KCSE 2025 KASSU MOCKS

ALL SUBJECTS

(KABARAK-SACHO-SUNSHINE JOINT MOCK)

The Joint mock exams for top-performing national schools in Kenya serve as a standardized assessment tool, designed to evaluate students' preparedness for the national examination. These trials encompass various subjects, providing a comprehensive review and fostering competitive academic excellence among participating institutions.

SUBJECTS COMPILED;

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

SERIES 2

For Marking Schemes

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

MWALIMU CONSULTANCY

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

CHRISTIAN RELIGIOUS EDUCATION

313/1

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

INSTRUCTIONS TO CANDIDATES

1) Write the Name, Admission number and Index number in the spaces provided above.

2) Sign and write the Date of the examination in the spaces provided above.

3) Answer any five questions.

4) Each question carries 20 marks.

5) Candidates should answer the questions in English.

FOR EXAMINER'S USE ONLY

QUESTION	1	2	3	4	5	6	CANDIDATES TOTAL SCORE
CANDIDATES SCORE							

Answer Any Five Questions

1a.Give seven reasons for studying Christian Religious Education in Secondary schools in Kenya. **(7 marks)**

b. Outline the Traditional African view of creation. **(7 marks)**

c. State **six** occasions when the Bible is used in Kenya today. **(6 marks)**

2a Describe the call of Abraham Genesis 12:1-9. **(8 marks)**

b. Explain the significance of the activities carried out by the Israelites on the Passover night. Exodus 12:1-31. **(7 marks)**

c **.**List **five** ways in which Christians identify themselves in the society in Kenya today. **(5 marks)**

3a. State seven promises that God made to king David through prophet Nathan. 2 Sam 7:117. **(7marks)**

b. Outline seven failures of king Solomon. 1 kings 9:10-14, 9:15-19, 11:1-13, 11;9-10.**(7mks)**

c. Why is David remembered as the king of Israel **(6marks)**

4.a With reference to the Old Testament, identify eight characteristics of true prophets **(8 marks)**

b. Explain six teachings of Amos on the Remnant and Restoration of the Israelites.Amos 9:8- 15 **(6 marks)**

c. State the relevance's of Amos teachings on remnant and restoration to Christians today. **(6 marks)**

5a. From the call of Jeremiah, identify **seven** qualities of God **(7 marks)**

b. Give reasons why Nehemiah introduced the policy of separation of Jews from foreigners. **(7 marks)**

c. List six lessons that Christians learn from Jeremiah's temple sermon. **(6 marks)**

6a Outline seven rituals performed during marriage in Traditional African Communities. **(7 marks)**

b. Explain the Traditional African understanding of spirits. **(6 marks)**

c. Identify seven changes that have taken place on land ownership in Kenya today. **(7 marks)**

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

CHRISTIAN RELIGIOUS EDUCATION

313/2

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

INSTRUCTIONS TO CANDIDATES

1) Write the Name, Admission number and Index number in the spaces provided above.

2) Sign and write the Date of the examination in the spaces provided above.

3) Answer any five questions.

4) Each question carries 20 marks.

5) Candidates should answer the questions in English.

FOR EXAMINER'S USE ONLY

QUESTION	**1**	**2**	**3**	**4**	**5**	6	**CANDIDATES TOTAL SCORE**
CANDIDATES SCORE							

Answer Any Five Questions

1.(a) Outline Deutro-Isaiah's prophecy concerning the suffering of Yahweh – Isaiah 53. **(7 marks)**

(b).Describe the annunciation of the birth of John the Baptist Luke 1:5-25. **(8 marks)**

(c) Give **five** reasons why Christians present gifts to new born babies. **(5 marks)**

2.(a) Outline **six** reasons why Jesus was rejected at Nazareth. **(6 marks)**

(b) Describe the call of the first disciples. **(8 marks)**

(c) From the sermon on the plain, outline **six** lessons that Christians learn on how human beings should relate to one another. **(6 marks)**

3.(a) From Luke 19:28-40, describe the triumphant entry of Jesus into Jerusalem. **(8 marks)**

(b) Outline the evidence that show Christ had resurrected. **(6 marks)**

(c) State the relevance of Jesus death and resurrection to Christians in Kenya today. **(6 marks)**

4.(a) Outline the events that took place on the day of Pentecost according to Acts of the Apostles2:1-14 **(7 marks)**

(b) Describe the analogy of the bride as used by Paul to teach on the unity of believers 2nd Cor 11:2, Rev 21:1-1 **(7 marks)**

(c) In what ways do Christians in Kenya demonstrate the New Testament teaching on unity? **(6 marks)**

5.(a) State **seven** similarities between Christians and the Traditional African understanding of marriage. **(7 marks)**

(b) Identify **seven** duties of an employer towards their employees. **(7 marks)**

(c) Why is the church against the LGBTQ in Kenya today? **(6 marks)**

6.(a) Give **seven** reasons why Christians should pay taxes to the government in Kenya**. (7 marks)**

(b) Explain the Christian view on plastic surgery in Kenya today. **(7 marks)**

(c) Identify **six** obstacles to effective maintenance of law and order in Kenya today**. (6 marks)**

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

HISTORY AND GOVERNMENT

311/1

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

INSTRUCTIONS TO CANDIDATES

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

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

(c) *This paper consists of THREE sections A, B and C*

(d) *Answer all questions in section A, choose three questions in section B and two questions in section C*

(e) *Answers to all questions must be written in the answer booklet provided*

FOR EXAMINER USE ONLY

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

SECTION A (25MKS)

Answer all questions in this section

1) State the branch of history that deals with the way of lives of a people. **(1 mark)**

2) Name the dispersal point of the Western Bantu. **(1 mark)**

3) Give the common type of government practiced by Kenyan communities during the pre-colonial period. **(1 mark)**

4) Give **one** reason why Seyyid Said took direct control of the settlements along the coast of Kenya in 1806. **(1 mark)**

5) Give **two** limitations of the right to freedom of conscience, religion, belief and opinion. **(2 marks)**

6) Identify **two** political causes of conflicts in Kenya. **(2 marks)**

7) Outline the **main** aim of the formation of Inter-Party Parliamentary Group (IPPG) in 1997. **(1 mark)**

8) State **two** types of democracy. **(2 marks)**

9) Outline **one** way through which African communities in Kenya responded to the British colonization. **(1 mark)**

10) State **two** objectives of missionary education in Kenya. **(2 marks)**

11) Highlight the **main** reason for convening the Second Lancaster House Conference of 1962. **(1 mark)**

12) Name the Kenyan leader attributed to the development of trade union movement. **(1 mark)**

13) Outline **two** challenges facing the Correctional Services in Kenya. **(2 marks)**

14) Identify **two** reasons for the adoption of African socialism. **(2 marks)**

15) State **two** achievements of the multiparty democracy in Kenya. **(2 marks)**

16) Give **one** principle of devolved government. **(1 mark)**

17) Identify **two** examples of recurrent expenditure in Kenya. **(2 marks)**

Section B (45 marks)

Answer any three questions from this section

18) (a) Give **five** reasons for the migration of the Luo from their original homeland into Kenya during the pre-colonial period. **(5 marks)**

(b) Describe the social organization of the Maasai during the pre-colonial period. **(10 marks)**

19) (a) Give **five** reasons for the coming of the Portuguese to Kenyan coast in the 15th century. **(5 marks)**

Explain **five** effects of the long distance trade in Kenya during the 19th century. **(10 marks)**

20.(a) Identify **five** activities of the Imperial British East Africa Company (IBEAC) between 1888 and 1895. **(5 marks)**

(b) Explain **five** reasons for the emergence of Independent Churches and Schools in Kenya during the colonial period. **(10 marks)**

21. (a) State **five** social effects of the Uganda railway on Kenya during the colonial period. **(5 marks)**

(b) Explain **five** factors which led to the migration of Africans to the urban centres during the colonial period. **(10 marks)**

SECTION C (30 MARKS)

Answer any two questions from this section

22. (a) Give **three** reasons why it is important to respect Human Rights. **(3 marks)**

(b) Discuss **six** features of the constitution of Kenya (2010). **(12 marks)**

23. (a) State **three** functions of the County Governor in Kenya. **(3 marks)**

(b) Explain **six** challenges faced by the County Government in Kenya. **(12 marks)**

24. (a) State **three** functions of the Controller of Budget in Kenya. **(3 marks)**

(b) Explain **six** reasons why the national government of Kenya prepares a Budget. **(12 marks)**

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

HISTORY AND GOVERNMENT

311/2

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

INSTRUCTIONS TO CANDIDATES

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

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

(c) *This paper consists of THREE sections A, B and C*

(d) *Answer all questions in section A, choose three questions in section B and two questions in section C*

(e) *Answers to all questions must be written in the answer booklet provided*

FOR EXAMINER USE ONLY

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

SECTION A (25MKS)

Answer all questions in this section

1) Identify **one** type of oral tradition used to obtain information on History and Government. **(1 mark)**

2) Give **one** reason why Homo Habilis was referred to as 'able man'. **(1 mark)**

3) State **two** negative effects of land enclosure system in Britain during the 18th Century. **(2 marks)**

4) State **two** advantages of using fire and smoke signals to pass messages in traditional societies. **(2 marks)**

5) Give **one** invention that revolutionized food preservation during the 19th century. **(1 mark)**

6) Identify **two** social functions of the ancient city state of Athens in Greece. **(2 marks)**

7) State **two** factors that facilitated growth of Asante Kingdom. **(2 marks)**

8) State **two** terms of the Berlin Conference of 1884-1885. **(2 marks)**

9) State **two** conditions that one had to fulfill in order to become fully assimilated in French West Africa. **(2 marks)**

10) State **one** method which the international community used to hasten the attainment of majority rule in South Africa. **(1 mark)**

11) Give **two** reasons why it took long for Mozambique to achieve independence from Portugal. **(2 marks)**

12) What event prompted the United States of America (USA) to join First World War in 1917? **(1 mark)**

13) Identify **one** superpower that was involved in the Cold War. **(1 mark)**

14) Name **two** agencies of the United Nations Organization (UNO) which deal with the problem of health. **(2 marks)**

15) Outline **one** factor that enabled Tanzania to maintain national unity since independence. **(1 mark)**

16) Name **one** house of British parliament. **(1 mark)**

17) State **one** feature of state government in the United State of America. **(1 mark)**

For Marking Schemes Contact 0746 222 000 / 0742 999 000

SECTION B (45 MARKS)

Answer any three questions from this section

18) (a) Identify **five** factors that led to early agriculture in Mesopotamia. **(5 marks)**

(b) Explain **five** effects of Agrarian Revolution in the United States of America. (USA).

(10 marks)

19) (a) Identify **five** effects of scientific inventions on medicine. **(5 marks)**

(b) Explain **five** factors which promoted industrialization in India. **(10 marks)**

20) (a) Give **five** immediate results of the partition of Africa by the Europeans. **(5 marks)**

(b) Explain **five** reasons why the Africans were defeated during the maji maji rebellion.

(10 marks)

21) (a) Identify **five** features of the direct rule as applied by the British in Zimbabwe. **(5 marks)**

(b) Discuss the difference between the use of British Indirect rule and the French Assimilation policy. **(10 marks)**

SECTION C (30 MARKS)

Answer any two questions from this section

22)(a) State any **three** permanent members of the United Nations Security Council. **(3 marks)**

(b) Explain **six** achievements of the Commonwealth. **(12 marks)**

23) (a) State **three** principles of Arusha declaration of 1967. **(3 marks)**

Explain **six** economic challenges facing Tanzania since independence. **(12 marks)**

24)(a) Give **three** ways in which the independence of the Judiciary is guaranteed in Britain.

(3 marks)

Explain **six** functions of the Cabinet in India. **(12 marks**)

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

GEOGRAPHY

313/1

PAPER 1

TIME: 2¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

INSTRUCTIONS TO CANDIDATES

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

FOR EXAMINERS USE

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

SECTION A

Answer all questions in this section

1. a) What is atmosphere **(2marks)**

b) Name the three transition layers of the atmosphere **(3marks)**

2. a) Explain two ways in which vegetation in the Nyika region of Kenya find adapted to the climatic condition experienced at the areas. **(4marks)**

(b) Describe two ways in which biological weathering takes place **(2mks)**

3. a) What is the effect of international dateline on time? (**2marks)**

b) Give the details of each of the following seasons;

i) Equinox **(1mark)**

ii) Summer solstice **(1mrks)**

iii) Winter solstice **(1marks)**

4. a) Explain how the presence of cold ocean current influences the climate of the adjacent coastlands. **(4marks)**

5. a) What is folding? **(2marks)**

b) Name one fold mountain in;

i) North America **(1mark)**

ii) Africa **(1mark)**

iii) South America **(1 mark)**

SECTION B (75 MARKS)

6. You have been provided with a map extract of Kisumu east sheet 116/2 1:5000, study the map and answer the following questions.

a) Apart from the map provided, name the other two types of maps. **(2marks)**

b) Calculate the area of Kisumu municipality. Give your answer in kilometers. **(3marks)**

c) Describe the drainage of the area covered by the map. **(4marks)**

d) What is the longitudinal extend of the area covered by the map. **(2marks)**

e) Give the six figure grid reference of the trigonometric station near Muhoroni-Kisumu road. **(2marks)**

f) Explain how relief has influenced settlement in the area covered by the map. **(6 marks)**

g) (i)Draw a cross section between grid reference 070940 and 070000. Use the scale 1cm to represents 250m. **(Marks)**

(ii) On the cross section mark and name the all-weather roads (bound surface), Nyando escarpment and a hill. **(6marks)**

7. a) Describe the following characteristic of minerals.

i) Colour **(2marks)**

ii) Clearage **(2marks)**

iii) Hardness **(2marks)**

b) i) Give two types of igneous rocks **(2marks)**

ii) Explain three conditions necessary for the growth of coral polyps **(6marks)**

c) State four uses of rocks **(4marks)**

d) You are planning to carry out a field study on the rocks within your school environment.

i) Give two secondary sources of information you could use to prepare the field study. **(2marks)**

ii) State why you would need the following items during the field study;

- A fork jembe **(1 mark)**
- Carrier bag **(1mark)**

iii) Suppose during the field study you collect marble, sandstone and granite, classify each of this samples according to its mode of formation. **(3marks)**

8. a) Give three processes that lead to formation of lakes. **(2marks)**

b) i) Describe how Lake Victoria was formed. **(4marks)**

ii) Explain how Lake Victoria influences climate of the surrounding areas. **(6marks)**

c) i) a part from Lake Magadi, name two other lakes within the rift valley in lakes that have high level of salinity. **(2marks)**

ii) Explain three causes of salinity in Lake Magadi. **(6marks)**

d) Give four economic uses of lakes other than mining. **(4marks)**

9. a) State three characteristics of desert soil. **(3marks)**

b) Identify two factors that contribute to soil leaching. **(2marks)**

c) Explain how each of the following factors influences the formation of soil;

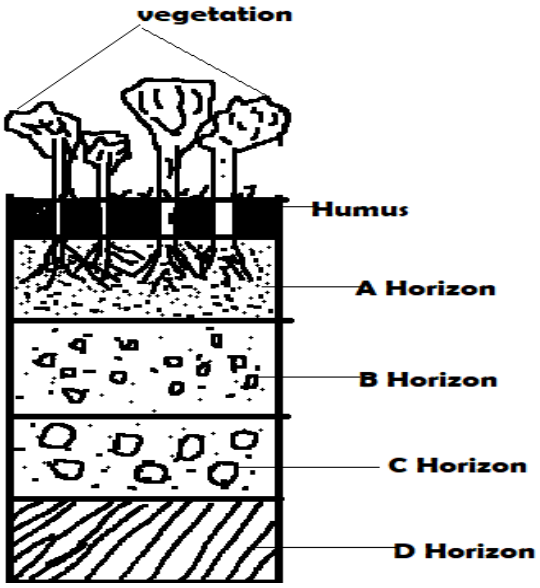
i) Nature of the parent rocks **(2marks)**

ii) Time **(2marks)**

iii) Topography **(2marks)**

d) (i)Define soil profile. **(2marks)**

(ii)The diagram below represent a well developed soil profile. State the characteristics of horizon A



e) Explain four ways in which human activities contribute to loss soil fertility. **(4 marks)**

10. (a)(i) Define underground water. **(2 marks)**

(ii)Explain how the following factors influence availability of Underground water.

a) Slope of the land **(2mks)**

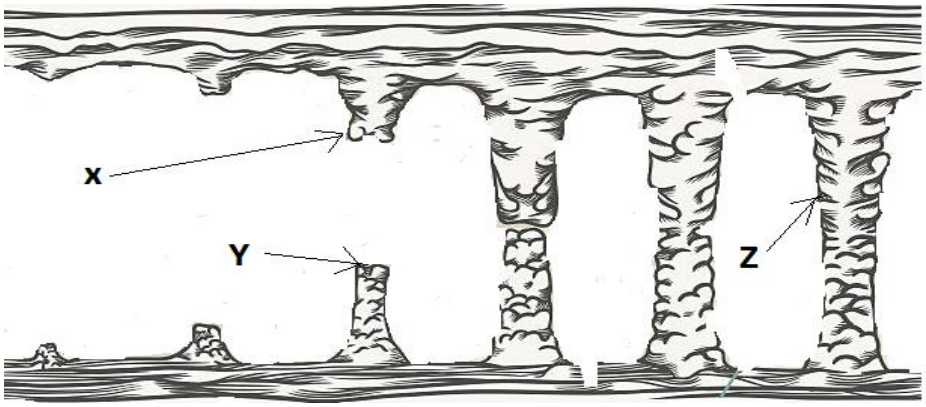
b) Vegetation cover **(2mks)**

(b)(i)State **three** conditions that are necessary for the formation of an Artesian well. **(3 mrks)**

(ii)State **three** problems that are associated with an artesian well. **(3 marks)**

(c)(i)Differentiate between a Karst scenery and Karst region. **(2 marks)**

(ii)The diagram below shows the underground features in limestone areas.



Identify the features marked **X**, **Y** and **Z**. **(3 marks)**

(d)Form four students of a school are planning to carry out a field study on a Karst landscape around their school.

(i)Name **two** surface features are likely to identify. **(2 marks)**

(ii)Give **three** reasons why they needed a working schedule. **(3 marks)**

(iii)Why was it necessary for them to divide into **groups** during their study? **(3 marks)**

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

GEOGRAPHY

313/2

PAPER 2

TIME: 2¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

INSTRUCTIONS TO CANDIDATES

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

FOR EXAMINERS USE

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

SECTION A

Answer all questions in this section

1. (a) Why is mining referred to as 'a robber industry'? **(2 marks)**

(b) Name ***three*** underground methods of mining. **(3 marks)**

2. (a) What is tourism? **(2 marks)**

(b) Name ***three*** tourist attraction sites at the Kenyan coast. **(3 marks)**

3. (a) Differentiate between manufacturing and tertiary industries. **(2 marks)**

(b) Give ***three*** Agricultural non-food manufacturing industries in Kenya. **(3 marks)**

4. (a) What is energy crisis? **(2 marks)**

(b) State ***three*** problems that affect hydroelectric power production long river Tana.**(3 mks)**

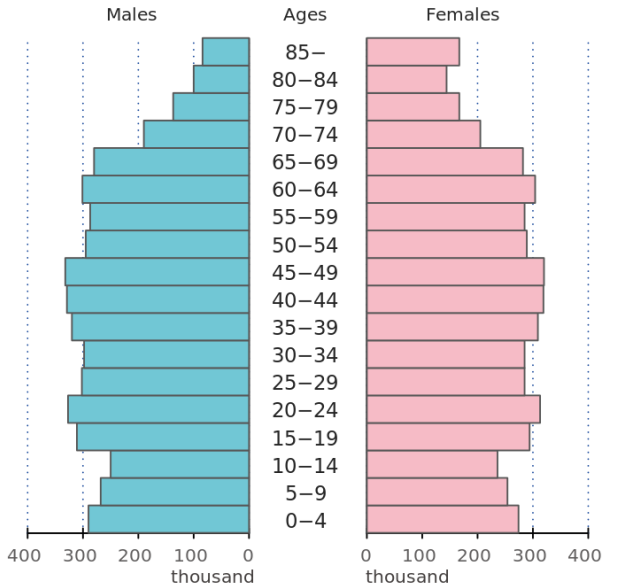
5. (a) Give ***two*** methods used to rehabilitate land in Kenya. **(2 marks)**

(b) Stage ***three*** benefits that Kenya derives from Perkerra irrigation scheme. **(3 marks)**

SECTION B

*Answer question **6** and any other **TWO** questions from this section.*

6. The pyramid below represents population structure. Use it to answer the questions below.



Population pyramids of Sweden 2011 (OECD stat)

(a) Describe the ***five*** characteristics of the population structure represented by the pyramid above. **(5 marks)**

(b) The table below shows items exported from Kenya in the year 2023. Use it to answer the questions that follow.

KENYA

EXPORTS	WEIGHT IN TONNES
Maize	12,600
Coffee	9,990
Oil cakes	1,560
Spices	750
TOTAL	**24,900**

(i) Name the main exports in Kenya in the year 2023. **(1 mark)**

(ii)Calculate the percentage of the export item with the least tonnage in the year 2023. **(2 marks)**

(iii)Draw a divided rectangle 15cm long to represent the export items for Kenya. **(5 marks)**

(iv)Stage ***two*** disadvantages of using a divided rectangle as a method of presenting the data. **(2 marks)**

(c)(i)State ***four*** effects of high population in a country. **(4 marks)**

(ii)Explain how the following factors have influenced the high population density in the Kenyan Highlands.

Rainfall **(2 marks)**

Temperature **(2 marks)**

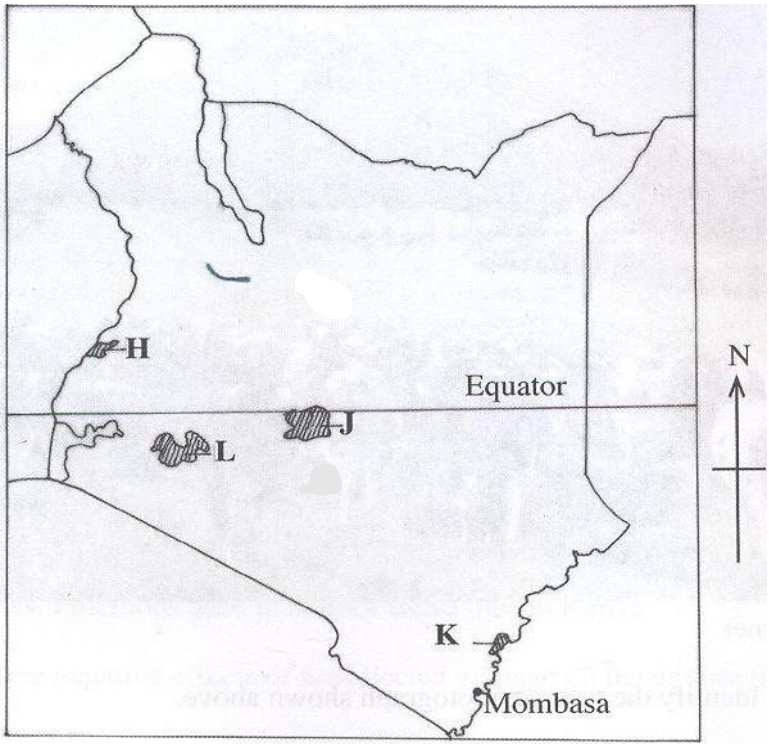
Soils **(2 marks)**

7. (a)(i) Define the term forestry. **(2 marks)**

(ii)Give ***two*** examples of indigenous soft wood tree species. **(2 marks)**

(iii)State ***four*** factors favoring growth of forests on mount Kenya. **(4 marks)**

(b)The map below shows the distribution of forests in Kenya.



(i)Name the forests reserves marked **J** and **K**. **(2 marks)**

(ii)State ***three*** measures undertaken in Kenya in order to conserve forests. **(3 marks)**

(c)Explain ***three*** features of coniferous forests that favors their exploitation. **(6 marks)**

(d)Compare soft wood forests in Kenya and Canada under the following subheadings.

Transportation **(2 marks)**

Harvesting **(2 marks)**

Distribution **(2 marks)**

8. (a)(i) Define Agriculture. **(2 marks)**

(ii)Give ***four*** characteristics of plantation farming. **(4 marks)**

(iii)State ***four*** social factors influencing agriculture. **(4 marks)**

(b)(i)Draw a sketch map of Nigeria and on it mark and name ***two*** main oil palm growing areas. **(5 marks)**

(ii)Give ***four*** physical conditions that favor oil palm growth. **(4 marks)**

(iii)Describe oil palm processing. **(6 marks)**

9. (a)(i)Distinguish between regional trade and international trade. **(2 marks)**

(ii)List ***four*** imports Kenya buys from Japan. **(4 marks)**

(b) (i)What is a trading bloc? **(2 marks)**

(ii)Describe ***three*** economic benefits of COMESA to member countries. **(3 marks)**

(iii)State ***six*** reasons why the government should get involved in trade. **(6 marks)**

(c) Explain ***four*** ways in which the Kenyan government promotes internal trade. **(8 marks)**

10.(a) Define the term environment. **(2 marks)**

(b)(i)Name ***two*** flood prone counties in Kenya. **(2 marks)**

(ii)State ***four*** causes of floods in Kenya. **(4 marks)**

(iii)Explain ***three*** measures undertaken to control floods in Kenya. **(6 marks)**

(c)State ***four*** significance of conserving the environment. **(4 marks)**

(d)Form four students of Mokasa high school conducted a field study on pollution in a nearby trading center.

(i)Identify ***two*** forms of pollution they identified during the study. **(2 marks)**

(ii) State ***two*** methods of data collection the used during the study. **(2 marks)**

(ii)Give ***three*** importance of the information obtained during the study to the local authority. **(3 marks)**

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

ENGLISH

101/1

PAPER 1

TIME: 2 HOURS(Functional Skills)

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

INSTRUCTIONS TO STUDENTS

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

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

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

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

e) *Candidates must answer all questions* ***in English.***

Question	Maximum Score	Student's Score	Examiner's Initials
1	20		
2	10		
3	30		
TOTAL	60		

1 . FUNCTIONAL WRITING **20MKS**

Imagine you are the sales manager of **Isaboke Smart-Tech Company**. Your company has come up with a new model of a phone.

Write an advertisement that is to appear in one of the dailies. **(10 mks)**

b)Assume that you run The Isaboke Smart-Tech Electronics Shop in Turbo . You have read the advert and you need Isaboke Smart-Tech Company to supply you with the above phone. Write a letter of request. In the letter, specify the number of phones, means of transportation and any other details you deem relevant. **(10mks)**

2. CLOZE TEST

Fill in the blanks in the passage below with an appropriate word. **(10 marks)**

Four weeks to the Africities Summit, **(i)** …….. host city of Kisumu is bristling **(ii)** ……. excitement and anticipation, with good reason. **(iii)** …….. 10,000 visitors are expected to converge on the lakeside city, drawn **(iv)** ……. By a continental summit that happens one every three **(v)** …… About 5,000 of them will be foreign delegates keen to join in a discourse that African cities and how they evolving into a truly unpredictable **(vi)** …… The other 4000 will be exhibitors at a gigantic exhibitions centre and service providers to ensure that the **(vii)** ……. do not lack anything. Many have been skeptical **(viii)** …….. Kisumu could handle such a large influx of people even if it is the third largest city in the country. Well, the city is well-prepared in all aspects. It has been for a while. Significant investments have been made in infrastructure and **(ix)** ……. is still going on to complete roads around and near the Mambolea ASK Showground where the event will be held. The major streets are spruced up, as they have been for many months, thanks to the work done **(x)** ……. the County Government of Kisumu.

3. ORAL SKILS **20MKS**

<u>Read the passage below and answer the questions that follow.</u>

One afternoon, a big wolf waited in a dark forest for a little girl to come along carrying a basket of food to her grandmother. Finally the little did come along and she was carrying the basket of food. “Are you carrying the basket to your grandmother?” Asked the wolf. The little girl answered,”Yes I am.” So the wolf asked the girl where her grandmother lived. When the girl told him, he disappeared to the woods.

When the little girl opened the door of her grandmother’s house, she noticed there was somebody in bed with a night cap and a night gown. She realized that it was the wolf, so the little girl took a gun from her basket and shot the wolf dead.

If you were narrating this story, how would you ensure your audience remains glued to the story?

(3 marks)

……

……

……

……

……

How would you say the words of the girl and the wolf in your narration**?** **(2 marks)**

……

……

……

……

How would you prepare yourself to effectively tell the story**?** **(3 marks)**

……

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……

……

Your class wants to put up a play. You have to decide which of the two plays among your set books to perform. Your teacher has asked you to lead a group discussion to choose one. What will you do to make sure the discussion remains calm and constructive? **(4 marks)**

……

……

……

……

……

e. Mary cannot bear children

Identify the above genre.

……

ii) Give the **two** possible meanings of the above **(2 marks)**

……

……

……

iii) Give **one** function of the above genre. **(1 marks)**

……

……

For each of the following words, write another that is **pronounced the same way** but is spelt differently and has a different meaning. **(3 marks)**

Know ……..

Gate ……..

Bare ……..

Indicate the **appropriate intonation** at the end of each sentence. **(4 marks)**

Have all the students been registered? ……...

Stop wasting time. …….

That was superb! …….

There is hope for Cancer patients. ……

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

Owuor: Before she died of liver cancer, my sister felt a lot of pain and lost a lot of weight.

Chondo: Talking about pain, had a toothache last night. I tell you. I couldn't sleep.

Owuor:Yes, so about my sister…….

Chondo: You remind me about my own sister. Infact she wrote to me last week telling me about her son's fees. She believes I have more money than I need, and that I should give her some.

Owuor:Well, maybe you have a lot of money. But thank you for being such good listener.

Chondo:What! Have I offended you?

i.] Point out three reasons that you think made Owuor decide to stop the conversation. **[3mks]**

……

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……

……

(ii) How could Chondo have reacted to Owuor's problems in a more acceptable manner? **(2mks)**

……

……

……

iii) List down five circumstances that may force one to interrupt a speaker. **[5mks)**

……

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KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

ENGLISH

101/2

PAPER 2

TIME: 2½ HOURS

(Comprehension, Literary Appreciation and Grammar)

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

INSTRUCTION TO STUDENTS

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

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

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

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

For examiners' use only

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

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

Drugs are widely available, and although it is illegal, many adolescents are involved in the use of illicit drugs. Adolescent drug use is one of the most important problems facing children today, according to recent opinion polls.

This is not the first time, however, that drug use has been seen as a serious problem. Since out for prohibition. Opium, cocaine and marijuana have all been objects of anti-drug campaigns.

While the use of crack by inner city **delinquents** continue to make headlines in the nation's newspapers, surveys constantly indicate that adolescent drug use in general is declining. However, even though their usage has declined, alcohol and cigarettes remain the overwhelming drugs of choice among youths in the United States today.

Sociological theories suggest that the causes of adolescents' drug use are varied. Strain theory posits that drug use is the result of a youth's failure to make it in either the legitimate or illegitimate world. Social learning theory argues that adolescents learn to use drugs from peers, much as they learn other forms of social behavior from each other. According to social control theory, the weakening of social controls allows an adolescent to become involved with drugs.

How should society respond to adolescent drug use? The **punitive** response involves hiring more police, building more prisons, and creating more severe sentences. This approach has encouraged the creation of military-style boot camps, suspension of driver's licenses, suspension from school, eviction from public housing, and drug testing in schools, and prevention and treatment responses have become very popular.

Unfortunately, few schools-based education and prevention programmes appear to work, and treatment programmes that are effective are unable to meet the growing number of clients. **Decriminalization** of legalization of drugs raises many questions. Should all drugs be made legal, subject to regulation, or should only certain drugs be legalized?

Finally, attempts to change the lives and environments of children assume that drug use is only a facet of a larger, more complex milieu of social problems facing today's youths. Poverty, unemployment, homelessness, abuse and lack of hope creates an environment in which drug use, as well as other forms of delinquency, is likely to occur.

But possible solutions to the larger problems may actually be within our reach. Among programmes found to be effective are those that provide preschool education, prevent teenage pregnancy and strengthen the family.

Questions

Comment on the use of style in paragraph 1 **(1 mark)**

……

……

……

……

Give the causes of drug use among the youth according to sociological theories. **(3 marks)**

……

……

……

……

What are the three ways in which a society can respond to adolescent drug use? **(3 marks)**

……

……

……

……

……

Apart from drug abuse, give other social problems mentioned in the passage faced by the youth.

(2 marks)

……

……

……

……

Make notes on reasons why punitive response is a bad approach of eradicating adolescent drug use.

(3 marks)

……

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……

……

"Adolescent drug use is one of the most important problems facing children today." (Rewrite adding a question tag) **(1 mark)**

……

……

What is the tone in the passage **(3 marks)**

……

……

……

……

Give the meanings of the following words as used in the passage **(3 marks)**

Delinquents ……..

Decriminalization ……..

Punitive ……..

2. <u>Read the following excerpt and answer the questions that follow.</u>

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

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

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

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

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

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

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

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

Mossi: (Looking at the Principal) The President?

Narine: Yes, Sir.

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

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

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

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

Mossi; (Looking at Mr. Pirro) This thing we are talking about is a school project under their control! (Turning to face the principal) It is, therefore, within your powers to find a way around it. You are at the centre of it! Figure out a way, like writing to the Ministry of Education indicating that there are some fundamental errors in it that you need to attend get what I mean?
Nicole: I am afraid, Your Worship, the assessment of the innovations was done by senior officers at the Ministry of Education. Experienced software engineers Were involved. It passed all the tests, and no errors were found

QUESTIONS

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

……

……

……

……

……

b) Why is Mayor Mossi adamant to launch the App? **(2 marks)**

……

……

……

c) From elsewhere in the play, what is the name of the App and how is it a people's platform**?**

(2mks)

……

……

……

d) Give reasons App is error **proof.** **(4 mks)**

……

……

……

……

……

e) Think about it: (Rewrite using the question tag.) **(1mk)**

……

f) Identify and explain any two stylistic devices used in the excerpt. **(4 mks)**

……

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……

……

……

g) From your knowledge of the text, identify four allegations against municipal leaders as uploaded on the APP**.** **(4mks)**

……

……

……

……

……

h) Explain the meaning of the following expressions as used in the excerpt. **(4 mks)**

i.Far-reaching

Implications ……

……

ii.Halt ……

……

iii.Kept us in the dark……

……..

iv.Figure out a way……

……..

Read the poem below and answer the questions that follow (20 Marks)

Love Is Not All

Love is not all: it is not meat nor drink
Nor slumber nor a roof against the rain;
Nor yet a floating spar to men that sink
And rise and sink and rise and sink again;
Love cannot fill the thickened lung with breath,
Nor clean the blood, nor set the fractured bone;
Yet many a man is making friends with death
Even as I speak, for lack of love alone.
It well may be that in a difficult hour,
Pinned down by pain and moaning for release,
Ornagged by want past resolution's power,
Imight be driven to sell your love for peace,
It well may be. I do not think I would.

By Edna St Vincent Millay (From Literature: The Human Experience: Reading and Writing by Richard Abcarian and Marvin Klotz, 2009).

Identify the persona in the poem above. **(2 marks)**

……

……

……

Briefly explain what this poem is about. **(3 marks)**

……

……

……

……

In not more than 2 sentences, summarize the basic needs that cannot be satisfied by love as shown in the poem? **(3 marks)**

……

……

……

……

……

Comment on any two figures of speech used in the poem. **(4 marks)**

……

……

……

……

……

……

What does the persona mean by this line: "Yet many a man is making friends with death"?

(2 marks)

……

……

……

What does the line the last line reveal about the persona's character? **(2 marks)**

……

……

……

Describe the mood evident in the poem above. **(3 marks)**

……

……

……

……

Explain the meaning of each of the following expressions as used in the poem. **(2 marks)**

Nagged……

Sell……..

4. GRAMMAR (20 MARKS)

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

Kaberia rejected the chance to study at a prestigious college. (Rewrite, replacing the underlined word with a phrasal verb)

……

……

Kibet's pen was found in the dustbin by Atwoli. (Rewrite in the active voice)

……..

Turn off the tap. (Add a question tag)

……..

I have never seen such a big aircraft. (Begin: Never…)

……..

Fill in each blank space in the following sentences with the appropriate pronoun (3 marks)

Is that ……..... (he/him) seating on top of a pick up?

Ndege, …… (who/whom) he introduced to you, is a very fine actor.

The winners are Aredi and ……(her/she)

Fill the blank spaces in the following sentences with appropriate prepositions (3 marks)

…… Muturi and Nkirote, there will be two other couples.

We are prohibited …… parking our bicycles at the gate.

The carpenter made a shelf……wood.

Punctuate the following sentence correctly **(2 marks)**

can you tell me asked otieno how many syllables are in the word keep

……

……

we should have left earlier said kamau we have done only a quarter of the journey so far

……

……

<u>Rewrite the following sentences correctly</u> **(2 marks)**

If today was Sunday, I would have gone to church.

……

We returned back to our school before 7.00 p.m.

……..

Give the **two** meanings brought out in the sentence below **(1 mark)**

The girl told the story to her brother was brave.

……

……

……

……

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

ENGLISH

101/3

PAPER 3

TIME: 2½ HOURS

(Creative Composition and Essays Based on Set Texts)

NAME……

SCHOOL…… **SIGN**……

INDEX NO…… **ADM NO**……

Kenya Certificate of Secondary Education. (KCSE)

Instructions to students

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

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

c) *Question **1** and **2** are **compulsory***

d) *In question **3** choose the set text you have prepared on.*

e) *None of your composition should exceed **450** words.*

f) *Candidates must answer all questions in **English***

For examiner's use only

Question	Maximum Score	Student's Score	Examiner's initials
1	20		
2	20		
3	20		
Total	60		

*Answer **three** questions only*

Imaginative composition. (Compulsory) **(20 marks)**

Either

Write a composition beginning with the following words:

"I tossed in my warm bed debating whether I should wake up or not ……"

Or

Write a story to illustrate the saying:

Birds of a feather flock together.

2. **<u>The compulsory set text</u>** **(20 marks)**

Essay based on the compulsory set book:-Fathers of Nations by Paul.B.Vitta.
Choices have consequences. Using illustrations from the novel Fathers of Nation, justify the statement.

3. **The Optional Set Texts**;***Either***

(a**) The Short Story**

A silent song and other stories Godwin Siundu (Ed.)

Failure to listen and heed good advice by people around us can result in suffering.

Drawing your illustrations from Stanley Gazemba's "Talking Money," justify this assertion.

(20 marks)

OR

(b) **Drama**

Adipo Sidang' Parliament of Owls

"Women and people from minority groups can rise against all odds to bring change without necessarily using violence." Basing your argument on Adipo Sidang's *Parliament of Owls,* write an essay to support this statement.

Or

(c) **The Novel**

Kazoo Ishuguro, An Artist of the Floating World

War has a way of affecting property and people's lives. Drawing examples from the life of Masuji Ono in Ishiguro's. *An Artist of the Floating World,* write an essay to show the truth of this statement.

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

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 ya usajili kwenye nafasi ulizoachiwa hapo juu.*
b) *Tia sahihi yako kisha uandike tarehe ya mtihani katika nafasi ulizoachiwa hapo juu.*
c) *Andika insha **mbili**. Insha ya kwanza ni ya **lazima.***
d) *Kisha chagua insha nyingine moja kati ya hizo tatu zilizobakia.*
e) *Kila insha isipungue maneno **400**.*
f) *Kila insha ina alama **20.***
g) *Kila insha lazima iandikwe kwa lugha ya **Kiswahili.***
h) *Insha zote sharti ziandikwe katika nafasi ulizoachiwa kwenye kijitabu hiki cha maswali.*

Kwa matumizi ya mtahini pekee

SWALI	UPEO	ALAMA	MTAHINI
1	20		
	20		
JUMLA	40		

LAZIMA

1. Kutokea kwa mafuriko nchini kumechochewa na ukosefu wa mikakati endelevu ya kuhifadhi mazingira.Wewe ni mhariri wa **Gazeti la Mwangaza**. Andika tahariri huku ukipendekeza hatua zinazoweza kuchukuliwa ili kukabiliana na changamoto hii.

2. Matokeo ya mtihani wa kitaifa katika masomo ya Kiswahili na Kiingereza yamekuwa yakidorora kote nchini. Wewe ni mwanahabari wa nyanjani. Umepata nafasi kumhoji mkuu wa Idara ya Lugha katika Shule ya Hekima kuhusu mikakati ambayo imewekwa ili kurekebisha hali hii. Andika mahojiano hayo.

3. Tunga kisa kinachodhihirisha maana ya methali ifuatayo:
   Maji yakimwagika hayazoleki.

4. Andika insha itakayomalizikia kwa …nilitazama nyuma iliyojawa na giza totoro, nikabaini kwamba kama sio ushirikiano wa dhati, nafsi zetu zingetuama katika bahari isiyo na kina.

For Marking Schemes Contact 0746 222 000 / 0742 999 000

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

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 namba yako ya usajili shuleni 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 kwenye nafasi ulizoachiwa katika kijitabu hiki cha maswali.*

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

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

KWA MATUMIZI YA MTAHINI PEKEE

SWALI	UPEO	ALAMA
UFAHAMU	15	
MUHTASARI	15	
SARUFI	40	
ISIMUJAMII	10	
JUMLA	80	

For Marking Schemes Contact 0746 222 000 / 0742 999 000

1. **UFAHAMU (ALAMA 15)**

Soma kifungu kifuatacho kisha ujibu maswali.

“Asubuhi moja alinipata ndani ya afisi ya mwalimu mkuu wa Shule ya Msingi ya Kilimo. Mwalimu Mkuu,Bi. Tamasha,alisikiliza kadhia yangu kwa makini. Hakuonyesha kushtuka kwa yaliyonipata katika umri wangu mdogo hivi.

'Unaweza kuanza masomo katika darasa la pili. Nitamwomba mzazi mmoja akupe hifadhi,' alisema Bi. Tamasha. Huo ndio ulikuwa mwanzo wa maisha yangu katika makao ya wafanyakazi wa mashamba ya chai. Bwana Tenge na mkewe, Kimai,walinichukua kunilea pamoja na watoto wao watano. Wenzangu, nyinyi hamjui adha zinayowapata wafanyakazi wa kima kidogo. Mtajuaje na hamjawai kukilalia kitanda hiki mkafahamiana na kunguni wake? Ninayowaambia ni asilimia ndogo mno ya niliyoyaona. Chumba cha wafadhili wangu kilikuwa hicho hicho kimoja: ndicho cha malazi, ndicho cha mapokezi, ndicho jikoni, sebule na chumba cha malazi viligawanywa na shuka moja nyepesi. Usiku sisi watoto tulilala juu ya vigodoro ambavyo ni kama viliwekwa mvunguni mwa kitanda cha wazazi.

“Usiniulize niliyaona na kuyasikia mangapi katika chumba hiki ambacho kiligeuka ***danguro*** wakati Bi. Kimai alipokuwa ameenda mashambani. Wakati huu Bwana Tenge angeamua kumleta mwanamke mmoja baada ya mwingine, hapo hapo, mbele ya macho ya wanawe, hadi usiku wa kuamkia siku ya kurudi kwa Bi.Kimai. Mara mojamoja Bi. Kimai angerudi bila kutarajiwa na kumshika ugoni mke mwenzake! Mwaka mmoja,miwili, mitatu.... hata nikaona kwamba, mbali na dhiki za ***kisaikolojia*** nilizozipata kwa kushuhudia vituko vya kila aina, nilikuwa mzigo mkubwa kwa wahisani wangu. Si kwamba waja hawa walinibagua, la! Kusema hivyo kutakuwa kuwapaka mashizi bure. Hata hivyo nilihisi kwamba nimepata mbavu za kufanya angaa kibarua kidogo, na kuwatua wawili hawa mzigo wa kuninunulia sare na madaftari.

"Nilianza kuchuna majanichai kwa malipo kidogo nikiwa katika darasa la tano.Wakati mwingine ningerauka alfajiri na mapema kufanya kazi kabla ya kwenda shuleni saa kumi na mbili asubuhi.Jioni nilipitia huko huko. Nyakati nyingi nililala humo humo katikati ya michai, wakati mwingine kwa marafiki wangu, kwa Bwana Tenge, na juu ya uchaga mkubwa wa saruji uliotumiwa kama karo na wauza chakula sokoni. Hakuna mmoja kati ya walimu wangu aliyejua mabadiliko haya hadi pale nilipoufanya mtihani wangu wa darasa la nane na kufuzu vyema.

"Wakati huo Bwana Tenge alikuwa ameisha kupewa uhamisho, akaenda kufanya kazi katika shamba lingine.Ndivyo wafanywavyo wafanyakazi hawa; kuhamishwa kila uchao bila mtu kuwazia kwamba wana watoto wanaoenda shule, na kwamba kuhamahama huku kunawavurugia masomo wana hawa."

Maswali

Eleza namna wazazi wanavyoweza kuchangia katika kuzorotesha maadili ya watoto katika jamii.

(alama 2)

……

……

……

Onyesha namna haki za watoto zilivyokiukwa katika kifungu**.** **(alama 3)**

……

……

……

……

Wafanyakazi wa kima kidogo hupitia dhiki zipi kulingana na kifungu**?** **(alama 3)**

……

……

……

……

Eleza sifa **tatu** za mkewe Tenge-Kimai. **(alama 3)**

……

……

……

……

……

Kifungu hiki kinadhihirisha changamoto zinazoikumba asasi ya ndoa. Tambua na ueleze.

(alama 2)

……

……

……

Eleza maana ya misamiati ifuatayo kama ilivyotumiwa kwenye kifungu**.** **(alama 2)**

(i) Danguro ……

(ii) Kisaikolojia ……

2. **MUHTASARI (ALAMA 15)**

Soma kifungu kifuatacho kisha ujibu maswali.

Kenya inakumbwa na hali ya hatari kuwahi kutokea msimu wa mvua ambayo imefanya serikali kuchukua hatua madhubuti za kuzuia maafa zaidi. Baada ya tathmini ya kina kuhusu hali ya hewa inayotarajiwa, serikali imelazimika kutangaza hatua za kuepusha vifo na uharibifu huku mvua ikitabiriwa kuendelea kunyesha na kimbunga kutarajiwa kutua Kenya kwa mara ya kwanza katika historia. Kimbunga hicho kitasababisha mvua kubwa, upepo mkali na mawimbi yenye nguvu na hatari, ambayo yanaweza kutatiza shughuli katika Bahari ya Hindi na makazi yaliyo karibu na pwani ya Kenya. Hali hii imechangiwa pakubwa na mabadiliko ya tabianchi.

Matukio ya hivi majuzi yamepima ustahimilivu wa nchi yetu wakati wa changamoto ambazo hazijawahi kutokea. Mvua imeendelea kusababisha mafuriko ambayo yameharibu miundomsingi. Vilevile, shughuli za uchukuzi zimetatizika katika sehemu zote za nchi baada ya barabara kuharibiwa na madaraja kusombwa na mafuriko.

Viwango vya maji katika mabwawa makuu ya 'Seven Forks' vimefikia kimo cha kihistoria huku mabwawa hayo yakitishia wanaoishi karibu na maeneo hayo. Kuna mabwawa 178 na vidimbwi vya maji katika ardhi ya umma na ya kibinafsi katika kaunti 33 ambayo yamejaa na kuwa hatari kwa wakazi walio maeneo yaliyo karibu. Vifo vya watu, kufurushwa kwa watu kutoka makwao na uharibifu wa mali umeshuhudiwa nchini.

Hatari nyingine imetokana na maporomoko ya ardhi na matope katika baadhi ya kaunti na wakazi wanaoishi katika maeneo hayo watahamishwa huku wanaoishi katika maeneo yasiyoratibiwa kama ya makazi kwa mfano kando ya mito, wakipewa ilani kuhama kwa kutambua hatari iliyopo.

Kwa sababu ya janga la mafuriko, wizara ya Elimu imeagiza kuahirishwa kwa tarehe ya kufunguliwa kwa shule zote nchini kwa muhula wa pili kwa muda usiojulikana. Pia, madhara ya mvua katika baadhi ya shule ni mabaya zaidi kiasi kwamba maisha ya wanafunzi yamo hatarini. Hatua ya kuahirisha ufunguzi wa shule hadi tarehe isiyojulikana imeibua mgawanyiko wa kitabaka huku watoto kutoka familia maskini, wengi wao wanaosomea shule za umma, wakiendelea bila masomo wenzao kutoka familia tajiri wakisoma kidijitali. Isitoshe, bila tarehe mahususi za ufunguzi wa shule, ni vigumu kupanga masomo ya ziada wakiwa nyumbani. Hofu nyingine ni kuwa kukaa kwa muda mrefu bila kufanya chochote kunaweza kuwapelekea wanafunzi katika matumizi ya mihadarati na mimba za mapema.

Serikali imetangaza kuwa tarehe mpya za muhula wa pili kwa shule za msingi na za sekondari zitarekebishwa ili kufidia muda ambao ungepotezwa kwa kucheleweshwa kufunguliwa kwa shule. Tena, kutokana na mafunzo yaliyopatikana kufuatia janga la korona, wazazi wengi wanahimizwa kununua vifaa vya kidijitali vya kisasa ili kutumika katika masomo ya kidijitali.

Jeshi la Ulinzi la Kenya na Huduma ya Polisi zimeagizwa kutumia rasilmali, maafisa na vifaa vyao kuhakikisha wakenya wako salama. Wangeshirikiana na shirika la Huduma ya Vijana kwa Taifa na maafisa wa Utawala kushughulikia dharura ikiwemo kuokoa wote walio kwenye hatari.

Baraza la mawaziri limeagiza Wizara ya Fedha kutoa pesa za kusaidia kukabiliana na janga hili. Hata hivyo, kumekuwa na ukosefu wa uwazi katika utoaji wa fedha na hata misaada ambayo inakusudiwa kuendea walioathirika na vilevile haifikii wenye ulemavu-udanyanyifu katika mchakato mzima kuanzia kuwasilisha majina ya waathiriwa hadi ngazi ya malipo.

Idara ya utabiri wa hali ya Hewa nchini imewatahadharisha wakenya dhidi ya kuishi kando ya mito iliyofurika. Wanafunzi ambao tayari walikuwa wamefika shuleni walitakiwa kubaki shuleni na usimamizi wa shule ungewahifadhi na kuhakikisha usalama wao.

Maswali:

Huku ukirejelea aya **nne** za kwanza, eleza athari hasi za mabadiliko ya tabianchi. (Maneno 80)

(alama 8)

Matayarisho

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Nakala safi

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Fafanua masuala ambayo mwandishi anaibua katika aya tano za mwisho. **(maneno 70)**

(alama 7)

Matayarisho

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Nakala safi

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3. <u>MATUMIZI YA LUGHA (ALAMA 40)</u>

Linganua sifa za sauti /i/ na /o/ kwa kuzingatia kigezo cha ulimi. **(alama 2)**

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Andika vitenzi vyenye silabi mbili kutokana na miundo ifuatayo ya silabi. **(alama 2)**

(i) KKIKI …….

(ii) IKKI …….

(i) Eleza dhana ya mofimu huru huku ukitolea mfano wa kiwakilishi nafsi**.** **(alama 2)**

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(ii) Andika neno lenye mofimu zifuatazo: **(alama 1)**

Kikanushi cha nafsi ya kwanza umoja, wakati ujao, yambwa, mzizi.

……

Je, ukiandika insha nzuri utatuzwa? Badilisha iwe sentensi sharuti inayoanza kwa kishazi huru.

(alama 1)

……...

Tunga sentensi ukitumia kitenzi cha silabi moja katika kauli ya kutendewa. **(alama 1)**

…….

Andika sentensi ifuatayo katika wingi. **(alama 2)**

Mtume yule aliubeba ujiti wa mwajiri wake.

……..

Andika katika usemi wa taarifa. **(alama 2)**

"Kwani mimi ni mwizi, mtu aniguse aone," alisema Jeni.

……

……

Tunga sentensi ukitumia kielezi cha jinsi kutokana na mzizi: -**zee**. **(alama 2)**

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Kando na mnyambuliko, eleza dhana **mbili** zinazowakilishwa na viambishi tamati. **(alama 2)**

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Andika katika ukubwa: **(alama 2)**

Kitabu hicho kimefichwa karibu na ndovu yule.

……

Nomino hizi zipo katika ngeli gani? **(alama 2)**

(i) Mbelewele …….

(ii) Sukari …….

Andika upya sentensi ifuatayo ukizingatia vinyume vya maneno yaliyopigiwa mstari. **(alama 2)**

Wezi **<u>walikiri</u>** makosa yao **<u>kabla ya</u>** kesi dhidi yao **<u>kuanzishwa</u>** mahakamani na **<u>wakasamehewa.</u>**

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Changanua sentensi ifuatayo kwa kielelezo cha matawi. **(alama 4)**

Japo yeye ni mwerevu, alishindwa na mtihani huu.

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Eleza maana **mbili** katika sentensi hii**.** **(alama 2)**

Jeshi la Polisi limekuja kutuliza.

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Ainisha vishazi katika sentensi ifuatayo: **(alama 2)**

Wanafunzi wanaotia bidii masomoni hupata alama nzuri.

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Tunga sentensi Kanushi katika wakati uliopita hali timilifu. **(alama 2)**

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Andika upya sentensi ifuatayo ukianzia kwa yambwa tendwa. **(alama 1)**

Wafugaji waliwakatia mbuzi wote majani ya mti huo.

……

Ainisha virai vilivyopigiwa mstari katika sentensi ifuatayo: **(alama 2)**

Wale wanne waliokuwa uwanjani walisafiri jana kwa ndege.

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Unda nomino **mbili** kutokana na kitenzi **andika**. **(alama 1)**

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Eleza matumizi ya '**na**' katika sentensi ifuatayo: **(alama 2)**

Mama na baba wanalima shamba kwa jembe karibu na mto ilhali wana trekta.

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Andika methali inayoweza kutumiwa kudhihirisha umuhimu wa stahamala. **(alama 1)**

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4. ISIMUJAMII (ALAMA 10)

Soma kifungu kifuatacho kisha ujibu maswali.

Mtu A: Nitashiriki katika uchuuzi wa hisa zangu sasa.

Mtu B: Ni vyema! Kwa sasa viwango vya riba vimeimarika

Mtu A: Tukutane kesho kwenye soko la hisa jijini

Mtu B: Inshallah! Je, utaniuzia?

Mtu A: Don't worry let's meet tomorrow. Tutaelewana tu.

Hii ni sajili gani? Thibitisha jibu lako. **(alama 2)**

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Eleza sifa za sajili hii zinazojitokeza katika kifungu hiki. **(alama 4)**

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Jadili sababu ambazo zinawafanya wanafunzi wengi kufanya makosa ya kisarufi mara kwa mara wanapowasiliana wakitumia lugha ya Kiswahili. **(alama 4)**

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KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

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 Fasihi Simulizi.*

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

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

KWA MATUMIZI YA MTAHINI PEKEE

SWALI	UPEO	ALAMA
I	20	
	20	
	20	
	20	
JUMLA		

SEHEMU A: RIWAYA

Clara Momanyi: Nguu za Jadi

1. "Pole kaka, huu ndio ulimwengu wetu… ulimwengu unaoendeshwa na sarafu, ndugu. Tumekuwa kama wanyama wa mwitu. N'ambie tofauti i wapi yakhe? Kama wanyama, hatuna tena mipaka ya umri, nasaba au vyeo."

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

Fafanua maana ya kitamathali kwenye kauli iliyopigiwa mstari. **(alama 2)**

Onyesha jinsi unyama wa msemaji kwenye dondoo ulivyoathiri wengine kwenye jamii. **(alama 6)**

Kando na msemaji wa dondoo hili, kuna wahusika wengine walioendeleza utovu wa maadili katika jamii. Thibitisha. **(alama 8)**

SEHEMU B: TAMTHILIA

T. AREGE: *Bembea ya Maisha*

Jibu swali la 2 au la 3

2. Si neno mama! (Kimya.) Hakuna kizuri kijacho kwa urahisi. Mazuri hutoka mbali na wakati mwingine yana hadithi za kutisha.

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

(b) Bainisha mbinu mbili za kimtindo katika dondoo hili. **(alama 4)**

(c) Fafanua sifa za msemaji. **(alama 6)**

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

3(a) "Ndiyo ni mgonjwa lakini mume ambaye ni mwanamume kweli hangoji kuelezwa kinafanyika nini."

(i) Bainisha maudhui yanayojitokeza katika dondoo. **(alama 1)**

(ii) Onyesha jinsi maudhui uliyotaja katika (i) yalivyoshughulikiwa katika tamthilia ya *Bembea ya Maisha*. **(alama 9)**

3(b) Ndoa ni bembea. Jadili kwa kurejelea tamthilia ya ***Bembea ya Maisha***. **(alama 10)**

SEHEMU C: HADITHI FUPI

D.M. Lutomia na P. Muthama (Wah.): *Mapambazuko ya Machweo na Hadithi Nyingine*

Jibu swali la 4 au la 5

4. **Yussuf Shoka Hamad**: "***Mzimu wa Kipwerere!"***

"Vipi kuhusu usambazaji wa mizigo? Tunahitaji akina mama zaidi maana mzigo ndio kama unavyouona na umejaa humu na hauuzwi kwa wingi! Umelifikiriaje hili?

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

Bainisha mbinu **tatu** za kimtindo zinazojitokeza katika dondoo hili. **(alama 3)**

Eleza sifa **sita** za msemaji katika dondoo hili. **(alama 6)**

Suala la dawa za kulevya limejitokeza katika hadithi, "***Mzimu wa Kipwerere***." Thibitisha. **(alama 7)**

5. (a) "Kwa muda wote tuliokaa pamoja, sikufichua siri yoyote ambayo nilijua". Onyesha siri ambazo msemaji hakufichua katika hadithi, "***Kifo cha Suluhu***". **(alama 7)**

(b) "Ni wajibu wetu wanawake kutetea maisha yetu na yale ya Watoto wetu." Thibitisha kauli hii kwa kurejelea hadithi, "***Nipe Nafasi.***" **(alama 13)**

SEHEMU D: USHAIRI

Jibu swali la 6 au 7

6. Soma mashairi yafuatayo kisha uyajibu maswali yanayofuata

Shairi 1

MIMBA ZA MAPEMA

Zanikosesha amani, hizi mimba za mapema
Hunizushia huzuni, nikakosa kuungama
Ela leo nabaini, munisikilize vyema
Mimba nyingi za mapema,ni ubaya wa malezi

Ni ubaya wa malezi, wakwa baba au mama
Kwa kushindwa uongozi, kuongoza palo pema
Wakawaacha ja mbuzi,ndio haya huja nyuma
Mimba nyingi za mapema,ni ubaya wa malezi

Mwana avaa vibaya, nguo zisizo heshima
Nanyi mwamuangaliya, munashindwa kumsema
Tena munamteteya, haki sawa mwalalama
Mimba nyingi za mapema,ni ubaya wa malezi

Wazazi haki wandani, wengi wao sio wema
Wajivalia vimini, banati wakitizama
Ndugu hili liacheni, mimba ndio zitakoma
Mimba nyingi za mapema,ni ubaya wa malezi

Au yuwataka pipi, kama ilo na Halima
Nae ajihisi hapi, yuwaonewa huruma
Wamgomea humpi, aenda pewa na Rama
Mimba nyingi za mapema,ni ubaya wa malezi

Mara aja na rafiki, wakiume wakisoma
Kuulizia hutaki, wawacha wakinguruma
Wallahi halikomeki, mimba zitazidi vuma
Mimba nyingi za mapema,ni ubaya wa malezi

Yuwakuaga mtoto, enda kesha kwenye ngoma
Nawe huoni uzito, wampa na darahima
Ela mwisho ni majuto, eleweni wanadama
Mimba nyingi za mapema,ni ubaya wa malezi

Jengine lililo sumu, silifichi nalisema
Na ndio lashika zamu, linaloharibu uma
Mwana kumwachia simu, na shule hajakhitima
Mimba nyingi za mapema,ni ubaya wa malezi

Hata shida za nyumbani, kukosekanapo sima
Mlo ukawa jioni, wali usio na nyama
Hapo tupo hatarini, tujitumeni kwa hima
Mimba nyingi za mapema,ni ubaya wa malezi

Hizi ni beti a'shari, ndio mwisho kaditama
Nalighaliki shairi, sisemi tena kalima
Ela niloyadhukuri, yatwalieni muhima
Mimba nyingi za mapema,ni ubaya wa malezi

Shairi 2

Hata nijaze dhahabu, lifurike kontena,kisha ifanye kilima
Eti nataka karibu, ya kuwa italingana,alonitendea mama
Takuwa najiadhibu, najisumbua naona,dharau zaniandama
Sitolipa masahibu, na madhila mengi sana,yalompita mama

Hata nijenge benki, kubwa kuzishinda zote,zilojengwa duniani
Pesa nijaze lukuki, kila aina apate,za ndani na za kigeni
Riyale kwake si dhiki, dirham zisikate, na Dola za Marekani
Hazitalipa mikiki, mama yangu aipate, sekunde nimo tumboni
Hata nijenge nyumba, ya ghorofa hamsini, karibu kugusa mbingu
Yenye idadi ya nyumba, alfu u thamanini, milki ya Mama yangu
Awe mwenyewe atamba, nyumbani na sebuleni, kwa sofa ziso mbingu
Na masifa ya kujipamba, si kitu chenye thamani, ja bega la mama yangu

Hata ndege ninunuwe, Miele angani iko, na mama aishi humo
Katu chini isituwe, kugusa chini mwiko, kila kitu kimo
Anapotaka mwenyewe, aone kule aliko, darubini ndani imo
Mwenyewe nikusumbuwe, si sawa na ubeleko, wa mama mwenye makamo

Hata nijenge mabwawa, makubwa ya kwogelea, kwa mama nimeyaweka
Maji moto yanatiwa, na baridi kila saa, aoga anayotaka
Taulo amepangiwa, sabuni za kunukia, kila chini zinatoka
Kote ni kujisumbuwa, sudusi sijafikia, kinyesi changu kunyika

Hata nitunge shairi, niwe mimi nalighani, mama atakapolala
Sauti ile nzuri, kutoa nyoka pangoni, si ya debe yenye ila
Nikawa nalikariri, mama yuko kitandani, chombezo limetawala
Haijawa ni kadiri, na yako yasi mizani, kutaka mimi kulala

Hata nipewe na vyeo, vishindavyo vyeo vyote, maarufu duniani
Na watu wanionao, heshima kwa nipate, nalindwa sionekani
Ulinzi nilionao, saa na dakika zote, vifaru komando ndani
Si sawa na chake cheo,cha mama kwa hali zote,kwake ni kuruti duni

Maswali

a) Linganisha na ulinganue muundo wa shairi 1 na shairi 2. **(alama 4)**
b) Linganua bahari za shairi 1 na shairi 2. **(alama 2)**
c) Kwa kutolea mifano mwafaka,eleza sababu za mshairi kutumia uhuru wake katika shairi 1. **(alama 4)**
d) Tambua nafsinenewa katika shairi 1 **(alama 2)**
e) Kwa mujibu wa shairi 1, mimba nyingi za mapema,ni ubaya wa malezi. Thibitisha ukweli wa kauli hii kwa hoja tatu. **(alama 3)**
f) Andika ubeti wa tatu katika shairi 1 kwa lugha nathari. **(alama 4)**
g) Eleza maana ya neno "**banati**" kama lilivyotumika katika shairi 1. **(alama 1)**

AU

7. Soma shairi lifuatalo kisha uyajibu maswali yanayofuata

Baada ya mtihani yetu ya mwisho
Tulijikusanya gwarideni kuskia neno la mwisho.

Nyuso zetu zilijawa na furaha
isiyo na kifani,
Hatukujua ni ufunuo wa dunia gizani

Ni miaka tatu sasa bado sijajiunga chuo kikuu
Kisa ni matokeo yangu na wazazi kukosa ka kituu
Ni uchungu sana ila napambania kuipata nafuu

Zile ndoto zangu za kuwa rubani
Niliziwacha mkononi mwa rabani
Wale wanafunzi nilokuwa nao shuleni
Cha ajabu atusemezani kama zamani

Natamani kurudi shuleni
Ila ni tamu izi mapeni
Kwaheri mwalimu
Wewe ni mtu muhimu

Maswali

a) Thibitisha kuwa hili ni shairi huru. **(alama 3)**
b) Kwa nini nafsineni hajajiunga na chuo kikuu? **(alama 2)**
c) Tetea ukweli kuwa kifungu hiki ni shairi. **(alama 4)**
d) Tambua kinaya kinachojitokeza katika ubeti wa pili. **(alama 1)**
e) Tambua mstari mshata na mstari toshelezi inayojitokeza katika shairi hili. **(alama 2)**
g) Eleza maudhui yanayotawala shairi hili. **(alama 2)**
h) Eleza aina zozote mbili za urudiaji katika shairi hili. **(alama 2)**
i) Tambua idhini moja ya kishairi katika shairi hili. **(alama 2)**
j) Eleza vipengele vifuatavyo vya kimtindo kama vilivyotumika katika shairi hili. **(alama 2)**
i) taswira
ii) sitiari

SEHEMU E: FASIHI SIMULIZI (Alama 20)

8. ***Tazama picha ifuatayo kisha ujibu maswali yanayofuata.***



a) Tambulisha kipera kinachodhihirika hapa juu kwenye picha. **(Alama 1)**

b) Kipera hiki hupatikana kwenye utanzu gani. **(Alama 1)**

c) Kwa nini jamii inadhamini kipera hiki? **(Alama 5)**

d) Utanzu uliotaja kwenye b) unahitaji fanani mwenye wasifu upi kuuwasilisha**?** **(Alama 5)**

e) Umepanga kwenda nyanjani kukusanya data ya kipera hiki. Kwa nini njia ya kurekodi kwa video itakuwa bora? **(Alama 5)**

f) Kupitia kipera kilichotajwa katika a) hapa juu, ni shughuli zipi za kijamii zinaweza kudhihirika kipera kinapowasiliswa? **(Alama 3)**

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

AGRICULTURE

443/1

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

INSTRUCTIONS TO STUDENTS

This paper contains three sections **A, B and C**

Answer **ALL** the questions in section **A and B**

Answer any Two questions from section **C**

All answer should be written in the spaces provided

FOR EXAMINERS USE ONLY

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATE SCORE
A	1-16	30	
B	17-20	20	
C	21-23	40	

SECTION A (30 Marks)

Answer ALL questions from this section.

1) Name two field practices that are carried out to obtain optimum plant population in a crop field **(1mk)**

……

……

b) Explain how each of the practices named in (a) above achieves optimum plant population. **(1mk)**

……

……

2) State four factors that may influence labour productivity in a farm. **(2mks)**

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3) State four functions of a farm manager. **(2mks)**

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4) List four post-harvest practices that are carried out in maize production. **(2mks)**

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5) a) What is rainfall intensity? **(1mk)**

……

……

b) State two effects of high rainfall intensity to farming**.** **(1mk)**

……

……

6) State four ways in which a farmer can improve the structure of a waterlogged clay soil.

(2mks)

……

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……

7) Apart from training and extension services, state four other agricultural support services the Kenyan government provides to a maize farmer . **(2mks)**

……

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8) State four factors which may affect the quality of silage. **(2mks)**

……

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……

9) Give four advantages of mixed farming. **(2mks)**

……

……

……

……

10) Differentiate between the following terms as used in agricultural economics

Fixed assets and current assets **(1mk)**

……

……

Delivery note and purchase order. **(1mk)**

……

……

11) Give two advantages of under sowing in pasture production **(1mk)**

……

……

12) Name four settlement schemes that the Kenyan government started as a result of the success of the million acre scheme. **(2mks)**

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……

13) State any two tertiary operations carried out on the farm **(1mk)**

……

……

14) State two ways of controlling bean anthracnose disease. **(1mk)**

……

……

15. List four factors that determine the depth of planting **(2mks)**

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16.Give four causes of land fragmentation. **(2mks)**

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17. State four disadvantages of mulching in crop production. **(2mks)**

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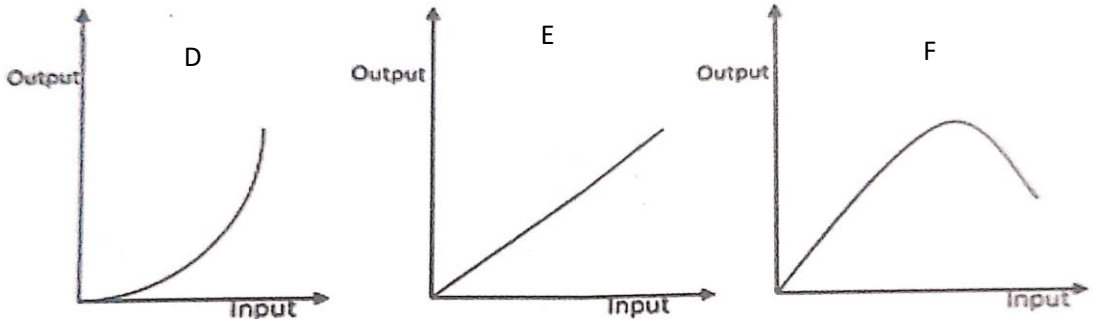
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SECTION B (20MKS)

Answer all the questions in this section.

18. The following illustration show different production curves in agricultural economics. Study them and answer the questions that follow.



Identify the production curves labelled **D** and **E** **(2marks)**

D……

E……

b. What does the law derived from the production function labelled **F** state? **(1mark)**

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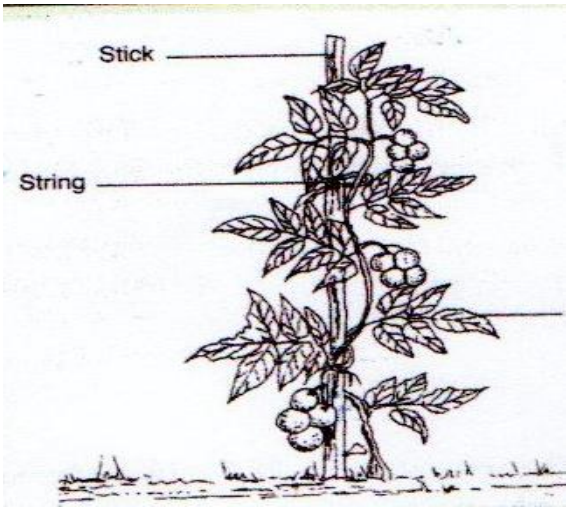
c.i. Which **one** of the three production curves is rare in agriculture**?** **(1mark)**

……

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

……

19. The diagram below shows a practice carried out in tomatoes. Study it and answer the questions that follow.



Identify the practice…… **(1mk)**

Give two reason for carrying out the practice in (a) above **(2mks)**

……

……

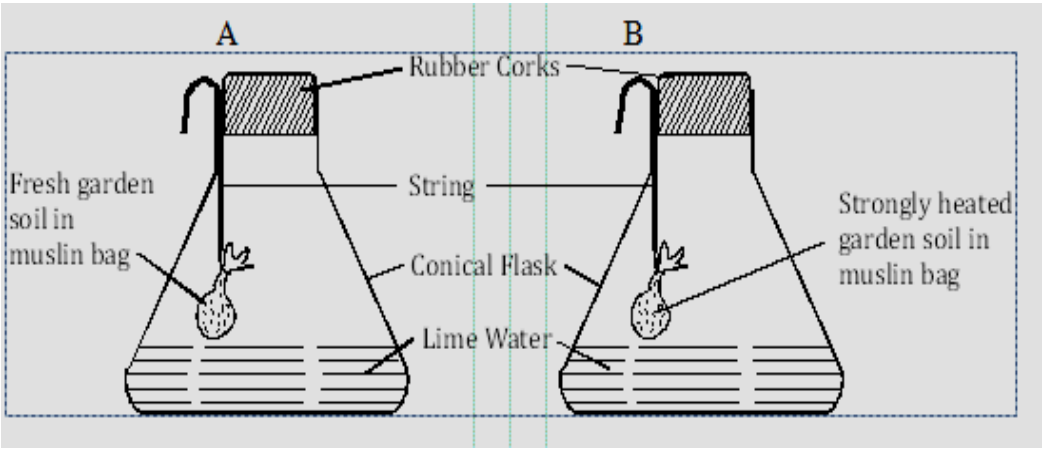
……

Name two other crops that require the practice**.** **(2mks)**

……

……

20.A form one student set up experiment as shown below to study an aspect of soil. The set up was left for six hours. Study it and answer the questions that follow.



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

……

b.State two observation that was made in each of the flask C and D. **(2 marks)**

……

……

c.Why was the soil in flask D strongly heated? **(1 mark)**

……

……

d.Outline one way in which soil living organisms affect Agricultural production. **(1 mark)**

……

……

21. A farmer is advised to apply 150kg of P_2O_5 per hectare. The fertilizer available is NPK 20% P_2O_5. Calculate the amount of NPK required for 2hectares**.** **(5mks**)

show your working.

SECTION C(40 MARKS)

Answer any two questions in this section in the spaces provided after question.

21.(a)Describe the establishment of a grass pasture from the time land is ploughed using a mouldboard plough to the time the pasture is ready for grazing. **(10mks)**

(b) State six benefits of intercropping in crop production **(6mks)**

(c) Stat the importance of the following stages during chemical water treatment.

i) Filtration at water intake **(1mk)**

ii) Softening **(2mks)**

iii) Chlorination **(1mk)**

22(a) Explain five disadvantages of land fragmentation**.** **(5mks)**

b) State seven roles of a farm manager**.** **(7mks)**

c) Explain four ways a farmer can adjust to uncertainties and risks. **(8mks**

23.a) Describe the production of dry beans under the following subheadings

(i) Seedbed preparation **(3marks)**

(ii) Planting **(5marks)**

(iii) Field practices **(4marks)**

b) Explain eight cultural control measures of diseases of in crop production **(8marks**

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

AGRICULTURE

443/2

PAPER 2

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

INSTRUCTIONS TO CANDIDATES

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

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

c) Answer **all** questions in sections **A** and **B** and any other question from section **C.**

d) **Do Not** plug any pages from the question paper.

FOR EXAMINER`S USE ONLY

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATE SCORE
A	17	30	
B	18 – 21	20	
C	22 – 23	40	
	TOTAL	90	

SECTION A (30MARKS)

Answer all questions in the spaces provided

1) Name **two** species of camels. **(1mk)**

……

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2) State **four** general uses of solar energy. **(2mks)**

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3) Name **four** tick borne diseases. **(2mks)**

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4) What is the use of a **strip cup**? **($\frac{1}{2}$mk)**

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5) Give **three** ways used to improve production in indigenous cattle. **($1\frac{1}{2}$mk)**

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6) Name a breed of sheep with a lambing percentage of above 125% and whose fleece is inferior due to black fibers. **($\frac{1}{2}$mk)**

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7) State **four** ways of controlling tsetse flies. **(2mks)**

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8) State **four** factors that are considered when formulating a livestock ration. **(2mks)**

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9) Differentiate between **mothering ability** and **prolificacy** in livestock breeding. **(2mks)**

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10) State **two** reasons why it is necessary to place sugar syrup close to a beehive. **(1mk)**

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……

11) Give **four** advantages of embryo transplant. **(2mks)**

……

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12) Give the appropriate term that refers to each of the following.

Young one of a rabbit. **($^1/_2$mk)**

……

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Mature male goat **($^1/_2$mk)**

……

……

A young female **($^1/_2$mk)**

……

……

13)(a) Give **two** advantages of concrete blocks over timber as building materials. **(1mk)**

……

……

(b) State **three** disadvantages of using steel in construction of farm buildings. **($1^1/_2$mk)**

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14) State **four** causes of egg eating in a flock of layers. **(2mks)**

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15) State **four** disadvantages of fold system in poultry rearing. **(2mks)**

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16)(a) Name **three** ways of caponization in poultry. **($1^1/_2$mk)**

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(b) Give **four** characteristics of a good vaccine. **(2mks)**

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17) State **four** reasons for carrying out egg curdling. **(2mks)**

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SECTION B (20 MARKS)

Answer all questions in this section in the spaces provided.

18) Diagrams F and G illustrates chicks suffering from some essential feed nutrients. Study the diagrams and answer the questions that follow.



F



G

Name the deficient nutrient in F and G. **(2mks)**

F……

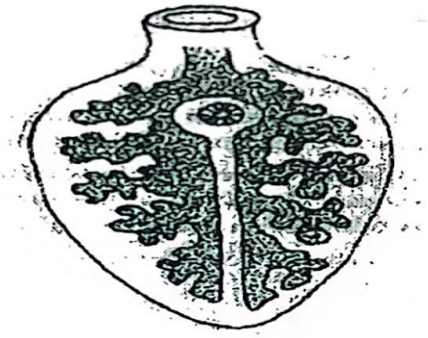
G……

Outline **one** method in each case used to control the condition in F and G**.** **(2mks)**

F

G

19) Below is an illustration of an internal parasite in livestock.



Identify the parasite. **(1mk)**

……

Name **one** final host for the parasite. **(1mk)**

……

Name the intermediate host for the parasite. **(1mk)**

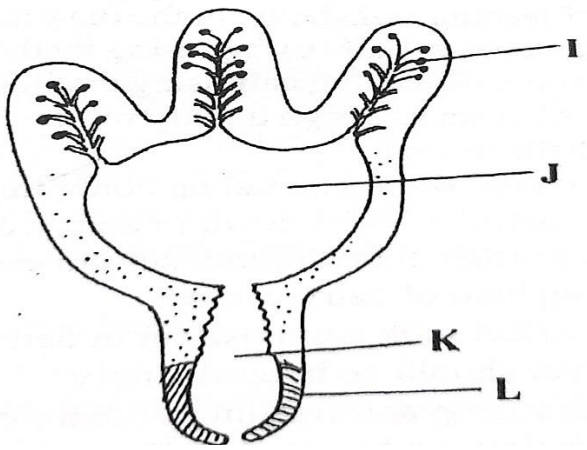
……

State **two** control measures of the parasite. **(2mks)**

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20) The diagram below shows a cross section of a cows' udder.



Label the parts **I, J, K** and **L**. **(2mks)**

I……

J……

K……

L……

What is milk letdown. **(1mk)**

……

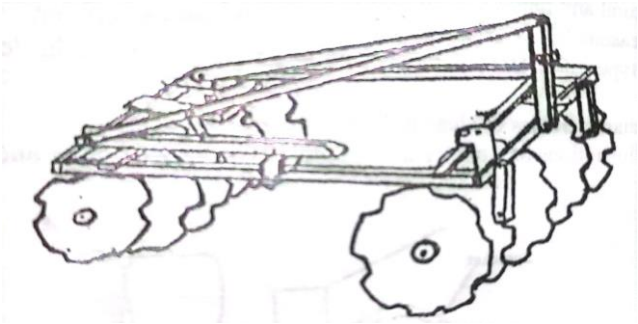
……

Name two hormones responsible for milk letdown. **(2mks)**

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……

21) Below is a diagram of a farm equipment.



Identify the equipment. **(1mk)**

……

State **one** function of the toothed notches**.** **(1mk)**

……

State **one** way of increasing the depth of penetration of the equipment**.** **(1mk)**

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State **Three** maintenance practices carried out on the equipment shown above. **(2mks)**

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SECTION C (40 MARKS)

Answer any two questions from this section in the spaces provided.

22) (a) Describe milk fever diseases under the following sub headings

Animal affected **(1mk)**

Causes of the diseases **(1mk)**

Symptoms of the diseases **(5mks)**

Control and treatment **(3mks)**

(b) Outline **five** features of an ideal calf pen. **(5mks)**

(c) State **five** care and maintenance practices of a tractor battery. **(5mks)**

23)(a) State and explain **five** preservative measures of livestock diseases. **(10mks)**

(b) Outline **six** factors considered when choosing poultry system. **(6mks)**

(c) Name **four** parts of a piggery (pigsty) unit and give the function of each part. **(4mks)**

24)(a) Describe the procedure of training a calf to take milk from a bucket. **(5mks)**

(b) State **eight** advantages of battery cage system. **(8mks)**

(c) Outline **seven** factors considered when selecting a heifer for breeding. **(7mks)**

For Marking Schemes Contact 0746 222 000 / 0742 999 000

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

BUSINESS STUDIES

565/1

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

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.*

c) *Answer **all** the questions.*

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

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

For Teacher's Use Only

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

16	17	18	19	20	21	22	23	24	25

TOTAL MARKS

1) Classify the following resources as either natural, man-made or human **(4mks)**

	Resources	**Classification**
a)	Carpenters	
b)	Chapati	
c)	Climate	
d)	Tractor	

2) State **four** reasons for the privatization of state corporations. **(4mks)**

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3) The table below shows the price, quantities demanded and quantities supplied of a product in a market.

Month	**July**	**August**	**September**	**October**	**November**	**December**
Price	3,000	3,000	3,000	3,000	3,000	3,000
Quantity Demanded	18,500	21,030	24,200	26,600	29,020	32,300
Quantity supplied	21,700	23,000	27,100	31,500	34,800	38,710

Give **four** reasons for the change in quantities supplied from July to December. **(4mks)**

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4) Outline **four** uses of a General journal. **(4mks)**

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5) In the spaces below, indicate the type of utility created by each of the following commercial activities. **(4mks)**

	Commercial activity	**Type of utility**
a).	Buying bread from the canteen	
b).	Distributing milk to customers	
c).	Warehousing	
d).	Grinding maize to flour	

6) Outline **four** ways in which mass media can protect consumers from exploitation. **(4mks)**

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7) Highlight **three** ways in which the producers may conserve the environment as they carry out their activities. **(3mks)**

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8) The following information relates to Koimur stores.

		Ksh.
a.	Fixed assets	681,500
b.	Current Liabilities	99,700
c.	Current Assets	286,650
d.	Capital	468,450
e.	Sales	920,000
f.	Long term liabilities	400,000
	Gross profit	120,000

Calculate:

a). Working capital **(1mk)**

b). Capital employed **(1mk)**

c). Mark up **(2mks)**

d). Margin **(1mk)**

9) Outline **four** advantages of hire purchase terms of sale to a buyer. **(4mks)**

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10) Highlight **four** benefits of transport to a trader. **(4mks)**

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11) Outline **four** sources of monopoly power. **(4mks)**

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12) Give **four** features that a commodity must have to perform as money. **(4mks)**

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13) Outline **four** benefits to a producer who owns his own warehouse. **(4mks)**

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14) State **four** reasons why a producer would sell her products directly to consumers. **(4mks)**

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15) State **four** non tax sources of public finance. **(4mks)**

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16) Describe the meaning of the following insurance policies. **(4mks)**

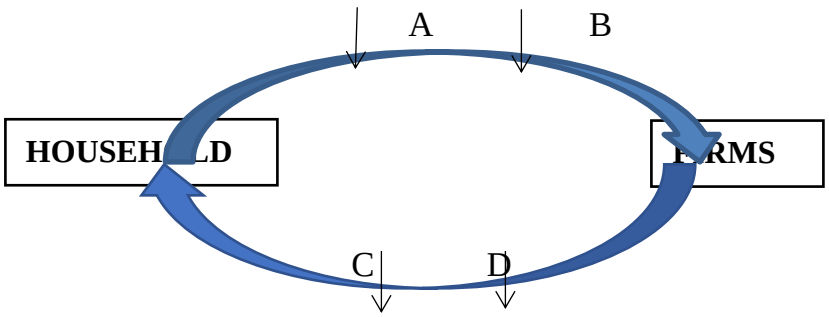
Endowment policy

b). Comprehensive motor policy

c). Constructive total loss policy

d). Public liability policy

17) Identify the injections and withdrawals in the circular flow of income diagram below. **(4mks)**



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18) The average consumer price of a loaf of bread for various years is shown below.

Year	**Consumer price (Ksh)**	**Consumer price index**
2020	40	100
2021	50	
2022	55	
2023	60	
2024	65	

If the consumer price index for the year 2020 is 100%. Calculate the consumer price index for using 2020 as the base year. (4mks)

19) Outline **four** reasons why producers need to observe ethics in product promotion. (4mks)

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20) Describe the following types of unemployment in an economy. **(4mks)**

a). Seasonal unemployment

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b). Involuntary unemployment

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c). Frictional unemployment

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d). Voluntary unemployment

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21) From the table below, identify the term of sale described as used in international trade. **(4mks)**

	Description	**Term of sale**
a).	The price quoted includes all expenses incurred until the goods are delivered in the bonded warehouse.	
b).	The exporter is willing to accept the quoted price or any other nearest to the quoted one.	
c).	Price quoted includes transport expenses up to the docks as well as dock charges, loading onto the ship and any other expense are paid by the importer.	
d).	Price quoted includes all expenses up to the port of destination as well as unloading charges.	

22) State the effect of the following transactions on the balance sheet totals by writing increase, decrease, or no effect in each case. **(4mks)**

	Transactions	**Effect**
a).	Purchased stock on credit sh. 10,000	
b).	Withdrew stock worth sh. 2,000 for family use.	
c).	Paid a creditor sh. 7,000 by cheque	
d).	Took a cooperative loan sh. 30,000 and deposited in bank account.	

23) Outline **four** benefits to a country that prepares development plans. **(4mks)**

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24) Outline **four** ways in which the technological environment may positively influence a business.

(4mks)

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25) The following transactions took place in the business of Highlands's retail shop in the month of June 2025.

June 1: Commenced business with Ksh. 120,000 in cash.

June 4: Transferred Ksh. 66,000 from business till to the bank.

June 13: Brought his private furniture worth Ksh. 15,000 in the business.

June 28: Borrowed a loan from ABC bank in cash Ksh. 40,000

Required: Open ledger accounts to record the above transactions. **(4mks)**

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

BUSINESS STUDIES

565/1

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

Instructions for candidates:

a) *This paper consists of **six** questions*

b) *Answer any **five** questions.*

c) *Write your answers in the answer booklet provided.*

d) *All questions carry equal marks.*

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

For Examiners Use Only

	1	2	3	4	5	6
a)						
b)						

TOTAL SCORE

1) (a) Explain **five** documents used in home trade that are sent by the seller to the buyer (10 marks)

(b) Wamae enterprise runs a general merchandise business. The transactions during the month of august 2023 were as follows:

2023

August 1: The business bought goods worth sh. 80,000 on credit from silver stores.

August 4: Sold goods on credit to Nandi traders sh. 60,000.

August 8: Sent Nandi traders a credit note for goods returned. Which was valued at sh.27,000.

August 10: Sold goods on credit to Otieno sh. 60,000.

August 12: Purchased goods from Nandwa Ltd for sh. 120,000 on credit.

August 15: Purchased goods on credit from Njeri for sh. 30,000.

August 16: Sent Otieno a credit note for goods returned worth sh. 6,000.

August 18: Nandwa ltd sent us a credit note for sh. 30,000.

August 19: received a credit note from silver store worth sh. 20,000

Required:

Prepare the relevant journals to record the above transactions **(10 marks)**

2) (a) Explain **five** factors that a school Principal would consider when choosing a means of communication to invite parents for an academic day. **(10marks)**

(b) Outline **five** uses of national income statistics in an economy. **(10 marks)**

3) (a) Other than the forces of demand and supply explain other **five** ways in which prices of products can be determined in a market. **(10 marks)**

(b) Explain **five** benefits of economic integration to a country **(10 marks)**

4) (a) Explain **five** factors to consider when determining the location of a firm **(10marks)**

(b) Outline **five** differences between a commercial bank and non-bank financial institutions. **(10 marks)**

5) (a) Explain **Five** Factors that can lead to the success of a Business. **(10 Marks)**

(b) Explain **five** measures that can be used to control demand pull inflation . **(10 marks)**

6) (a) Explain **four** circumstances that may lead to dissolution of a public limited company.

(8 marks)

(b) The following balances were extracted from the books of Koilegen Traders on 1st October 2022.

(12 marks)

Sh.

Capital	4,200,000
Creditors	1,330,000
Motor Van	1, 800,000
Furniture	1,500,000
Stock	500,000
Debtors	780,000
Cash	40,000
Bank	2,000,000
ABSA bank loan	1,090,000

The following transactions took place in the month of October 2022.

Sold some furniture Sh. 710,000 for which Sh. 440,000 cash was received and the balance was to be paid later.

Bought goods Sh. 950,000 and paid Sh. 620,000 by cheque and the balance was to be paid later.

The proprietor took Sh. 120,000 cash to pay his child school fees.

Sold goods worth Sh. 1,100,000 for Sh. 1,900,000 by cheque.

Required:

Draw Koilegen Traders balance sheet as at 31st October 2022 and show the items in the relevant classes.

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

BIOLOGY

231/1

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

INSTRUCTIONS TO CANDIDATES:

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

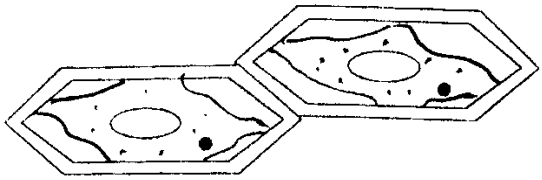
b) *Sign and write date of examination in the spaces provided above*

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

For Examiner's Use Only:

QUESTIONS	MAXIMUM SCORE	CANDIDATE'S SCORE %
1- 22	80	

1. Study the diagram below showing a portion of an onion epidermis that had been irrigated with a certain solution X.



a) In <u>one</u> word describe the condition of the **cells** **(1mk)**

……

b) Describe the process that lead to the condition named above. **(3mks)**

……

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2. The following reaction may proceed in forward or backward direction

Glucose + fructose ⇌ sucrose + water.

What term is used to refer to the backward reaction. **(1mk)**

……

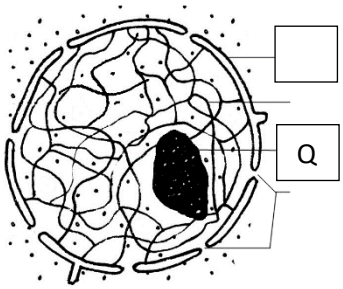
In which part of alimentary canal does the backward reaction occur**?** **(1mk)**

……

Name the enzyme that catalyzes the backward reaction**.** **(1mk)**

……

3. The diagram shown below represents a nucleus



State the role of the organelle labelled **Q** **(1mk**

……

……

Name a Kingdom whose members lack structure labelled **P** **(1mk**

……

Which is the general term given to organisms whose cells have structure **P**?

……

4. After fertilization of an ovule, which parts develops into: -

Testa **(1mks)**

……

b) Endosperm **(1mk)**

……

5a) Explain two roles of diffusion in human beings. **(2mks)**

……

……

……

……

bi) Name the process through which a plant takes up some mineral ions against a concentration gradient. **(1mk)**

……

ii) State two factors that may affect the process named in b(i) above. **(2mks)**

……

……

c) Distinguish between haemolysis and plasmolysis. **(1mk)**

……

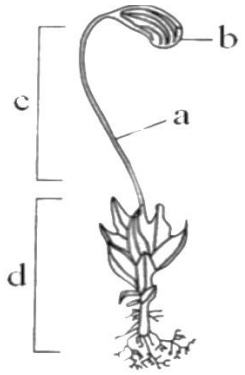
……

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6. An insect landed on a leaf of an insectivorous plant. Consequently, the leaf closed with its spines interlocking trapping the insect inside it. Name the response exhibited by the leaf. (**1mk)**

……

7.The figure below represents a plant.



State the division it belongs to. **(1mk)**

……

Label the parts labeled **(2mk)**

a. ----------

b. ----------

c) State the role of part labeled **d** in the life cycle of the organism. **(1mk)**

……

……

8. State any two adaptations of the cardiac muscle that enable it to undergo systole. **(2mks)**

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9.a) Why are carbohydrates and not lipids the first choice respiratory substrates**?** **(2mks)**

……

……

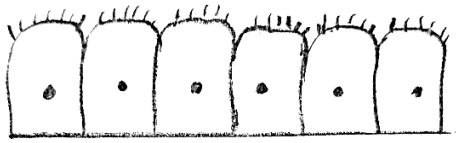
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b) $2C_{57}H_{110}O_6 + 163O_2 \longrightarrow 114CO_2 + 110H_2O$ + Energy.

Calculate the RQ from the equation in (c) above. **(2mks)**

10. Below is a diagram of a group of cells of a specific tissue.



Name the **tissue** **(1mk)**

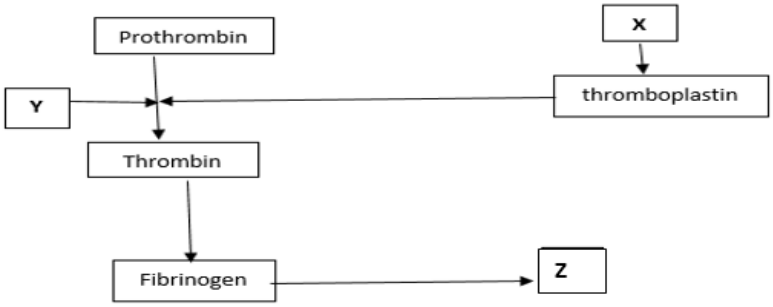
……

This tissue lines the trachea and bronchi. Suggest its function in these structures. **(1mk)**

……

……

11. Study the flow chart below which represents a physiological process in mammals



ai) Name blood components represented by **X.** **(1mk)**

……

ii) What is the significance of product represented by **Z.** **(2mks)**

……

……

b) Under what condition is thrombokinase released by the platelets? **(1mk)**

……

12 a) Explain what happens to excess amino acids in the liver of humans**.** **(3mks)**

……

……

……

……

……

b) Which portions of the human nephron are only found in the cortex**?** **(1mks)**

……

13.A potted plant is transferred from outside on a sunny and windy day, to a dark room.

a) Briefly explain the effect this is likely to have on:

i)The rate of loss of water from its leaves. **(3mks)**

……

……

……

……

……

ii)The rate of water absorption. **(2mks)**

……

……

……

14.Give a reason why urine of a mammal does not contain amino acids. **(1mks)**

……

……

15.a) In what form is energy stored in muscles? **(1mk)**

……

……

b) State the role of insulin in human body. **(2 mks)**

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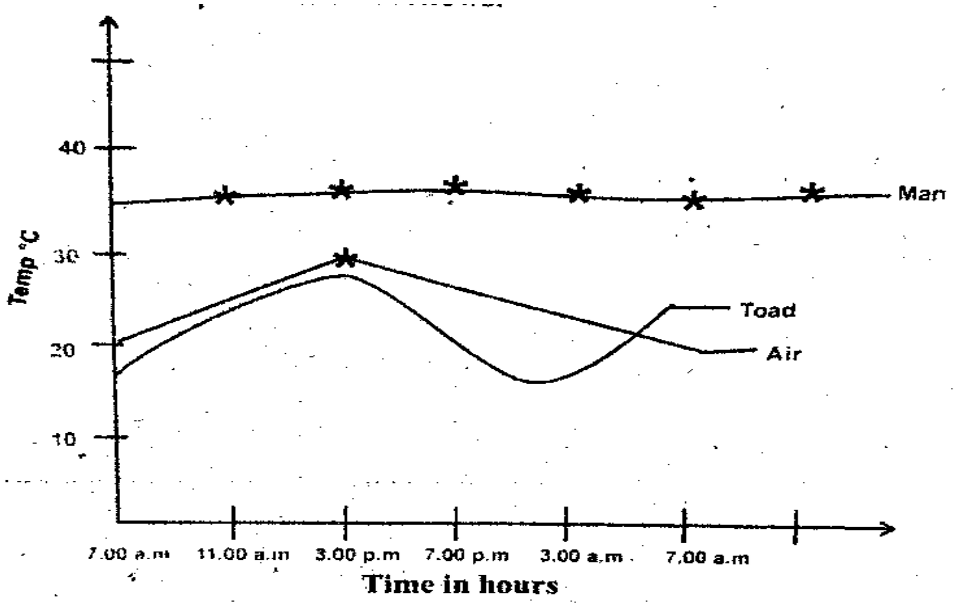
16. Name the processes that take place in the liver to bring about differences between blood in the Hepatic portal vein and that in the hepatic vein**.** **(3mks)**

i) ----------

ii) ----------

iii) ----------

17. The graph below shows how the body temperature of a toad and man varies with time in hours. Study it and answer the questions that follow.



a) What is the relationship between the body temperature of the toad and that of the atmospheric air? **(1mk)**

……

b) State two corrective measures that maintains man's body temperature at norm even when the environmental temperature is below 30^0C. **(2mks)**

……

……

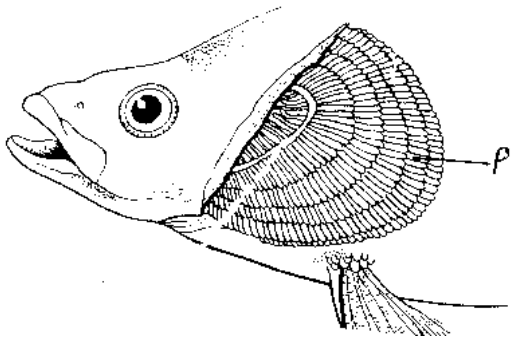
……

c) Give one behavioral adaptation observed in a lizard when the environmental temperature is above 39^0C. **(1mk)**

……

……

18. The figure below shows the exposed breathing apparatus of a fish.



a) Name the structure that was removed to expose the apparatus. **(1mk)**

……

b i) Name structure P. **(1mk)**

……

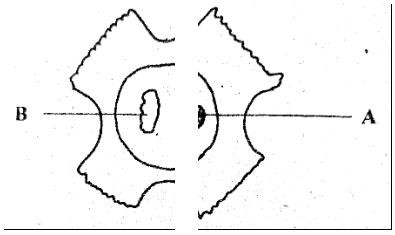
ii) State two structural adaptations of the respiratory surface in insects. **(2mks)**

……

……

……

19. The following is a reproductive structure of a plant.



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

……

b) Name the sub-division of the plants that produces the above reproductive structure. **(1mk)**

……

ci) Name structure B. **(1mk)**

……

ii) What is the function of structure A? **(1mk)**

……

……

20. Nucleic acids are made up of nucleotides that bears a sugar component.

a) Name the sugar component found in: - **(2mks)**

i) DNA fragment ----------

ii) RNA fragment ----------

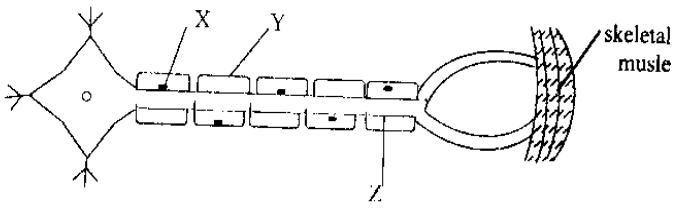
b) The following nucleotide sequence was found in a segment of DNA: - **A G C C T.** Write down the complementary base sequence in the corresponding m RNA segment during transcription. **(1mk)**

……

c) A point mutation altered the base sequence from the original to **G G C C T**. Identify the type of gene mutation**.** **(1mk)**

……

21. Below is a drawing of a cell.



With two reasons, identify the cell**.** **(2mks)**

Identify. ----------

Reasons:

……

……

Which of the three structure X, Y and Z speeds up transmission of the impulse. **(1mk)**

……

22.a) Name the pigment that protects humans from the negative effect of Ultraviolet lights

……..….**(1mk**

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

……

……

……

23.a) State two structural differences between skeletal muscles and smooth muscles. **(2mks)**

Skeletal muscle	Smooth muscle
(i)	
(ii)	

b) What are antagonistic muscles? **(1mk)**

……

……

24. Name the substrates for the following enzymes

i) Carbonic anhydrase ……. **(1mk**

ii) Cholinesterase ……..... **(1mk**

25. A tilapia fish has a full length of 300mm but measures 200mm from the mouth tip to its anus. Determine the tail power of the fish **(2mks**

……

……

……

……

……

26. State the differences between cones and rods in terms of the following **(2mks**

Feature	Cone	Rod
Visual acuity		
Photochemical		

Impulse transmission across a synapse is in one direction. **Explain** **2mks**

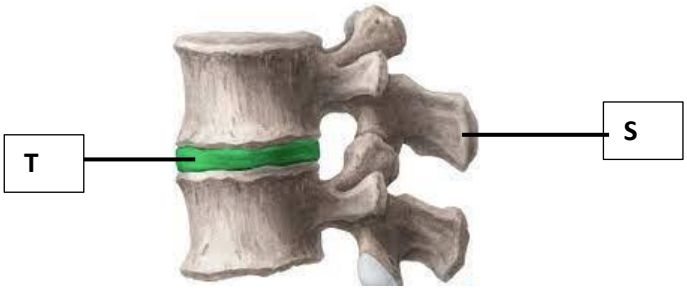
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27. The diagram shown below represents a section of the vertebral column



Name the part labelled **S** **(1mk**

……

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

……

……

……

Give **TWO** features that make modern man to be more adaptable to the environment **(2mks**

……

……

……

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

BIOLOGY

231/2

PAPER 2

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

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.*

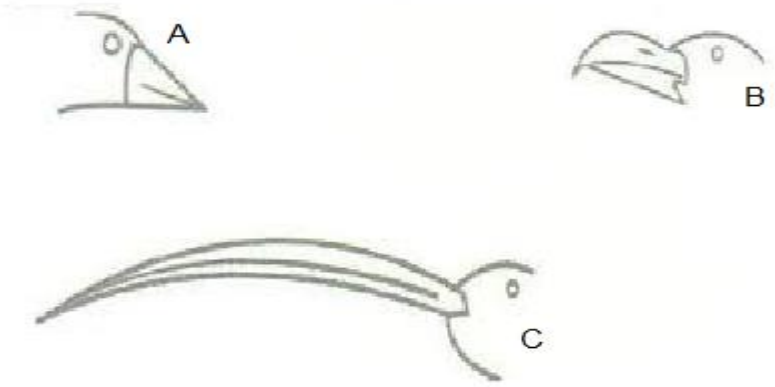
FOR EXAMINERS' USE ONLY

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 questions in this section in the spaces provided.

1. The diagrams below show beaks of various birds. Study the diagrams and answer the questions that follow.



(a)Name the;

The type of evolution represented by the **diagrams** **(1mark)**

……

The type of structures represented by the **diagrams** **(1mark)**

……

b)i) Using Darwin's theory of evolution, explain how the beak of bird C would have evolved **(3mks)**

……

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Explain how Lamarck could have explained the evolution of beak of bird B **(3mark)**

……

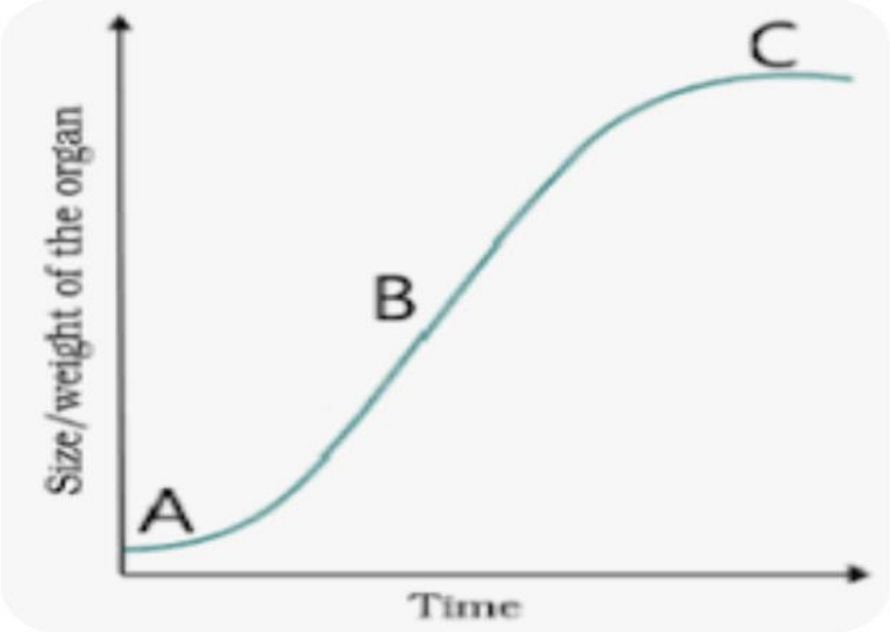
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2. The diagram below shows a growth curve of an organ from a certain organism. Study it then use it to answer the questions that follow.



Identify the growth **curve** **(1mk)**

……

State the Phylum from which the organism belongs **(1mk)**

……

Explain the phenomenon that occurs at points

A **(2mks)**

……

……

……

……

B **(2mks)**

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……

State two factors affecting growth in plants **(2mks)**

……

……

3. A rhesus positive man marries a rhesus positive woman and one of their children happens to be rhesus negative.

(a) work out the possible genotypes of the two parents **(1mark)**

……

(b) the rhesus negative daughter of the above couple is married to a rhesus positive but carrier man. work out ;

(i) The phenotypes of their offspring **(4marks)**

The genotypic and phenotypic ratio of their **offspring** **(2mark)**

……

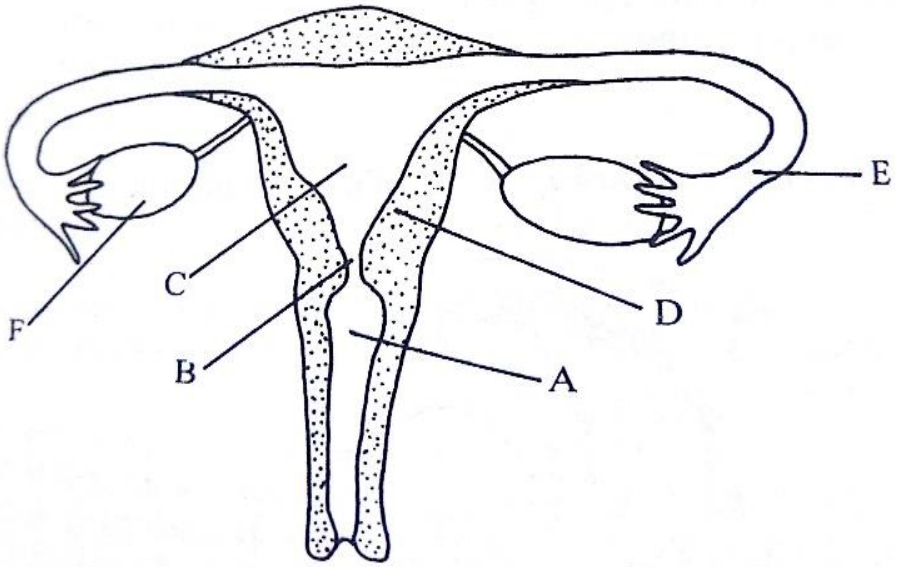
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(c) Name the condition that the first offspring in the genetic cross in (b) above will suffer from **(1mk)**

……

4. The diagram below represents a female reproductive system.



Name the part labelled A **(1mark)**

.....

Identify the letter representing the organ where fertilization takes place **(1mark)**

.....

Name the hormones produced by the part labelled F **(2marks)**

.....

.....

Explain how an ovum moves along the labelled E **(2marks)**

.....

.....

.....

.....

Explain why if the parts labelled F are removed after the fourth month, pregnancy can proceed normally. **(2marks)**

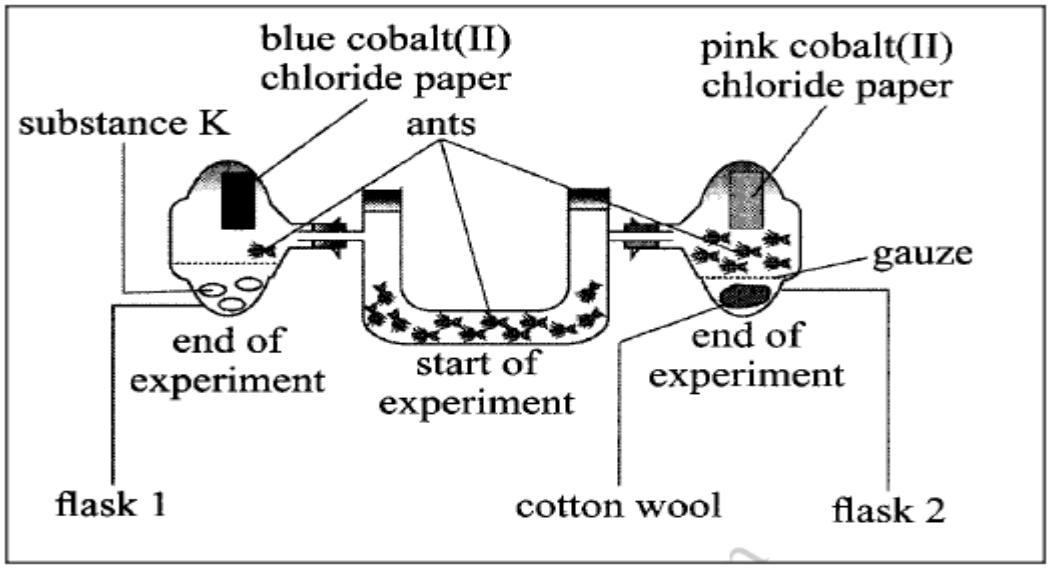
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5. The diagram below represents a set up during an experiment



Name the type of response the experiment was **investigating** **(1mark)**

……

Name two other types of responses that are shown by animals in relation to stimuli **(2mks)**

……

……

State the likely identity of substance K **(1mark)**

……

Explain your answer in (b(i) above **(2marks)**

……

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e) Account for the observations made in flask **2** **(2mks)**

……

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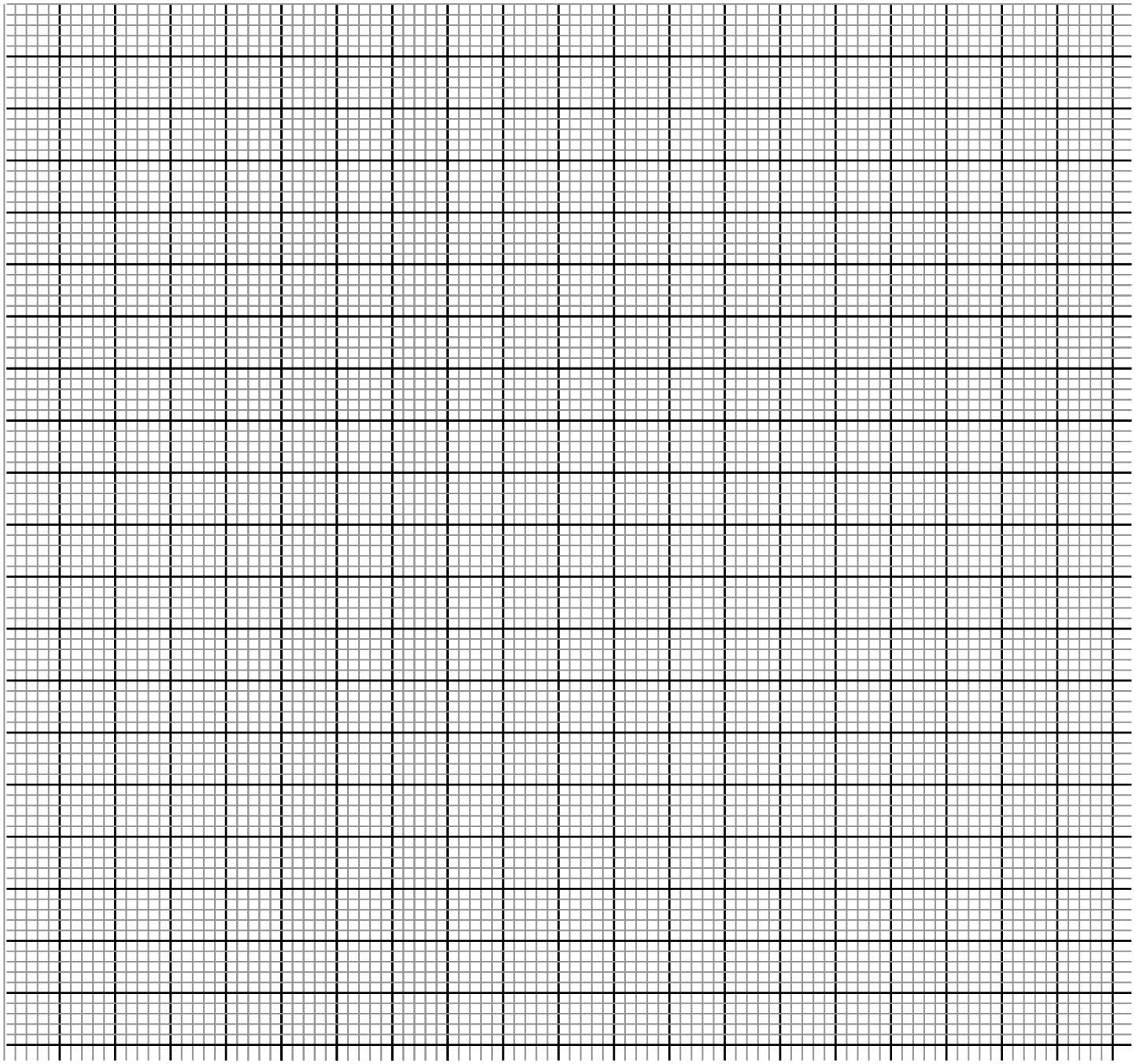
SECTION B (40 MARKS)

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

6. The relationship between oxygen concentration and sugar consumption in isolated roots of sorghum was determined. The results are shown in the table below. The loss of sugar and potassium uptake are in arbitrary units. **% Oxygen concentration**

	0	5	10	15	20	100
Sugar loss	15	20	42	45	45	48
Potassium gain	5	55	70	73	75	70

Plot graphs of sugar loss and potassium gain against percentage of oxygen concentration in the same axis. **(8mks)**



Name the process by which potassium is taken in by root hairs. Give reasons for your answer.

Process**:** **1 mk)**

……

Reasons. **(1mk)**

……

……

Account for the sugar loss and potassium gain at:

0% oxygen concentration. **(2mks)**

……

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……

Between 5% and 20% oxygen concentration. **(2mks)**

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……

d) Apart from oxygen concentration, give **two** other factors that are necessary for the above process. **(2mks)**

……

……

……

e) State **two** ways in which you can stop the above process from taking place. **(2mks)**

……

……

……

……

f)Name **two** main areas in the mammalian body where the above process is involved. **(2mks)**

……

……

……

7a) Describe the causes and effects of water pollution **(10mks)**

b) State the adaptations of the ileum to its functions **(10mks)**

8a) Describe the economic importance of plant excretory products **(10mks)**

b) Describe the mechanism of gaseous exchange in terrestrial insects **(10mks)**

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

BIOLOGY

231/3

PAPER 3

TIME: 1¾ HOURS

SCHOOL…… SIGN……

Kenya Certificate of Secondary Education. (KCSE)

CONFIDENTIAL

For question 1 each candidate requires the following

6ml solution Y (Starch solution) in a test tube.

50ml solution X (glucose solution) in a 100ml beaker

2 pieces of thread (about 10cm) each

8 cm piece of visking tubing

4 tests tubes in a test tube rack

4 labels

Access

Benedict's solution

Iodine solution

Source of heat

Light microscope

Permanent slide white blood cell labelled E

Permanent slide red blood cell labelled K

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

BIOLOGY

231/3

PAPER 3

TIME: 1¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

INSTRUCTIONS TO CANDIDATES

a) Write your name, Index Number in the spaces provided above.

b) Write the date of examination in the space provided above.

c) Answer ALL the questions in the spaces provided below each question in the question paper.

FOR EXAMINER'S USE ONLY

Question	Maximum score	Candidate's score
1	**14**	
2	**14**	
3	**13**	
TOTAL	**40**	

1. You are provided with solution X and Y, Iodine solution, Benedict's solution, visking tubing and two pieces of thread.

(a) Using the reagents provided, carry out appropriate tests on solutions X and Y.

Ensure that droppers are not interchanged.

Iodine **test** **(4marks)**

Solution	**Procedure**	**Observation**	**Conclusion**
Solution X			
Solution Y			

Benedict's test **(4marks)**

Solution	Procedure	Observation	Conclusion
Solution X			
Solution Y			

(b) Tie one end of the visking tubing tightly with a thread. Using a dropper, place about 3ml of solution Y in the tubing and tie the open end tightly. Rinse the visking ensuring there is no leakage and immerse it in solution X in a beaker. Leave the set up to stand for about 20 minutes.

Using the contents of the visking tubing and the beaker, carry out the appropriate tests using the reagents provided.

Iodine test **(2mks)**

Contents	**Observation**	**Conclusion**
Visking tubing		
Beaker		

Benedict's test **(2mks)**

Contents	**Observation**	**Conclusion**
Visking tubing		
Beaker		

(c) Account for the observation made in (b)(ii) above in the visking tubing**.** **(2mks)**

……

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……

2.You are provided with the following materials and apparatus.

Two prepared slides labelled E and K respectively containing a certain tissue obtained from the human body.

Access to a light microscope with at least low and medium power objective lens.

Observe the prepared slides of a human tissue under medium power objective lens of the light microscope.

a) Identify with reasons the structures seen under the medium power objective of the light microscope. Draw and label the structures in the table below**.** **(6marks)**

	Identity	**Reason**	**Diagram**
E			
K			

b) Calculate the magnification of the image observed in the slide labelled K under low power objective **lens** **(2marks)**

……

……

……

c)Explain why the high power objective lens cannot be used with coarse adjustment knob during observation of the prepared slides above**.** **(1mark)**

……

……

……

d) State the adaptations of the human structures observed in slide E to its functions **(3marks)**

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e)(i) If a slide of a complete human tissue showing all the components is prepared, which amongst the two tissues is likely to be observed in abundance. **(1mark)**

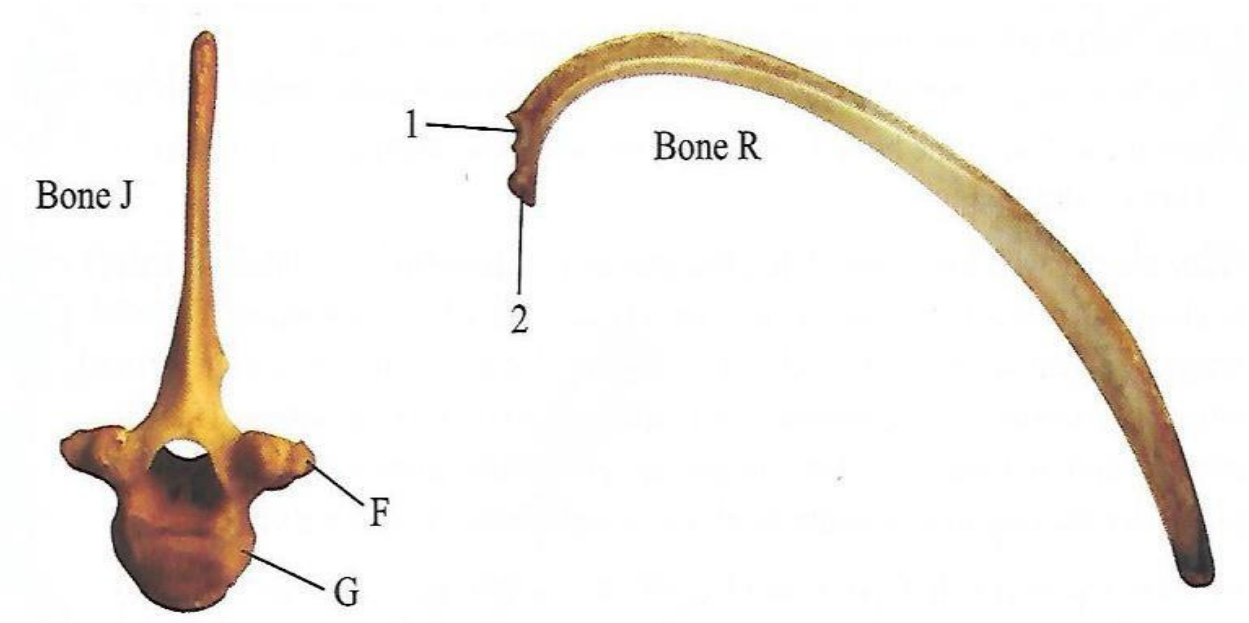
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ii) Give reason for your answer in e(i) above **(1mark)**

……

……

3.Below are photographs of mammalian bones **J** and **R** obtained from the same region of the body. Study them and answer the questions that follow.



Giving reasons, identify bone J and R**.** **(4mks)**

Bone	Identity	Reason
J		
R		

(i) Name the parts labeled 1,2,F and G **(4mks)**

1……

2……

F……

G……...

(ii) Which of the labeled part of bone J does structures 1 and 2 on bone R articulate. **(2mks)**

……

……

……

(iii) Make a drawing to show how and bones J and R articulate **(3mks)**

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

CHEMISTRY

233/1

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

INSTRUCTIONS TO CANDIDATES

a) *Write your Name, Admission Number and class in the spaces provided.*

b) *Answer all the questions in the spaces provided in the question paper.*

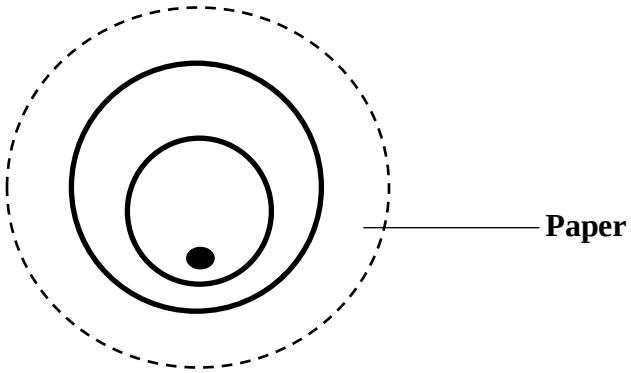
c) *Mathematical tables and silent scientific calculators may be used.*

d) *ALL the working must be clearly shown where necessary.*

FOR EXAMINER'S USE ONLY

QUESTIONS	MAX SCORE	CANDIDATE'S SCORE
1 – 28	80	

1. An extract colouring matter was placed at the centre of a filter paper and allowed to dry. Drops of ethanol were added to the centre and eventually the following was observed.



Name a process by which dilute extract can be made more concentrated. **(1mk)**

……

Give the name of the process by which the circles were produced. **(1mk)**

……

Explain why water is not suitable for this process. **(1mk)**

……

……

2. Study the table below and answer the questions that follow.

Solution	**N**	**P**	**K**	**L**	**Q**
P^H	**1.0**	**14.0**	**6.5**	**7.0**	**8.0**

Which of the solutions would be suitable for use in the manufacture of anti-acid tablets? **(1mk)**

……

……

Give a pair of the above solutions for which zinc oxide can dissolve. Give a reason. **(2mks)**

……

……

……

3. In an experiment to prepare oxygen gas, black **solid B** was added to hydrogen peroxide solution. The oxygen produced was then used to produce **gas D** which changes orange acidified potassium dichromate (VI) to green. Gas D was prepared by heating a yellow **solid A** in oxygen.

Identify

Solid B **($\frac{1}{2}$mk)**

……

Gas D **($\frac{1}{2}$mk)**

……

Write an equation for formation of oxygen gas from the above experiment. **(1mk)**

……

……

What volume of oxygen gas would be produced at r.t.p of 20 cm^3 of 2M hydrogen peroxide was used in the experiment? (M.G.V at r.t.p = 24000 cm^3) **(2mks)**

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……

4. Given:

ΔH_{1att} LiCl = 891 $kJmol^{-1}$

ΔH_{hyd} $Li^{+}_{(g)}$ = 484 $kJmol^{-1}$

ΔH_{hyd} $2Cl^{-}_{(g)}$ = 800 $kJmol^{-1}$

Determine the enthalpy of solution of lithium chloride. **(2mks)**

……

……

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……

……

Draw an energy level diagram to represent the above information **(2mks)**

5. 65 g of a solution contains 5 g of solute. The solubility of the salt is 25 g per 100cm^3 of water at 20 ^{0}C. 30 g of the salt was added to the solution at 20 ^{0}C. Determine the mass of the salt that remained undissolved. **(3mks)**

……

……

……

……

6. Using dots (.) and crosses (X) to represent electrons show bounding in phosphonium ion (PH_4^+) **(2mks)**

7. (a) Describe how you can prepare a dry sample of ammonia ($Na_2CO_3.NaHCO_3.2H_2O$) in the laboratory, starting with sodium carbonate solid. **(2mks)**

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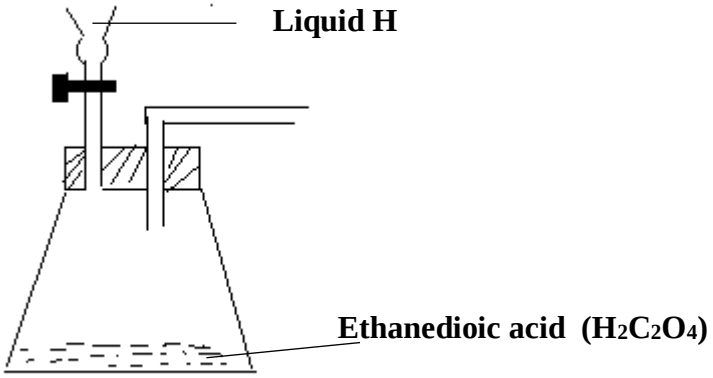
(b) If the crystals prepared above are left exposed overnight. It is observed that it turns into a white powder. Explain. **(1mk)**

……

……

……

8. The set-up below was used in the laboratory preparation of carbon (II) oxide.



Complete the set up to show how carbon (II) oxide was collected. (**2mks)**

Identify liquid **H** and state its function **(1mk)**

……

……

Write an equation for the reaction producing carbon (II) oxide gas. **(1mk)**

……

9. A student electrolyzed magnesium sulphate solution graphite electrodes.

Calculate the amount of current required to liberate 1.2dm^3 of the gas produced at the anode at r.t.p. (M.G.V at r.t.p = 24dm^3, 1F = 96500C). **(3mks)**

……

……

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……

Explain the changes in concentration of the electrolyte as the electrolysis progresses.**(1mk)**

……

……

10. (i) State Graham's law of diffusion **(1mk)**

……

……

(ii) 100 cm^3 of ozone (O_3) diffused through a certain apparatus in 96 seconds. Calculate the time taken by 100 cm^3 of carbon (IV) oxide to diffuse through the same apparatus under same conditions. (O = 16.0 C = 12.0) **(3mks)**

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11. In an experiment to confirm the presence of nitrate ions in a solution, a student added a certain solid M followed by sodium hydroxide solution the warming. He then tested the gases produced using litmus papers.

Identify solid M **(1mk)**

……

Complete the table below by listing down the observations that lead to the conclusion that nitrate ions were present.

Observation	**Inference**
…… …… …… …… **(2mks)**	**NO_3^- present**

12. A certain metal carbonate, QCO_3 , reacts completely with 20 cm3 of 1M hydrochloric acid according to the equation below.

$QCO_{3(s)} + 2\ HCl_{(aq)} \longrightarrow QCl_{2(aq)} + CO_{2(aq)} + H_2O_{(l)}$

Determine the relative atomic mass of Q is 1g of the carbonate reacted completely.
(C=12, O = 16) **(3mks)**

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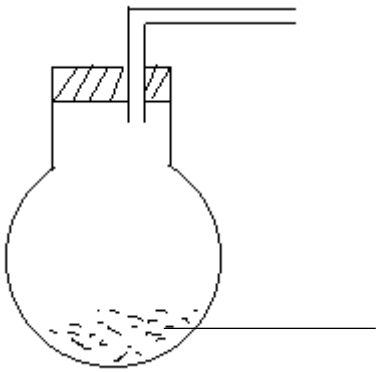
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13. (a) Draw and name all the possible isomers of butene. **(2mks)**

(b) The diagram below shows an incomplete set-up of the laboratory and collection of propane.



Solid X + sodium hydroxide solid + calcium oxide

Complete the set-up to show how the gas is collected. **(2mks)**

Identify solid X **(1mk)**

……

What is the role of calcium oxide in the mixture? **(1mk)**

……

……

14. (a) An element P consist of three isotopes with mass number 39, 40, 41 with percentage abundance of P-40 being 60%. If the R.A.M of P is 39.8, determine the percentage abundances of the other two isotopes. **(2mks)**

……

……

……

(b) If the atomic number of P is 9, illustrate the structure of an ion of P-39. **(2mks)**

15. Hydrogen sulphide gas reacts with chlorine gas according to the following equation.

$H_2S_{(g)} + Cl_{2(g)} \longrightarrow 2HCl_{(g)} + S(s)$

Use oxidation numbers to identify the reducing agent in the equation. **(2mks)**

……

……

……

16. (i) Write a balanced chemical equation for the reaction between chlorine gas and hot concentrated sodium hydroxide solution. **(1mk)**

……

……

(ii) Give one use of the major product formed in (i) above. **(1mk)**

……

Write PTFE in full. **(1mk)**

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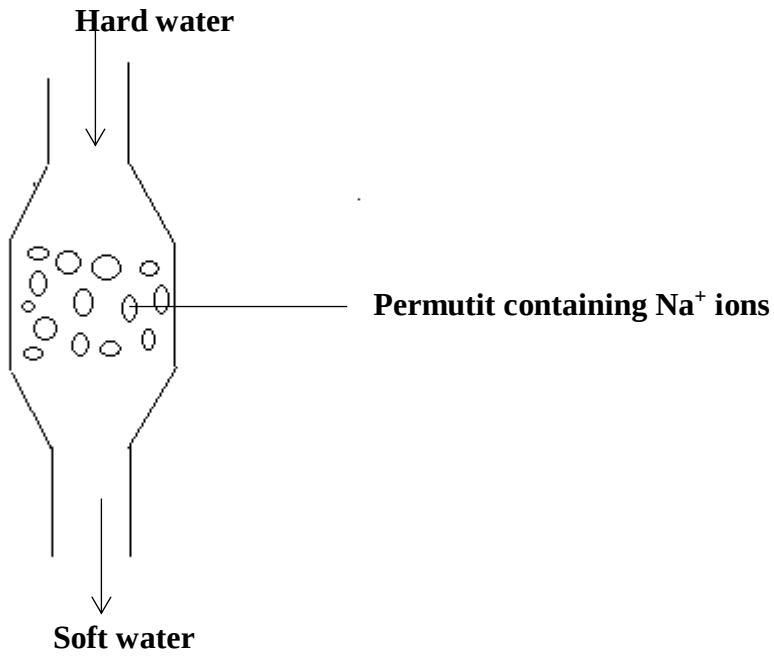
17. (a) Identify the acid in the backward reaction. Give a reason for your answer.

$NH_4^+{}_{(aq)} + H_2O_{(l)} \rightleftharpoons NH_{3(aq)} + H_3O^+_{(aq)}$ **(2mks)**

……

……

18. The column below was used to soften hard water.



Briefly explain how the resin works. **(1mk)**

……

……

How is the resin re-activated after some time? **(1mk)**

……

……

……

19. Hydrogen chloride gas dissolved in water conducts electric current while hydrogen chloride gas dissolved in methylbenzene does not. Explain. **(2mks)**

……

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20. (a) Name the chief one from which lead is extracted. **(1mk)**

……

(b) State two uses of copper metal. **(2mks)**

……

……

21. Describe the process of preparation of soap. **(2mks)**

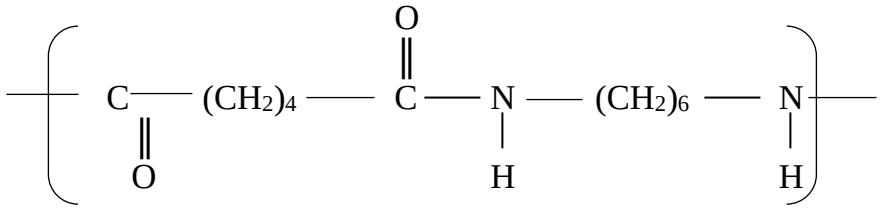
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22. (i) Name the type of polymerization by which the polymer nylon– 6, 6 below is formed.



……**(1mk)**

(ii) Write the equation for the process taking place in (b) above. **(1mk)**

……

23. (a) Distinguish between nuclear fusion and nuclear fission. **(1mk)**

……

……

……

(b) $^{Z1}U + 1n \xrightarrow{94} Sr + {}^{140}Sr + 2\ 1n$

^{92} 0 ^{38} Z_2 $_0$

Find the value of Z1 and Z2 in the nuclear equation above. **(1mk)**

(c) 100g of radioactive $^{231}_{91}$ Pa was reduced to 12.5g after 81 days. Determine the half-life of Pa **(2mks)**

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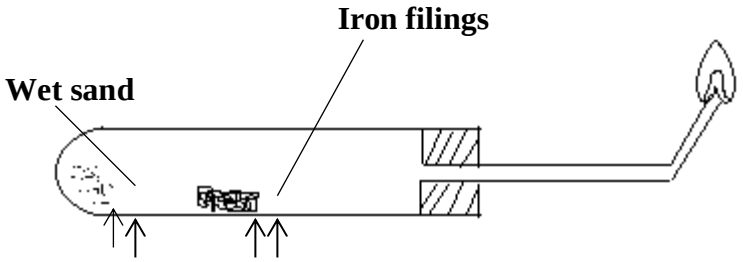
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24. Study the set-up below and use it to answer the questions that follow.



Why is it necessary to heat the wet sand before heating the iron filings? **(1mk)**

……

……

Write down an equation for the reaction involving the iron filings. **((1mk)**

……

……

What precaution is necessary during the reaction? **(1mk)**

……

……

25. A student was provided with two solutions of sodium chloride and aluminium chloride in an experiment. He accidentally removed the labels from the beakers containing the solutions. Describe how he can use potassium hydrogen carbonate to distinguish between the two solutions. **(2mks)**

……

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26. One mole of hydrazine gas (NxHy) reacts completely with oxygen to from 40 cm^3 of nitrogen gas and 80 cm^3 of steam.

Determine the volume of oxygen gas used in the reaction. (**2mks)**

……

……

……

Write the equation for the reaction. **(1mk)**

……

27. A student accidentally added potassium chloride into a mixture of zinc oxide and iron (III) chloride. Describe how you can help him obtain pure potassium chloride from the mixture. **(3mks).**

……

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……

28. Draw and name an apparatus used to support a crucible while heating in the laboratory. **(1mk)**

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

CHEMISTRY

233/2

PAPER 2

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

Instructions to students:

- ***a)*** *Write your **name, admission number** and **class** in the spaces provided.*
- ***b)*** *Answer **all** questions in the spaces provided*
- ***c)*** *Candidates must answer all questions in **English***

Question	Maximum Score	Student's Score
1	11	
2	11	
3	14	
4	11	
5	13	
6	11	
7	9	
TOTALS	80	

1. The grid below represents part of the periodic table. The letters do not represent actual symbols of the elements. Study it and answer the questions that follow:-

K								**W**
				E			**Q**	
H	**P**		**S**	**T**	**G**	**Y**	**Z**	**J**
	B						**V**	
A								

Select an element with the highest ionization energy. Explain **(1mark)**

……

……

Compare the ionic radius of G and Y. Explain **(2marks)**

……

……

……

In terms of structure and bonding compare the melting point of the oxides of E and T **(3marks)**

……

……

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……

On the space provided below draw a labeled diagram showing how the chloride of element P can be prepared **(2marks)**

State one use of element J **(1mark)**

……

From the grid above select the most electropositive element **($\frac{1}{2}$mark)**

……

Sketch a graph to show the trend on atomic radius across the period to which element H and P belong. **(2marks)**

2. a) A piece of unpolished aluminium foil is not attacked by water or steam. Explain why this is so. **(1mark)**

……

……

b) Zubeida a form four student at Joburg high school collected a piece of rock in the school compound .The rock was suspected to contain aluminium. Explain how Zubeida can confirm the presence of aluminium in the ore. **(3marks)**

……

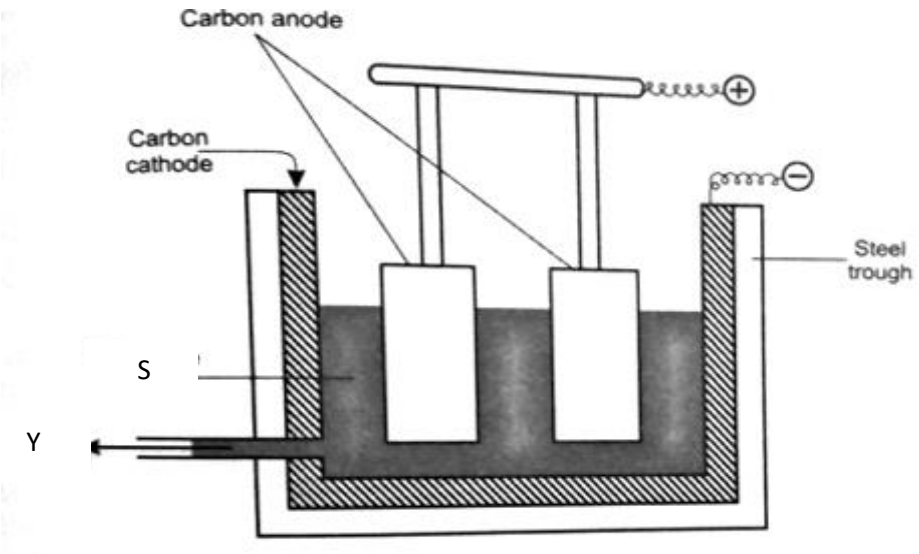
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c) The diagram below illustrates the hall's cell for extraction of aluminium .Study it and answer the questions that follow.



Name the ore from which aluminium is extracted **($\frac{1}{2}$mark)**

……

Name substances S and Y **(1mark)**

S……..

Y…….

The melting point of alumina is 2015^{o}c yet the electrolysis process is carried out at 800^{o}c. Explain how this is achieved. **(1mark)**

……

……

Write the overall equation that takes place in the hall's cell during electrolysis. **(1mark)**

……

Duralumin is an alloy of aluminium and magnesium. State two reasons why it is mostly preferred in construction of aeroplane body parts. **(2marks)**

……

……

……

State two uses of aluminium. **(1mark)**

……

……

……

3. a) Draw a well labelled diagram to show how zinc metal is extracted by electrolysis.**(2marks)**

b) Use the standard electrode potentials given below to answer the questions that follows

Reaction	E^{o}(V)
$MnO^{-}_{4\,(aq)} + 8H^{+}_{(aq)} + 5e^{-} \longrightarrow Mn^{2+}_{(aq)} + 4H_2O_{(l)}$	+1.44
$M^{3+}_{(aq)} + e^{-} \longrightarrow M^{2+}_{(aq)}$	+077
$A^{2+}_{(aq)} + 2e^{-} \longrightarrow A_{(s)}$	+0.34
$P^{2+}_{(aq)} + 2e^{-} \longrightarrow P_{(s)}$	-0.23
$T_{2(g)} + 2e^{-} \longrightarrow 2T^{-}_{(aq)}$	+2.86

State whether acidified $MnO^{-}_{4\,(aq)}$ can oxidise M^{2+}. Give a reason for your answer. **(2marks)**

……

……

……

Write the e.m.f of the half-cell of A if P was used as a reference electrode. Show working.

(1mark)

……

……

……

Select two half cells which would produce the highest e.m.f when combined **(1mark)**

……

……

Draw a well labelled diagram of the electrochemical cell formed when the half cells named above are combined. **(3mark)**

Calculate the e.m.f of the electrochemical cell above. **(2marks)**

An alloy containing iron was dissolved in an acid and the total volume made up to $250cm^3$.$25cm^3$ of tis solution required $18.0cm^3$ of 0.15M acidified potassium dichromate VI to react with completely as shown $\mathbf{Cr_2O^{2-}_{7\,(aq)} + 14H^+_{(aq)} + 6Fe^{2+} \longrightarrow 2Cr^{3+}_{(aq)} + 6Fe^{3+}\ 7H_2O_{(l)}}$

Calculate the mass of iron in the alloy. (Fe=56) **(3marks)**

4. **a).** When a mixture of concentrated sulphuric (VI) acid and copper turnings is strongly heated, a colourless gas and a solid mixture of white and black solids are formed. When the solid mixture is treated with distilled water and filtered a blue filtrate and a black residue are obtained. Explain the observation on the solid mixture formed in the above experiment.

(3marks)

……

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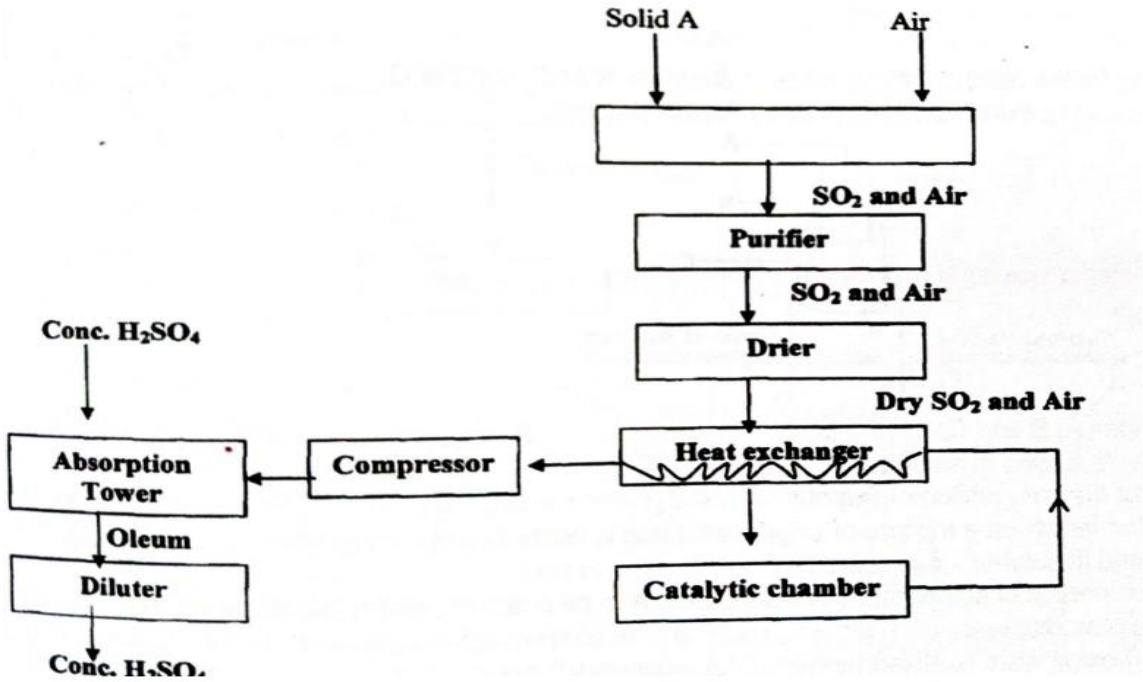
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b). Study the flow chart below and answer the questions that follows.



Besides sulphur name two possible identities of solid A **(1mark)**

……

……

Explain why it is important to remove the impurities in the above process **(1mark)**

……

……

Explain why in the above process sulphur (VI) oxide gas is not directly dissolved in water to form sulphuric (VI) acid but instead dissolved in concentrated sulphuric (VI) acid **(2marks)**

……

……

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……

Write the chemical equation that takes place in the catalytic chamber. **(1mark)**

……

……

State two conditions for the reaction in iv above to take place **(2marks)**

……

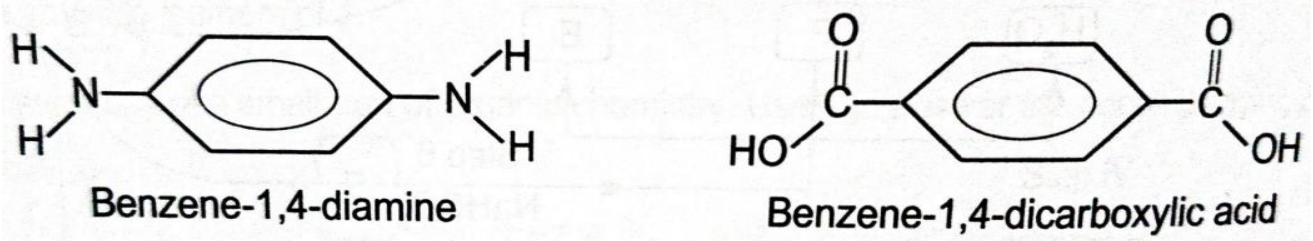
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Give a reason why the above process is called the contact process **(1mark)**

……

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5. Kevlar is a polyamide which is made from two different monomers whose structures are shown below



Draw the structure of Kevlar. **(1mark)**

State one disadvantages of continued use of Kevlar **(1mark)**

……

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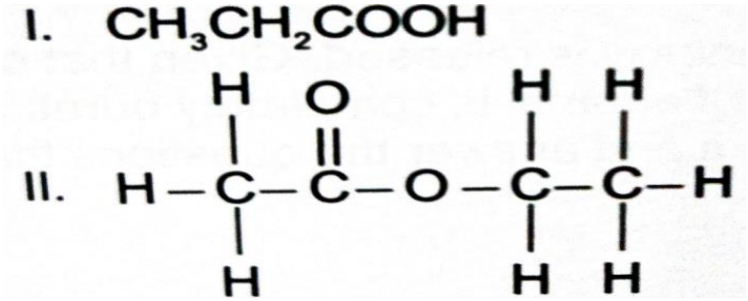
Kevlar is used to make body suits for superbike riders due to being tough and friction less. Name one other application it is popular for. **(1mark)**

……

……

Give the names of the molecules shown below **(2marks)**

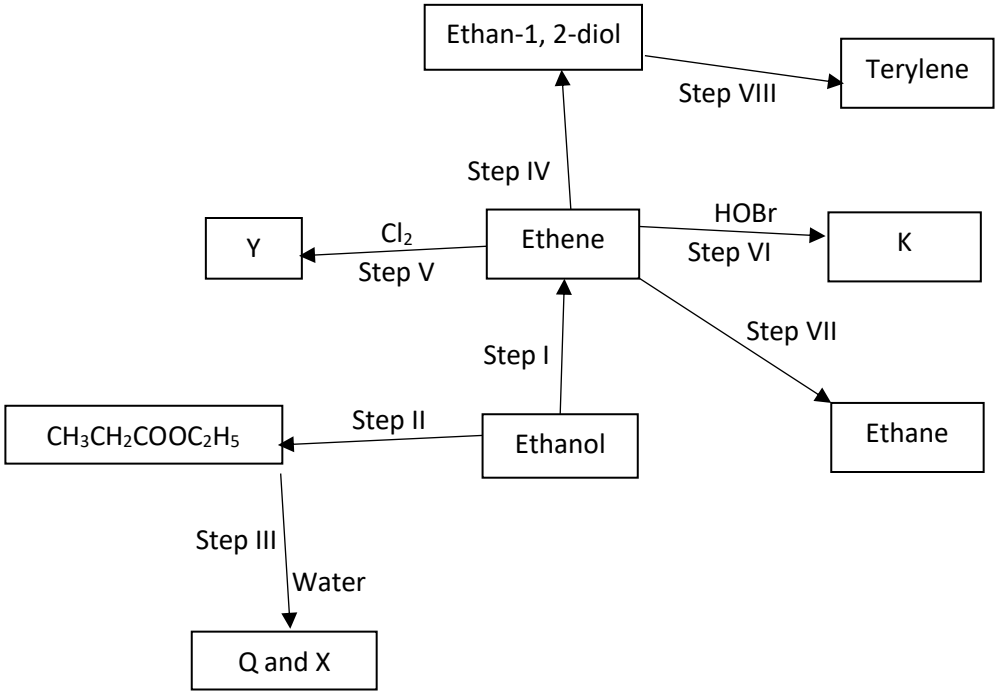
I. CH_3CH_2COOH

II. 

I……

II……

Study the reaction scheme below and answer the questions that follows.



Name substances K and Y **(2marks)**

K……

Y……

Write the chemical equation for the reaction in step VI **(1mark)**

…….

Name the reagent and two conditions for step VII **(3marks)**

Reagent…….

Conditions

……

……

Name the process that takes place in: **(2marks)**

Step III……..

Step VIII……..

a. After 112 days 1/16 of the mass of R remained, Determine the half-life of R **(3marks)**

b. (i) State **two** ways in which nuclear reactions differ from ordinary chemical reactions**(2marks)**

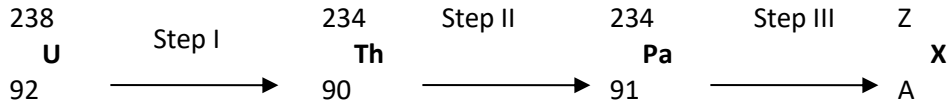
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(ii) The following is a part of Uranium decay series



(iii) Which particles are emitted in **step I** and **II** **(1mark)**

……

(iv) If a beta particle is emitted in **step III,** find the values of **Z a**nd **A** **(2marks)**

(v) State two factors that determine the stability of an isotope **(1mark)**

……

……

(vi) State one application of radioactivity in each following fields: **(2marks)**

Tracers ……...

Paper industries……..

A) Chemical reaction occur as a result of collision of particles. Give a reason why not all collisions are effective **(1mark)**

……

……

B) State and explain how the following factors affect the rate of a chemical reaction **(4marks)**

Pressure

……

……

……

Temperature

……

……

……

C) Bismuth chloride reacts with water according to the equation below.

$$BiCl_{3\,(aq)} + H_2O_{\,(l)} \rightleftharpoons BiOCl_{\,(s)} + 2HCl_{\,(aq)}$$

(Colourless) (White)

State and explain the observation made when a few drops potassium hydroxide are added to the system at equilibrium. **(2marks)**

……

……

……

D) Define the Lechatelier's principle **(1mark)**

……

……

E) State one industrial application of dynamic equilibrium **(1mark)**

……

……

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

CHEMISTRY

233/3

PAPER 3

TIME: 2¼ HOURS

SCHOOL…… SIGN……

Kenya Certificate of Secondary Education. (KCSE)

CONFIDENTIAL

1) 50ml burette

2) 25ml pipette

3) 250ml volumetric flask

4) Complete stand

5) White tile

6) Two conical flasks

7) One thermometer

8) One stop watch

9) 100ml plastic beaker

10) Means of labelling (1)

11) Test tube rack with 6 test tubes

12) Two boiling tubes

13) Watch glass

14)10ml measuring cylinder

15)5ml measuring cylinder

16) Piece of tissue paper

17)3.15g of solid C

18)150cm^3 of solution B

19) About 0.5g of solid M

20) 15cm^3 of liquid N

21) 6cm^3 of an organic acid

22) Distilled water in a bottle.

Access to: (Reagents should be supplied with droppers)

$NaOH_{(aq)}$

$Ba(NO_3)_{2(aq)}$

1M HNO_3

H + 1$KMnO_4$

H+1$K_2Cr_2O_7$

Phenolphthalein indicator

Source of heat

3M H_2SO_4

Identity of reagents

Solution B = 0.2 NaOH

Solid C: 3.15g of oxalic acid weighed accurately)

Solid M: about 0.5g hydrated magnesium sulphate

Liquid N: Absolute ethanol

Organic acid: glacial/ethanoic acid

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

CHEMISTRY

233/3

PAPER 3

TIME: 2¼ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

Instructions to candidates

(a) Write your name, index number, signature and date in the spaces provided above.

(b) Answer ALL the questions in the spaces provided in the question paper.

(c) 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 that you may need.

(d) All working MUST be clearly shown where necessary.

(e) Mathematical tables and silent electronic calculators may be used.

For Examiner's Use Only

Questions	Marks	Candidate's Score
1	18	
2	12	
3	10	
TOTAL	**40**	

1. You are provided with: Solid

a) 3.15g of Dibasic Acid solid C ($H_2C_2O_4.nH_2O$)

b) Solution B; 0.2M sodium hydroxide

You are required to determine:

Molar enthalpy of solution of solid C

Determine the value of n, water of crystallization in solid C ($H_2C_2O_4.nH_2O$)

Procedure I

Using a measuring cylinder, place $50cm^3$ of distilled water in 100ml plastic beaker.

Measure the initial temperature of water and record in table I below.

Add all the solid C at once into the beaker containing water, stir the mixture with a thermometer and measure the temperature of the solution after every 30 seconds and record the results in table I below.

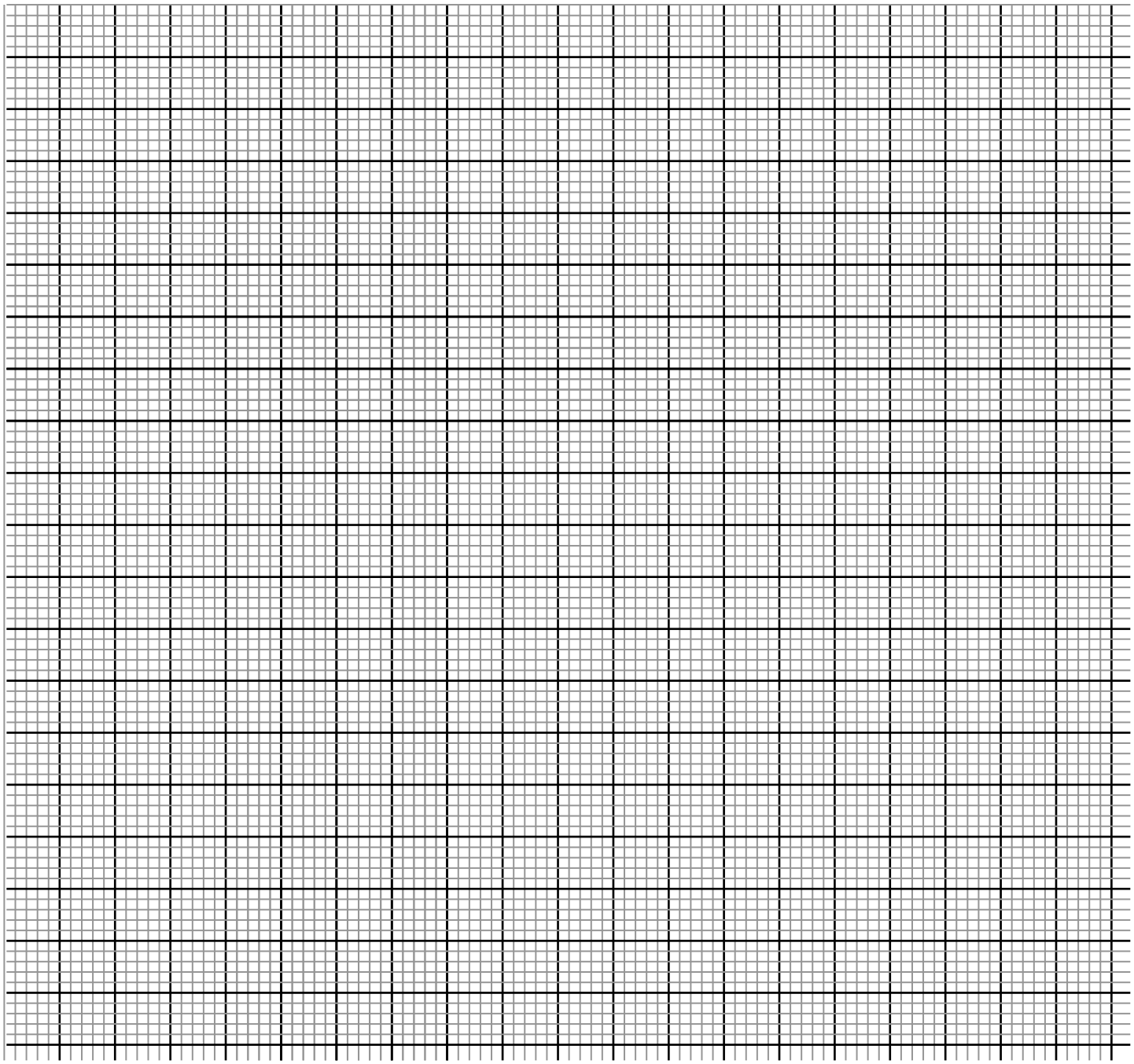
NOTE: Retain the solution formed for use in procedure II

Table I **(3 marks)**

Time (seconds)	0	30	60	90	120	150	180	210
Temperature (°C)								

On the grid provided, plot a graph of Temperature (°C) against time (seconds)

(3 marks)



From the graph, show and determine the temperature change **(1 mark)**

Calculate the enthalpy change of solution for the above reaction **(1 mark)**

(C = 4.2J/g/k, Density = 1g/cm^3)

Procedure II

Transfer the contents of the beaker obtained in procedure I into a 250ml volumetric flask. Rinse both the beaker and thermometer with distilled water and add to the volumetric flask. Add more water upto the mark. Label this as solution C.

Fill the burette with solution C upto 0.0 mark.

Place 25cm^3 of solution B using a pipette into a conical flask, add 3 drops of phenolphthalein indicator and titrate with solution C until the pink colour turns colourless, record readings in table 2 below.

Repeat procedure (iii) two more times and complete table II below.

Table II	I	II	III
Final burette reading			
Initial burette reading			
Volume of solution C (cm^3)			

(4 marks)

Calculate the average volume of solution C used **(1 mark)**

Calculate the number of moles of solution B used **(1 mark)**

1 mole of Dibasic acid reacts with 2 moles of sodium hydroxide according to equation below.

$$2NaOH_{(aq)} + H_2C_2O_{4(aq)} \longrightarrow Na_2C_2O_4 + 2H_2O_{(l)}$$

Determine:

The number of moles of the Dibasic acid, solution C used in the titration **(1 mark)**

Number of moles of the Dibasic acid in 250cm^3 of solution C **(1 mark)**

The relative formula mass of the Dibasic acid **(1 mark)**

The value of n, water of crystallization in the dibasic acid, $H_2C_2O_4.nH_2O$
(C = 12, O = 16, H = 1) **(1 mark)**

Calculate the molar heat of solution of the dibasic acid **(1 mark)**

2. You are provided with:

a) Solid M
b) Aqueous sodium hydroxide
c) Aqueous acidified Barium Nitrate
d) Water

Solid M is suspected to be magnesium sulphate

From the reagents provided, select and describe three tests that could be carried out consecutively to confirm solid M is magnesium sulphate. Write the results and expected observations in the spaces provided.

Test 1 **(1 mk)**	**Expected observation** **(1 mk)**

Test 2 **(1 mk)**	**Expected observation** **(1 mk)**

Test 3 **(1 mk)**	**Expected observation** **(1 mk)**

Carry out the tests described in (a) above using solid M and record the observations and inferences in the spaces provided.

Test 1

Observations (1 mk)	**Inferences (1 mk)**

Test 2

Observations (1 mk)	**Inferences (1 mk)**

Test 3

Observations (1 mk)	**Inferences (1 mk)**

3. You are provided with an organic liquid N, carry out the tests below and record your observations and inferences in the spaces provided.

a)Place about $2cm^3$ of the liquid in a watch glass and ignite it.

Observations **(1 mk)**	**Inferences** **(1 mk)**

b) Place about $2cm^3$ of liquid into 4 test tubes.

(i) To the 1^{st} portion and $2cm^3$ water and allow the mixture to stand for a minute.

Observations **(1 mk)**	**Inferences** **(1 mk)**

(ii)To the 2^{nd} portion, add 2-3 drops of acidified potassium manganite VII.

Observations **(1 mk)**	**Inferences** **(1 mk)**

(iii)To the 3rd portion, add 3 drops of acidified potassium dichromate VI and warm.

Observations (1 mk)	**Inferences (1 mk)**

To the 4th portion, add 3cm^3 of the organic acid provided followed by 3 drops of sulphuric (VI) acid and warm the mixture.

Observations (1 mk)	**Inferences (1 mk)**

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

PHYSICS

232/1

PAPER 1

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

Instructions to Candidates

*This paper consists of sections: **A** and **B.***

*Answer **ALL** the questions in section **A** and **B** in the spaces provided.*

***ALL** working **MUST** be clearly shown in the spaces provided.*

Mathematical tables and electronic calculators may be used.

For Examiner's Use Only

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1 – 10	25	
B	11	09	
	12	07	
	13	09	
	14	08	
	15	10	
	16	12	
TOTAL SCORE		**80**	

SECTION A (25 Marks)

1. A student measured the diameter of a nichrome wire as 0.36mm. On the space provided, draw the micrometer screw scale reading. **(2mks)**

2. (a) The diagram below shows a wire loop with a thread tied across it. The loop is dipped into a soap solution such that the soap film covers it as shown.



Region **X** is punctured. On the space alongside the diagram sketch the resulting shape of the wire loop. Give a reason for the shape. **(2mks)**

……

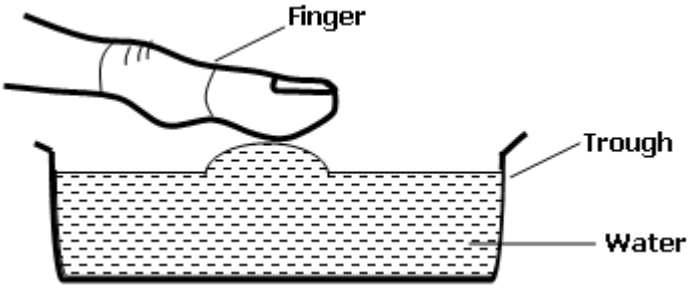
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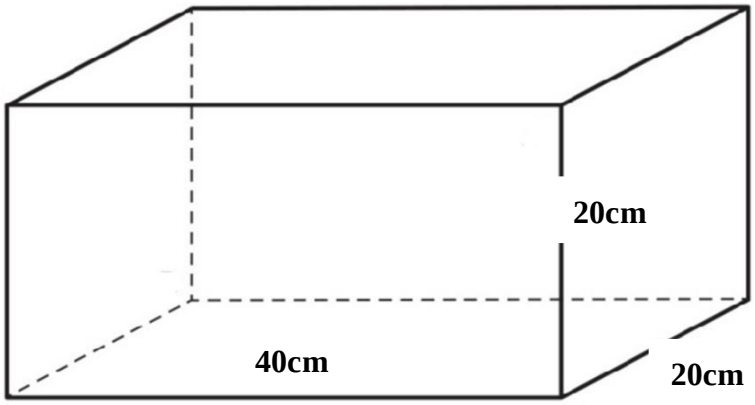
(b) Diana placed her finger on water as shown in the diagram below.



Name the force that lifts the water to the finger. **(1mk)**

……

3. The diagram below shows a cuboid with dimensions **20cm by 20cm by 40cm** of mass **5kg.**



State and explain how it should be placed on a flat surface in order to exert minimum pressure on the surface. **(2mks)**

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4. Explain the formation of steam at **100^0C** using the particulate nature of matter. **(2mks)**

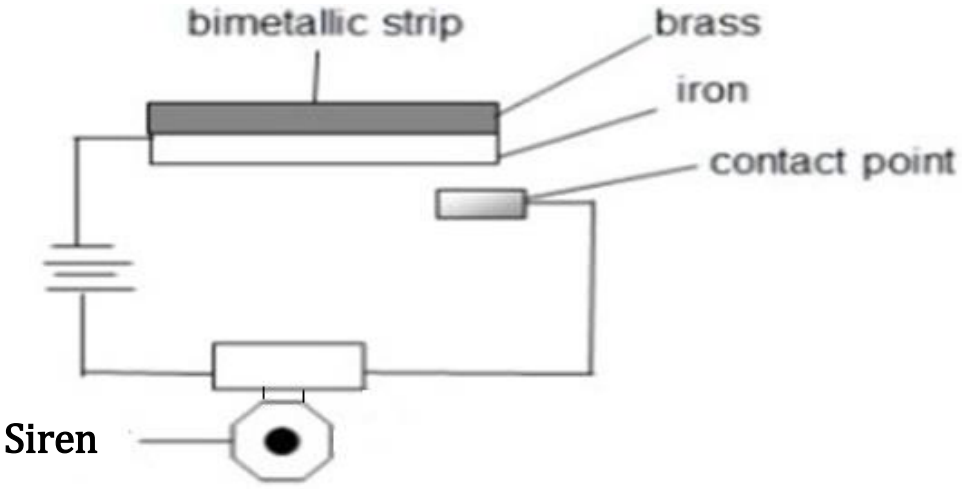
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5. The figure below shows a simple bimetallic strip used for detecting fire.



Describe how the fire alarm works. **(3mks)**

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6. Jane stirred hot tea using a metal spoon and observed that the handle of the spoon soon becomes warm. State two ways through which the heat is conducted to reach the hand. **(2mks)**

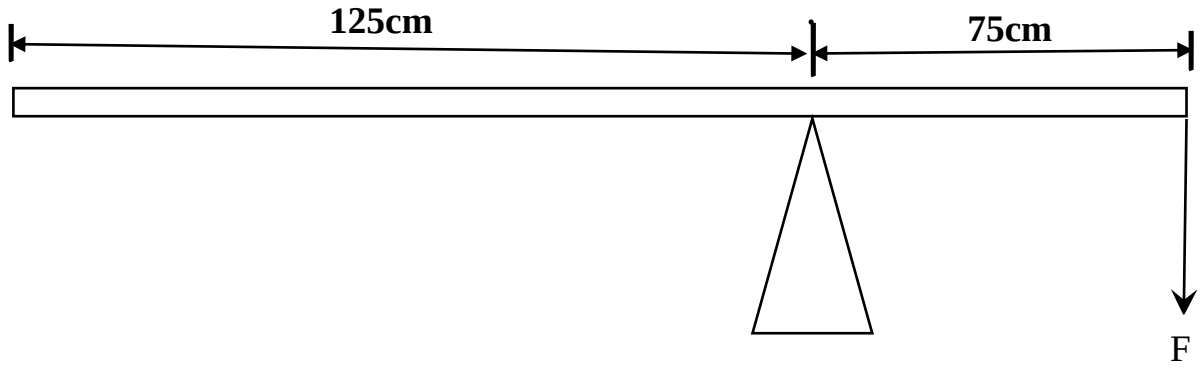
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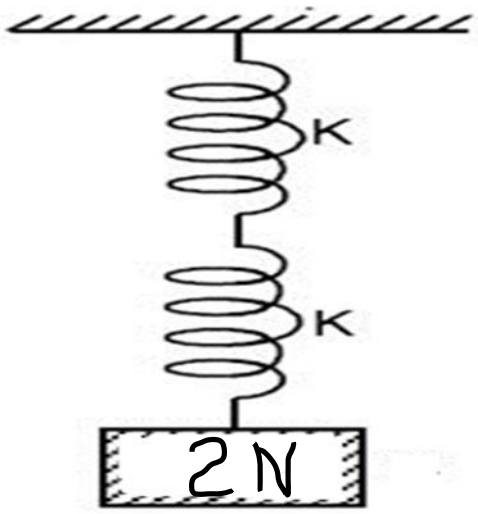
7. The diagram below shows a uniform metal bar of mass 150g balanced horizontally by a force, **F.**



Determine the value of the force, **F**. **(2mks)**

Calculate the reaction force on the pivot. **(1mk)**

8. The diagram below shows an arrangement of two identical light springs. Each spring has a length of **5cm** when unstretched. The total length of the two springs is **15cm** when supporting a load of **2N.**

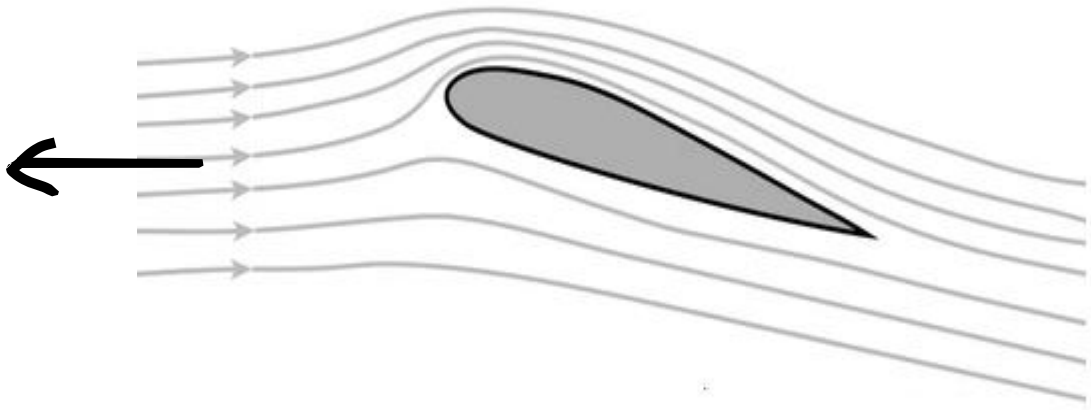


Calculate:

The extension on each spring **(1mk)**

The combined spring constant **(2mks)**

9. The diagram below shows an aerofoil moving in the direction shown in air at a high velocity.



State and explain the direction of the force acting on the aerofoil. **(2mks)**

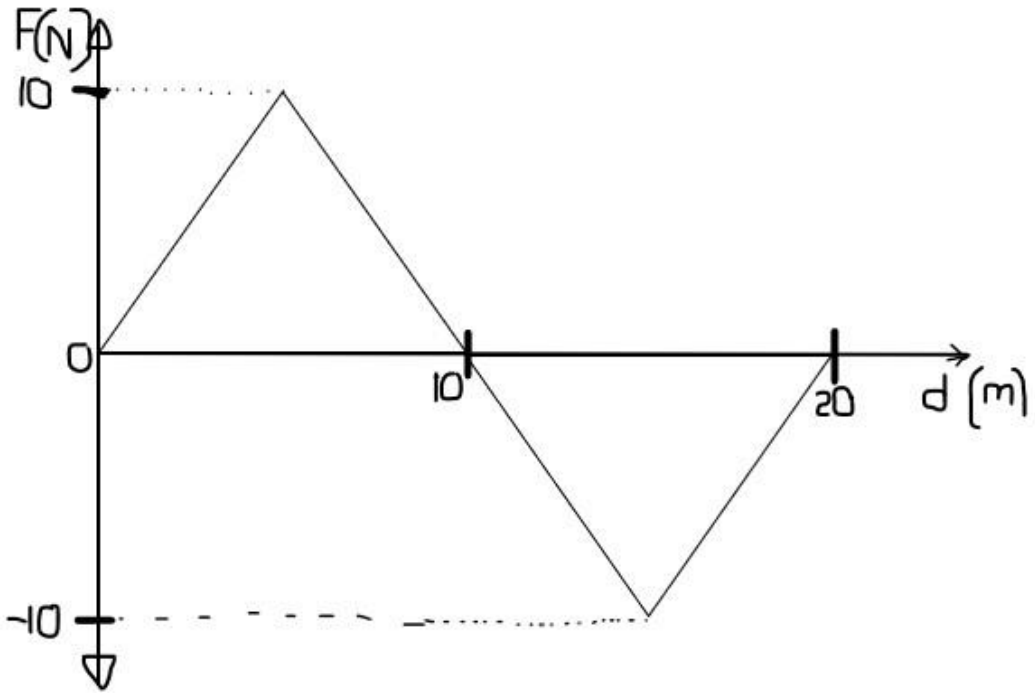
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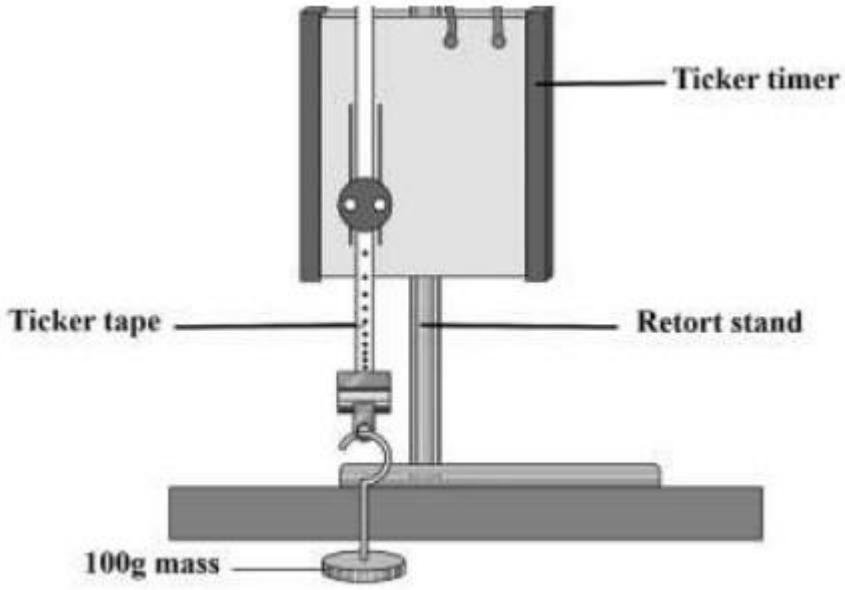
10. The diagram below shows a variation of force acting on an object over a distance of 20 metres



Find the total work done on the object. **(3mks)**

SECTION B (55 Marks)

11. (a) The set up below shows a ticker timer used to determine acceleration due to gravity at Moi Girls' High School - Eldoret.



Briefly describe how the set up can be used to determine the value of acceleration due to gravity at the school. **(3mks)**

……

……

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……

(b) A block of wood of mass **40kg** is pulled along a horizontal rough surface with a force of **150N.** Given that the coefficient of friction between the block and the horizontal rough surface is **0.2.** Calculate:

The frictional force between the block and the surface. **(3mks)**

The acceleration of the block. **(2mks)**

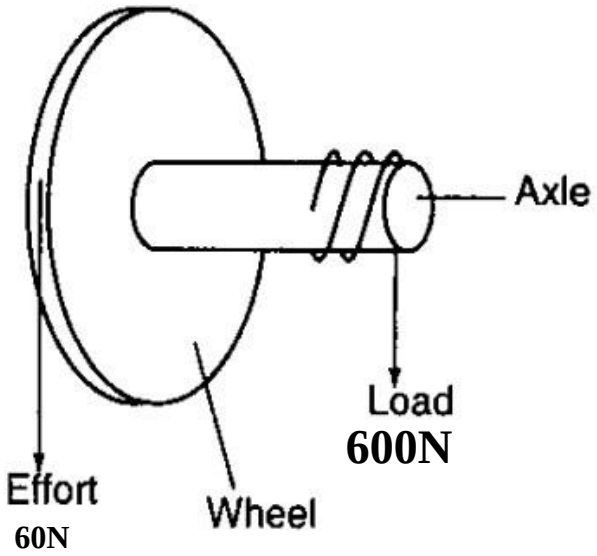
12. (a) Define work and state it's SI Unit. **(2mks)**

……

……

……

(b) The diagram below shows a wheel and axle as a machine used to lift a load of **600N** using an effort of **60N.**



If the radius of the wheel is **20cm** and that of axle is **2cm**, determine the machine's:

Mechanical advantage **(1mk)**

Velocity Ratio **(2mks)**

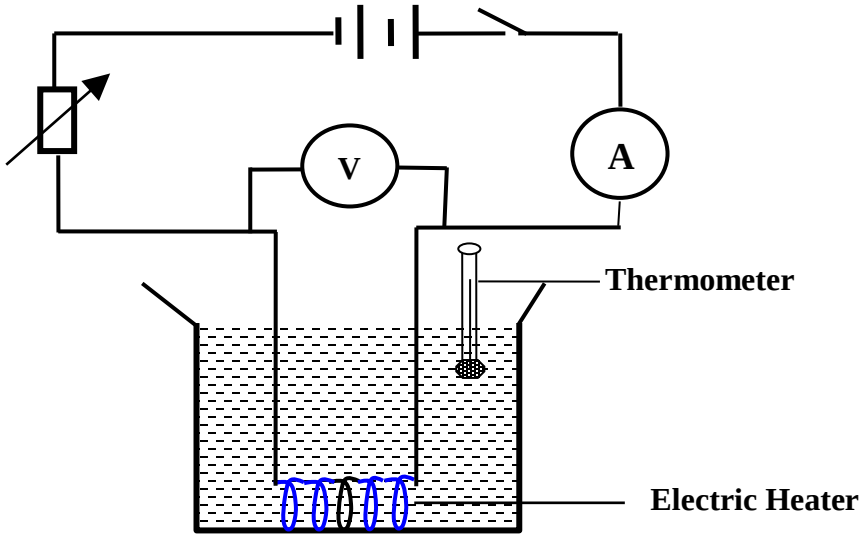
Efficiency **(2mks)**

13. (a) Define specific heat capacity **(1mk)**

……

……

(b) Figure below shows a set up in an experiment to determine specific heat capacity of water.



The data below was obtained from the experiment.

Voltage (V) across the heater =**12V**

Current (I) in the circuit **= 1.4A**

Time (t) for heating **= 600s**

Mass (m) of water **= 0.4kg**

Change in temperature ΔT **= 6ºC**

Determine:

The electrical heat energy **(2mks)**

Use the above results to determine the specific heat capacity of water. **(3mks)**

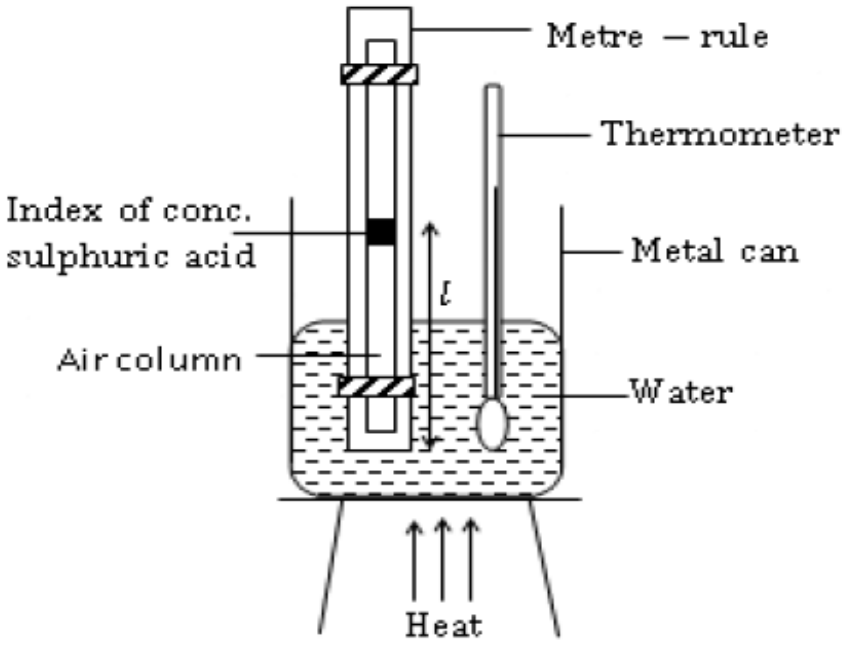
The power of the electrical heater. **(2mks)**

14. (a) If the volume of a fixed mass of a gas is tripled at constant temperature, what happens to its pressure. **(1mk)**

……

……

(b) The diagram below shows apparatus used to verify Charles' Law.



State the measurements to be taken from the apparatus **(2mks)**

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Describe how apparatus can be used to verify the law **(3mks)**

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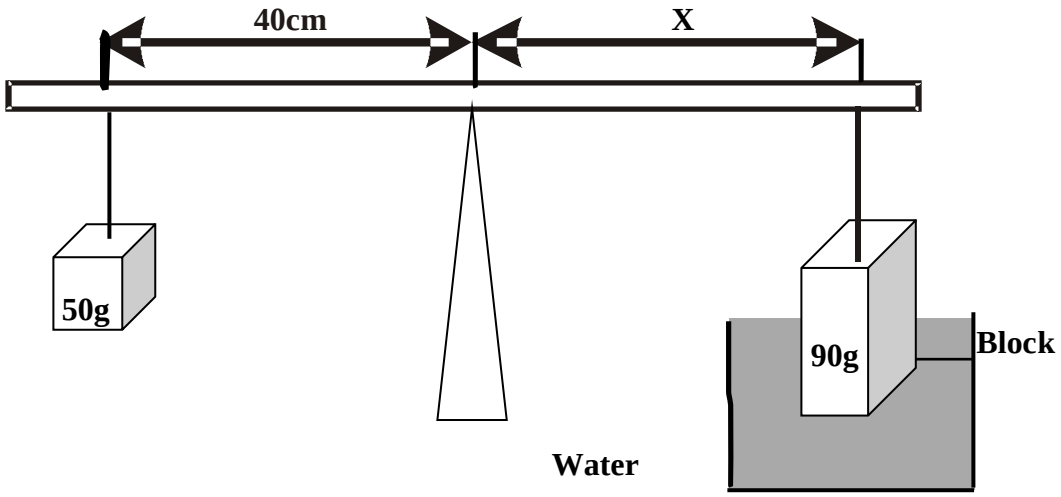
(c) A gas has a volume of **$20cm^3$** at **27^0C** and at normal atmospheric pressure. Calculate the new volume of the gas if it is heated to **54^0C** at the same pressure. **(2mks)**

15. (a) State Archimedes Principle **(1mk)**

……

……

(b) The system below is in equilibrium and balanced at the centre of gravity.



When the temperature of the water is raised, the system is observed to tilt to the right. State the reason for this observation. **(2mks)**

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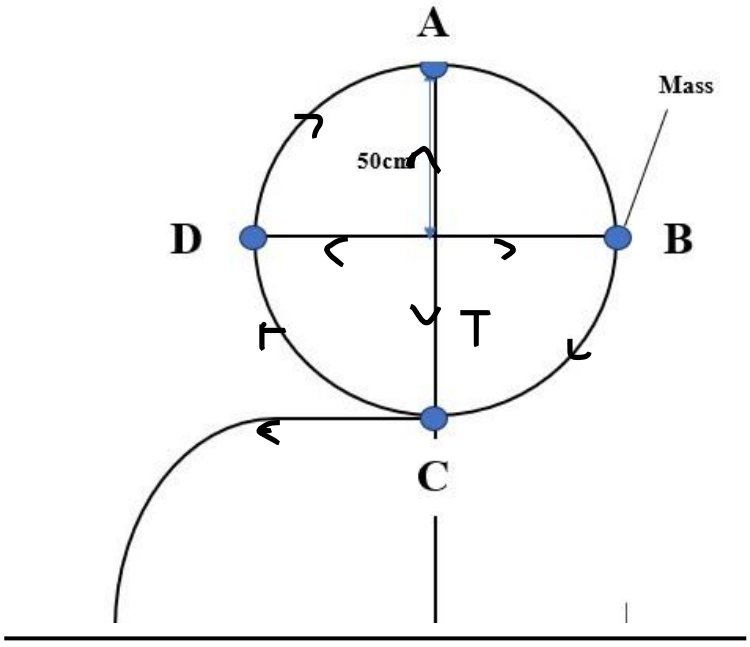
Given that the block is half **($^1/_2$)** immersed and its dimensions are **2.0cm by 2.0cm by 6.0cm.**

Calculate the volume of the water displaced by the block. **(2mks)**

Calculate Upthrust and hence the apparent weight of the block. ***(Given the density of water is 1000kg/m^3)*** **(2mks)**

Determine the value of distance X. **(3mks)**

16. A mass of **100g** is whirled in a vertical plane using a string of radius **50cm** as shown below in the clockwise at a speed of **2m/s.**



Determine:

The angular velocity. **(2mks)**

The tension, **T** on the string at point C. **(3mks)**

If the string snaps at point C, **50cm** above the ground. Determine:

The time taken for the mass to hit the ground. **(2mks)**

The horizontal distance travelled before hitting the ground. **(2mks)**

Explain how a centrifuge may be used to separate cream from milk. **(2mks)**

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SUCCESS IN THE EXAMS!!!

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

PHYSICS

232/2

PAPER 2

TIME: 2 HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

INSTRUCTIONS TO CANDIDATES

- ***a)*** *Write your name and index number in the spaces provided.*
- ***b)*** *Mathematical tables and non-programmable calculators may be used.*

  $h = 6.63 \times 10^{-34}$Js, $c = 3.0 \times 10^{8}$m/s ; $e = 1.6 \times 10^{-19}$C.
- ***c)*** *Attempt all the questions in the spaces provided.*
- ***d)*** *ALL working MUST be clearly shown.*

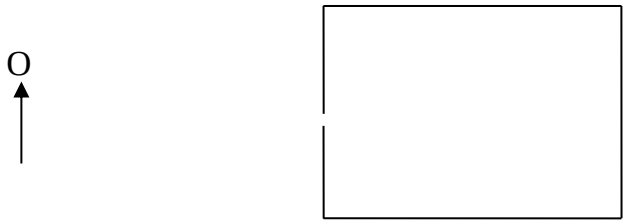
For Examiners Use

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1 – 10	25	
B	12	08	
	13	10	
	14	08	
	15	06	
	16	09	
	17	08	
	18	06	
	TOTAL	**80**	

SECTION A (25 MARKS)

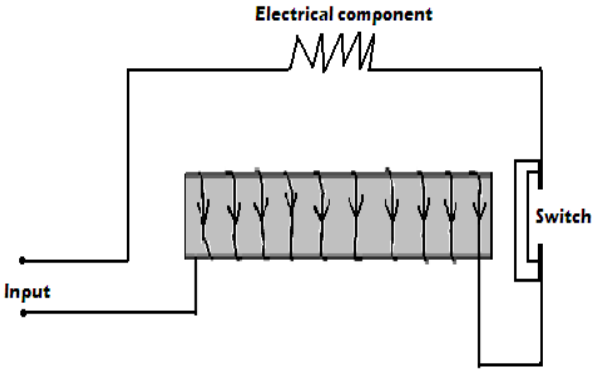
Answer all the questions in this section in the spaces provided.

1.The diagram below shows a pin hole camera and an object **O.**.



Using two rays on the same diagram show how the image is formed on the screen**. (2mks)**

2.The diagram below shows a circuit breaker rated 5A.



Briefly explain how it works when the current exceeds 5A. **(2 mks)**

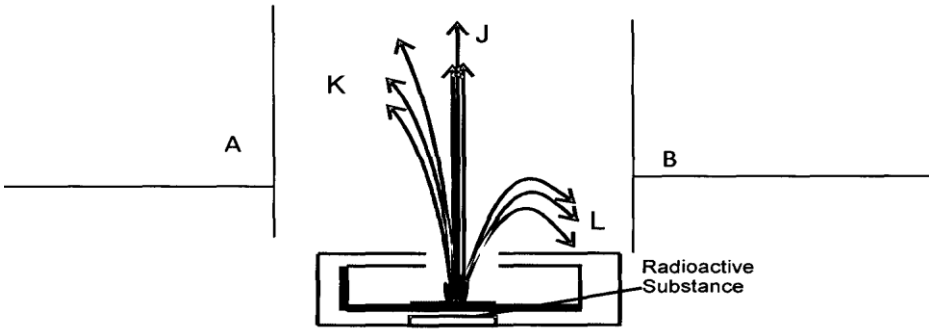
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3.The diagram in the figure below shows paths taken by three radiations K, J and L from a radioactive source through an electric field.



I)State the charge on plate A giving a reason **(2mks)**

……

……

……

4.State two reasons why in determining the depth of an ocean using an echo sounder ,ultra sound is preferred to ordinary sound**.** **(2mks)**

……

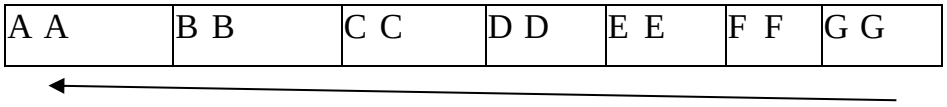
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5.You are provided with 2 diodes, A resistor, a centre tapped step-down transformer ,a capacitor and enough connecting wires.In the space provided below, sketch the circuit diagram for a full wave rectifier . **(3mks)**

6.The figure below shows regions of the electromagnetic spectrum arranged in order of decreasing wavelenght. D is the region of visible light



Decreasing wave length

Indicate the region for ; **(3 mks)**

i)X - rays ……

ii)Name one detector of radiation A;…….

iii)Which part of the spectrum is applied in greenhouse…….

7. $^{226}_{88}Ra$ decays into $^{219}_{86}Rn$ by emission of an alpha particle and neutrons. Write a nuclear equation for the decay**.** **(2mks)**

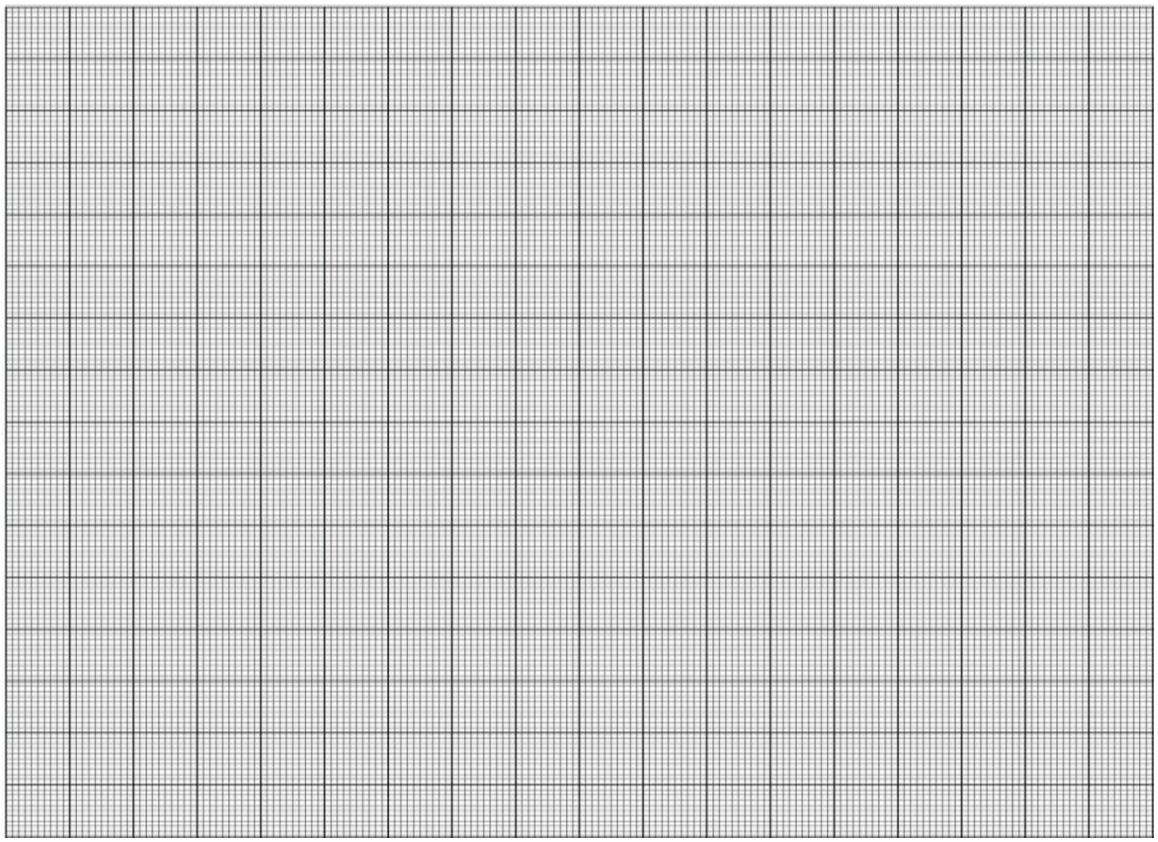
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8.An object is placed on the axis of a concave mirror of focal length 200mm.If the object is 100mm tall and is placed 300mm from the mirror by scale drawing and using rays determine its image position hence state its nature**.** **(3mks)**



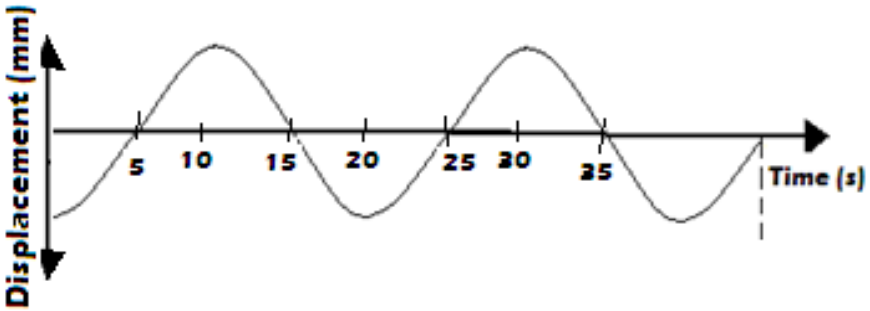
9.Define the direction of the magnetic field. **(1mk)**

……

……

……

10. The sketch below is a displacement –time graph of a wave travelling at 300m/s



Determine the wavelength of the above wave. **(3mks)**

……

……

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……

11. State two differences between human eye and a simple camera. **(2mks)**

……

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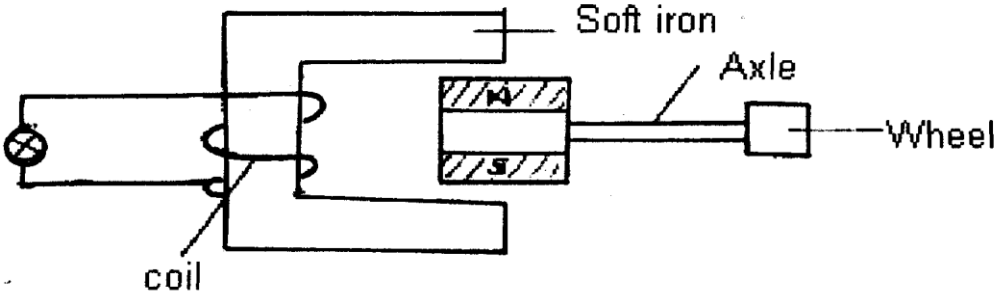
SECTION B(55 MARKS)

12.a) State the Faradays law of electromagnetic induction . **(1mk)**

……

……

b) The figure shows a cross- section of a bicycle dynamo. The wheel is connected by an axle to a permanent cylindrical magnet and is rotated by the bicycle tyre



i) Explain why the bulb lights **(2mks)**

……

……

……

……

ii) State one way in which the bulb can be made brighter. **(1mk)**

……

……

c)An hair dryer rated 1000W,240V runs for 3hours everyday for seven days.Calculate;

i)the number of kilowatt hour used during that period **(2mks)**

……

……

……

……

ii)the cost of electrical energy during the period if cost per unit is shs 5.50 per unit. **(2mks)**

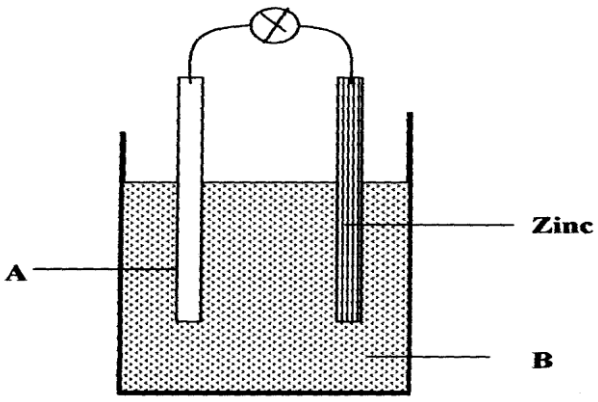
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13.a)Below is a figure of a simple cell.



Name;

i)electrode A**.** **(1mk)**

……

ii)solution B **.(1mk)**

……

iii) name the defect that takes place in electrode A and how it can be minimized. **(2mks)**

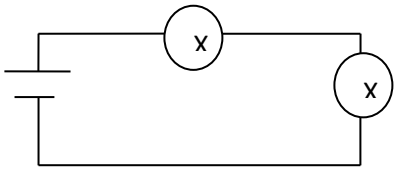
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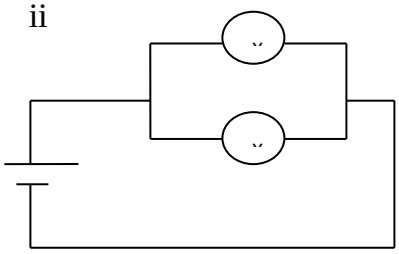
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b)Figure below shows circuit diagrams (i) and (ii) containing identical bulbs.



ii



State the observation on the brightness of the bulbs in a) and b) giving a reason. **(2mks)**

……

……

……

c)A battery of emf X volts drives a current of 0.42A through a 11Ω resistor.When the same resistor is replaced with a 5Ω resistor the current flowing becomes 0.86A.Determine;

i) the internal resistance of the battery**.** **(3mks)**

……

……

……

……

ii)the value of X**.** **(1mk)**

……

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14.a)(i) The minimum energy required to cause a photoelectron to be emitted from a clean zinc surface is 4.0eV.Light with a frequency of 1.2 x 10^{15}Hz is irradiated onto the zinc surface.Show by calculation whether the photons of this light will cause photoelectric effect to occur. **(3 mks)**

……

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ii)If the light source above is now replaced with a light source which produces light of frequency 1.5 x 10^{15}Hz,find the energy of the emitted photoelectrons.. **(3mks)**

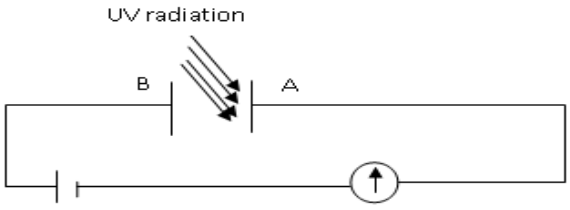
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b) The diagram below was used by Valkim to investigate photoelectricity.



i) Explain how milliammeter reading is affected when the intensity of the UV light above is decreased**.** **(1mk)**

……

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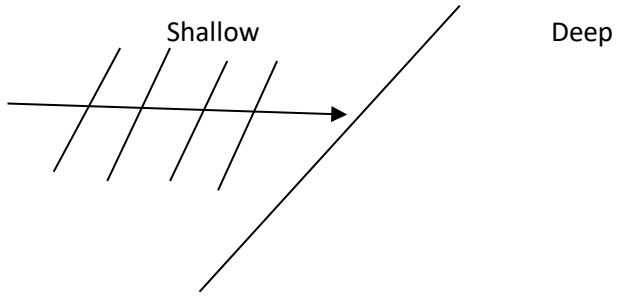
ii) Explain why there is no reading on the milliammeter when red light is used instead of UV light.

(1mk)

……

……

15.a) The figure below shows water waves fronts approaching a boundary between a shallow and deep region.



On the same diagram complete the figure to show the wave fronts after crossing the boundary.

(2 mks)

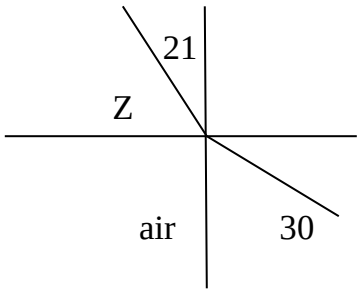
b)Explain why light wave diffraction by a width slit of approximately 1mm is unnoticeable.

(1mk)

……

……

c)The diagram below shows a ray of light travelling from a medium Z into air.



Determine the refractive index of medium Z.(n of air = 1.000**).** **(3mks)**

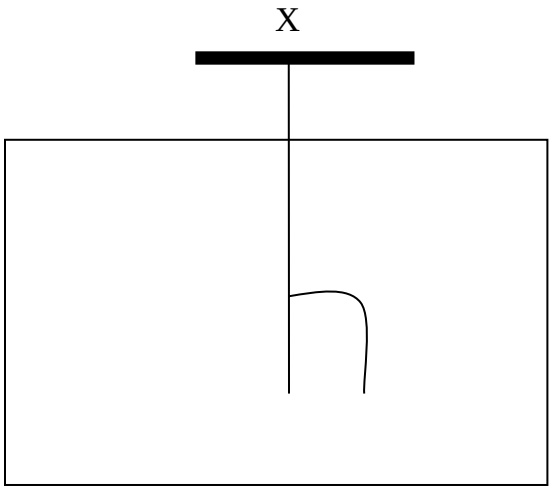
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16.a)The diagram below shows an uncharged gold leaf electroscope.



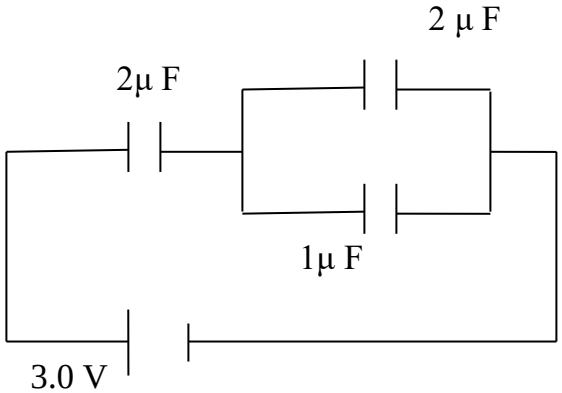
i)Name part X…….. **(1mk)**

II)Why is part X usually circular in shape. **(1mk)**

……

……

b) The diagram below shows a network of capacitors in a circuit



Determine;

i)Effective capacitance in the circuit. **(2mks)**

……

……

……

……

……

ii)The charge across the 1μF capacitor. **(2mks)**

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iii)The energy in the 1μF capacitor**.** **(3mks)**

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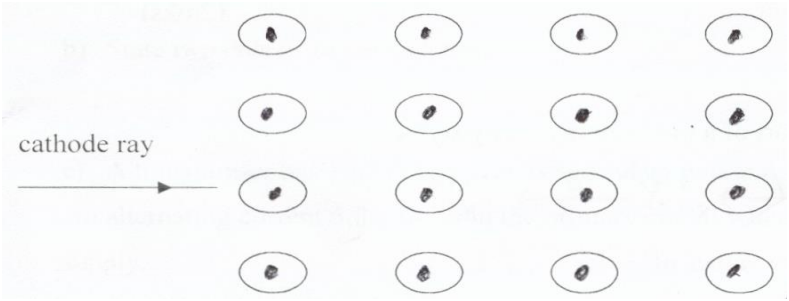
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17.a) Define thermionic emission**.** **(1mk)**

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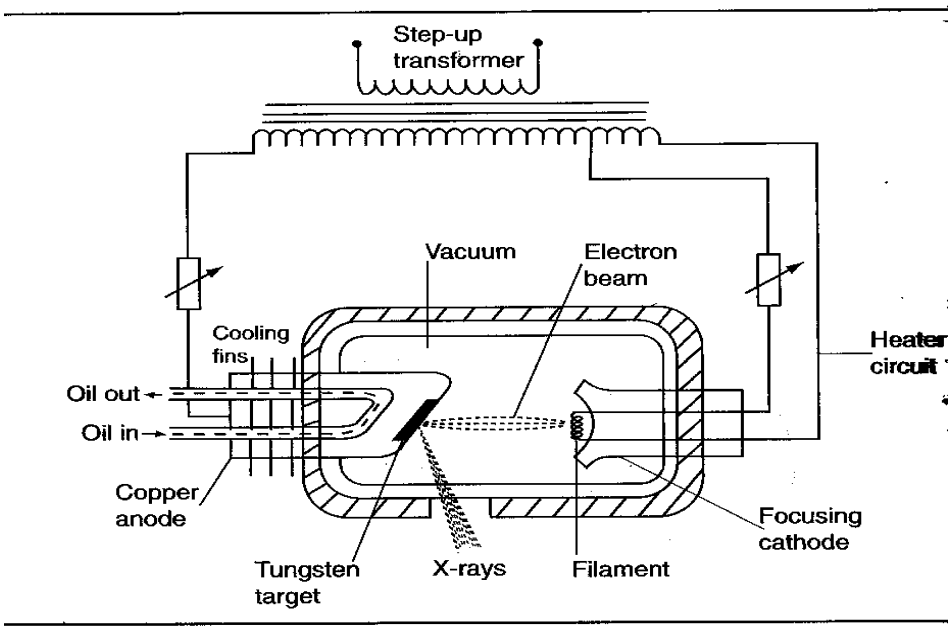
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b)The diagram below shows cathode rays directed into a magnetic field (the magnetic field is out of the paper).



Complete the diagram to show the path of the cathode ray. **(1mk)**

c)The diagram below is an X-ray tube .



i)Give a reason why the anode target rotates during operation. **(1mk)**

……

……

ii)What metal is suitable as an anode give a reason for it. **(2mks)**

……

……

iii) The X-ray tube above produces electrons which are accelerated by a potential difference of 120Kv.Assuming all energy is used to produce X-rays,determine the minimum wavelength of X-rays produced. **(3mks)**

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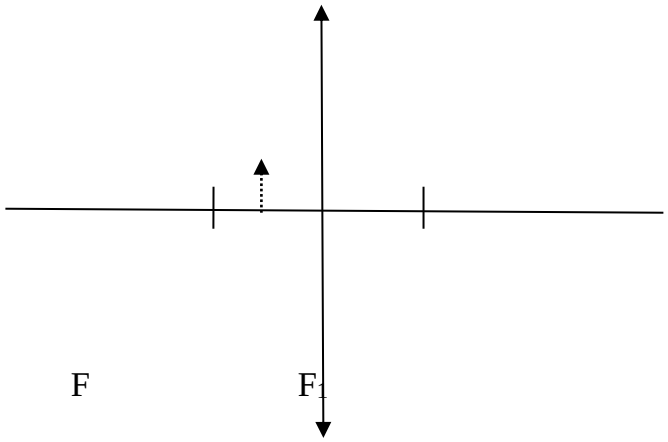
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18.a)Define the term principal focus of a converging lens. **(1mk)**

……

……

b)Figure below shows an image **I** formed by a concave lens.**F and F**$_1$ are the principal foci.



Complete the diagram using rays to show object position. **(2mks)**

c)An object 1cm tall stands on the principal axis of a convex lens 10cm from it. A virtual image of the object 2.5cm tall is formed by the lens. Determine the focal length of this lens. **(3mks)**

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KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

PHYSICS

232/3

PAPER 3

TIME: 2½ HOURS

SCHOOL…… SIGN……

CONFIDENTIAL

Each candidate should have the following

Question 1

- A metre rule
- A white screen with cross wires labelled O
- A white screen labelled S
- A convex (converging lens) of focal length 10cm
- A lens holder
- A candle
- Some dry sand (in a small beaker)
- Boiling tube pyrex glass (length 14.5cm and diameter 2.45cm)
- Measuring cylinder 500ml
- Clean water (to be put in a measuring cylinder to almost filled and be labelled L)
- Half metre rule
- Vernier calipers
- Tissue paper
- Weighing machine (one per a room)

Question 2

- 2 dry cells
- A cell holder for 2 cells connected in series
- A nichrome wire SWG 30 mounted on a metre rule (the length of the wire be at least 100cm)
- A voltmeter (0 – 5)V
- An ammeter (0 – 1)A
- 8 connecting wires, 3 with crocodile clips and 1 with a jockey
- A switch

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

PHYSICS

232/3

PAPER 3

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

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 questions in the spaces provided.*

(d) *You are supposed to spend the first 15 minutes of the 2½ hours allowed for this paper reading the whole paper carefully before commencing your work.*

(e) *Marks will be given for clear records of observations actually made, their suitability, accuracy and the use made of them.*

(f) *Candidates are advised to record their observations as soon as they are made.*

(g) *All working must be clearly shown where necessary.*

(h) *Mathematical tables and silent electronic calculators may be used.*

FOR EXAMINER'S USE ONLY

QUESTIONS	MAXIMUM SCORE	CANDIDATE'S SCORE
1	20	
2	20	
TOTAL	40	

For Marking Schemes Contact 0746 222 000 / 0742 999 000

1. PART A

You are provided with the following:

- A white screen with cross wires labeled O
- A lens and a lens holder
- A white screen labeled S
- A meter rule
- A candle

Proceed as follows:

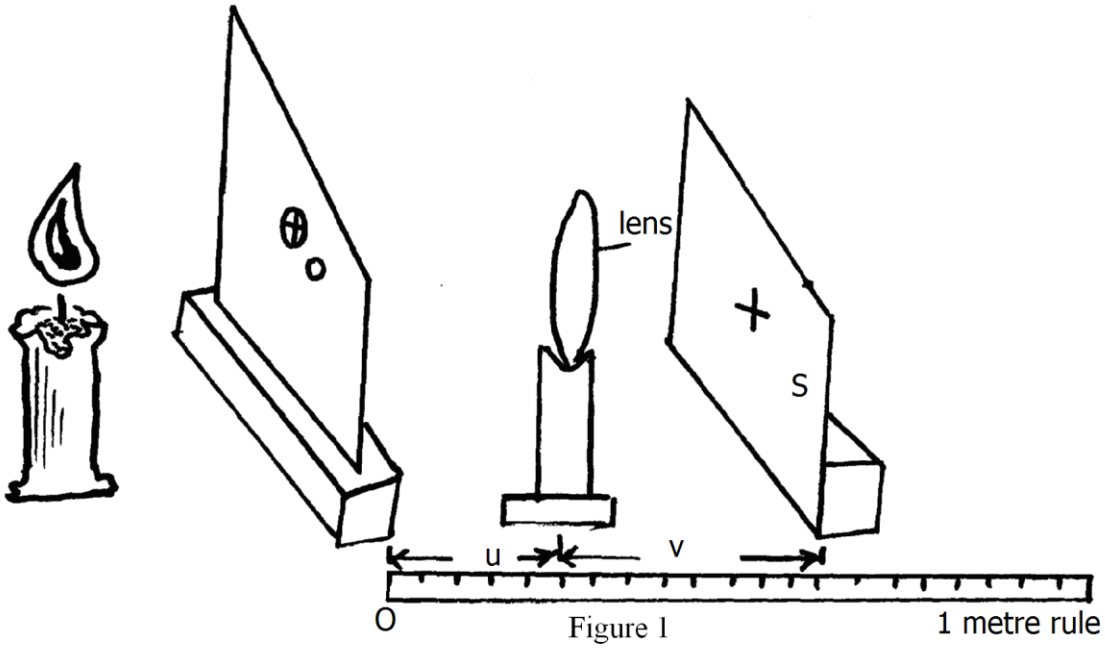


Figure 1

(a)Set up the apparatus as shown in fig 1

(b)Position the lens so that the object distance u = 20 cm

(c)Adjust the screen S so that a sharp image of the cross wires is formed on the screen S. Measure the image distance v. Record the value of u and the corresponding value of v in table 1

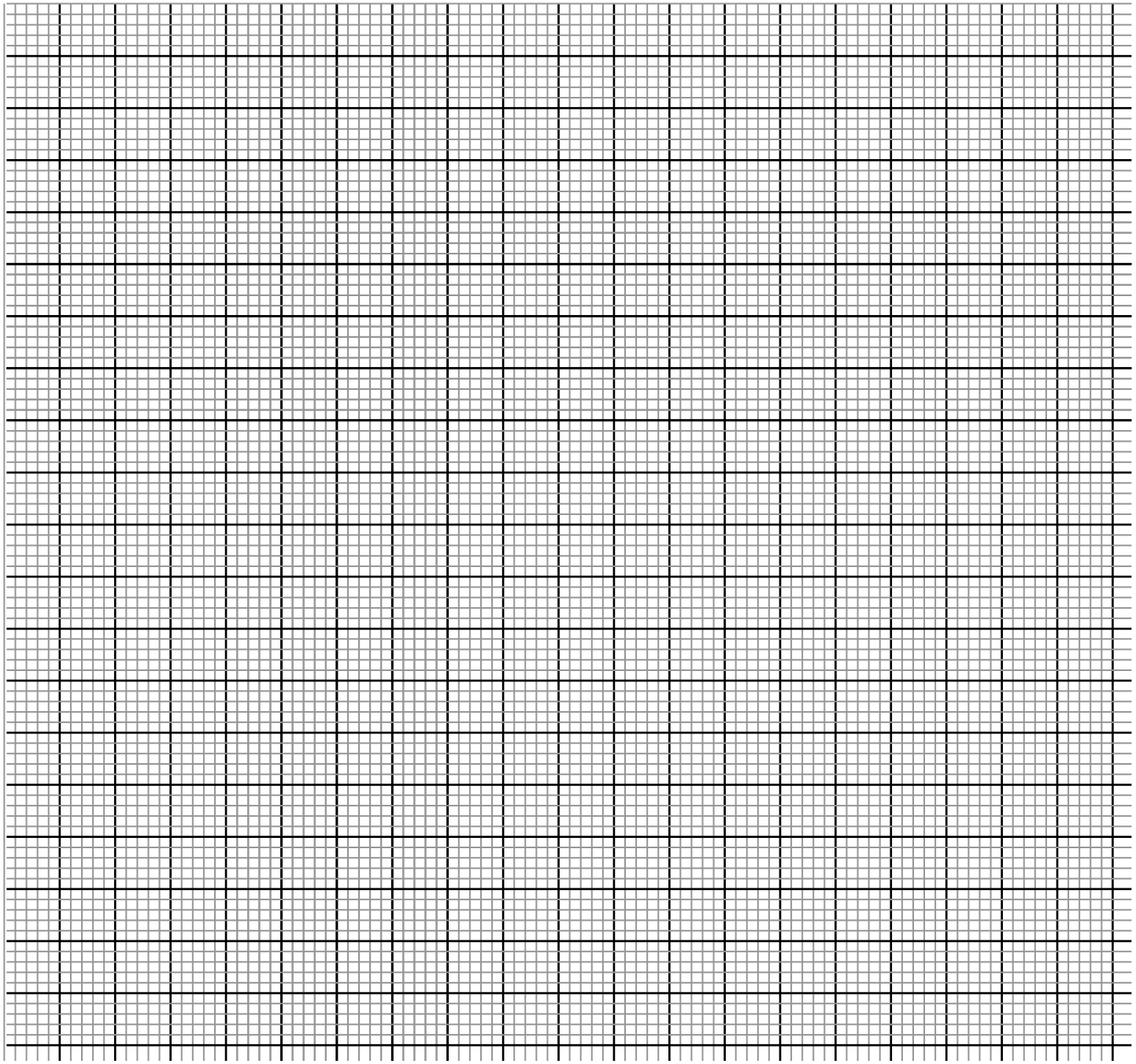
(d)Repeat (b) and (c) above for value of u = 20cm, 25cm, 30cm, 35cm, 40cm and 45cm.

(e)Complete table 1

u (cm)	20	25	30	35	40	45
v (cm)						
u + v (cm)						
uv (cm^2)						

Table 1 **(6mks)**

(f)On the grid provided, plot a graph of uv (y axis) against u + v **(5mks)**



(g)Determine the slope of the graph **(3mks)**

PART B

You are provided with the following:

- A boiling tube
- Some dry sand
- A liquid in a measuring cylinder labelled L
- Half – metre rule
- A vernier calipers (to be shared)
- A weighing machine (one per room)
- Tissue paper

Proceed as follows:

(h) (i) Measure the length of the boiling tube

h = ……cm (½ mk)

(ii)Put a little amount of sand in the boiling tube and place it in the measuring cylinder which is almost filled with a liquid labelled L. Add sand, little by little until the tube floats upright as shown in figure 2.

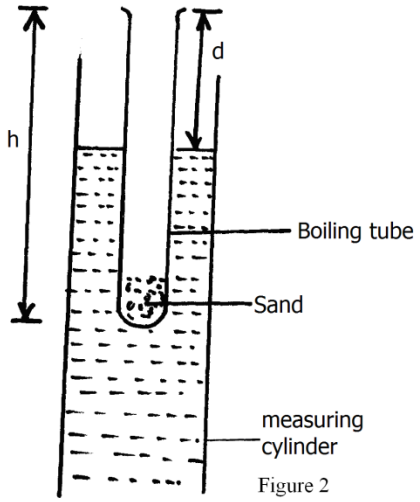


Figure 2

Measure the length, d, of the boiling tube which is above the liquid

d = ……cm (½ mk)

(iii) Determine the length, t, of the boiling tube which is immersed in the liquid

t = ……cm (½ mk)

(iv) Remove the boiling tube from the measuring cylinder, wipe it dry (on the outside) and weigh its mass, m, including the sand inside.

m = …….g (½ mk)

(v) Measure the external diameter, D, of the boiling tube

d = …….cm (½ mk)

(vi) Determine external radius, R,

R = ……....cm (½ mk)

(vii)Using the formula

$m = \rho \times (\pi R^2)$, determine ρ for the liquid

ρ = …….. (3mks)

2. You are provided with the following:

- 2 dry cells
- A cell holder
- A nichrome wire mounted on a metre rule
- An ammeter, A
- A voltmeter, V
- A jockey J
- A switch S
- 8 connecting wires

Proceed as follows:

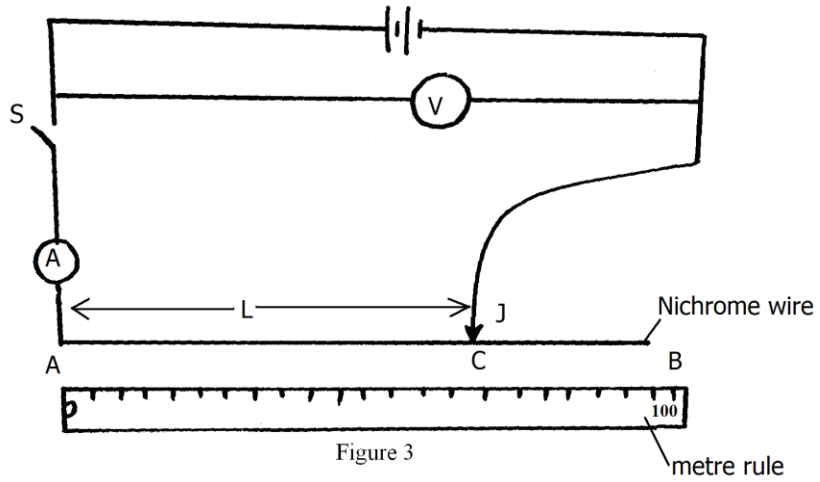


Figure 3

(a) Set the apparatus as shown in fig 3

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

E = …… (1mks)

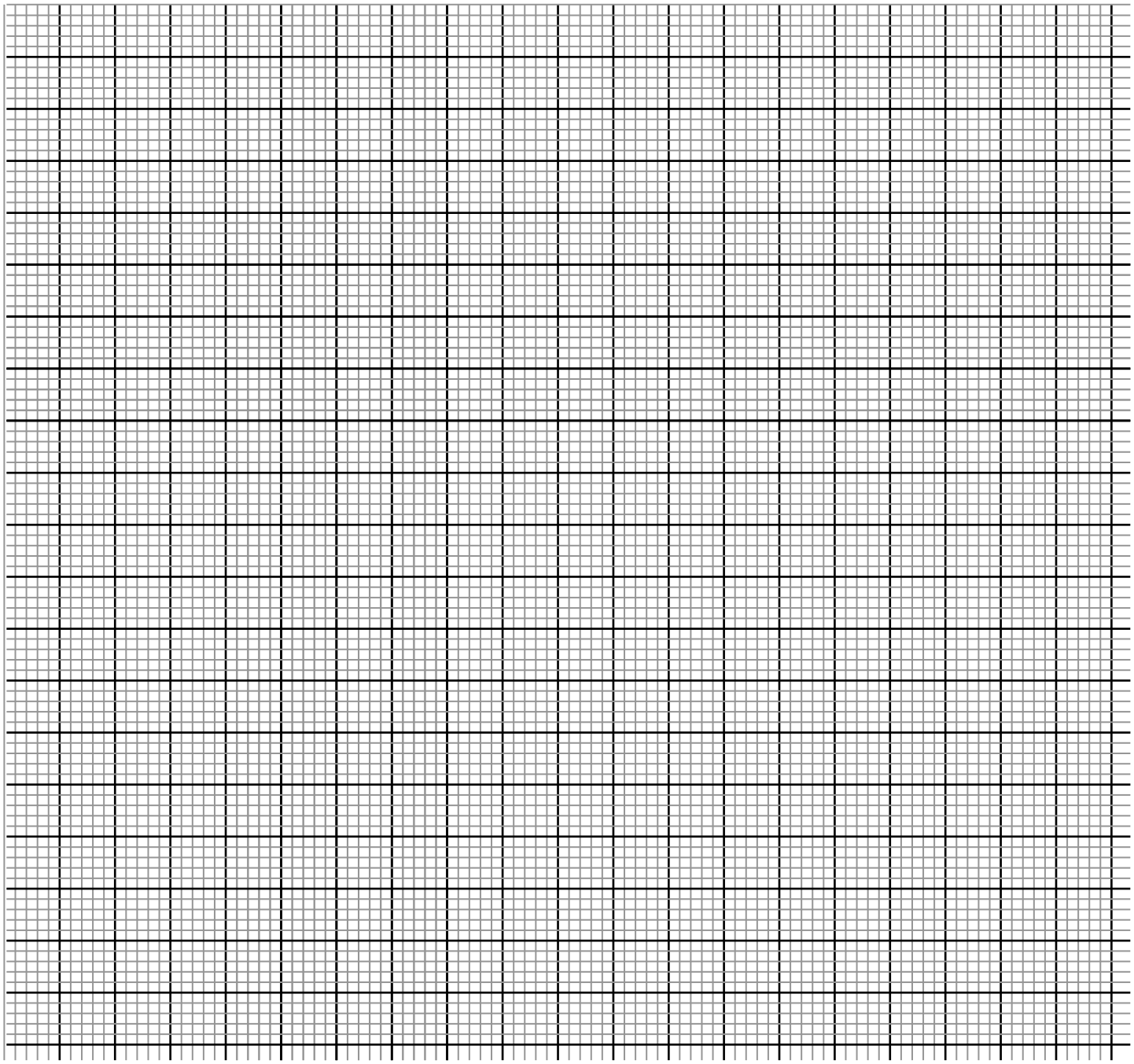
(c) Place the jockey, J , on the nichrome wire at 100cm mark. Close the switch, read and record the values of I (ammeter reading) and the corresponding values of V (voltmeter reading) in table 2

(d) Repeat (c) above for length, L = 70cm, 60cm, 50cm, 40cm and 20cm. Complete table 2

L (cm)	**100**	**70**	**60**	**50**	**40**	**20**
I (A)						
V (V)						
E – V (V)						

Table 2 **(7mks)**

(e)Plot a graph of (E – V) (y axis) against I **(5mks)**



(f)Determine the slope of the graph **(3mks)**

(g)Given that E = V + Ir, from the graph determine

(i) The internal resistance, r, of the battery **(2mk)**

(ii) V when I is 0.3A **(2mk)**

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

MATHEMATICS

121/1

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

INSTRUCTIONS TO CANDIDATES:-

*a. Write your **name**, **Admission number and CLASS** in the spaces provided above.*
b. The paper consists of TWO sections. SECTION I and SECTION II.
c. Answer ALL the questions in section I and ONLY FIVE in Section II.
d. Show all the steps in your calculations, giving your answer at each stage in the spaces provided below each question.
e. Marks may be given for correct working even if the answer is wrong.
f. Non-programmable silent electronic calculators and KNEC mathematical tables may be used except where stated otherwise.
g. Candidates should answer the questions in English.

For Examiner's Use Only:

SECTION I

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

SECTION II

17	18	19	20	21	22	23	24	**TOTAL**

GRAND TOTAL

SECTION 1 (50 MARKS)

Answer all the questions in the spaces provided.

1. Simplify the expression **(3mks)**

$$\frac{12x^2 - 27}{4 - (2x + 1)}$$

2. Solve the equation $\frac{x-1}{x} - \frac{2x-1}{3x} = \frac{1}{4}$. **(3mks)**

3. A flag post 10m long is mounted on top of a pillar. The angle of depression from the top of the flag post to a point A on the horizontal ground is 60^0 while the angle of depression to the same point A from the bottom of the flag post is 40^0. Calculate the height of the pillar. **(3mks)**

4. The exchange rates of currencies in a certain bank in Kenya on a certain day were as follows;

Currency	Buying (Ksh)	Selling (Ksh)
1 US dollar	104.37	105.42
1 Euro	121.51	122.62

John exchanged 27,520 US dollars into Ksh in this bank.

a) How much Ksh did he receive? **(2mks)**

b) After spending Ksh. 973,289 he converted the remainder to Euros. How many Euros did he finally have? (Give your answer to the nearest Euro). **(2mks)**

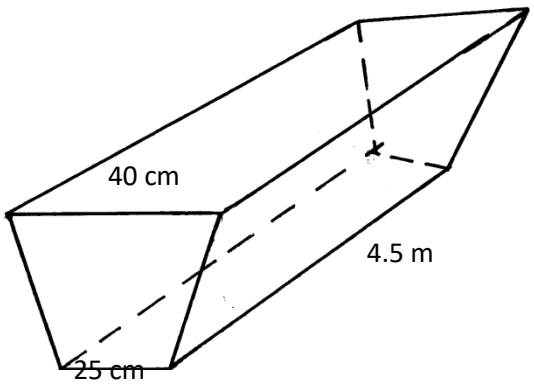
5. An irregular polygon has two of its interior angles as 135^0 and 105^0. The remaining interior angles are all equal to 150^0. Calculate the sum of its interior angles. **(3mks)**

6. A fruit juice dealer sell the juice in packet of 300ml, 500ml and 750ml. find the size of the smallest container that can fill each of the packets and leave a remainder of 200ml. **(3mks)**

7. In a fundraising committee of 45 people, the ratio of men to women is 7:2. Find the number of women required to join the existing committee so that the ratio of men to women is changed to 5: 4. **(3mks)**

8. Jemima's team entered a contest where teams of students compete by answering questions that earn either 3 points of 5 points. Jemima's team scored 44 points after answering 12 questions correctly. How many five-point questions did the team answer correctly? **(3mks)**

9. The figure below shows a trough which is 40 cm wide at the top and 25 cm wide at the bottom. The trough is 20cm deep and 4.5 m long. Calculate the capacity of the trough in litres. **(3mks)**



10. Using compass and ruler only construct a triangle ABC such that AB= 6cm, BC = 5cm and angle ABC = 67.5^{o} measure the length of AC. **(3mks)**

11. The two sides of a triangle are given 6 cm and 5 cm. the angle between them is 130^{o}. Calculate the area of the triangle (giving your answer to 2 decimal places) **(3mks)**

12. The length of a rectangular mat is 1.5 m longer than its width; Find the length of the mat if its area is $6.5m^2$(give your answer to 4 significant figures) **(3mks)**

13. State the amplitude, period and the phase angle of the curve $Y= 2 \sin (1.5X - 30^0)$ **(3mks)**

14. (a) Using line AB given below, construct the locus of point P such that angle APB $=90^o$. **(2mks)**

A _____ B

(b) On the same diagram locate two possible positions of point C such that point C is on the locus of P and is equidistant from A and B. **(2mks)**

15. Given that **OA**= 2i + 3j and **OB**=3i- 2j. Find the magnitude of AB to one decimal place. **(3mks)**

16. Determine the quartile deviation for the following distribution. **(3mks)**

3,4,9,5,4,7,6,2,1,6,7,8,9

SECTION II (50 MARKS)

Answer ONLY FIVE questions in this section.

17. A point A is (-1, 8) and B is (8, 2).

a)

i.Find $\overrightarrow{AB}$. **(2mks)**

ii. Find $\left|\overrightarrow{AB}\right|$ **(2mks)**

b) Given that a point P divides $\overrightarrow{AB}$ in the ratio 1:2, find the position vector of point P. **(2mks)**

c) Another point R has co-ordinates (11, 0). Show that points A, B and R are collinear. **(4mks)**

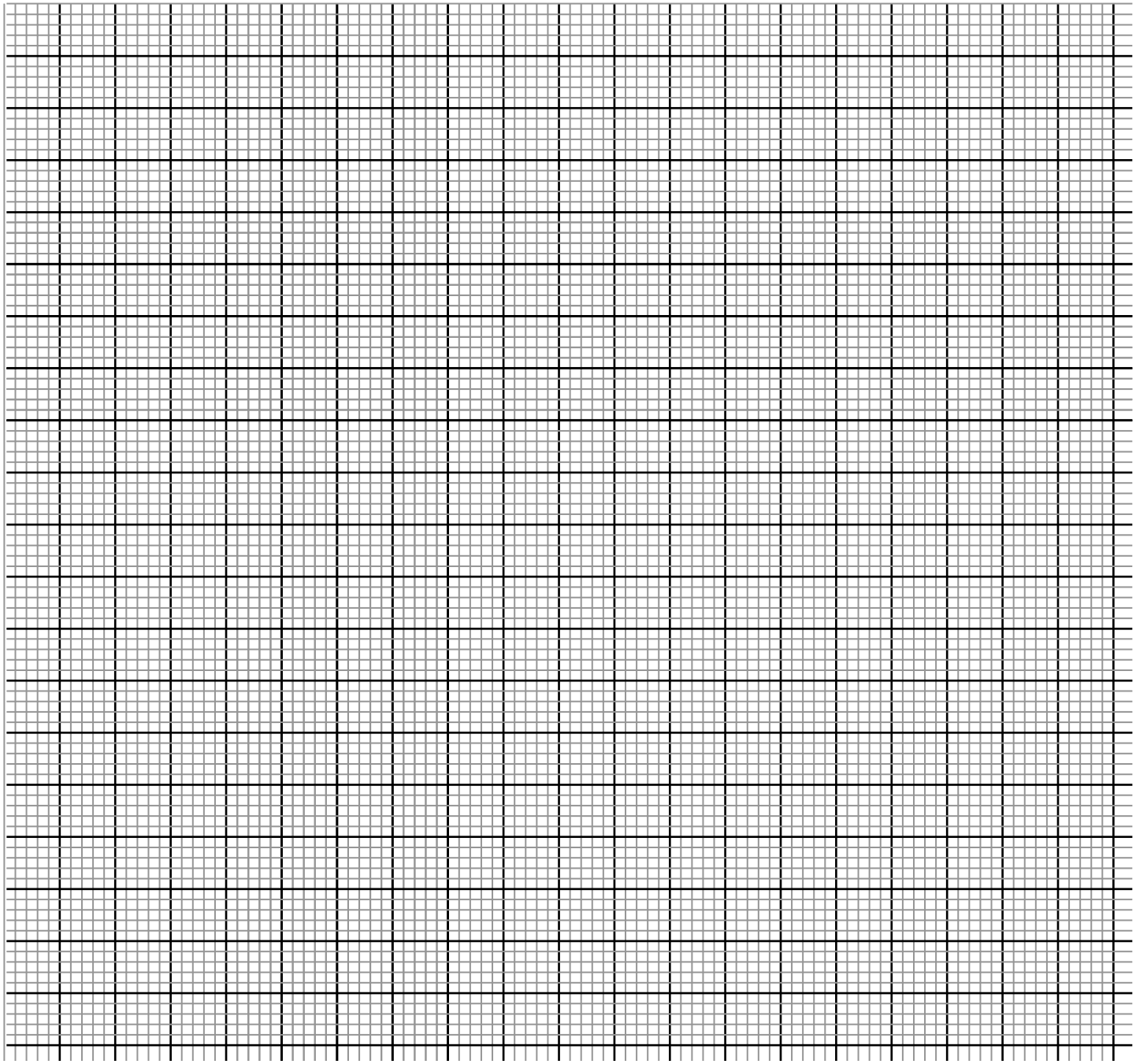
18. The table below shows marks obtained by 40 students in an examination.

Marks	5 - 14	15 - 29	30 - 34	35 - 44	45 – 49
Frequency	2	12	7	15	X

a) Find the value of x. **(1mk)**

b) Calculate the mean mark. **(3mks)**

c) On the grid provided, draw a histogram to represent the data above. **(4mks)**



d) Draw a straight line on the graph above to determine the median mark. **(2mks)**

19. A wooden stool is in the form of a frustum of a cone with slant edge 40cm, the top diameter is 30cm and the bottom diameter is 50cm.

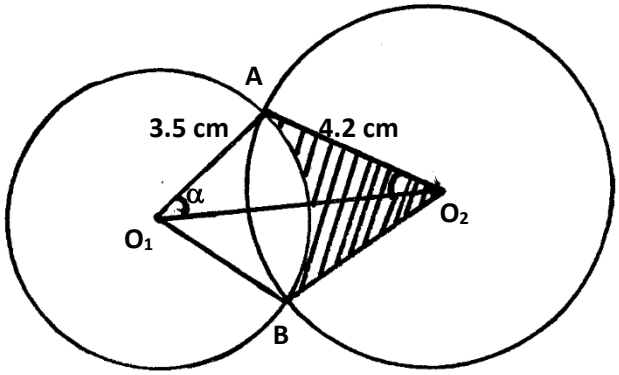
a) Calculate the perpendicular height of the stool to2 d.p. **(3mks)**

b) Calculate the total surface area of the stool in terms of π. **(2mks)**

c) Calculate the volume of wood used to make the stool in terms of π to 2 d.p. **(3mks)**

d) Given that the density of the wood used to make the stool is $0.8g/cm^3$, calculate the mass of the stool to 2 d.p. using π as $^{22}/_{7}$. **(2mks)**

20. Two circles of radii 3.5 and 4.2 cm with centres O_1 and O_2 respectively intersect at points A and B as shown in the figure below. The distance between the two centres is 6 cm.



Calculate

(a) The size of $\angle AO_1B$ (to the nearest degree) **(3mks)**

(b) The size of $\angle$ A O_2 B (to the nearest degree) **(3mks)**

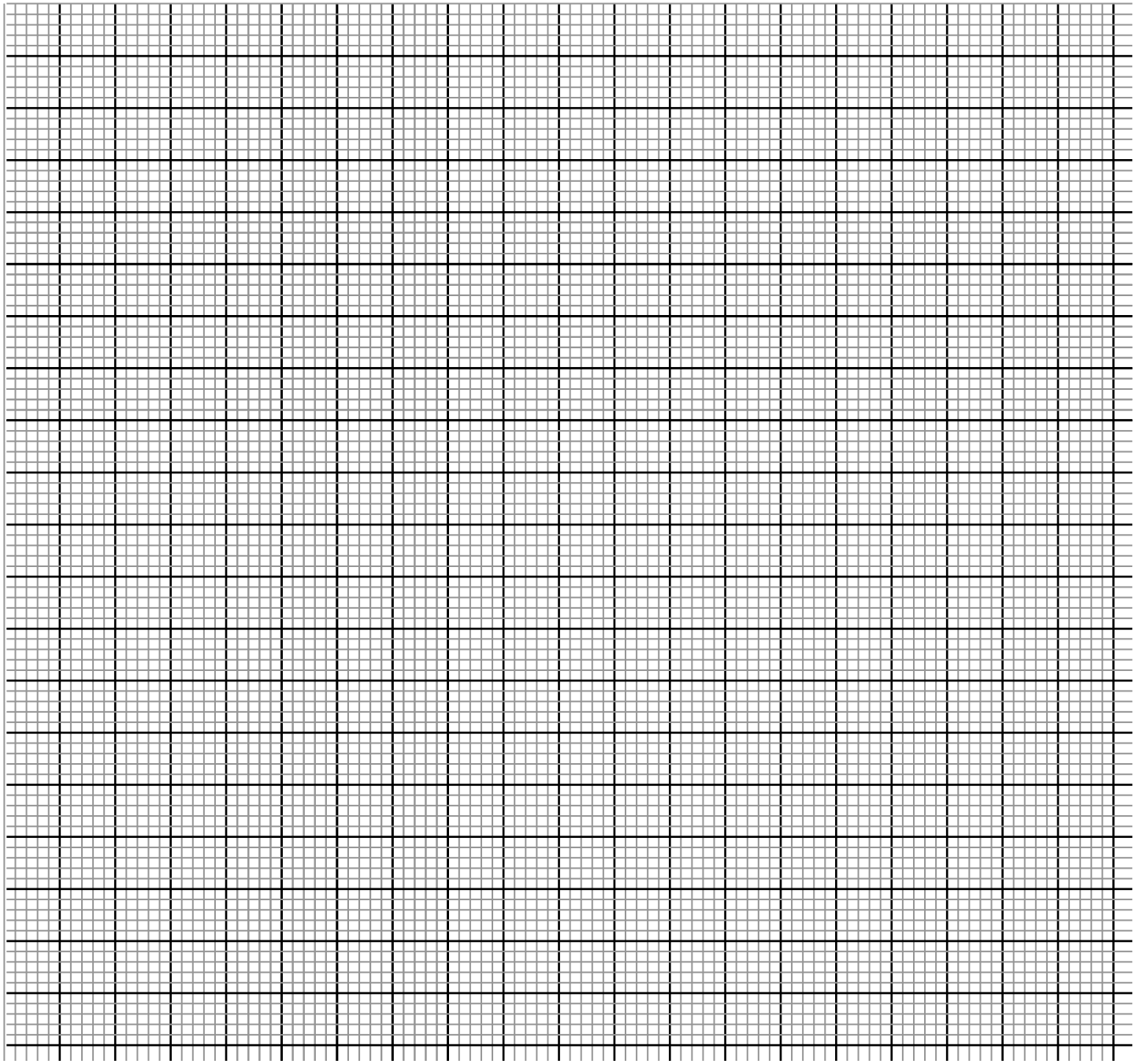
(c) The area of quadrilateral O_1AO_2B, correct to 2 decimal places. **(2mks)**

(d) The shaded area correct to 2 significant figures. (take $\pi\ ^{22}/_{7}$) **(2mks)**

21 (a) Complete the table below for the function $y = 2x^2 + 4X - 3$ **(2mks)**

X	-4	-3	-2	-1	0	1	2
$2x^2$	32		8	2	0	2	
4x-3			-11		-3		
Y			-3			3	13

(b) Draw the graph of the function $y = 2x^2 + 4x - 3$ on the grid provided. **(3mks)**



(c) Use your graph to estimate the roots of the equation $2x^2 + 4x - 3 = 0$ **(1mk)**

(d) Use your graph to obtain the roots of the equation $2x^2 + x - 5 = 0$ to 1 decimal place. **(3mks)**

(e) Draw the line of symmetry to pass through the turning point of this curve. **(1mk)**

22. A line **L** passes through (-2, 3) and (-1, 6) and is perpendicular to a line **P** at (-1, 6).

a) Find the equation of **L** **(2mks)**

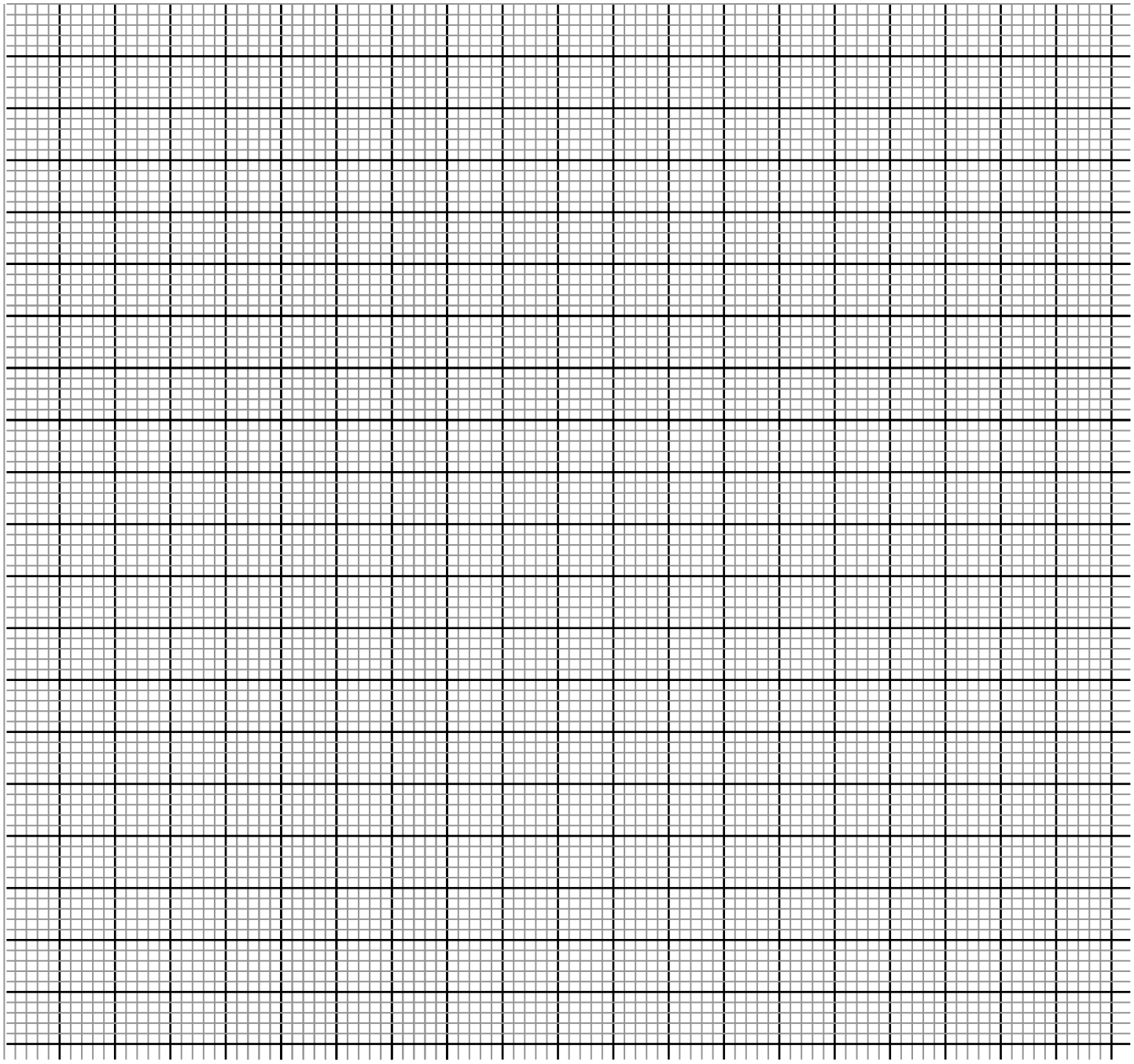
b) Find the equation of **P** in the form ax + by = c,where a, b and c are constants. **(2mks)**

c) Given that another line **Q** is parallel to **L** and passes through point (1, 2) find the x and y intercepts of **Q** **(3mks)**

d) Find the point of the intersection of lines **P** and **Q** **(3mks)**

23. The vertices of quadrilateral OPQR are O (0, 0), P (2, 0), Q (4, 2) and R (0, 3). The vertices of its image under a rotation are O’ (1, -1), P'(1, -3) Q'(3, -5) an R'(4, -1).

(i) On the grid provided, draw OPQR and its image O'P'Q'R' **(2mks)**



(ii) By construction, determine the centre and angle of rotation. **(2mks)**

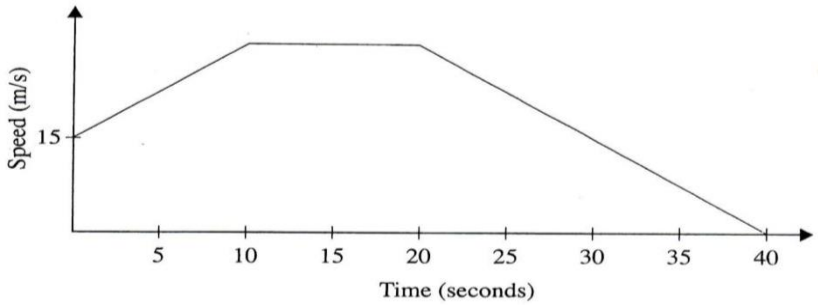
(a) On the same grid as (a) (i) above, draw O"P"Q"R", the image of O'P'Q'R' under a reflection in the line $y = x$ ***(2mks)***

(b) From the quadrilaterals drawn, state the pairs that are:

(i) Directly congruent; **(2mks)**

(ii) Oppositely congruent **(2mks)**

24. The figure below represents a speed time graph for a cheetah which covered 825m in 40 seconds.



(a) State the speed of the cheetah when recording of its motion started **(1mk)**

(b) Calculate the maximum speed attained by the cheetah **(3mks)**

(c) Calculate the acceleration of the cheetah in:

(i) The first 10 seconds **(2mks)**

(ii) The last 20 seconds **(1mk)**

(d) Calculate the average speed of the cheetah in first 20 **seconds** **(3mks)**

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

MATHEMATICS

121/2

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

INSTRUCTIONS TO CANDIDATES

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

For Examiner's use only

Section I

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

Section II

17	18	19	20	21	22	23	24	Total

Grand Total

SECTION I (50 Marks)

ANSWER ALL QUESTIONS.

1. Given that $(2x+a)(x+1) = 2x^2 + bx - 3$ determine the values of a and b. **(2 mks)**

2. A bag contains 5 white balls, 3 black balls and 2 green balls. A ball is picked at random from the bag and not replaced. In three draws find the probability of obtaining white, Black and Green in that order. **(2mks)**

3. Christine deposited Kshs. 50,000 in a financial institution in which interest is compounded quarterly. If at the end of the second year she received a total amount of Kshs. 79,692.40, calculate the rate of interest per annum. **(3mks)**

4. Given that $\frac{2\sqrt{3}}{1+\sqrt{3}} - \frac{\sqrt{3}}{1-\sqrt{3}} = a + b\sqrt{c}$ find the values of a, b and c. **(4mks)**

5. Three quantities P,Q and R are such that P varies jointly with Q and the square of R. find the percentage decrease in P if Q is increased by 50% and R decreased by 20%. **(3mks)**

6. Solve for Θ **(3mks)**

$8\cos^2 \Theta - 2 \cos \Theta = 3$

For $0^o \leq 0 \leq 180$

7. Find the percentage error in the perimeter of a regular pentagon whose side is 15.0cm. **(3mks)**

8. a) Show that the circle with equation $(x - 3)^2 + (y - 4)^2 = 25$ passes through the origin. **(1mk)**

b)Find the coordinates of another point (not the origin) where the circle cuts x-axis. **(3mks)**

9. A survey carried out in a rural town on the number of young people who went for HIV test was shown in the table below:

% infected	36-39	40-43	44-47	48-51	52-55	56-59
No. of people	6	5	3	3	2	1

Calculate the quartile deviation of the data. **(4mks)**

10. Given that $\frac{y\ b-bx^2}{cx^2-a}$ make x the subject. **(3mks)**

11. Shopping centres X, Y and Z are such that Y is 12km south of X and Z is 15km from X,Z is on a bearing of 330^{o} from Y. calculate the bearing of Z from X. **(3mks)**

12. a) Expand $(1 + \frac{1}{2}x)^7$ up to the term in x^3. **(2mks)**

b) Hence find the value of $(0.96)^7$ correct to 3 decimal places. **(2mks)**

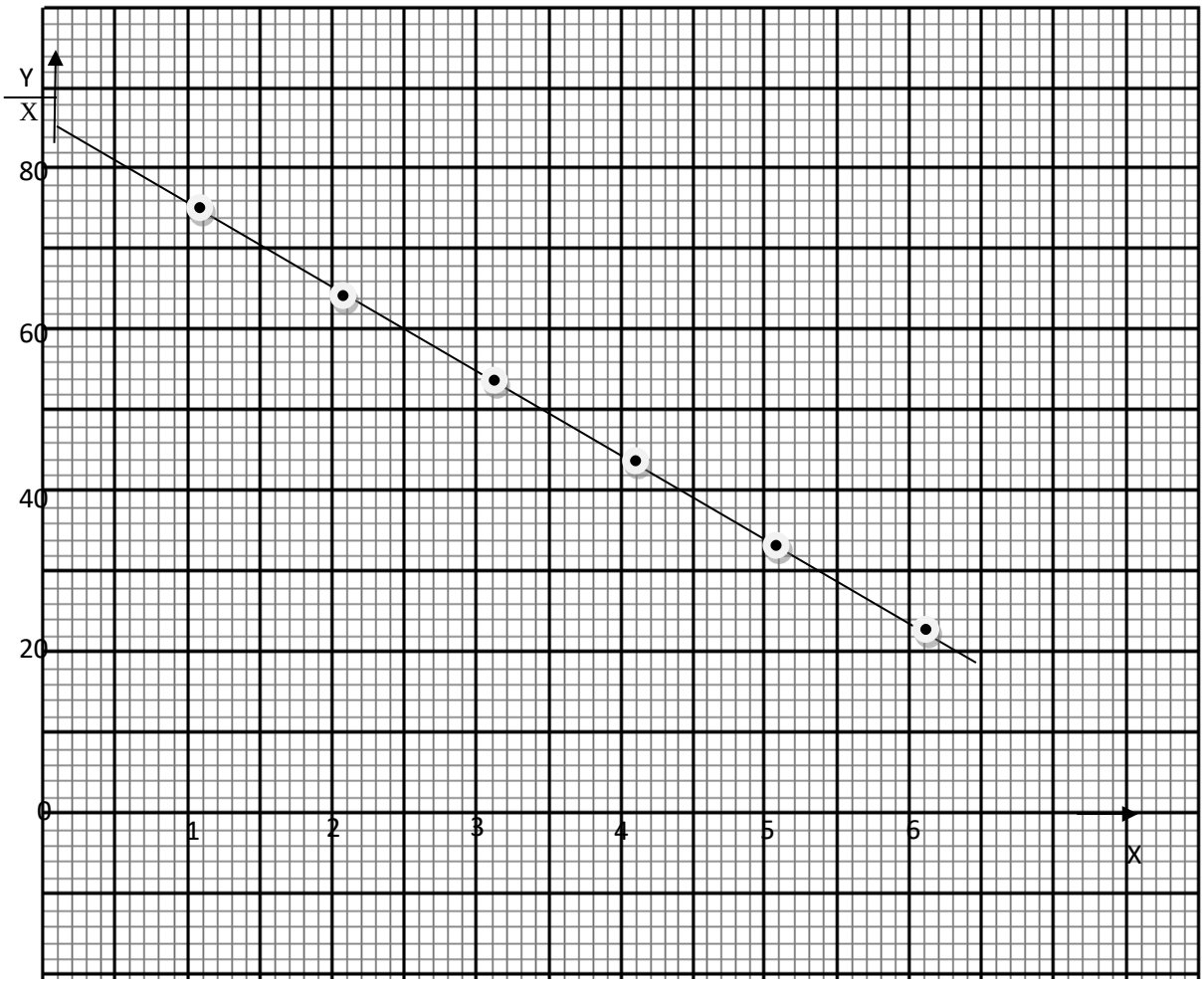
13. Solve for x given that $\log(5x-10) - \log \left(\frac{x}{15}\right) = \log 40 - \log \left(\frac{x}{20}\right)$ where x is not equal to zero. **(3mks)**

14. There are two grades of tea, grade A and Grade B. Grade A costs sh 80 per Kg while Grade B costs sh 60 per kg. in what ratio must the two be mixed in order to produce a blend costing sh 75 per kg? **(3mks)**

15. Use logarithm tables to evaluate. **(3mks)**

$$\frac{13.4 \times 9}{12 \times \log 4.82}$$

16. The graph below shows the linear relation between two variable X and Y connected by the expression $Y = pX^2 + qx$.



Using the graph, estimate, to the nearest whole number, the value of:

i.P **(2mks)**

ii.q **(1mk)**

SECTION B

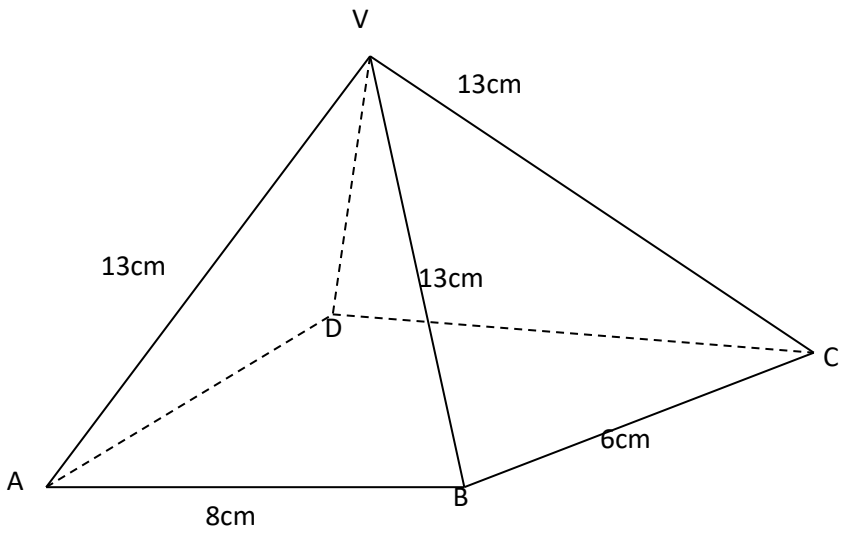
ANSWER ANY FIVE QUESTIONS IN THIS SECTION IN THE SPACES PROVIDED.

17. Two towns A(60°N, 25°W) and B(60°N, 155°E) are both on the same parallel of latitude and also on the same great circle. A pilot can fly from A to B along the parallel of latitude or along the great circle over the North pole.

a) Giving your answers to the nearest kilometer, determine which route is shorter and by how long (Take earth's radius = 6370km and $\pi = {}^{22}/_{7}$) **(6mks)**

b) The average speed of the aircraft is 600km/hr. calculate to the nearest minute the time taken by the pilot using either route) **(4mks)**

18. ABCDV is a rectangular based pyramid with AB = 8cm, BC=6cm and VA =VB=VC=VD=13cm.



a) Draw the net of the solid. **(2mks)**

b) Calculate the height of the pyramid. **(2mks)**

c) A line is drawn from V through the mid points of BC and AD to V. Calculate the length of this line. **(3mks)**

d) Determine the angle the plane VBC makes with plane VAD. **(3mks)**

19. A particle moves in a straight line and passes a point Q when t=0 sec but velocity V= 5m/s, it accelerates at the rate of a m/s^2 given by the formula a = 6t+ 4 when t is time taken.

a) Express the velocity of the particle at t seconds in terms of t. **(2mks)**

b) What is the velocity at t= 3 sec? **(2mks)**

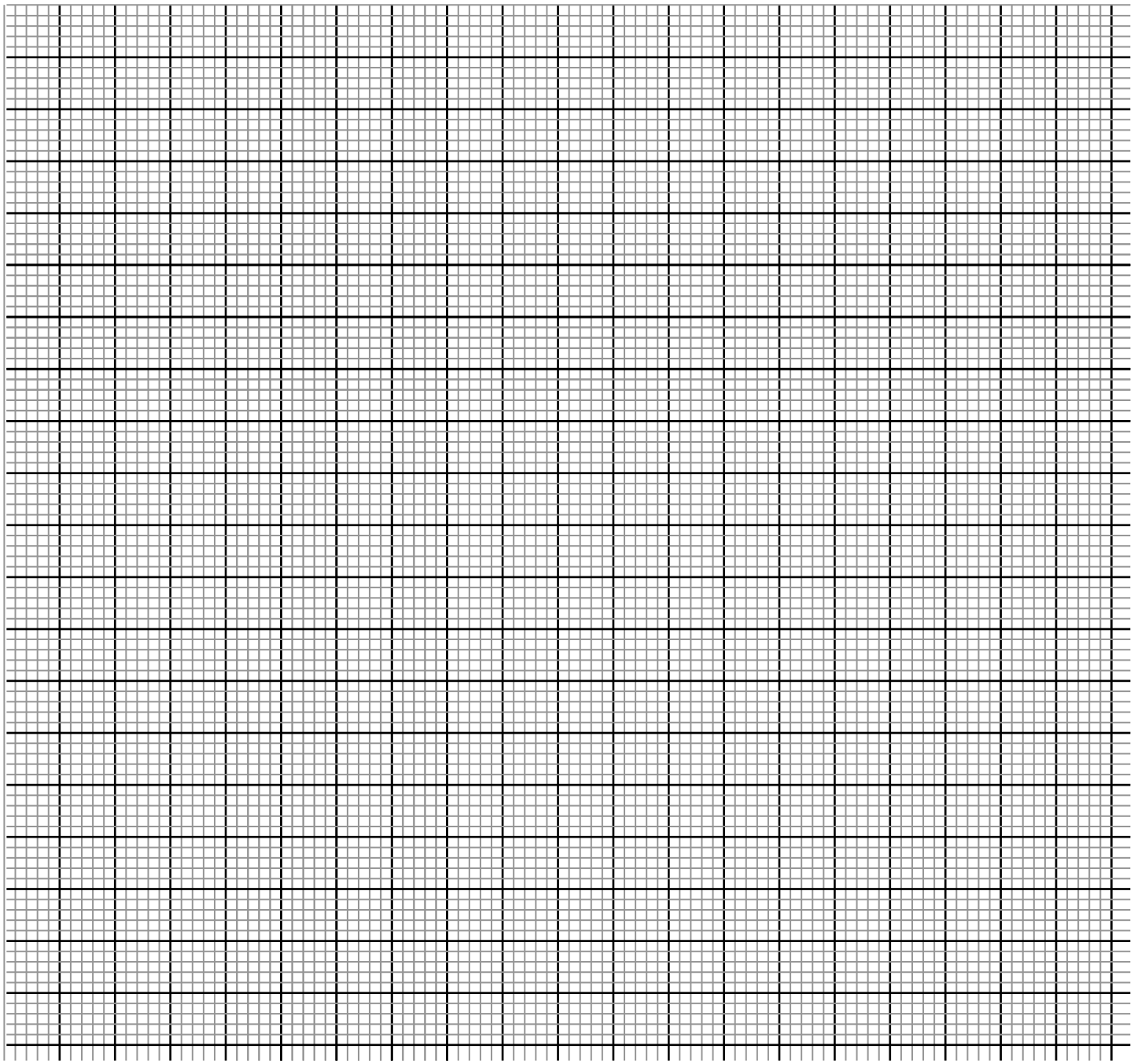
c) Calculate the distance covered between t =1 and t=4. **(4mks)**

d) Find the acceleration when t = 2 seconds. **(2mks)**

20. a) Complete the table below for the functions y = cosx and y = 2 cos (x+ 30^o) for $O^0 \leq x \leq 360^o$ **(2mks)**

x	0^o	30^o	60^o	90^o	120^o	150^o	180^o	210^o	240^o	270^o	300^o	330^o	360^o
Cos x													
2cos (x+30^o)													

b) On the same axis, draw the graph of y = cos x and y=2 cos (x+ 30) for $0^o \leq x \leq 360^o$. **4mks)**



c) State the amplitude of the graph $y = \cos x^{o}$. **(1mk)**

ii) State the period of the graph $y = 2\cos(x + 30^{o})$ **(1mk)**

d) Use your graph to solve **(2mks)**

$\cos x = 2\cos(x + 30^{o})$

21. Two tanks of equal volume are connected in such a way that one tank can be filled by pipe A in 1 hour 20 minutes. Pipe B can drain one tank in 3 hours 36 minutes but pipe C alone can drain both tanks in hours. Calculate:

a) The fraction of one tank can be filled by pipe A in one hour. **(2mks)**

b) The fraction of one tank that can be drained by both pipes B and C in one hour. **(4mks)**

c) Pipe A closes automatically once both tanks are filled. Assuming that initially both tanks are empty and all pipes opened at once, calculate how long it takes before pipe A closes. **(4mks)**

22. The table below shows income tax rates.

Monthly income in the Kenya shillings	Tax rates percentage (%) in each shilling
Up to 10164	10
From 10165 to 19740	15
From 19741 to 29320	20
From 29321 to 37040	25
From 37041 and above	30

In one year, Mr. Kamau's monthly earning was as follows:

Basic salary 20,000
House allowance 12,000
Medical allowance 2,808
Transport allowance 1,764

a) Calculate:

i. Mr. kamau's taxable income. **(2mks)**

ii. Tax charged on Mr. Kamau's earning **(4mks)**

b) Mr. Kamau was entitled to the following tax reliefs:

i. Monthly personal relief at the rate of 15% of the premium paid. If Mr. Kamau paid a monthly premium of Kshs. 2,500 and cooperative shares of Kshs. 5,000 per month, calculate his net salary. **(4mks)**

23. The second, third and fourteenth terms of arithmetic progression are the three consecutive terms of a geometric progression. The 10^{th} term of the arithmetic progression is 18. Find:

a) The first term and the common difference of the progression. **(4mks)**

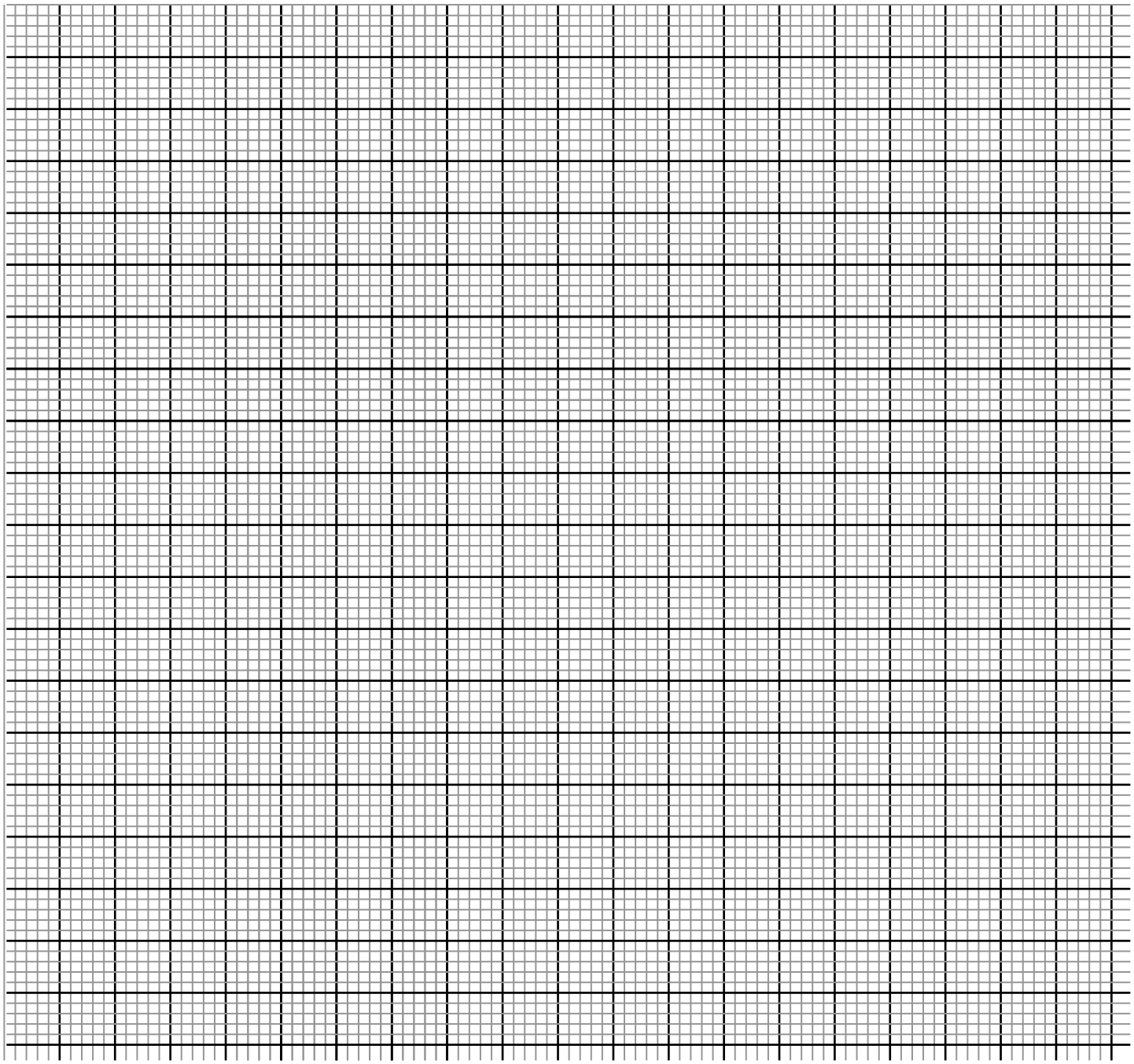
b) The sum of the first 10 terms of the Arithmetic progression. **(2mks)**

c) The sixth term f the G.P. **(4mks)**

24. A certain uniform supplier is required to supply two types of shirts: one for girls labeled G and the other for boys labeled B. the total number of shirts must not be more than 400. She has to supply more of type G than of type B. however the number of type G shirts must not be more than 300 and the number of type B shirts must not be less than 80. By taking x to be the number of type G shirts and y to be the number of type B shirts.

a) Write down in terms of x and y all the inequalities representing the information above. **(4mks)**

b) On the grid provided below draw the inequalities and shade the unwanted regions. **(4mks)**



c) Given that type G costs shs. 500 per shirt and type B costs shs. 300 per shirt use the graph above to determine the number of shirts of each type that should be made to maximize the sales.**(2mks)**

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

COMPUTER STUDIES

451/1

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

Instruction to candidates

a. *Write your name, admission number, Index No and class in the spaces provided at the top of this page.*

b. *This paper consists of **TWO** sections; **A** and **B**.*

c. *Answer **ALL** questions in section **A**.*

d. *Answer question **16** and any other **THREE** questions from section **B**.*

e. *All answers should be written in the spaces provided on the question paper.*

f. *All answers should be written in the spaces provided on the question paper*

g. *Candidates should answer the questions in English*

For Examiner's Use Only

Section	Question	Score
A	1 – 15	
B	16	
	17	
	18	
	19	
	20	
	Total	

SECTION A

Answer all questions in this section

1. Other than cost and compatibility, state two factors to consider when selecting an input device for an organization **(2 Marks)**

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2. State the importance of the cache memory to the computer **(1 Mark)**

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3. Distinguish between the address bus and the control bus in the CPU **(2 Marks)**

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4. State any two disadvantages of printing documents using thermal printers **(2 Marks)**

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5. State one advantage of storing data on an optical disk over the magnetic **disk** **(1 Mark)**

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6. a. Define the term network topology **(1 Mark)**

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b. Distinguish between a logical and physical topology **(2 Marks)**

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7. a. Distinguish between a web portal and a blog **(2 Marks)**

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b. List four components of an e-mail header **(2 Marks)**

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8. The tables below were extracted from jobu's enterprise database. Use them to answer the questions that follows

CUSTOMER TABLE				
CUSTOMER ID	ID NUMBER	NAME	ADDRESS	TOWN

ORDER TABLE					
ORDER ID	CUSTOMER ID	ORDER DATE	PARTICULARS	QUANTITY	UNIT COST

a. Identify the most appropriate primary keys in both tables **(1 Mark)**

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b. Identify a candidate key in any of the tables **(1 Mark)**

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c. Describe the relationship formed between the two tables **(2 Marks)**

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d. Write a function that would be used in a query to display the delivery date; given that all deliveries are made three days after the order date. Name the query field "Delivery_Date" **(2 Marks)**

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9. Explain the circumstances that may lead to use of crop tool in a word processing document.

(2 Marks)

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10. State two advantages of using templates when creating documents in word processing

(2 Marks)

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11. The emergence of Gen-Z popular 'maandamano' has led to many organizations in major cities in Kenya to embrace teleworking approach

a) State the meaning of the term teleworking **(1 Mark)**

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b) State two benefits that the organization gained by using this **approach** **(2 Marks)**

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12. (a) (i) State the meaning of each of the following terms used in spreadsheets **(2 Marks)**

Value

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Chart

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(ii) A certain formula was typed in a cell within a worksheet. Upon execution the cell displayed the error #NULL. State the meaning of the error **(1 Mark)**

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13. State the hardware technological differences between the second generation and the third generation computers. ***(2* Marks*)***

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14. State three ways of transforming a picture embedded in a Desktop Publishing programme in order to fit in a designated space on a document. ***(3* Marks*)***

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b) State two application areas of a desktop publishing software. ***(2* Marks*)***

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15. List *two* duties performed by each of the following personnel ***(3* Marks*)***

i. System analyst

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ii) Network administrator

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iii) Computer trainer

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SECTION B

Answer question 16 and any other three questions

16. a. State two functions of a language translator in program development **(2 Marks)**

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b. In a game, a player is given three rounds of picking a red, blue or yellow ball from a basket three times per round. The player is considered a winner by picking at least two blue balls in the round. Write a program pseudocode and flowchart to prompt a player to choose a ball then display

- The ball color selected
- The ball color combination for each round
- Total number of wins and looses in all the three rounds

Pseudocode **(6 Marks)**

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Flowchart **(7 Marks)**

17. An information system is a critical tool of success in any organization. For this reason, many organization set aside a lot of resources in supporting their information system.

a. Define the term information system **(2 Marks)**

b. Different methodologies are used to develop systems depending on the nature of the system and the organization.

i. Define the term methodology as used in systems development **(2 Marks)**

ii. State any two advantages of a prototype during system development **(2 Marks)**

iii. List any four tools that can be used to design a system **(2 Marks)**

iv. Identify the system flow chart symbol shown in the diagram below and state its function



Symbol **(1 Mark)**

Function (**1 Mark)**

c. List the order in which the operating system organizes information from top to bottom **(2 Marks)**

d. State the purpose of a disk diagnostic utility provided by the operating system **(1 Mark)**

e. As John was booting his computer, the process was terminated before completion with an error message "Missing Operating System", identify the reason for the error and its solution.

Reason **(1 Mark)**

Solution **(1 Mark)**

18. (a)Mention three factors to consider when choosing a file organization **method (3 Marks**)

b) Define the term Data **integrity** **(1 Mark)**

(c) State three ways of minimizing threats to data integrity. **(3 Marks**

d) Briefly describe the following data processing modes **(3 Marks)**

i) Online processing.

ii) Real-time processing.

iii) Multi-programming

e) Lindah does not understand why computers are said to be Automatic at the same time they have No Intelligent Quotient (IQ). Explain to her the observation concepts**.** **(2 Marks)**

f)Give three reasons to justify why many computer users today prefer saving their documents in the google **drive** **(3 Marks)**

19. a) State three standard coding schemes used in computing ***(3* Marks*)***

b) Convert the following numbers

i) 111.010_2 to decimal ***(3* Marks*)***

ii) 13.875_{10} to binary ***(3* Marks*)***

c) i) Give three reasons why primary storage devices are not used for secondary storage ***(3* Mks*)***

ii) A computer teacher put a rule that flash disks should not be used in the computer laboratory ***(1* Mark*)***

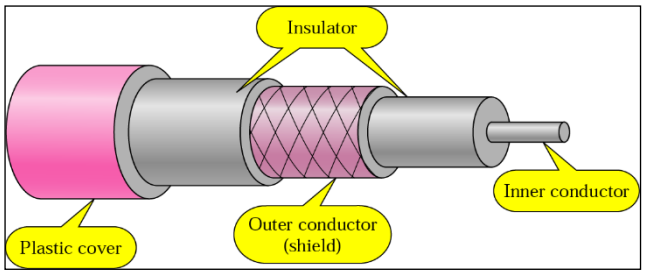
a. Give a reason for the rule

(b)State two other alternatives that can be used to achieve the same objective

20. The development of internet has succeeded in reducing the world into a global village

a. State any two benefits of networking **(2 Marks)**

b. Identify the cable in the diagram below **(1 Mark)**



c. State any two reasons for making it a better choice for a backbone in a bus topology network **(2 Marks)**

d. State three components of satellite communication **(3 Marks)**

e. Distinguish between a switch and a brouter **(2 Marks)**

f. Explain the following principles in relation to data integrity principle **(2 Marks)**

i. Data integrity

ii. Availability

g. John was promoted at work but James was not happy about it, he therefore decided to steal and destroy critical information from John's computer.

i. Identify the threat committed by James **(1 Mark)**

ii. State two ways John could have avoided the threat mentioned in (i) above **(2 Marks)**

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

COMPUTER STUDIES

451/2

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

451/2

COMPUTER STUDIES

Paper 2 (PRACTICAL)

2 ½ hours

INSTRUCTIONS TO CANDIDATES

a) *Indicate your name and index number at the right hand corner of each printout*

b) *Write your name and index number on the CD/removable storage medium provided*

c) *Write the name and version of the software used for each question attempted in the answer sheet provided*

d) *Answer all the questions*

e) *All questions carry equal marks*

f) *Passwords should not be used while saving in the CD/removable storage Medium*

g) *Marked printout of the answers on the sheet*

h) *Arrange your printouts and staple them together*

i) *Hand in all the printouts and the CD/removable storage medium used*

j) *All the work should be saved at the desktop of your computer in a folder named with our name and index number. All the work in your folder should be burned to the CD/WR provided*

1. The Management of a company owning a chain of hotels intend to use a spreadsheet program to compute the revenues in thousands of Kenya Shillings for the hotels during the 1st, 2nd, 3rd and 4th quarters. The hotels are rated as 2 star, 3star, 4 star and 5 star. **Figure 1** below shows an extract of the worksheet.

HOTEL	STAR CATEGORY	1ST	2ND	3RD	4TH	TOTAL REVENUE		
City Inn	4	174,400	177,400	127,900	180,800			
Forkland	2	173,700	111,300	194,900	103,700			
Highway	4	182,900	136,300	143,900	144,600			
Hiltop	5	188,500	124,700	173,500	171,200			
Membley	5	187,800	118,700	115,900	195,500			
Voyager	3	139,100	178,400	109,600	179,700			
Eden	2	200,000	112,200	109,100	117,200			
Palm	4	169,800	163,000	173,000	148,300			
The Shaza	5	163,900	106,800	107,100	150,500			
Total Quaterly Revenue								
Administrative cost								
Percentage 30%								

(a) Open a spreadsheet program and create the worksheet extract as it appears in Figure 1. Save the workbook as **Task 1(11 marks)**

(b) Use a function and cell addresses to calculate:

(i) Total revenue for each quarter**;(2 mark)**

(ii) Total revenue for each hotel.(**2 marks)**

(c) (i) Insert two rows above row I and type the title "MBALAMBALA GROŒ HOTELS" in cell Al **(2 marks)**

(ii) Merge the cells in the range Al I. **(l mark)**

(iii) Apply bold and font size 15 to the title. **(1 mark)**

(d) Using cell addresses only, compute the administrative cost for each quarter given that the cost is a percentage of total revenue and the percentage rate IS In cell B18. (34)

(e) Apply thick outside borders and regular inside borders to cells in the range A3:

(f)(i) Copy all the contents of the current worksheet to a new worksheet. (**2 marks)**

(ii)Rename the old worksheet as original and the new worksheet as formatted

(2 marks)

(g) (i) Change the page layout orientation of the formatted worksheet to landscape and the page size scaled to 80%. **(2 marks)**

(ii) Enter the values 2, 3, 4 and 5 in the cell range B20: B23 respectively representing the hotel star category ratings. **(1 mark)**

(iii)Using a function and cell references:

Icompute the total revenue for each hotel references;

II compute the total revenue for each hotel category in the 1st quarter using reference values in the range B20: B23 in cells C20: C23**. (5 marks)**

(iv)Sort the revenues from the hotels in descending order of hotels. **(2 marks)**

(h) (i) Create a column chart that compares the revenues of the hotels in star category 4 for the 1st and 2nd quarter. **(4 marks)**

(ii) Format the chart created as follows:

I. Chart title"FIRST AND SECOND QUARTER REVENUES"(**2 marks)**

II. Move the chart to a new sheet and rename the sheet as FourStar Revenues. **(2 marks)**

(i) Save the changes and print later each of the following:

(i) original worksheet showing the column and row headings; **2 marks)**

(ii) formatted worksheet; **l mark)**

(iii) FourStar Revenues chart. **1 mark)**

2. Popo City planners intend to use a Desktop Publishing program to draw a plan for a section of a city. Assume you have been given the task.

(a) (i) Open a desktop publishing program and set the page layout orientation to portrait and and paper size to A4. **(2 marks)**

(ii) Save the publication as Task 2 **(l mark)**

(b) Create the city plan as it appears In Figure 2 ensuring that the design covers the entire **printable area of the page.** **46 marks)**

c) Save the changes and print the publication later. **(l mark**

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POPO CITY PLAN

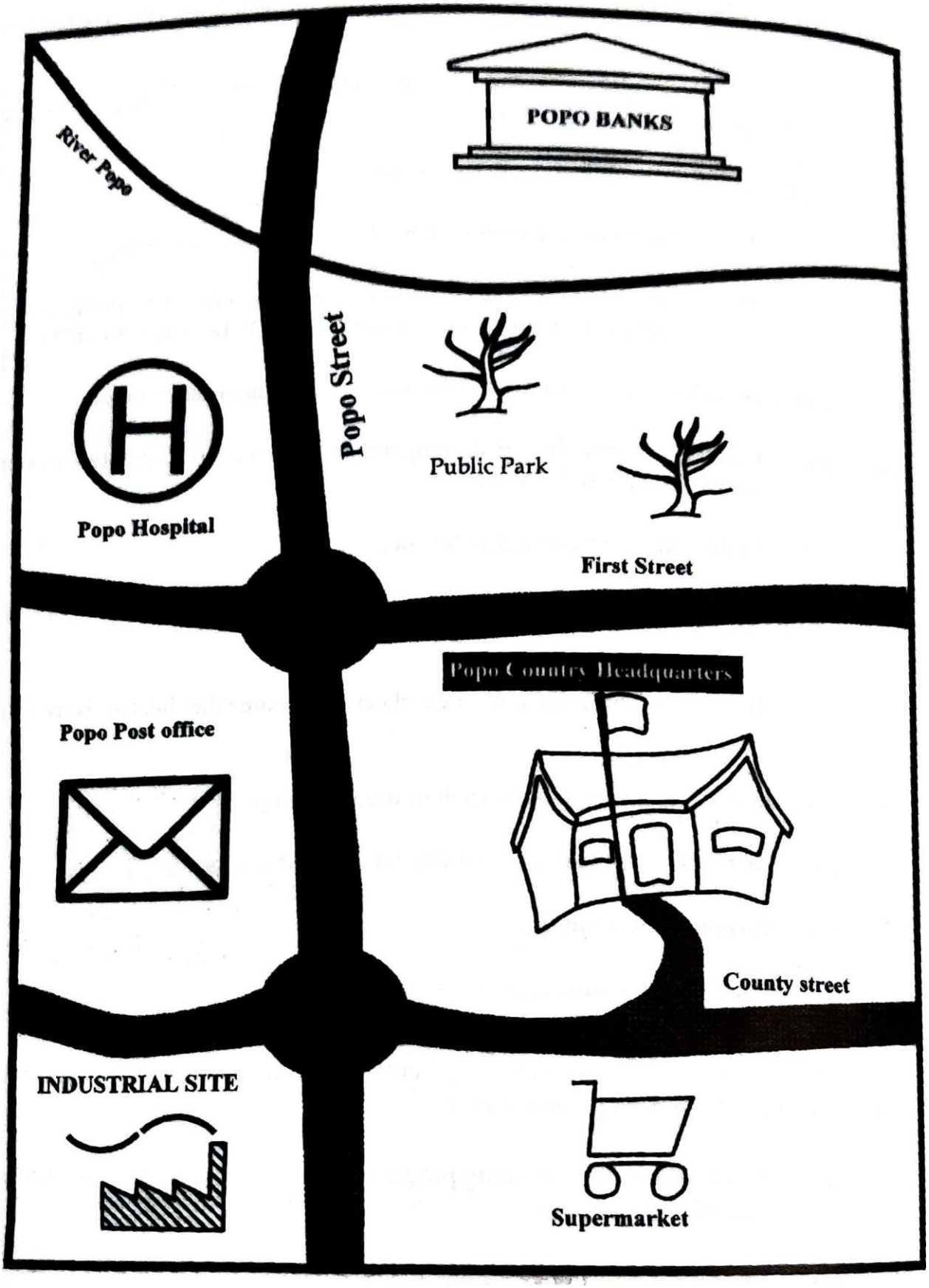

POPO BANKS
River Popo
Popo Street
Public Park
Popo Hospital
First Street
Popo Country Headquarters
Popo Post office
County street
INDUSTRIAL SITE
Supermarket

Figure 2

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

HOME SCIENCE

441/1

PAPER 1

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

Instructions to candidates

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

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

3. *Answer all questions in Section A and B and any TWO questions from section C*

4. *Answers to all questions must be written in this booklet*

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

FOR EXAMINER'S USE ONLY

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1 – 40	40	
B	41a, b	20	
C	42	20	
	43	20	
	44	20	
	TOTAL	**100**	

SECTION A (40 MARKS)

Attempt ALL questions in this section. Write answers in the spaces provided

1. Give two grooming requirements of persons handling food **(1mark)**

……

……

2. Indicate the most suitable method of cooking for the following groups of people; **(1mark)**

i.Convalescents.....

ii.Adolescents .....

3. Name two childhood nutritional disorders that are caused by lack of vitamin B1(thiamin) and vitamin D **respectively** **(1mark)**

i. Vitamin B1 -.....

ii. Vitamin D-.....

4. Give two benefits of prior planning of a meal to the **host** **(1mark)**

……

……

5. Describe any two aspects of variety in a meal **(1mark)**

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6. Give two reasons why breakfast is considered as the most important meal of the day**(1mark)**

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7. Differentiate the two types of vegetarians **(1mark)**

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8. Give two reasons for including citrus fruits to the diets of patients recuperating at home **(1mark)**

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9. Name two examples of shortenings used in baking **(1mark)**

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10. Mention the two uses of batter mixture **(1mark)**

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11. List two ways of neutralizing an acidic poison at home **(1 mark)**

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12. Write down two reasons why non-stick cooking pans are becoming popular in today's **kitchens** **(1mark)**

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13. List down two functions of whiteners on white canvas **shoes** **(1mark)**

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14. Your soccer coach has rented a flat near the stadium prior to the national games. Give two disadvantages of this type of **housing** **(1mark)**

……

……

……

15. Give reasons for the following practices done during weekly cleaning of a pit latrine

i. High dusting –.....

ii. Smoking – ..... **(1mark)**

16. State two applications of chemistry knowledge at home **(1mark)**

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17. State two benefits of "drip drying'' on a **garment** **(1mark)**

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18. Mention two ways of disposing refuse that are beneficial to farming **(1mark)**

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19. Identify two functions of a stool in an invalid's sick room **(1mark)**

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20. Mention two basic functions of kitchen chimneys **(1mark)**

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21. Suggest two factors to bear in mind when choosing fuel for home consumption **(1mark)**

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22. State two factors to consider when selecting lighting for a specific room **(1mark)**

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……

23. Identify two types of twins in **pregnancy** **(1mark)**

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……

24. Give two reasons why baby napkins are slowly fading away **(1mark)**

……

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25. Define the term **immunization** **(1mark)**

……

……

26. Apart from cereal and protein, name the four components of a multi-mix (**1mark)**

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……

27. Identify two characteristics shared by cotton and viscose when exposed to a flame **(1mk)**

……

……

28. Give two reasons as to why a running stitch is referred to as a versatile stitch **(1mark)**

……

……

29. Mention two functions of the stitch length regulator **(1mark)**

……

……

30. Mention two instances where binding is the most suitable method of finishing seams **(1mark)**

……

……

31. Suggest two inconspicuous methods of controlling fullness at the crown of set in sleeves **(1mark)**

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32. Name two types of **facings** **(1mark)**

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33. State two advantages of making your own clothes **(1mark)**

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……

34. Identify two reasons for introducing a thread shank on a flat button **(1mark)**

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35. Describe any two design features in clothing that can give an illusion of enlargement of one's **figure** **(1mark)**

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36. Using one food example explain the meaning of complementary goods **(1mark)**

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37. Discuss two disadvantages of buying goods using hard **cash** **(1mark)**

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38. Name two acts of government tasked with protection of **consumers** **(1mark)**

……

……

39. State two disadvantages of hoarding food **(1mark)**

……

……

40. List down 2 basic needs to a young **family** **(1mark)**

……

……

SECTION B(20 MARKS)

Compulsory- Answer question 41 in the spaces provided

42. You have taken off some time of your half-term break to do the following tasks for your mother.

a) Thoroughly launder her woolen **shawl** **(8marks)**

b) Clean the cemented kitchen counter top where you earlier worked on **(7marks)**

c) Thoroughly clean the stainless steel balloon whisk you used to make pancake batter **(5marks)**

SECTION C (40 MARKS)

Answer any TWO questions from this section in the spaces provided at the end.

42. A) Describe any four dishes that can be made from left over boiled **eggs** **(4mark)**

(B)) Loose covers have made a comeback in the soft furnishing markets. Give four reasons to explain this move **(4mark)**

(C) Explain four points to consider when buying baby's clothes (**4marks)**

(D) You have decided to patch your five-year-old sister's light cotton overall instead of darning. Give four explanations to your decision **(4marks)**

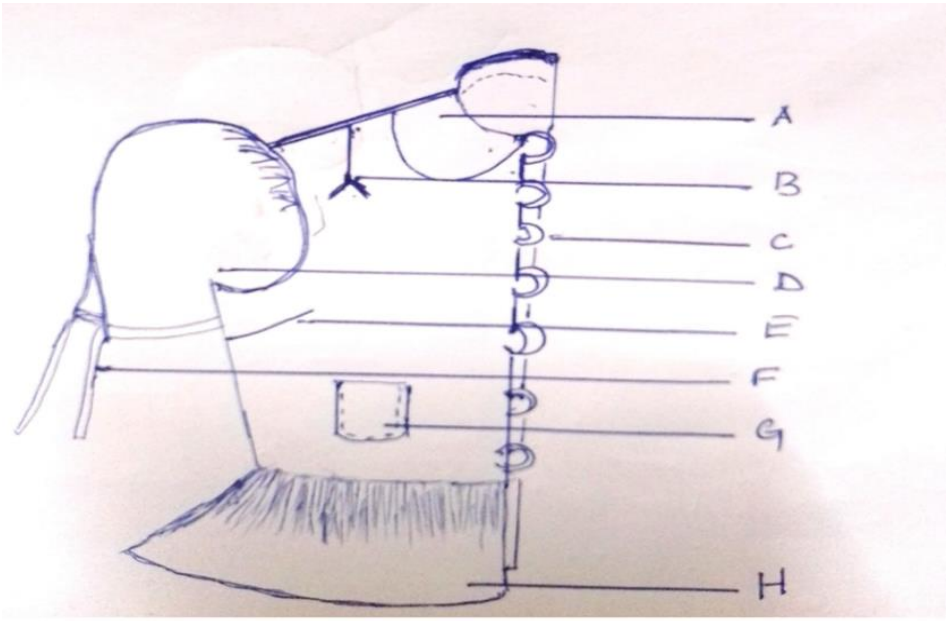
(E) Give four reasons for making a shopping list before visiting a **supermarket** **(4marks)**

43. (A) State four functions of retinol as a nutritional necessity for children **(4marks)**

(B) Explain any four advantages of breast milk compared to cow's milk in child care **(4marks**

(C) Describe four ways of ensuring safety in storage of firewood **(4marks)**

(D) A sample of a girl's dress top is shown below. Study and name parts A-H **(4marks)**



(E) State and explain four scarcity based problems of a consumer in **buying** **(4marks)**

44. (A) A house wife has chosen to buy readymade cakes for the family. State and explain four disadvantages of readymade food **products** **(4marks)**

(B) As a MOKASA beauty pageant 2024, outline four ways you would use to enhance your looks for the competition **(4mark**

(C) Explain four roles of the family in a child's play **(4marks)**

(D) Outline the preparation of the cut in one waistband in readiness for attaching (**4marks)**

(E) Give four duties of an advertising company **(4marks)**

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

HOME SCIENCE

441/2

PAPER 2

TIME: 2½ HOURS

SCHOOL…… SIGN……

Kenya Certificate of Secondary Education. (KCSE)

441/2 HOMESCIENCE –Paper 2

(CLOTHING CONSTRUCTION)

(PRACTICAL)

CONFIDENTIAL

2½ HOURS

INSTRUCTIONS TO CANDIDATES

The school should provide the following items:

- ✓ **Poplin light coloured fabric 70cm long and 90cm wide**
- ✓ **Matching sewing thread**
- ✓ **Pressing tools**
- ✓ **Sewing machines**
- ✓ **2012 pattern**
- ✓ **Envelopes**

KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

HOME SCIENCE

441/2

PAPER 2

TIME: 2½ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

HOMESCIENCE PAPER

441/2

CLOTHING CONSTRUCTION

TIME: 2 ½ HRS

INSTRUCTIONS TO CANDIDATES

1. The paper consists of three pages
2. Candidates should check the question paper to ascertain that all pages are printed as indicated and that no questions are missing.
3. Candidates should check the question paper to ascertain that all the pages are printed.

A pattern of a girl dress is provided. You are advised to study the sketches, instructions and the layout carefully before you begin the test.

1. MATERIALS PROVIDED

A. Bodice front

B. Bodice back

C. Skirt front

D. Skirt back

E. Sleeve

F. collar

G. cut out a crossway strip measuring 18cm long 4cm wide

2. Plain lightweight cotton fabric 70cm long and 90 cm wide.

3. Cotton sewing thread to match the fabric

4. One large envelope.

THE TEST

Using the materials provided, lay, cut out and make the left half of a girl's dress to show the following processes:

a) Cutting out **(16mks)**

b) Making of the dart at the front bodice **(6mks)**

c) Making of a shoulder seam using a double stitched seam. **($7\frac{1}{2}$mks)**

d) Making the side seam on bodice and skirt using an open seam. **(13 mks)**

e) Attaching of the bodice pieces to the skirt pieces using overlaid seam and neatening ¼ of the seam using overcasting stitches **($9\frac{1}{2}$mks)**

f) Preparation of the collar and attaching using a crossway strip. **(16mks)**

g) Preparation and attachment of the sleeve; use French seam for the underarm seam. Do not **TRIM OR NEATEN THE SEAM ALLOWANCE** **(10 ½ mks)**

h) Making of the worked loop on the back edge for 1cm wide button. **(5 mks)**

i) Overall presentation **($6\frac{1}{2}$mks)**

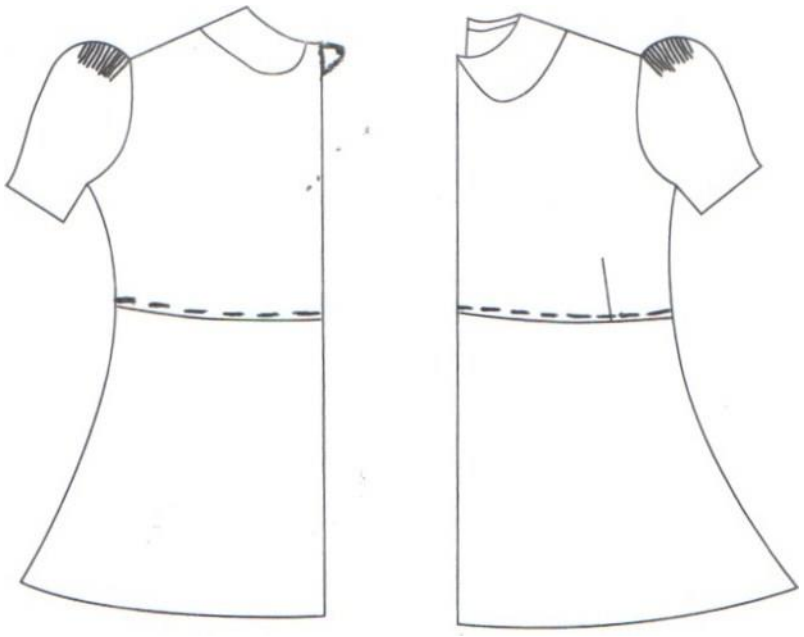
OMIT

The management of this lower hem to the skirt and sleeves.

At the end of the examination, firmly sew onto your work, on a single fabric a label bearing your name and index number. Remove the needle, pins and loose threads from your work.

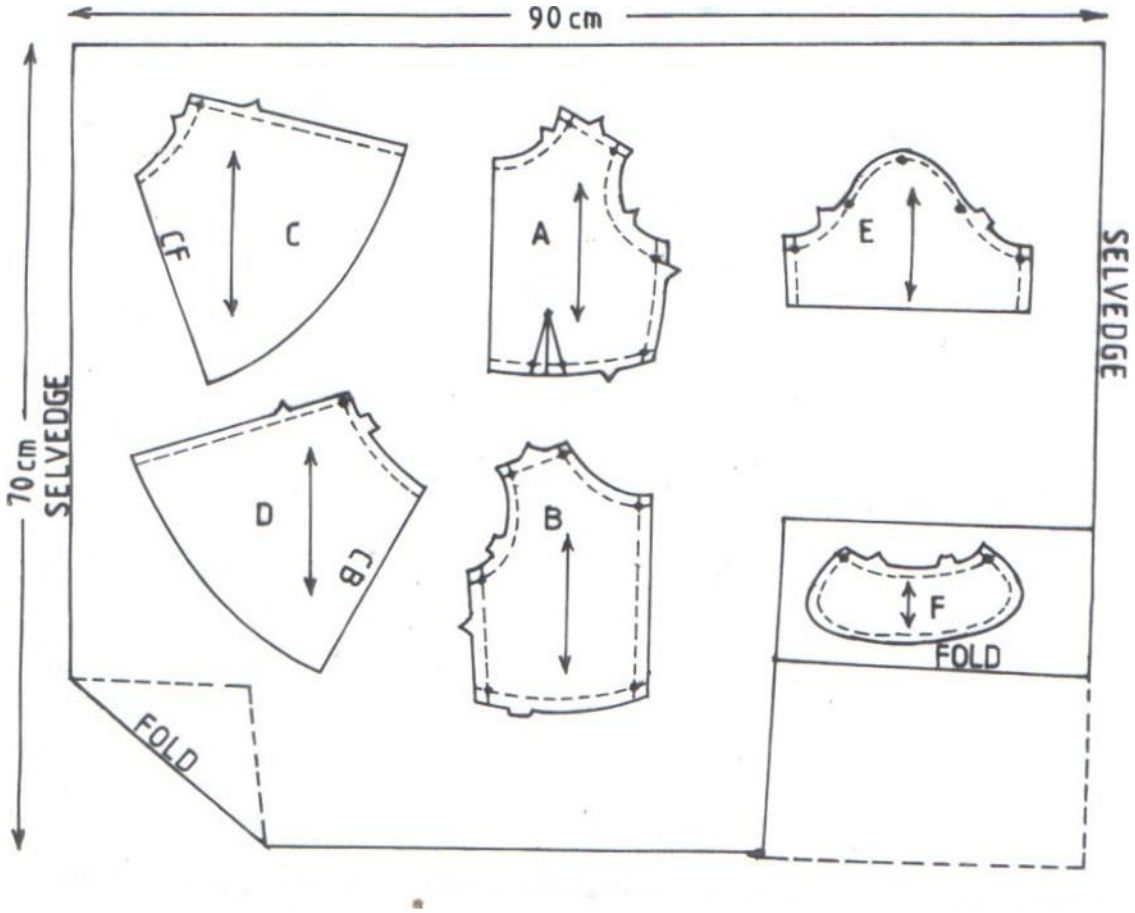
Fold your work neatly and place it in the envelope provided. Do not put scarps of fabric in the envelope. Do not seal the envelope.

DRESS VIEW



BACK **FR0NT**

LAYOUT (NOT TO SCALE)



KCSE 2025 KASSU MOCK EXAMS

JOINT SERIES 2

HOME SCIENCE

441/3

PAPER 3

TIME: 1¾ HOURS

NAME……

SCHOOL…… SIGN……

INDEX NO…… ADM NO……

Kenya Certificate of Secondary Education. (KCSE)

441/3

HOMESCIENCE

Paper 3

[FOOD AND NUTRITION]

Time: 1 ¼ Hours

Planning session: 30 minutes

Practical session 1 ¼ hours

INSTRUCTIONS TO CANDIDATES

- Read the test carefully.
- Textbooks and recipes may be used during planning session as reference materials
- You will be expected to keep to your order of work during the practical session.
- You are not allowed to bring additional notes to the practical session.

THE TEST

You have been left in charge of the home with your younger brother. Using the ingredients listed below, prepare cook and present a suitable two dish meal for the two of you.

Include a stimulating drink for two.

Ingredients

- Salt
- Cabbage
- Minced beef
- Fat/oil
- Garlic
- sugar
- Rice
- Onion
- Ginger
- Tea leaves/cocoa
- Pilau mix
- Milk
- Green Peas
- Carrots
- Tomatoes

Planning Session.

Use separate sheets of paper for each task listed below and a carbon paper to make duplicate copies and proceed as follows: -

(i). Identify the dishes and write down their recipes

(ii). Write down your order of work.

(iii). Make a list of the food stuff, equipment and materials you would require.

For Marking Schemes Contact 0746 222 000 / 0742 999 000

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
- ✓ TOP SCHOOLS MOCKS
- ✓ JOINT MOCKS
- ✓ KCSE POSTMOCKS
- ✓ TOP SCHOOLS PREDICTIONS
- ✓ KCSE PREDICTIONS
- ✓ KCSE REVEALED SETS

CALL/TEXT/WHATSAPP

0746-222-000

0742-999-000

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