H_2SO_4. Add distilled water to make 1 litre of solution.
2. 1M sodium hydroxide is prepared by dissolving 40 g of sodium hydroxide dissolved in about 200 cm^3 of distilled water in a 1000 ml volumetric flask and top up with distilled water to the mark.
3. Acidified Barium Nitrate solution is prepared by dissolving 26.1g of Barium Nitrate in 400 cm^3 of 2M nitric acid and top up to 1 litre of solution using distilled water.
4. 2M Sulphuric acid. Prepared by dissolving 110 cm^3 of concentrated Sulphuric acid in about 600cm^3 of distilled water and diluting to one litre of solution.
5. Solution B 0.05M oxalic prepared by dissolving 6.3 g of dehydrated oxalic acid in about 400 ml of distilled water in a 1 litre volumetric flask and top up to the mark.

For Marking Schemes Contact 0746 222 000 / 0742 999 000

KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

233/3

CHEMISTRY

PAPER 3 (PRACTICAL)

TIME: 2¼ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

Instructions:

- *Answer **ALL** questions in the spaces provided.*
- *You are **NOT** allowed to start working with the apparatus for the first 15 minutes of the 2 ¼ hours allowed for this paper. This time will enable you read through the question paper and make sure you have all the chemicals and apparatus required.*
- *Mathematical tables and electronic calculators may be used*
- *All working must be clearly shown where necessary.*

FOR EXAMINER'S USE ONLY.

Question	Maximum score	Candidate's score
1	20	
2	12	
3	8	
Total score	**40**	

For Marking Schemes Contact 0746 222 000 / 0742 999 000

1. You are provided with:

- Solution A of Potassium manganate (VII).
- 0.05M solution B of oxalic acid.
- Solution C containing 4.9g of ammonium iron (II) Sulphate, $(NH_4)_2\ SO_4.FeSO_4.6H_2O$, in $250cm^3$ of water.
- You are required to:

i) Determine the rate of reaction between oxalic acid and Potassium manganate (VII) solutions.

ii) Standardize the solution A.

PROCEDURE I:

(i) Fill the burette with solution A.

(ii) Place 1 cm^3 of solution A from the burette into each of the five (5) test-tubes in a test tube rack.

(iii)Using a clean measuring cylinder, place 19 cm^3 of solution B into a boiling tube.

(iv)Place the thermometer into solution B and heat gently until it attains a temperature of 40 ^0C.

(v) Add the first portion of solution A **immediately and at the same time start a stop watch**.

(vi) Record the time taken for solution A to be decolorized in table I below.

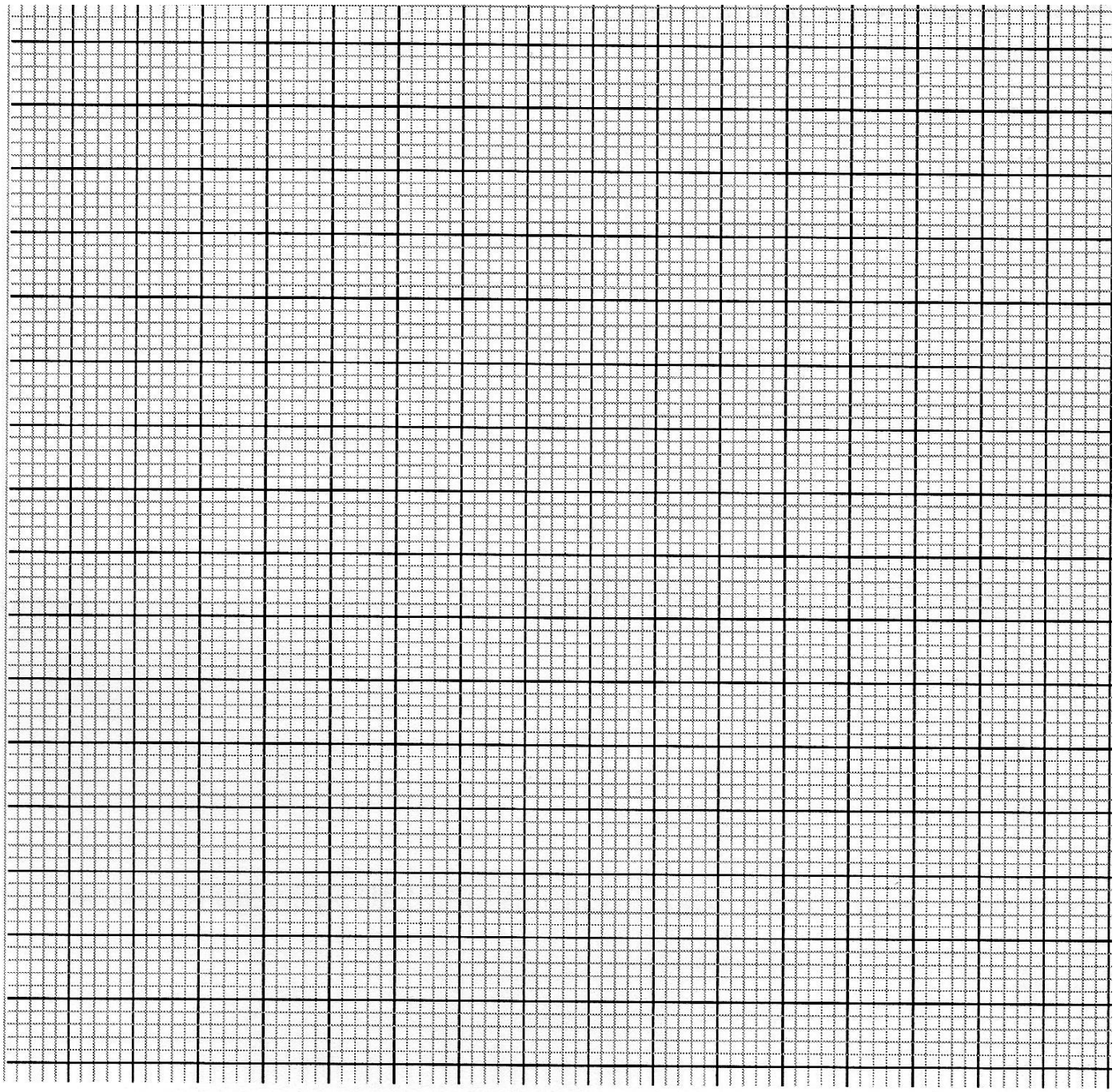
(vii) Repeat the procedure (i) to (v) at temperatures of 50^oC,60^oC,70^oC and 80^oC to complete the table.

Table I

Temperature of solution B (^oC)	40	50	60	70	80
Time taken for decolorization (seconds)					
Rate ($^1/_t$) s^{-1} X 1000					

(4 marks)

i) Plot a graph of ($^{1}/_{t}$ X 1000) against temperature (X-axis) **(3 marks)**



ii) From the graph determine the time taken for the mixture to decolourise at 65°C **(2 marks)**

……

……

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……

iii) How does the rate of reaction between oxalic acid solution B and Potassium manganate (VII) solution A vary with temperature? **(1 mark)**

……

……

PROCEDURE II

-Refill the burette with solution A.

-Pipette 25cm^3 of solution C into a conical flask and titrate the solution A against solution C until a permanent pink colour just appears.

-Record your results in table II below and repeat the procedure to fill the table.

Table II	1	2	3
Final burette reading (cm^3)			
Initial burette reading (cm^3)			
Volume of A used (cm^3)			

(4 marks)

i) Determine the average volume of A used. **(1 mark)**

……

……

……

ii) Calculate the concentration of solution C in moles per litre (Fe = 56, S = 32, O = 16, N =1 4, H = 1) **(1 mark)**

……

……

……

iii) Find the number of moles of solution C used. **(1 mark)**

……

……

……

……

iv) Given the ionic equation for the reaction is

$5Fe^{2+}_{(aq)} + MnO_4^-{}_{(aq)} + 8H^+_{(aq)} \longrightarrow 5Fe^{3+}_{(aq)} + Mn^{2+}_{(aq)} + 4H_2O_{(l)};$

Find the number of moles of solution A used. **(1 mark)**

……

……

(v) Determine the concentration of the Potassium manganate (VII), solution A in moles per litre.

(2 marks)

……

……

……

……

2. You are provided with solid Q. Carry out the tests below and record your observations and inferences in the table below.

i) Place half a Spatula full of solid Q in a clean dry test-tube and heat gently then Strongly.

Test the gas produced using moist red and blue litmus papers

Observations	**Inferences**
(1 mark)	**(1 mark)**

ii) Place the remaining solid Q in a boiling tube, add about $5cm^3$ of distilled water and shake well. Divide the resulting mixture into four portions for the tests below.

Observations	**Inferences**
(1 mark)	**(1 mark)**

a). To the first portion add Sodium hydroxide solution dropwise until in excess.

Observations	Inferences
(1 mark)	**(1 mark)**

b). To the second portion add 2-3 drops of dilute Sulphuric (VI) acid

Observations	Inferences
(1 mark)	**(1 mark)**

c). To the third portion add aqueous ammonia dropwise until in excess

Observations	Inferences
(1 mark)	**(1 mark)**

d). To the fourth portion add 2-3 drops acidified barium nitrate solution

Observations	Inferences
(1 mark)	**(1 mark)**

3. You are provided with solid L. carry out the tests below on L and record the observations and inferences in the spaces provided.

(a) Place **half** of solid L in a boiling tube and add about $5cm^3$ of distilled water

(i)

Observations	Inferences
(1 mark)	**(1 mark)**

Divide the solution into two portions and carry out the tests below.

(ii). To the first portion add 2-3 drops of acidified potassium manganate (VII).

Observations	Inferences
(1 mark)	**(1 mark)**

(iii). To the second portion add Sodium carbonate provided.

Observations	Inferences
(1 mark)	**(1 mark)**

(b). Place the remaining solid L in metallic spatula and ignite it.

Observations	Inferences
(1 mark)	**(1 mark)**

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KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

232/1

PHYSICS

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, 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/s²

FOR OFFICIAL USE ONLY

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	

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)**

……

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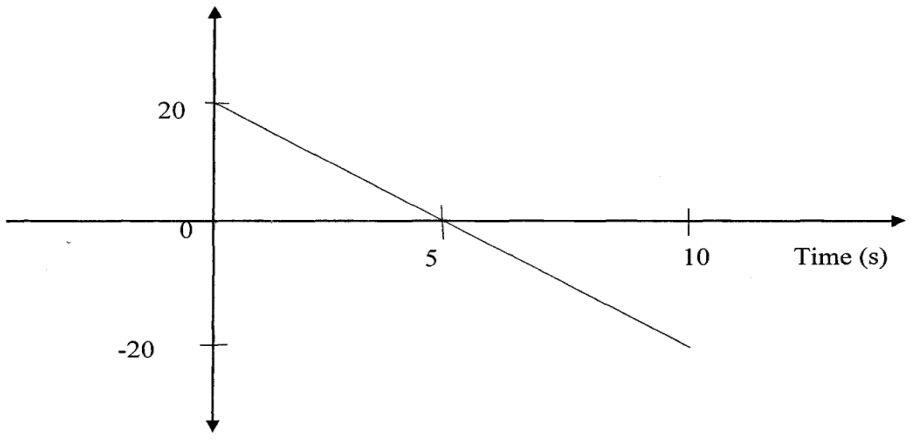
5. The figure below shows a graph of velocity against time for a moving body.



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)**

……

……

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……

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)**

……

……

……

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)**

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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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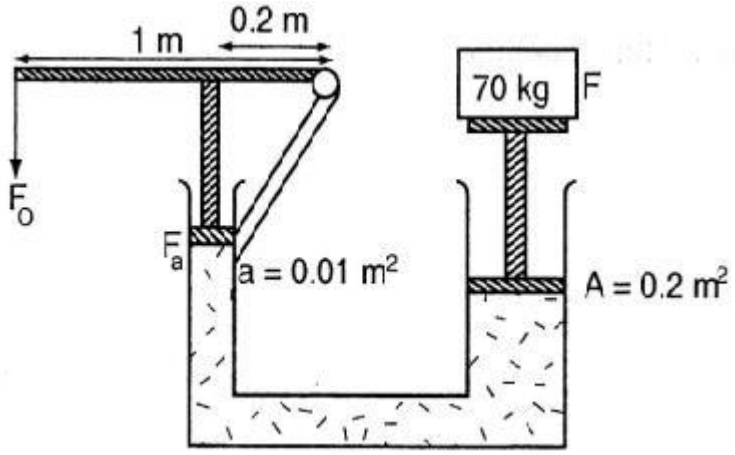
SECTION B (55 MARKS) Attempt ALL questions in this section.

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 $\mathbf{F_a}$ **(2 marks)**

ii. The force F_0 **(2 marks)**

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)**

ii) The distance moved after impact. **(2 marks)**

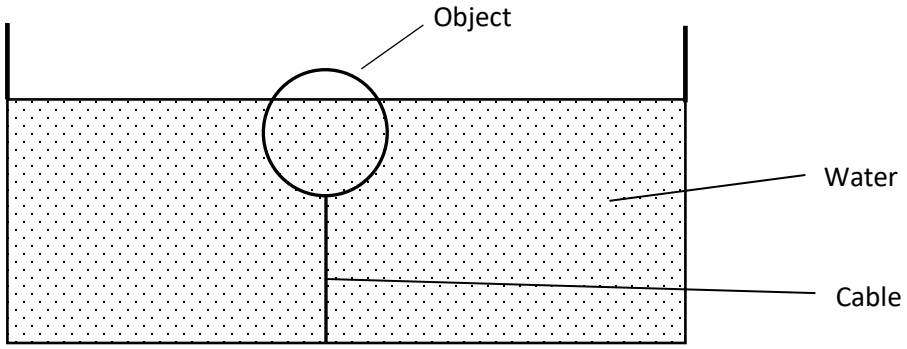
iii) The change in Kinetic energy. **(3 marks)**

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).



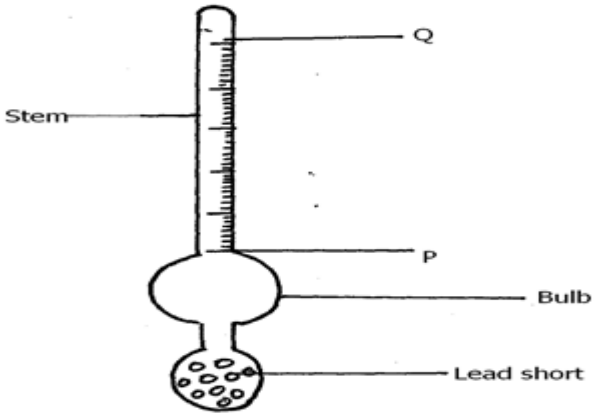
Calculate the volume of the object under water**.** **(2 marks)**

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.



(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)**

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……

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)**

(ii) Given that L is the specific latent heat of vaporization of steam, determine the value of L.

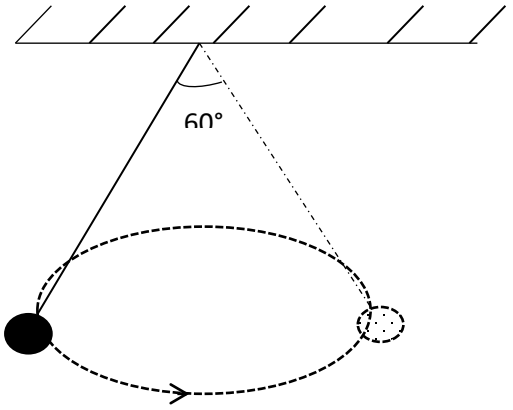
(3 marks)

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



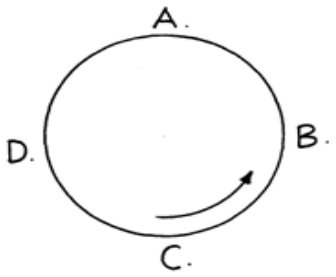
i.State what happens when the speed of whirling is increased **(1 mark)**

……

……

ii. If the radius of the path is 50cm and the centripetal force is 285N. Determine the linear velocity of the mass **(3 marks)**

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)**

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KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

232/2

PHYSICS

PAPER 2 (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 and index number in the spaces provided above.*
- *Attempt **ALL** questions in sections A and B.*
- *All your answers must be written in the spaces provided in this question paper.*
- *All working must be clearly shown*
- *Non programmable silent electronic calculators and KNEC mathematical tables may be used .*

FOR EXAMINER'S USE ONLY

Section	Question (s)	Max. Score	Candidates Score
A	1 – 13	25	
B	14	9	
	15	11	
	16	11	
	17	12	
	18	12	
	Total	80	

SECTION A: (25 MARKS)

1. A student rubs an iron rod with a duster. State with reason whether the rod became charged or not. **(2mk)**

……

……

……

2. A pinhole camera of length 10cm forms an image of a magnification 0.85.Calculate the distance between the object and pinhole of the camera. **(3mk)**

……

……

……

……

3. Briefly describe how you can demagnetise a bar magnet using electrical method. **(3mk)**

……

……

……

……

4. You are provided with three cells each of 1.5V emf. What is the effective emf when the three cells are connected in parallel? **(1mk)**

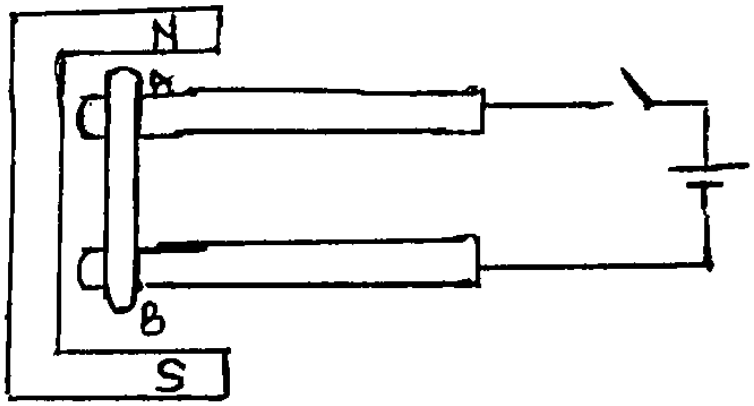
5. A candle is placed in front of a spherical mirror. A sharp image is formed on the screen. State with reason the type of spherical mirror used. (2mk)

……

……

……

6. A copper rod AB is placed on two other rods in horizontal positions and within the magnetic field. The rod is placed such that the field of the permanent magnet is parallel to the length of rod AB as shows below.



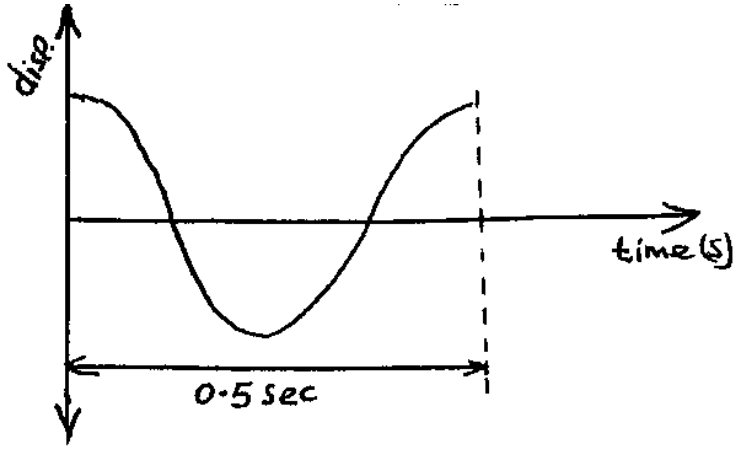
State with reason whether the rod rolls when the switch is closed or not? **(2mk)**

……

……

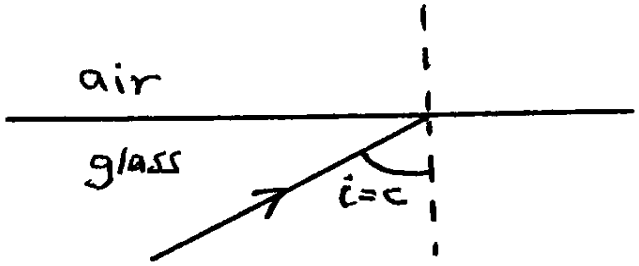
……

7. The figure below shows a displacement time graph of a given wave.



Determine the frequency of this wave. **(2mk)**

8. The figure below shows a light ray from glass towards air.



(i = angle of incidence and c = the critical angle)

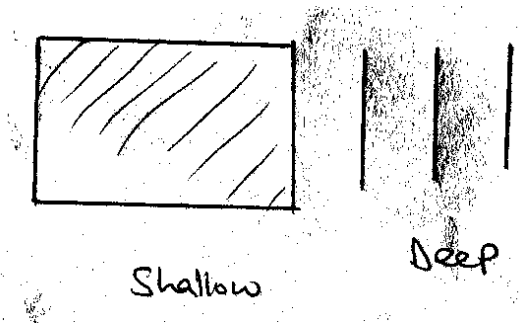
Complete the diagram to show direction taken by the ray hence determine the angle of refraction showing it on the diagram. **(2mks)**

9. When air is blown over the mouth of a test tube, sound is heard. What causes the sound produced? **(1mk)**

……

10. Two resistors 8 Ω and 5 Ω are connected in parallel to each other and across a battery of emf 6V. If the battery has internal resistance of 1.25 Ω, calculate the total current circulating in the circuit. **(3mk)**

11. A plane water wave moves from a deep region to a shallow region as shown.



Name two quantities of the wave which are affected when it crosses the boundary and for each one of them state how it is affected. **(2mk)**

……

……

……

12. When a hollow conductor is charged in its inner surface and then the conductor is tested for presence of charge at the inner side, state the expected observation. **(1mk)**

……

……

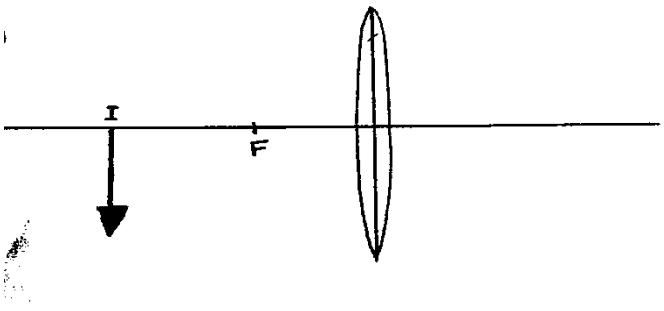
13. Arrange the following in order of increasing wavelength. Microwave, x ray, visible light, UV. **(1mk)**

……

……

SECTION B (55 MARKS)

14 (a) The figure below shows an image formed by a biconcave lens.

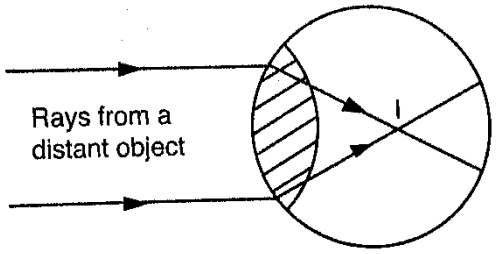


F is the principal focus.

(¡) Complete the ray diagram to locate the object. **(2mk)**

(¡¡) From your diagram calculate the magnification. **(1mk)**

(b) The figure below shows an eye with a defect.



(¡) Name the defect. **(1mk)**

……

(¡¡)Explain this defect in relation to how the person view objects at different distances. **(2mk)**

……

……

……

……

(¡¡¡) In the space provided below redraw the diagram above and complete it to show how a lens is used to correct the defect. **(3mk)**

15a (¡) Explain how the n-type semiconductor is made **(1mk)**

……

……

(¡)The figure below shows p-n junction diode



Complete the diagram to show how you can connect the diode in forward bias **(1mk)**

(b)X-rays are electromagnetic waves produced in x-ray tubes.

(¡) Briefly describe how x-rays are produced. **(1mk)**

……

……

(¡¡) Name the material used to make the metal target in an X ray tube. **(1mk)**

……

(¡¡¡) State the reason why the material named in (¡¡) above is preferred over other materials. **(1mk)**

……

……

(¡v) How can intensity of x-rays produced in an x-ray tube be increased? **(1mk)**

……

……

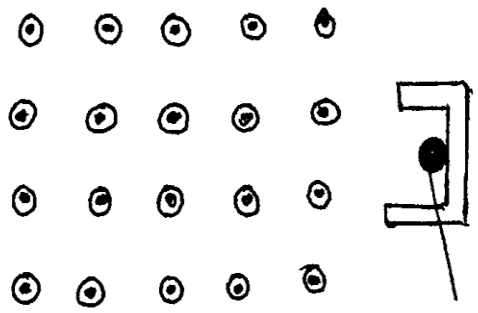
(c) An x-ray tube has an accelerating voltage of 80KV. (Given that the planks constant $h = 6.63\times10^{-34}$ Js, electron charge (e) $= 1.6\times10^{-19}$ C, mass of electron (m_e) $= 9.1\times10^{-31}$ kg)

Determine;

(¡) maximum frequency of x-rays produced. **(2mks)**

(¡¡)Velocity of electrons in the x-ray tube. **(3mks)**

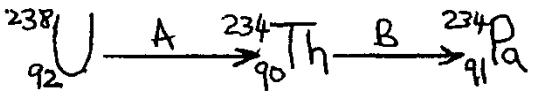
16(a). A radioactive source produces the beta and alpha particles which then moves through magnetic field (see the figure below).



Complete the diagram to indicate the path taken by the two radiations. (Label your diagram).

(2mk)

(b)Uranium disintegrates as shown below



(¡) identify radiations A and B

A **(1mk)**

…….....

B **(1mk)**

…….....

(c)A d.c voltage of 75V is applied to the Y plates of a CRO set at Y-gain sensitivity of 20V/cm

(¡)Determine how far the spot would be deflected verticaly (in cm) from the center line**.** **(2mk)**

(¡¡)If the d.c voltage is replaced with an a.c voltage of 75V and of high frequency sketch a diagram to show what would be observed on the screen. (indicate the centre line of your CRO screen).

(2mk)

(¡¡¡) If in (¡¡) above the time base is switched on and set at 10ms/cm and that the frequency of a.c. is 50Hz. Determine

I) The period of the trace on the **screen** **(1mk)**

II) The wavelength in cm as seen on the screen. **(2mk)**

17a (¡) State the reason why electrical power is transmitted at high voltage. **(1mk)**

……

……

(¡¡) in domestic wiring the neutral wire reaches the house at zero potential. What is done to the neutral wire to make it be zero potential. **(1mk)**

……

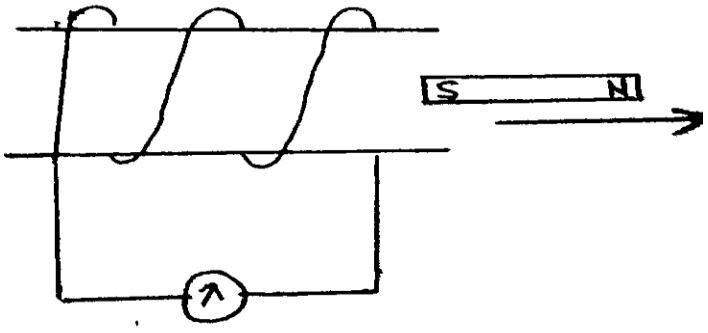
……

(b)i) State the Faraday's law of electromagnetic induction**.** **(1mk)**

……

……

(ii) A bar magnet initially inside a coil is pulled out at high speed as shown below.



Indicate on the diagram the direction of current in the coil hence name the law used to determine this direction. **(1mk)**

……

(**iii)**One of the energy loses in a transformer is Flux leakage. State what is meant by the term Flux leakage. **(1mk)**

……

……

(c)A generator produces 450KW at 11KV. This power is then fed to a step up transformer of efficiency 92%. The turns ratio of primary coil to secondary coil is 1:12.

Determine;

(i) The output voltage of the transformer. **(3mk)**

(ii) The power output of the transformer. **(2mk)**

(**iii)** The secondary current of the transformer. **(2mk)**

18a (i) Define the term work function as used in photoelectric effect. **(1mk)**

……

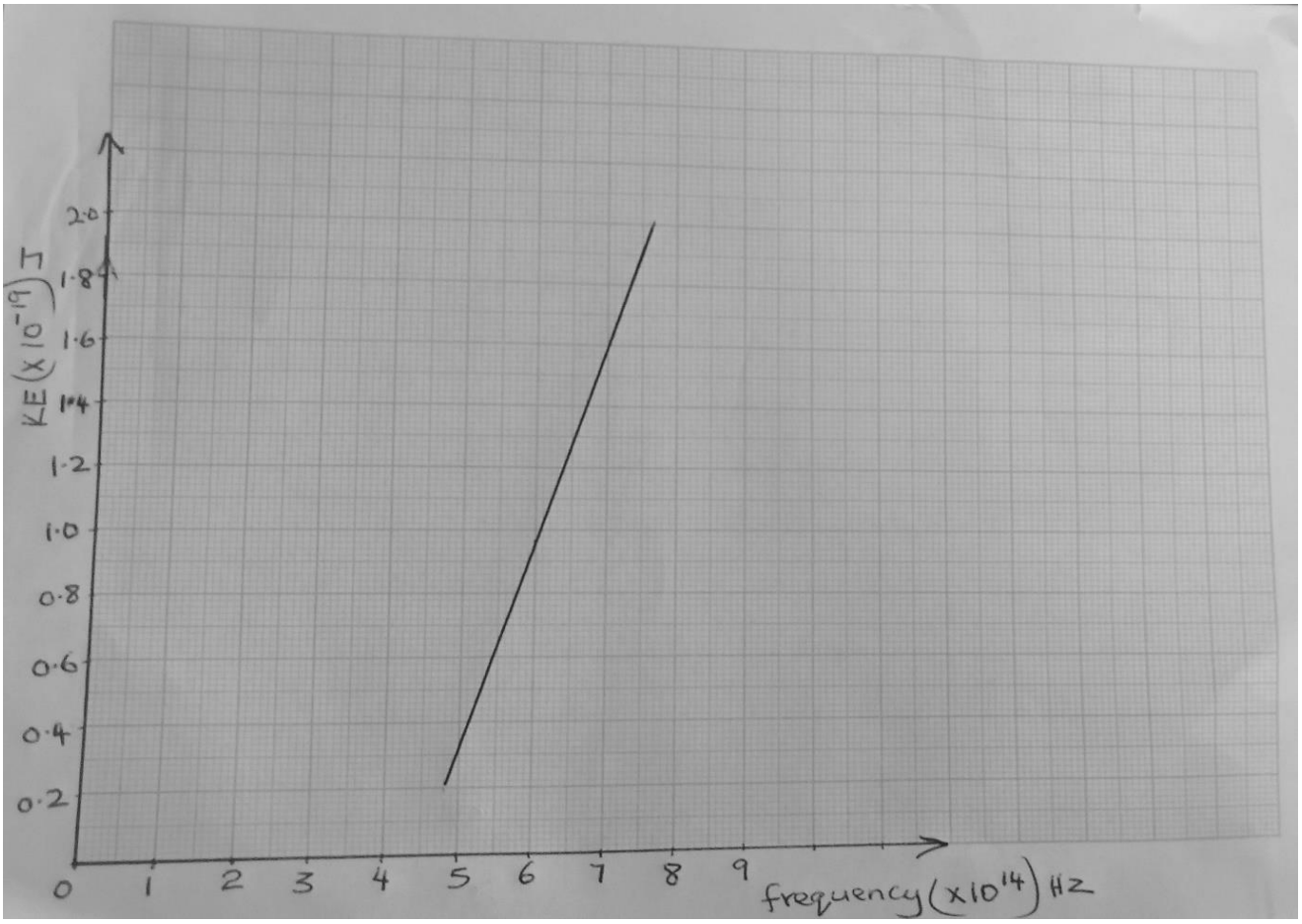
……

(ii) A photocell is illuminated with a given radiation. State two factors that would determine whether the electrons will be dislodged from its cathode or not. **(2mk)**

……

……

(b) The figure below shows a graph of maximum kinetic energy (KE_{max}) of photo electrons emmited in a photocell against frequency (f) of incident radiations.



Given that the speed of light (c) is 3.0×10^{8} m/s, determine from your graph;

(i) plank's constant (h) **(3mk)**

(ii) Threshold frequency (f_o) **(2mk)**

(iii) Calculate threshold wavelength **(2mk)**

(iv) Calculate Work function in Joules. **(2mk)**

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KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

232/3

PHYSICS

PAPER 3

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

CONFIDENTIAL

INSTRUCTIONS TO SCHOOLS.

This document must not be seen by the candidates whatsoever.

EACH STUDENT WILL BE PROVIDED WITH

Question 1

- Voltmeter (0 – 2.5V)
- Centre zero galvanometer
- Ammeter 0 – 1A
- A coiled resistant wire labeled **X** (nichrome wire SWG 30 of length 50cm)
- A resistance wire labeled **AB** mounted on a millimeter scale (nichrome wire SWG 32)
- 8 connecting wires each with crocodile clip at one end
- A switch
- A jockey/crocodile clip
- Six 10 ohms carbon resistors
- Two new size D dry cells
- Two cell holders of one cell each

Question 2

- A measuring cylinder of 50ml
- A test tube of mass between 12 - 15g
- About 200 ml of water in A 250ml beaker
- Six 1g ball bearings (From bicycle repairers)
- A vernier caliper
- Half meter rule
- Label
- A bare copper wire SWG 26 NB the wire should be 21 cm in length and a loop should be made on one end so that the final length of the wire is 20 cm
- A retort stand, boss and clamp
- An optical pin mounted on a cork
- A stop watch
- A micrometer screw gauge (to be shared)

For Marking Schemes Contact 0746 222 000 / 0742 999 000

KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

232/3

PHYSICS

PAPER 3

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES:-

- *Write your **name** and **Adm number** and **school** in the spaces provided above.*
- *Answer **all** the questions in the spaces provided in the question paper*
- *You are supposed to spend the first **15 minutes** of 2 ½ hours reading the whole paper carefully before commencing your work.*
- *Marks are given for a clear record of the observations actually made, their suitability, accuracy and the use of them*
- *Record your observations as soon as you make them.*
- *Mathematical tables, slide rules and silent non-programmable electronic calculators may be used.*
- *Take $g = 10ms^{-2}$*

FOR EXAMINERS' USE ONLY:

QUESTION	MAXIMUM SCORE	CANDIDATE SCORE
1	20	
2	20	
TOTAL SCORE	**40**	

For Marking Schemes Contact 0746 222 000 / 0742 999 000

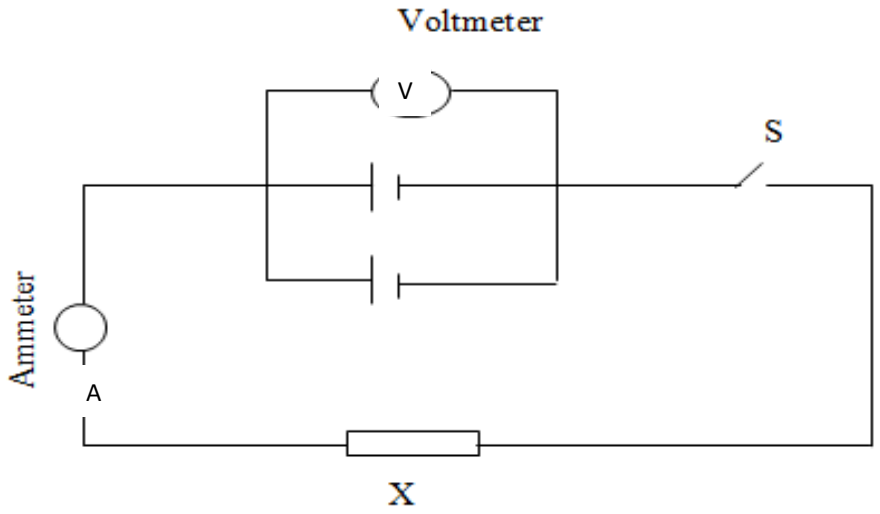
Question 1

You are provided with the following

- A voltmeter 0-2.5 or 0-5 V
- A center zero galvanometer
- An ammeter
- Two new size D dry cells
- Two cell holders
- A switch
- Eight connecting wires each with a crocodile clip on one end
- A coiled resistance wire labeled X
- A resistance wire labeled AB mounted on a millimeter scale
- Six 10 carbon resistors
- A jockey/crocodile

Proceed as follows

(a) Set up the circuit with the cells in parallel as shown in the figure below



(b) With the switch open, record the reading E of the voltmeter

E = _____ **(1mark)**

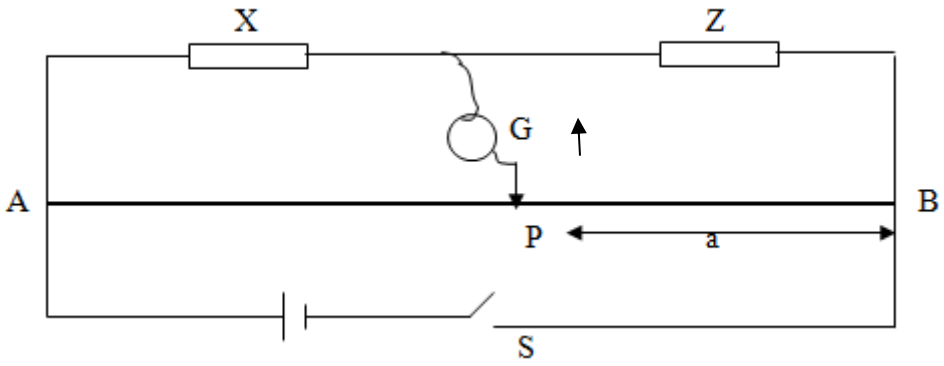
(c)Close the switch and record the current I flowing through the circuit and the potential difference V across the cells

I = _____ **(1mark)**

V = _____ **(1mark)**

d) Given that **E = V + Ir** and **V = IR,** determine the internal resistance r of the combined cells and the resistance **(R)** of the wire labeled **X** **(3marks)**

(e) Now set up the circuit as shown in the figure below. Z is one of the 10 carbon resistors.



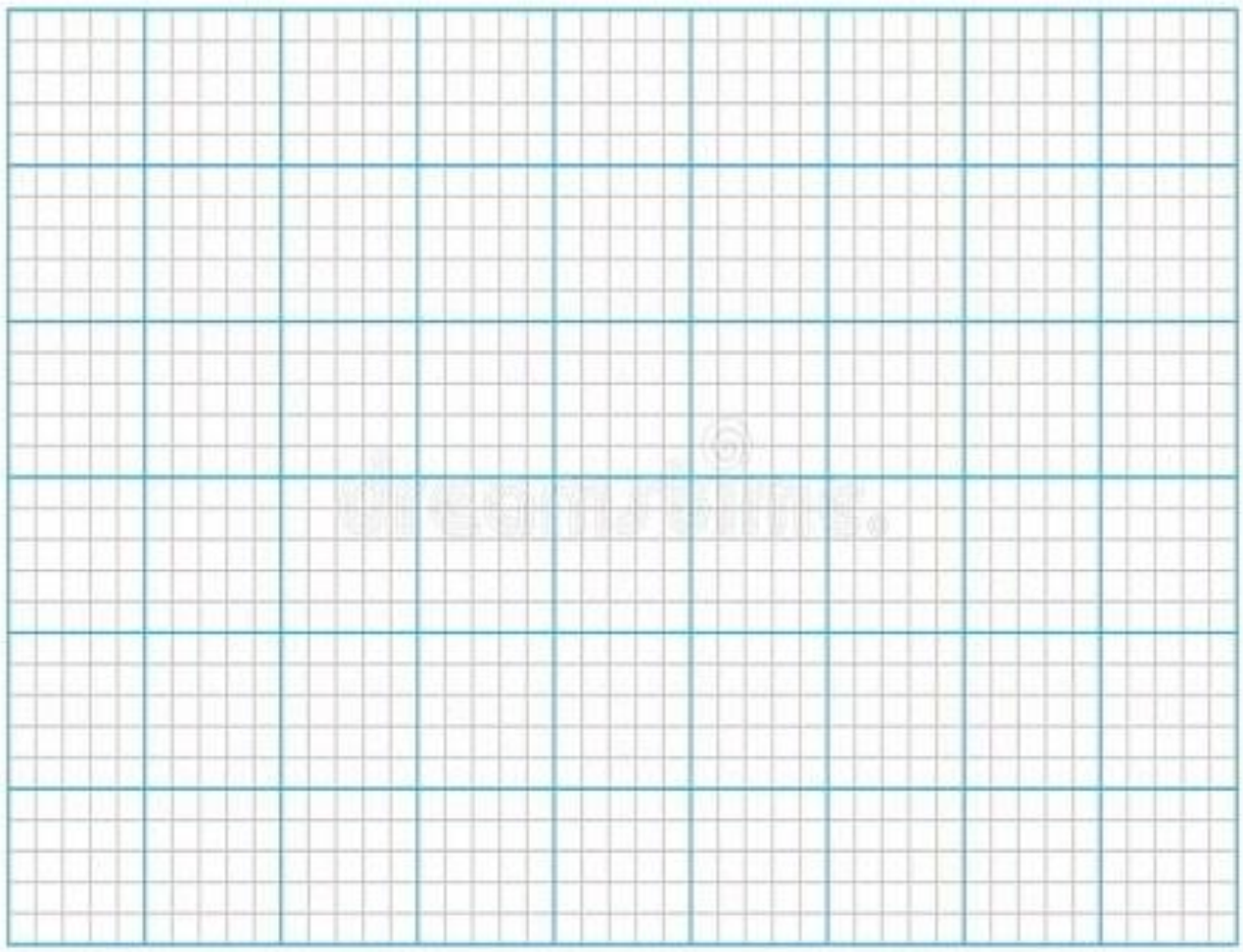
(f) Close the switch. Tap the jockey at various points along the wire AB and locate a point P at which the galvanometer shows zero deflection. Measure and record in the table below the length **'a'** where **a = PB**

(g) Repeat the procedure in (f) using two resistors in parallel, three resistors in parallel, four resistors in parallel, five resistors in parallel, and six resistors in parallel. Record your readings in the table below. **R** is the effective resistance for the **PARALLEL** combination.

Number of 10Ω resistors	One	Two	Three	Four	Five	Six
Effective resistance **(R)**						
length (**a**) in cm						
$^1/_R$**(Ω^{-1})**						
$^1/_a$ **(cm^{-1})**						

(5marks)

(h) Plot a graph of $^{I}/_{a}$ (y-axis) against $^{I}/_{R}$ **(5marks)**



(i) Determine the slope **S**, of the graph **(2marks)**

(j) Given that **I / a = β / kR + 1 / k,** where **k** = 100cm, Use the graph to determine **β** **(2marks)**

Question 2

PART A

1. You are provided with the following apparatus.

- A 50ml measuring cylinder
- A test tube
- About 200ml of Water in a 250ml beaker
- Six 1g ball bearings
- A vernier caliper
- Half meter rule
- Label

Procedure

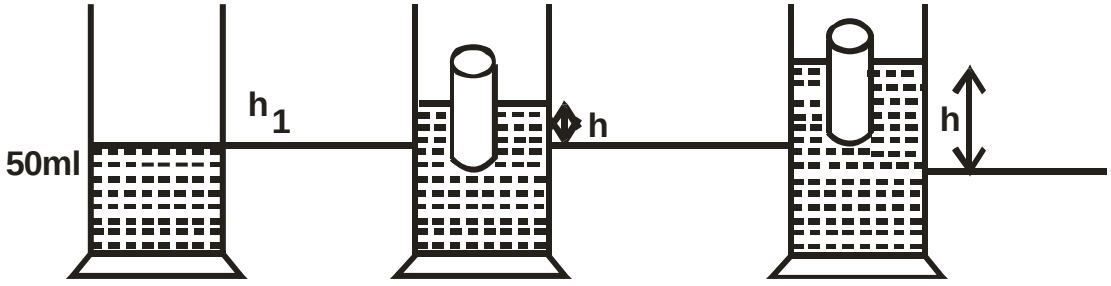
a) i) Measure the internal diameter of the measuring cylinder using a vernier caliper.

D = _____ cm **(1 mark)**

ii) Calculate the area **A** of cross section of the inner part of the cylinder**.** **(2 marks)**

b) i) Pour water into the measuring cylinder up to 50ml mark. Mark this point as $\mathbf{h_1}$ using the label.

ii)Place the test tube upright inside the measuring cylinder so that it floats. Measure the increase in height of the water level from h_1 using a half meter rule. Record this value in the table below.



(i) Cylinder without test tube **(ii) Test tube without ball bearings** **(ii) Test tube with ball bearings**

(iii)Insert one ball bearing into the test tube then place the test tube back into the cylinder gently. **NB** (Remove the test tube slant it slightly and let the ball bearing roll to the bottom. Dropping the ball can break the test tube) measure the increase in height from h_1

c) i) Repeat the procedure in b(iii) above by adding ball bearings one by one each time measuring the new change in height **H** from h_1. Enter the results in the table shown. (3 marks)

Mass of ball (g)	0	1	2	3	4	5	6
Change in height (**H**) (cm)							

(ii) Determine the weight of the water displaced $\mathbf{W_w}$ when the test tube has six ball bearings (density of water is 1 g/cm^3**)** **(3mks)**

(iii) Determine the weight $\mathbf{W_o}$ of the test tube when empty given that

$\mathbf{W_w = W_o + 0.06}$. **(2 marks)**

(iv) State any **one** source of error in the experiment above **(1mark)**

PART B

You are provided with the following:

- A bare copper wire with a loop on one end labeled **W**
- A retort stand, boss and clamp
- An optical pin mounted on a cork
- A stop watch
- A micrometer screw gauge to be shared

Proceed as follows:

(a) Clamp the cork so that optical pin is horizontal. Hang the copper wire from the pin by the loop as shown in the figure below. Ensure the wire is straight and the length **X** between the lower tip and the optical pin is 20 cm.

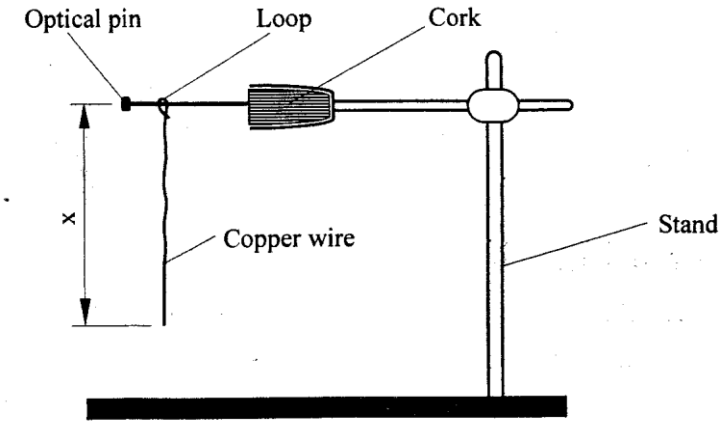


Figure 1

(b) Displace the lower tip of the wire slightly and then release it. Measure the time **t** for 10 oscillations of the wire and record the value in the table below.

(c) Repeat the procedure in (b) above for two more trials each time recording the time taken in the table below. **3 marks**

TRIALS	1	2	3
Time t for 10 oscillations (s)			
Period T (s)			
T^2 (S^2)			

(d) i) Determine the average of $\mathbf{T^2}$ to 4sf **1mark**

(ii) Using a micrometer screw gauge, measure the diameter **D** of the wire in SI units **(1mark)**

ii) Obtain the value of **K** in the equation $\mathbf{T^2= \frac{8\pi}{3KD}}$ **(2marks)**

KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

121/1

MATHEMATICS

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

Instructions to candidates

a) Write your name and index number in the spaces provided above.
b) Sign and write the date of examination in the spaces provided.
*c) This paper consists of **TWO** sections I and II.*
d) Answer ALL questions in section I and any five from section II.
e) All answers and working must be done on the question paper in the spaces provided
f) Show all the steps in your calculations giving your answers at each stage in the spaces below each question.
g) Marks may be given for correct working even if the answer is wrong.
h) Non-programmable silent electronic calculation and KNEC Mathematical tables may be used.

For Examiner's use only

Section I

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total

Section II

17	18	19	20	21	22	23	24	Total

Grand Total

SECTION I (50 Marks)

Answer all questions in this section in the spaces provided

1. Without using mathematical table or a calculator, evaluate: **(3 mks)**

$\underline{36 - 8x\ -4 - 15 \div -3}$

$3x\ -3 + -8\ (6 - (-2))$

2. Simplify $\dfrac{27^{1/3} \div 2^4}{32^{-\frac{1}{5}}}$ leaving your answer as a simple fraction **(3 mks)**

3. Solve the inequality $-3x + 2 < x + 6 \leq 17 - 2x$ and write down the integral values satisfying the inequality. **(3 mks)**

4. A triangle whose area is $16cm^2$ has its shortest side as 12cm. Find the length of the shortest side of a similar triangle whose area is $36cm^2$ **(3mks)**

5. Solve for x given that $5^{2x+2} - 20 \times 5^{2x} = 625$ **(3mks)**

6. The line $y = mx + 6$ makes an angle of $78^0\ 58^1$ with the x – axis. Find the co-ordinates of the point where the line cuts the X – axis. **(3mks)**

7. 3g of metal A of density 2.7g/cm^3 is mixed with 1.6cm^3 of metal B of density 3.2g/cm^3
Determine the density of the mixture **(3mks)**

8. A two digit number is such that when the digits are reversed, the value of the number increases by 36. If the sum of the unit digit and twice the tens digit is 16, find the number**. (3mks)**

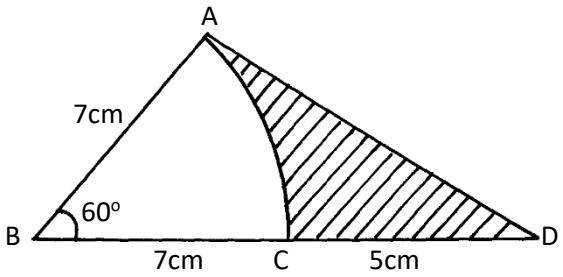
9. On Monday the currency exchange rate was

1 Euro (E) = Kshs.95.65

1 US dollar($) = Ksh.76.50

A gentle man Tourist decided to exchange half of his 2400E into Dollars.
Calculate to 2 decimal places the number of dollars he received**.** **(3 marks)**

10. In the figure given below, AC is an arc of a circle centre B. Angle ABD = 60°, AB = BC = 7cm and CD= 5 cm.



Calculate (3 d.p)

a) The area of triangle ADB **(2mks)**

.

b) The area of the shaded region. **(2mks**

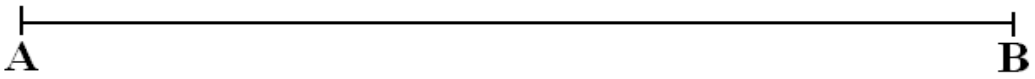
11. If cos A = $\frac{-40}{41}$ and A is obtuse, find without using tables or calculators

a) Sin A **(2mks)**

b) Tan A **(1mk)**

12. A matatu left town X at 9.37a.m. towards town Y at an average speed of 78km/h. At 9.47a.m. a Car left the same venue at an average speed of 84.5km/h. Determine the time when The car caught up with the matatu . **(3mks)**

13 Using a set square, a ruler and a pair of compasses, divide the given line into five equal parts. Measure the length of one part. **(3 marks)**



14. Simplify the expression. $\frac{x^2 + 14x + 49}{x^2 - 49}$ **(3mks)**

15. The acceleration of a particle in ms^{-2} is given by the expression Acc=3t –4

Given that t=0 sec V=3m/s and S=0 metres

Find:

(i) an expression for velocity Vms^{-1} **(2 mark)**

(ii) An expression for distance S metres from a fixed point O**.** **(2 marks)**

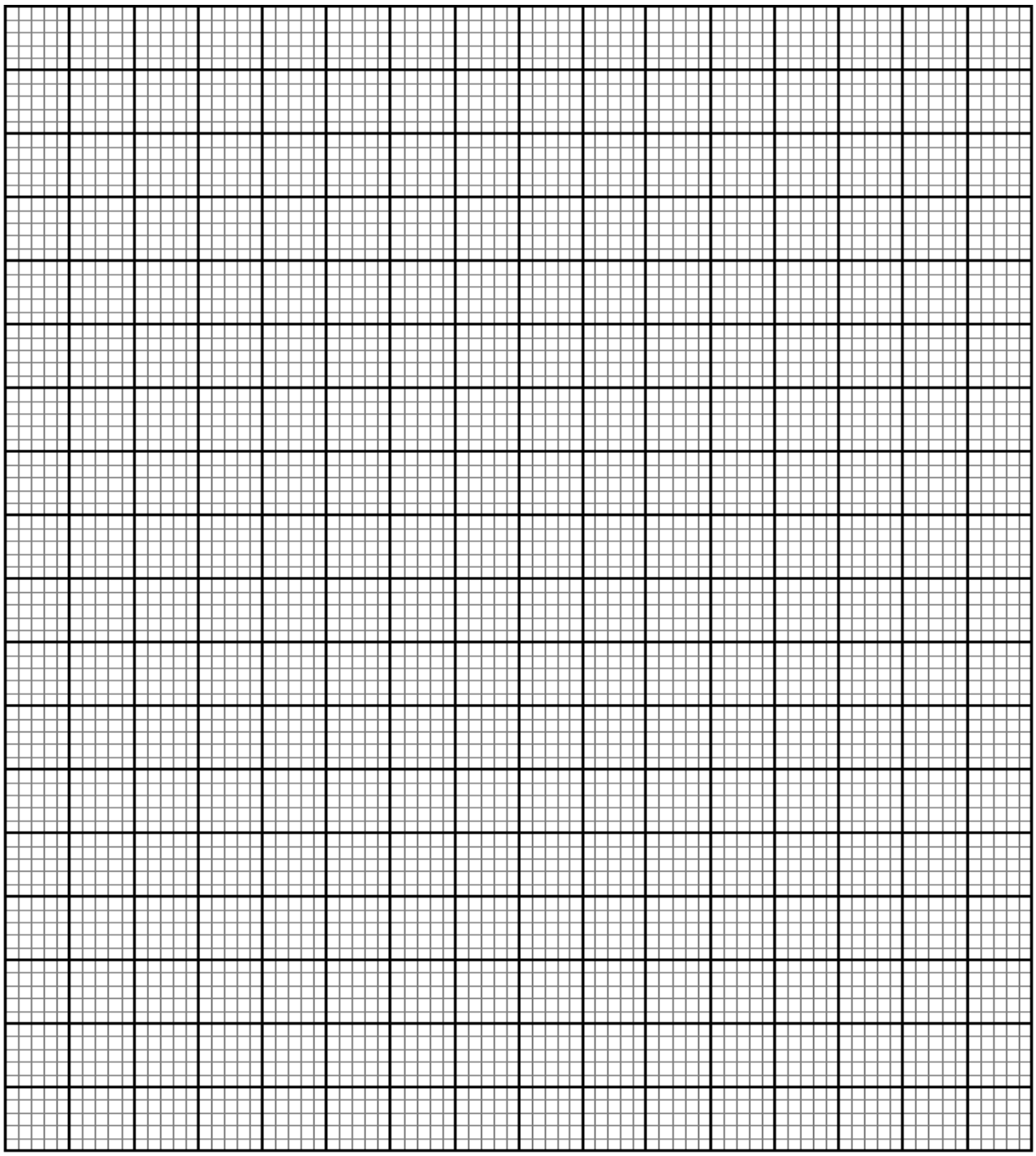
16. A salesman earns a basic salary of Kshs.19, 000 per month. In addition, he earns a commission of 5% for all sales above ksh.20,000. In February 2023, he sold goods worth 115,000. Calculate his total earnings that month . **(3mks)**

SECTION II (50 MARKS)

Answer only five questions

17. A triangle with A(-4, 2), B(-6, 6) and C(-6, 2) is enlarged by a scale factor -1 and centre (-2, 6) to produce triangle $A^1 B^1 C^1$. Triangle $A^1 B^1 C^1$ is then reflected in the line $y = x$ to give triangle $A^{11} B^{11} C^{11}$

a) Draw triangle ABC, $A^1 B^1 C^1$ and $A^{11} B^{11} C^{11}$ and state the co-ordinates of $A^1 B^1 C^1$ and $A^{11} B^{11} C^{11}$ **(6mks)**



b) If triangle A^{11} B^{11} C^{11} is mapped onto A^{111} B^{111} C^{111} whose co-ordinates are $A^{111}(0, -2)$, $B^{111}(4, -4)$ and C^{111} $(0, -4)$ by a rotation. Find the centre and angle of rotation **(4mks)**

18. A cylindrical water tank of diameter 5m and height 1.8m is supplied with water by pipe P of internal radius 2.5cm. Water flows through this pipe at the rate of 50m per minute. A drainage pipe Q can empty the full tank in 8 hours.

a) Calculate the time in hours that pipe P alone would take to fill the empty tank **(4mks)**

b) The tank is initially half full. Water flows through pipe P into the tank for 2 hours. The drainage pipe Q is then opened and both pipes left running.

Determine how long it will take to fill the tank **(6 mks)**

19. Ken and Jane cycle to school 20km away. Jane cycles at 2km/h faster than Ken and reaches there half an hour earlier. Given that the speed of Ken is **x**km/hr. Find in terms of **x**

a). The time taken by Ken**.** **(1 mk)**

b) The time taken by Jane**.** **(1 mk)**

c) Form an equation in **x**. **(1 mk)**

d) Solve the equation in (a) above and find the speed of Ken and Jane**.** **(7 mks)**

20. The table below shows some paired values of X and Y for a known curve.

X	0.0	0.2	0.4	0.6	0.8	1.0
Y	0.0	0.4	1.6	3.6	6.4	10.0

By establishing how x and y relates.

Estimate the area under the curve for the interval **0 < X< 1** using

a). The mid – ordinate rule with five mid – ordinates. **(4mks)**

b). The trapezium rule with five Trapezia. **(2mks)**

c) If the exact area is $^{10}/_{3}$ square units.

Calculate the percentage error in the two estimates. **(4mks)**

21 The following are speeds in m/s of the first 50 vehicles at a police check point.

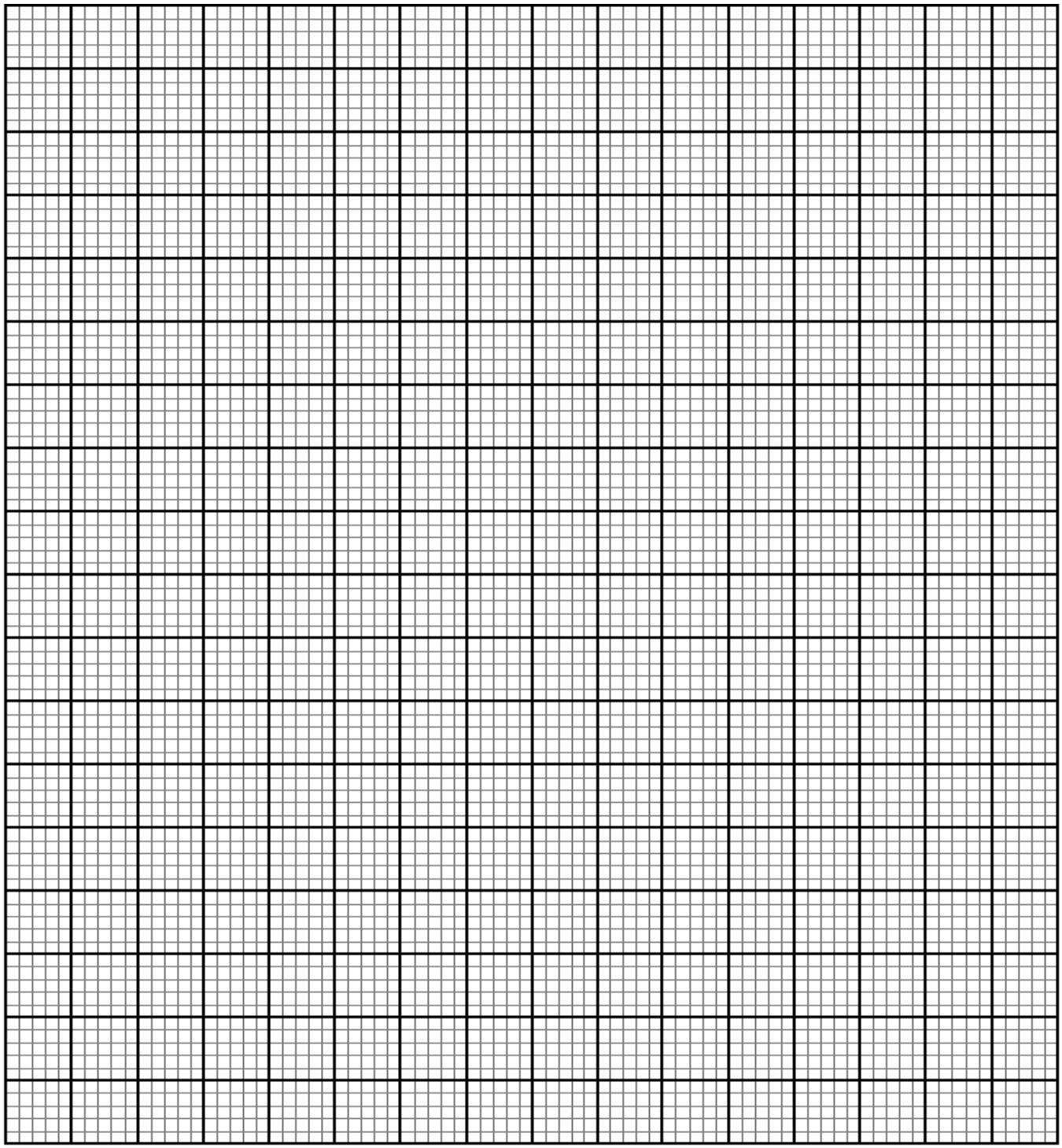
Speed in m/s **x**	**No. of vehicles** **f**	**f(x)**
10 - 19	3	
20 – 29	1	
30 - 39	2	
40 - 49	5	
50 - 59	6	
60- 69	11	
70 – 79	9	
80 - 89	8	
90- 99	3	
100 -109	2	

a) Calculate the mean **speed** **(4mks)**

b) Draw on the same axes using this information

i) The **Histogram** **(3 mks)**

ii) The Frequency polygon **(1 mk)**



c) Calculate the median speed. **(2mks)**

22. A trader sold an article at sh.4800 after allowing his customer a 12% discount on the marked price of the article. In so doing he made a profit of 45%.

a) Calculate

(i) The marked price of the article**.** **(2 marks)**

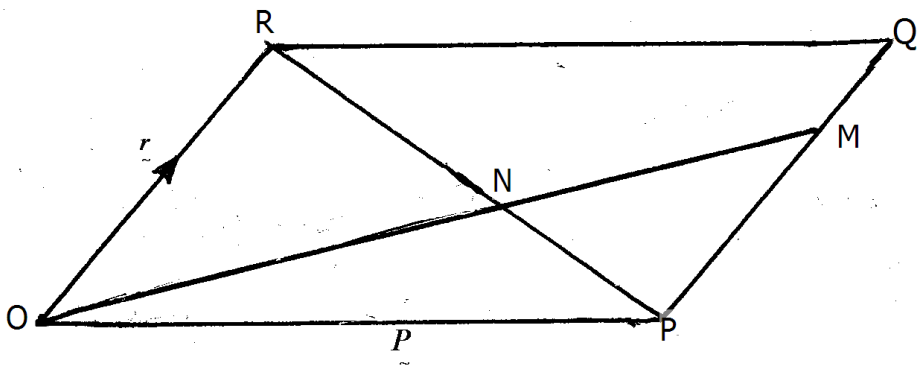
(ii) The price at which the trader had bought the article **(2 mks)**

b) If the trader had sold the same article without giving a discount. Calculate the percentage profit he would have made. **(3 mks)**

c) To clear his stock, the trader decided to sell the remaining articles at a loss of 12.5%. Calculate the price at which he sold each article. **(3 mks)**

.

23. The diagram below shows a parallelogram OPQR. Point M divides line PQ in the ration 2:3 PR and OM intersect at N. Given that $\underset{\sim}{OP} = \underset{\sim}{p}$ and $\underset{\sim}{OR} = \underset{\sim}{r}$



a) Express the following vectors in terms of $\underset{\sim}{P}$ and $\underset{\sim}{r}$

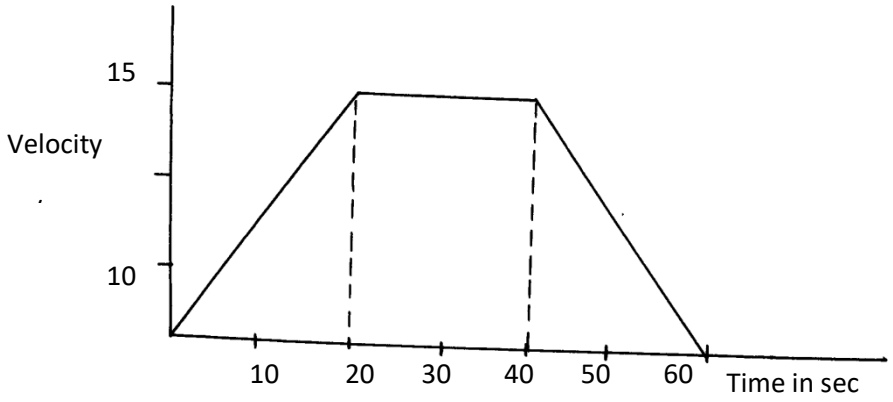
i) $\underset{\sim}{PR}$ **(1mk)**

ii) $\underset{\sim}{OM}$ **(1mk)**

b) Given that $\underset{\sim}{ON} = k\underset{\sim}{OM}$ and $\underset{\sim}{ON} = \underset{\sim}{OP} + h\underset{\sim}{PR}$

By Expressing **ON** in two different ways find the ratio in which N divides **PR.** **(8 mks)**

24. The diagram below shows the graph of a moving matatu from Nakuru to Naivasha.



a) Find the acceleration of the matatu. **(2mks)**

b) Find the deceleration of the matatu **(2mks)**

c) Calculate the distance the matatu travelled while accelerating. **(2mks)**

d) Calculate the distance the matatu covered while traveling at an acceleration of $0m/s^2$ **(2mks)**

e) Find the distance between the two Towns. **(2 mks)**

For Marking Schemes Contact 0746 222 000 / 0742 999 000

KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

121/2

MATHEMATICS

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

a) *Write your* ***name, admission number, class and index number*** *in the space provided.*

b) *This paper contains* ***TWO*** *sections:* ***section I*** *and* ***section II***

c) *Answer* ***ALL*** *the questions in* ***Section I*** *and only* ***five*** *questions from* ***section II.***

d) ***Show all the steps in your calculations, giving your answers at each stage in the spaces provided below each question.***

e) *Marks may be given for correct working even if the answer is wrong.*

f) ***Non-programmable*** *silent electronic calculators and KNEC mathematical tables may be used except where stated otherwise.*

FOR EXAMINER'S USE ONLY:

Section I

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	**TOTAL**

Section II

17	18	19	20	21	22	23	24	**TOTAL**

GRAND TOTAL

For Marking Schemes Contact 0746 222 000 / 0742 999 000

SECTION I (50 MARKS)

Answer ALL the questions in this section.

1. Without using logarithms tables or calculator: Evaluate. **(3mks)**

$Log_{10}96 + \frac{3}{4} Log_{10}625 - Log_{10}12$

2. Find the value of p if the expression $\boldsymbol{px^2 - 60x + 25}$ is a perfect square, given that p is a constant. **(2mks)**

3. The price of a new car is shs. 800,000. If it depreciates at a constant rate to shs. 550,000 within 4years, find the annual rate of depreciation **to 2d.p.** **(3mks)**

4. Mwangi truncated 7/9 to 3 decimal places. Calculate the percentage error resulting from the truncating. **(3mks)**

5. The position vector of A and B are $\vec{a}$ = 4**i** + 4**j** – 6**k** and $\vec{b}$ = 10**i** + 4**j** + 12**k.** D is a point on AB such that AD:DB is 2:1. Find the co-ordinates of D. **(3mks)**

6. A quantity y varies partly as x^2 and partly as x. When y = 6, x = 1 when y = 30, x = 3. Find y when x = - 3. **(3mks)**

7. The coordinates of the end points of diameter are A(2,4) and B(2,6). Find the equation of a circle in the form $\mathbf{ax^2 + by^2 + cx + dy + e = 0}$ **(3mks)**

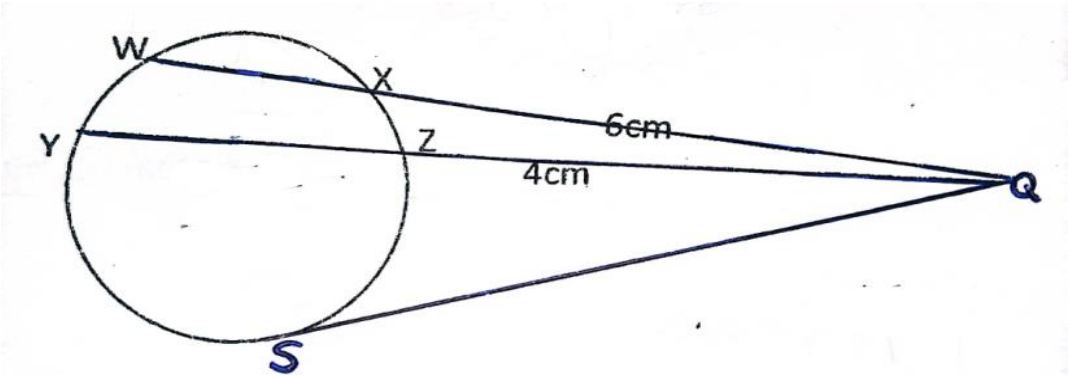
8. A bag M contains 8 balls of which 3 are red and 5 are white. Another bag N contains 7 balls of which 4 are red and 3 are white. A bag is chosen at random and two balls picked at random without replacement. **Using a tree diagram,** Find the probability that the two balls chosen are red in colour. **(4mks)**

9. Find the equation of tangent to the curve below at the indicated point

$\mathbf{y = x^3 + 3x^2 - 3}$ at $\mathbf{x=2}$ giving your answer in form of $\boldsymbol{y = mx + c}$ **(3mks)**

10. Solve the equation $\mathbf{8\sin^2 x = 7 - 2\cos x}$ for $0^0 \leq x \leq 360^0$ **(4mks)**

11. Chord WX and YZ intersect externally at Q. The secant WQ= 11cm and QX= 6 cm while ZQ= 4cm.



a) Calculate the length of chord YZ. **(2mks)**

b) Using the answer in (a) above, find the length of the tangent SQ to **2 d.p**. **(2mks)**

12. Find the **possible values** of x given that $\begin{bmatrix} x-1 & x+1 \\ 3x & x \end{bmatrix}$ is a **singular** matrix. **(3mks)**

13. Determine the semi interquartile range for the following set of numbers. **(3mks)**

4, 9, 5, 4, 7, 6, 2, 1, 6, 7, 8.

14. A carrot patch is in the shape of trapezium. There are 13 carrot plants in the first row, 15 in the second row and 17 in the next and so on. If there are 47 plants in the last row, **how many rows** are there and **how many plants**. **(3mks)**

15. Two brands of coffee cost Kshs 120 and Kshs 144 per kilogram respectively. A wholesaler blends the two and sells the blend at Kshs 168 thereby making a profit of 20%. Find the ratio in which he blends them. **(3mks)**

16. Make x the subject of the formula **(3mks)**

$$P^2 = \sqrt{\frac{x + 2W}{4x + 3R}}$$

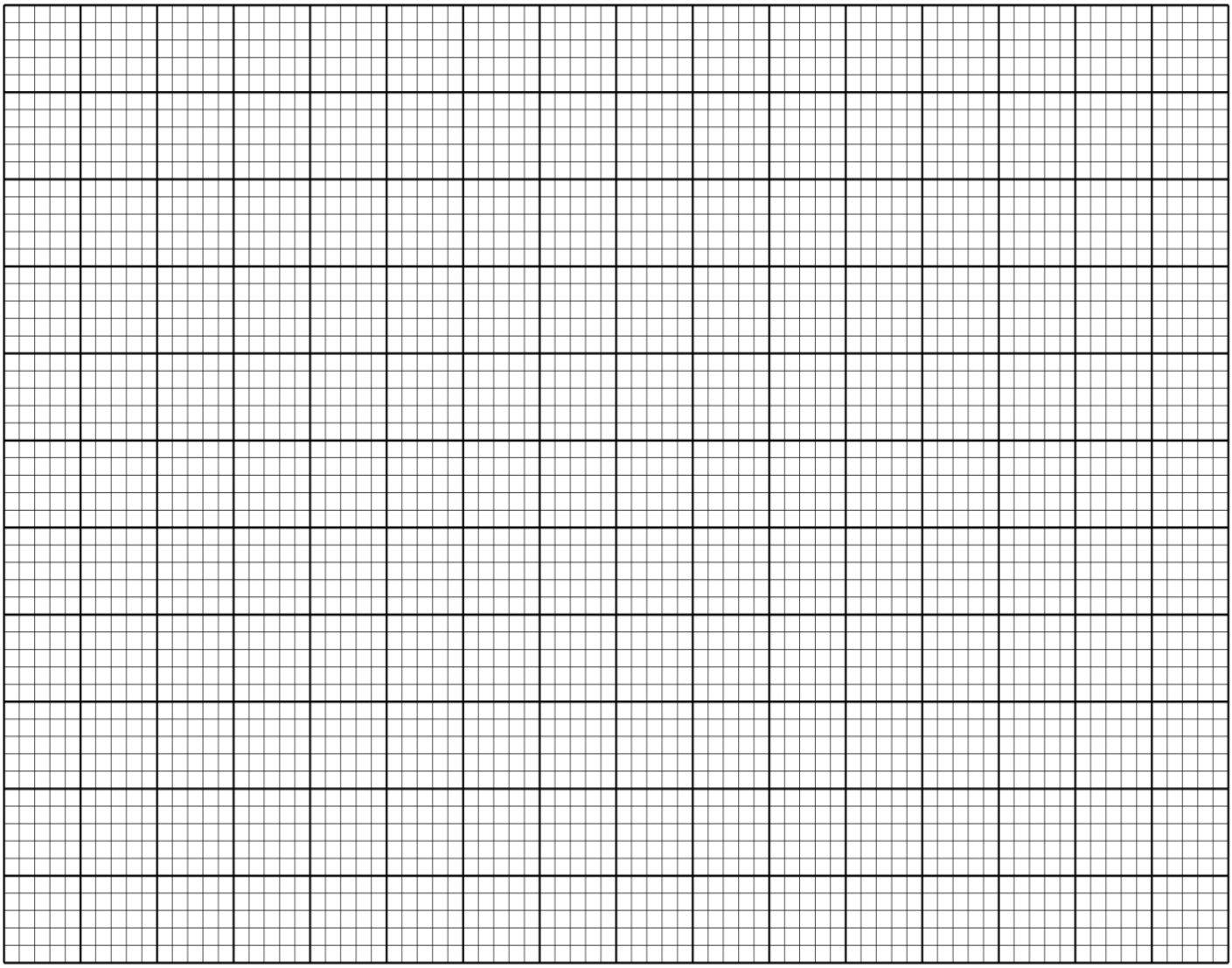
SECTION II (50 MARKS)

Answer any FIVE questions in this section.

17. (i) Complete the table below, giving the values correct to 2 **decimal places** **(2mks)**

X^0	0^0	15^0	30^0	45^0	60^0	75^0	90^0	105^0	120^0	135^0	150^0	165^0	180^0
Cos $2x^0$	1.00		0.50	0.00	-0.50		-1.00	-0.87		0.00		0.87	1.00
Sin(x^o+30^0)	0.50		0.87	0.97	1.00		0.87	0.71	0.50	0.26	0.00		-0.50

(ii) Using the grid provided draw on the same axes the graph of $y=\text{Cos } 2x^0$ and $y = \text{Sin } (x^o+30^0)$ for $0^0 \leq x \leq 180^0$ **(5mks)**



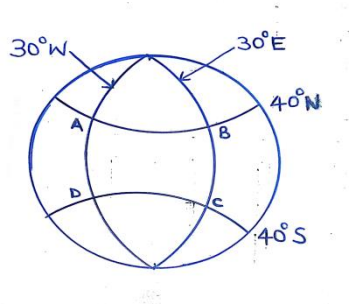
(iii) Find the period of the curve $y=\text{Cos } 2x^0$ **(1mk)**

(iv) Using the graph, estimate the solutions to the following questions to the nearest degree;

a) $\text{Sin}(x^o+30^0) - \text{Cos } 2x^0= 0$ **(1mks)**

b) $\text{Cos } 2x^0=0.50$ **(1mk)**

18. The figure below shows points on the earth's surface.



a) State the positions of A, B, C and D in coordinate form. **(2mks)**

A_____

B_____

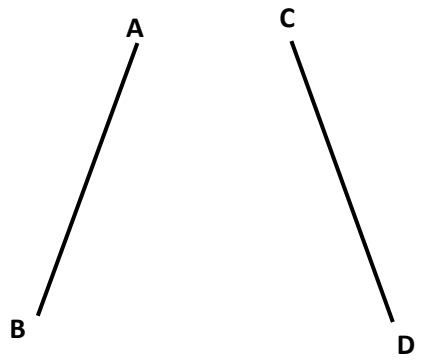
C_____

D_____

b) An aircraft flies from A to B along latitude 40^0N, B to C along longitude 30^0E, C to D along latitude 40^0S and then flew back to A along longitude 30^0W. Calculate to **2 d.p** the total distance it covered .(**Take radius of the earth =6370 km and** $\boldsymbol{\pi} = \frac{22}{7}$) **(5mks)**

c) If the aircraft leaves A at 8.00am at a speed of 720km/h to B. At what local time is it expected at B? Give your answer **to the nearest minute.** **(3mks)**

19. a) AB and CD are chords of a circle. Construct the circle with centre O and measure its radius **(4mks)**

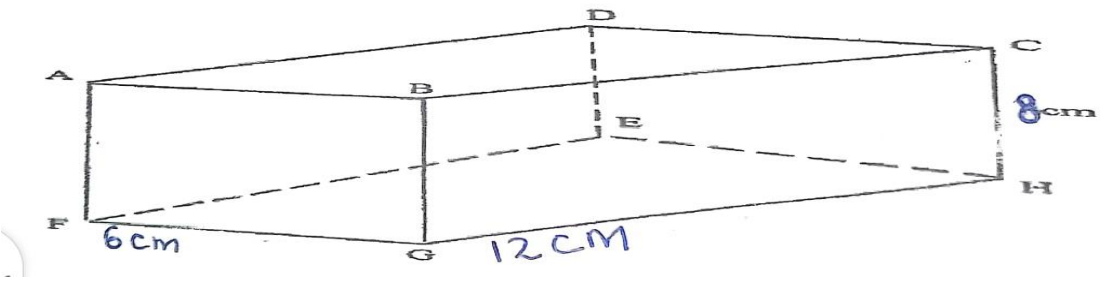


b. Construct the loci of a points x which are equidistant from line AB and CD **(1mk)**

c. Construct the loci of a points Z which are 2cm from the circumference of the circle. **(2mks)**

e. A point P moves such that CP $\geq$ DP, It is not more than 2cm from the circumference of the circle and its distance from line CD is not more than its distance from AB. Show the region P by shading it. **(3mks)**

20. The diagram below represents a cuboid ABCDEFGH in which FG= 6 cm, GH=12 cm and HC=8 cm



Calculate to **2 decimal places**;

a) The length of FC **(2mks)**

b) (i) The size of the angle between the lines FC and FH **(2mks)**

(ii) The size of the angle between the lines AB and FH **(2mks)**

c) The size of the angle between the planes ABHE and the plane FGHE **(2mks)**

d) The space occupied by the Cuboid. **(2mks)**

21. The points A (1,4), B(-2,0) and C (4,-2) of a triangle are mapped onto $A^1(7,4)$, $B^1(x,y)$ and C^1 (10,16) by a transformation N = $\begin{pmatrix} a & b \\ c & d \end{pmatrix}$. Find

(i) Matrix N of the transformation **(4mks)**

(ii) Coordinates of B^1 **(2mks)**

(iii) $A^{II}B^{II}C^{II}$ are the image of $A^1B^1C^1$ under transformation represented by matrix

M = $\begin{pmatrix} 2 & -1 \\ 1 & 0 \end{pmatrix}$ Write down the co-ordinates of $A^{II}B^{II}C^{II}$ **(2mks)**

(iv) A transformation N followed by M can be represented by a single transformation K.

Determine K **(2mks)**

22. A particle moves along a straight line such that its displacement S metres, from a given point is $S = t^3 - 5t^2 + 3t + 4$. Where t is time in seconds find;

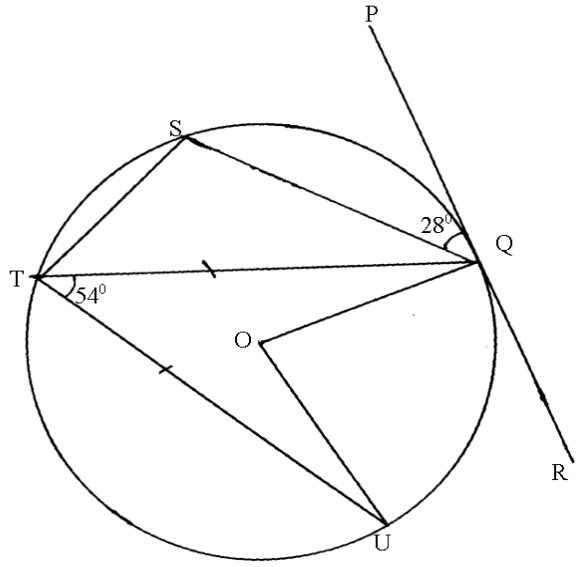
a) The displacement of the particle at t = 5 **(2mks)**

b) The velocity of the particle when t =5 **(2mks)**

c) The values of t when the particle is momentarily at rest. **(3mks)**

d) The acceleration of the particle when t = 2. **(3mks)**

23. In the figure below ,O is the center of the circle. PQR is a tangent to the circle at Q. Angle PQS=28^0,angle UTQ=54^0 and UT =TQ.



Giving reasons, determine the size of

a) Angle STQ. **(2mks)**

b) Angle TQU. **(2mks)**

c) Angle TQS **(2mks)**

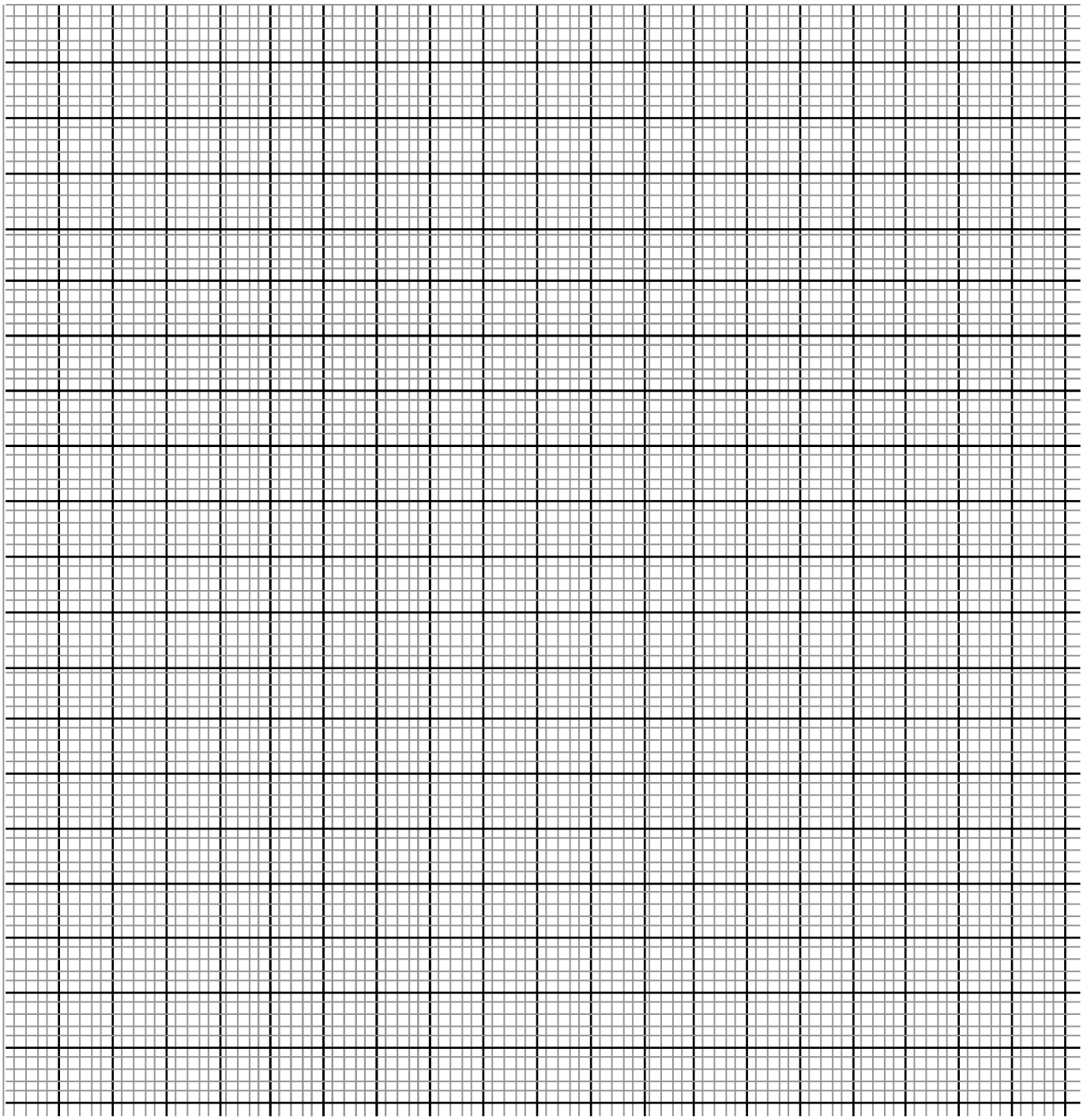
d) Reflex angle UOQ . **(2mks)**

e) Angle TQR. **(2mks)**

24. A company wishes to buy two types of squash machines; Electric and manual. A manual machine requires four attendants whereas an electric one also requires four. An electric machine fills 300 packets per hour; a manual one can fill 200 packets per hour. The numbers of packets to be filled are not more than 3000 per hour and the number of attendants should be at least 40. By letting x be the number of electric Machines and y be the number of manual Machines answer the following questions.

a) Form all the possible inequalities which will represent the above information. **(4mks)**

b) On the grid provided draw the inequalities and shade the unwanted region. **(3mks)**



c) If for every hour it is used, an electric machine brings a profit of shs.200 and a manual one shs.500, determine the number of machines of each type that should be installed in order to maximize profit per hour. Find the maximum profit **(3mks)**

KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

451/1

COMPUTER STUDIES

PAPER 1 (THEORY)

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

(a) Write your Name and Index/Adm Number in the spaces provided.
(b) This paper consists of TWO sections: A and B
(c) Answer ALL the questions in section A
*(d) Answer question 16 and any other **THREE** questions from section B*
(e) All answers should be written in the spaces provided in the question paper.

For Examiners use only.

Section	Question	Candidates Score
A	1 – 15	
B	16	
	17	
	18	
	19	
	20	
Total Score		

SECTION A (40 MARKS)

ANSWER ALL QUESTIONS FROM THIS SECTION

1. Give **FOUR** characteristics of first generation computers? **(2marks)**

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2. a) Why are powder fire extinguishers not allowed in the computer room? **(1 mark)**

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b) What is the difference between delete and backspace keys? **(2 marks)**

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3. Give **FOUR** factors that describe the ideal environment for a computer to work properly.

(2marks)

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4. Give **TWO** advantages of using sound output devices **(2marks)**

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5. Give **TWO** application areas of OMR **(2marks)**

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6. a) Distinguish between primary and secondary storage devices. (**2marks)**

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7. State FOUR devices that support multimedia capability on a computer **(2marks)**

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b) Differentiate between the terms: volatile memory and non-volatile memory. **(2marks)**

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8. Differentiate between misreading and transposition errors in data processing **(2marks)**

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9. What is the function of the power supply unit found in the system unit? **(2marks)**

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10. (a) Name **FOUR** approaches that may be used to replace a Computerized Information system.

(2 marks)

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(b) Which of the approaches named in (a) above is appropriate for critical systems? Explain.

(2 marks)

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11. Terry intends to download a movie from the Internet. State the **two** factors that may determine the total time taken to complete the download. **(2 Marks)**

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12. A lecturer keeps the following student details in a database: name, age, course.

(a) Write an expression you would use to compute the year of birth of a student using this year as the current year. **(2 marks)**

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(b) What query expressions would the lecturer use to list the students whose age is above 15 years and below 25 years? **(2 marks)**

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13. a) Explain each of the following roles performed by an operating system

i.Memory management **(2 marks)**

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ii. Interrupt handling **(2 marks)**

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14. A computer teacher has put a rule that flash disk should not be used in the computer laboratory

(a) Give a reason for the rule **(1 mark)**

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(b) State two alternatives that can be used to achieve the same objective **(1 marks)**

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15. (a) What is a utility software? **(1 mark)**

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(b) Give **FOUR** examples of utility software **(2 marks)**

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SECTION B (60 MKS)

Answer question 16 and any other 3 questions.

16. a) i) What is system maintenance? **(2marks)**

b) Differentiate between absolute and relative cell referencing. **(2marks)**

c) The formula A4 +C$5 is typed in cell D4 and copied to cell H6. Write down the formula as it would appear in cell H6. **(2marks)**

d) Generate output for the following pseudo code **(4marks)**

```
START
        X= 5
        WHILE (X<15) DO
                Y= X +2
X=X+3
PRINT X,Y
        ENDWHILE
        PRINT ("DONE',X)
STOP
```

e) Draw a flowchart for the above pseudo code **(5 marks)**

17. a) Using 10-bits binary number system, perform the following decimal operation using two's complement. **(4 marks)**

$129_{10} - 128_{10}$

b) Convert the following into binary $6CD_{16}$ **(2 marks)**

c) Perform the following binary arithmetic 11001.101+1110.011 **(2 marks)**

d) Define the following terms. **(3 marks)**

i) Record

ii) File

iii) Database

e) List any **FOUR** ways of dealing with a virus on a computer. (**4 marks)**

18. a) Explain the functions performed by **(2 marks)**

i) The control unit-

ii) Arithmetic and logic unit (ALU)

b) Define the following terms in relation to computer software . (3 marks)

i) Free ware.

ii) Proprietary

iii) Open source

c) i) Define the term E-commerce **(2marks)**

ii) List down **TWO** advantages of e- commerce as used in modern business environment **(2marks)**

d) Describe **THREE** ways how computing has been applied to each of the following areas:

i) Reservation systems. **(3 marks)**

ii) Law enforcement **(3 marks)**

19. (a) i) Name any **TWO** types of non-printable guides in DTP. **(1mark)**

ii) Explain the functions of each of non-printable guides in (19 (a)i) above **(4 marks)**

b) State FOUR factors to consider when designing a good file **(2 marks)**

c) Name **THREE** responsibilities that are carried out by a:

(i) Web administrator **(3 marks)**

(ii) Computer trainer **(3 marks)**

d) Identify **TWO** disadvantages of Observation method used in fact-finding. **(2 marks)**

20.(a) List **THREE** advantages of wireless communication over wired communication. (**3 marks)**

(b) Using a Diagram, describe the following signals and state where each is applied in network communication:

(i) Analog; **(2 marks)**

(ii) Digital. **(2 marks)**

(c) Name the **TWO** types of coaxial cables. **(2 marks)**

(d) (i) Define the term network protocol. **(1 mark)**

(e) List **FOUR** internet protocols **(2 marks)**

(f) Describe star topology as used in networking **(3 marks)**

KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

451/2

COMPUTER STUDIES

PAPER 2 (PRACTICAL)

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

(a) *Type your name and index number at the top right-hand corner of each print out.*

(b) *Write your name and index number on the CD-R/ CD-RW provided.*

(c) *Write the name and version of the software used in each question attempted in the printouts used.*

(d) *Answer **all** the questions.*

(e) *All questions carry equal marks.*

(f) *Passwords **should not be used** when saving files.*

(g) *All files must be transferred to the CD-R/ CD-RW.*

(h) *Make printouts of your answers on the papers provided for printing.*

(i) *Arrange your printouts and tie/ staple them together.*

(j) *Hand in all the printouts and the CD/removable storage medium provided.*

(k) Candidates should check the question paper to ascertain that all pages are printed as indicated and no questions are missing.

(l) Candidates must answer the questions in English.

For Marking Schemes Contact 0746 222 000 / 0742 999 000

1.(a) Open a word processing program and type the document below as it appears and save it as **CBC.** **(15 marks)**

PARENT'S ROLES IN COMPETENCY BASED CURRICULUM

Kenya has embraced a Competency Based Curriculum (CBC) to increase skills development and instill values in the learner. Parental empowerment and engagement in the learning process is essential to the learner's growth and development. As a parent, you are the first educator, trainer and source of authority for your child. The purpose of this brochure, therefore, is to give you more information about CBC and your role in the learning process of your child.

WHAT IS COMPETENCY BASED CURRICULUM?

This is a process that gives learners an opportunity to be actively involved in learning. It facilitates identification and development of learner's unique talents and abilities through different career pathways after grade 9. CBC assists learners acquire, nurture and apply values in day to day living

WHY THE CHANGE FROM 8-4-4 CURRICULUM TO CBC?

The Competency Based Curriculum was rolled out nationally in January 2019 in Early Years Education. The difference between 8.4.4 and CBC;

From 8-4-4	To CBC
Focuses on teaching	Focuses on practical learning
Focuses on memorization of content	Focuses on application of knowledge
Focuses on academic achievement	Focuses not only on academic achievement but also on skills development and nurturing of values
Focuses on examination and results	Focuses on what the learner is expected to achieve and provision of feedback on the learner's progress
Focuses on competition	Focuses on collaboration
Not all learners transited to the next level	Facilitates smooth transition for all learners
Less emphasis on talent and career progression	More emphasis on talent identification and career development
Less parental engagement in learning	More parental empowerment and engagement

GENERAL ROLES OF THE PARENT IN COMPETENCY BASED CURRICULUM

The following are general roles to support the learning of your child in CBC

- ∝ Provide basic necessities.
- ∝ Protect your child from physical and emotional harm.
- ∝ Instill and nurture morals and values.
- ∝ Teach and guide children to make the right choices and make them aware of consequences.
- ∝ Teach and model proper use of resources.
- ∝ Instill a sense of responsibility by ensuring children participate in age-appropriate chores.
- ∝ Help in enhancing learning achievements in your child as guided by the teacher.
- ∝ Engage with the teacher to enrich your child's learning experiences.
- ∝ Provide tender, loving care to boost your child's emotional safety and a sense of belonging.
- ∝ Take part in school activities such as academic clinics, talent

Required

b) Set page margins as follows:

i) Left margin: 6 Picas **(2 marks)**

ii) Right, Top and Bottom margins: 3 Picas **(2 marks)**

c) Apply 1.5 line spacing on the entire document **(2 marks)**

d) Insert an in margin drop cap on paragraph 1 dropped to 4 lines **(2 marks)**

e) Save the document as **CBC-1** **(2 marks)**

f) Print out the following:

i) CBC **(2 marks)**

ii) CBC-1 **(2 marks)**

2.(a) The following is an extract from Wavumbuzi Entrepreneurship Challenge showing the performance of different participants over the Six-week period.

	A	B	C	D	E	F	G	H	I	J	K	L
1	WAVUMBUZI ENTREPRENEURSHIP CHALLENGE											
2				SCORED POINTS								
3	NAME	SEX	SCHOOL	WK 1	WK 2	WK 3	WK 4	WK 5	WK 6	TOTAL POINTS	AVERAGE POINTS	MEDAL
4	Sarah	F	LSS	80	180	360	500	700	900			
5	Dennis	M	MHS	100	200	300	400	650	800			
6	Jules	F	CSS	75	120	225	350	480	600			
7	Faith	F	BHS	60	100	250	320	450	630			
8	Dylan	M	KHS	90	150	350	600	750	680			
9	Kenan	M	FMSS	70	160	210	320	500	700			
10	Sheillah	F	SSS	80	170	300	480	535	670			
11	Pauline	F	NHS	100	250	400	650	800	1000			
12	Albert	M	JSS	50	100	200	430	500	660			
13	Fionah	F	MGHS	80	150	320	450	490	600			
14												
15	TOTAL FOR FEMALE											
16	TOTAL FOR MALE											

i) Using a spreadsheet package, enter the above information and save it as **Wavumbuzi Challenge** **(11 marks)**

ii) Format the worksheet to appear as it is **(4 marks)**

iii) Rename the worksheet containing the data as ***Wavumbuzi-1*** **(1mark)**

iv) Copy the contents of *Wavumbuzi-1* to another worksheet and rename it as ***Wavumbuzi-2*** **(2 marks)**

b) Type a formula at:

i) Cell J4 to compute the total points for Sarah **(2 marks)**

ii) Apply the formula to the appropriate cells **(1 mark)**

c) Type a function at:

i) Cell K7 to compute the Average Points for Faith. **(2 marks)**

ii) Apply the function to the appropriate cells. **(1 mark)**

d) A participant earns a medal based on the Average Points scored as follows:

Average points	Medal
500 and above	Gold
300-499	Silver
Below 300	Bronze

i) Type a formula in L5 to determine David's medal **(3 marks)**

ii) Apply the formula to other appropriate cells **(2 marks)**

e) Insert a blank column after average points and label it RANK. Using appropriate function, compute the rank of the participants based on the average points in descending order **(5 marks)**

f) (i) Using appropriate functions, compute the:

(a) Total points for the female per week in cell D15 **(2 marks)**

(b) Total points for the male per week in cell D16 **(2 marks)**

ii) Apply the functions to the appropriate cells **(2 marks)**

g) Using **Wavumbuzi-1** worksheet, create a **bar chart** showing how various participants performed in the six-week challenge and Move it to a new worksheet: **(7 marks)**

i) Insert the Chart Title as: **WAVUMBUZI SIX WEEK CHALLENGE PERFORMANCE**

ii) Insert X-axis as: **PERFORMANCE SCORES**

iii) Insert Y-axis as: **PARTICIPANT NAME**

iv) Display the legend at the bottom

v) Rename the worksheet containing the chart to ***WavumbuziChart***

h) Print out each of the following: **(3 marks)**

i) Wavumbuzi -1

ii) Wavumbuzi-2 (showing the formulas)

iii) WavumbuziChart

KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

441/1

HOME SCIENCE

PAPER 1(THEORY)

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

INSTRUCTIONS TO CANDIDATES

a) Write your name and admission no in the spaces provided.

b) Answer all the questions in section A and B and any two from section C.

c) Answers to all questions must be written in the spaces provided.

For examiners use only.

Section	Question	Maximum score	Candidates score
A	1-23	40	
B	24	20	
C	25-27	40	
TOTAL SCORE		100	

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SECTION A (40 MARKS)

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

1. Mention two disadvantages of steaming **food** **(2mark)**

……

……

2. State two conditions essential in making steam effective as a raising agent **(2mark)**

……

……

3. Mention two points on prevention and control of round worms **(2mark)**

……

……

4. Identify two ways of meeting the emotional needs of patient recuperating at home **(2mark)**

……

……

……

5. List two ways of achieving good grooming **(2mark)**

……

……

6. State two advantages of bungalows **(2mark)**

……

……

7. State two factors that affect a budget **(2mark)**

……

……

8. State two advantages of breast milk **(2mark)**

……

……

9. State two points that guarantee safe parenthood **(2mark)**

……

……

10. Mention two points to observe when using disinfectants during laundry **(2mark)**

……

……

11. List two uses of candles as a source of lighting **(1mark)**

……

……

12. Mention two advantages of biogas fuel **(2mark)**

……

……

13. List down two ways of ventilating a room using doors and windows. **(1mark)**

……

……

14. Mention two common injuries which may accidentally occur at home**.** **(1mark)**

……

……

15. State two ways of improvising clothes storage facilities **(2mark)**

……

……

16. Mention two uses of facings in clothing **construction** **(2mark)**

……

……

17. Differentiate between a tear and a wear **(2mark)**

……

……

18. Mention two areas in a garment where diagonal tacking can be used **(1mark)**

……

……

19. Openings are of various types. Give two examples **(2mark)**

……

……

20. State two properties of silk that makes it suitable for making furnishings **(2mark)**

……

……

21. Give the correct directions of pressing the following darts. **(1mark)**

Front shoulder dart

……

……

elbow dart

……

……

22. State two qualities of a well-made seam **(2mark)**

……

……

23. Mention two methods of attaching collars to the neckline **(2mark)**

……

……

SECTION B: (20 MARKS)
COMPULSORY
Answer question 41 in the spaces provided.

24. Your sister has invited you to a stay with her over the holiday and she has an eight months old baby. Describe the procedure of carrying out the following activities at her home;

a) Prepared a baby cot for her **(8marks)**

b) Thorough clean her calabash that she uses to serve porridg**e** **(5marks)**

c) Thorough clean terrazzo floor of her bedroom **(7marks)**

SECTION C (40 MARKS)
***Answer two questions from this section in the space provided*.**

25.

a) Suggest four factors that can cause food prices to rise. **(4marks)**

b) Describe with the use of two diagrams the procedure of making a machine fell seam **(6marks)**

c) Briefly describe four principles of food preservation. **(4marks)**

d) Give two reasons for using each of the following ingredients in flour mixtures **(6marks).**

i) Eggs

ii) Sugar

iii) Salt

26.

a) Discuss five reasons for sufficient ventilation in a **room** **(5marks)**

b) State five ways of keeping pastry cool during preparation. **(5marks)**

c) Outline four functions of counterfeit section**.** **(3marks)**

d) Describe three qualities of a well-made in seam pocket **(6marks)**

27. (a) State **five** factors that affect individual nutrient requirement **(5mks)**

(b) State **five** factors to consider when packing meals. **(5mks)**

(c) State **six** ways of ensuring that a sleeve is well set. **(6mks)**

(d) Suggest four advantages of blending wool with **nylon** **(4mks)**

KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

441/2

HOME SCIENCE

PAPER 2

TIME: 2½ HOURS

SCHOOL…… SIGN……

(Kenya Certificate of Secondary Education)

CONFIDENTIAL

Instructions to the Home Science teacher

- Provide light weight plain coloured cotton fabric 56cm x 90cm.
- Sewing tools and equipment's.

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KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

441/2

HOME SCIENCE

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

HOME SCIENCE

(CLOTHING CONSTRUCTION)

Paper 2

(PRACTICAL)

2 ½ hours

INSTRUCTIONS TO CANDIDATES

a) *This paper consists of 3 printed pages.*

b) *Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.*

c) *Candidates MUST use machine stitches appropriately in the construction of the garment. Hand stitches used instead of machine stitches will not be marked.*

d) *Hand stitches will only be allowed for the making of loop, worked buttonhole tacking stitches.*

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GIRL'S SKIRT

A pattern of a girl's skirt is provided. You are advised to study the sketches, instructions and layout carefully before you begin the test.

MATERIALS PROVIDED

1. Pattern Pieces
A — Skirt back
B — Yoke (front)
C — Lower skirt (front)
D — Front waistband
E — Back waistband
F — Frill

2.Plain lightweight cotton fabric 56 cm long by 90 cm wide.
3 Sewing thread to match the fabric.
4 One large envelope.

THE TEST

Using the materials provided, cut out and make the left half of the girl's skirt to show the followingprocesses:

a) Cutting out. (18 marks)

b) Making of the dart at the back skirt. ($^{61}/_{2}$ marks)

c) Joining of the yoke front to the lower skirt front using an overlaid seam. **Neatenhalf the seam using loop stitches.** (12 marks)

d) Attaching of the frill to the lower skirt front using a plain seam. **Leave the gathering stitches**and do not trim the seam allowance. (11 marks)

e) Making of the skirt side seam from the yoke to the hemline using an open seam. (7 marks)

f) Attaching of the front and back waistbands and holding them in place using even tacking stitches. (20marks)

g) Making of the worked buttonhole. (12 marks)

h) OMIT The management of the skirt hem.

i) Overall presentation. ($6^{1}/_{2}$ marks)

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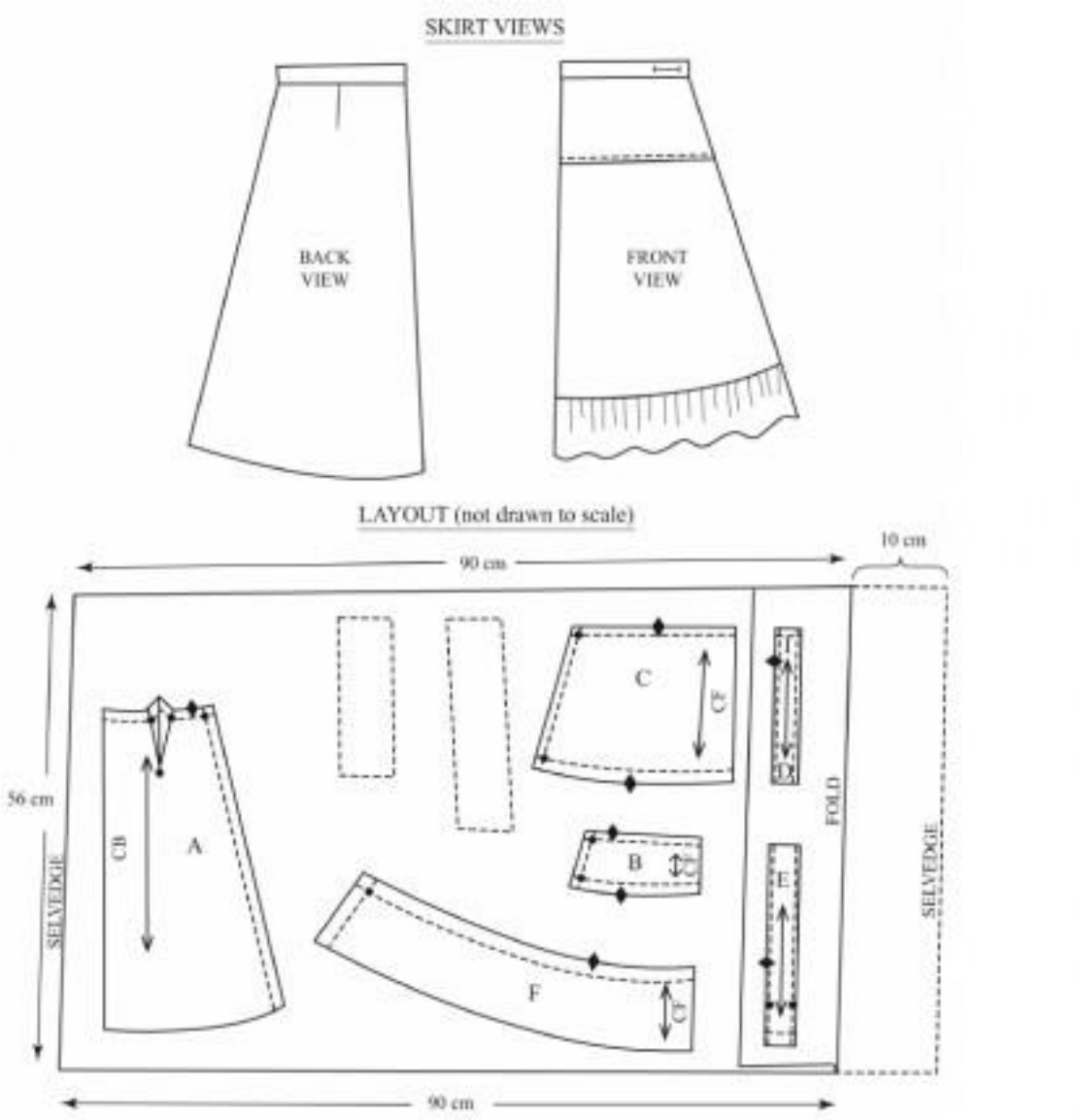
At the end of the examination, firmly sew onto your work, on a single fabric, a label bearing your name and index number. Remove needles, pins and loose threads from your work. Fold yourwork neatly and place it in the envelope provided. Do not put scraps of fabric in the envelope. Donot seal the envelope.



KCSE 2024 MOCK EXAMINATIONS

TEST SERIES 1

441/3

HOME SCIENCE

PAPER 3

(Foods and Nutrition)

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

(Kenya Certificate of Secondary Education)

Instructions to candidates

PLANNING SESSION: 30 Minutes

PRACTICAL TEST SESSION: 1¾ Hours

(a) *Reading the test carefully.*

(b) *Use the booklet provided for all your work.*

(c) *Write your name and index number on every sheet of paper used.*

(d) *Text books and recipes may be used during the planning session.*

(e) *You will be expected to keep to your order of work during practical session.*

(f) *You are allowed to take away your reference materials at the end of the planning session.*

(g) *You are not allowed to bring additional notes to the practical sessions.*

(h) *Previously written plans are not allowed into the examination room.*

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TEST:

Your aunt is attending a clinic with a 5 month old baby.

Using the ingredients listed below prepare a 4 O'clock tea for you and your uncle to include;

a) Two snacks.

b) A suitable drink.

c) Dessert

Ingredients:

- Plain wheat flour.
- Water melon
- Bread.
- Cooking oil.
- Lettuce.
- Eggs.
- Pawpaw
- Tomatoes.
- Sugar.
- Margarine.
- Milk.
- Pineapple
- Tea leaves/coffee
- Salt

Planning session: 30 Min

Use separate sheets of paper and a carbon paper to make duplicate copies then proceed as follows:

1) Identify the dishes and write their recipes.

2) Write your order of work.

3) Make a list of food stuff and equipment you will require.

25 marks

THE END

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FOR THE FOLLOWING;

- ✓ ONLINE TUITION
- ✓ REVISION NOTES
- ✓ SCHEMES OF WORK
- ✓ SETBOOKS VIDEOS
- ✓ TERMLY EXAMS
- ✓ QUICK REVISION KITS
- ✓ KCSE TOPICALS
- ✓ KCSE PREMOCKS
- ✓ TOP SCHOOLS PREMOCKS
- ✓ JOINT PREMOCKS
- ✓ KCSE MOCKS
- ✓ TOP SCHOOLS MOCKS
- ✓ JOINT MOCKS
- ✓ KCSE POSTMOCKS
- ✓ TOP SCHOOLS PREDICTIONS
- ✓ KCSE PREDICTIONS
- ✓ KCSE REVEALED SETS

CALL/TEXT/WHATSAPP

0746-222-000

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