KCSE ACHIEVERS MOCK

JOINT SERIES 1-2024

ALL SUBJECTS

First series of the Countrywide Joint Examination Mock Trials among Select Top National Schools.

JUNE-JULY-AUG CYCLE

SUBJECTS EXAMINED;

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

SERIES 1

For Marking Schemes

Mr Isaboke 0746-222-000 / 0742-999-000

MWALIMU CONSULTANCY LTD

KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

CHRISTIAN RELIGIOUS EDUCATION

313/1

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

313/1

CHRISTIAN RELIGIOUS EDUCATION

PAPER 1

TIME: 2½ HOURS

INSTRUCTIONS TO CANDIDATES

a) *Write your name, school and index number in the spaces provided above.*
b) *Write the date of examination and sign in the spaces provided above.*
c) *This paper consists of **six** questions.*
d) *Answer any **five** questions in the answer booklet provided.*

FOR EXAMINER'S USE ONLY

Question	1	2	3	4	5	6	TOTAL SCORE
Candidates Score							

Answer any five questions in the answer booklet provided.

1. a. Describe the first account of creation in Genesis 1-2:4a **(8 Marks)**

b. From the story of the fall of human beings in Genesis Chapter three, state six effects of sin **(6marks)**

c. Identify any ***six*** causes of evil in Kenya today **(6 marks)**

2. a)Outline the conditions that God gave the Israelites during the renewal of the Mosaic covenant? **(7marks)**

b) Identify the worship practices that Israelites adopted in the wilderness? **(7marks)**

c) What was the Israelites new understanding of God in the wilderness? **(5marks)**

3. a) Explain four factors which led to Religious Schism in Israel after the death of king Solomon. **(8marks)**

b) State seven promises that God made to David through Prophet Nathan in (2 Samuel 7.1-29) **(7marks)**

c) Give reasons why political and church leaders should **cooperate** **(5marks)**

4. (a) Explain the role of prophets in the Old Testament. **(6marks)**

(b) State the teachings of Amos on the day of the Lord. **(6marks)**

(c)What social evils could Amos condemn if he would come to Kenya today? **(8marks)**

5. a) Outline the contents of Jeremiahs letter to the exiles in Babylon according to Jer.29:1-32 **(8marks)**

b) Give four differences between the new covenant foretold by Jeremiah and the Sinaitic covenant **(8marks)**

c) Suggest ways in which Christians should respond to those who oppose them during their work. **(4marks)**

6. **a) State seven** ways in which the living maintained contact with ancestral world in the African traditional society **(7marks)**

   b) What is the importance of marriage in the traditional African community **(8marks)**

   c) Give reasons why the payment of bride wealth is losing meaning in the society today **(5marks)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

CHRISTIAN RELIGIOUS EDUCATION

313/2

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

313/2

CHRISTIAN RELIGIOUS EDUCATION

PAPER 2

TIME: 2½ HOURS

INSTRUCTIONS TO CANDIDATES

a) *Write your name, school and index number in the spaces provided above.*
b) *Write the date of examination and sign in the spaces provided above.*
c) *This paper consists of **six** questions.*
d) *Answer any **five** questions in the answer booklet provided.*

FOR EXAMINER'S USE ONLY

Question	1	2	3	4	5	6	TOTAL SCORE
Candidates Score							

Answer any five questions in the answer booklet provided.

1.(a)From the infancy narratives, what shows that the birth of Jesus Christ was extra-ordinary. **(8 marks)**

(b) What lessons do Christians learn from the lives of Zechariah and Elizabeth. **(6 marks)**

(c) In what ways can Christian respond to childlessness in marriage today. **(6 marks)**

2. a) Outline **seven** teachings of Jesus from the sermon on the plain on true discipleship. **(7marks)**

b) Using examples give **four** reasons why Jesus faced opposition from the Jewish, religious leaders in Galilee . **(8marks)**

c) Outline **Five** ways in which the church leaders are preparing in the society for the second coming of Jesus. **(5marks)**

3. (a)State the meaning of the parable of the sower as explained by Jesus in Luke 8:11-15. **(8 marks)**

(b) Give seven reasons why Jesus referred to the Pharisees as hypocrites. **(7 marks)**

(c)Write down six factors which hinder people from accepting the call of salvation. **(6 marks)**

4.(a)Outline the characteristics of the people of God as taught by Peter in 1 Peter 2:9 – 10. **(7 marks)**

(b) Identify seven gifts of the Holy Spirit. **(7 marks)**

(c)Outline the importance of the Holy Spirit to Christians today. **(6 marks)**

5 a) Explain **three** biblical teachings about celibacy. **(6marks)**

b) State **eight** negative results brought about by strike action. **(8marks)**

c) Identify Christian criteria for evaluating the use of leisure. **(6marks)**

6 a) Explain the negative impact of the introduction of money economy in Traditional African Society. **(7marks)**

b) Identify ways in which Christians can help fight corruption in Kenya today. **(7marks)**

c) State **six** Christian's values related to wealth. **(6marks)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

HISTORY AND GOVERNMENT

311/1

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

- *This paper consists of three sections A,B and C*
- *Answer **All** questions in section A, **three** questions in section B and **two** Questions in section C*
- *Answer to all question must be written in the answer booklet provided*
- *Candidate should answer the questions in English*

FOR EXAMINER USE ONLY

SECTION	QUESTION	MAX SCORE	SCORE
A	1-17	25	
B		15	
		15	
		15	
C		15	
		15	
TOTAL SCORE			

SECTION A (25 MARKS)

Answer all the questions in this section.

1. **Identify one** main source of History and Government of the Kenyan communities during the pre colonial period. **(1mark)**
2. **Name** two groups of people that form the Coastal Bantu of Kenya. **(2mrks)**
3. **Name** one Kenyan community that had a centralized form of government in the pre-colonial period. **(1mark)**
4. **Give two** crops that were introduced by the Portuguese at the East African Coast. **(2mrks)**
5. **State** two terms of the Anglo-German agreement of 1886. **(2mrks)**
6. **Define** dual citizenship. **(1mark)**
7. **Identify** the main grievance of Ukamba Members Association. **(1mark)**
8. **Identify two** Kenyan communities that showed mixed reactions against colonial invasion. **(2mrks)**
9. Mention the woman who led the Agiriama resistance. **(1mark)**
10. **State** two reasons why Africans in Kenya were denied the right to grow cash crops during the colonial period? **(2mrks)**
11. **Give** two demands of African Elected Members Organization (A.E.M.O). **(2mrks)**
12. **Who** introduced dairy farming in Kenya? **(1mark)**
13. **What** was the main ideological difference between KANU and KADU before independence in 1963? **(1mark)**
14. **Give** the main function of Parliament in Kenya. **(1mark)**
15. **State** the two levels of government in Kenya today. **(2mrks)**
16. **Identify** the constitutional amendment that reverted Kenya to a multi-party state. **(1mark)**
17. **Mention** two types of funds in which government revenue is deposited. **(2mrks)**

SECTION B: (45 MARKS)

*Answer **ANY three** questions from this section.*

18. **(a)**Outline **five** reasons for the migration of the Luo from their ancestral homeland. **(5 mrks)**

(b) **Describ**e the political organization of the Mijikenda during the pre-colonial period. **(10 mrks)**

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19. (a) Identify **three** contributions of the European missionaries to the exploration of East Africa in the 19th century. **(3 marks)**

(b) Explain **six** factors which promoted missionary activities in East Africa in the 19th century **(12 marks)**

20. (a)Identify **three** problems that the independent schools faced during the colonial period. **(3 marks)**

(b) Explain **six** results of the establishment of independent churches in Kenya during the colonial period. **(12 marks)**

21. (a) State **five** main features of African socialism. **(5 marks)**

(b)Explain **five** economic effects of African socialism. **(10 marks)**

SECTION C (30 MARKS)

Answer any two questions from this section

22. a) List three methods used by the British to occupy Kenya towards the close of the 19th century **(3marks)**

b)Explain six challenges that faced the Imperial British East Africa Company in its Administration of the protectorate **(12 marks)**

23. a) Identify three methods that have been used to conduct elections in Kenya. **(3marks)**

b) Why is parliament an important institution in Kenya? **(3marks)**

24. a) Give three aims of Harambee movement in Kenya. **(3marks)**

b) Explain six problems that faced Harambee movement in Kenya. **(12 marks)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

HISTORY AND GOVERNMENT

311/2

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

- *This paper consists of three sections A,B and C*
- *Answer **All** questions in section A, **three** questions in section B and **two** Questions in section C*
- *Answer to all question must be written in the answer booklet provided*
- *Candidate should answer the questions in English*

FOR EXAMINER USE ONLY

SECTION	QUESTION	MAX SCORE	SCORE
A	1-17	25	
B		15	
		15	
		15	
C		15	
		15	
TOTAL SCORE			

SECTION A (25 MARKS)

Answer all the questions in this section.

1. Mention **one** political importance of studying History. **(1mark)**

2. Identify **two** characteristics of the Aegyptopithecus. **(2mrks)**

3. What was the importance of the development of writing in Mesopotamia during the Agrarian Revolution? **(1mark)**

4. Identify **two** factors that led to the development of local trade. **(2mrks)**

5. State **one** way in which European colonization led to the decline of the Trans-Atlantic trade. **(1mark)**

6. Identify **two** trans-continental railway lines in the modern world. **(2mrks)**

7. Identify **two** factors that led to the scientific revolution. **(2mrks)**

8. Give **one** factor that led to the emergence of London as a major trading centre. **(1mark)**

9. Identify **two** external factors that led to the decline of the Asante empire. **(2mrks)**

10. Give **two** negative political effects of the partition of Africa by the European powers. **(2mrks)**

11. State how Islamic religion enabled the Mandinka to resist French invasion from 1886 to 1898. **(1mark)**

12. Identify **one** social shortcoming of Indirect role in Nigeria. **(1mark)**

13. Identify **one** factor that led to the riots of 1948 in Ghana. **(1mark)**

14. Give the role that diplomacy played in the struggle for independence in South Africa. **(1mark)**

15. State **one** way in which the violation of the Treaty of Versailles led to the outbreak of the Second World War (1939 – 1945). **(1mark)**

16. Mention **two** personalities who led in the formation of the Non-Aligned Movement. **(2mrks)**

17. State **two** objectives of the Pan-African Conference of 1900. **(2mrks)**

SECTION B: (45 MARKS)

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

18. (a) State **three** reasons why Africa is considered the cradle of man. **(3 mrks)**

(b) Describe **six** ways in which homo erectus attempted to improve kind way of life. **(12 mks)**

19. (a) Give **three** methods used to acquire slaves from West Africa during the Trans-Atlantic trade. **(3 mrks)**

(b) Explain **six** factors that led to the decline of the Trans-Atlantic trade. **(12 mks)**

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20. (a) Give **five** examples of the communication. **(5 mrks)**

(b)Describe **five** negative impacts of modern forms of communication. **(10 mks)**

21. (a) State **three** ways used by nationalists in Ghana to fight for independence. **(3 mrks)**

(b) Explain **six** factors that led to development of African nationalism in Ghana. **(12 mks)**

SECTION C (30 MARKS)

*Answer any **two** questions from this section*

22. a) State five factors for the rise of Pan Africa Movement **(5 mrks)**

b) Discuss the achievements of Pan African Movement by 1960 **(10 mks)**

23.a) Outline five factors that enabled Allied Forces to defeat Germany during the 2nd world war **(5 mrks)**

b) Discuss five social effects of 2nd world war on the people of Europe **(10 mks)**

24. a) State three ways in which one can qualify as a member of House of Lords in Britain **(3 mks)**

b) Describe six duties of the monarch in Britain **(12 mks)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

GEOGRAPHY

312/1

PAPER 1

TIME: 2¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES.

(a) Write your name, class and admission number in the spaces provided above.
(b) Sign and write the date of the examination in the spaces provided above.
*(c) This paper has **two** sections: **A** and **B**.*
*(d) Answer **all** the questions in sections **A**.*
*(e) Answer question **6** and any other **two** questions from Section **B**.*

FOR EXAMINER'S USE ONLY

Section	Questions	Maximum Score	Candidate's Score
A	1 – 5	25	
	6	25	
B		25	
		25	
		Total Score	

SECTION A

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

1. a). What is wildlife? **2marks**

b). Name three game sanctuaries in Kenya **3marks**

2. a) Draw a well labelled diagram showing the three functional zones of an ideal urban centre . **(2mrks)**

b) State three factors leading to the emergence of slums in urban areas **(3marks)**

3. a) Give two reasons how the following factors influenced the development of iron and steel industry

- Availability of water. **(2marks)**
- Historical reasons **(2marks)**

4 a). Distinguish under-population from overpopulation. **(2marks)**

b) Below is a table showing the intercensual births and deaths in Kenya (millions)

	2013	**2014**	**2015**
Number of Births	34.9	32.3	31.8
Number of Deaths	8.3	7.0	5.8
Total Population	**44.8**	**46.0**	**47.2**

Source: **Hypothetical**

i. Calculate the crude birth rate of 2013 **(2 marks)**

ii. Calculate the death rate of 2015 **(2 marks)**

iii. The numerical population increase in Kenya between 2013 and 2015 **(2marks)**

5 a). What is land reclamation? **(1 mark)**

b) State two factors that determine the amount of water to be supplied to agricultural land **(2 marks)**

SECTION B

Answer question 6 and any other two questions from this section

6. Study the map of **MUMIAS** provided and answer the following questions

a. i .What is the magnetic variation of the map **2mks**

ii. Name the tittle of the map **2mks**

iii. Give any 4 types of natural vegetation found in the area covered by the map **4mks**

b. Citing evidence from the map give any 2 economic activities taking place in the area covered by the map **4mks**

d. Citing evidence from the area covered by the map, give any 3 functions of Mumias town **6mks**

e. Describe the Drainage of the area covered by the **map** **7mks**

7. (a) What is a rock? **(2mrks)**

(b)(i)Classify rocks according to their mode of formation. **(3mrks)**

(ii) Identify **two** classes of rocks mentioned in (i) above that are formed from the already existing rocks. **(2mrks)**

(iii)List **two** characteristics of rocks. **(2mrks)**

(c)(i)List **two** main types of rocks dominant in Kenya. **(2mrks)**

(ii)Explain the importance of studying rocks. **(6mrks)**

(d)Explain **four** benefits of rocks to the economy of a country. **(8mrks)**

8.(a)(i) What is mass movement? **(2mrks)**

(ii)List the **two** broad categories of mass wasting. **(2mrks)**

(b)(i)What is soil creep? **(2mrks)**

(ii)Describe the factors that cause soil creep. **(5marks)**

(c)Differentiate between soils creeps and rock slide. **(6marks)**

(d)Explain the negative effects of mass wasting on physical and human environment. **(8marks)**

9. (a) Differentiate between a ocean and a sea. **(2marks)**

(b)(i) Identify the **main** cause of water movement in the ocean. **(2marks)**

(ii) Identify the **two** main water movements in the oceans. **(2marks)**

(c)List **three** processes through which erosion occurs along the Coasts. **(3marks)**

(d)Using a well labeled diagram describe the formation of a spit. **(5marks)**

(e)Describe the **three** types of coasts. **(6marks)**

(f)Explain how oceans currents influence the climate of the surroundings. **(5marks)**

10. (a) Describe how a river erodes its channels by the following process.

(i) Hydraulic action **(2marks)**

(ii) Abrasion **(2marks)**

(b) (i) Explain **three** factors that lead to rejuvenation of a river **(6marks)**

(ii) Describe the process of a river capture. **(6marks)**

(c) Some students carried out a field study on the feature found a long a river.

(i) List **three** features formed as a result of river erosion. **(3marks)**

(ii) State **three** methods that students may have used to record their data **(2marks)**

(iii) Explain **two** ways in which features resulting from river deposition are of significance to human activities. **(4marks)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

GEOGRAPHY

312/2

PAPER 1

TIME: 2¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES.

(a) *Write your name, class and admission number in the spaces provided above.*
(b) *Sign and write the date of the examination in the spaces provided above.*
(c) *This paper has **two** sections: **A** and **B**.*
(d) *Answer **all** the questions in sections **A**.*
(e) *Answer question **6** and any other **two** questions from Section **B**.*

FOR EXAMINER'S USE ONLY

Section	Questions	Maximum Score	Candidate's Score
A	1 – 5	25	
	6	25	
B		25	
		25	
		Total Score	

SECTION A

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

1. (a) State three ways in which minerals occur **(3 marks)**

(b) Name any two types of underground mining **(2 marks)**

2. (a) What is a forest **(1 mark)**

(b) State any two characteristics of the tropical hardwood forests. **(2 marks)**

(c) State two main species of softwood trees mainly grown in Canada. **(2 marks)**

3. (a) State one major characteristics of non-renewable energy sources. **(1mark)**

(b) Name any two non-renewable energy sources. **(2marks)**

(c) State any two effects of charcoal burning in the environment. **(2marks)**

4. (a) What is a trading bloc. **(2marks)**

(b) State any three factors influencing trade. **(3marks)**

5. (a) Name any two pre- historic sites that are popular with tourists in Kenya. **(2marks)**

(b) State the three agencies set up by the three governments of East Africa countries to manage the game parks and take care of the wildlife. **(3marks)**

SECTION B (75 marks)

Answer question 6 and any other two questions

6. The table below shows some of Kenya's imports and exports in tonnes in 1987.

Use the data to answer the questions that follows.

Import in tonnes		**Export in tonnes**	
Item	Tonnes	Item	Tonnes
Sugar	99,000	Sugar	316,000
Iron and steel	300,000	Iron and steel	159,000
Fertilizer	84,000	Fertilizer	259,000
Wheat	125,000	Wheat	225,000
Total	**608,000**	**Total**	**959,000**

a) Draw a comparative bar graph to represent the above data using scale of 1cm to 25,000 tonnes. **(8 marks)**

b) Explain how the following factors influence external trade in Kenya under the following subheadings:

i) Population **(2 marks)**

ii) Foreign investment **(2 marks)**

iii) Government policy **(2 marks)**

c) Explain three measures taken by the Kenyan government to reduce unfavourable balance of trade. **(6 marks)**

d) State **five** ways in which Kenya is likely to benefit from the renewed East African Co-operation. **(5 marks)**

7. a) i) Differentiate between the term transport and communication. **(2 marks)**

ii) State **four** advantages of road transport. **(4 marks)**

b) Explain **four** factors that hinder the development of river transport in Africa. **(8 marks)**

c) State **three** problems facing communication in Africa. **(3 marks)**

d) Explain **four** reasons why it is difficult to transport goods from Mombasa to Lagos along the Trans- Africa highway. **(8 marks)**

8. a) Define the following terms:

i) Forest **(1 mark)**

ii) Forestry **(1 mark)**

b) i) Name **three** indigenous hardwood tree species grown in Kenya. **(3 marks)**

ii) Name **four** conditions that favour the growth of forests. **(4 marks)**

c) Explain **four** factors which favour the development of soft wood forests in Canada. **(8 marks)**

d) Students of Kitui School carried out a field study of a nearby forest.

i) State **three** activities that they engaged in during collection of data. **(3 marks)**

ii) List **three** follow-up activities the students would have done. **(3 marks)**

iii) State **two** problems the students were likely to encounter. **(2 marks)**

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9. (a)(i) What is fishing and fisheries **(4marks)**

(b)List **three** types of fish caught in North East pacific fishing ground. **(2marks)**

(c)(i) State the significance of fishing industry in Kenya. **(3marks)**

(ii) Explain **four** problems facing fishing in Kenya. **(8marks)**

(d) State **two** methods that are used to manage and conserve fish in **Kenya** **(2marks)**

10. (a) (i) Name **two** major counties in Kenya known for high maize production. **(2 marks)**

(ii) What is the importance of maize production to Kenya's economy. **(6 marks)**

(iii) Name the Board that is known for buying and selling of maize in Kenya. **(1 mark)**

(b) What are the problems facing the maize farming in Kenya. **(8 marks)**

(c) Explain **four** physical conditions that favour maize growing in Kenya. **(8 marks)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

ENGLISH

101/1

PAPER 1

(Functional Writing, Close Text and Oral Skills)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

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

b) *Sign and write the date of examination in the spaces provided above*

c) *Answer* ***all*** *the questions in this paper*

d) *All your answers must be written in the spaces provided in the question paper*

FOR EXAMINER'S USE ONLY

Question	Maximum Score	Candidate's Score
	20	
	10	
	30	
Total Score	**60**	

1. FUNCTIONAL WRITING **(20marks)**

You are the President of your School. It has come to your notice that some students make a lot of noise during morning preps. Write a memorandum to the students warning the noise makers against the habit. In your memorandum, remind the students of the importance of maintaining total silence at this time and the punishment for those who will fail to adhere to this expectation. Remember to send a copy of your memorandum to the principal.

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2. CLOZE TEST **(10 marks)**

Olive oil is good for the bones, a two-year (1)... .....has found. People who consume olive oil have higher amounts of osteocalcin, a special (2)……..that is found in bones which helps keep(3). ……..strong.

They also found that osteocalcin lowers the risk of osteoporosis a (4) ……. in which bones lose density and become fragile and more likely to fracture. In addition, osteocalcin was found to (5).....in metabolic regulation. These findings help explain (6)……..people from the Mediterranean area of (7)... .....…are the least prone to developing osteoporosis. These people consume a lot of olives and olive oil, along with 8... .....…and vegetables.

Other (9)... .....of olive oils include reduced stroke and breast (10)... .....risk and liver protection.

3 ORAL SKILLS **(30mks)**

(a) **Read the Oral Narrative below and answer the questions that follow.**

GIKUYU AND MUMBI

In the beginning, Ngai or the creator, made Gikuyu. He gave him wife called Mumbi. The two lived in a cave under a Mugumo tree at a place called Mukurwe wa Gathanga in Murang‟a.

Ngai, the creator, lived on top of Kirinyaga from where he ruled the entire universe. One day, he lifted up Gikuyu to the top of the mountain from where he beheld a panorama of the beautiful land stretching from miles before him. He saw a land of Ravines, Rivers and ridges. It lay between the mountains of Kirinyaga, Kiandarua, Kihanji nd Kiambiruiru. “Do you see all this beautiful land sprawling before your eyes?” Ngai asked. Yes I do” Gikuyu answered.

“Well then. All that land I give you. It is land flowing with milk and hone (Uki na ngorono). It belongs to you and to your descendants.”

But Ngai also told Gikuyu to worship him also facing Kirinyaga and occasionally offer sacrifices of fat rams under the Mugumo tree. Gikuyu and his wife, Mumbi lived together quite happily. They had nine daughters but no son. This worried Gikuyu so much as he didn‟t see how he could propagate his house. And he sacrificed to Ngai and made his fear known. But Ngai told him not to worry for he, Ngai would send him nine handsome young men who would marry Gikuyu‟s nine beautiful daughters.

And true to his word, Ngai sent him nine handsome young men who married Gikuyu‟s nine daughters.

They brought forth children and each daughter started her own clan.

These are:-

Acera (Njeri)

Agachiku (Wanjiku)

Airimu (Wairimu)

Ambui (Wambui)

Ethaga (Wagathigia)

Aithrandu (Waithera)

Angari (Wangari)

This myth explains the origin of the Agikuyu and how they came to have nine clans. It also explains the link between the clans and the common female names found in the tribe.

QUESTIONS

(i) Before telling this story to the audience, list down three things the narrator must do to capture the audience‟s attention. **(3marks)**

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……

(ii) “Do you see all this beautiful land sprawling before your eyes?” Ngai asked. (Line 7)

“Yes I do,” Gikuyu answered (Line 8)How would you perform the words of Ngai**?** **(2marks)**

……

……

……

(iii) Which intonation would you use for Gikuyu‟s words? Explain your answer. **(2marks)**

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(iv) At the end of the performance of this oral narrative, signs of inattentiveness were noticed from the audience List down three such signs. **(3marks)**

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(b) Underline stressed syllables in the following words:

Sedimentation

Noteworthy

Conflagration

(c) Identify the odd word out according to the pronunciation of the underlined sound. **(2marks)**

(i) Said Head Paid Red

……

(ii) Shepherd Philosophy Phase Surface

……

(d)(i) Grusha patiently waited for Simon Shashava to return from the war. Explain the meaning of the sentence when the following words are stressed: **(3marks)**

Grusha

The war

Simon

……

……

……

……

……

(ii) You have been called on to speak to the youth of your church on the dangers of drugs and substance abuse. Introduce yourself to the audience. **(2marks)**

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……

(iii) Assume that you are the principal of Excel High School where the Head of State makes a visit. Introduce John Rashid (a medical doctor) who is a member of the Board of Management to the Head of State. **(2marks)**

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(e) Mike has been sent to a neighbouring school to participate in a group discussion. Suggest ways that will make him benefit from the group discussion. **(8marks)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

ENGLISH

101/2

PAPER 2

(Comprehensive, Literary Appreciation and Grammar)

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 above.*

c) *Answer **all** the questions in this paper.*

d) *All your answers **must** be written in the **spaces provided** in the question paper.*

FOR EXAMINER'S USE ONLY

QUESTION	MAX SCORE	SCORE
1	20	
2	25	
3	20	
4	15	
TOTAL SCORE	80	

For Marking Schemes Contact 0746-222-000 / 0742-999-000

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

Certainly, national examinations are the most objective instrument for evaluating the quality of instructions learners get in a school over a given period of time. They help to determine, in the short term, how well schools have exposed learners to the prescribed curriculum.

An exam is a monitoring and evaluation tool of some sort; it helps the policy makers to determine how schools are implementing the curriculum.

There is, however, a big danger here. Over time, the public come to view examinations, tests, as indicators of how well schools are teaching. The better the results, the more the public believe that there is quality education a school is giving to its learners.

When society comes to idolize examinations and all that they can do- secure qualification for admission into competitive courses in universities or training- it makes the school and the teaching fraternity to narrow their perspective to nothing but examinations.

Some schools discard the professional integrity that has long defined the teaching profession over the years. Lest we have forgotten, education is the instrument by which the knowledge, skills and habits of the society is transmitted or transferred from generation to the next through teaching and research. Included in this is the knowledge, beliefs, art, law, morals, customs and other capabilities and habits mankind has acquired as a member of the society, to paraphrase a definition of culture by English anthropologist E.B. Tylor.

Pressed to produce excellent results, schools face the temptation of developing methods that can deliver those results with or without imparting the knowledge, skills and habits.

The core curriculum has been designed in such a way that it is sequentially covered within a period of eight years for primary and four years for secondary education. Build into the scope and sequential implementation of the curriculum are leading ideas of education psychologists on the nature of knowledge, how children learn, and how best they can learn the prescribed curriculum without stress.

The series of guidelines the Ministry of Education, Science and Technology has developed pre-scribing normal teaching and learning hours are informed by knowledge of educational psychology.

They seek to ensure that schools actually implement the curriculum as designed to allow children time to rest, to do their own reading after formal teaching hours during weekdays and over the weekends. The Kenya Institute of Curriculum Development (KICD) has sequenced the curriculum in such a way that students painstakingly build on previous concepts and ideas to reinforce their understandings and appreciation of the things they are learning.

This is the principle that underlies the ban against holiday tuition, and teaching outside official teaching hours including Saturday and Sundays. The Government wants quality curriculum delivery and control. It is not after getting sterling grades through hook or crook.

A highly valued method of imparting prescribed knowledge, skills and habits is through the development of and promotion of the use of effective learner- centred pedagogies, curriculum models/ resources and assessment mode to enhance learning in the cognitive, affective, physical and aesthetic domains.

(Adapted by Mwalimu Consultancy from Education News: April, 2014)

QUESTIONS

a) According to the writer, why is an exam important to policy makers? **(1 mark)**

……

……

b) What misconceptions does the public have towards examinations**?** **(2 marks)**

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c)In not more than 40 words. Write a summary on the effects of idolizing examinations by the society. **(3 mrks)**

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d) According to E.B. Tyloy, what is culture**?** **(2 marks)**

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e) According to the passage, what has influenced the designing and implementation of the curriculum? **(2 mrks)**

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f) Why has he Ministry of Education, Science and Technology come up with guidelines on normal teaching and learning hours. **(2 mrks)**

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g) "It is not after getting sterling grades through hook or crook'. What is the meaning of the underlined statement? **(1 mark)**

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h) The government wants quality curriculum delivery and control.

Change above statement to an interrogative sentence. **(1 mark)**

……

……

i) Provide a suitable title to the passage. **(1 mark)**

……

……

j) Give the meaning of the following words as used in the passage**.** **(5 marks)**

a) Prescribed

b) Implementing

c) ldolize

d) Anthropologist

e) Sequenced

Question 2: The Compulsory Set Text (25 Marks)

The door to the bathroom opened. Fiona emerged and started walking but stopped. Her eyes had not adjusted to the darkness in the living room. "Where are you?" she asked.

"Over here," he said. "I have taken a couch in the living room. Go take the bed in the bedroom."

"You're acting as if you might have a wife," she said. "Do you?"

"No, she divorced me last year." "Did she?"

"Yes."

"Let's see now. You studied in America at a marriageable age."

"So?"

"So let me guess." Go ahead.

"She is American."

"Who? Pamela?"

"That's her name? Pamela?"

"Yes, it is. And, yes, she is American. Enough about me now. Let's turn to you. Shouldn't your name still be Fiona McKenzie?"

"Who told you it might have changed?" She started walking to the bedroom. Her eyes had adjusted to the only light.

"Why was Liberian Mauler calling you Joy instead?"

"It's local slang for streetwalker?"

He was calling you a streetwalker?"

"Yes. Do you want me to draw a picture for you? Where are you from anyway? Mars?"

"No: Nigeria. Married?" "Me?"

The phone rang.

He rose and answered the landline by the couch. When he ended the call, his mood had darkened.

"What's the matter?" she asked him. You seem upset all of a sudden. Who was on the phone?"

"One Chineke Chiamaka," he said. The man was claiming that I chided him for being drunk, when all he had had was a Pepsi." He wriggled in his improvised bed to protest his innocence against that claim. "It beats me how he got my suite phone number in the first place," he added. "Anyway, I did not chide him. Why do people like to tell lies?"

QUESTIONS

1. What happens immediately before this excerpt? **(4mks)**

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2. Discuss two character traits of Abiola and one of Ms Fiona McKenzie as brought out in the excerpt. **(6mks)**

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3. Why do people like to tell lies? Rewrite in reported speech. **(1mk)**

……

4. The phone rang. Add a question tag. **(1mk)**

……

5. No, she divorced me last year. Rewrite in the passive voice. **(1mk)**

……

6. Discuss two themes raised in this excerpt. **(4mks)**

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7. Identify and illustrate any two aspects of styles used in this excerpt. **(4mks)**

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8. Explain the meaning of the following words as used in the excerpt. **(3mks)**

a. streetwalker

b. wriggled

c. chided

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

Poem for my sister (Liz Lochhead)

My little sister likes to try on my shoes,
to strut in them,
admire her spindle-thin twelve-year-old legs
In this season's styles.
She says they fit perfectly,
but wobbles
on their high heels, they're
hard to balance.

I like to watch my
little sister playing
hopscotch, admire the
neat hops-and skips
of her, their quick
peck.
Never miss their
mark, not over-
stepping the line.

She is competent at peever.
I try to warn my little sister
about unsuitable shoes
point out my own distorted feet, the
callouses, odd patches of hard skin.
I should not like to see her
in my shoes.

I wish she would stay
sure footed,
sensibly shod.

QUESTIONS

1. Why does the little sister try the persona's shoes? **(3mks)**

……

……

……

……

2. How do we know from the first stanza that the shoes don't fit? **(1mk)**

……

……

3. Why does the persona like watching her young sister play hopscotch? **(4mks)**

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4. In the third stanza, the persona gives us new reasons why her little sister should not wear her shoes. What are these reasons? **(2mks)**

……

……

……

5. What is the message of this poem? **(5mks)**

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6. Describe the tone of the poem. **(3mks)**

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……

……

7. Explain the meaning of the following lines: **(2mks)**

I should not like to see her

in my shoes

……

……

……

4. GRAMMAR **(15 marks)**

(a) **Rewrite each of the following sentences according to the instructions given after each**.

(3 mrks)

(i) We did not know that he was a thief. (Rewrite beginning: Little……)

……

……

(ii) My father would not allow us to go out at night under any circumstances.

(Begin: Under ……)

……

……

(iii) She does not like either of them. (**Rewrite** to end ……. by her)

……

(b) **Fill in the blank spaces with the correct preposition.** **(3 marks)**

(i) The doctor put me _____these drugs.

(ii) Wife beaters have scant regard _____ women.

(iii) During the match between the national team and the visiting team, the field was filled _____ capacity.

(c) **Use the correct form of the word in brackets to fill in the blank spaces.** **(3 marks)**

(i) Her _____ (deceive) cost her two million US dollars.

(ii) The minister was impressed by the _____ (keen) with which the students carried the experiment. (iii) The teacher punished the student for _____ (spell) the word.

(d**) Give two possible meanings for the following sentence.** **(2 marks)**

Flying planes can be dangerous.

……

……

……

……

(e) **Rewrite the following sentences in direct speech**. **(2 marks)**

(i) The girls exclaimed that Miss Kenya was a beautiful lady.

……

(ii) The teacher told Juma to go where she was.

……

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

(i) The girl _____ her clothes yesterday. (hung/hanged)

(ii) The Chef _____ the mats on the table before serving the food. (lay/laid)

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

ENGLISH

101/3

PAPER 3

(Creative Composition and Essays Based on Set Texts)

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDINDATES

a) *Answer three questions only*

b) *Question one and two are compulsory*

c) *In question three, choose only one of the optional texts you have prepared on.*

d) *Where a candidate presents work on more than one optional text, only the first to appear will be marked.*

e) *Each essay should not exceed 450 words.*

FOR EXAMINER'S USE ONLY.

QUESTION	TOTAL MARKS	CANDIDATE'S SCORE
1.Imaginative Composition	20	
2.The Compulsory Set Text	20	
3.The Optional Set Text	20	
TOTAL	60	

For Marking Schemes Contact 0746-222-000 / 0742-999-000

Answer three questions only.

1. Imaginative composition(compulsory)

Either

(a) Write a story beginning with: **(20 marks)**

"As he walked in through the door, I noticed he was not one of the usual customers…"

OR

(b) Write a composition explaining why students cheat in National Exams. **(20marks)**

2. The compulsory set text: **(20marks)**

THE SAMARITAN By J. LARA **(20 marks)**

Abuse of office is rampant among the officials of Maracas Municipality. Support this assertion with a close reference to **THE SAMARITAN.**

3. OPTIONAL SET BOOKS

either

a) Drama: PARLIAMENT OF OWLS **By Adipo Sidang**

Write an essay on oppression as brought out in Parliament of Owls.

Or

(b) Short story: *A Silent Song and Other Stories* by Godwin Siundu **(20 marks)**

People with admirable traits stand out. Basing your illustrations on Vrenika Pather's *Ninema*, write an essay to validate this assertion.

Or

(c) An Artist of the floating world by Kazuo Ishiguro.

Discuss the use of Noriko's marriage negotiation as a means to drive this novel's plot forward while revealing Ono's past.

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For Marking Schemes Contact 0746-222-000 / 0742-999-000

KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

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 jina lako na nambari yako katika nafasi ulizoachiwa hapo juu.*

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

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

d) *Kila insha isipungue maneno **400***

e) *Kila insha ina alama **20***

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

KWA MATUMIZI YA MTAHINI PEKEE

Swali	Upeo	Alama
1	20	
	20	
Jumla	40	

MASWALI

LAZIMA

1. Wewe ni rais wa muungano wa viranja jimboni mwako, umehudhuria semina ya viranja wakuu ulioandaliwa shuleni mwenu kujadili chngamoto zinazowakabili viranja kutekeleza wajibu wenu shuleni. Andika hotuba ambayo ungetoa kwa walimu wakuu kuhusu changmaoto hizo na mapendekezo yenu wakati wa kikao cha walimu wakuu jimboni.

2. Kenya ni mmoja wa inchi zinazowania kuwa mbele katika ulimwengu wa kisasa. Wewe ukiwa mzalendo fafanua vipingamizi au vijanzo vya ongezeko la bei ya bidhaa Nchini huku ukionyesha athari za ongezeko hili.

3. Mzigo wa mwenzio kanda la usufi.

4. Tunga kisa kinachoanza kwa maneneo yafuatayo:

5. Baada ya matokeo ya mtihani wa mwaka uliotangulia kutangazwa na katibu mkuu katika wizara ya elimu, iliniwia vigumu kusadiki ukweli wa mambo lakini nilielewa fika kuwa kuanguka mtihani siyo mwisho wa maisha…..

HUU NDIO UKURASA WA MWISHO KUPIGWA CHAPA

For Marking Schemes Contact 0746-222-000 / 0742-999-000

KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

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) *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* ***yote****.*

d) *Majibu yote yaandikwe katika nafasi ulizoachiwa katika kijitabu hiki cha maswali.*

e) *Usitoe ukurasa wowote kutoka kwenye kijitabu hiki.*

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. UFAHAMU

Soma kifungu kifuatacho kisha ujibu maswali yanayofuata.

Wakati wananchi katika kila pembe ya dunia waliadhimisha siku ya wapendanao maarufu kama Valentine Day, kwa mitindo mbalimbali, hali hiyo ilikuwa tofauti kwa baadhi ya wanaume nchini Kenya, baada ya kulalamika kuhusu kunyanyaswa na wake zao.

Kulingana na Mwenyekiti wa Chama cha Kutetea Haki za Wanaume nchini, idadi ya wanaume wanaopigwa na wake zao imeongezeka mno. Alisema juzi kuwa utafiti wa chama chake umeonyesha kuwa harakati za kumpa uwezo mwanamke zimeathiri maadili na kuwasababisha kuwadharau wanaume. Mwanaharakati huyo anadai kuwa tatizo hilo limechochewa zaidi na hali ya kuwa wanawake wengi sas wana kipato kikubwa kuliko waume zao.

Mwishoni mwa wiki Polisi walimtia mbaroni mwanamke mmoja mjini Nyeri mkoani kati, baada ya kumshambulia mumewe na kumjeruhi vibaya kwa panga. Mwanamume huyo bado anapata matibabu hospitalini. Yeye alirudi nyumbani kama amevaa miwani ndipo akakatwa katwa usoni na uchunguzi kuhusu tukio hilo bado unaendelea.

Inadaiwa kuwa zaidi ya wanaume 460,000 walinyanyaswa na wake zao mwaka jana na kwamba utafiti wa shirika la kuwatetea wanaume unaonyesha kesi nyingi za wanaume kuteswa na wake zao zinaripotiwa katika Mkoa wa kati.

Hata hivyo, baadhi ya wanaume katika eneo hilo wameunga mkono hatua ya wanawake kuwashambulia waume zao. Wanasema kuwa, wanapigwa kwa sababu wamekosa kuwajibika kwa familia zao. Wanadai kuwa *wanaume wengine hawajulikani nyumbani kwao.* Wake zao wanawajua makasisi ambao huja kuwaombea kuhusu matatizo ya nyumbani huku mbwana zao wakizama katika ulevi. Wanawake na wanaume wa Nyeri wametak serikali ikomeshe uuzaji na unywaji pombe haramu ambayo imechangia sana ugomvi wa kinyumbani.

<u>Maswali</u>

(a) Upe ufahamu huu anwani mwafaka. **(alama 1)**

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……

(b)Eleza sababu za wanaume kupigwa katika ndoa. **(alama 4)**

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(c) Mwandishi anamaanisha nini anaposema kuwa wanaume wengine hawajulikani nyumbani kwao.

(alama 2)

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……

(d) Fafanua majukumu ya makasisi katika jamii kwa mujibu wa kifungu hiki. **alama 2)**

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(e) Eleza mabadiliko katika asasi ya ndoa kwa mujibu wa kifungu hiki. **(alama 3)**

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……

(f) Eleza maana ya vifungu hivi kama vilivyotumika katika tungo. **(alama 3)**

(i) Mwanaharakati

……

……

(ii) Amevaa miwani

……

……

(iii) Waliadhimisha

……

……

……

2. MUHTASARI

Soma habari ifuatayo kisha ujibu maswali.

Baada ya kuchunguza kwa makini nimeshagundua kuwa wasanii maarufu huishi maisha ya kifalme. Jambo hili linadhihirika kweli ninapopiga darubini maisha yao. Mathalan,wanapoenda jamaa hawa, mashabiki hujitokeza kwa maelfu kuwalaki kuwashangilia na hata kuwatazama tu. Si ajabu kusikia sauti za watu wakisema, "Tunataka, jitokeze tafadhali tunakupenda."

Ikiwa hushangazwi na jinsi watu wengi wanajitokeza kuwashangilia wasanii, labda utaduwaa nikikwambia kuwa baadhi ya wasanii husafiri kwa magari ya bei ghali kama vile benzi na mengio.

Usishangae pia nikikwambia kuwa baadhi yao huruka kwa ndege zao wenyewe toka mahali pamoja hadi pengine. Kila waendako jamaa hawa aghalabu huwa wamezingirwa na mameneja wanaoendesha shughuli zao, mawakala wa vyombo vya bahari pamoja na walinzi. Ama ukiona maisha ya wasanii hao, utadhani kuwa unawaona wafalme au malkia wa nchi mbalimbali.

Ikiwa hujachoshwa na hayo, pulika nikueleze mengine; kama walivyo jamaa wa aila za kifalme, picha za wasanii maarufu au "walioukata", kama tusemavyo mitaani, wana kipato kizuri kama walivyosema waliotutangulia "Mtaka cha mvunguni sharti ainame", Jamaa hawa kipato kizuri kama wameshainama kweli na sasa wanafurahia jasho lao. Jamiiya leo hulipa wasanii maarufu pesa mzo mzo. Lakini heby nikwambie kuwa fedha wanazopapta jamaa hawa si za bure: huwa wamezifanyia kazi kweli.

Usidhani kuwa pesa wanazolipwa wasanii maarufu ni zao peke yao. Pesa hizo hulipwa kodi kubwa serikalini na kodi hiyo kutumika kuendeleza huduma muhimu kwa jamii. Kwa sababu hiyo sidhani kuwa tunapaswa kuwaonea kijicho watu na vipawa vyao.

Chochote king'aacho si dhahabu. Ingawa baadhi ya wasanii wana mapesa mengi yanayowawezesha kuishi maisha ya utukufu na anasa, tusifikiri kuwa wanaishi katika pepo. Baadhi yao huzongwa na mazonge mbalimbali kama vile kutokuwa na familia imara, kupatwa na upweke wa mara kwa mara au hata wakati mwingine kufilisika. Isitoshe baadhi ya wasanii maarufu hawawezi kutoka nje ya nyumba zao au kutembea mitaani kama wewe na mimi tufanyavyo. Ama wanaweza kudhuriwa au kuhangaishwa na mashabiki wao kwa kila njia kwa sababu hiyo wasanii wengi maarufu hawafurahii maisha kama watu wa kawaida. Ingawa wanalipwa vizuri, lakini malipo hayo yana bei yake.

a) "Wasanii huishi maisha ya kifalme" Eleza jinsi kauli hii inavyodhibitishwa na taarifa.

(maneno 60- 65).

Nakala Chafu

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Nakala safi

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b) “Chochote king’aacho si dhahabu“ Msemo huu umefafanuliwa vipi katika taarifa ?**Maneno 40-45**

(Alama 5)

Nakala Chafu

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Nakala Safi

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3. MATUMIZI YA LUGHA (ALAMA 40)

a) **Tumia msemo ufuatao katika sentensi.** **(alama 1)**

Fanya lele mama

……

……

b) Tunga sentensi kuonyesha tofauti ya vitate hivi. **(alama 2)**

i) Mjusi

……

……

ii) Mjuzi

……

……

c) Andika katika hali ya umoja . **(alama 2)**

i) Masaibu yaliyowapata yaliwafanya wapoteze matumaini maishani.

……

ii) Machaka ya waridi hayazai maua meusi.

……

d) Andika katika hali ya ukubwa. **(alama 2)**

Asiye na mwana aeleke jiwe

……

e) Tumia neno <u>mwitu</u> kama; **(alama 3)**

(i) Kivumishi

……

(ii) Kielezi

……

(iii) Nomino

……

f)**Changanua sentensi hii kwa kutumia jedwali.**

Wanafunzi wote wamewasili lakini wengi walichelewa sana. **(alama 4)**

……

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……

g) **Kwa kutoa mifano eleza sauti zifuatazo** **(alama 2)**

(i) Kipasuo – kwamizo

……

……

(ii) Kitambaza

……

……

h)**Eleza matumizi ya <u>KU</u> katika sentensi ifuatayo:** **(alama 2)**

Kusoma sana hakukumzuia kujiingiza kulikokuwa na wajinga.

……

……

……

……

i) **Kanusha** **(alama 2)**

Ungeipoteza kalamu yake, ungelazimishwa kuinunua nyingine.

……

……

j) **Andika kwa usemi halisi .** **(alama 2)**

Asha alimwita Halima na kumsihi waandamane kwenda kuogelea siku iliyofuata

……

……

……

k) **Bainisha nyakati na hali zilizotumiwa katika sentensi ifuatayo**. **(alama 4)**

"Mgeni wangu akija nitampokea kwa mikono miwili, ningekuwa na jimbi ningemchimjia"

Mwanaidi alimwambia Mzee Juma.

……

……

……

……

……

l) **Andika sentensi hii tena bila kutumia 'amba'** **(alama 2)**

Ng'ombe ambaye hupewa chakula kizuri ndiye ambaye hukamuliwa maziwa mengi.

……

……

m) **Andika kinyume cha maneno yaliyopigwa mstari** **(alama 2)**

Maina <u>aliushindika</u> mlango ili <u>avue</u> sidiria.

……

……

n) **Tambua yambwa-kitondo na yambwa-kipozi** . **(alama 2)**

Juma aliwachemshia wageni wake chai na kisha akawapelekea mezani.

……

……

……

o) **Huu ni ungonjwa gani?** **(alama 2)**

Kifaduro;

……

……

……

p) Kwa kutoa mifano onyesha tofauti kati ya Shadda na kiimbo. **(alama 2)**

……

……

……

q) Eleza matumizi mawili ya:

Ritifaa **(alama 2)**

……

……

……

r) **Eleza maana mbili za sentensi hii:**

Mzee huyu anaogopa magonjwa zaidi ya vijana. **(alama 2)**

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4. ISIMU JAMII

Eleza huku ukitoa mifano mwafaka sifa tano za sajili ya bungeni. ` **(alama 10)**

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HUU NDIO UKURASA WA MWISHO KUPIGWA CHAPA

For Marking Schemes Contact 0746-222-000 / 0742-999-000

KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

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, Tamthilia,,Hadithi Fupi na Ushairi.*

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

Kwa Matumizi ya Mtahini Pekee

Swali	Upeo	Alama
1	20	
	20	
	20	
	20	

SEHEMU A : USHAIRI

1. **Lazima**

Soma shairi lifuatalo kisha ujibu maswali.

Lipi la kutenda, kwa walimwengu, liwe jema?
Liwe ni kupenda, bila uchungu, na lawana,
Niwe kama punda, pasipo fungu, wala kima.

Lipi liso inda, kwa walimwengu, na lazima?
Liwe la kuonda, kukupa Mungu, lisokwama,
Laiti si winda, enyi nduzangu, lau kama.

Kipi cha kupanda, kwa walimwengu, cha salama?
Kiwe kama tunda, au furungu, la mtama,
Hata zao nyonda, siunge zangu, na kuvama.
Ni wapi pa kwenda, kwa walimwengu, pa huruma?
Niwe ni kupanda, daraja yangu, pasi vuma,
Pasiwe ba chonda, ajae kwangu, kwa dawama.

Upi wa kudanda, kwa walimwengu, pasi kwima?
Na kuvuta nyanda, ziso wezangu, 'pite wima,
Kwa kurandaranda, niwape dungu, wawe nyuma.

Lipi la kushinda, kwa walimwengu, kiwe chuma?
Bila ya kuponda, kwa kilimwengu, na hikima,
Ni lau wadunda, weshe mizungu, ni kizima.

Kipi kisovunda, kwa walimwengu, cha daima?
Pasi na kukonda, kwa malimwengu, yaso wema,
Angawa ni nunda, huja kiwingu, cha nakama.

MASWALI

(a) Taja hoja zozote **nne** ambazo mwandishi anazishughulikia katika shairi. **(alama 4)**

(b) Eleza sifa za kiarudhi katika ubeti wa pili. **(alama 6)**

(c) Andika ubeti wa nne kwa lugha ya nathari. **(alama 3)**

(d) Kwa nini mshairi anatumia maneno; "nduzangu" na "yaso" **(alama 2)**

(e) Kwa nini mwandishi anauliza swali katika mwanzo wa kila ubeti? **(alama 2)**

(f) Eleza maana ya maneno yanayofuata kama yanavyotumika katika shairi**:** **(alama 3)**

(i) Inda

(ii) Nyonda

(iii) Mizungu

SEHEMU B: RIWAYA

Clara Momanyi: *Nguu za Jadi.*

Jibu swali la 2 au 3

2. Soma dondoo lifuatalo kisha ujibu maswali yanayofuata

"...kiongozi si mwanasiasa pekee. Kila mmoja wetu ni kiongozi namna yake ya kipekee."

a) Weka maneno haya katika muktadha wake. **(alama 4)**

b) Eleza mbinu iliyotumika. **(alama 2)**

c) Eleza umuhimu wa mnenaji**.** **(alama 6)**

d) Tathmini ukweli wa maneno yaliyopigiwa mstari. **(alama 8)**

3. "Mwanamke ni mhusika mkuu katika kuibomoa jamii yake." Jadili. **(alama 20)**

SEHEMU C. TAMTHILIA

T. Arege: Bembea ya Maisha

Jibu swali la 4 au la 5

4. Bembea ya Maisha ni tamthilia inayohimiza mshikamano wa kijamii. Jadili. **(alama 20)**

Au

5. ***Soma dondoo hili na ujibu maswali.*** **(alama 20)**

"Mtu anaishi na wanawe ambao wiki nzima anawaona wakiwa usingizini; wamelala fofofo..
.Nyumba ni ya yaya."

i. Weka maneno haya kwenye muktadha wake. **(alama 4)**

ii. Fafanua maudhui yanayojitokeza kwenye dondoo. **(alama 2)**

iii. Fafanua manufaa saba ya mazingira ya dondoo hili. **(alama 14)**

SEHEMU YA D

Hadithi Fupi – Mapambazuko Ya Machweo Na Hadithi Nyingine – Dw Lutomia

Jibu swali la 6 au la 7

6. Huku ukitolea mifano mwafaka ,eleza jinsi amabavyo Haki Za Watoto/Vijana zimekiukwa katika hadithi ya mapambazuko ya machweo **(alama 20)**

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7. "...iwapo penzi hili litatia doa, basi nirudishie mfuko huu kama ishara ya kulitupa penzi langu kama)ongoo na mti wake...

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

b) Fafanua mbinu mbili ambazo zimetumika katika dondoo hili. **(alama 4)**

c) Eleza sifa sita za msemaji wa maneno haya. **(alama 6)**

d) EIeza umuhimu wa msemewa wa hadithi hii katika kujenga ploti. **(alama 6)**

SEHEMU YA E

Fasihi simulizi

8. ***Soma kifungu kifuatacho kisha ujibu maswali***

"Mwanangu, dunia haitaki papara. Ikiwa unataka kufanikiwa katika mustakabali wako kuwa mtoto mtiifu na mwongofu. Kumbuka kuwa asiyefunzwa na mamaye hufunzwa na ulimwengu…"

a) Tambua na ueleze kipera hiki cha fasihi **(alama 2)**

b) Eleza sifa tatu za kipera hiki. **(alama 3)**

c) Fafanua dhima tano za kipera hiki katika jamii. **(alama5)**

ii) Fanani anawezaje kuihusisha hadhira katika usimulizi wake? **(alama 4)**

iii) Eleza utaratibu unaofuatwa wakati wa kutega na kutegua vitendawili. **(alama 6)**

KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

AGRICULTURE

443/1

PAPER 1 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

- *Write your name and index number in the spaces provided above.*
- *The paper consists of **three** sections A , B and C.*
- *Answer all questions in section A and B in the spaces provided*
- *Answer **any two** questions from section C in the spaces provided*

FOR EXAMINER'S USE ONLY

ection	Question	Maximum score	Candidate's score
A	1–16	30	
B	17	20	
	18		
	19		
	20		
C	21-23	40	
	TOTAL	90	

SECTION A (30 marks)

1. Give two reasons why agriculture is looked as an artistic practice **(2marks)**

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2. Outline two disadvantages of communal land tenure system **(1mark)**

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3. Give three different types of soil water **(1 ½ marks)**

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4. Give two ways of utilization of napier grass as a forage crop **(1mark)**

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5. Give two signs of crop infestation by root nodes nematodes **(1mark)**

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……

6. Name two chemicals used in water treatment **(1mark)**

……

……

For Marking Schemes Contact 0746-222-000 / 0742-999-000

7. a) A farmer was advised to apply 210 kg of calcium of ammonium nitrate (CAN 21-0-0) per hectare. Calculate the amount of nitrogen required **(2 marks)**

b) Different between fertilizer grade and fertilizer ratio **(2marks)**

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8. Give four biotic factors that influence agriculture **(2marks)**

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9. a) Give reasons why land should be prepared early in readiness for planting **(2marks)**

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(b) State reasons for deep ploughing during land preparation **(2marks)**

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10. List two methods of land reclamation **(2marks)**

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11. A form four student planted maize for her KCSE agriculture project. She use a spacing of 75cmx25cm; her plot was 4 x3m.

(i) What does 75cm stand for in this statement **(1mark)**

(ii) Calculate the plant population showing your working **(3marks)**

12. Name two pests with piercing and sucking mouth parts **(1mark)**

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13. a) Explain the form changing the cycle in coffee growing **(1mark)**

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……

b) State two importance of tissue culture in crop production **(1mark)**

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14.Why are leguminous plants preferred for green manure? **(1mark)**

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15. i) What is opportunity cost **(1mark)**

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……

ii) A farmer has an option of growing either wheat or maize in her one hectare of land. Wheat gives a return of Kshs. 20, 000 while maize fetches Kshs. 35, 000 in the market. If the farmer chooses to grow wheat, what will be the opportunity cost? **(1mark)**

16. State three control measures of maize streak disease **(1.5marks)**

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SECTION B (20 MARKS)

17. The table below shows output of maize in response to increase in D.A.P fertilizers on one hectare of land.

ixed input land (in ha)	Variable input D.A.P in 30kg-bag	otal product maize yield in 90-kg bag	Average product (AP) maize in 90kg bag	Marginal product (M.P) in 90kg bag
1	0	2	-	-
1	1	5	-	-
1	2	14	-	-
1	3	21	-	-
1	4	26	-	-

a) Fill in the table for average product (A.P) and marginal products (M.P) **(5marks)**

18. The diagrams below illustrate irish potato seed preparation before planting. Study it carefully and answer the questions that follow.



a) Name the practice used in preparing the seed potato above before planting. **(1mark)**

……

b) Describe the procedure followed in preparing the seed potatoes for planting. **(3marks)**

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c) Give **one** reason for carrying out the practice named above. **(1mark)**

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19. The photograph below shows an irish potato plant attacked by a disease. Study it and answer the questions that follow.



a) Identify the disease represented by the photograph. **(1mark)**

……

b) Name the causative agent of the diseases. **(1mark)**

……

c) Give **one** other crop that can be attacked by the same disease. **(1mark)**

……

d) List **two** control measures of the disease. **(2marks)**

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20. The photographs below show common weeds C and D in pasture land. Study them carefully and answer the questions that follow.



C



D

a) Identify weeds C and D. **(2marks)**

C……**D**…….

b) Classify weed D according to plant morphology. **(1mark)**

……

……

c) State the major problem posed by each of the weeds above in pasture land. **(2marks)**

C

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D

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SECTION C (40MARKS)

Answer Any TWO questions in this section

21. (a) Explain **FIVE** cultural methods of pest control **(10marks)**

(b) Outline **FIVE** factors considered in timely planting of annual crops **(10marks)**

22. (a) Outline the process of land Adjudication **(5marks)**

(b) Discuss **five** reasons for carrying out minimum tillage. **(5 marks)**

(c) Explain **5** ways in which soil losses fertility. **(10 marks)**

23. (a) Describe **seven** field management practices in tomato production. **(7marks)**

b. Outline **five** factors that determine water requirements in an animal's body. **(5 marks)**

c. Describe the transplanting of tree seedlings. **(8 marks)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

AGRICULTURE

443/2

PAPER 2 (THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

- *Write your name and index number in the spaces provided above.*
- *The paper consists of **three** sections A, B and C.*
- *Answer all questions in section A and B in the spaces provided*
- *Answer **any two** questions from section C in the spaces provided*

FOR EXAMINER'S USE ONLY

Section	Question	Maximum score	Candidate's score
A	1–17	30	
B	18	20	
	19		
	20		
	21		
C	22-24	40	
	TOTAL	90	

SECTION A (30MARKS)

Answer all questions in this section

1. Give **two** reasons for docking in sheep production. **(1 mark)**

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2. Give **four** ideal qualities of a good calf pen **(2 marks)**

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3. Outline **four** characteristics of Romney marsh sheep breed **(2 marks)**

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4. (a) State **two** disadvantages of using metal frames in construction of farm buildings **(1 mark)**

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(b) Give **two** reasons for seasoning timber **(1 mark)**

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5. Outline **four** reasons for swarming of bees **(2 marks)**

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6. List **two** methods that can be used to preserve fish **(1 mark)**

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7. (a) What is a notifiable disease? **(1 mark)**

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(b) Name **four** examples of notifiable diseases in livestock. **(2 marks)**

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8. Name **two** major physical differences between Bactrian and Dromedary breeds of camel.**(1 mark)**

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9. State **two** characteristics of heavy poultry breeds. **(1 mark)**

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10. List **two** maintenance practices of a wood chisel. **(1 mark)**

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11. State **four** ways of controlling tsetse flies. **(2 marks)**

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12. State **four** characteristics of livestock roughage feedstuff. **(2 marks)**

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13. List **two** equipment used in handling cattle during agricultural exhibition. **(1 mark)**

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14. State the gestation period of the livestock animals given below

a) Rabbit **(½ mark)**

……..

b) Goat **(½ mark)**

……..

15. State **four** disadvantages of natural mating **(2 marks)**

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16. State **one** egg content added to it at the magnum during egg formation process. **(1 mark)**

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17. State **four** methods used to control cannibalism in a deep litter system **(2 marks)**

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18. (a) Give **three** uses of Biogas in the farm **(1 ½ marks)**

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(b) State **three** reasons why the use of wind power on the farm is limited. **(1 ½ marks)**

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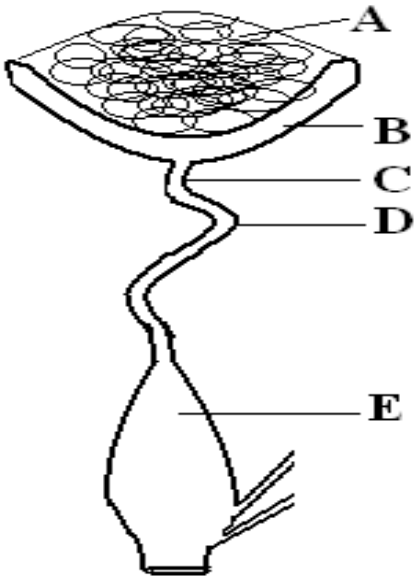
SECTION B (20 marks)

Answer ALL questions in this section.

19. Study the diagram below and answer the questions that follow.



(i) Name the parts labelled A, B, C, D and E in the diagram. **(2½ marks)**

A……...

B……...

C……...

D……...

E……

(ii) State the function of each part. **(2½ marks)**

A

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B

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C

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D

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E

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20. Give two reasons why a jersey breed cattle is adapted to arid and semi arid areas. **(2marks)**

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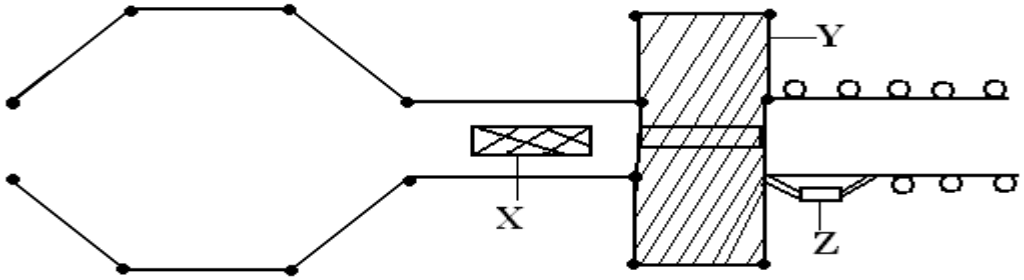
21. The diagram below represents an aerial view of a farm structure. Study it carefully and answer the questions that follow.



a) Identify the structure. **(1 mark)**

……

b) Name the parts labeled X, Y and Z. **(3 marks)**

X……...

Y……..

.Z……

c) List two roles of the part labeled Y. **(2 marks)**

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22. Give two reasons for carrying out hoof trimming. **(1 mark)**

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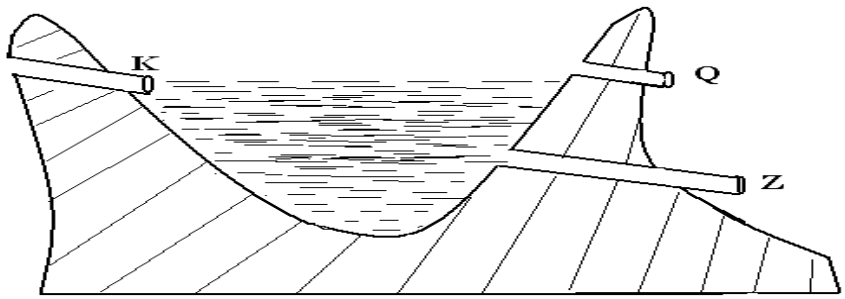
23. The illustration below is a farm structure.



a) Identify the structure. **(1 mark)**

……

b) Name the parts labeled K, Q and Z. **(3 marks)**

K……...

Q……..…

Z……

c) Give four maintenance practices carried out on the above structure. **(2 marks)**

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SECTION C

Answer only two questions from this section.

24. (a) Describe the control measures of cannibalism in layers. **(10 marks)**

(b) State **five** maintenance practices of a mould board plough. **(5 marks)**

(c) State the advantages of a four stroke engine. **5 marks)**

25. (a) Describe **six** effects of parasite on livestock **(6 marks)**

(b) Explain **five** reasons for maintaining farm tools and equipment **(5 marks)**

(c) Discuss the management of layers in a deep litter system **(9 marks)**

26. (a) Explain the practices observed in clean milk production **(8 marks)**

(b) Explain the importance of fences in a farm **(12 marks)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

BUSINESS STUDIES

565/1

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS

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

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

c) *Answer all the questions.*

d) *All answers should be written in the spaces provided in this booklet.*

e) ***Candidates should answer all the questions in English.***

For Examiner's Use Only

Question	1	2	3	4	5	6	7	8	9	10	11	12	13
Marks													

Question	14	15	16	17	18	19	20	21	22	23	24	25
marks												

Total marks

For Marking Schemes Contact 0746-222-000 / 0742-999-000

1. Identify the rewards of the following factors of production. **(4Marks)**

Factor	**Reward**
(a) Limestone	……..
(b) Teacher	……..
(c) Exchange of goods	……..
(d) Landlords	……..

2. Outline **four** circumstances under which a firm would be located near the market for its p product.

(4 Marks)

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3. State **four** unethical practices that traders should avoid in product promotion. **(4Marks)**

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4. Nundu and Thuku bought a building for Kshs 12,000,000. The building was insured for 8,000,000 against the risk of fire. Later the building was partially destroyed by fire to a tune of Kshs 6,000,000.

(a) State the amount of compensation likely to be paid by the insurance company. **(3Marks)**

(b) Give a reason for your answer. **(1Mark)**

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5. Outline **three** reasons why a seller may prefer cash with order (C.W.O) Policy in his operation.

(3Marks)

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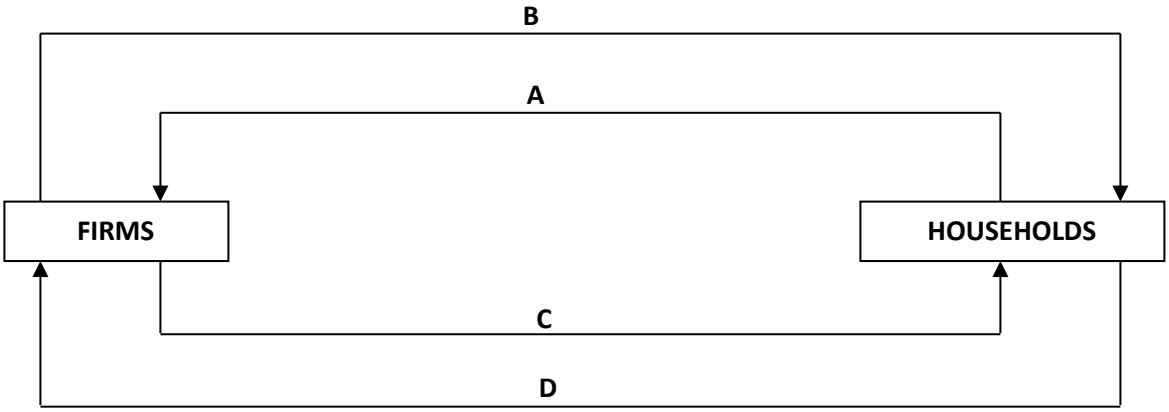
6. Study the diagram below and answer questions that follow.



(i) What does this diagram represent? **(1Mark)**

……

(iii) Identify what letters A,B,C and D represent.

A…….. (1Mark)

B…….. (1Mark)

C…… (1Mark)

D……. (1Mrk)

7. The final capital for Mundu's business for the year ended 30th June 2022 was Kshs90, 000. During the trading period he made a loss of Kshs5000 and the additional investment of Kshs46, 000 and drawings of Kshs5, 100. Calculate the initial capital. **(4Marks)**

8. The per capita income in a country X was £350 in January 2020. At the end of the year the per capita income had increased to £420. State **four** reasons why the standards of living of the people in the country X may not have risen during the year. **(4Marks)**

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9. Highlight **four** reasons why motorbikes have replaced bicycles as the choice for transport.(**4mks**

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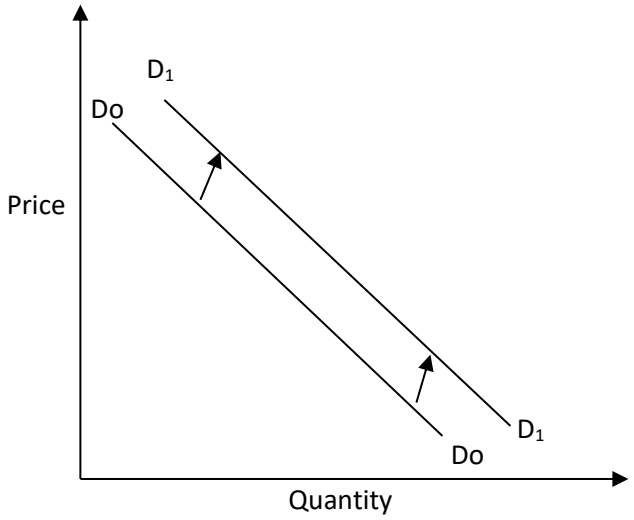
10. The diagram below shows a demand curve DoDo and D_ID_I. Highlight **four** factors to account for the above shift. **(4Marks)**



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11. A business opportunity exists where there is a gap to be filled in the market. State **four** situations that may create a gap. **(4Marks)**

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12. State **four** factors that may limit an individual's ability to satisfy his basic human wants.**(4mks)**

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13. The following details relate to Kango Traders as at 31. 12. 22

	Shs.
Sales	300,000
Stock (1/1/23)	45,000
Stock (31/12/23)	35,000
General expenses	25,000
Capital	400,000
Margin	25%

Calculate;

(a) Purchases **(2Marks)**

(b) Net profit **(1Mark)**

(c) Rate of turnover **(1Mark)**

(d) Rate of return on capital **(1Mark)**

14. State **three** reasons why people hold money. **(3Marks)**

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15. Name **four** features that distinguish economic growth from economic development. **(4Marks)**

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16. Outline **four** circumstances under which partnership may be dissolved. **(4Marks)**

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17. As a banker to the government state **four** services that the central Bank renders to the government. **(4Marks)**

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18. The following transaction relate to Mawo traders. Indicate the accounts to be debited and credited **(4Marks)**

Transactions	Account to be debited	Account to be credited
(a) Withdraw cash from the bank for office use.		
(b) Bought goods on credit		
(c) Took shs 500,000 from the cash till to pay his son's dowry		
(d) Converted his lorry into business motor vehicle.		

19. Highlight **four** circumstances under which a manufacturer would not require substantial warehousing. **(4Marks)**

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20. State **four** uses of an invoice to a seller of goods. **(4 Marks)**

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21. Outline **four** errors which do not affect the agreement of a trial balance. **(4 Marks)**

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22. Match the accounts below with the appropriate types of ledger where they are kept. **(4 Marks)**

(a) Returns inwards ……

(b) Drawings ……..

(c) Bank …….

(d) Discount received ……

23. Enter the following transactions is the two-column cash book of Katundu traders given below.

(4Marks)

2021

Feb 10 - Paid a creditor Shs.7, 500 by cheque

20 - Received Shs.5, 000 in cash from Muthiani a debtor

25 - Deposited Shs.12, 500 into a bank

28 - Paid wages Shs.2, 400 in cash

24. Mula and Museba have each taken life assurance cover. State **four** reasons why Mula is to pay higher premiums than Museba. **(4 Marks)**

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25. State **four** limitations of using mobile phone in communication. **(4Marks)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

BUSINESS STUDIES

565/2

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

a) *Write your name and 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		

QUESTIONS

1. a) Explain **five** benefits of division of labour to an organization. **(10 mks)**

b) With the aid of a diagram, explain the effect of an increase in the supply of a commodity while its demand remains constant. **(10mks)**

2 a) Explain **five** ways in which central bank of Kenya may control the supply of money in the country **(10mks)**

b) Explain **five** characteristics of property insurance. **(10mks)**

3 a) Highlight any **five** merits of direct tax. **(10mks)**

b) Explain the differences between a public company and a public corporation **(10mks)**

4 a) Explain **five** features of oligopoly. **(10mks)**

b) Kenya is experiencing a general increase in prices of commodities. Explain any **five** causes of this trend. **(10mks)**

5 a) On July 2022, Ufanisi Traders had cash in hand sh 3,500 and cash at bank shs. 140,000. The following transactions took place during the month

July 2: Cash sales sh 42, 000 was paid direct into the bank.

July 3: Received a cheque of sh 15000 from Kariuki in full settlement of his debt.

July 8: Bought goods by cheque sh 26000.

July 13; Paid Wanjiku by cheque sh 24000 after deducting 5% cash discount.

July 17; Withdrew sh. 40,000 from bank for office use.

July 22; Bought office furniture by cheque sh. 50,000

July 27; Received a cheque for sh 9000 from Waweru after deducting a 5% cash discount.

July 30; Banked all the money except sh. 7000Required:

Prepare a Three-Colum cash book and balance it off. **(10mks)**

b) Explain **five** factors that would influence the choice of office layout to be adopted by a firm.**(10mk**

For Marking Schemes Contact 0746-222-000 / 0742-999-000

6 a) The following information related to Rashid Traders for the year ended 31st May 2019. **(10mks)**

	Shs.
Purchases	150,000
Opening stock	40,000
Closing stock	10,000
Margin	40%
Total expenses	5,000
Capital	100,000

Calculate:

a) The mark-up **(1mk)**

b) Cost of goods sold **(2mks)**

c) Gross profit **(2mks)**

d) Sales **(2mks)**

e) Net profit **(1mk)**

f) Rate of return on capital **(2mks)**

b) Explain five challenges facing the transport industry in Kenya today **(10mks)**

KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

BIOLOGY

231/1

PAPER 1

(THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

Instructions to candidates

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

b) *Append your signature and write the date of examination in the spaces provided above.*

c) *Spelling errors especially of* ***biological*** *terms shall be penalized*

d) *Answer* ***ALL*** *questions in the spaces provided.*

e) *Candidates should answer the questions in English*

f) Candidates should check the question paper to ascertain that all the pages are printed and no questions are missing

FOR EXAMINERS USE ONLY

QUESTIONS	MAXIMUM SCORE	CANDIDIATES SCORE
1 -29	80	

For Marking Schemes Contact 0746-222-000 / 0742-999-000

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

1. Name the branch of biology that involves the study of

(a) Organisms for the sake of classifying them **(1mark)**

……

(b) Microscopic organisms **(1mark)**

……

2. What is the role of Seechi disk in experimental biology? **(1mark)**

……

……

3. What role does the blood play in the following in human body;

a) Nutrition **(1mark)**

……

……

b) Thermoregulation **(1mark)**

……

……

c) Development and coordination **(1mark)**

……

……

4. You have set up your light microscope for use to observe epidermal cells. However, upon looking through the eyepiece lens, you are not able to see the field of view. Suggest three possible adjustments you can make the microscope to rectify the case **(3 marks)**

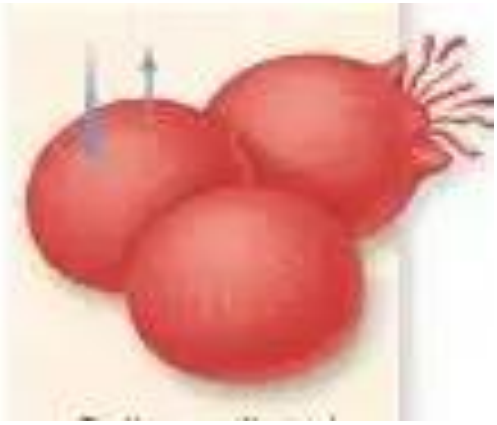
……

……

……

……

5. Below is red blood cell appearance after treatment in a given solution



a) Account for the appearance of the red blood cell **(3marks)**

……

……

……

……

b) Even with the damage to the sympathetic and vague nerves, the heart beat continues.
Explain this observation **(1mark)**

……

……

6. a) Define apical dominance **(1mark)**

……

……

b)Abscisic acid is known to promote leaf fall through formation of the abscission layer.
Give two beneficial advantages of leaf fall to plants. **(2 marks)**

……

……

7. Despite the best efforts to make and use the most effective pesticides, bedbugs have not been eradicated from most homes. Give an explanation for this observation **(2 marks)**

……

……

……

8. Explain how the structure of the blood vessels entering and leaving the glomerulus contribute to presence of glucose in the Bowman's capsule **(2 marks)**

……

……

……

……

9. Some entomophilies flowers do not have brightly coloured petals but they still attract insects. Give two reasons **(2 marks)**

……

……

……

……

10. Give two differences between a human male gamete and male gamete from an angiosperm.**(2 mks**

……

……

……

……

11. During hyper glymercemia, what is the effect of insulin on the muscles: **(1 marks)**

……

……

12. a) For what purpose in experiment al biology do we use Biuret's reagent **(1mark)**

……

……

b)Give the interpretation of the test/procedure you have identified above. **(2 marks)**

……

……

……

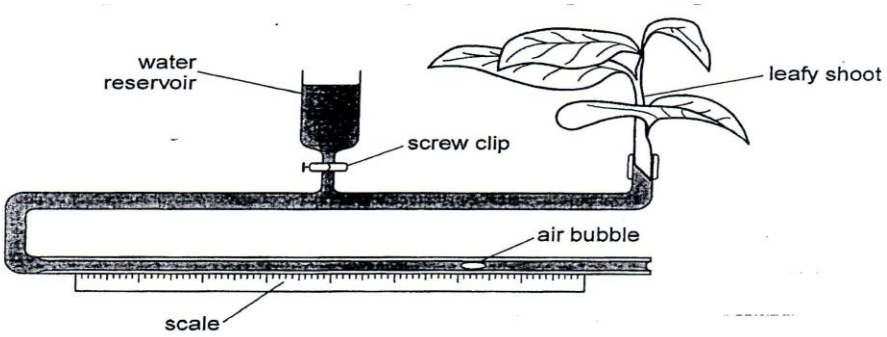
13. Poor support system s in plants affects vital process in plants. Highlight two ways in which a leaf achieves support **(2 marks)**

……

……

……

14. Below is a setup that was used to investigate a certain process in plants



a) What was the aim of the experiment **(1mark)**

……

……

b) What is the limitation of this apparatus in investigating the aim you have stated above. **(1mark)**

……

……

c) What is the role of the water reservoir? **(1mark)**

……

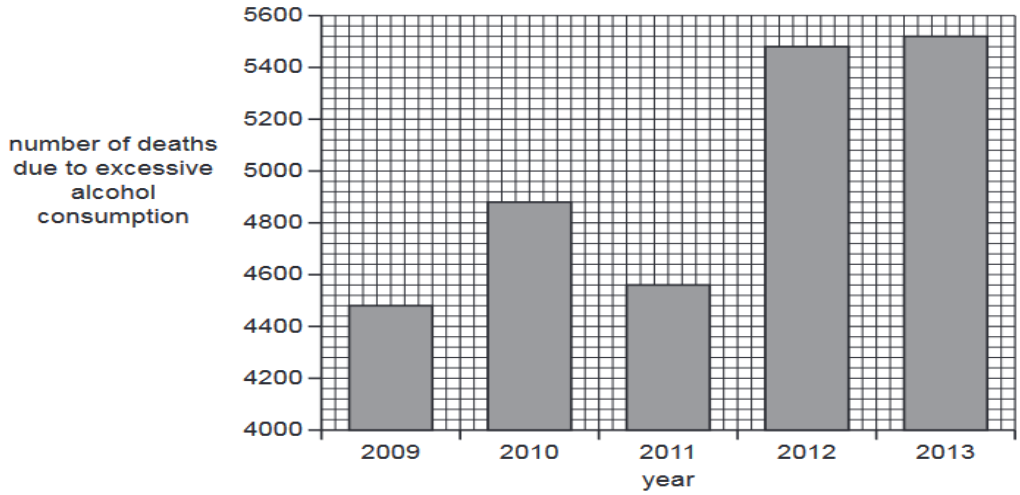
……

d) Suggest a control experiment for the setup above? **(1mark)**

……

……

15. The figure below shows the number of deaths in one county that were due to excessive alcohol consumption.



a) Briefly discuss the results Use the data to support your answer **(1 mark)**

……

……

b) Describe two short-term effects of excessive alcohol consumption on the nervous system**(2 mks)**

……

……

……

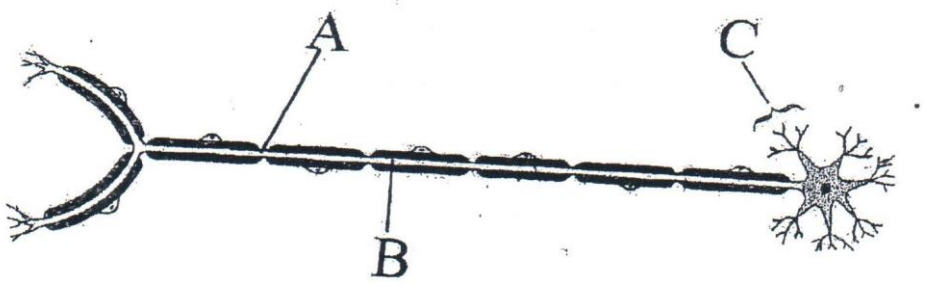
……

c) State the name of one organ damaged by long-term excessive alcohol consumption **(1 mark)**

……

……

16. Study the diagram below representing a neurone and answer the questions that follow



a) Give function of A **(1 mark)**

……

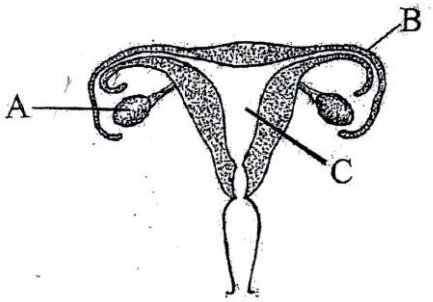
b) Place an arrow on the diagram to show the direction of the impulse **(1mark)**

a) On the diagram indicate with X a point at which there will be secretion of a neurotransmitter. **(1mark)**

b) What is the role of neurone above **(1mark)**

……

17. The diagram below represents a female reproductive system



a) Identify the part affected by both pituitary hormones regulating the menstrual cycle **(1mark)**

……

b) Label with Letter M , the part of the diagram most sensitive to oxytocin **(1mark)**

c) Suggest why implantation on part B must be terminated **(1mark)**

……

……

d) Highlight two functions of the female reproductive system **(2 marks)**

……

……

……

18. The flow diagram below represents the process of photosynthesis. Study the diagram and answer the questions that follow.

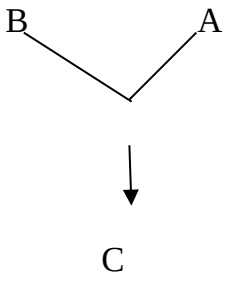
Sunlight

↓

H_2O

↙↘

Oxygen



a) Name the substances labelled A,B C **(3 marks)**

……

……

……

b) Write an equation to show the process illustrated above. **(1 mark)**

……

……

19. Give two differences between respiration and gaseous exchange **(2 marks)**

……

……

……

20. Your class is to embark on a practical lesson to study the digestive system of a rabbit.

a) Name any three instruments you are likely to use during the dissection **(3 marks)**

……

……

……

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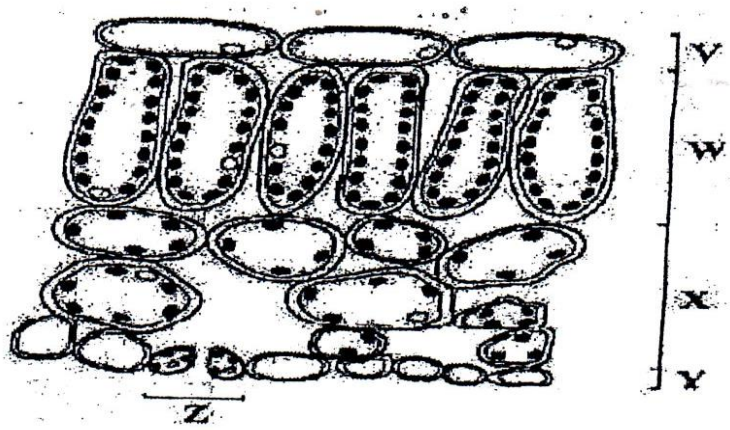
b) Give two factors determining energy requirements in man **(2marks)**

……

……

21. Below is a leaf cross section



a) Name one tissue type found at both points V and Y **(1mark)**

……

……

b) Give two adaptations of cells at point Z **(2marks)**

……

……

……

22. The table below contains information about various components of mammalian circulatory system.

	Blood in aorta	Tissue Fluid	Lymph	lood in Vena Cava
Red blood Cells	Many		None	Many
White blood cells	Many	Some	Some	Many
Glucose Concentration	High	High		High
Pressure	High	Low	Low	Low

a) Complete the unfilled boxes in the table with the most appropriate word**.** **(2 marks)**

b) Explain the difference in glucose concentration in the tissue fluid and **lymph** **(2 marks)**

……

……

……

23. Mr. Kamau sues Neema Hospital for exchanging his son 15 years ago. Mr. Kamau's son is colour blind while both the parents have normal colour vision. According to Mr. Kamau this means the son must have been exchanged at birth. Explain why Mr. Kamau may lose the case **(2 marks)**

……

……

……

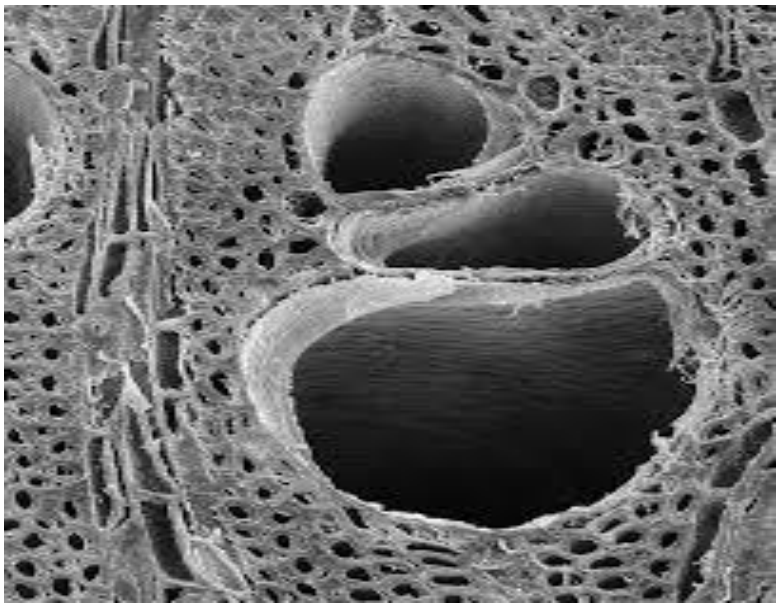
24. State two ways in which bryophytes are of ecological significance in an ecosystem **(2 marks)**

……

……

……

25. The diagram below is a scanning electron micrograph of some xylem vessels



Give two adaptations visible in the picture that adapts the tissue to its function **(4 marks)**

……

……

……

……

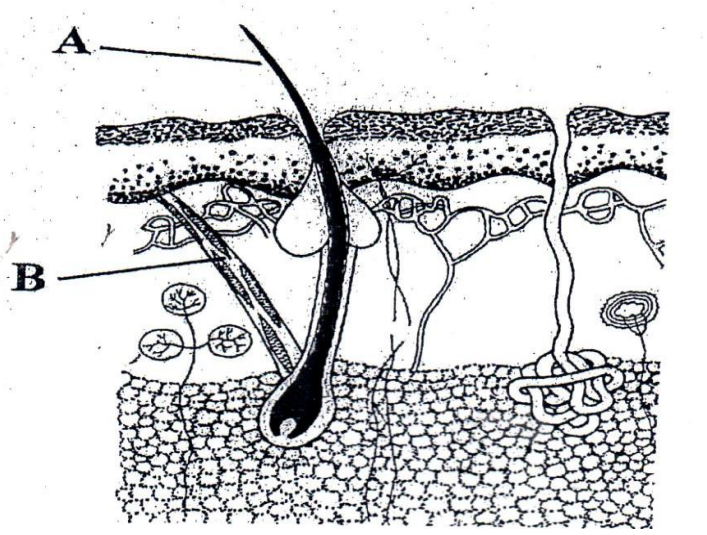
26. Distinguish between chemical evolution and organic evolution theories **(2 marks)**

……

……

……

27. Below is representation of one of the organs of the mammalian body



a) Name the part labelled B **(1mark)**

……

b) The opening through which structure A emanates provides a possible path way for bacteria to get into a mammalian body. How is this possible risk minimized in the organ above **(1 mark)**

……

……

c) John, a class five pupil wondered why a hot day his puppy appeared "smaller" than on a cold day. What could be the reason for this? **(2 marks)**

……

……

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

BIOLOGY

231/12

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.*

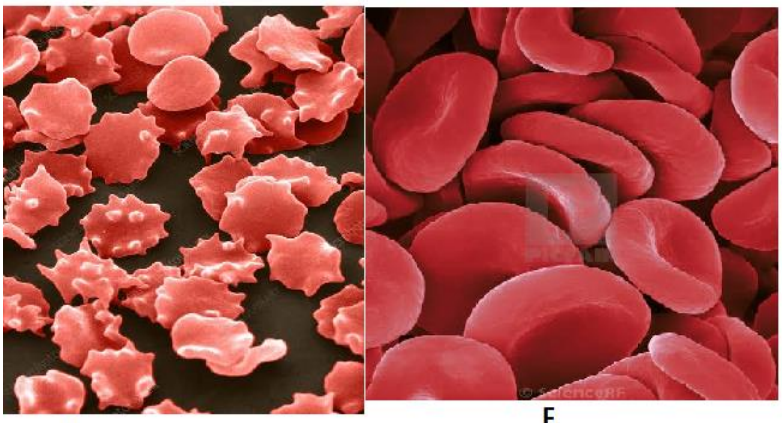
FOR EXAMINERS' USE ONLY

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

SECTION A (40 MARKS)

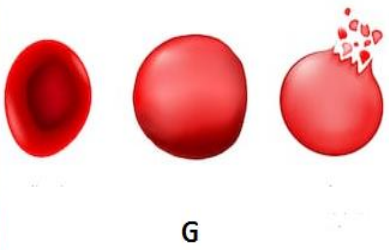
Answer ALL the questions in this section in the spaces provided.

1. The photograph below shows red blood cells that have been put in different solutions. Examine them and answer the questions that follow.



E

F



G

a) i)Identify the type of solution in which F was placed. **(1mark)**

……

ii) State the process which the red blood cells underwent in illustration G. **(1mark)**

……

b) Account for the appearance the red blood cells underwent in illustration E. **(3marks)**

……

……

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……

……

c) Explain what would happen if plant cells are placed in the solution in which the cells in G were immersed. **(3marks)**

……

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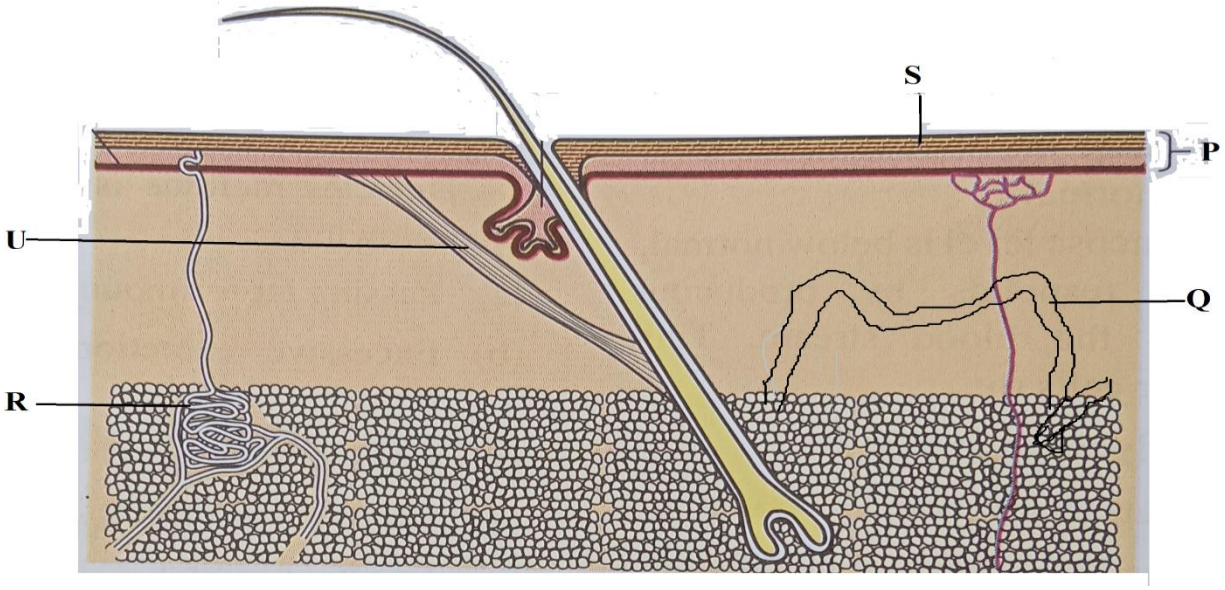
2. The diagram below represents a vertical section through a mammalian skin.



(a). Name the structures labelled P,Q,R and U **(4 marks)**

P ……

Q ……

R ……

U ……

(b) What is the function of S and T **(2marks)**

S

……

……

T

……

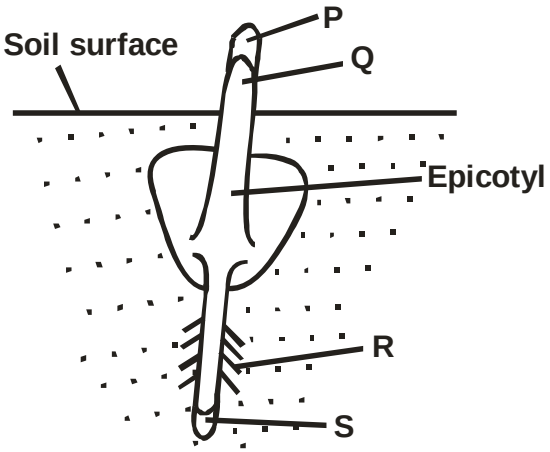
……

(c) State the physiological changes that would occur in the following structures if the environmental temperature was raised gradually from 22℃ to 40℃ **(2 marks)**

R ……

Q……

3. Diagram below represents a germinating seedling.



a) What is germination? **(1 mark)**

……

……

b) Name the part labelled P, Q and R. **(3 marks)**

P ……

Q ……

R ……

c) Identify the type of germination shown in the diagram. **(1 mark)**

……

What is the role of the following in germination of the above seedling?

i) Oxygen **(1 mark)**

……

……

ii) Enzymes **(1 mark)**

……

……

iii) Water **(1 mark)**

……

……

4. The table below gives information about an aquarium which is ecologically balanced.

Type of organism	Dry weight
Insect	500gms
Fishes	1200gms
Water plants	5000gms
Bacteria	10gms

a) What do you understand by the term ecological balance? **(1 mark)**

……

……

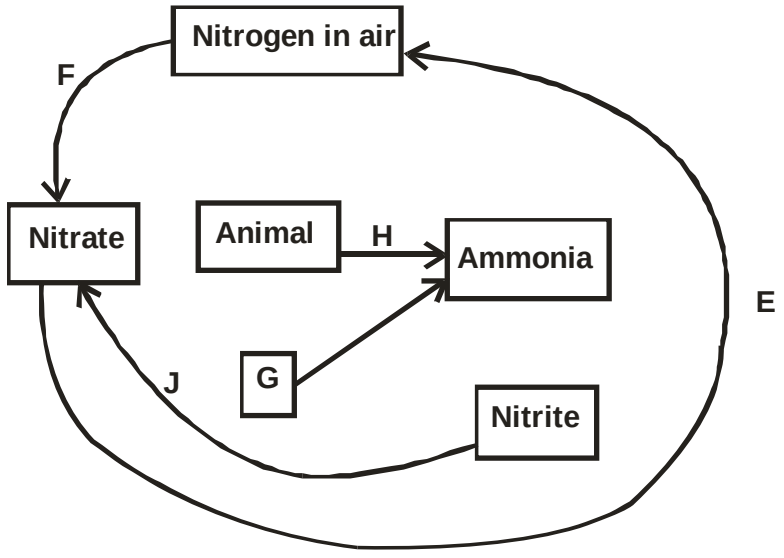
b) Calculate the total biomass of the aquarium. (Answer in kgs) **(3 marks)**

c) Which organism in the table is:

i) Primary producer. ..... (1 mark)

ii) Secondary consumer. ..... (1 mark)

d) The diagram below represents a simple nitrogen cycle.



i) Name the organisms that cause processes E and J. **(2 marks)**

E .....

J .....

5. When the offspring of purple and white flowered pea plants were crossed, they produced purple and white flowered plants in the ratio of 3: 1

Using letter H to represent the gene for purple colour

(a) State the genotype of:

(i) Parents **(2 marks)**

.....

.....

.....

(ii) F_1 Generation **(1 mark)**

.....

.....

(b) Work out the cross between plants in the F_1 generation **(4 marks)**

(c) Account for the colour the flowers in plants of the F_1 generation **(1mark)**

.....

.....

SECTION B

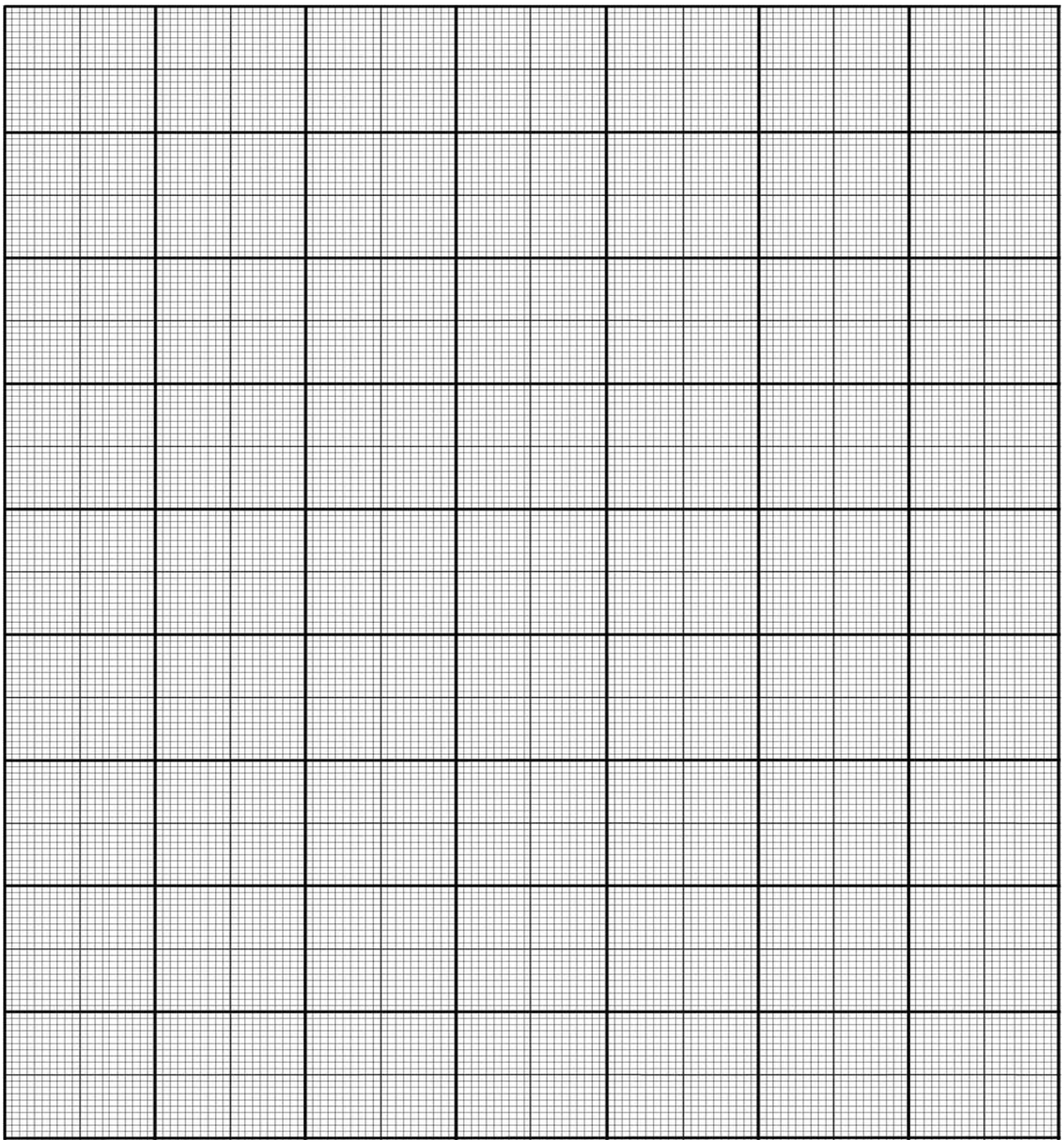
6. The data below represents levels of progesterone hormone produced in a female's body within a period of 34 days. Study the data and use it to answer the questions that follow

NB: The days were counted from the 1st day that menstruation was noticed.

Day	Progesterone hormone concentration in arbitrary units
1	6
2	5
3	3
4	2
5	1
6	1
8	1
10	2
12	4
14	7
16	8
20	9
22	10
24	10
26	10
28	10
30	11
32	11
34	11

For Marking Schemes Contact 0746-222-000 / 0742-999-000

(a) Plot a graph of progesterone concentration against time using a suitable scale. **(6marks)**



(b) Account for the progesterone levels in the blood between

i) Day 1- day 5 **(2marks)**

……

……

……

……

ii) Day 14 – day 20 **(2marks)**

……

……

……

iii) Day 28 – day 35 **(2marks)**

……

……

……

(c) Name two structures that produce progesterone in females . **(3marks)**

……

……

……

(d) Suggest the process that usually takes place at day 14. **(1mark)**

……

(e) Suggest two other hormones that were in high concentration in the body of the female between day 10 – 15 . Give reasons for your answer. **(4marks)**

……

……

……

……

……

7. Describe the

(i) Process of inhalation in mammals **(10 marks)**

(ii) Mechanism of opening and closing of stomata **(10 marks)**

8. How is the human eye adapted to its functions **(20 marks)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

BIOLOGY

231/3

PAPER 3

(PRACTICAL)

TIME: 1¾ HOURS

SCHOOL…… SIGN……

Kenya Certificate of Secondary Education.

CONFIDENTIAL

All students to be provided with the following

- Distilled water labeled solution P (50mls)
- Concentrated salt solution (20%) labeled solution Q (50mls)
- Onion bulb –one per student labeled K
- Scapel
- Petridish – Labelled R
- Ruler 30cm

KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

BIOLOGY

231/3

PAPER 3

(PRACTICAL)

TIME: 1¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

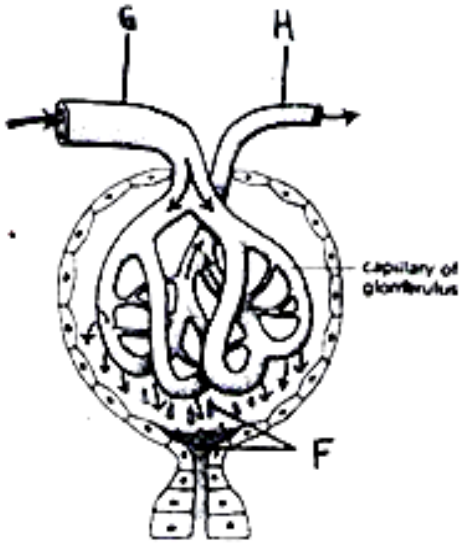
1. *Write your name, class and admission number in the spaces provided above.*
2. *Sign and write the date of the examination in the spaces provided.*
3. *Answer all questions in the spaces provided.*
4. *You are required to spend the first 15 minutes of the 1 ¾ hours allowed for this paper reading the whole paper carefully before commencing your work.*
5. *Additional pages must not be inserted.*
6. *Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing*

FOR EXAMINERS USE ONLY

Section	Maximum Marks	Candidate Score
1	13	
2	16	
3	11	
TOTAL SCORE	**40**	

For Marking Schemes Contact 0746-222-000 / 0742-999-000

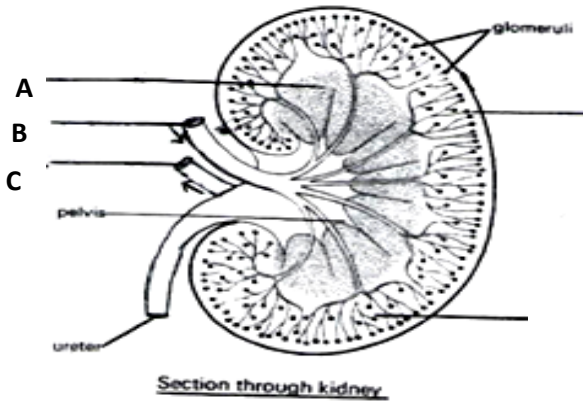
1. The diagram below shows structures which occur in a mammalian kidney. Study the figure carefully and answer the questions that follow.



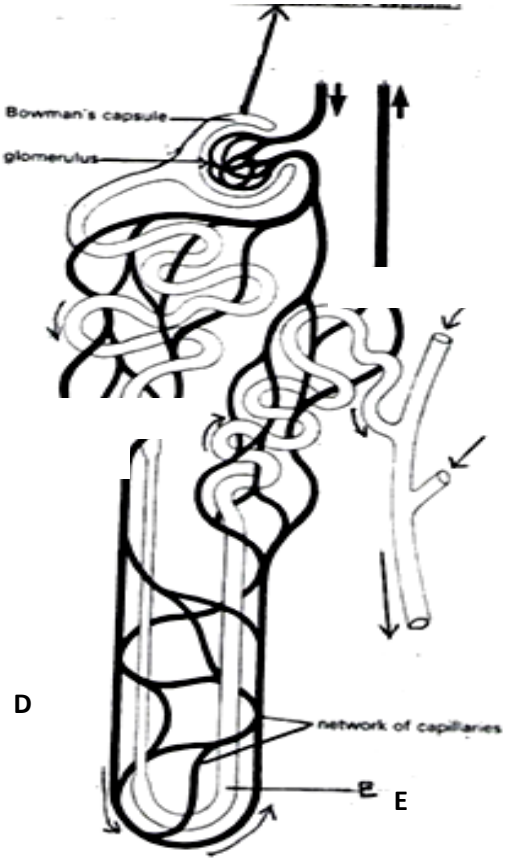
Detail of bowman's capsule

Capillary of glomerulus

Glomerulus



Section through kidney



Network of capsule

Simplified diagram of a kidney tubule

i) Name the parts marked **(2 marks)**

A.....

D.....

ii) Identify the blood vessels labeled: **(4 marks)**

B.....

C.....

G.....

H.....

b) i) Name the filtrate labeled F **(1 mark)**

.....

ii) Briefly explain how the filtrate named in (b) (i) above is formed **(3 marks)**

.....

.....

.....

.....

.....

c) Explain the difference in structure E in a desert and a fresh water animal. **(2 marks)**

.....

.....

.....

d) Name the hormone which regulates reabsorption of sodium ions in the kidney tubules. **(1 mark)**

.....

2. The diagrams below represent leaves of certain plants



(a) Use the above specimen to complete the dichotomous key below **(2marks)**

1. (a) Leaf simple…..... go to 2

(b) Leaf compound…..... go to 4

2. (a) leaf with parallel veins…..... wandering jew

(b) Leaf with net veins…..... go to 3

3. (a) leaf with smooth margin…..... Devils horse whip

(b) Leaf with ……..... Tick berry

4. (a) Leaf trifoliate…..... go to 5

(b) Leaf with more than three leaflets…..... go to 6

5. (a) Leaf with sharp tips…..... Bean

(b) Leaf with rounded tips…..... Oxalis

6. (a) Leaf pinnate…..... .Cassia

(b)Leaf …..... Accacia

(b) Use the dichotomous key above to fill the table below **(14marks)**

Specimen	**Steps**	**Identity**

3. You are provided with a specimen labeled K and solution labeled P and Q. Cut the specimen into two halves.

(a) (i) Name the type of reproduction exhibited by specimen K **(1mark)**

……

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

……

……

Using specimen K, remove some of the inner leaves. Cut the leaves along their lengths into nine strips equal length. Each strip should be about 2mm wide. Place three strips into the solution labeled P, place another three strips into the solution labeled Q and leave the last three strips in a petri dish labeled R. Allow the experiment setup to stand for 10 minutes.

(b) Use your fingers to feel the texture of the strips. Record your observations **(2marks)**

i) Strips in solution P

……

ii) Strips in solution Q

……

(c) Account for the texture of the strips in the solution Q **(4marks)**

……

……

……

……

……

(d) Suggest the concentration of solution P in relation to the cell sap in the strips of the specimen. Give a reason for your answer **(1mark)**

……

……

(e) State the aim of the setup R **(1mark)**

……

KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

CHEMISTRY

233/1

PAPER 1

(THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

Instructions To Candidates

a) Write your name and index number in the spaces provided

b) Sign and write the date of examination in the spaces provided

c) Answer ALL questions in the spaces provided

d) Mathematical table and electronic calculators may be used.

e) ALL working MUST be shown clearly where necessary

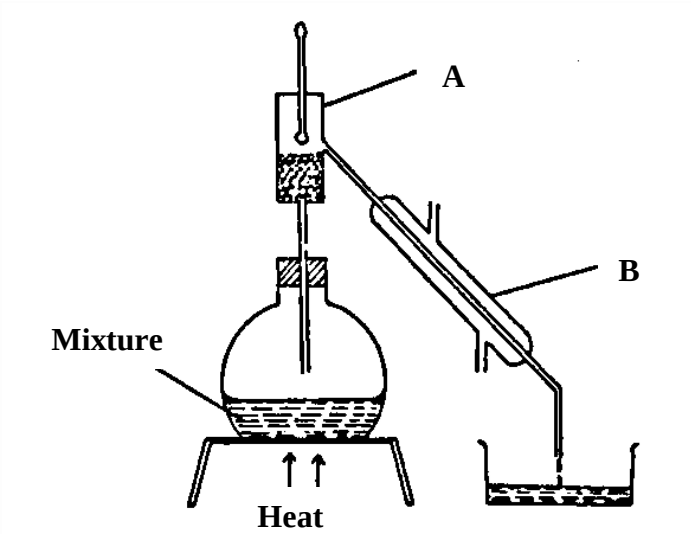
f) Candidates should check the question paper to ensure that all pages are printed as indicated and no questions are missing

For Examiner's Use Only

QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORES
1 – 31	80	

QUESTIONS

1. The diagram below shows a set-up of apparatus used to separate immiscible liquids.



a) Name the parts labelled A and B. **(1 mark)**

A .....

B .....

b) State the function of the part labelled A . **(1 mark)**

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2. Element K (not actual symbol of the element) has isotopes with relative abundance as shown below.

Isotope	**abundance %**
$^{10}_{5}K$	18.69%
$^{11}_{5}K$	81.28%

Calculate the relative atomic mass of K. **(2 marks)**

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3. The table below gives the ionization energies of the alkali metals.

Element	**1st ionization energy** kJ mol
A	494
B	418
C	519

Which of the three metals is the least reactive. Give a reason. **(1mark)**

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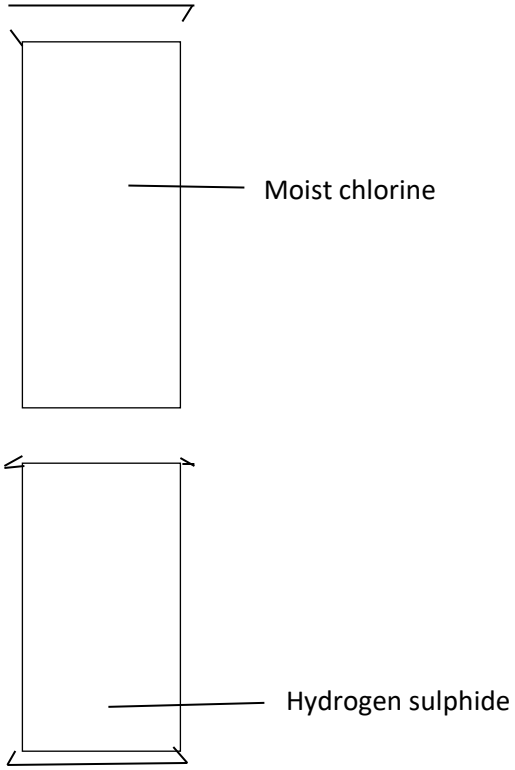
4. A jar full of moist chlorine was inverted over a jar of hydrogen sulphide as shown below.



(a) State the observation made. **(1 mark)**

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(b) Write the equation for the reaction and show using oxidation numbers that the reaction above is redox. **(2 marks)**

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5. A piece of burning Magnesium was introduced into a gas jar of nitrogen, water was then added to the products. The resultant solution was tested with litmus paper.

(i) Explain the observation. **(1mark)**

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(ii) Write an equation for the formation of the final solution. **(1mark)**

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6. State one reagent that can be used to distinguish between the pairs of ions.

(a) Pb^{2+} (aq) Al^{3+}(aq)

Reagent

Observation **(2 marks)**

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(b) $SO^{2-}4$ and $SO3^{2-}$

Reagent

Observation **(2marks)**

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7. $20cm^3$ of sodium carbonate solution was reacted completely with $25cm^3$ of a 0.8M hydrochloric acid according to the equations.

$Na_2CO_3 + 2HCl \longrightarrow 2\ NaCl + CO_2 + H_2O$

Calculate the concentration of sodium carbonate in grams per litre. **(3 marks)**

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8. The electronic arrangement of ions of a certain element represented by letters P Q R and S.

P^{2-} 2:8:8

Q^{2+} 2:8

R^{+} 2:8

S 2:8:8

a) Explain why S is not represented as an ion. **(1mark)**

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b) Which element has the largest atomic radius? Explain **(1mark)**

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9. A label on a bottle of Hydrochloric acid has the following information;

Density 1.134gm and percentage purity 37%

Determine the molarity of the solution. **(4 marks)**

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10. The P^{H} values of some solutions are given below

P^{H}	14.0	1.0	8.0	6.5	7.0
Solution	M	L	N	P	Z

(a) **Identify** the solution with the lowest concentration of hydrogen ion. Give reason for your answer **(1mk)**

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(b) Which solution would be used as an anti-acid for treating stomach upset. Give for your answer **(1mk)**

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11. The atomic number of P and S are 6 and 17 respectively.

a) Using dots and cross draw the compound formed when P react with S. **(1mark)**

b) Name the type of bond and explain whether the compound would conduct electricity. **(2 marks)**

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12. A given volume of a gas G diffuses through a membrane in 10 seconds. Under same condition an equal volume of oxygen diffuses for 12.5sec. Determine the molecular mass of G**. (2 marks)**

13. (a) Using an equation explain the observation made when sodium hydroxide is added to aluminum oxide dropwise until in excess. **(2 mks)**

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(b) Name the product of the reaction **(1mark)**

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14. (a) Cynogen is a gaseous compound of carbon and Nitrogen only. 250cm^3 Cynogen. On complete combustion in oxygen. 750cm^3 of nitrogen (iv) Oxide and 1000cm^3 of the rest of product.

Determine the formula of cynogen. **(3 marks)**

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b) Complete the reaction by indicating the polymer. **(1mark)**

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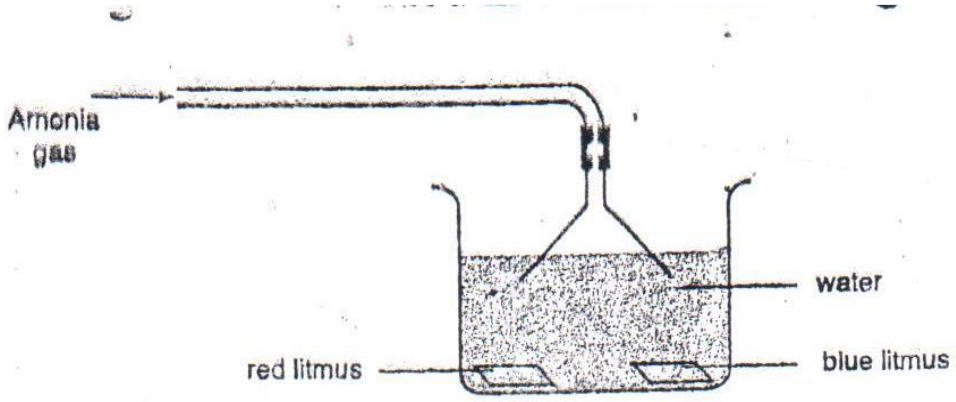
15. A stream of Ammonia was bubbled in water containing litmus papers.



a) State one physical property of the gas **(1mark)**

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b) Explain the observation made during the experiment. **(1mark)**

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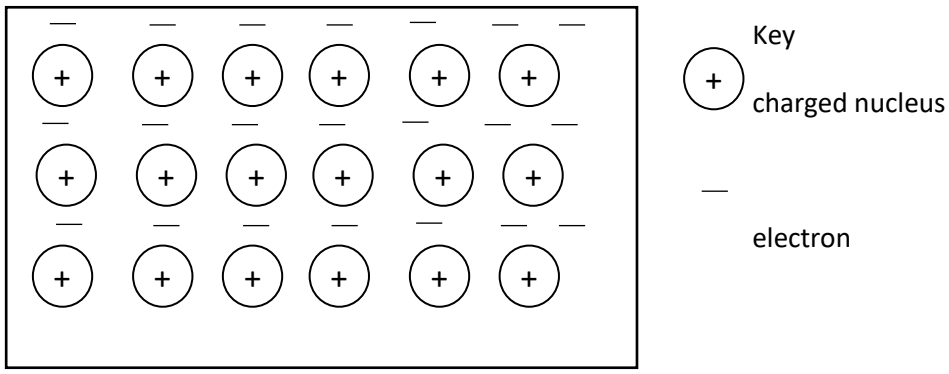
16. The diagram below is a section of a model of the structure of element K



a) State the type of bonding that exist in **K** **(1mk)**

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b) In which group of the periodic table does element K belong. Give a reason **(2mks)**

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17. Propene and propane both decolourises bromine liquid at different conditions.

a) Explain with an equation how the hydrocarbons decolourises bromine. **(4 marks)**

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b) Complete the reaction by indicating the polymer **(1mark)**

C_2H_4 $\longrightarrow$

c) State type of reaction and calculate the value of n given the molecular mass of polymer is 33600.

(4 marks)

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18. Below is a chemical reaction

$2SO_2 + O_2 \rightleftharpoons 2SO_3$ $\triangle$H-ve

Using an energy level diagram represent the reaction when vanadium (V) oxide is used. **(2 marks)**

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a) State the effect of increase temperature to the equilibrium **(1mark)**

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b) Give one characteristic of a dynamic equilibrium. **(1mark)**

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19. Study the test below and answer the questions.

(i)

Test	**Observation**
P is heated until no further change	A colourless liquid condensed on the cooler parts of the test tube - A colourless gas which turns Aqueous potassium chromate (VI) green was given out and red-brown residue R was left.

(ii)

Chlorine gas was bubbled through an aqueous of P	Solution turn from green to yellow

a) Identify **P**……

R……**1mark)**

b) Describe how a student would test for onion in solid P. **(3 marks)**

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c) Name one reagent that can be used to confirm cation in P. **(1mark)**

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20. Name the main ores of. **(2 marks)**

a) Iron

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b) Copper

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c) Sodium

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d) Aluminium

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21. Calculate the oxidation number of P given the following P_2O_5 **(1mark)**

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22. State and explain observation made when chlorine gas bubble through a solution of potassium iodine. **(2 marks)**

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23. Sketch the bond formed between the complex of tetramine copper(II) ions. **(1mark)**

24. Explain why graphite is used as a lubricant in machines. **(3 marks)**

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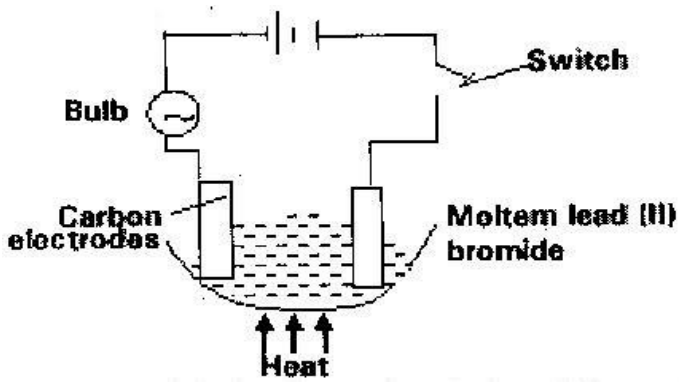
25. Study the set up below and answer the questions that flows



State all the observations that would be made when the circuit is **completed** **(3mks)**

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26. Most natural water occurs as permanent hard water or temporary hard water.

a. Name **two** compounds that cause;

i. Temporary hardness **(1mk)**

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ii. Permanent hardness **(1mk)**

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b. How is temporary hardness removed from water? **(1mk)**

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c. State **one** disadvantage of using hard water in boilers. **(1mk)**

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27. Use the information below to answer the questions that follow.

$H2(g) + {}^{1}\!/_{2}O_2 \longrightarrow H_2O(l)$ $\quad \Delta H_1 = -286KJ/Mol$

$C(s) + O_2(g) \longrightarrow CO_2(g)$ $\quad \Delta H_2 = -384KJ/Mol$

$C(s) + 4H_2(g) + {}^{1}\!/_{2}O_2(g) \longrightarrow C_3H_7OH$ $\quad \Delta H3 = -2686.6KJ/Mol$

a. Define '**enthalpy** of formation' **(1mk)**

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b. Determine the molar enthalpy of formation of propanol. **(2mks)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

CHEMISTRY

233/2

PAPER 2

(THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

a) Write your name and index number in the spaces provided

b) Sign and write the date of examination in the spaces provided

c) Answer ALL questions in the spaces provided

d) Mathematical table and electronic calculators may be used.

e) ALL working MUST be shown clearly where necessary

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

FOR EXAMINER'S USE ONLY

QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORES
1 – 6	**80**	

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Answer ALL questions in the spaces provided

1. I. 3 g of granules of carbonate of metal M of formula MCO_3 were mixed with excess 0.5M dilute hydrochloric acid. The mass of the reaction vessel ants its contents were recorded at various times. The total loss in the mass of the reaction vessel and its contents was calculated and recorded.

Time(min)	0	0.5	1	1.5	2	2.5	3	3.5
otal loss in mass(Kg)	0	0.008	0.37	0.90	1.19	1.28	1.32	1.32

a) Why is there continuous loss of mass of the reaction mixture? (**1mark)**

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b) i) State two ways by which the reaction could be made more rapid. **(1mark)**

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ii) On the same grid sketch, graphs of total loss in mass (g) against (mins) before and after the changes in b(i) above. **(1mark)**

c) i) Write an equation for the reaction that takes place. **(1mark)**

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ii) Given the experiment was carried out at room temperature , calculate the number of moles of carbon (iv) oxide gas produced .(C=12,O=16) **(1mark)**

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iii) Determine the relative molecular mass of metal M. **(2marks)**

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II During the manufacture of Sulphuric (VI) acid by contact process, Sulphuric (IV) Oxide is converted to Sulphur (VI) Oxide in the presence of a catalyst according to the equation below

$$2SO_{2\,(g)} + O_2 \rightleftharpoons 2SO_{3(g)} \quad \Delta H = 19Kj/Mol$$

a) Write a formula of the catalyst used **(1mark)**

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b) What would be the effect on the production of Sulphur (VI) Oxide of the following?

i) Increasing the temperature ;Explain **(1mark)**

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ii) Reducing the pressure? Explain **(1mark)**

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c) Write equations showing how Sulphuric (VI) acid is obtained from Sulphuric (VI) Oxide

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2 a) The table below shows information about chlorides of some period 3 elements

Chloride	NaCl	$MgCl_2$	$AlCl_3$	$SiCl_4$	PCl_5
Melting Point (^0C)	801	712	Sublimes at 183	-70	-90

i) State the nature of the solution formed when the following chlorides are dissolved in water. Explain **(2marks)**

NaCl.....

.....

$AlCl_3$.....

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ii) Explain why $AlCl_3$ has much lower melting point than Mg Cl_2 although both Al and Mg are metals **(2marks)**

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iii) Draw (.) and cross(x) diagram to show bonding in:

$MgCl_2$ (**1mark)**

$SiCl_4$ **(1mark)**

iv) Identify the type of bonding in each case **(1mark)**

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b) $10cm^3$ of water was placed in a test tube and the initial temperature of the water recorded. A spatula of Si Cl_4 was added to the water and the final temperature recorded when the entire solid had dissolved.

i) Explain the observations made. **(2marks)**

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ii) Write an equation for the reaction that occurred **(1mark)**

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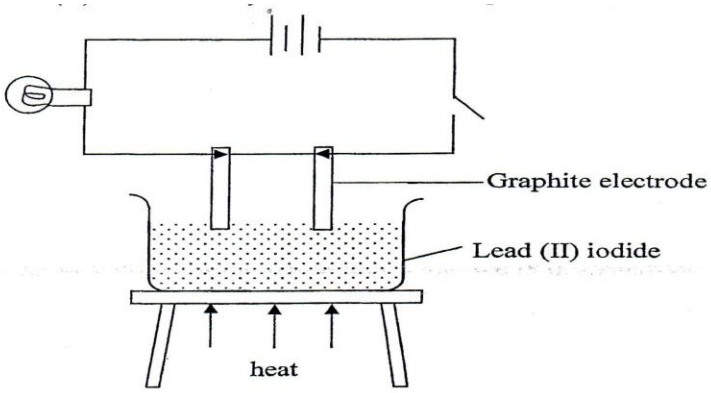
3. The diagram below shows a setup which was used to investigate the effect of electricity on solid and molten lead(II) iodide. Study it and answer the questions that follow.



a) i) The bulb only lit after the Lead (II) iodide had melted .Explain **(1mark)**

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ii) State and explain the observation at the anode when the circuit is completed. **(1mark)**

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iii) What precaution should be taken when carrying out this experiment **(1mark)**

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iv) Write the equation for the reaction taking place as the cathode **(1mark)**

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v) On the diagram; indicate the movement of ions in the electrolyte. **(1mark)**

vi) When a current was passed through 23.6g of molten Lead (II) iodide for 3 mins 5 secs 19.1g of the electrolyte remained. Calculate the amount of current passed. **(3marks)**

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b) Given the following standard electrode potentials;

$Cu^{2+}_{(ag)} + 2e^- \quad Cu_{(s)} \longrightarrow \quad E^0 = +0.34V$

$Zn^{2+}_{(ag)} + 2e^- \quad Zn_{(s)} \longrightarrow \quad E^0 = -0.77V$

Explain whether it's advisable to store a solution of Zinc sulphate in a copper can. **(2marks)**

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4. a) Name the following organic Compounds **(3marks)**

i. $CH_3\,CCCH_3$

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ii. $CH_3\,CH(OH)CH\,CH_2\,CH_3$

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iii. $CH_3\,COOO\,CH_2\,CH_3$

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b) i) Define isomerism **(1mark)**

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ii) Draw and name one branching isomer of C_5H_8 **(2marks)**

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iii) To which homologous series does C_5H_8 belong? State the general formula of the members of the series **(1mark)**

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c) Identify two reagents that can be used to prepare 3 - Bromobutan – 2-ol in the laboratory **(1mark)**

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d) In an experiment, ethanol was warmed with acidified potassium manganate (VI). State and explain the observation made at the end of the experiment **(2marks)**

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5. In an experiment to investigate the enthalpy of displacement of copper by iron, 25.0 cm^3 of Copper (II) sulphate solutions was placed in plastic beaker. The temperature of the solution was recorded every half minute of 1.5 minutes. At exactly two minutes excess iron powder was added and the temperature of the mixture recorded every half minute for an additional three minutes. The results were recorded in the table below

Time (min)	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
Temp ^0C	18.0	18.0	18.0	18.0	X	31.0	29.0	28.5	25.0	23.0	21.0

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a) Plot a graph of Temperature (^{0}C) against time (mins) **(3marks)**

Graph paper provided

b) From the graph, determine the highest temperature, hence the temperature change. **(2marks)**

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c) Write the ionic equation for the reaction. **(1mark)**

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d) Calculate the amount of heat given out during the reaction

(c= 4.2kj/Kg/K, density of solution = 1g/cm^3) **(2marks)**

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e) Given the molar heat for the displacement in the above reaction is -151kj/Mol, calculate:

i) The moles of Copper (II) sulphate reacted **(1mark)**

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ii. The concentration of the copper (II) sulphate solution in g/litre **(2marks)**

(Cu = 63.5,S= 32,O= 16)

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6. a) A compound whose formula is $Z(OH)_2$ reacts as shown by the equations below

$Z(OH)_{2(S)} + 2OH^-_{(ag)} \quad Z^{2+}{}_{(ag)} + 2H_2O_{(1)}$

$Z(OH)_{2(S)} + H^+_{(ag)} \quad Z^{2+}{}_{(ag)}H_20_{(1)}$

i) State the property exhibited by the compound in the reactions **(1mark)**

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ii) Name two elements whose hydroxides exhibit the above property. **(1mark)**

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b) The table below shows tests carried out on a sample of water.

Test	Results
. Additional of sodium hydroxide drop wise till in excess	White precipitate which is insoluble in excess
2. Addition of sodium Sulphate Solution	White precipitate
3. Addition of Lead (II) nitrate solution .Then warming	White precipitate , which dissolves on warming.

i) Identify the anion present in the water **(1mark)**

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ii) Write an ionic equation for the reaction in step 1 **(1mark)**

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iii) Given two methods that can be used to soften the water sample **(2marks)**

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c) The following tests were carried out on Solid M.

i) Solid M was added to water and the mixture stirred, a colorless solution was formed

ii) Barium nitrate was added to a portion of the colourless solution, a white precipitate was formed which dissolved in dilute Nitric (V) acid to form a colourless solution.

iii) Orange acidified potassium dichromate (VI) changed to green when added to a portion of the solution

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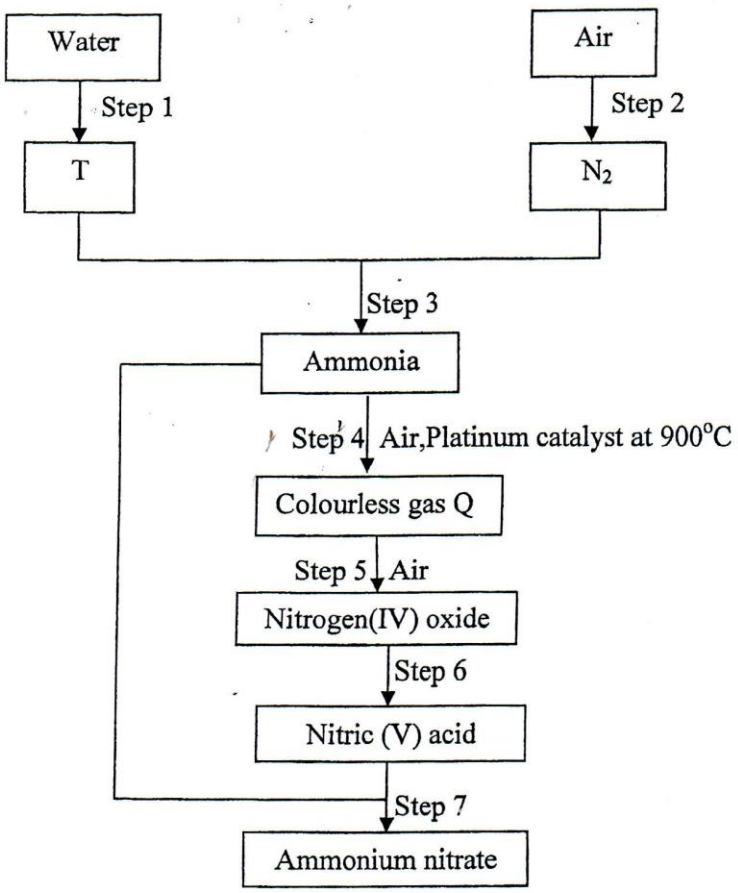
iv) When Chlorine gas was bubbled into a portion of the colourless solution followed by addition of acidified Barium nitrate solution, a white precipitate was formed.

Name and write the formula of white precipitate formed in:-9

Step II..... (1mark)

Step IV..... (1mark)

d) Study the flow chart below and answer the questions that follow.



i) Name element t **(1 ½ marks)**

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ii) Identify the process in **(1 ½ marks)**

Step 1.....

Step 2.....

Step 4.....

iii) Identify colourless gas

Q..... **.(1½ marks)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

CHEMISTRY

233/3

PAPER 3

(PRACTICAL)

TIME: 2¼ HOURS

SCHOOL…… SIGN……

PRACTICAL

CONFIDENTIAL

INSTRUCTIONS TO SCHOOLS

Apart from the common laboratory apparatus and chemicals, each candidate will require the following:-

A.

- Two 100ml beakers
- One 10ml measuring cylinder
- One burette 0 – 50ml
- One pipette 25ml and pipette filler
- Six dry test tubes and one test tube holder.
- One thermometer
- One metallic spatula
- One boiling tube
- About 2g of - Sodium chloride solid
  - Potassium chloride solid
  - Calcium chloride solid
  - Barium chloride solid
- About 3g of solid G
- 5 labels

B. Access to:

- Source of heat
- Distilled water
- Litmus papers
- 2M NaOH(aq) solution
- Barium Chloride solution
- Acidified Potassium Manganate (VII) solution.

C. Further Information;

- Solid G – Sodium Sulphite.
- Solid P – Oxalic Acid ($H_2C_2O_4.2H_2O$)

KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

CHEMISTRY

233/3

PAPER 3

(PRACTICAL)

TIME: 2¼ 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.*
2. *Sign and write the date of examination in the spaces provided.*
3. *Answer ALL the questions in the spaces provided in the question paper*
4. *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 is to enable you to read the question paper and make sure you have all the chemicals and apparatus required.*
5. *ALL working MUST be clearly shown where necessary*
6. *Mathematical tables and electronic calculators may be used.*

FOR EXAMINERS USE ONLY

QUESTION	Max Score	Candidate Score
1	14	
2	14	
3	12	
TOTAL	40	

1 You are provided with 3.6 g of solid **P** in a boiling tube.

You are required to determine the solubility of solid **P** at different temperatures

Procedure

a) Using a burette, add 4 cm^3 of distilled water to solid **P** in the boiling tube. Heat the mixture while stirring with the thermometer to about 80^0C. When the entire solid has dissolved, allow the solution to cool while stirring with the thermometer. Note the temperature at which crystals of solid **P** first appear. Record this temperature in table one.

b) Using the burette, add 2cm^3 of distilled water to the contents of the boiling tube. Warm the mixture while stirring with the thermometer until the entire solid dissolves. Allow the mixture to cool while stirring. Note and record the temperature at which crystals of solid **P** first appear.

c) Repeat procedure (b) two more times and record the temperatures in table 1.

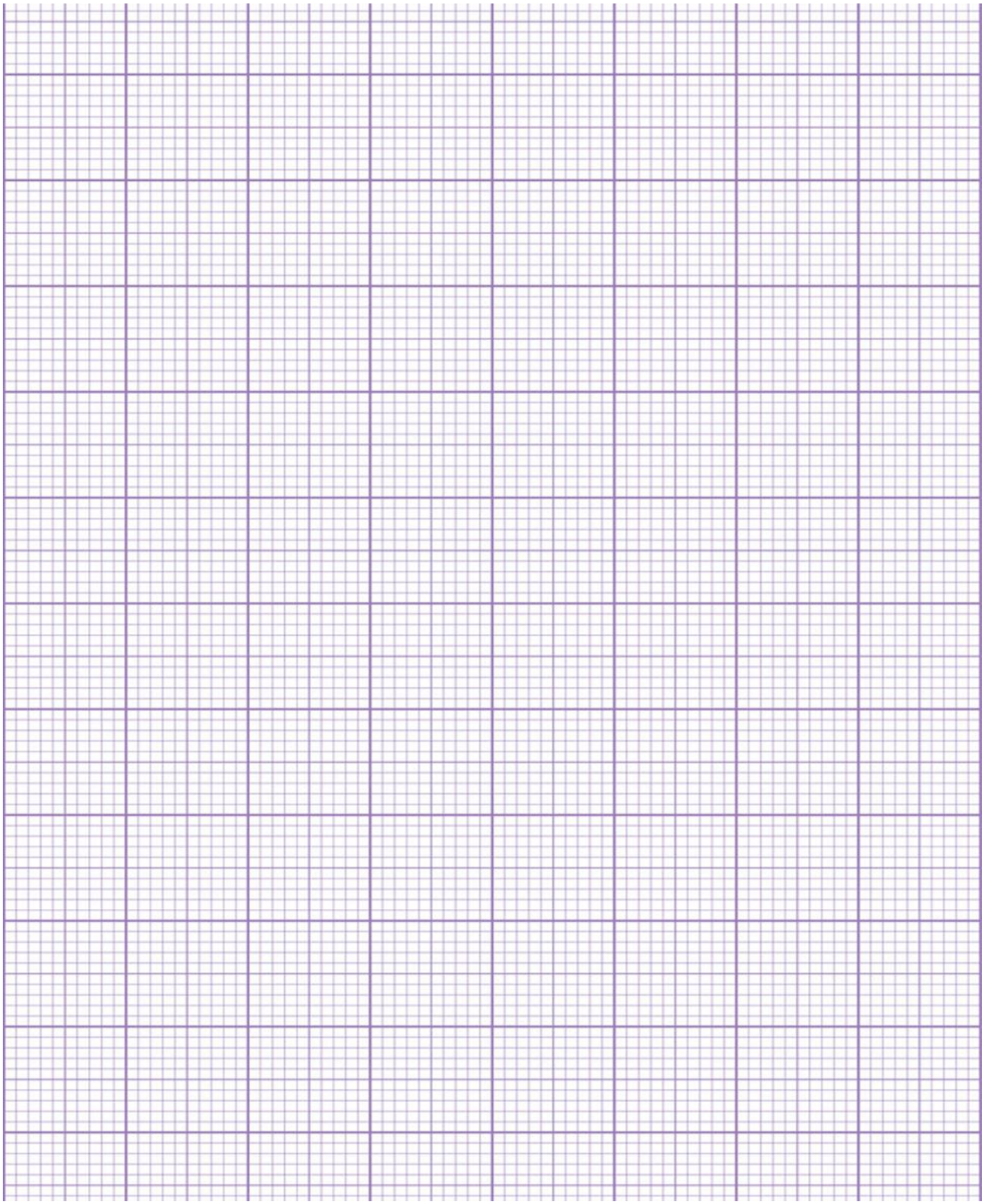
d) Complete table 1 by calculating the solubility of solid **P** at the different temperatures. The solubility of a substance is the mass of that substance that dissolves in 100 cm^3 (100g) of water at a particular temperature.

Table 1

Volume of water In the boiling tube (cm^3)	Temperature at which Crystals of solid **P** first appear (^0C)	Solubility of solid **P** (g/100g water)
4		
6		
8		
10		

(ii) On the grid provided, plot a graph of the solubility of solid **P** (vertical axis) against temperature.

(4mks)



(iii) Using your graph, determine the temperature at which 100g of solid **P** would dissolve in $100cm^3$ of water. **(1mk)**

(iv) Using your graph determine the temperature at which 30 g of P dissolves in 60 g of water **(1mk)**

2. You are provided with

- Solution Y_1 containing $7.3gl^{-1}$ of hydrochloric acid
- Solution Y_2, containing 14.3g of hydrated sodium carbonate, $Na_2CO_3.XH_2O$ (washing soda) dissolved in $500cm^3$ of water and diluted to 1 litre

- You are required to standardize Y_2 ($Na_2CO_3.XH_2O$) using Y_1 (HCl)
- Determine the number of moles of water of crystallization in hydrated sodium carbonate.

Procedure:

- Fill the burette with solution Y_2 ($Na_2CO_3.XH_2O$)
- Pipette $25.0cm^3$ of solution Y_1 into $250cm^3$ conical flask
- Add 2 – 3 drops of phenolphthalein indicator and titrate with Y_2. Record your readings in table 2 below.

(a)

	I	**II**	**III**
Final burette reading (cm^3)			
Initial burette reading (cm^3)			
Volume of solution Y_2 Used (cm^3)			

(4mks)

(i) Determine the average volume of solution Y_2 used **(1mk)**

(ii) Write the chemical equation for the reaction between dilute hydrochloric acid and sodium carbonate solution. **(1mk)**

(b) Calculate:

(i) The molar concentration of hydrochloric acid solution Y_1 **(2mks)**

(ii) The molar concentration of $Na_2CO_3.\ xH_2O$ solution Y_2. **(2mks)**

(iii) The relative formula mass of $Na_2CO_3.XH_2O$ **(1mk)**

(iv) The value of X in $Na_2CO_3.xH_2O$ **(1mk)**

3. a) You are provided with the following solids:-

- Sodium Chloride, Potassium Chloride, Calcium Chloride, Barium Chloride and Solid G

Note: Solid G will also be required for question 3. b)

- You are required to carry out flame tests on the above solids to identify the flame colour of the cations present in each of them

Procedure:

Clean a metallic spatula and raise it with distilled water. Dry the spatula on the Bunsen burner flame for about 1minute. Allow it to cool, place a little of Sodium Chloride solid on the spatula and burn it strongly with a non-luminous Bunsen burner flame. Note the colour of the flame as the solid burns and record it in table III. Clean the spatula thoroughly using steel wool and repeat the procedure using each of the other solids and complete table III.

Table III

Solid	Colour of Flame
Sodium Chloride	(½ mk)
Potassium Chloride	(½ mk)
Calcium Chloride	(½ mk)
Barium Chloride	(½ mk)
Solid G	(½ mk)

What cation is present in solid G? **(½mk)**

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……

b) You are provided with solid G

Carry out the tests below and record your observations and inferences in the spaces provided. Identify any gases produced.

i) Place a little of solid G in a dry test tube and heat strongly

Observation	Inferences
(2mks)	**(1mk)**

ii) Place the remainder of solid G in a boiling tube. Add about $10cm^3$ of distilled water and shake well.

Observation	Inferences
(1mks)	**(1mk)**

iii) Divide the mixture into three portions for tests I to III below.

I To the first portion, add 2 – 3 drops of aqueous sodium hydroxide until in excess.

Observation	Inferences
(1mks)	**(1mk)**

II To the 2nd portion, add 2 – 3 drops of Barium Chloride solution followed by dilute hydrochloric acid solution F

Observation	Inferences
(1mks)	**(1mk)**

III To the 3rd portion, add about 1cm3 of acidified potassium Manganate (vii) solution.

Observation	Inferences
(1mks)	**(1mk)**

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For Marking Schemes Contact 0746-222-000 / 0742-999-000

KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

PHYSICS

232/1

PAPER 1

(THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES: -

(a) Write your name, Admission number and class in the spaces provided above.
*(b) This paper consists of **two** sections: **A** and **B***
*(c) Answer **all** the questions in section **A** and **B** in the spaces provided*
*(d) **All** working **must** be clearly shown.*
(e) Mathematical tables and electronic calculators may be used
*(f) **Candidates should answer the questions in English**.*

For Examiner's Use Only:

Section	Question	Maximum Score	Candidate's Score
A	1 – 11	25	
B	12	11	
	13	08	
	14	08	
	15	09	
	16	09	
	17	10	
	Total Score	80	

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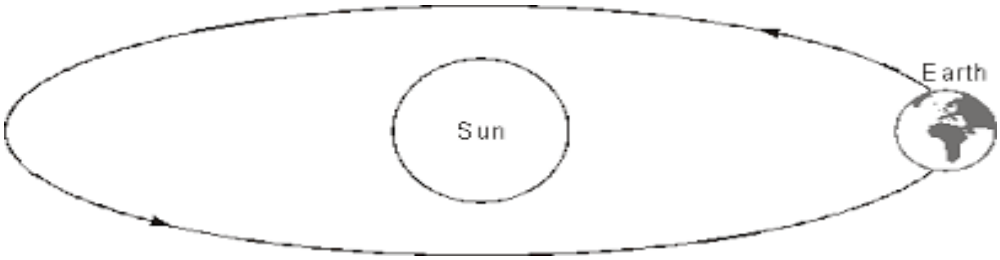
SECTION A (25 marks)

Answer all questions in this section in the spaces provided

1. The diagram below shows the earth moving around the sun continually . State the branch of Physics that would be concerned with this. **(1 mark)**



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2. The diameter of a steel ball is measured using a vernier callipers which has divisions of 0.1cm on its main scale (MS) and 10 divisions of its vernier scale (VS) match 9 divisions on the main scale. Three such measurements for a ball are given as

S.No.	MS (cm)	VS divisions
1	0.5	8
2	0.5	4
3	0.5	6

If the zero error is – 0.03 cm, calculate then mean corrected diameter of the steel ball. **(3 marks)**

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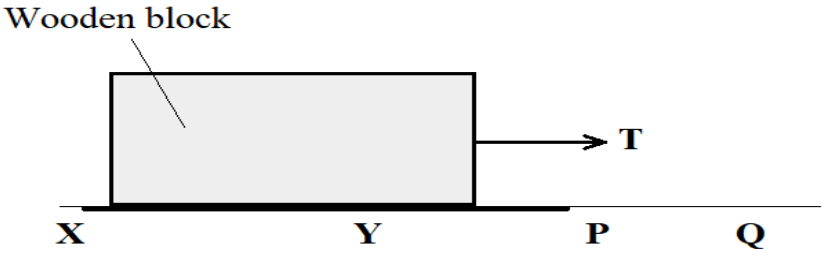
3. A wooden block on a horizontal surface is pulled by a constant horizontal force **T** as shown in the diagram below, at two different sections. The block moves with constant velocity along **XY**. Section **XYP** is rough, while **PQ** is smooth. Use the information to answer questions that follow.



(a) Describe the motion of the block as it enters section **PQ**. **(1 mark)**

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

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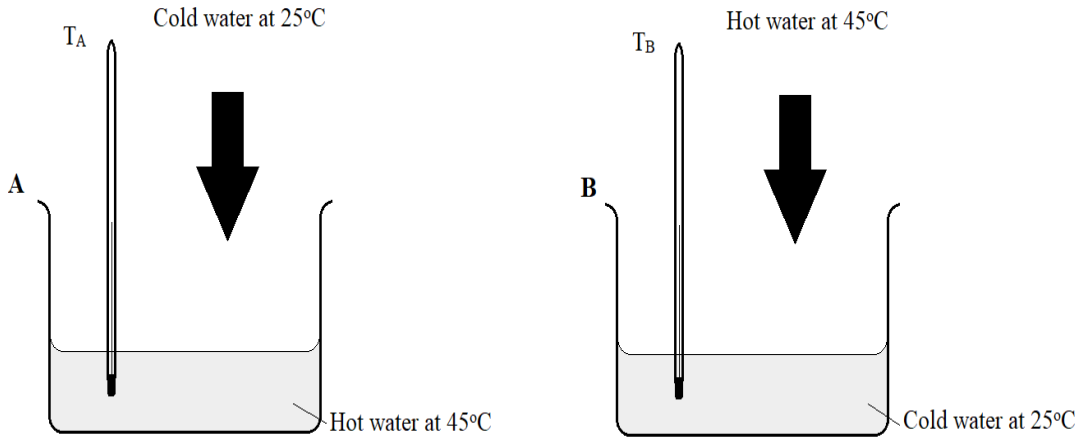
4. Two identical well lagged cans **A** and **B**, each has equal volumes of water and are fitted with thermometers $\mathbf{T_A}$ and $\mathbf{T_B}$ as shown in the figure below. Water in **A** is at 45°C, while water at **B** is at room temperature of 25°C. Cold water is poured carefully in **A** and simultaneously, an equal mass of hot water is poured in **B**.



(a) State which of the thermometers record a lower reading after a short while **(1 mark)**

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

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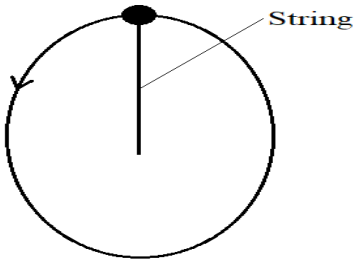
5. A stone of mass 200g is whirled on a vertical circle at constant speed of 3m/s, as shown in the diagram below.



Determine the tension **T** in the string when the stone is at its uppermost point shown, given that the string is 40cm long. **(3 marks)**

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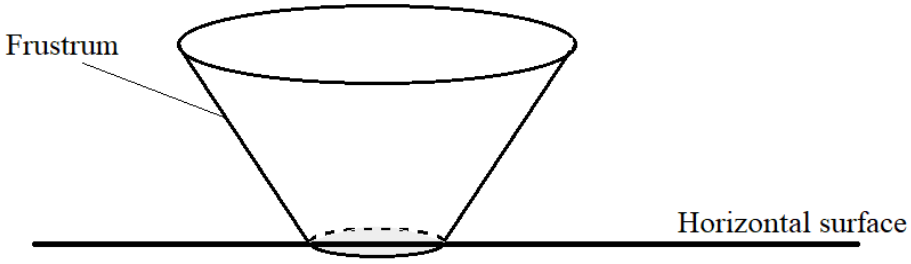
6. Below is a solid frustrum of a cone, resting on its narrow end on a horizontal flat surface. The solid is made of a uniform material.



(a) Name the state of equilibrium of the solid on the surface. **(1 mark)**

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(b) Locate the centre of gravity of the cone, and mark it **M** **(2 marks)**

7. Some pollen grains were placed in water to study Brownian motion in liquids. State and explain the nature of the observed motion. **(2 marks)**

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8. When estimating the diameter of an oil molecule, a student measured the diameter of an oil drop using vernier callipers. State the assumption she made in this measurement. **(1 mark)**

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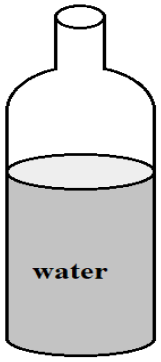
9. A form one student at Upper Secondary School had a tin can half filled with water, as shown in the figure below.



She heated the water and let it to boil for some time. The open top was then sealed, and cold water poured on the can. The can was observed to crash in. State why:

(a) The water was let to boil for some time. **(1 mark)**

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(b) Cold water was poured on the can. **(1 mark)**

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(c) Explain why the tin can crushed in **(2 marks)**

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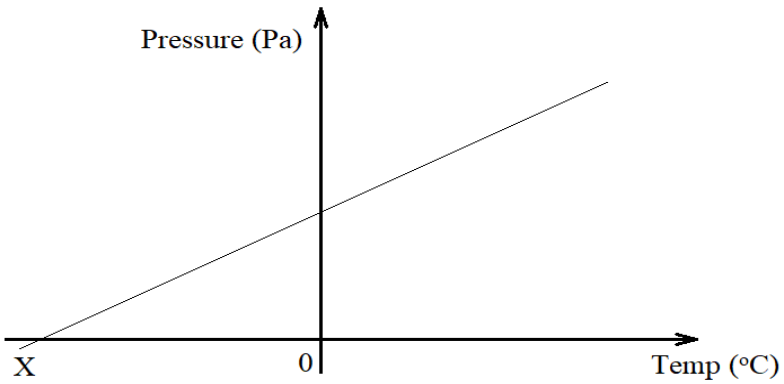
10. The temperature if a gas in a container of fixed volume was gradually lowered, and the corresponding pressure measured. Below, is a sketch graph showing the variation of pressure with temperature from the experiment.



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(a) Define temperature **X** using kinetic theory of matter **(1 mark)**

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(b) State the reason why temperature **X** cannot be achieved **(1 mark)**

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11. A steel wire of length 20cm was coiled several times to make a spring. The spring was loaded with various weights and a graph of *Force* against *extension* plotted as indicated in *Fig i* below.

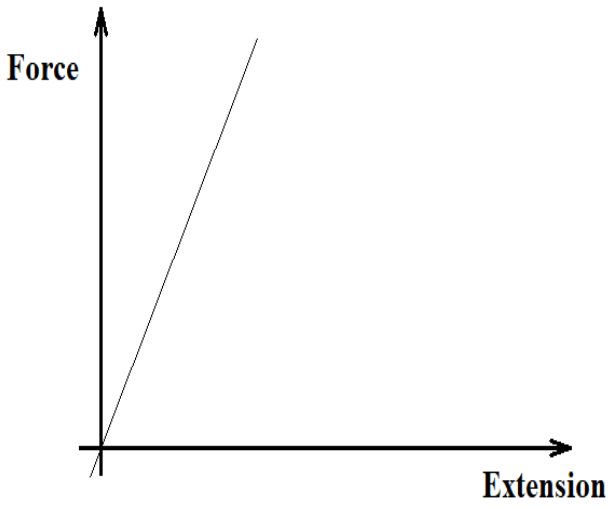

Fig i

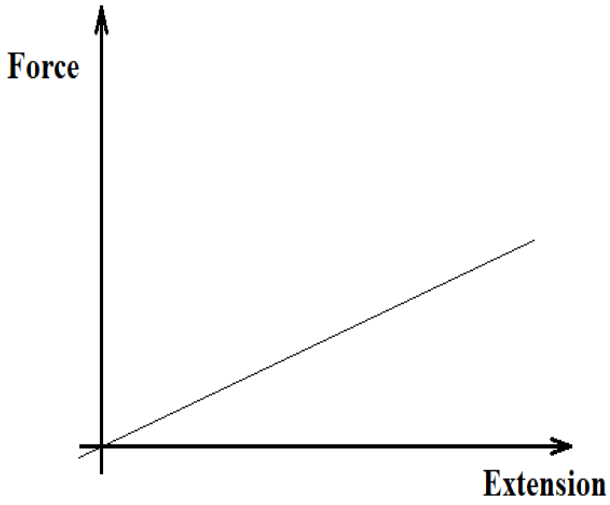

Fig ii

State any **two** changes that could be made on the spring to obtain the graph in *Fig ii* **(2 marks)**

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SECTION B (55 marks)

Answer all the questions in this section in the spaces provided

12.

(a) State Bernoulli's principle. **(1 mark)**

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(b) In deriving the equation of continuity, it is assumed that the fluid is non-viscous. Explain the effect of increase in fluid viscosity on the type of flow. **(2 marks)**

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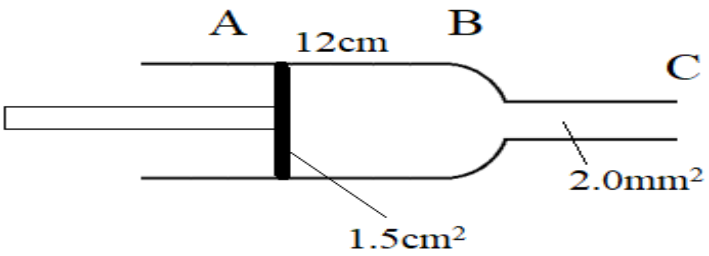
(c) The figure below shows water in a horizontal tube of two different sections, **AB** and **BC**.



The cross-sectional area on the piston is $1.5cm^2$ while that of section **BC** is $2.0mm^2$. If the piston moves 12cm from **A** to **B** in 3 seconds, calculate:

i) The volume flux of water **(3 marks)**

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ii) The speed of water through section **BC** **(2 marks)**

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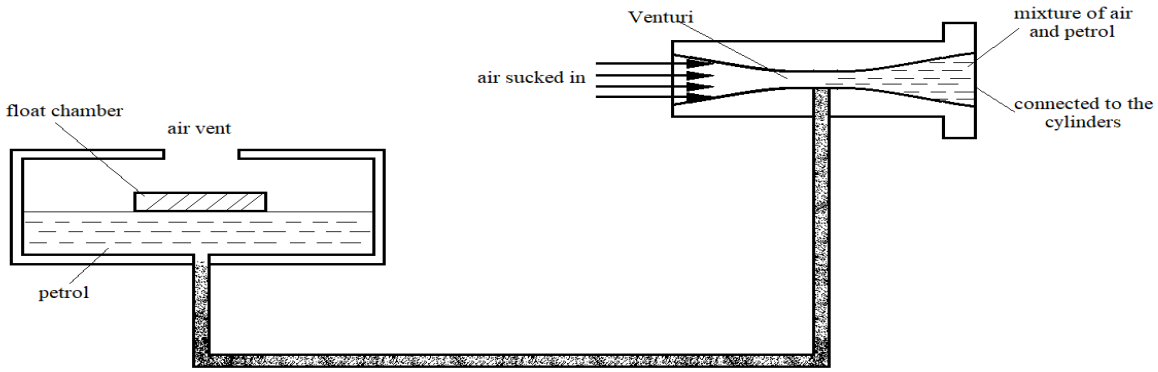
(d) Below is a cross-sectional diagram of a carburettor used to supply petrol for combustion in a car engine



Explain how this carburettor is able to draw petrol into the combustion **cylinders** **(3 marks)**

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13.

(a) A covid vaccine is only suitable when stored at a temperature of -40°C. A nurse had a choice of measuring the temperature of this vaccine using either a mercury thermometer or an alcohol thermometer. Explain which of the two thermometers would be suitable. **(1 mark)**

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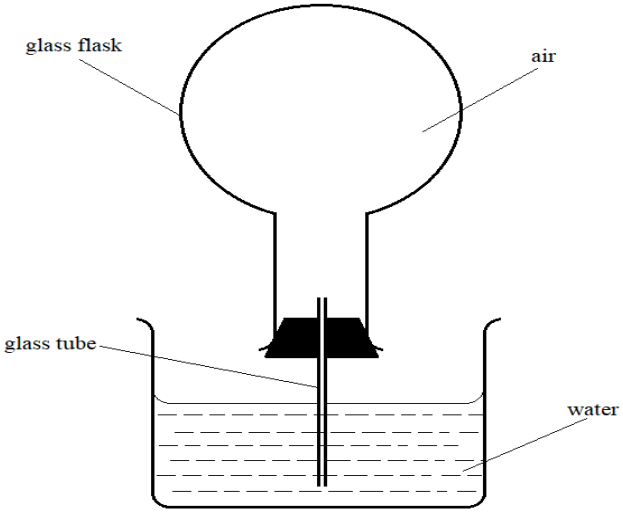
(b) Below is a glass flask fitted with a tube and inverted in water.



The temperature of the surrounding is slowly lowered.

i) State the observation on the liquid level in the glass tube **`(1 mark)**

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ii) Give a reason for the above observation **(2 marks)**

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(c) You have been provided with the following apparatus:

A glass bulb filled with mercury fitted onto a hollow stem, ice, boiling water in a can and a grid of equal squares. Use this apparatus to describe an experiment to make a graduated thermometer whose scale is in Celsius. **(4 marks)**

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14.

(a) Define velocity ratio as used in machines **(1 mark)**

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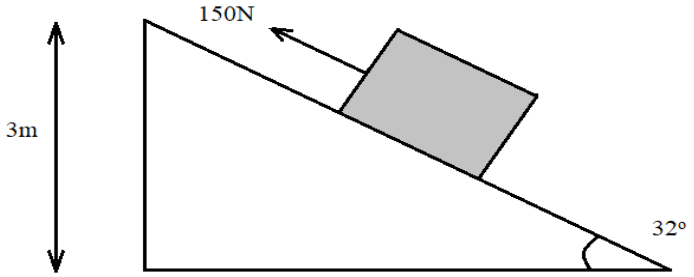
(b) The figure below shows a load of mass 20kg being pulled up an inclined plane with a constant force of 150N. The plane makes an angle of 32°C with the horizontal, and a height of 3m.



Determine:

i) The work done on the load **(2 marks)**

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ii) Work done by the effort **(2 marks)**

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iii) The efficiency of the system **(2 marks)**

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iv) The work done against the friction between the plane and the block **(1 mark)**

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15.

(a) Distinguish between heat capacity and latent heat of fusion of a substance **(1 mark)**

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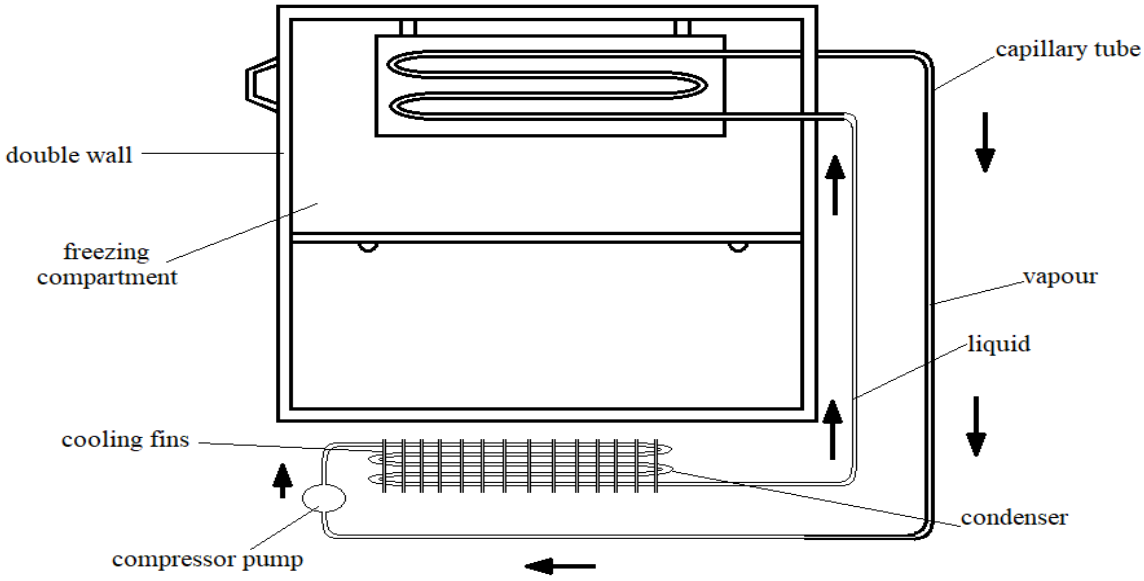
(b) Below is a figure showing a common refrigerator used for domestic purposes. A volatile liquid circulates in the capillary tubes.



i) State the reason why the diameter of the capillary tube is made wider at the freezing compartment.

(1 mark)

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ii) Explain the function of the compression pump. **(2 marks)**

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iii) Give a reason why food items are placed below the widened copper tube **(1 mark)**

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(c) In an experiment to determine specific latent heat of vaporization of water, steam of mass 12g at 100°C was passed into 80g of water initially at 23°C in a container of negligible heat capacity. The temperature of water rises by 74K. Use the information to determine specific latent heat of vaporization of water (take specific heat capacity of water as 4.2kJ/kg/K and boiling point of water as 100°C). **(4 marks)**

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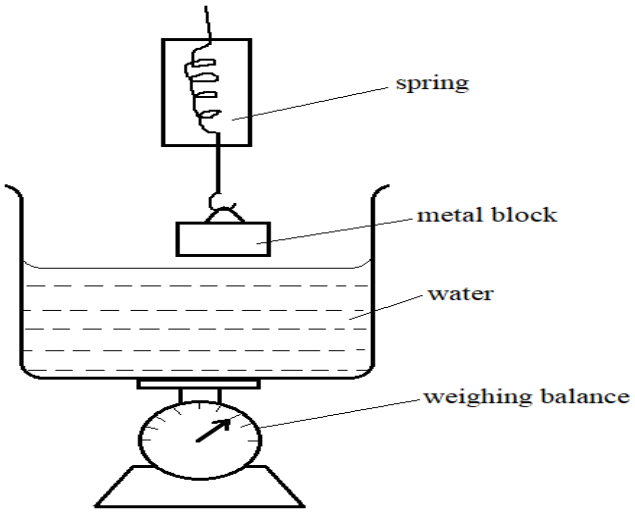
16.

(a) The figure below shows a weighing balance on which a beaker containing some water is placed. The reading of the weighing balance and the spring balance are initially 2.80N and 2.70N respectively.



i) The metal block is gradually lowered into water. State the observation made on:

A) The spring balance reading **(2 marks)**

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B) The weighing balance reading

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ii) The reading of the spring balance when the block is fully submerged in water is 2.36N. Determine the:

A) Reading of the weighing balance **(2 marks)**

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B) The density of the stone **(2 marks)**

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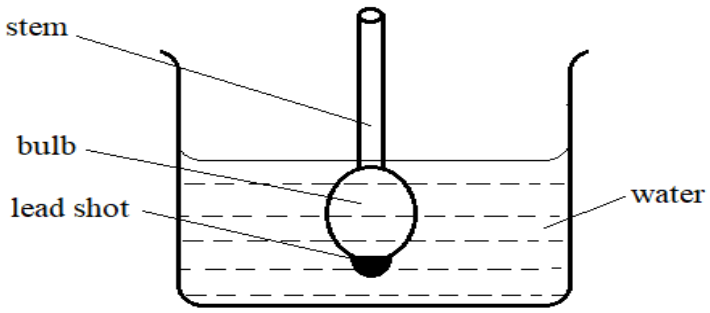
(b) Below is a figure showing a hydrometer floating in water.



i) State the function of the following: **(2 mks)**

A) Wide bulb

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B) Lead shot

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ii) Salt solution is added to the water. State the observation made on the hydrometer. **(1 mark)**

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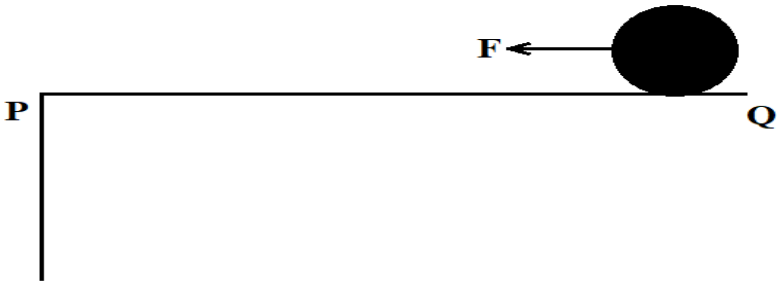
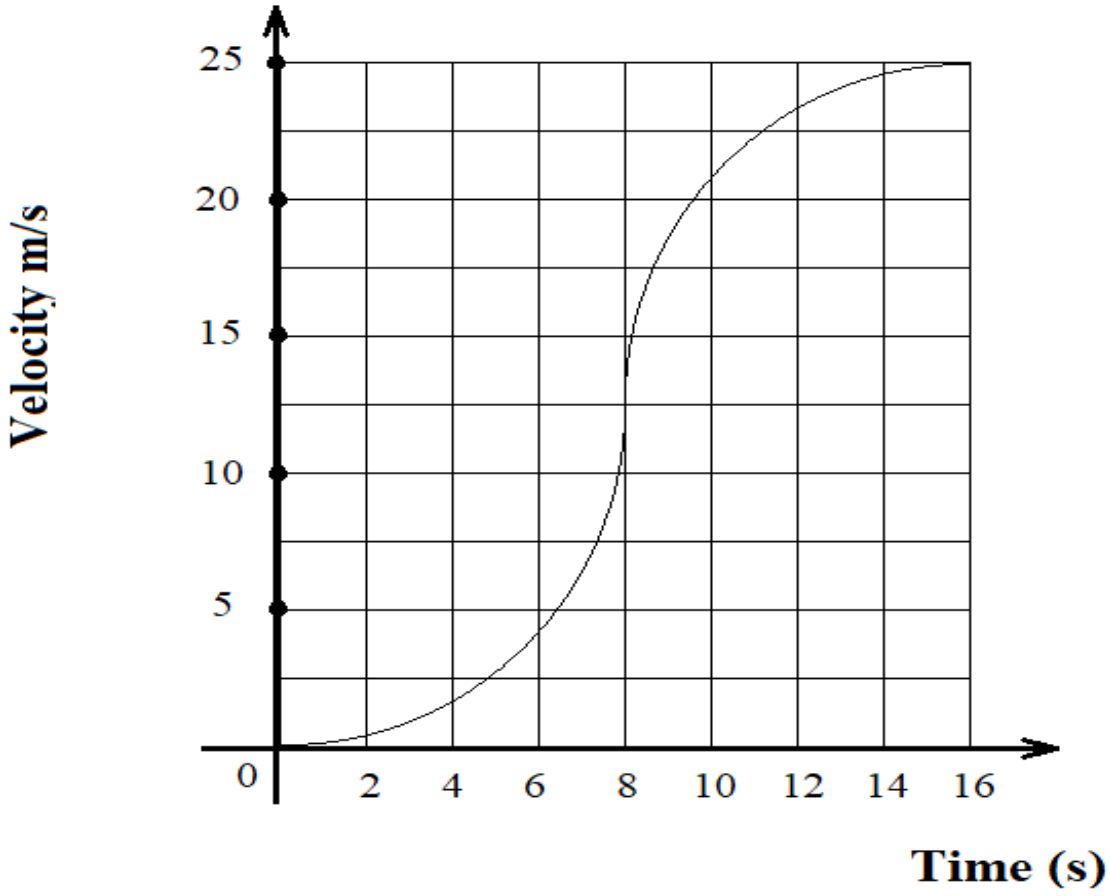
17. A metal ball of mass 20kg at rest is pulled by a force and moves along a horizontal friction compensated table as shown below. The pull is withdrawn when the ball is at **P** after travelling 16 seconds from **Q**.



Below is a velocity-time graph for the motion of the ball as it moves along the tabletop.



(a) Determine the distance **PQ** travelled along the tabletop. **(3 marks)**

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(b) Calculate:

i) The average acceleration between time t = 8 seconds and t = 16 seconds **(2 marks)**

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ii) The average force acting between t = 8s and t = 16s. **(2 marks)**

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(c) From **P** the ball falls to the ground a distance 22.5m from the foot of the table. Calculate the height of the table. **(3 marks)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

PHYSICS

232/2

PAPER 2

(THEORY)

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

Instructions to candidates

(a) *Write your name, index number in the spaces provided above.*
(b) *Sign and write the date of examination in the spaces provided above.*
(c) *This paper consists of* **two** *sections:* **A** *and* **B**.
(d) *Answer* **all** *the questions in sections* **A** *and* **B** *in the spaces provided.*
(e) ***All*** *working* **must** *be clearly shown.*
(f) *Silent non-programmable electronic calculators may be used.*
(g) *Candidates should answer the questions in English.*

For Examiners Use Only

Section	Question	Candidate's Score
A	1 – 12	
B	13	
	14	
	15	
	16	
	17	
Total Score		80

SECTION A (25 MKS):

Answer all questions in this section in the spaces provided.

1. **Figure 1** shows a ray of light incident on a mirror at an angle of 45^0. Another mirror is placed at an angle of 45^0 to the first one as shown

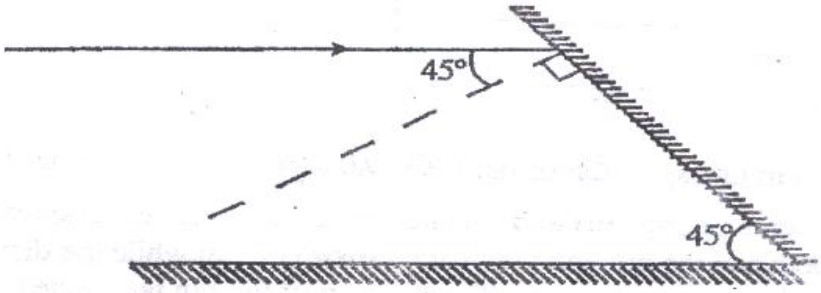

Figure 1

Sketch the path of the ray until it emerges **(2 mks)**

2. **Figure 2** shows a soft iron bar AB placed in a coil near a freely suspended magnet.

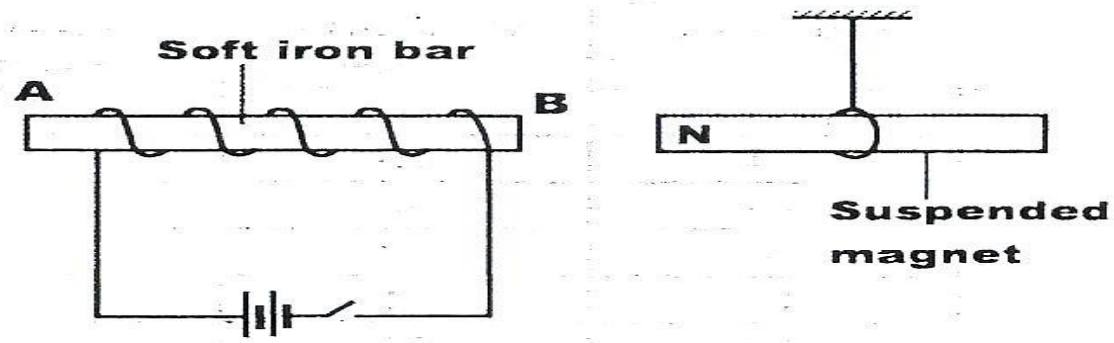

Figure 2

Explain the observation made when the switch is closed. **(2 mks)**

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3. Table 1 shows radiations and the irrespective frequencies.

Type of radiation	Yellow light	Gamma rays	Radio waves	Micro waves
Frequency (Hz)	1×10^{15}	1×10^{22}	1×10^{6}	1×10^{11}

Arrange the radiations in the order of increasing energy. **(l mk)**

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4. State the reason why electrical power is transmitted over long distances at very high voltages.

(1 mk)

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5. A boy standing in front of a cliff blows a whistle and hears the echo after 0.5s. He then moves 17 metres further away from the cliff and blows the whistle again. He now hears the echo after 0.6s. Determine the speed of the sound. **(4mks)**

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6. **Figure 3** shows a human eye with a certain defect

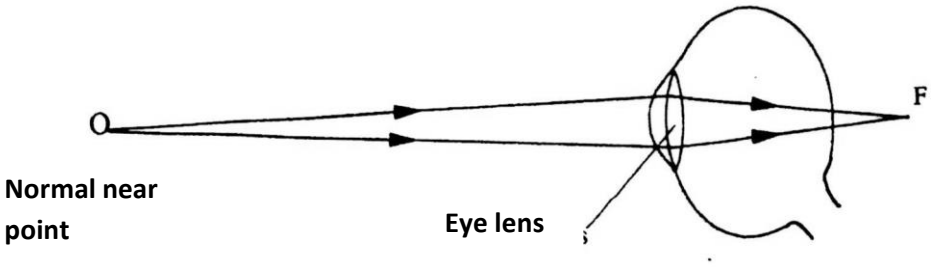

Figure 3

(i) Name the defect **(1 mk)**

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ii) On the same diagram, sketch the appropriate Len and rays to show how the defect can be corrected. **(2mks)**

7. Polarisation is a defect of a simple cell. State how it reduces the current produced and how this defect can be minimized **(2mks)**

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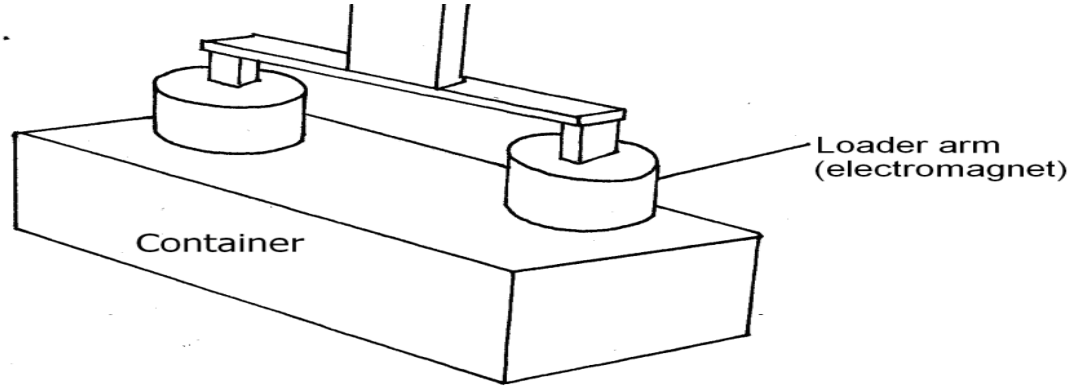
8. The figure below shows container loader which uses electromagnet to offload containers from a ship.



(i) Why should the container be made of iron or steel **(1mk)**

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(ii) State two ways in which the loader can be made to lift heavier container **(2mks)**

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9. Two 12V lead acid accumulators are rated 60Ah and 70Ah. State two physical differences between the accumulators **(2mks)**

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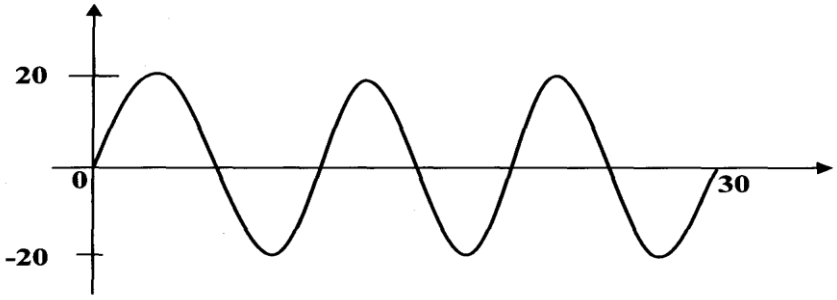
10. The diagram below shows part of a wave form. The numbers on the diagram show scales in meters. If the speed of the wave is $20ms^{-1}$, determine the frequency and wavelength of the wave.

(3mks)



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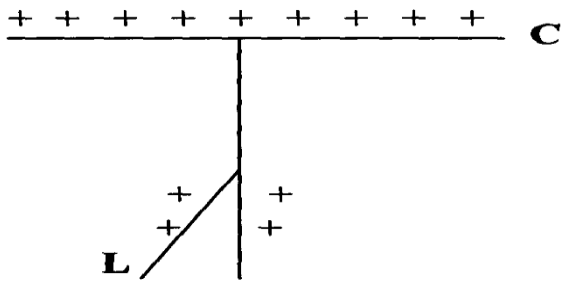
11. A gold leaf electroscope is positively charged as shown in the diagram below where **C** is the cap and **L** is the gold leaf. State and explain what happens to **L** when a positively charged rod is brought near **C** without touching it. **(2mks)**



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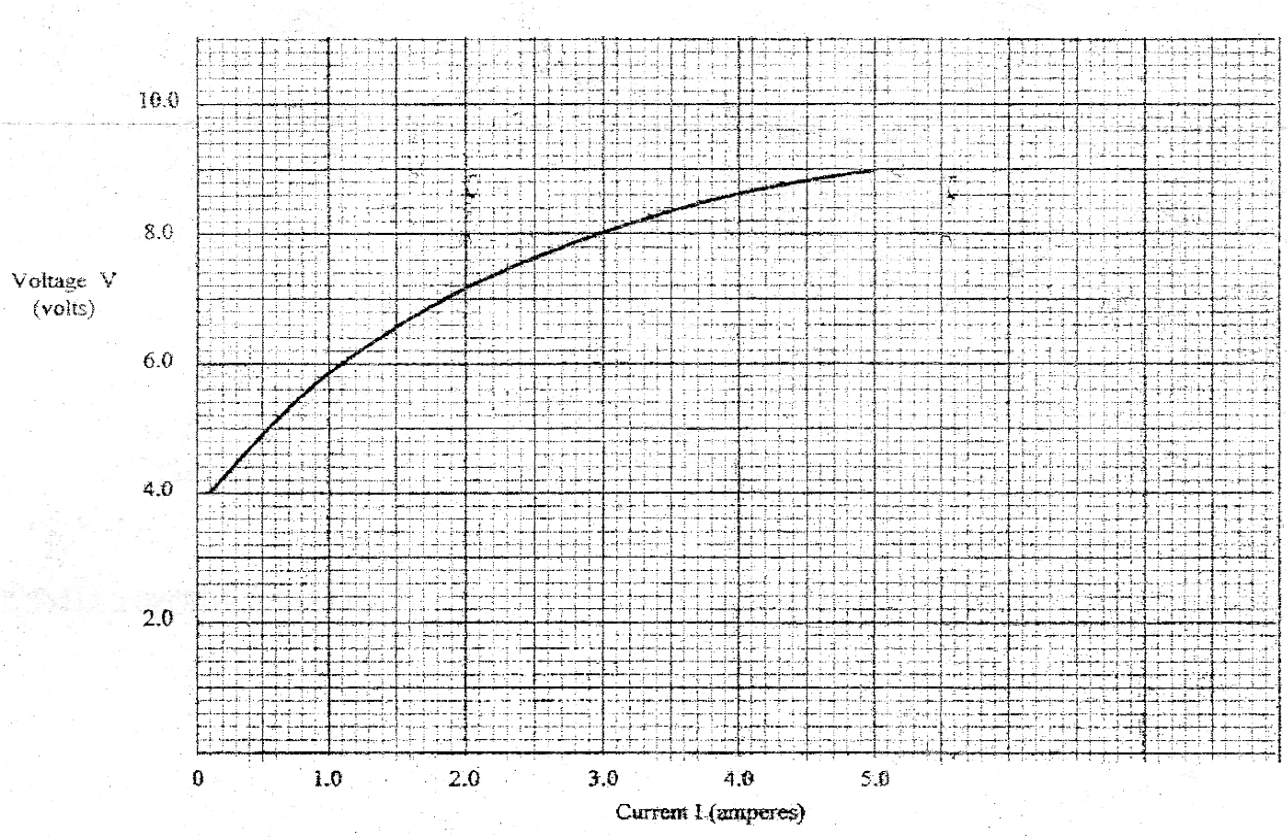
SECTION B (55 Marks)

Answer all the questions in this section in the spaces provided

12 a) Figure 8 shows graph of potential difference V (volts) against a current (ampere) for a certain device.



From the graph

(i) State with a reason whether or not the device obeys ohms law **(2marks)**

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(**ii)** Determine the resistance of the device at

(I) 1 = 1.5A

(II) 1 = 3.5A

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(iii) From the results obtained in (ii) translate how the resistance of the device varies as the current increases **(1mark)**

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(iv) **State** the cause of this variation in resistance **(1mark)**

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b) Three identical dry cells each of e.m.f. 1.6V are connected in series to a resistor of 11.4Ω. A current of 0.32A. How is the circuit? Determine:

(i) The total e.m.f. of the cell **(1mark)**

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(ii) The internal resistance of each cell **(3marks)**

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13 (a) State the meaning of the term 'principal focus' as applied in lenses **(1mark)**

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(b) You are provided with the following apparatus to determine the focal length of a lens:

- A biconcave lens and lens holder
- A lit candle
- A white screen
- A metre rule

(i) Draw a diagram to show how you would arrange the above apparatus to determine the focal length of the lens **(1mark)**

(ii) Describe the procedure you would follow

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(iii) State two measurements that you would take **(2marks)**

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(iv) Explain how the measurements in (iii) would be used to determine the focal length.

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(c) An object is placed 30cm in front of a concave lens of focal length 20cm. Determine the magnification of the image produced. **(4marks)**

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14 (a) State what is meant by 'electromagnetic induction' **(1mark)**

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(b) Figure 9 shows a simple electric generator

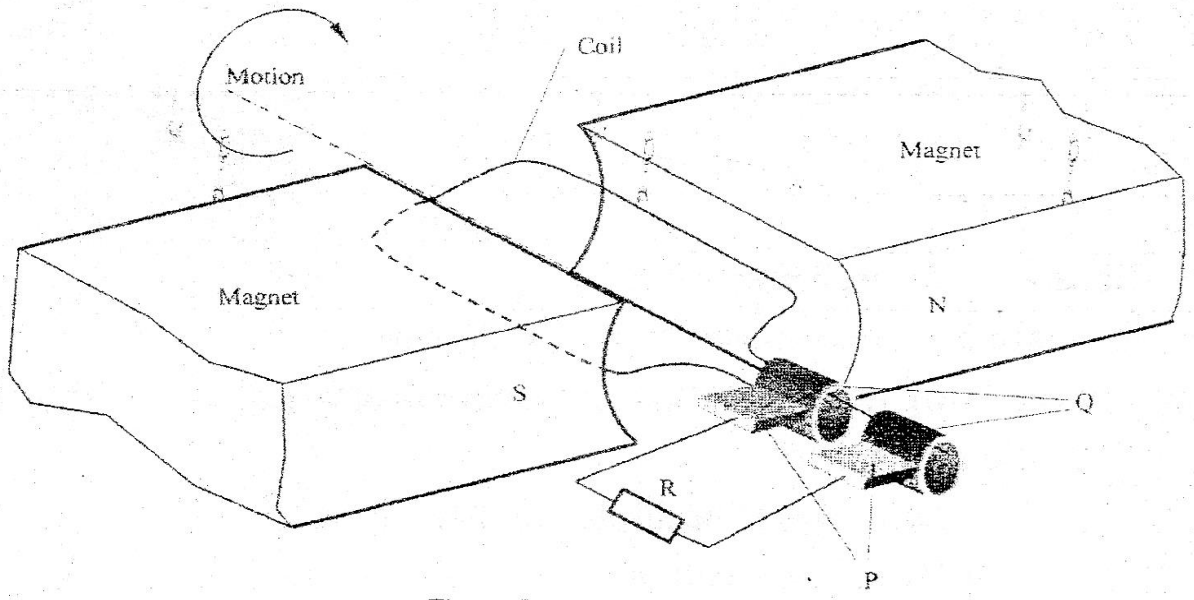

Figure 9

(i) Name the parts labeled P and Q **(2marks)**

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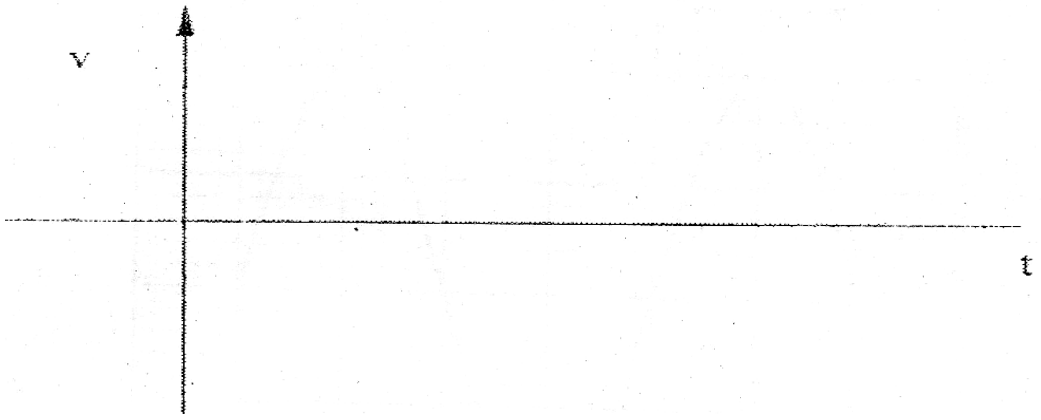
(ii) Sketch on the axes provided a graph to show how the magnitude of the potential difference across R changes with the line I



(iii) State two ways in which the potential differences produced by such a generator can be increased.

(2marks)

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(c) In a transformer, the ratio of primary to the secondary turns is 1:10. A current of 500mA flows through a 200Ω resistor in the secondary circuit. Assuming that the transformer is 100% efficient; determine;

(i) The secondary voltage **(1mark)**

……

……

(ii) The primary voltage **(2marks)**

……

……

……

……

(iii) The primary current **(2marks)**

……

……

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……

15 (a) State two differences between cathode rays and electromagnetic radiations

……

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……

(b) Figure 10 shows the main features of a cathode ray oscilloscope (CRO)

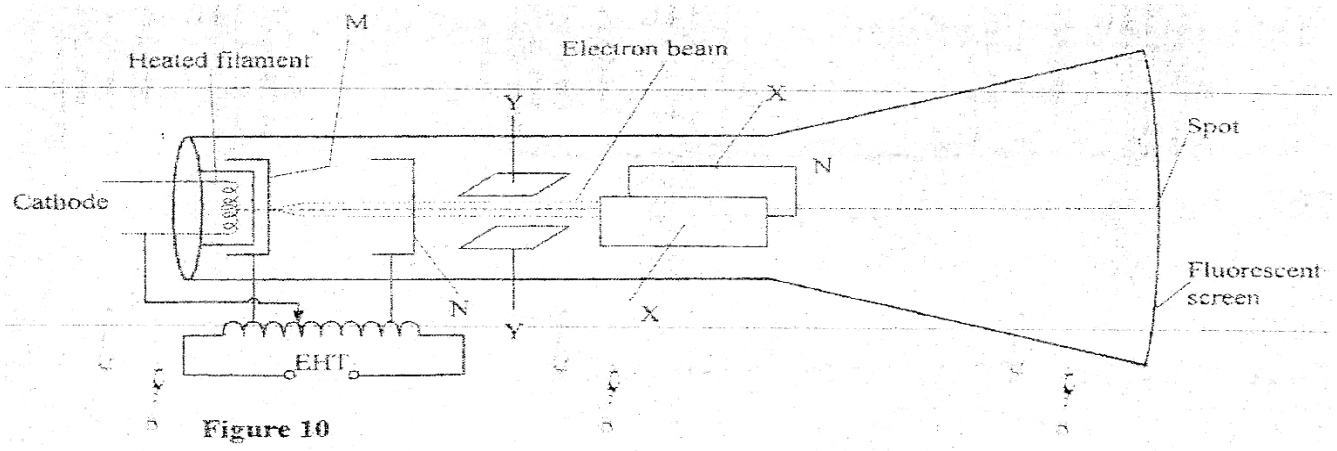

Figure 10

(i) Name the parts labeled M and N

……

……

(ii) Explain how electrons are produced in the tube.

……

……

(iii) When using the CRO to display waveforms of voltages state where the following should be connected

(I) The voltage to be displayed on the screen

……

(II) The time base volume

……

(iv) State why the tube is highly evacuated

……

……

(c) Figure 11 shows the waveform of a voltage displayed on the screen of a CRO. The Y gain calibration was 5V per cm

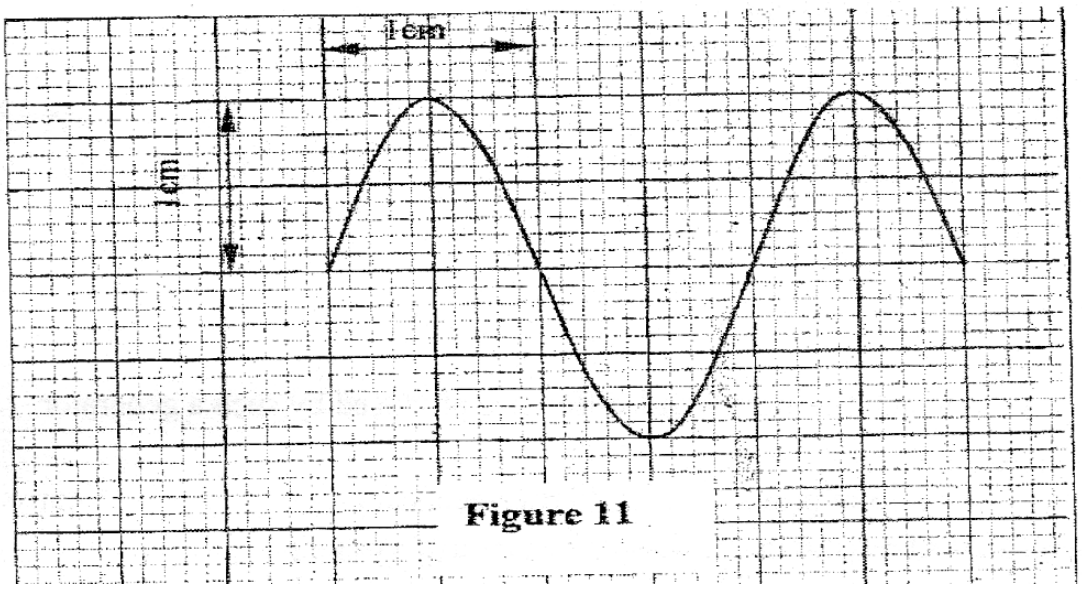

Figure 11

(i) Determine the peak-to-peak voltage of the Y input

……

……

……

……

……

(ii) Sketch on the same figure the appearance of the waveform after the voltage of the input signal is halved and it's frequency is doubled **(2marks)**

16. a) It is observed that when ultra – violet radiation is directed onto a clean Zinc plate connected to the cap of a negatively charged leaf electroscope, the leaf falls.

i. Explain this observation. **(1mark)**

……

……

ii. Explain why the leaf of the electroscope does not fall when infrared radiation is directed onto the zinc plate. **(1mark)**

……

……

b) State the effect on the electrons emitted by the photoelectric effect when the intensity of incident radiation is increased. **(1mark)**

……

……

c) The maximum wavelength required to cause photoelectric emission on a metal surface is 8.0×10^{-7} m. The metal surface is irradiated with light of frequency 8.5×10^{14} Hz.

(**Take lev = 1.6×10^{-19} J , c = 3.0×10^{8} m/s , h= 6.63×10^{-34} Js)**

Determine:

i). The threshold frequency. **(2marks)**

……

……

……

……

ii) .The work function of the metals in electron volts. **(2marks)**

……

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iii) . The maximum Kinetic energy of the electrons. **(3marks)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

PHYSICS

232/3

PAPER 3

(PRACTICAL)

TIME: 2½ HOURS

SCHOOL…… SIGN……

Kenya Certificate of Secondary Education.

CONFIDENTIAL

Instructions

Each candidate will require the following:

Question one

- A metre rule
- 100 ml beaker
- About 100 ml clean water
- A stand, boss and clamp
- A stop watch
- A screen
- A measuring cylinder (100 ml)
- A micrometer screw gauge (to be shared if necessary)
- A Vernier calliper (to be shared if necessary)
- A glass tube of external diameter 6 mm and length 10 cm
- A nichrome wire labelled **M** approximately 65 cm long and diameter 0.35 mm **should be provided for each candidate.**
- Some sellotape (5 cm long)
- One 50 g mass
- One 40 g (or two 20 g masses) (any combination to give 40 g)

Question Two

- A nichrome wire labelled **L** of length 100 cm and diameter 0.30 mm mounted on a millimeter scale
- Six connecting wires at least four with crocodile clips
- An ammeter (range 0 – 0.1 A)
- A voltmeter (range 0 – 3 V)
- Two new dry cells (size D)
- A cell holder
- A switch

For Marking Schemes Contact 0746-222-000 / 0742-999-000

KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

PHYSICS

232/3

PAPER 3

(PRACTICAL)

TIME: 2½ 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*

b) *Answer all questions in this question paper.*

c) *All your answers and working must be written in the spaces provided in this question paper.*

d) *You are supposed to spend the first **15** minutes of the **2 ½** hours allowed for this paper reading the whole paper carefully.*

e) *Marks are given for a clear record of the observation actually made, their suitability, accuracy and the use made of them*

f) *All questions must be answered in English*

FOR EXAMINERS USE ONLY

QUESTION	SECTION	MAXIMUM SCORE	CANDIDATES SCORE
1	A	12	
	B	08	
2		20	
TOTAL		40	

Question 1

You are provided with the following:

- a micrometer screw gauge (to be shared)
- a vernier calliper (to be shared)
- glass tube
- a wire labelled m
- some sellotape
- one 50 g mass
- some masses (totaling 40 g)
- a meter rule
- 100 ml beaker
- a stand boss and clamp
- a stop watch
- a source of light
- a screen
- some water
- a measuring cylinder

PART A

Proceed as follows:

a) Using a micrometer screw gauge, measure and record the diameter of the wire labelled M.

(1 mark)

d = ... mm

d = ... m

b) Using wire M, make a spring as follows:

(i) Use some sellotape to fix one end of the wire M (about 2.5 cm) along the glass tube

(ii) Hold firmly the part of the wire under the tape with one hand. Use the other hand to wind 30 turns as closely and tightly as possible.

(see figure 1)

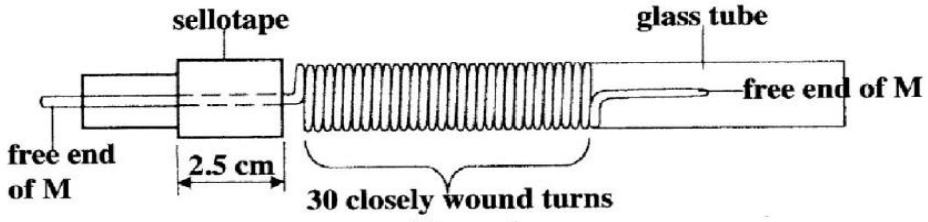

Figure 1

c) Remove the sellotape and release the spring from the tube. *(The spring will slightly unwind and some turns will disappear)*

Bend the free ends as shown in **Figure 2**

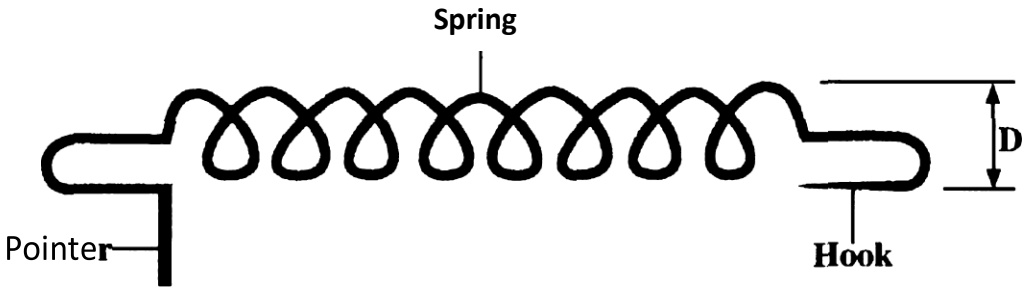

Figure 2

d) Using a Vernier callipers, measure and record the external diameter **D** of the spring. **(1 mark)**

D = …… cm

D = …… m

e) Suspend the spring and 50g mass from a retort stand as shown in **Figure 3.**

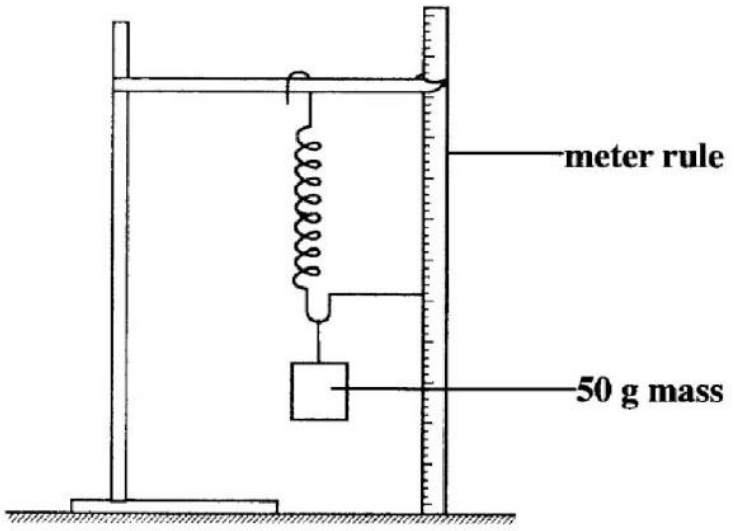

Figure 3

Count and record the number of turns N of the suspended spring. **(1 mark)**

N = ……..

f) Add 40 g to the 50 g mass and record the extension X of the spring due to the 40 g.

X = …….. cm **(1 mark)**

X = …… .m

g) Determine c given that $c = \frac{0.4}{X}$ **(1 mark)**

……

……

……

……

h) Determine n given that $n = \frac{nd^4}{8ND^3}$ **(2 marks)**

……

……

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……

i) With the spring still loaded with the 90 g, pull the lower mass slightly downwards and let go so that the mass oscillates vertically. Record the time **t** for 20 oscillations. Hence determine the period **T.** **(2 marks)**

t = ……..…… s

T = ……..……s

j) Determine Z given that $T = 2\pi\sqrt{\frac{m}{Z}}$ where m is the mass in kg on the spring**. (2 marks)**

……

……

……

……

PART B

Proceed as follows:

k) Place the 100 ml beaker on a metre rule and pour 80 cm^3 of water into it. Arrange a lamp (*source of light*) and screen on either side of the beaker. (*see **figure 4***)

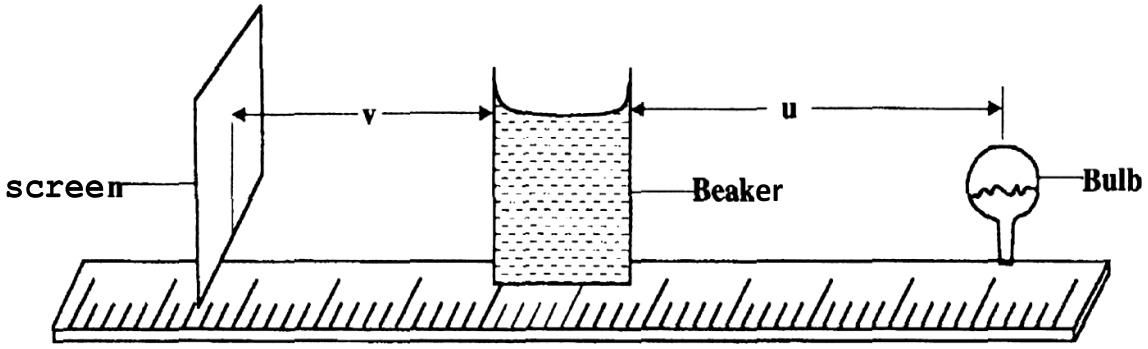

Figure 4

l) Adjust the position of the lamp on the metre rule so that its centre is a distance u = 12 cm from the beaker. Switch on the light. Adjust the position of the screen until a well focused vertical line *(the image of filament)* is formed on the screen. Measure and record in **Table** 1 the image distance V between the screen and the beaker.

m) Repeat part (l) for other values of **u** shown in **Table 1** and complete the table

Table 1 **(4 marks)**

Distance u (cm)	12	16	20
Distance v (cm)			
$y = \frac{uv}{u+v}$			

n) (i) With the meter rule outside the beaker, measure the height **h** of the water meniscus above the bench. **(1 mark)**

h = …….. cm

(ii) Determine the value of **P** given that $P = \frac{5}{\sqrt{h}}$ **(1 mark)**

……

……

……

(iii) Hence determine the value of **f** given that $f = \frac{P}{2m} + 1$ to one decimal place. **(2 marks)**

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QUESTION TWO

You are provided with the following apparatus.

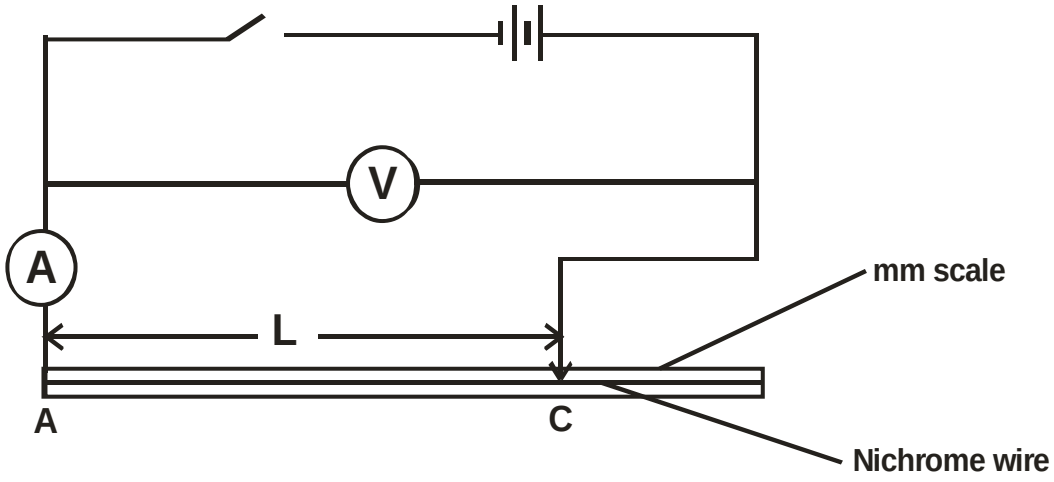
- Two dry cells.
- Nichrome wire 100cm on a mm scale.
- An ammeter.
- Cell holder.
- Voltmeter.
- Connecting wires with crocodile clips.
- Switch.

Proceed as follows;

a) Measure the e.m.f of the cells, E.

E = …… **(1 mark)**

b) Connect the circuit as shown in the diagram.



c) Connect the ends A and C where AC is the length L of the Nichrome wire across the terminals as shown. Close the switch and measure both current I and potential difference (P.d) across the wire AC when L = 100cm.

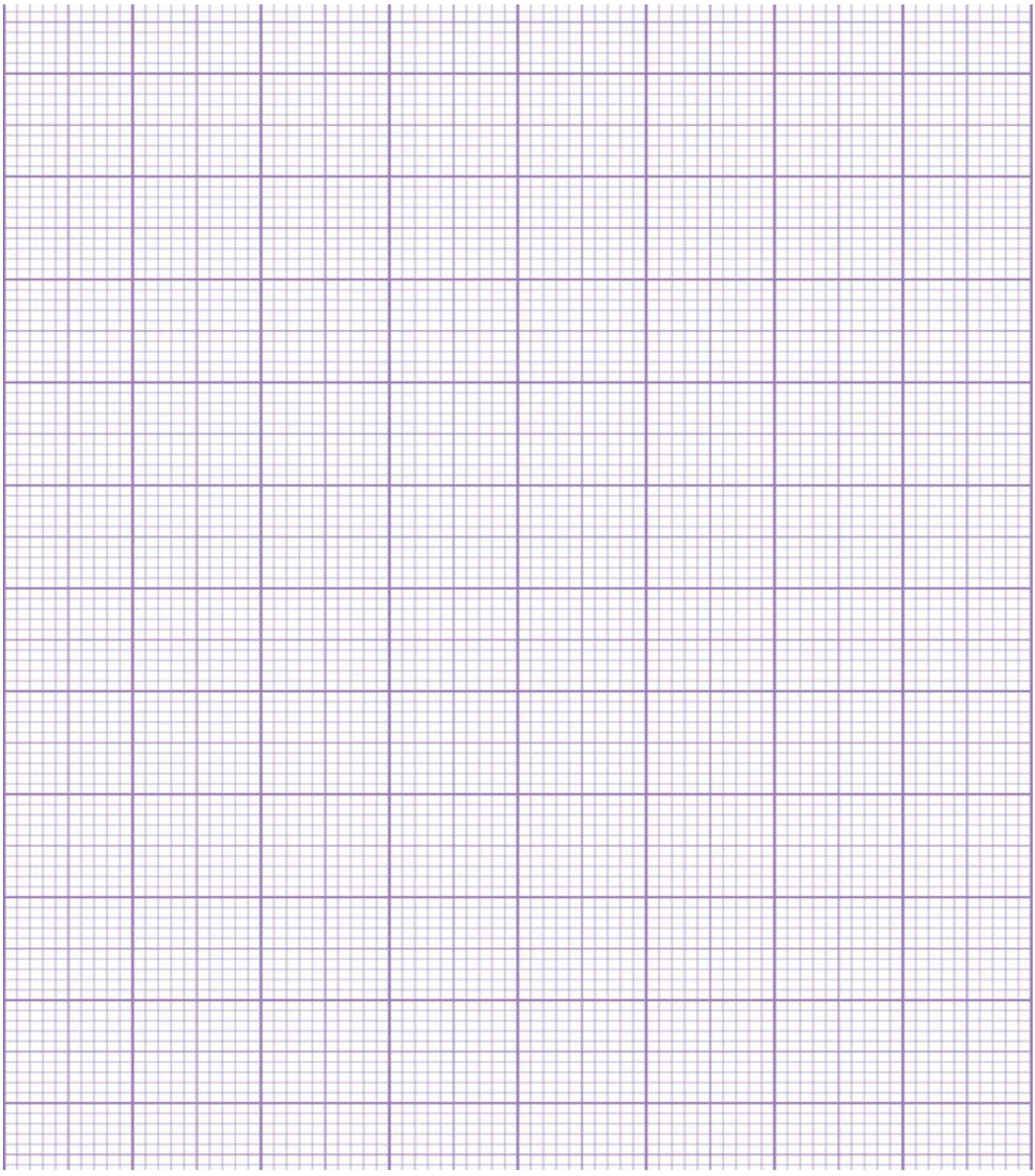
Current I = …… **(1 mark)**

P.d, V = …… **(1 mark)**

d) Reduce the length L (AC) to the lengths shown in the table below. In each case record the current, I, and the corresponding P.d. **(7 marks)**

Length L (cm)	100	70	60	50	40	20
I (A)						
P.d (V)						
E – V (v)						

e) Plot a graph of E – V against I(A) on x-axis in the grid provided. **(5 marks)**



f) Determine the slope of the graph. **(3 marks)**

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g) Given that E = V + Ir, determine the internal resistance, r, of each cell. **(2 marks)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

MATHEMATICS

121/1

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

INSTRUCTIONS TO CANDIDATES

1. Write your name, index number and class in the spaces provided above.
2. The paper contains two sections: **Section I** and **Section II**.
3. This paper contains **14 PRINTED** pages make sure all **PAGES ARE PRINTED** and **NON IS MISSING**
4. Answer **ALL** the questions in **Section I** and **ANY FIVE** questions from **Section II**.
5. All working and answers must be written on the question paper in the spaces provided below each question.
6. Marks may be awarded for correct working even if the answer is wrong.
7. Negligent and slovenly work will be penalized.
8. Non-programmable silent electronic calculators and mathematical tables are allowed for use.

For examiners use only

Section I

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

Section II

17	18	19	20	21	22	23	24	Total

Grand Total

SECTION A (50 marks)

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

1. Without using a calculator evaluate

$$\frac{5x6 + (-76)\div 4+27\div 3}{(-5)\div 3 \times (-4)}$$

(3marks)

2. (a) Express 2268 in terms of its prime factors **(1mark)**

(b) Hence determine the smallest positive number x such that 2268x is a perfect square.

(2marks)

3. Elvis arrived in Kenya with 5000 sterling pound, he exchanged it to Kenya Shilling and spent sh. 267 100. Before jetting out of the country, he exchanged the balance into Euros. Using the exchange rates below, calculate the amount he obtained in Euros in Kenya shillings. **(3marks)**

Currency	**Buying**	**Selling**
1 Sterling pound	114.20	114.50
1Euro	101.20	101.30

4. Simplify the expression **(3marks)**

$$\frac{2x^2+3x-2}{x^3-4x}$$

5. When two wires of length 179m and 234m are divided into pieces of equal lengths a remainder of 3m is left in each case. Find the least number of pieces that can be obtained.

(3marks)

6. Without using calculator, solve for n in the equation

$1 - \left(\frac{1}{3}\right)^{n} = \frac{242}{243}$ **(3marks)**

7. Solve for y in the equation $\frac{7-y}{4} - \frac{9-2y}{3} = \frac{1}{2}$ **(3marks)**

8. Two similar solids have surface area of 48cm^2 and 108cm^2 respectively. Find the volume of the smaller solid if the bigger solid has a volume of 162 **cm^3** **(3 marks)**

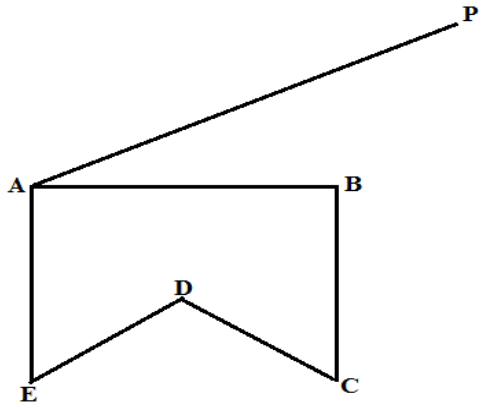
9. Use reciprocal table only to evaluate $\frac{1}{0.325}$ **(3marks)**

Hence, evaluate $\frac{\sqrt{0.25}}{0.325}$ to 1.d.p

10. A plot measuring 1.2m by 19.1 m is surrounded by a path 0.5m wide. Find the area of the path in square metres. **(3marks)**

11. The interior angle of a regular polygon is 60^0 more than its exterior angle, find the number of sides of the polygon. **(3marks)**

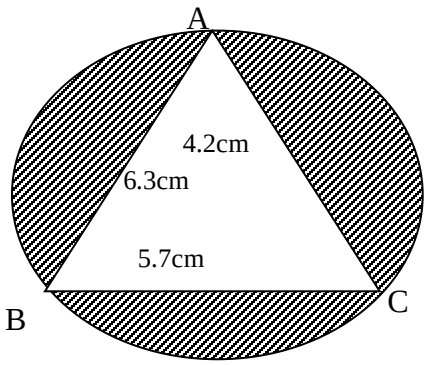
12. In the figure below ABCDE is a cross-section of a solid. The solid has a uniform cross-section. Given that AP is an edge of the solid, complete the sketch showing the hidden edges with a broken lines. **(3 marks)**



13. If tan x = $\frac{1}{\sqrt{3}}$ find without using tables or calculator the value of Sin (90-x)+ cos (90-x) leaving your answer in simplified surd form **(3marks)**

14. A line perpendicular to the line 3y-2x=2 passes through the point (-3,2). Determine the equation of the line and write it in the form ax +by = c where a, b, and c are constant. **(3marks)**

15. The circle below whose area is 18.05cm^2 circumscribes triangle ABC where AB = 6.3cm, BC = 5.7cm and AC = 4.2cm. Find the area of the shaded part. **(4 Marks)**



16. In a book store, books packed in cartons are arranged in rows such that there are 50 cartons in the first row, 48 cartons in the next row, 46 in the next and so on.

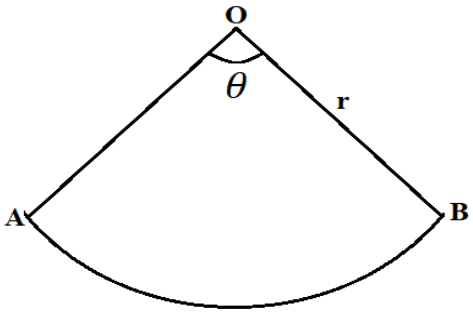
(a) How many cartons will there be in the 8th row? **(2 Marks)**

(b) If there are 20 rows in total, find the total number of cartons in the book store**.** **(2 Marks)**

SECTION II (50 Marks)

*Answer any **five** questions from this section in the spaces provided.*

17. The figure below represents a sector of a circle radius r units. The area of the sector is 61.6 cm^2 and the length of the arc AB is one tenth of the circumference of the circle from which the sector was obtained. (Take $\pi = \frac{22}{7}$)



a) Calculate;

i) the angle θ subtended by the sector at the centre**.** **(2 marks)**

ii) The radius r of the circle**.** **(3 marks)**

b) If the sector above is folded to form a cone;

i) Calculate the base radius of the cone. **(2 marks)**

ii) The volume of the cone. **(3 marks)**

18. Two factories A and B produce both chocolate bars and eclairs. In factory A, it costs Kshs x and Kshs y to produce 1 kg of chocolate bars and 1 kg of eclares respectively. The cost of producing 1 kg of chocolate bars and 1 kg of eclairs in factory B increases by the ratio 6:5 and reduce by the ratio 4:5 respectively.

a) Given that it costs Kshs 460 000 to produce 1 tonne of chocolate bars and 800kg of eclares in factory A and Kshs 534 000 to produce the same quantities in factory B, form two simplified simultaneous equations representing this information**.** **(3 marks)**

b) Use matrix method to find the cost of producing 1 kg of chocolate bars and 1 kg of eclaires in factory A. **(5 marks)**

c) Find the cost of producing 100 kg of chocolate bars and 50 kg of eclaires in factory B. **(2 marks)**

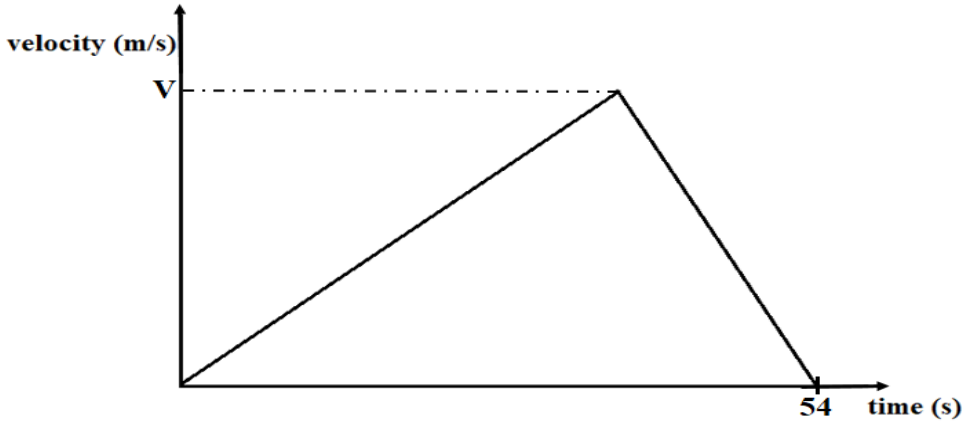
19. The following measurements were recorded in a field book of a farm in metres (xy = 400m)

	Y	
	400	
C60	340	
	300	120D
	240	100E
	220	160F
B100	140	
A120	80	
	x	

(a) Using a scale of 1cm representing 4000cm, draw an accurate map of the farm**.(3 Marks)**

(b) If the farm is on sale at Kshs. 80,000.00 per hectare, find how much it costs**.(7 Marks)**

20. The figure below shows a velocity-time graph of an object a which accelerates from rest to a velocity of V ms^{-1} then decelerated to rest in a total time of 54 seconds.



a) If it covered a distance of 810 metres;

i) Find the value of V. **(2 marks)**

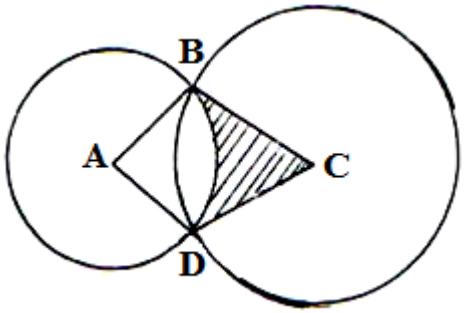
ii) Calculate its deceleration, given that its initial acceleration was $1\frac{2}{3}ms^{-2}$ **(2 marks)**

b) A bus left town X at 10.45 am and travelled toward town Y at an average speed of 60 km/h. A car left town X at 11.45 am on the same day and travelled along the same road toward Y at an average speed of 100km/h. The distance between town X and town Y is 500km.

i) Determine the time of the day when the car overtook the bus**.** **(3 marks)**

ii) Both vehicles continued towards town Y at their original speeds. Find how long the car had to wait in town Y before the bus arrived**.** **(3 marks)**

21. In the diagram below, two circles, centres A and C and radii 7cm and 24cm respectively intersect at B and D. AC = 25cm.



(a) Show that angle ABC = 90^0. **(3 Marks)**

(b) Calculate

(i) the size of obtuse angle BAD **(3 Marks)**

(ii) the area of the shaded part **(4 Marks)**

22. (a) a straight line L_1 whose equation is $9y - 6x = -6$ meets the x-axis at Z. Determine the coordinates of Z. **(2 marks)**

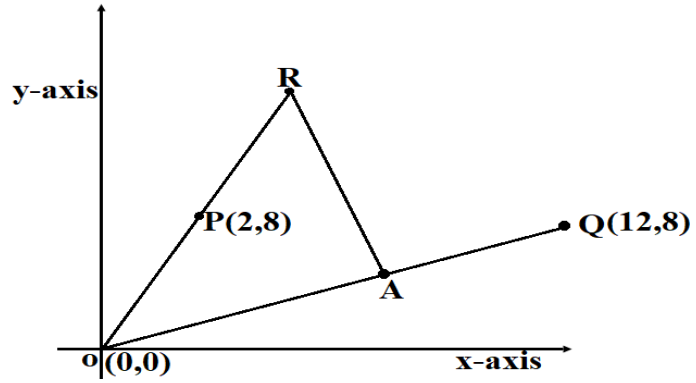
(b) A second line L_2 is perpendicular to L_1 at Z. Find the equation of L_2 in the form $ax + by = c$, where ,b and c are integers. **(3 marks)**

(c) a third line L_3 passes through the point (2,5) and is parallel to L_1. Find:

i) The equation of L_3 in the form $ax + by = c$, where a, b and c are integers. **(2 marks)**

ii) The coordinate of point R at which L_2 intersects L_3**.** **(3marks)**

23. In the diagram below, the coordinates of points O, P and Q are (0,0), (2,8) and (12,8) respectively. A is a point on **OQ** such that 4**OA**=3**OQ**. Line **OP** produced to R is such as **OR**=5**OP**.



a) Find vector **RA.** **(3 marks)**

b) Given that point L is on **PQ** such that **PL**: **LQ**=12:5, find vector **RL**. **(4 marks)**

c) Show that R, L and A are collinear. **(2 marks)**

d) Find the ratio of **RL**:**LA.** **(1 marks)**

24. Five points, P, Q, R, V and T lie on the same plane. Point Q is 53km on the bearing of 055^0 of P. Point R lies 162^0 of Q at a distance of 58km. Given that point T is west of P and 114km from R and V is directly south of P and $S40^0E$ from T.

a) Using a scale of 1:1,000,000, show the above information in a scale drawing. **(3 marks)**

b) From the scale drawing determine:

i) The distance in km of point V from R. **(2 marks)**

ii) The bearing of V from Q. **(2 marks)**

iii) Calculate the area enclosed by the points PQRVT in squares kilometers. **(3 marks)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

MATHEMATICS

121/2

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education

INSTRUCTIONS TO CANDIDATES

a) Write your name, index number and class in the spaces provided above.
b) The paper contains two sections: **Section I** and **Section II**.
c) Answer **ALL** the questions in **Section I** and **ANY FIVE** questions from **Section II**.
d) All working and answers must be written on the question paper in the spaces provided below each question.
e) Marks may be awarded for correct working even if the answer is wrong.
f) Negligent and slovenly work will be penalized.
g) Non-programmable silent electronic calculators and mathematical tables are allowed for use.

For examiners use only

Section I

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

Section II

17	18	19	20	21	22	23	24	Total

Grand Total

SECTION I (50 marks) ***Answer all the questions***

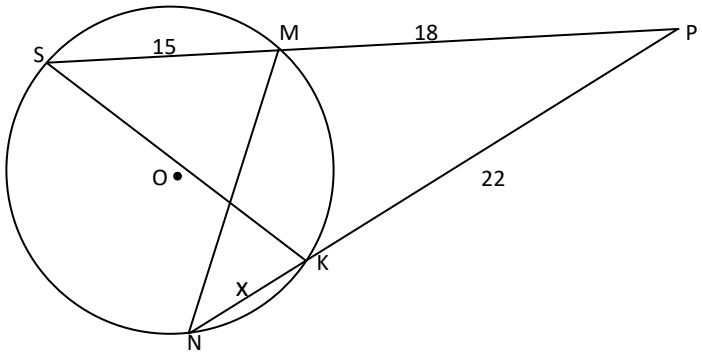
1. Find matrix **X** given that $\boldsymbol{AX - X} = \begin{pmatrix} \mathbf{-4} \\ \mathbf{-10} \end{pmatrix}$ where $A = \begin{pmatrix} \mathbf{2} & \mathbf{3} \\ \mathbf{-2} & \mathbf{4} \end{pmatrix}$ **(3 marks)**

2. The cost of providing a commodity consists of transport, labour and raw material in the ratio $8:4:12$ respectively. If the transport cost increases by $12\ \%$ labour cost $18\ \%$ and raw materials by $40\ \%$, find the percentage increase of producing the new commodity **(3 marks)**

3. Find the number of terms in the series $\frac{8}{81} - \frac{4}{27} + \frac{2}{9} - ..... - 1\frac{11}{16}$ **(3marks)**

4. Using binomial expansion simplify $\frac{\left(2+\sqrt{3}\right)^4}{\left(2-\sqrt{3}\right)^4}$ leaving your answer in the form $\mathbf{a+b\sqrt{c}}$ where a, b and c are rational numbers **(3marks)**

5. The figure below shows external intersection of two chords SM and NK which are produced to meet at P. Given that SOK is the diameter of the circle and that SM=15cm, MP=18cm and PK=22cm



a). Calculate the value of x representing length of chord NK. **(1 marks)**

b). Calculate the radius of the circle **(2marks)**

6. Determine the equation of a circle if the coordinates of the end points of its diameter are **A(–4,4) and B(6,–12)** leaving your answer in the form of $\mathbf{ax^2 + by^2 + cx + dy + e = 0}$ where a, b, c, d and e are integers. **(3 marks)**

7. Make 'c' the subject of the formula if $v^2 = \frac{r}{3} + \sqrt{\frac{1+c^2}{r^2}}$ **(3marks)**

8. Find the area enclosed by the curve$y = 81 - x^2$ and the x −axis using mid-ordinate rule with 9 strips. **(4marks)**

9. Without using a calculator or tables, find the value of x in **(3marks)**

$$\log_{2.5}\left(\frac{1}{x}\right)-1-\log_{2.5}(x)=3\log_{2.5}\left(\frac{1}{x}\right)-\log_{0.5}2$$

10. Solve for ϑ in the equation $6cos^2\vartheta - sin\vartheta - 4 = 0$in the range $-180^0 \leq \vartheta \leq 180^0$ **(3 marks).**

11. Wambua deposited 6,400 in an investment account which pays 30% interest rate per annum compounded semi – annually for 3 years. Muinde invested one and a half times that of Wambua at $12\frac{1}{2}\%$ per annum simple interest for 6 years. Find whose investment earned more interest and by how much give your answer to the nearest shilling. **(3marks)**

12. (a) Expand and simplify the binomial expression. **(2 Marks)**

$$\left(2-\frac{1}{2}y\right)^5$$

(b) Use the first four terms of the simplified expression in (a) above to evaluate to 5 significant figures.

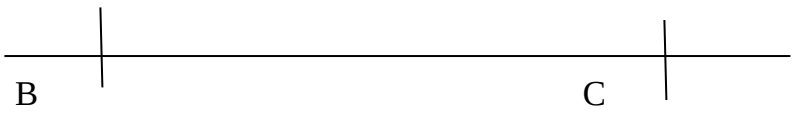
(1.98)5. **(2 Marks)**

13. Use logarithms to evaluate $\sqrt[3]{\frac{5.27\times\cos^2 82.48}{\log 6.7}}$ **(3marks)**

14. Form the quadratic equation whose roots are $\mathbf{x = -^5/_3}$ and $\mathbf{x = 1}$ **(2 marks)**

15. A biased coin is weighted such that its tail is twice as likely to appear as the head. Find the probability that that a tail and a head appear when the coin is tossed twice. **(3marks)**

16. Line BC below is a side of a triangle ABC and also side of a parallelogram BCDE.



Using a ruler and a pair of compasses only construct:

(i) The triangle ABC given that $\angle ABC = 120^0$ and AB = 6 cm. **(1 mark)**

(ii) The parallelogram BCDE whose area is equal to that of the triangle ABC and point E is on line AB. **(3 marks)**

SECTION II (50 marks)

*Answer **only five** questions from this section*

17. ABCD is a quadrilateral with coordinates $A\ (2,1), B\ (3,2), C\ (3,4)$ and $D\ (0,3)$. ABCD is mapped onto A'B'C'D' under transformation **T** given by a shear with x – axis invariant such that A' (4, 1).

a) Determine the $2\ x\ 2$ transformation matrix representing **T** and hence determine the coordinates of B', C' and D'. **(2 marks)**

b) A'B'C'D' is transformed to A"B"C"D" under a transformation **H** such that A" $(-6,-9)$ and D" $(-12,-15)$ Determine the $2x2$ matrix representing **H** and hence determine the coordinates of B" and C" **(3 marks)**

c) A"B"C"D" mapped onto A"'B"'C"'D"' under a transformation **V** representing a reflection in the line $\mathbf{y=-x}$. Determine the $2x2$ matrix representing **V** and hence determine the coordinates of A"'B"'C"'D" **(3 marks)**

18. The following table shows heights of 200 seedlings of the same species measured to the nearest cm.

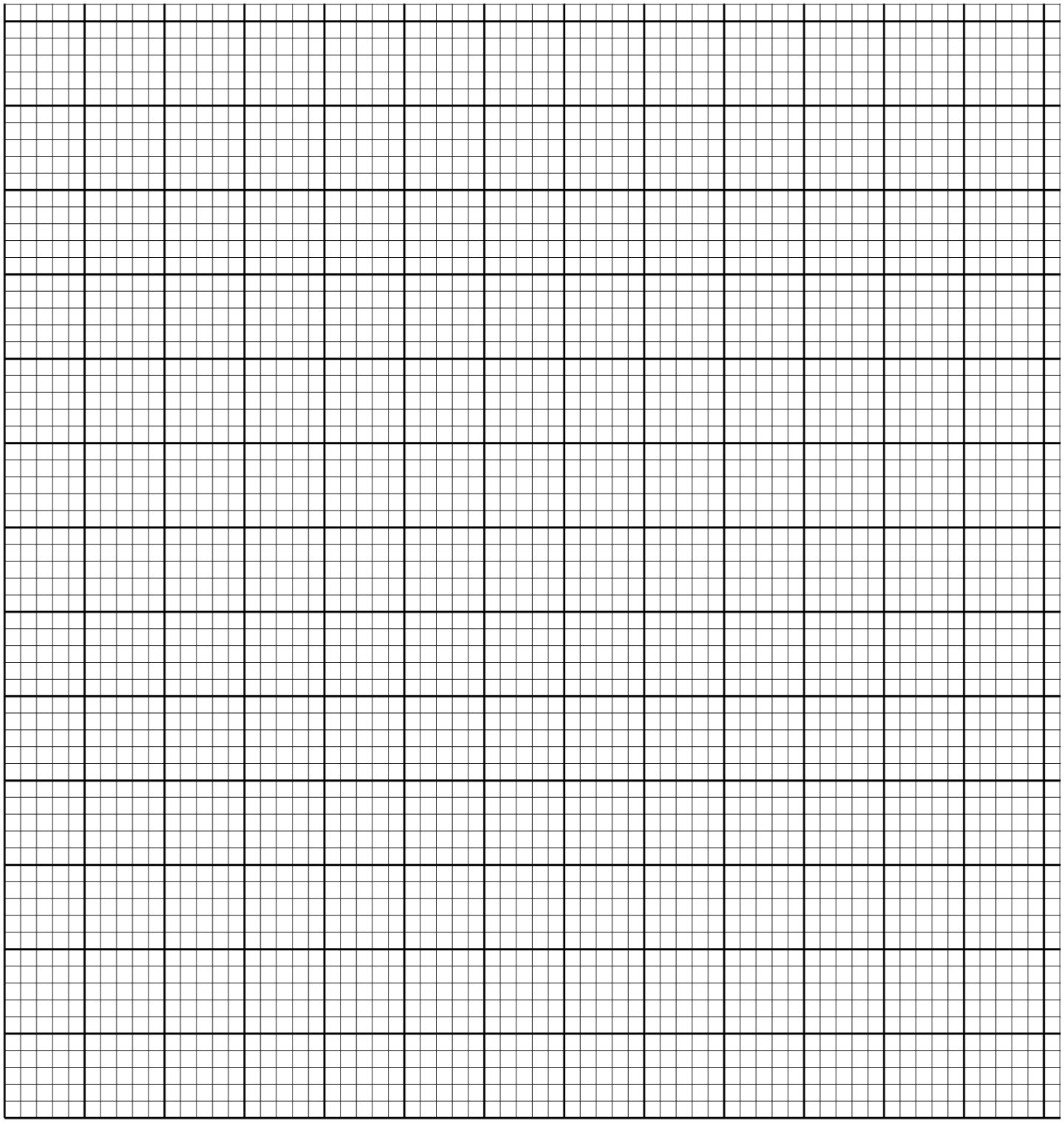
Height(cm)	frequency					
70- 79	7					
80-84	30					
85-89	66					
90-94	57					
95-99	27					
100-109	13					

a) Calculate the:-

i) Quartile deviation **3marks**

b) Standard deviation using a working mean of 102 **3marks**

c) Draw an ogive curve representing the above information and use it to determine the percentage number of seedling whose height ranges between $85 \leq H \leq 93$. **(4marks)**

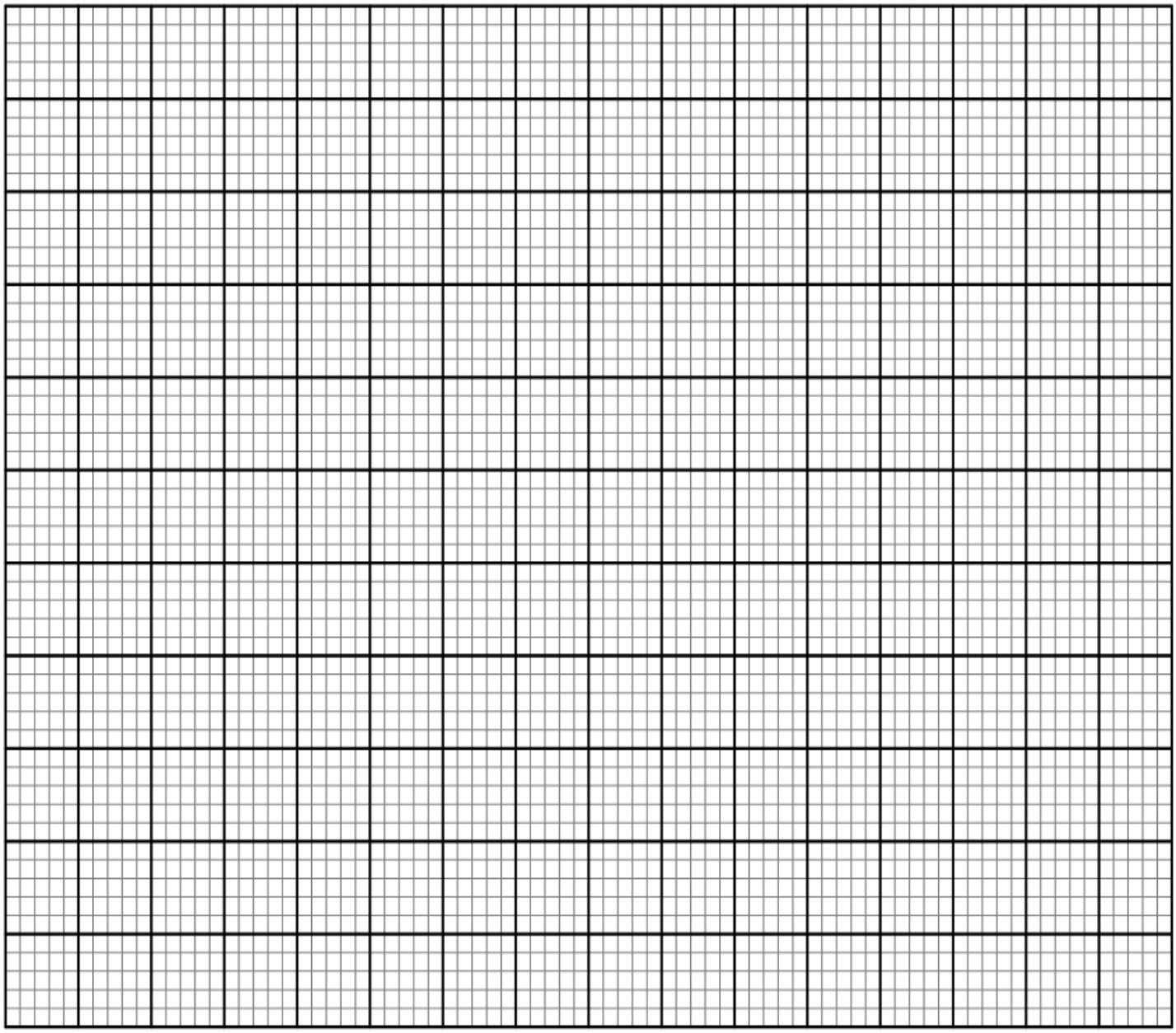


19. In order to ensure optimal health a lab technician needs to feed the rabbits on a daily diet containing a minimum of 24grams of fat, 36grams of carbohydrates and 4grams of protein. Rather than order rabbit food that is custom blended it is cheaper to order food X and food Y and blend them for an optimal use. One packet of food X contains 6grams of fat ,12 grams of carbohydrates ,2 grams of proteins and costs Sh 50.While one packet of food Y contains 12grams of fat,12 grams of carbohydrates,1 gram of proteins and it costs Sh 60

a). Form all the inequalities to represent the information above**.** **(4 marks).**

b). Graph all the inequalities **(4marks)**

c). Determine the number of packets of type X and Y feed that should be used for optimal health at minimum cost. **(2marks)**



20. Mr Kibet's PAYE per month is ksh 29,522. The ratio of his basic salary to taxable allowances is 13: 9. He is housed by his employer and pays a norminal rent of ksh 9000. His taxable pay is his gross pay plus 15% of his gross pay less the norminal rent. He is entitled to a personal relief of ksh 1056 per month.The following tax rates are used in the tax computation.

Income per annum (k£ per annum)	Rates (Ksh per K£)
1-5808	2
5809-11280	3
11281-16756	4
16753-22224	5
22225 and over	6

Calculate:

a) His basic salary per month **7marks.**

b) The percentage change in his PAYE if his taxable pay increases by 10% **3marks**

21. A group of students wish to build up a pile of toy bricks so as to have 2 bricks in the top row,4 bricks in the second row, and 6 bricks in the third row and so on. If they have 3000 bricks

a) How many rows can they complete and how many bricks are they left with? **(4marks)**

b) Calculate the least number of bricks they should add to have all bricks used with no remainder? **(2marks)**

c) Counting from the top, the 3rd row, 9th row, 27th row and so on form a geometric progression. If rows forming this progression are to be summed up, calculate the total number of bricks forming this arrangement after the number of bricks in (b) above have been included**.** **(4marks)**

22. P and Q are two pints on latitude $60°S$.Their longitudes are $30°E$ and $150°W$ respectively. Find to one decimal place :(Take the radius of the earth = $6370km$ and $\pi = \frac{22}{7}$)

a) The distance in km between P and Q along the parallel of latitudes**.** **(2marks)**

b) The shortest distance along the earth's surface between P and Q. **(3marks)**

c) A weather forecaster reports that the center of a cyclone at (30°S 120°W) is moving due south at 24 knots. How long will it take to reach a point (45°S, 120°W**).** **(2marks)**

d) A plane leaves P at $1400hr$s to Q at a speed of $900\ knots$ along the shortest route. Determine the time at Q when the plane arrived. **(3marks)**

23. A curve is represented by the following function; $y = x^3 - 4x^2 + 5x - 2$. Use the curve to answer the following questions;

a). Find $\frac{dy}{dx}$ **(1 mark)**

b). (i). Determine the values of the stationery points of the curve. **(4marks)**

(ii). Determine the nature of each stationery point on the curve **(2 marks)**

c). In the space provided, sketch the curve of $y = x^3 - 4x^2 + 5x - 2$ **(3 marks)**

24. Three quantities A,B and C are such that A varies directly as the square root of B and inversely as the square of C.

a). Given that $A = 4$ when $B = 64$ and $c = 5$, find

i). The law connecting A, B and C **(4 marks)**

ii). A when $B = 16$ and $C = 10$ **(2 marks)**

b). If B is increased by 44% and C decreased by 20%, find the percentage change in A. (**4 marks)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

COMPUTER STUDIES

451/1

PAPER 1 (THEORY)

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

1. *This paper consists of **TWO** sections; A and B*
2. *Answer all questions in sections A.*
3. *Answer question 16 and any other three questions from section B.*

FOR EXAMINER'S USE ONLY

Section	Question	Candidates score
A	1-15	
B	16	
	17	
	18	
	19	
	20	
TOTAL SCORE		

SECTION A (40 Marks)

*Answer **all** questions in this section*

1. Give **TWO** reasons why Powder type fire extinguishers are not recommended to be used in a computer laboratory. **(2 Marks)**

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2. State the purpose of each of the following memories in a computer system. **(2 marks)**

(i) ROM

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(ii) RAM

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3. State two factors that one would consider when selecting data entry method in computing.

(2 Marks)

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4. Describe the following types of printers and state one application area of each**.** **(3Marks)**

(a) Dot matrix

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(b) Thermal printer.

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5. Differentiate between in-house software and freeware. **(2 Marks)**

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6. Give two importance of feedback mechanism in systems **(2 Marks)**

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7. With an aid of a diagram, explain one-to-one database relationship. **(2 Marks)**

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8. KASSU Secondary School intends to set up internet connection in their school for e-learning purposes. Advise the school management on four internet connectivity requirements that is required for them to be able to access internet. **(2 Marks)**

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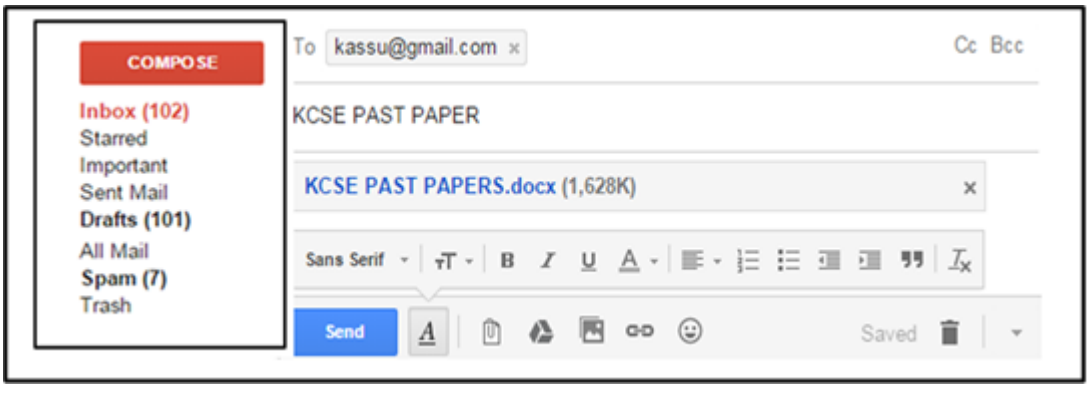
9. The figure below shows an extract of an e-mail application.



What is meant by each of the following terms: **(3 Marks)**

(a) Trash

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(b) Spam

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(c) Inbox

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10. State two ways in which users in an organization can be a security threat to data in an information system. **(2 Marks)**

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11. State three negative impact of information communication technology on the Environment. **(3 Marks)**

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12. In a computer based information system, state the purpose of the following files and give **one** example where such a file may be required in a school. **(4 marks)**

a. Report file.

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b. Sort file.

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13. State three responsibility of a Database administrator in an organization. **(3 Marks)**

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14. With an example for each, describe how computers are used in the following areas of education; **(3 Marks)**

a. Simulation

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b. Tutorial

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15. a. Dan a computer student noticed that every time a person enters the computer lab the computer screen flickers. Identify three reasons why the monitor might be flickering **(3 Marks)**

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b. State two ways in which the problem can be solved **(2 Marks)**

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SECTION B (60 MKS)

Answer question 16 (Compulsory)and any other THREE questions from this Section.

16. To maintain a strategic fit Safaricom is introducing a tariff called the mega tariff that will lower costs to Safricom to Safaricom calls and calls to other networks. Calls to Safaricom networks will be charged according to the time of the day as listed below:

- -Between 8am to 12 noon – 6 Ksh
- -Between 12 noon to 2pm -0.8 Kshs
- -Between 6 to 1 am -4Kshs
- -between 1 am t 8am - 1Kshs

Internal calls to other networks are charged at a fixed rate of 7 Kshs between 8am to 8pm and to while international calls are charged at a rate of 25 Kshs between 8am to 8pm and Kshs 35 for the rest of the day. All calls are charged per minute usage.

Mr. Wasswa Bbaale a business man who makes both internal and internal calls would like to make maximum use of this of this tariff.

a) Write a pseudo code that would show him know the charges of calls with an appropriate label when he the inputs type of call and the time where appropriate. Use a 24 hour clock. **(8marks)**

b) Design a flowchart for the pseudo code in 16(a) above **(7marks)**

17. a) Explain how an operating system controls I/O devices. **(2marks)**

b) Maintaining security is one of the functions the operating system. Explain how the operating system maintains security **(2marks)**

c) Distinguish between Indexed sequential and direct file organizations **(2marks)**

d) i) Using appropriate examples, differentiate between distributed and centralized processing modes **(3marks)**

ii) State one advantage and one disadvantage of distributed processing modes in 17(d) (i**(2marks)**

e) i) With reference to an operating system, differentiate between formatting and partitioning. **(2marks)**

ii) List any **TWO** types of user interface. **(2mark)**

18. a) Using eight bits and twos complement, subtract 78_{10} from 17_{10}. Give your answer in decimal notation **(3marks)**

b) Convert 11011011111.1111_2 to:

i) Octal **(2marks)**

ii) Hexadecimal **(2marks)**

iii) Decimal **(2marks)**

c) State any **Two** methods used to gain illegal access to a computer system **(2marks)**

d) i) Distinguish between peer-to-peer and client –server LANs. **(2marks)**

ii) Atieno was very happy when she bought a Safaricom 2G modem for she was able to easily connect her computer to the Internet. After six months she noticed it was taking her too long to connect to the Internet. State two possible causes of the problem. **(2marks)**

19. a)i) Explain any **two** causes of system change. **(2marks)**

ii) Explain any **THREE** causes of system maintenance. **(2marks)**

b) i) Use of questionnaire is one of the most popular fact finding method. State any **TWO** advantages and **TWO** disadvantages of using this method to gather data. **(2marks)**

ii) Explain the importance of requirement specification phase of Systems development.**(2marks)**

c) Explain **TWO** reasons why a new system is tested before implementation. **(2marks)**

d)i)State two duties performed by a system administrator. **(1mark)**

ii) The principal of a school is attempting to convince his staff to us CAL and CAI software. State one benefit and one limitation of using such software. **(2marks)**

e) State one advantage and one disadvantage of using expert systems in medicine**(2marks)**

20. a) Explain three types of communication links that may be used to get an Internet connection **(3marks)**

b)Differentiate between the Internet and World Wide Web. **(2marks)**

ii) Technology has been blamed for polluting the environment.

Explain how computer technology has contributed to this. **(2marks)**

c) A Company that makes and sells vehicles receives orders from various clients. The company wants to enter their orders into a database. Study the table structure below and answer the questions that follow.

Field Name	Data Type	Field Size
Order Number	Number	Long Intenger
Order Date	Date/Time	
Supply Date	Date/Time	
Product code	Tex	5
Customer ID	Number	Long Integer
Delivery address	Text	30
Product Type	Tex	15
Product Name	Tex	10
Quantity Ordered	Number	Long integer
Product Prize	Number	Long Integer

i) Split the above structure into **THREE** tables and for each table identify an appropriate primary key. **(5marks)**

ii) Design well labeled tables structures and identify foreign keys **(3marks)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

COMPUTER STUDIES

451/2

PAPER 2 (PRACTICAL)

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

1. Type your name and index number at the top right hand corner of each printout.
2. Write your name and index number on the CD provided
3. Write the name and version of the software used for each question on the answer sheet.
4. Passwords **should not** be used while saving in the CD
5. Answer all questions.
6. All questions carry equal Marks.
7. All answers must be saved in the CD
8. Make a printout of the answers on the answer sheets provided.
9. Hand in all the **printouts** and the **CD**

Question One

The following data is an extract of data obtained from Movers Transport company records. Study the data and answer the questions that follow.

AREA	PRODUCER ID	NAME	QUANTITY DELIVERED (KG)	TOTAL COST	TRANSPORT COST	GROSS COST	DEDUCTION	NET PROFIT
101B	115	Selina Mwao	4562					
79A	145	Yvonne Kibet	1254					
79A	012	Dorothy Namulungu	235					
79A	561	Tiffany Wangui	8954					
101B	016	Asha Waningu	9658					
20Z	123	Ruth Mellanie	7895					
20Z	458	Afif Mumtaz	456					
101B	654	Pelah Wonder	421					
20Z	758	Christabel Simbauni	7895					

a) Enter the data shown above into a spreadsheet giving it an appropriate title, center and bold across the worksheet. Save the workbook as WORK01. Rename the worksheet as Jan records**(10 Marks)**

b) Copy the data to a new worksheet and add the details of producer Valence Masitsa of area 101B, ID 452 with quantity of produce of 2,700kg in an appropriate row. **(1 Mark)**

c) Insert double borders around every cell and every row. **(2 Marks)**

d) Use a function to calculate the Total cost for the producer with ID number 115 given that the price per KG of the produce is Sh.41 .00 **(2 Marks)**

e) Use the formula for Total cost obtained for producer Selina Mwao and use it to calculate the gross cost for all the farmers **(2 Marks)**

f) Use if function to calculate transport cost for all the producers given that transport is charged per Kg is as follows **(5 Marks)**

AREA	Price per kg
101B	5.00
20Z	3.50
79A	4.00

g) Insert the value 20% in cell E14. Using absolute cell referencing calculate deductions, given that the deduction is 20% of the Total cost. **(4 Marks)**

h) Using a function calculate the Net cost, given that Net cost is Gross cost minus deductions and gross cost is Total cost plus Transport cost **(4 Marks)**

i) Format the columns containing currency values to currency with 2 decimal places and prefix Ksh. Rename the worksheet PRODUCE PAY. **(3 Marks)**

j) Arrange the records in ascending order of the producer ID. **(2 Marks)**

k) Copy the contents of worksheet Jan records to a new worksheet and rename it as Filtered. By applying suitable filter condition, display records for all producers except those from area 79A. **(4 Marks)**

1) Use subtotals function to calculate subtotals for the quantity delivered, gross pay and net pay from each area. **(3 Marks)**

m) Create an embedded pie chart showing the total quantity of produce delivered for each area .The chart should have the following details.

i. Chart title: Area Total produce delivered

ii. Legend Position: Right

Save it as CHART 1 **(5 Marks)**

n) Print Jan records, Produce Pay and Filtered in landscape orientation. **(3 Marks)**

Question 2

You are part of a wedding committee of your friend and you have a vast knowledge of using a computer; you are tasked to be in charge of the wedding cards. Using a desktop publishing software, design the wedding card as it appears. Name the file as **W-Card.** **(24marks)**

(a) Prepare the page layout specifications as follows:

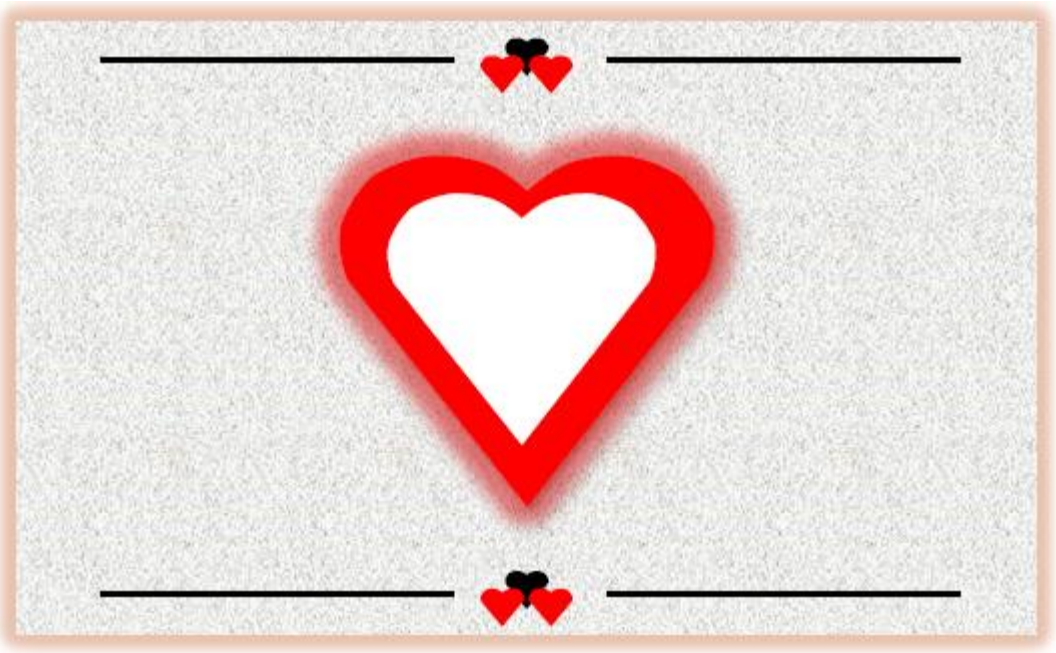
(i) Paper size: A4 portrait **(2mks)**

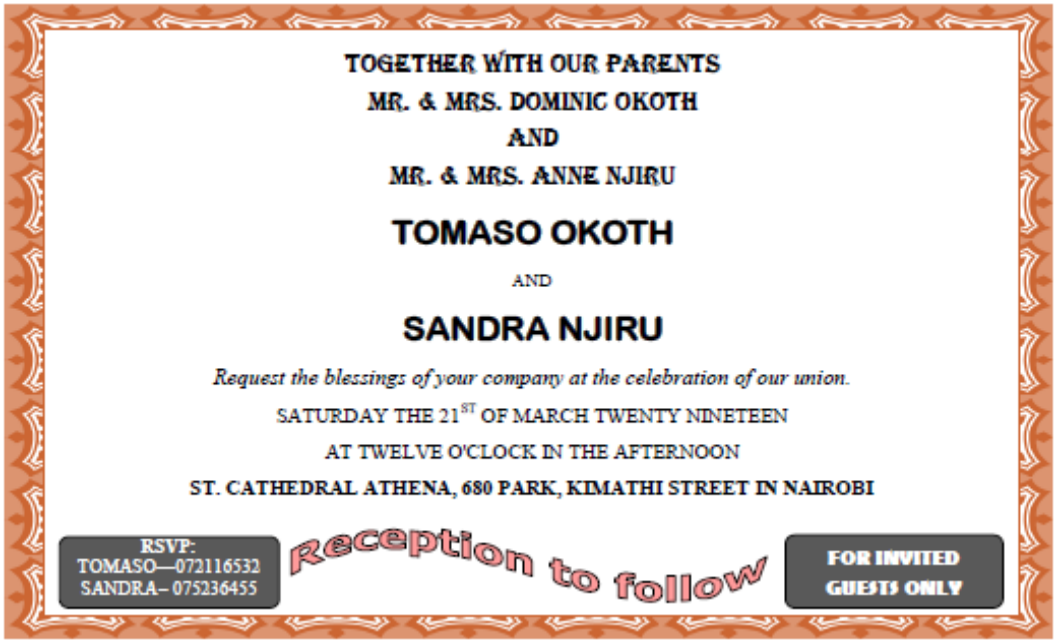
(ii) Grid guides **(3mks)**

- Column guides: 1
- Row guides: 2
- Spacing: 0.3”

(iii) Margins guides **(2mks)**

- Left and right: 0.24”
- Top and bottom: 0.25”





(b) Format the Outer heart shape in the middle part of the design to the following specifications:

(4marks)

i. **Color**: Red
ii. **Outline**: Light blue
iii. **Height**: 2.64”
iv. **Width**: 2.84”

(c) Perform the following formatting on the rectangle of the first part of the design.

i. Apply an outline **shadow**. **(1mark)**

ii. Background Texture fill - **Newsprint**. **(2Marks)**

iii. Add a glow (**Accent 1, 18pt glow**), glow size **25pts**, and **57% transparency.** **(4marks)**

(d) Change the paragraph text starting from **"Request the blessings…"** to color **cold** with line spacing of **0.75sp**. **(2marks)**

(e) Format the names of the bride and bridegroom to have a **strikethrough** and a **dotted underline.** **(2marks)**

(f) Group all objects in the design. **(2marks)**

(g) Insert a page header **"LOVE IS A GOOD THING"**. **(1mark)**

(h) Print the publication. **(1mark)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

HOME SCIENCE

441/1

PAPER 1 (THEORY)

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO STUDENTS

- *Write your name and index number in the spaces above.*
- *This paper consists of three sections **A**, **B** and **C**.*
- *Answer all the questions in section **A**, Question 25 **(Compulsory)** in section **B** and any two questions from section **C**.*
- *Answers to **ALL** questions must be written in this booklet.*
- *Candidates should check to ensure that all pages are printed as indicated and no questions are missing.*

For Examiner's use only.

Section	Questions	Maximum score	Candidates score
A	1 -40	40	
B	41	20	
C	42-44		
TOTAL SCORE		**100**	

SECTION A (40 MARKS) Answer all questions

1. Give **two** ways of meeting the emotional needs of a patient recuperating at home. **(1mark)**

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2. State **two** disadvantages of using hot water on plain wooden equipment. **(1mark)**

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3. State **two** disadvantages of staying in a traditional house with the current rains**.** **(1mark)**

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4. What is **snipping**? **(1mark)**

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5. State **two** disadvantages of commercial paper patterns. **(1mark)**

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6. Mention **two** advantages of sponging. **(1mark)**

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7. State **two** methods of graining fabric. **(1mark)**

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8. Explain how **fans** work in ventilating a room. **(1mark)**

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9. Highlight **two** precautions to take when using pressure lamps. **(1mark)**

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10. Give **two** uses of sugar in flour mixtures. **(1mark)**

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11. State **two** importance of pressing at every stage of dress making. **(1mark)**

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12. Identify **two** tasks carried out only during special cleaning of a bedroom. **(1mark)**

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13. Give **two** points to consider when drawing up a diet for vegetarians. **(1mark)**

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14. Give **two** ways of making meat tender before cooking. **(1mark)**

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15. State **two** ways of saving money in a family. **(1mark)**

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16. Mention any **two** methods of fabric construction. **(1mark)**

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17. Briefly explain what you understand by the term **consumer education**. **(1mark)**

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18. State **two** limitations of living in an employer's house. **(1mark)**

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19. Give **two** important points to consider when daily cleaning a pit latrine. **(1mark)**

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20. Identify **two** ways of caring for a food processor. **(1mark)**

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21. Note down **two** reasons for unsuccessful frying. **(1mark)**

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22. State **two** reasons for stitches looping when machine stitching. **(1mark)**

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23. List down **two** characteristics of good stitches. **(1mark)**

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24. Mention **two** reasons why vitreous enamel finish is used on cookers. **(1mark)**

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25. Explain the effect of **soap** in water during laundry. **(1mark)**

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26. Give **two** undesirable outcomes of not rinsing garment properly. **(1mark)**

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27. State **two** precautions to observe when using a charcoal iron. **(1mark)**

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28. Identify any **two** rules for patching. **(1mark)**

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29. Identify **two** categories of bleaches giving an example for each. (**1mark)**

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30. State **two** points to look for when choosing a wardrobe. **(1mark)**

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31. State **one** difference between marasmus and kwashiorkor. **(1mark)**

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32. Differentiate between **A La Carte menu** and **Table d'ote** menu. **(1mark)**

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33. List **two** factors that can cause premature birth. **(1mark)**

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34. Give **two** ways one can lose weight. **(1mark)**

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35. State **two** functions of the weights and measures department. **(1mark)**

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36. State **two** ways one can ensure left-over food retains its freshness. **(1mark)**

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37. Give **two** ways fruits can be made available as convenience foods. **(1mark)**

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38. State how **salt** works in food preservation. **(1mark)**

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39. State **two** points to consider when making a flower arrangement for a dining table**.(1mark)**

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40. State **two** factors that influence food scarcity at household level other than poverty**(1mark)**

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SECTION B - COMPULSORY (20 MARKS)

41. Your mother is away and has asked you to carry out the following tasks:-

a) Starch and finish a previously washed white embroidered linen table cloth using the boiling water starch **(8 marks)**

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b) Special clean an oil painted wall **(7 marks)**

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c) Clean an aluminium sufuria that was used to cook ugali **(5 marks)**

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SECTION C: (40 MARKS)

Answer any TWO questions in this section.

42. a) State four factors that influence the cleaning frequency of a house. **(4marks)**

b) List down four qualities of good lighting **(4marks)**

c) Name any four types of openings in garment construction **(4marks)**

d) Discuss four problems associated with breast feeding **(8marks)**

43. a) Pastry is usually kept as cool as possible during preparation so that on cooking gases expand as much as possible .explain 4 ways of ensuring this. **(4marks)**

b) State five ways of making a face slit opening to be decorative. **(5marks)**

c) State five reasons for using soft furnishing in the home. (**5marks)**

d) List down the two forms of advertisement giving examples in each. **(2marks)**

e) Give four reasons that make polythene bags suitable for storing food in a refrigerator. **(4marks)**

44. a) suggest six ways of conserving charcoal when cooking **(6marks)**

b) Identify four advantages of hospital confinement. **(4marks)**

c) Explain briefly on five general points to consider when buying kitchen equipment. **(10marks)**

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

HOME SCIENCE

441/2

PAPER 2(Clothing Construction)

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

Instructions to Candidates:

a) Candidates should check the question paper to ascertain that al the pages are printed as indicated and that no questions are missing.

A pattern of a blouse is provided. You are adviced to study the sketches the question and the layout carefully before you begin the test.

MATERIALS PROVIDED

1. A - Front bodice
   B - Back bodice
   C - Back yoke
   D - Collar
   E - Back neck facing
2. Plain light weight cotton fabric 50cm long by 91 cm wide.
3. Sewing thread to match the fabric.

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THE TEST.

Using the material provided, cut out and make the **right half** of the blouse to show the following:

a) Making of the bust dart.

b) Making of the inverted pleat at the back bodice.

c) Attachment of the back yoke to the back bodice using an overlaid seam. Neatening half with loop stitches.

d) Making of machine fell seam at the shoulder.

e) Making a French seam on the side of the bodice.

f) Joining the back and front neck facings at the shoulders.

g) Preparation of an interfaced collar and attaching it to the bodice.

h) Working of the buttonhole.

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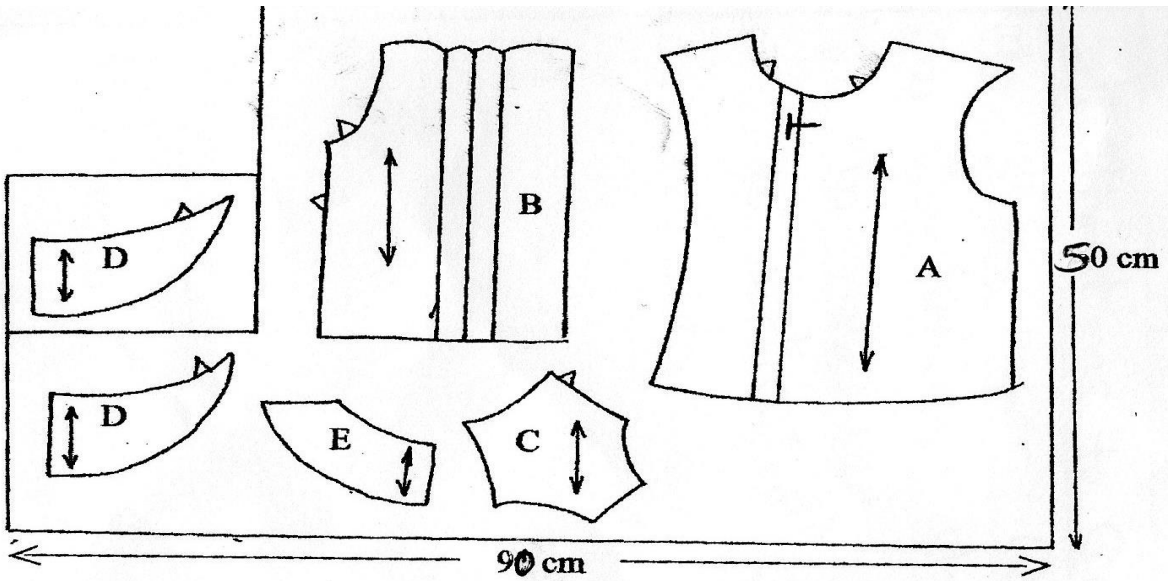

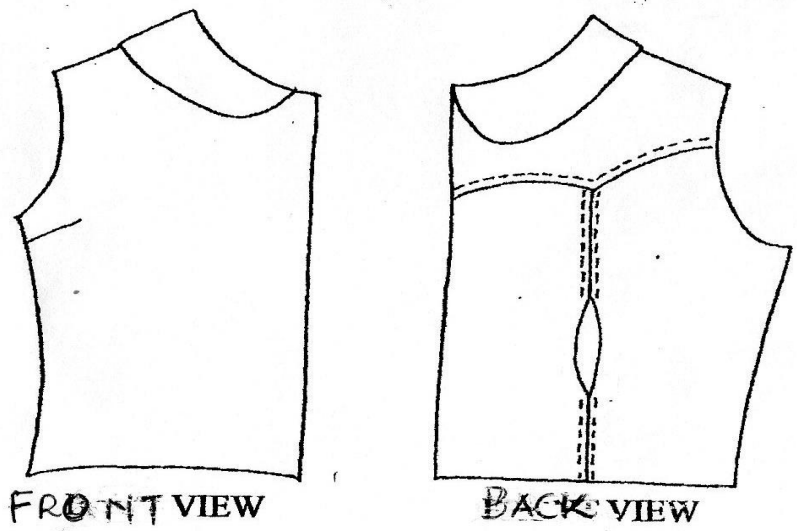

FRONT VIEW BACK VIEW

KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

HOME SCIENCE

441/3

PAPER 3 (PRACTICAL)

TIME: 1¾ HOURS

NAME……

SCHOOL…… **SIGN……**

INDEX NO…… **ADM NO……**

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO STUDENTS

a) Read the test carefully.
b) Write your name and index number on every sheet of paper used.
c) Textbooks and recipes may be used during the planning session as reference materials.
d) You will be expected to keep to your order of work during the practical session.
e) You are only allowed to take away your reference materials at the end of the planning session.
f) You are not allowed to bring additional notes to the practical session.

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THE TEST

You are intending to visit your elder sister during the holiday

Using the ingredients listed below prepare, cook and serve one course meal and hot beverage for both of you.

Ingredients

- Potatoes /rice / maize flour
- Green grams / beef / beans
- Green leafy vegetables / cabbage
- Carrots
- Tomatoes
- Green pepper
- Onions
- Salt
- Sugar
- Spices
- Cooking oil / fat
- Fruits in season
- Milk

PLANNING SESSION: 30 MINUTES

Use separate sheets of paper for each task listed below and use carbon paper to make duplicate copies then proceed as follows;

(i) Identify the dishes and write down their recipes

(ii) Write down your order of work

(iii) Make a list of food stuffs and equipments you will require

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

ISLAMIC RELIGIOUS EDUCATION

314/1

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

Instructions to students

- Write your name and index number in the spaces above.
- Answer any five questions in the foolscaps provided
- Candidates should check to ensure that all pages are printed as indicated and no questions are missing.

For Examiner's use only.

Question	1	2	3	4	5	6
Maximum score	20	20	20	20	20	20
Candidates score						

GRAND SCORE

Answer Any 5 Questions In The Space Provided

1. (a) With reference to Surah An – Nur, describe the prescribed etiquette of entering houses **(6marks)**

(b) Give eight conditions that must be fulfilled by a translator of the Quran **(8marks)**

(c) Mention the dua found in the last verse of Surah Al-Baqara. (Q.2:286) **(6marks)**

2. (a) Identify the groups of people who are not at a loss according to Surah Al-Asr **(5marks)**

(b) Explain the differences between the compilation and the standardization of the Holy Quran. **(8marks)**

(c) State seven ways through which the Quran is preserved in the Present time (today) **7marks)**

3. (a) Explain ways through which hadith evolved **(8marks)**

(b) The Apostle of Allah (SAW) said to us. "When one of you becomes angry while standing he should sit down, if the anger leaves him, well and good; otherwise he should lie down" (Abu Daud)

From the above hadith discuss how Muslims can control anger **(8marks)**

(c) Name the four main shia collections of hadith **(4marks)**

4. (a) What are the punishment awarded under **Taazir** **(6marks)**

(b) Mention acts that nullify wudhu **(7marks)**

(c) State seven rights that a Muslim should accord other people **(7mks)**

5. (a) Explain the three types of sijdats **(6marks)**

(b) Outline the acts that are forbidden for a pilgrim in the state of Ihram **(8marks)**

(c) State six contributions of Imam Abu Hanifa to the development of fiqh **(6marks)**

6. (a) Explain the significance of belief in Qadar and Qadha **(7marks)**

(b) Describe the characteristics of paradise according to Quran and Hadith **(7marks)**

(c) Mention the duties of the following angels **(6marks)**

(i) Angel Malik

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(ii) Angel Ridhwan

(iii) Angel Munkar and Nakir

(iv) Angel Mikail

(v) Angel Atid and Raqib

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KCSE 2024 ACHIEVERS MOCK

SERIES 1 EXAM

ISLAMIC RELIGIOUS EDUCATION

314/2

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education.

Instructions to students

- Write your name and index number in the spaces above.
- Answer any five questions in the foolscaps provided
- Candidates should check to ensure that all pages are printed as indicated and no questions are missing.

For Examiner's use only.

Question	1	2	3	4	5	6
Maximum score	20	20	20	20	20	20
Candidates score						

GRAND SCORE

Answer Any 5 Questions In The Space Provided

1. (a) What are the advantages of enjoining and forbidding good to the Muslim **(6marks)**

(b) State six effects of gambling to the society **(6marks)**

(c) Explain ways Muslims can help end corruption in the society **(8marks)**

2. (a) State the Haram acts in business transactions in Islam **(6marks)**

(b) Explain four ways in which divorce affect the children in a family **(4marks)**

(c) (i) identify any five wives of the Prophet (S.A.W)? **(5marks)**

(ii) For each state reasons that might have contributed to marriage of each wife. **(5marks)**

3. (a) State duties of extended families in Islam **(7marks)**

(b) Explain reasons why marriage is considered important in Islam. **(6marks)**

(c) State the effects of corruption **(7marks)**

4. (a) state lessons we can learn from the conquest of Makkah **(6marks)**

(b) Outline ways in which prophet Muhammad (SAW) encouraged religious tolerance **(8marks)**

(c) Explain problems faced by Khalif Ali bin Abu Talib **(7marks)**

5. (a) What roles did Akidas and Jumbes play in the spread of Islam **(6marks)**

(b) State the terms of the Madina constitution **(8marks)**

(c) What was the importance of Hudaibiyya treaty **(6marks)**

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6. (a) State the contribution of Kabaka Mutesa in the spread of Islam in Buganda **(6marks)**

(b) Discuss the contribution of Sayyid Qutb **(8marks)**

(c) Outline lessons we can learn from the speech of Sayyidina Abu Bakar (R.A) **(6marks)**

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THE END

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
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