

SUCCESS MOCK EVALUATION

KCSE SERIES 1 - 2023

ALL SUBJECTS

*First series of the Countrywide Joint Examination Mock Trial among Selected
Top National Schools.*

JUNE-JULY-AUG CYCLE

SUBJECTS EXAMINED;

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

SERIES 1

For Marking Schemes

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

MWALIMU CONSULTANCY

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

CHRISTIAN RELIGIOUS EDUCATION

313/1

PAPER 1

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

313/1

CHRISTIAN RELIGIOUS EDUCATION

PAPER 1

TIME: 2½ HOURS

INSTRUCTIONS TO CANDIDATES

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

FOR EXAMINER'S USE ONLY

Question	1	2	3	4	5	6	TOTAL SCORE
Candidates Score							

Answer any **five** questions

1. a) Identify any **six** minor prophetic books in the Old Testament. (6 marks)
b) From the Genesis story of the fall of human beings, explain the results of sin **Gen 3:7-24** (8 marks)
c) Outline ways in which the church in Kenya helps to bring back members who have fallen from the faith (6 marks)

2. a) Outline ways in which God prepared Moses to be the future leader of his people. (7 marks)
b) Explain the meaning of symbolic acts carried out by the Israelites on the night of the Passover. (8 marks)
c) Identify **five** attributes of God, Christians learn from the night of the Passover. (5 marks)

3. a) Give reasons why Prophet Samuel was against kingship in Israel. (6 marks)
b) Explain four factors that led to the division of the kingdom of Israel after the death of King Solomon. (8 marks)
c) Identify six causes of power struggle in the Church in Kenya today. (6 marks)

4. a) Give five ways in which the Old Testament prophets communicated God's message to the people. (5 marks)
b) Identify the reasons why prophet Amos condemned the way Israelites worshipped God. (10 mks)
c) Mention five ways in which Christians can enhance the true worship of God today. (5 marks)

5. a) Describe Nehemiah's temple reforms. (**Nehemiah 13: 8-14**) (8 marks)
b) Outline the promises that Israelites made when they renewed their covenant with God during the time of Nehemiah (Nehemiah 10:28-29) (6 marks)
c) In what ways do Christians renew their covenant faith with God? (6 marks)

6. a) List seven duties of diviners in traditional African communities. (7 marks)
b) How was the problem of sickness solved in traditional African communities? (7 marks)
c) Identify the factors that undermine the roles of traditional medicine men in the modern society. (6 marks)

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

CHRISTIAN RELIGIOUS EDUCATION

313/2

PAPER 2

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

313/1

CHRISTIAN RELIGIOUS EDUCATION

PAPER 1

TIME: 2½ HOURS

INSTRUCTIONS TO CANDIDATES

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

FOR EXAMINER'S USE ONLY

Question	1	2	3	4	5	6	TOTAL SCORE
Candidates Score							

Answer any five questions

- 1) a) In what ways did Jesus fulfill the messianic prophecies of Isaiah about the suffering servant? (8 marks)
- b) Outline seven events that took place on the night that Jesus was born. (7 marks)
- c) Give **five** factors that hinder people from accepting the call of Christ to salvation. (5 marks)
- 2) a) Describe the call of the first disciples of Jesus **Luke 5:1-11** (5 marks)
- b) Describe the incident in which Jesus raised the son of the widow in Nain **Luke 7:11-17** ()
- c) Give lessons that Christians learn from the call of the first disciples (5 marks)
- 3) a) Why was it necessary for Jesus to have the last supper with the disciples? (7 marks)
- b) Describe eight events which took place on mount Olives before the arrest of Jesus (8 marks)
- c) Outline six reasons why Christians in Kenya should pray (6 marks)
- 4) a) Highlight Peters message on the day of the Pentecost (7 marks)
- b) Identify four teachings of St. Paul on the similarities between the Church and husband-wife relationship. (8 marks)
- c) Give five in which Christians fight injustices in the society today. (5 marks)
- 5) a) Identify six ways in which sex is abused in Kenya today. (6 marks)
- b) State eight effects of irresponsible sexual behavior. (8 marks)
- c) Explain six teachings on irresponsible sexual behavior. (6 marks)
- 6) a) State six importance of leisure. (6 marks)
- b) Identify seven leisure activities common to both Christianity and traditional African communities (7 marks)
- c) Explain seven dangers of using illicit drugs among the youth in Kenya today (7 marks)

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

HISTORY AND GOVERNMENT

311/1

PAPER 1

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

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

FOR EXAMINER USE ONLY

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

SECTION A 25MKS

(Answer all questions)

1. Identify two sources of information on Kenyan history. (2mks)

.....
.....

2. What is the significance of Rusinga Island to the history of Kenya. (1mk)

.....
.....

3. Name the dispersal area of the Eastern Bantu. (1mk)

.....

4. Give two social roles of the council of elders (Njuri Ncheke) of the ameru in the Pre-colonial period. (2mks)

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

5. Name two groups that rivaled the Portuguese for the control of the Kenyan coast in the 16th century. (2mks)

.....
.....

6. Identify two ways in which citizenship by birth can be revoked. (2mks)

.....
.....

7. State the main reason why the second Lancaster house conference was held in 1962. (1mk)

.....
.....

8. State two rights of a person who is detained or in custody. (2mks)

.....
.....

9. Name two aspects of fair labour practices as contained in the constitution of Kenya 2010.(2mks

.....
.....

10. Identify two factors that enabled the white settlers to establish farms in the white highlands. (2mks)

.....
.....

11. State one institution that may limit parliamentary supremacy in Kenya (1mk)

.....

12. State two ways in which the rule of law is applied in Kenya. (2mks)

.....
.....

13. Give type of fund established by the constitution of Kenya in 2010. (1mks)

.....

14. Name one source of the principle of African socialism. (1mk)

.....

15. What is the main role of Ethics and Anti-corruption Commission in Kenya.(EACC) (1mk)

.....

16. Who was the first vice –president of the independent Kenya. (1mk)

.....
.....

17. Give the meaning of the devolved government in **Kenya**. (1mk)

.....
.....

SECTION B

Answer any three questions.

18. (a) State five economics activities of the Borana in the 19th century. (5mks)
(b) Discuss five results of the migration of the Cushites into **Kenya**. (10mks)
19. (a) State five factors which contributed to the development of trade between different Communities in the interior of Kenya. (5mks)
(b) Discuss five negative effects of the Portuguese rule at the coast of East Africa. (10mks)
20. (a) Identify five problems faced by political parties in Kenya between 1992 and 2007 in Kenya. (5mks)
(b) Explain five factors that favored Mau Mau freedom fighters in Kenya. (10mks)
21. (a) Give five reasons why corruption is being discouraged in Kenya. (5mks)
(b) Explain five problems associated with Moi's leadership as a president of Kenya. (10mks)

SECTION C

Answer any two questions

22. (a) State five peaceful methods of solving conflict. (5mks)
(b) Explain five economic factors that promote national unity in Kenya. (10mks)
23. (a) State three non-military functions of the Kenya Defence Forces (3mks)
(b) Explain six functions of the Supreme Court in Kenya. (12mks)
24. (a) Name three categories of members who make up the county assembly in Kenya. (3mks)
(b) Explain six obstacles facing county governments in Kenya. (12mks)

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

HISTORY AND GOVERNMENT

311/2

PAPER 2

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

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

FOR EXAMINER USE ONLY

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

SECTION A
Answer all questions

1. Give two types of monarchical government. (2mks)

.....
.....

2. Give two advantages of upright posture to the early man. (2mks)

.....
.....

3. Give one land use system before agrarian revolutions. (1mks)

.....

4. Give two regions where salt was mined during trans- Saharan Trade. (2mks)

.....
.....

5. State two methods of trade. (2mks)

.....
.....

6. Mention two important canals that link major water bodies in the world today. (2mks)

.....
.....

7. State the country that pioneered space exploration in the world. (1mk)

.....

8. State two government policies, which have contributed to industrialization in India. (2MKS)

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

9. Give the main contribution of William Morton in surgical science. (1mk)
.....
10. Give two reasons that led to the decline of Athens as an urban centre. (2mks)
.....
.....
.....
11. State the main reason why the golden stool was important in the Asante empire. (1mk)
.....
12. Identify two categories of the spirits among the Shona. (2mks)
.....
.....
13. Identify one company that was used by the British in West Africa to administer the region. (1mk)
.....
14. Mention one characteristic of **Assimilation**. (1mk)
.....
15. Give the main reason for the failure of the League of Nations. (1mk)
.....
16. Identify one African country that was broken by the formation of the Organization of African Union. (1mk)
.....
17. Name the military bloc that was formed by the allies after World War 1 (1mk)
.....
.....

SECTION B

Answer any three questions

- 18.(a)** Give **five** characteristic of Agriculture in the United state of America during the Agrarian Revolution. (5mks)
- (b)** Explain **6 ways** in which third world countries can counter the problems of food shortages. (10mks)
- 19. (a)** Name three parts that developed in Africa as a result of Trans-Atlantic trade. (3mks)
- (b)** Explain six factors that led to the decline of Trans-Atlantic trade. (12mks)
- 20.(a)** Identify three reforms that were introduced after the Majimaji rebellion. (3mks)
- (b)** Explain six reasons why the Shona allied with the Ndebele in the ShonaChimurenya War. (12mks)
- 21.(a)** Give five objectives of the Economic community of West African State.(ECOWAS)(5MKS)
- (b)** Explain five achievement of Economic Community of West African States. (ECOWAS) (10mks)

SECTION C

Answer any two questions

- 22. (a)** Give three political causes of World War 1 (3mks)
- (b)** Explain six effects of World War II (12mks)
- 23. (a)** State five economic challenges facing the Democratic Republic of Congo(DRC) since Independence. (5mks)
- (b)** Explain five economic developments in the Democratic Republic of Congo (DRC) since Independence. (10mks)
- 24.(a)** State five sources of Britain unwritten constitution. (5mks)
- (b)** Explain the functions of the prime Minister in Britain. (10mks)

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

GEOGRAPHY

312/1

PAPER 1

TIME: 2¾ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

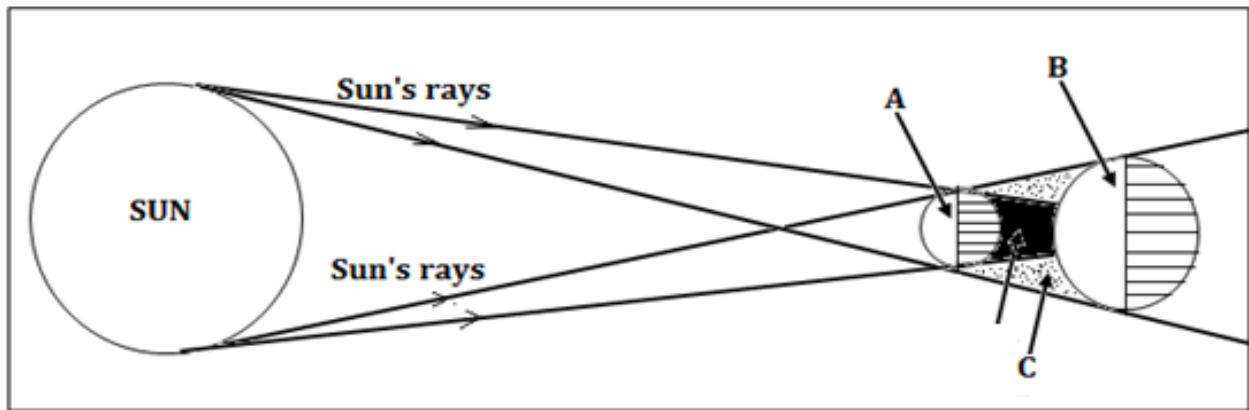
- This paper has **two** sections: A and B
- Answer ALL the questions in section A.
- In section B, answer questions 6 and any other TWO questions.
- Candidates must answer the questions *in English*.

FOR EXAMINER'S USE ONLY

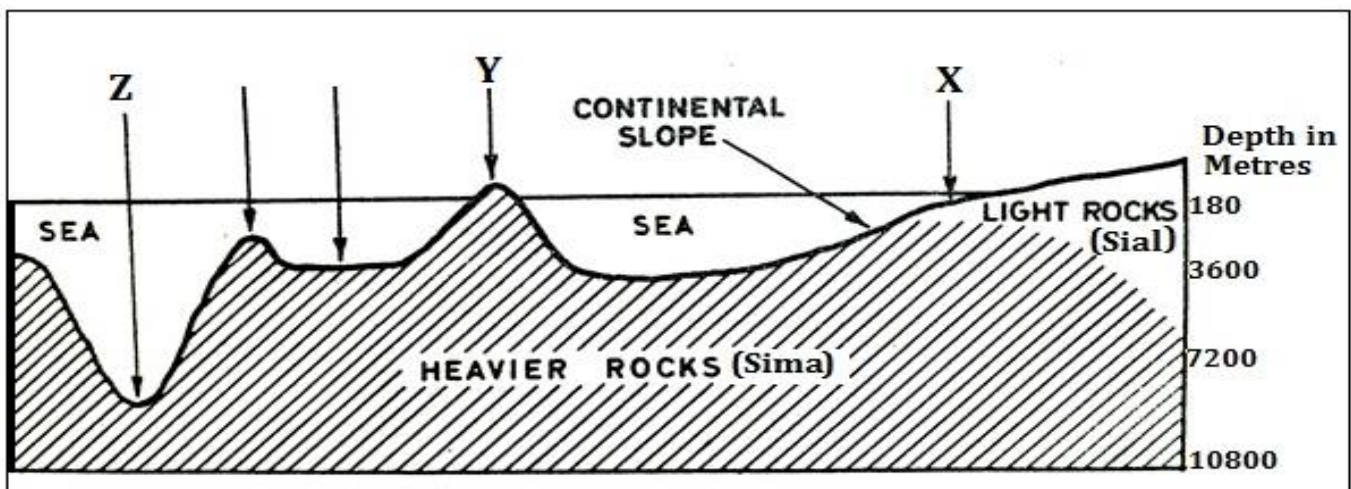
SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1 – 5	25	
B	6	25	
		25	
		25	
TOTAL SCORE			

SECTION A

1. The diagram below shows a type of an eclipse.



- (a) Name the parts marked A, B, and C. (3 marks)
- (b) Apart from the occurrence of eclipses, state **three** other effects of the movement of the earth round the sun. (3 marks)
- 2.(a) What are metamorphic rocks? (2 marks)
- (b) Give **two** examples of organically formed sedimentary rocks. (2 marks)
- 3.(a) List **three** landmasses that formed from Gondwanaland according to continental drift theory. (3 marks)
- (b) Give **two** types of tectonic plate boundaries. (2 marks)
- 4.(a) What is an earthquake? (2 marks)
- (b) State **three** natural causes of earthquakes. (3 marks)
5. The diagram below shows some features that form ocean relief.



- (a) Identify the features marked X, Y and Z. (3 marks)
- (b) List **two** main forms of horizontal movements of ocean water. (2 marks)

SECTION B

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

6. Study the map of **Nyeri 1:50,000** (sheet 120/4) provided and answer the following questions.

(a)(i) Give the **six figure** grid reference of the forest Guard Post in Nyeri forest. **(2 marks)**

(ii) Name the adjoining sheet to the south East of the map **(1 marks)**

(iii) What is the general direction of the flow of river Chanya? **(1 mark)**

(b) (i) Using a vertical scale of **1cm** to represents **50m**; draw a cross section along Northing 64 from Easting 68 to Easting 78. On it mark and label the following.

➤ All weather road

➤ A hill.

➤ River Amboni (Honi). **(8 marks)**

(ii) Calculate the vertical exaggeration of the cross section. **(2 marks)**

(iii) Determine the intervisibility of the cross section. **(1 mark)**

(c) Describe the distribution of natural vegetation in the area covered by the map. **(6 marks)**

(d) Explain **two** ways relief has influenced the distribution of settlement in the area covered by the map. **(4 marks)**

7.**(a)(i)**Differentiate between weather and weather climate. **(2 marks)**

(ii) Give **three** types of rainfall. **(3 marks)**

(b) Explain how the following factors affect the climate of a place:

(i) Cold ocean currents. **(4 marks)**

(ii) Inter Tropical Convergence Zone. **(2 marks)**

(c) With the aid of a well labelled diagram, describe how sea breeze occurs. **(8 marks)**

(d) Suppose you were to carry out a field study at a weather station:

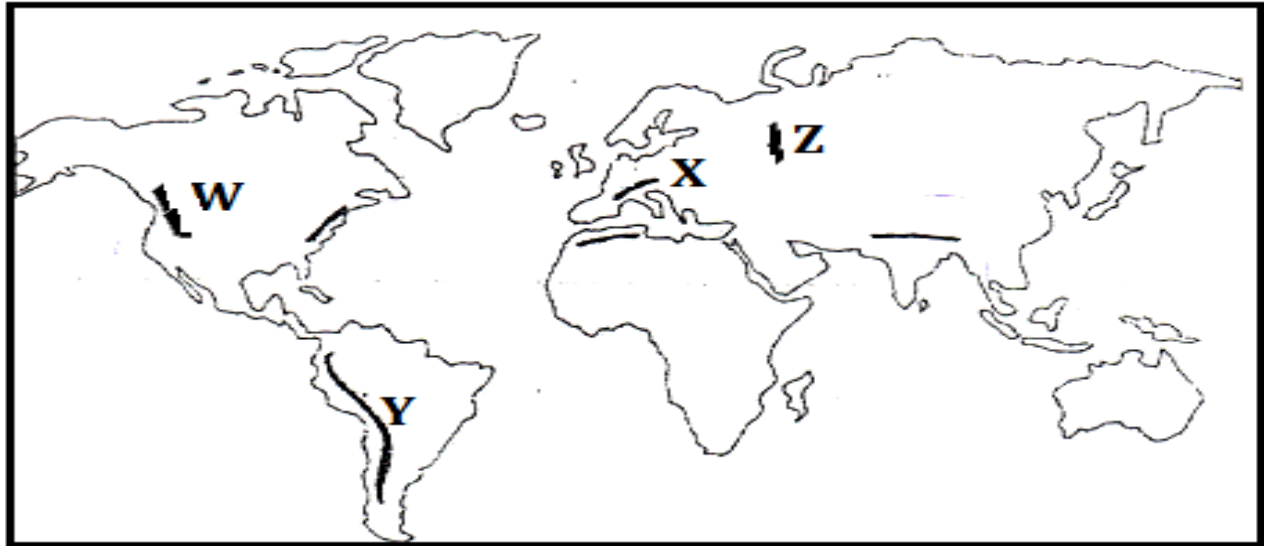
(i) Give **three** methods that they would use to collect data **(3 marks)**

(ii) State **three** follow up activities for the field study. **(3 marks)**

8. (a)(i) Define the term folding. (2 marks)

(ii) Name **three** types of folds. (3 marks)

(b) The world map below shows the distribution of some fold mountains. Use it to answer question (i)



(i) Identify the fold mountains marked W, X, Y and Z (4 marks)

(ii) With the aid of well labelled diagrams, how Fold Mountains were formed. (10 marks)

(c) Explain **three** negative effects of Fold Mountains (6 marks)

9.(a) (i) What is a karst scenery? (2 marks)

(ii) State **five** characteristics of karst landscapes. (5 marks)

(b) Give **four** sources of ground water. (4 marks)

(c) Explain how the following factors influence the occurrence of ground water:

(i) Nature of rocks. (2 marks)

(ii) Slope of land. (2 marks)

(iii) Vegetation cover. (2 marks)

(d) Explain **four** conditions that favour the development of an artesian well. (8 marks)

- 10.(a)(i)** What is glaciation? **(2 marks)**
- (ii)** Outline **four** factors which determine the rate at which ice moves. **(4 marks)**
- (b)** Apart from a cirque, name **four** other glacial erosional features. **(4 marks)**
- (c)** Using well-labelled diagrams, describe how a cirque is formed. **(8 marks)**
- (d)** Students of Nanyuki High School carried out a field study on glaciation on Mt. Kenya
- (i)** Give **three** reasons why they conducted a reconnaissance. **(3 marks)**
- (ii)** State **two** factors they must have considered when selecting the data collection methods. **(2 marks)**
- (iii)** Give **two** activities they may have been involved in during the study. **(2 marks)**

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

GEOGRAPHY

312/2

PAPER 2

TIME: 2¾ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

- This paper has **two** sections: **A** and **B**
- Answer **ALL** the questions in **section A**.
- In section **B**, answer **questions 6** and any other **TWO** questions.
- Candidates must answer the questions **in English**.

FOR EXAMINER'S USE ONLY

SECTION	QUESTIONS	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1 – 5	25	
B	6	25	
		25	
		25	
TOTAL SCORE			

Section A: Answer All Questions In This Section

- 1.a) What is Human Environment? (2Marks)
- (b) Areas of study under Human Environment. (3 Marks)
- 2(a) Give two reasons why pastoralists keep large herds of animals. (2 Marks)
- (b) Give three ways in which the government of Kenya assist nomadic pastoralists (3 Marks)
- 3(a) What is a derelict land? (2 Marks)
- (b) State three causes of land dereliction. (3 Marks)
- 4(a) State three problems facing coffee in Kenya. (3 Marks)
- (b) Outline two benefits of coffee farming in **Brazil** (2 Marks)
5. (a) A photograph is divided into three main parts. Name them. (3 Marks)
- (b) State two limitations of using photographs. (3 Marks)

SECTION B: Answer question 6 and any other two questions in this section

6. The table below shows the prices of sugar in Kenya shillings per ton in some countries in Africa. Use it to answer questions (a)

YEAR	KENYA	SOUTH AFRICA	TANZANIA	ZAMBIA
2014	95,400	61,927	68,702	84,447
2015	111,713	67,462	66,985	93,798
2016	110,878	65,173	90,649	86,832

- a)(i) Draw a divided rectangle 16cm long to represent the prices of sugar in the year 2016 (8Marks)
- (ii) State **two** advantages of using divide rectangle to present statistical data (2Marks)
- (b) Give **three** physical factors that influence the growing of sugar cane in Kenya (3 Marks)
- (c). Describe the stages involved in processing of sugarcane at the factory (7Marks)
- d). State five challenges facing sugar farming in Kenya (5 Marks)

- 7(a) (i) Distinguish between a forest and forestry. (2Marks)
- (ii) Name **two** indigenous softwood trees species found in Kenya (2Marks)
- (b)(i) Characteristics of planted forests (3Marks)
- (ii) Name **two** forest reserves in West of the Rift valley of Kenya (2 Marks)
- b) (i) State **four** characteristics of temperate hardwood forests. (4Marks)
- (ii) Explain any **three** problems which have limited exploitation of tropical hardwood forests in Africa (6Marks)
- c) Give the difference between exploitation of softwood forests in Kenya and Canada under the following headings:
- i) Trees species (2Marks)
- (ii) Mode of exploitation (2Marks)
- (iii) Marketing of products (2Marks)
- 8.a) Define the term mineral (2Marks)
- b) i) Name **two** areas in South Africa where diamond is mined (2Marks)
- ii) Give **four** ways in which minerals occur (4Marks)
- c) i) Explain **Three** negative effects of mining on the environment (6Marks)
- ii) Identify any **two** main methods of mining (2Marks)
- iii) Name a port through which minerals in East Africa are exported (1 Mark)
- d. Explain **four** ways in which soda ash contributes to the economy of Kenya) (8Marks)
9. (a) i. Name **three** exotic breeds of cattle reared in commercial ranches in Kenya. (3Marks)
- (ii). Explain **three** problems facing commercial beef farming in Kenya. (6 Marks)
- (b). State **four** physical factors that favour dairy farming in the Kenya highlands (4Marks)
- c.(i). Apart from fresh milk name three other dairy **products** (3 Marks)
- (ii) Explain **four** ways in which dairy farming in Kenya is different from dairy farming in Denmark. (8Marks)

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

ENGLISH

101/1

PAPER 1

TIME: 2 HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

Functional Skills

INSTRUCTIONS TO CANDIDATES:

- a) Write your name, school and admission number in the spaces provided.*
- b) Sign and write the date of exam in the spaces provided.*
- c) Answer all the questions in this paper.*
- d) All your answers must be written in the spaces provided.*

FOR EXAMINER'S USE ONLY:

S/No.	Question	Maximum Score	Candidate's Score
1	Functional Writing	20	
2	Cloze Test	10	
3	Oral Skills	30	
	TOTAL	60	

1. FUNCTIONAL WRITING (20MARKS)

You are the environment club chairperson in your school. You have been invited to give a speech on how to conserve the environment during the “**Environmental Awareness Day**” in county. The Governor, sub-county director of environment, the area chief, students, the club patrons and members from the community will attend.

In your speech you will address the following issues: deforestation, pollution and waste disposal. Write the speech that you will deliver. (20 marks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

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

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

academic, but lacking skills and knowledge (v).....the applicability as required by the demands from the workplace. Kenya and Tanzania adopted a curriculum with the philosophy of education for self-reliance;(vi) due to the inadequately trained teachers and insufficient resources, it ended up being (vii).....examinable and losing its goal. That (viii).....to unemployment, increased vices, and rampant dropouts, among other factors. Currently, due to technological advancement, most countries have opted (ix).....a competency-based curriculum (CBC), which appears as worldwide trends in offering skills that match with the requirements of companies’ employers. (x).....question shall be: does the job market currently determine the curriculum reforms in education?

3. a) Read the poem below and then answer the questions that follow: 30 MARKS

The Song of the Engine by Worsely Benison

With a snort and pant the engine dragged
 Its heavy train uphill,
 And puffed these words the while she puffed
 And laboured with a will:

“I think-I can-I think-I can
 I’ve- got- to reach- the top.
 I’m sure- I can- I will- get there
 I sim-ply must-not stop.”

At last, the top was reached and passed,
 And then-how changed the song!
 The wheels all joined in the engine’s joy,
 As quickly she tore along.
 “I knew I could do it; I knew I could win,
 Oh, rickety, rickety, rack!
 And now for a roaring rushing race
 On my smooth and shining track!”

i) How has the poet made the above poem rhythmic? (4 marks)

.....

.....

.....

.....

.....

ii) How would you say the last two lines of the poem?

(2 marks)

.....

.....

.....

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

I bought a camera for you.

.....

.....

I bought a camera for you.

.....

.....

I bought a camera for you.

.....

.....

c) Write another word with a similar pronunciation for each of the ones given below. (4 marks)

(i) Clime.....

(ii) Packed.....

(iii) Blew.....

(iv) Serial.....

d) Your friend wishes to visit you over the December holidays but she has never been to your place.

She requests you to give her directions that will enable her reach your home. How would you

ensure that the directions you give enable her to reach her **destination**?

(4 Marks)

.....

.....

.....

.....

.....

.....

e) Imagine you have been invited to give a speech on the topic “Devastating effects of Covid19.”

State three introductory strategies of your **speech**. (3 Marks)

.....

.....

.....

.....

f. Study the genre below and answer the questions that follow.

If Peter Piper picked a peck of pickled peppers, where’s the peck of pickled peppers Peter Piper picked?

i) Giving a reason, classify the **genre**. (2 marks)

.....

.....

ii) Identify the dominant sound pattern used in the above genre. (2 marks)

.....

.....

iii) State two functions of the genre above. (2marks)

.....

.....

iv) If the above genre was to be translated to another language, what would be lost? (1 mark)

.....

g. Indicate whether you would use falling intonation or rising intonation in the sentences below.

(3mks)

i) **Did** you remember to buy tomatoes?

ii) Where did you buy these?

iii) Open the window!

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

ENGLISH

101/2

PAPER 2

(Comprehension, Literary Appreciation and Grammar.)

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO STUDENTS

- (a) Write your name and admission no. in the space provided.*
- (b) Sign and write the date of exam in the space provided.*
- (c) Answer all the questions in this paper.*
- (d) All your answers must be written in the space provided.*

FOR EXAMINERS USE ONLY

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

1. COMPREHENSION (20MKS)

Read the passage below and answer the questions that follow.

The plan by the national government to import doctors and other health specialists from Cuba to plug a “shortage” of workers has been warmly welcomed by county government through the council of governors.

In the deal, the national government will pay the medics’ salaries while the counties foot the transport, accommodation and security bill.

As per the 2010 constitution, which ushered in devolution, health was to be managed as a shared responsibility between the two levels of government in a vertical and horizontal manner.

But the transition authority, in this hurry, devolved health and seconded healthcare workers to counties without proper legal framework to address the challenges of this complicated cadre.

Devolution was meant to increase inclusivity and have resources enjoyed at the local level without political favors as it had been. Previously, many areas had been neglected, with little access to healthcare professionals, let alone specialists.

At the height of devolution debate, the drafters of the constitution agreed to have healthcare shared so that marginalized parts of the country would get the necessary attention through efforts such as equalization funds.

As rightly captured in the Bomas Draft, a health service commission (HSC) was to be informed to ensure issues of personnel are dealt with at the national level. This was in a bid to have adequate resource sharing, proper retention of scarce resources (specialists) and promotion of training to achieve the recommended population-to-health worker ratio.

The commission was, however, somehow excluded from the Constitution by the committee of experts in a process that lacked wide participation.

As it were, the devolution of healthcare was done hurriedly and the chicken has come home to roost. It is clear that something has gone very wrong with the management of this important national resource. Health sector strikes which should rightly be frowned upon, have become common place. The media are awash with reports of tribalism, nepotism and “countysm” in recruitment. Lack of equipment, medication and common supplies is also rampant. The national government stepped in with medical equipment leasing (MES) scheme, which saw high-tech tools and machines supplied to much-unprepared institutions, putting to question the whole structure of what exactly is devolution of health.

One must still support the tension of devolution but question its implementation. Unable to attract, train and retain specialists, the counties are salivating at the prospect of receiving “free” Cuban doctors. This is a clear admission that the devolved units are quite incapable of managing this vital resource.

Accepting human resource sourced and managed for them is to lend credence to the belief that this is a role that at best coordinated by the national government. *Daily nation, June 6 2018*

Questions

a) Referring to the first paragraph, why is the term “shortage” put in quotation. **2mks**

.....

.....

.....

b) What shared responsibilities are highlighted in the hiring process? **2mks**

.....

.....

.....

c) For the drafters of 2010 constitution, what was envisaged under a new constitution order pertaining to healthcare? **2mk**

.....

.....

.....

d) According to the Bomas draft, what was the work of the health service commission? **2mks**

.....

.....

e) What evidence is given to show that health sector is in crisis. **3mks**

.....

.....

.....

.....

f) In note form, show according to the passage, how devolved units are un-prepared to handle health. 4mks

.....

.....

.....

.....

.....

g) Identify a case of idiomatic expression in the passage. 2mks

.....

.....

.....

h) Give the meaning of the following words and phrases. 3mks

i) Ushered-

.....

ii) Marginalized parts-

.....

iii) Incapable

.....

2. Read the excerpt below and then answer questions that below.

Helmer (*calls out from his room*).Is that my little lark twittering out there?

Nora (*busy opening some of the parcels*). Yes, it is!

Helmer. Is it my little squirrel bustling about?

Nora. Yes!

Helmer. When did my squirrel come home?

Nora. Just now.

(*Puts the bag of macaroons into her pocket and wipes her mouth.*)

Come in here, Torvald, and see what I havebought.

HELMER. Don't disturb me.

(*A little later, he opens the door and looks into the room, pen in hand.*)

Bought, did you say? All these things? Has mylittle spendthrift been wasting money again?

Nora. Yes but, Torvald, this year we really can let ourselves go a little. This is the first Christmas that we have not needed to economise.

Helmer. Still, you know, we can't spend money recklessly. **Nora.** Yes, Torvald, we may be a wee bit more reckless now, mayn't we? Just a tiny wee bit! You are going to have a big salary and earn lots and lots of money.

Helmer. Yes, after the New Year; but then it will be a whole quarter before the salary is due.

Nora. Pooh! We can borrow until then.

Helmer. Nora! (*Goes up to her and takes her playfully by the ear.*) The same little featherhead! Suppose, now, that I borrowed fifty pounds today, and you spent it all in the Christmas week, and then on New Year's Eve a slate fell on my head and killed me, and—

Nora (*putting her hands over his mouth*). Oh! don't say such horrid things.

Helmer. Still, suppose that happened,—what then?

Nora. If that were to happen, I don't suppose I should care whether I owed money or not.

Helmer. Yes, but what about the people who had lent it?

QUESTIONS

(a) State **four** actions that take place just before this excerpt. **(4marks)**

.....

.....

.....

.....

.....

(b) What pet names do Helmer call Nora in the excerpt? **(3marks)**

.....

.....

.....

.....

(c) “This is the first Christmas that we have not needed to economise.” Why does Nora say they don't have to economise. Refer to what happens in the rest of the play. **(3marks)**

.....

.....

.....

.....

(d) Helmer calls Nora a little spendthrift. Why is this the case? **(2marks)**

.....

.....

.....

(e) Explain **two** character traits of Nora as brought out in the excerpt. **(4marks)**

.....

.....

.....

.....

.....

(f) Rewrite by replacing the underlined word with a group of words. **(3marks)**

i. Don't disturb me.

.....

ii. Oh! Don't say such horrid things.

.....

iii. If that were to happen, I don't suppose I should care whether I owed money or not.

.....

.....

(g) Discuss **one** theme evident in the excerpt. **(3marks)**

.....

.....

.....

(h) What happens immediately after this excerpt? **(3marks)**

.....

.....

.....

.....

3. Read the narrative below and then answer questions that follow.

There was a great famine in the land where Obunde and his wife, Oswera, lived with their nine children. The only creatures who had some food were the ogres and before they would part with their food, they demanded a lot of things.

One day, Oswera went to one Ogre's home and asked him for some food, for by then her children were almost dying of hunger.

'I have no more food except sweet potatoes, the ogre told her.

'I shall be happy to have the potatoes. We have nothing, not a grain of food at my house and the children are starving. Please let me have some and I shall repay you after the harvest.

'No, if you want food you must exchange with something right now. Will you give me one of your children in exchange for my potatoes? Oswera hesitated, her children were dear to her, but then they would die without food.

'Yes, I shall let you have one of them for his meal, if only you could let us have some potatoes,' Oswera answered. Then she took a big basket full of potatoes and told the ogre the exact time he could go to her home to collect one of her children for a meal.

Oswera thought hard and she decided she would not give a single one of her children to the ogre for a meal. She therefore cut young banana stalks and cooked them nicely.

When the ogre came, she gave them to him and the beast greedily went away satisfied. Soon the potatoes were finished and she had to go to the ogre again.

Oswera and Obunde, her husband kept on cooking banana stalks for the ogre each time he came for one of their children, until one day, she had no more banana stalks to cook for the animal.

"You have now eaten all my children, yet we still need the potatoes. What shall we give you now?" Oswera asked in despair.

'Then I shall come for you and your husband,' the ogre replied angrily as he helped Oswera to load her basket of potatoes on her head.

'Yes come tomorrow at the usual time in the afternoon and get me. I shall have cooked myself for you,' Oswera said calmly.

The following day the ogre went promptly as Oswera had told him and he found the home almost deserted. He looked everywhere but a part from Obunde there was no trace of anybody.

Then he looked at the usual place and found a huge bowl of a big meal Oswera had cooked for him. The ogre did not realize they had prepared a dog instead of Oswera. When he had eaten the ogre told Obunde he would come for him the following day. Obunde got very worried and that night he could not sleep. The following day he started crying:

"Ah Oswera my wife, how did you cook yourself and how shall I cook myself for the ogre?" He sat down in the dust of his compound and wept. Oswera became very annoyed with her husband.

You, you stupid, foolish man! Why sit and cry there all day long? How do you think I cooked myself? Take one of the dogs and quickly prepare it for the ogre!

Very quickly Obunde got up, caught, killed and prepared a dog for the ogre. Then he joined his wife and children in a huge hollow part of a tree in his compound where they had hidden.

That day the ogre knew he was going to have his last meal of juicy human flesh. Being a generous and unselfish ogre, he brought many of his fellow ogres. They were going to have a feast.

Suddenly as they were eating, they heard a man singing very happily. No they could not believe it!

It was Obunde singing! And he was boasting of how he had cheated the ogre.

The greedy ogre ate banana stalks

Not my family;

The greedy ogre ate a dog

Not Obunde Magoro!

The greedy ogre ate banana stalks

Not my family;

Now come and get Obunde,

His children and wife.

Obunde sang the words and the ogres got very angry. The first ogre rushed into the hollow of the tree, but Oswera had heated a long piece of iron until it was white. She pushed the iron into the ogre's mouth. The beast fell down dead. The next one rushed into the hollow and Oswera killed him in the same way. In this way she killed all the ogres and saved her husband and all their children.

My story ends there.

QUESTIONS

(a) Classify the above narrative.

(2marks)

.....
.....

(b) Whom do you consider to be the champion in this story? Why?

(2marks)

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

(c) Where do you think the pace setting of the story? Give a reason.

(2marks)

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

(d) Compare Obunde and the ogre as they are presented in this story.

(2marks)

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

(e) Illustrate **two** features of the story that makes it an oral narrative. (4marks)

.....

.....

.....

.....

.....

(f) Explain the moral lesson of this story. (2marks)

.....

.....

.....

(g) If you were to collect the above from the informant,

i. What methods of data collection would you use? (3marks)

.....

.....

.....

.....

ii. What challenges are you likely to face? (3marks)

.....

.....

.....

.....

4. GRAMMAR

(a) Use the most suitable form of the word in bracket to fill in the blank space. (3marks)

i. I believe in his (innocent)

ii. Her _____ cost her life. (deceive)

iii. Such an _____ had never been seen. (Occur)

(b) Rewrite according to instructions given without changing the meaning. **(3marks)**

i. Neither Ann nor the girls are studying French.

Begin: Neither the girls....

.....
ii. Two buses and a train go to the Eiffel Tower.

Correct the error

.....
iii. The sun shines brightly.

End:shines

.....
(c) Combine the following sentences using the words in brackets. **(3marks)**

i. She is intelligent. She is beautiful. (...both..and...)

.....
ii. Jerry is not rich. Jerry is not famous. (neither...nor)

.....
iii. He is intelligent. He is very funny. (...not only...but also...)

.....
(d) Fill in the most suitable preposition. **(3marks)**

i. Solomon was famoushis wisdom.

ii. She guessedthe answer.

iii. He derived the meaningthe context of the sentence.

(e) Choose a more suitable pronoun to fill the blank space. **(3marks)**

i. The ones responsible are Charles and (she, her)

ii.did you give it to? (who, whom)

iii. It'swho arrived first. (me, I)

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

ENGLISH

101/3

PAPER 3

(Imaginative Composition and Essays Based On the Set Texts)

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

INSTRUCTIONS

- *Answer three questions only*
- *Question 1 and 2 are compulsory*
- *In question 3 , choose only one text that you have prepared for.*

FOR EXAMINER'S USE ONLY

QUESTION	MAXIMUM SCORE	CANDIDATE SCORE
1	20	
2	20	
3	20	
TOTAL	60	

QUESTIONS

Question 1 IMAGINATIVE COMPOSITION (COMPULSORY)

(20mks)

Either

1 a) write a composition beginning with the following sentence

“The night was different from all the previous nights.....”

Or

b) Write a composition explaining the importance of co-curricular activities in achieving a wholesome education in Kenya schools.

2. QUESTION 2(COMPULSORY)

(20 mk)

Though Resian goes through the valley of death her determination leads her to a victorious life.”

Write a composition to show the validity of this assertion. Using Blossoms of the savanna.

3. SHORT STORIES

(20 mk)

Answer any one of the following

Either

a) Godwin Siundu, A Silent Songs And Other Short Stories

Action speaks louder than words. Discuss the truth of this saying using illustrations from

Leonard Kibera's A Silent Song.

Or

b) Drama David Mulwa: Inheritance

Life has a way of paying back our actions, good or bad, in full measure. Using illustrations from

Inheritance, discuss this statement.

OR

c) Artist of the Floating World, Godwin Siundu

Drawing illustrations from “**artist of the floating world**”, write an essay about the theme of loyalty.

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

KISWAHILI

102/1

PAPER 1

INSHA

TIME: 1¾ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

102/1

KISWAHILI

KARATASI YA KWANZA

MUDA: SAA 1 ¾

MAAGIZO KWA MTAHINIWA:

- a) Andika jina lako, nambari ya usajili na tarehe katika karatasi ya majibu.*
- b) Karatasi hii ina maswali manne.*
- c) Jibu maswali mawili pekee. Kila swali lina alama ishirini.*
- d) Swali la kwanza ni la lazima.*
- e) Chagua swali lingine lolote moja kutoka yale matatu yaliyosalia.*
- f) Majibu yote yaandikwe katika karatasi ya majibu uliyopewa.*

Sehemu hii imehifadhiwa kwa matumizi ya mtahini pekee.

SWALI	1	2	3	4
UPEO	20	20	20	20
ALAMA				

UPEO	40
ALAMA ZA MTAHINIWA	

MASWALI

1. Wewe ni mwanahabari mtajika nchini. Umepata fursa ya kumhoji Waziri wa Afya kuhusu njia mbalimbali za kukabiliana na maradhi yasiyo na tiba. Andika mahojiano yenu.
2. Eleza njia mbalimbali zinazofaa kuchukuliwa na serikali katika kukabiliana na migogoro ya kifamilia nchini.
3. Andika insha inayoafiki methali: **Asiyejua faida ya mwangaza aingie gizani.**
4. Tunga kisa kitakachoanza kwa maneno yafuatayo:
Hospitali ilionekana kumetameta kwa wingi wa watu...

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

KISWAHILI

102/2

PAPER 2

LUGHA

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

MAAGIZO:

- (i)** Andika jina lako, nambari yako ya usajili na darasa katika nafasi ulizoachiwa hapo juu.
- (ii)** Tia sahihi yako kisha uandike tarehe ya mtihani katika nafasi ulizoachiwa hapo juu.
- (iii)** Jibu maswali yote.
- (iv)** Majibu yote yaandikwe katika nafasi ulizoachiwa katika kijitabu hiki cha maswali.
- (v)** Majibu yote lazima yaandikwe kwa lugha ya Kiswahili

Kwa matumizi ya mtahini pekee.

	Swali	Upeo	Tuzo
A	Ufahamu	15	
B	Ufupisho	15	
C	Matumizi ya lugha	40	
D	Isimu jamii	10	
	JUMLA	80	

SEHEMU A.(Alama 15)

Soma makala yafuatayo kisha ujibu maswali

Ulimwengu unapaswa kuzuka na mbinu za kulitandarukia tatizo ambalo linakwamiza juhudi za maendeleo. Umaskini unaokabili mataifa yanayoendelea, unayatosa kwenye dhiki kubwa huku mataifa ya kimagharibi yakipiga hatua kubwa kimaendeleo. Ufa uliopo baina ya mataifa yanayoendelea na yale kama vile marekani, nchi za ulaya na ujamani unapanuka kila uchao.

Vyanzo vya umaskini huu ni anuwai mathalan, ufisadi uongozi mbaya, turathi za kikoloni, uchumi kuegemezwa kwenye kilimo kinachotegemea mvua isiyotabirika, idadi ya watu inayoupiku uwezo wa uchumi wa taifa linalohusika na ukosefu wa nyenzo na mali za kuwakwamua raia kutoka lindi la umaskini, ukosefu wa elimu na nafasi adimu za ajira huchangia pia katika tatizo hili.

Jamii ya ulimwengu inapaswa kuelea kuwa umaskini unaothiri nchi fulani una athari pana sana. Uvunjifu unaotokana na umaskini unaweza kuwa mboji ambako matendo mabaya huchipuka. Raia maskini huweza kushawishiwa haraka kujitosa kwenye matendo ya kihalifo ili kujinasua kutoka dhiki ile. Hii inaweza kuwa mbegu ya kuatika maovu kama ugaidi na uhalifu wa kila aina.

Mataifa ya magharibi yanapaswa kuyaburia madeni ya mataifa yanayoendelea kama kama njia mojawapo ya kupambana na umaskini. Asilimia kubwa ya pato la kitaifa katika mataifa mengi hutumika kuyalipa madeni hayo. Katika hali hii inakuwa muhali kwa mataifa hayo kujikwamua kutokana na pingu za umaskini. Njia nyingine ni kustahabu kutoa ruzuku za kimaendeleo badala ya mikopo kwa nchi zinazoendelea.

Kwa upande wake, mataifa yanayoendelea yanapaswa kuibuka na mikakati bora ya kupambana na umaskini. Ni muhimu pawepo na sera zinazotambua ukweli kuwa asilimia kubwa ya raia wa mataifa hayo ni maskini. Pana dharura ya kuzalisha nafasi za ajira, kupanua viwanda hususan vinavyohusiana na zaraa ambayo ni tagemeo kuu la mataifa mengi, kuendeleza elimu na kuimarisha miundo msingi. Ipo haja pia ya mataifa haya kuhakikisha kuwa mfumo wa soko huru unaotawala ulimwengu sasa hauishii kuwa chanzo cha kufa kwa viwanda asilia na kuendeleza umaskini zaidi. Kwa ufupi, maamuzi yote ya sera za kiuchumi lazima yauzingatie uhalisia wa maisha ya raia wa mataifa hayo.

Maswali:

a) Kwa nini umaskini umetamalaki katika mataifa yanayoendelea?

(alama 4)

.....

.....

.....

.....

.....

b) Madeni yana athari gani kwa mataifa yanayoendelea.

(alama 2)

.....

.....

.....

c) Ni mapendekezo yapi ambayo mwandishi anatoa kwa mataifa machanga kuhusu utatuzi wa tatizo la umaskini?

(alama 4)

.....

.....

.....

.....

.....

d) Mfumo wa soko huru una madhara gani kwa mataifa machanga

(alama 2)

.....

.....

.....

e) Ukirejelea kifungu, eleza maana ya:

(alama 3)

I.Kulitandarukia.....

II.Kuatika.....

III.Kuyaburia madeni -----

.....

SEHEMU YA B :UFUPISHO.(alama 15).

Soma taarifa ifuatayo kisha ujibu maswali yanayofuata

Kadiri jamii mbalimbali zinavyotagusana, ndivyo lugha zinazozungumzwa na jamii hizi nazo zinavyoingiliana na kuathiriana . Mojawapo ya athari hizi ni ukopaji wa msamiati kutoka kwa

lugha jirani na kuutumia kuelezea dhana mpya zinazolingia katika utamaduni wao kupitia kwa mitagusano ya kijamii.

Lugha ya Kiingereza kwa mfano, imekopa kutoka lugha nyingine kama vile Kifaransa na Kilatini. Mathalani, istilahi nyingi za kisheria zimekopwa kutoka lugha ya kifaransa. Aidha, Kiingereza kimekopa kutoka lugha ya Kiswahili. Maneno ya Kiswahili kama vile mwalimu, jiko, mandazi, panga, buibui, ngoma na hata wananchi, sasa yameingia katika kamusi za Kiingereza, kumaanisha kuwa yamekubaliwa kama msamiati rasmi wa lugha ya Kiingereza.

Kiswahili nacho kimeathiriwa na lugha nyingine. Kimekopa msamiati wa Kiingereza na hata Kiarabu. Katika tungo nyingi za kishairi, kwa mfano, utenzi wa Mwanakupona utapata msamiati wa Kiarabu uliotoholewa. Lugha nyingine ambazo zimeathiri Kiswahili ni pamoja na Kijerumani ambako msamiati kama vile ‘shule’ ulikopwa na kutoholewa kutokana na neno schule. msamiati kama vile ‘leso’, ‘karata’ na ‘mvinyo’ yamekopwa kutoka lugha ya Kireno, huku majina ‘balazi’ na ‘bahasha’ yakikopwa kutoka Kituruki.

Pamoja na ukopaji wa vipengele vya lugha, mtagusano wa lugha una athari nyingine. Lugha zinapokuja pamoja, mazingira ya wingi-lugha hazuka. Baadhi ya watu hujifunza zaidi ya lugha moja. Mtu anayeweza kuzungumza zaidi ya lugha moja anaweza kujieleza kwa urahisi kwa kuchanganya msamiati wa lugha tofauti. Aidha, anaweza kubadilisha msimbo kulingaa na matilaba yake. Ikiwa anataka kukubalika na jamii-lugha anayotagusana nayo, anatumia lugha ya jamii hiyo ili kujinasibisha nayo. Wazungumzaji hupata visawe vya maneno kuelezea dhana zile zile, hivyo kuboresha mitindio yao ya mawasiliano

Kadhalika, kutagusana kwa lugha kunaweza kusababisha kubuniwa kwa lugha ngeni ambayo inarahisisha mawasiliano. Wakati mwingine, watu wanaozungumza lugha tofauti wanapokutana, hubuni mfumo sahili wa lugha ili kufanikisha mawasiliano. Pijini ni mfano wa lugha iliyobuniwa kwa njia hii. Pijini huchota msamiati kutoka lugha zilizotagusana. Sheng ni mfano mwingine wa lugha ambayo ilibuniwa kutokana na kutagusana kwa lugha ya Kiswahili, lugha za kiasili na kiingereza.

Japokuwa kuna faida nyingi za wingi-lugha, hasara pia zipo. Mazingira ya wingi-lugha huwapa wazungumzaji fursa ya kuchagua lugha wanayotaka kuwasiliana kwayo. Katika hali hii, lugha yenye ushawishi mkubwa kijamii, kiuchumi na kisiasa ndiyo inayopendelewa zaidi. Wengi-lugha unaweza kusababisha kukweza kwa lugha moja na kudunishwa kwa lugha nyingine, mathalini. Kuwepo kwa lugha nyingi nchini kulizua haja ya kukwezwa kwa lugha ya Kiswahili huku lugha nyingine za kiasili zikipuuzwa.

Lugha hukua kwa kutumiwa. Lugha isipozungumziwa kwa muda mrefu, watu hupoteza umilisi ambao huifanya kuwa vigumu kuirithisha kwa vizazi. Lugha inaweza pia kukosa wazungumzaji ikiwa wale wanaozungumza ni wachache au ikaathiriwa na mtagusano na lugha nyingine iliyo na wachache au ikaathirisha na mtagusano na lugha nyingine iliyo na wazungumzaji wengi. Katika hali kama hii, lugha hiyo hukubaliwa na tisho la kudidimia au hata kufa. Ikiwa jamii itakosa kudhibiti sera za matumizi ya lugha yake, baadhi ya lugha zitafifia au zitakufa na kusahaulika kabisa.

a). Bila kupoteza maana,fupisha aya za kwanza tatu(maneno 50)alama 8,2mtiririko)

MATAYARISHO

.....

.....

.....

.....

.....

.....

.....

.....

.....

JIBU

.....

.....

.....

.....

.....

.....

.....

.....

.....

b) .Kwa mujibu wa taarifa hii,mtagusano wa lugha una athari gani?(maneno 30) alama 7,1mtiririko)

MATAYARISHO

.....

.....

.....

.....

.....

.....

JIBU

.....

.....

.....

.....

.....

MATUMIZI YA LUGHA (ALAMA 40)

a) Andika neno lenye muundo ufuatao wa **sauti (alama 2)**

Kipua cha kaakaa laini, irabu ya kati tandazwa, kipasuo sikhuna cha ufizi, irabu ya chini.

.....

.....

b) Taja aina mbili kuu za ala za sauti kisha utoe mfano mmoja mmoja (alama 2).

.....

.....

c) Tumia kivumishi kionyeshi cha karibu pamoja na nomino katika ngeli ya I-ZI, Kisha utunge sentensi katika ukubwa –wingi. (alama 2).

.....

.....

.....

d) Yakinisha sentesi ifuatayo katika wakati ujao hali timilifu wingi. (alama 1)

Msomi hakutuzwa siku hiyo

.....

e) Tumia mzizi –w- katika sentensi **kama (alama 2)**

i)kitenzi kisaidizi

.....

.....

.....

ii) kitenzi kishirikishi

.....

.....

f) Ainisha viambishi kwa kurejelea majukumu ya kisarufi katika neno hili (alama 3)

Alijipelekea

.....

.....

.....

.....

.....

g) Maneno yaliyopigiwa mstari yametumikaje? (alama 1)

Pahali pema pako si pema pa mwenzako.

.....

.....

h) Changanua sentensi ifuatayo kwa kielelezo cha matawi (alama 3)

Mlango umevunjwa na fundi aliyeujenga.

.....

.....

.....

.....

.....

.....

.....

.....

i) Onyesha matumizi ya chagizo ya mfanano katika sentensi (alama 2)

.....

.....

.....

j) Andika katika usemi wa taarifa. (alama 3)

“Hicho kijicho cha paka cheupe leo marufuku kwangu”alisema mzee Kambumbu.

.....

.....

k) Ainisha sentensi ifuatayo kwa kuzingatia jukumu lake. (alama 2)

Pika ugali kwa kuku kila Jumamosi ukitumia gesi.

.....

.....

.....

l) Panda ni kuatika mbegu ardhini au kuparaga mti. Andika maana nyingine mbili. (alama 2)

.....

.....

.....

m) Tunga sentensi moja ukitumia **kihishishi cha bezo** (alama 1)

.....

.....

n) Tunga sentensi na ubainishe **kijalizo** (alama1)

.....

.....

o) Tunga sentensi yenye muundo wa: (alama 3)

Kiima, kiarifa, yambwa tendwa, yambwa tendewa na yambwa ala.

.....

.....

p) Eleza maana ya msembo ufuatayo (alama1)

Piga unyende

.....

.....

q) Eleza tofauti iliyopo kati ya jozi hii ya sentensi.

(alama 1)

i)Kerubo alinikimbilia.

ii)Kerubo alinikimbilia.

.....

.....

.....

r) Weka nomino ifuatayo katika ngeli yake

(alama 1)

Mbalungi

.....

.....

s) Tumia kiungo ‘na’ katika sentensi kuonyesha

(alama1)

i)ufupisho wa nafsi ya kwanza umoja fulani

ii)kihusishi kuonyesha aliyetenda jambo fulani.

.....

.....

.....

t) Andika sentensi ifuatayo upya ukizingatia kinyume cha maneno yaliyopigiwa mstari: **(alama2)**

Ubora wa kazi zao ulifichika baada ya kuanzishwa kwa mradi ule.

.....

.....

.....

u) Tunga sentensi yenye muundo ufuatao.

(alama 2)

KN(N) + KT (T+E) + U+KN(N)+KT(T+E)

.....

.....

.....

v) Eleza matumizi ya kiambishi ‘ki’katika sentensi hii.

(alama2)

Njia hii haipitiki

.....

.....

.....

ISIMUJAMII(ALAMA 10).

a)Kwa kutumia hoja sita zilizofafanuliwa vyema, jadili tofauti zipatikanazo kati ya sajili ya maabadini na ile ya mahirimu.

(alama 6)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

b)Sajili za lugha huwa na umuhimu anuwai.Thibitisha ukweli wa kauli hii kwa kutumia hoja nne.

(alama 4)

.....

.....

.....

.....

.....

.....

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

KISWAHILI

102/3

PAPER 3

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

MAAGIZO

- a) Jibu maswali manne pekee.
- b) Swali la kwanza ni la lazima
- c) Maswali hayo mengine matatu yachaguliwe kutoka sehemu nne zilizobaki yaani; Riwaya Hadithi fupi, Tamthilia na Ushairi.
- d) Usijibu maswali mawili kutoka sehemu moja.
- e) Majibu yote yaandikwe kwa lugha ya Kiswahili

KWA MATUMIZI YA MTAHINI PEKEE

Swali	Upeo	Alama
1	20	
	20	
	20	
	20	
	Jumla	

SEHEMU YA A:

1. LAZIMA. FASIHI SIMULIZI

- a) Eleza vitambulisho vya mtambaji bora wa hadithi. (alama 4)
b) Fanani huihusisha hadhira kwa njia gani? (alama 4)
c) Eleza mbinu mlumbi anazoweza kutumia ili afanikishe uwasilishaji wa ulumbi (alama 12)

SEHEMU YA B: JIBU SWALI LA 2 AU LA 3.

TAMTHILIA : BEMBEA YA MAISHA

2. Eleza namna **maudhui** ya **ndoa** yameshughulikiwa katika tamthilia nzima **alama 20**
3. "*Asijejua safari ya Sara na Yona akielezwa huiona kama filamu.*"
- (a) Eleza muktadha wa dondoo hili (alama4)
(b) Eleza bainisha viwili vya kimtindo katika dondoo hili (alama2)
(c) Eleza sifa za msemewa (alama4)
(d) Jadili namna msemaji amechangia katika kuendeleza Ploti na maudhui (alama10)

SEHEMU YA C.

4. Ushairi: Jibu swali la 4 au la 5

Soma shairi lifuatalo kisha ujibu maswali yafuatayo.

Nyoosha mkono, uviringe ngumi, unyanyuwe kwa hasira.

Nyoosha mkono, sema huntumi, ila haki ujira.

Nyoosha mkono, alama ya kukataa.

Alama ya nguvu

Nyoosha mkono, na macho makali, uwaonyeshe kukerwa

Nyoosha mkono , wataka halali , kwamba hutaki kuporwa

Nyoosha mkono, alama ya kukataa

Alama ya nguvu.

Nyoosha mkono, umekula njama, uyakatae madhila

Nyoosha mkono, nyanyua kwa hima, watambue hukulala

Nyoosha mkono, alama ya kukataa

Alama ya nguvu.

Nyoosha mkono, jiunge umoja, na wateswaji wenzako

Nyoosha mkono, mwonyeshe miuja, yaondoke masumbuko

Nyoosha mkono, alama ya kukataa

Alama ya nguvu.

Nyoosha mkono, ivume sauti, inayojaa kitisho

Nyoosha mkono, mumejizatiti kwa mengi maamrisho

Nyoosha mkono,alama ya kukataa
Alama ya nguvu.

Nyoosha mkono, mumeshikamana, huo ukuta wa chuma
Nyoosha mkono, kitisho hakuna , wao watarudi nyuma
Nyoosha mkono, alama ya kukataa
Alama ya nguvu.

Maswali

- a) Bainisha bahari tatu zinazojitokeza katika shairi. (alama 3)
- b) Andika ujumbe mkuu unaojitokeza katika shairi hili. (alama 4)
- c) Andika ubeti wa pili kwa lugha ya nathari. (alama 4)
- d) Onyesha tamathali mbili za lugha zilizotumiwa. (alama 2)
- e) Bainisha kwa njia tatu ni vipi mtunzi amefanikiwa kutumia uhuru wa kishairi . (alama 3)
- f) Tambua toni ya shairi hili (alama 1)
- g) Eleza maana ya maneno yafuatayo kama yalivyotumiwa katika shairi hili. (alama 2)
- i) Madhila
- ii) Jizatiti

AU

5. Soma shairi lifuatalo kisha ujibu maswali.

MWANA

1. Kwani mamangu, u ng'ombe, au punda wadobi?

Nakuuliza usambe, nayavunja madhehebi

Nalia chozi kikombe, uchungu wanisibabi

Hebu nambie

Kweli jaza ya kiumbe, ni madhila na mapigo?

MAMA

2. Nong'ona mwana, nong'ona, nikaumiza umiyo

Sinipe kuja sonona, kwa uchungu na kiliyo

Babayo mkali sana, kubwa pigo la babayo

Kwani kelele kunena, huyataki maishiyo?

Hilo nakwambia

MWANA

3. Sitasakamwa kauli, nikaumiza umiyo

Nikabeba idhilali, ikautweza na moyo

Siuvuwati ukweli, hazidisha gugumiyo

Baba hafanyi halali, nawe hwachi vumiliyo

Hebu niambie

Kweli jaza ya kiumbe, ni madhila na mapigo?

Nambie ipi sababu, ya pweke, kwenda kondeni
Nini ya, matulubu, kulima hadi jioni?
Na jembe ukidhurubu, ukilitua guguni
Yu wapi wako, muhibu, Baba kwani simuoni?
Hebu niambie
Kweli jaza ya kiumbe, ni madhila na mapigo?

Baba kwani simuoni, kuelekea shambani?
Kutwa akaa nyumbani, na gumzo mtaaani
Hajali hakuthamini, wala haoni huzuni
Mwisho haya ni nini, ewe mama wa imani?
Hebu niambie
Kweli jaza ya kiumbe, ni madhila na mapigo?

Na kule kondeni kwako, ukatekuni kwa shoka
Ufunge mzio wako, utosini kujitwika
Kwa haraka uje zako, chakula upate pika
Ukichelewa vituko, baba anakutandika Hebu niambie
Kweli jaza ya kiumbe, ni madhila na mapigo?

Chakula kilicho ndani, ni jasho lako hakika
Kisha mbioni, wapita kupokapoka
Urudi nje mekoni, uanze kushughulika
Ukikosa kisirani, moto nyumbani wawaka Hebu niambie
Kweli jaza ya kiumbe, ni madhila na mapigo?

MAMA

Wanitonesha kidonda, cha miaka na miaka
Usidhani nayapenda, madhila pia mashaka
Nakerwa na yake inda, na sasa nimeshachoka
Ninaanza kujipinda, kwa mapambano hakika
Hilo nakwambia.

Maswali

- a) Mtunzi wa shairi hili alikuwa na dhamira gani katika kutunga shairi hili. (alama 2)
- b) Shairi hili ni la aina gani? Toa ithibati. (alama 2)
- c) Yataje mambo yoyote matano anayoyalalamikia mwana. (alama 5)
- d) Eleza kanuni zilizotumika kusarifu ubeti watatu. (alama 5)
- e) Andika ubeti wa nane kwa lugha tutumbi (alama 4)
- f) Eleza maana ya maneno haya yalivyotumika katika shairi hili
- i) Jaza (alama 1)
- ii) Muhibu (alama 1)

SEHEMU YA D: HADITHI FUPI: Mapambazuko ya Machweo na hadithi nyingine.

Jibu swali la 6 au la 7.

6. Miti katika misitu ilizidi kuangamizwa kwa makali ya shoka lakini miti ilizidi kulifurahia shoka...miti ikafikiri shoka ni mmoja wao!" (alama 20)

7.

a) Kwa kuzingatia hadithi ya **harubu ya maisha**, jadili changamoto zinazokumba **asasi ya ndoa**. (alama 5)

b) Kwa kuzingatia hadithi ya harubu ya maisha, fafania matatizo yanayowakumba wafanyikazi. (alama 10)

c) Jadili dhana ya utatu inavyojitokeza katika diwani ya mapambazuko ya machweo na hadithi nyingine. (alama 5)

SEHEMU YA E: RIWAYA

8. CHOZI LA HERI

“Dada Umu, Di, ni mimi, Ni ndugu yenu. Ni hai. Auntie Sauna alishikwa na polisi.”

a) Weka dondoo hili katika muktadha wake. (alama 4)

b) Fafania sifa tatu za **msemaji** (alama 6)

c) Taja tamathali moja iliyotumika katika dondoo. (alama 2)

d) Kwa nini Auntie Sauna alishikwa na polisi? Eleza kikamilifu. (alama 8)

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

AGRICULTURE

443/1

PAPER 1

TIME: 2 HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES:

- Write your **name** and **index number** in the space provided.
- **Sign** and **write the date** of examination in the space provided
- This paper consists of three section **A, B** and **C**.
- Answer all questions in section **A** and **B**.
- Answer any two questions in section **C**
- All the questions should be answered in the spaces provided.

FOR EXAMINERS USE ONLY

SECTION	QUESTINS	MAX SCORE	CANDIDATES SCORE
A	1-16	30	
B	17-20	20	
C	21	20	
	22	20	
	23	20	
TOTAL		90	

SECTION A (30MARKS)

Answer all the questions in this section in the space provided.

1. Give four advantages of intensive farming. (2mks)

.....

.....

.....

.....

2. State **four** benefits of agroforestry to a maize crop. (2mks)

.....

.....

.....

.....

.....

3. Name the plant part used for vegetative propagation of each of the following plants.

- (i) Sisal (½ mk)

.....

- (ii) Pyrethrum (½ mk)

.....

- (iii) Sweet potatoes (½ mk)

.....

- (iv) Sugar cane (½ mk)

.....

4. State four cultural ways of controlling couch grass (2mks)

.....

.....

.....

.....

5. Name three sources of underground water

(1½mks)

.....

.....

.....

6. State three causes of blossom end of rot in tomatoes

(1½mks)

.....

.....

.....

7. Give three qualities of a good green manuring plant

(1½mks)

.....

.....

.....

8. State **four** reasons for practicing minimum tillage.

(2mks)

.....

.....

.....

.....

9. Name **four** farm records that should be kept by a poultry farmer.

(2mks)

.....

.....

.....

.....

10. Give **three** ways in which pastures are classified

(1½mks)

.....

.....

.....

11. State **four** ways in which land reforms can be implemented in Kenya. (2mks)

.....

.....

.....

.....

.....

12. State **four** factors that determine the stage at which a crop is harvested. (2mks)

.....

.....

.....

.....

13. Give **four** beneficial effects of weeds to a farmer. (2mks)

.....

.....

.....

.....

.....

14. Give four advantages of practicing crop rotation. (2mks)

.....

.....

.....

.....

15. Name four methods of controlling pests. (2mks)

.....

.....

.....

.....

16. Distinguish between intensive hedgerow and border planting forms of **agroforestry** (2mk)

.....

.....

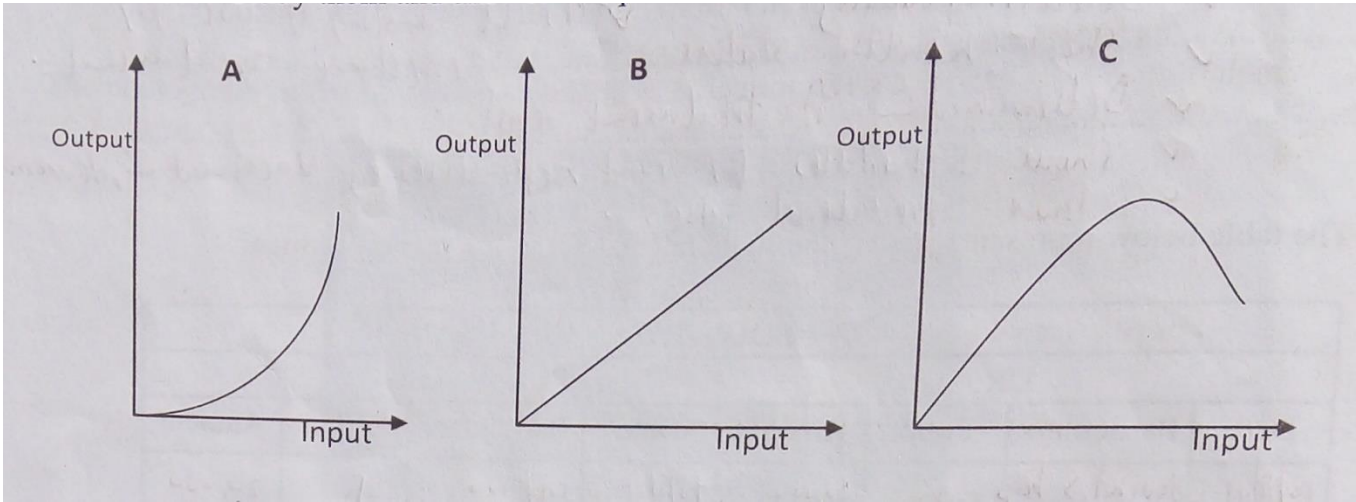
.....

.....

SECTION B (20 MARKS)

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

17. The following illustrations show different production function curves in agricultural economics. Study them and answer the questions which follows;



(a) Identify the production function curves labeled A, B and C

A (1mk)

B (1mk)

C (1mk)

(b) What does the law derived from the production function labeled C state? (1mk)

.....

.....

(c)

(i) Which one of the three production functions curves is rare in **Agriculture** (1mk)

.....

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

.....

18. The table below shows the population and gross domestic products of countries A and B

Country	Gross Domestic product (million Ksh)	Population (million)
A	1800	36
B	1200	15

(a) Calculate the per capita income for each country show your working (2mks)

.....

.....

.....

(b) Which of the two countries is more developed economically (1mk)

.....

(c) Give a reason for your answer in (b) above (1mk)

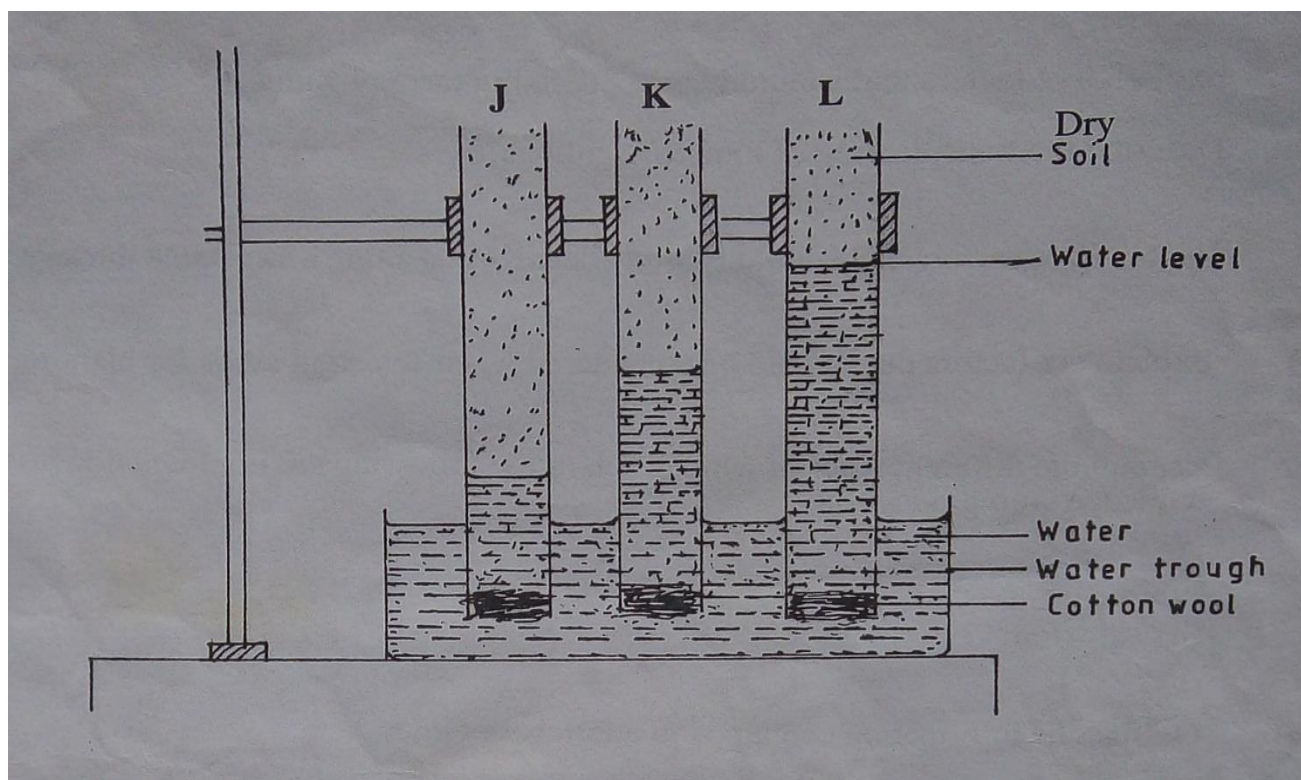
.....

(d) How can agriculture increase the gross domestic product of a country (1mk)

.....

.....

19. The diagram below illustrate investigation on a property of soil using soil samples labeled J, K and L.



(a) Name the property of soil being investigated (1mk)

.....

(b) What is the relationship between the soil property above and the size of soil particles? (1mk)

.....

.....

(c) Which soil sample would be suitable for growing paddy rice? (1mk)

.....

(d) Give a reason for your answer in (c) above (1mk)

.....

20. The following is a list of nutrients: copper, calcium, nitrogen, molybdenum, zinc, phosphorus, carbon, sulphur, iron and magnesium. Which of the above nutrients are;

(a) Macro – nutrients (1mk)

.....

(b) Micro – nutrient (1mk)

.....

(c) Fertilizer elements (1mk)

.....

(d) Liming elements (1mk)

.....

(e) Primary macro nutrients (1mk)

.....

SECTION C

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

21.

(a) Explain five functions of a live fence in a farm. (5mks)

(b) Describe various risks and uncertainties in crop farming (10mks)

(c) State five functions of young farmers clubs in Kenya (5mks)

22.

- (a)** Explain five factors that should be considered in farm planning **(10mks)**
- (b)** Explain the different ways in which each of the following environmental factors influence crop production.
 - (i)** Wind **(5mks)**
 - (ii)** Temperature **(5mks)**

23.

- (a)** Outline the information contained in a purchase order. **(5mks)**
- (b)** Describe the harvesting of tea **(7mks)**
- (c)** Explain the cultural methods of controlling soil erosion **(8mks)**

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

AGRICULTURE

443/2

PAPER 2

TIME: 2 HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES:

- Write your **name** and **index number** in the space provided.
- **Sign** and **write the date** of examination in the space provided
- This paper consists of three section **A, B** and **C**.
- Answer all questions in section **A** and **B**.
- Answer any two questions in section **C**
- All the questions should be answered in the spaces provided.

FOR EXAMINERS USE ONLY

SECTION	QUESTINS	MAX SCORE	CANDIDATES SCORE
A	1-21	30	
B	22-24	20	
C	25	20	
	26	20	
	27	20	
TOTAL		90	

SECTION A (30MARKS)

Answer all the questions in this section in the space provided.

1. Give **four** signs of ill health in livestock. (2mks)

.....

.....

.....

.....

2. List **four** materials that can be used in the construction of Kenya top bar hive. (2mks)

.....

.....

.....

.....

3. State **four** management practices carries out on a cows during parturition. (2mks)

.....

.....

.....

.....

4. Name four methods of controlling Newcastle disease in chicken (2mks)

.....

.....

.....

.....

5. State the role of the following practices when rearing piglets

- (i) Iron injection. (½mks)

.....

- (ii) Tooth clipping (½mks)

.....

6. State **two** functions of fats and oils in animals body. (1mk)

.....

.....

7. State **two** functions of a queen bee in a colony (1mk)

.....

.....

8. Name **four** species of fresh water fish reared in Kenya. (2mks)

.....

.....

.....

.....

9. State **two** forms in which tapeworms are found in livestock (1mk)

.....

.....

10. Give the distinguishing colour for each of the following breeds of livestock

(i) Chinchilla rabbit (½mks)

.....

(ii) Toggen burg goat (½mks)

.....

11. State **two** functions of ventilation in an animal house (2mk)

.....

.....

12. Give **two** reasons for using litter in a poultry house. (2mk)

.....

.....

13. State **one** role of each of the following ingredients as used in preparation of artificial colostrums. (2mks)

Castor oil

.....

(a) Cod liver oil

.....

14. State four reasons for breeding animals. (2mks)

.....

.....

.....

.....

15. State the functions of each of the following

(a) Shovel (½mks)

.....

(b) Strip cup (½mks)

.....

16. Why is it necessary to have guard rails in a farrowing pen? (1mk)

.....

.....

17. Distinguish between the following practices as used in livestock production.

(a) Cropping and harvesting in fish farming (1mk)

.....

.....

.....

(b) Crutching and ringing in sheep management (1mk)

.....

.....

.....

18. State three instances when a bee keeper may handle bees. (1½mks)

.....

.....

.....

19. State three functions of rumen in ruminant animals (1½mks)

.....

.....

.....

20. Give two signs that indicate that a cow has died of anthrax. (1mk)

.....

.....

21. Why is it raddling essential in sheep management. (1mk)

.....

.....

SECTION B (20 MARKS)

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

22.

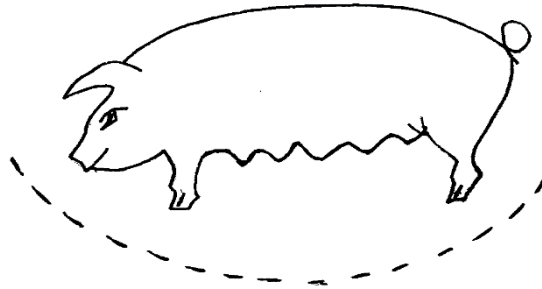
- (a) If the maize meal contains 60% digestable crude protein (DCP) and Fish contains (64% DCP, calculate the amount of each feed stuff in Kilogrammes required to prepare 200kg of chickmash containing 18% DCP. (4mks)

(b) Name two other feed ingredients which should be added to the chick mash to make it a balanced diet. (2mks)

.....

.....

23. The figure below is a pig with some body paints. Study it and answer the questions that follow.



(i) A farmer wants to select a breeding stock. State the three physical qualities the farmer should assess in order to select a pig. (3mks)

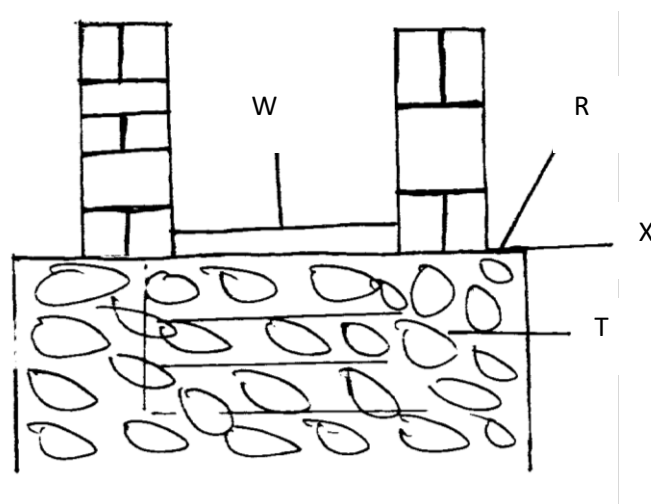
.....

.....

.....

.....

b) Study the illustration below of a hard flow foundation in a farm structure.



i) Name the parts labeled Rand T (2mks)

.....

.....

ii) State three advantages of concrete floor. (3mks)

.....

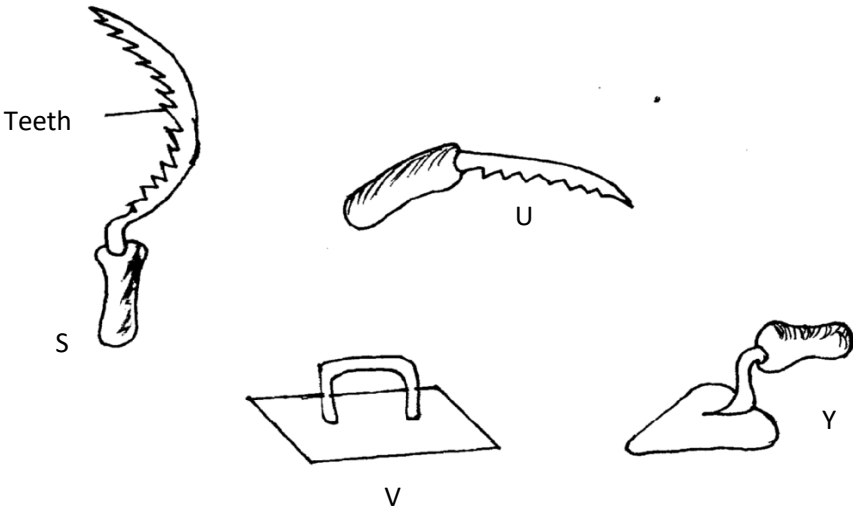
.....

.....

.....

.....

24. The diagram below represents some farm tools



(a) State the use of each tool on the farm. (4mks)

S.....

U.....

V.....

Y.....

(b) Explain two maintenance practices that should be carried out on the teeth of tools in the diagram. (2mks)

.....

.....

.....

.....

SECTION C

Answer any two questions in this section in the spaces provided after question 26.

25.

- (a) Explain the factors considered when culling livestock. (5mks)
- (b) Explain five factors considered when siting a cattle dip. (5mks)
- (c) Give four conditions necessary for artificial incubation. (4mks)
- (d) Outline the factors a farmer should consider to ensure fast and efficient cultivation by oxen. (6mks)

26.

- (a) Describe East Coast Fever (ECF) under the following sub headings.
 - (i) Animal attacked (1mk)
 - (ii) Causal organism (1mk)
 - (iii) Signs of infection (5mks)
 - (iv) Control measures (3mks)
- (b) Explain seven factors that affect milk composition in a dairy farming. (7mks)
- (c) State the advantages of a four stroke engine over a two stroke engine oil. (3mks)

27.

- (a) Describe the feeding practices in artificial rearing of a dairy calf. (10mks)
- (b) Describe the life cycle of a three host tick. (10mks)

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM BUSINESS STUDIES

565/1

PAPER 1

TIME: 2 HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

- (a)** Write your name and index number in the spaces provided above.
- (b)** Sign and write the date of the examination in the spaces provided above.
- (c)** This paper consists of 25 questions.
- (d)** Answer ALL questions in the spaces provided

FOR EXAMINER'S USE ONLY

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

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

TOTAL MARKS

Answer ALL questions in the spaces provided

1. State four elements of economic environment which affect business positively. (4mks)

.....

.....

.....

.....

2. Outline four reasons, which make it difficult to satisfy human wants. (4mks)

.....

.....

.....

.....

3. Give four reasons why Kenya has few entrepreneurs. (4mks)

.....

.....

.....

.....

4. Outline four reasons why the government may train traders. (4mks)

.....

.....

.....

.....

.....

5. Name four recent trends in the transport sector in Kenya. (4mks)

.....

.....

.....

.....

6. State four benefits of advertising products in the face book. (4mks)

.....

.....

.....

.....

.....

7. Outline four factors which cause supply curve to shift to the left. (4mks)

.....

.....

.....

.....

8. State the effect of the following transactions on the balance sheet totals. (4mks)

- a) Payment to a creditor_____
- b) Receipts from a debtor_____
- c) Addition of capital_____
- d) Purchase of an asset on credit_____

9. Give four errors that will make trial balance totals not to agree. (4mks)

.....

.....

.....

.....

.....

10. Give four external diseconomies of scale. (4mks)

.....

.....

.....

.....

11. Give four features of monopoly. (4mks)

.....

.....

.....

.....

12. Outline four limitations of national income statistics as a measure of the standards of living. (4mks)

.....

.....

.....

.....

.....

13. Outline four problems associated with under population. (4mks)

.....

.....

.....

.....

14. Outline four merits of indirect taxes. (4mks)

.....

.....

.....

.....

15. Outline four challenges that faces direct production. (4mks)

.....

.....

.....

.....

16. Outline four features of fixed deposit account. (4mks)

.....

.....

.....

.....

17. Outline four measures that central bank may put in place to reduce high inflation in a country. (4mks)

.....

.....

.....

.....

.....

18. Outline four problems experienced by the East African Community.(EAC). (4mks)

.....

.....

.....

.....

.....

19. The following information relates to Mwangi Traders for the period ended 31st March 2023.
Shs.

Sales 1,000,000

Opening Stock 100,000

 Closing Stock 25% of cost of goods sold

 Gross profit Margin 20%

Prepare a trading account of Mwangi Traders for the period ended 31st March 2023. (4mks)

20.State four benefits of electronic filing. {4mks}

.....

.....

.....

.....

21. Under what four circumstances would deferred payment be appropriate. (4mks)

.....

.....

.....

.....

22.Outline four benefits that accrue to a person who joins savings and credit co-operative Society. (4mks)

.....

.....

.....

.....

23. For each of the following transactions below indicate in the spaces provided the source document from which the transaction would be recorded.

Transactions	Source Document
a) Sales of goods on credit	
b) Purchase of goods on credit	
c) Goods returned	
d) Correction of an undercharge	

24. Identify the insurance terms described below:

Description	Term
An interim document issued to the insured after payment of the first premium	
Amount refundable to the assured on terminating a life policy prematurely	
Restoration of the insured who suffers Loss to his former financial position	
Insurance Company insuring itself with another insurance Company	

25. The following transactions relates to Patel traders as at 31.Dec.2022.

Bank overdraft	-	100,000
Rent received	—	200,000
Salaries	—	100,000
Creditors	—	50,000
Cash	-	40,000
Discount allowed	-	40,000
Discount received	-	30,000
Commission allowed	—	30,000
Commission received	—	10,000
Furniture	-	150,000
Drawing	—	10,000

Return outwards — 50,000

Required: A trial balance

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

BUSINESS STUDIES

565/2

PAPER 2

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

- (a) Write your name and index number in the spaces provided above.*
- (b) Sign and write the date of the examination in the spaces provided above.*
- (c) This paper consists of 6 questions.*
- (d) Answer ANY FIVE questions in the spaces provided*

FOR TEACHER'S USE ONLY

Question	Maximum Score	Candidate's Score
	20	
	20	
	20	
	20	
	20	
	Total Score	

Answer ANY FIVE questions in the spaces provided

- 1 a) Explain **five** limitations of small scale retailers. (10mks)
b) African countries are considered to be underdeveloped. Explain five characteristics of such countries. (10mks)

- 2 a) **Explain five** factors that may lead to high consumptions of fruits. (10mks)
b) **Explain five** benefits of insurance industry to the economy. (10mks)

- 3 a) **Explain five** challenges that a trader who relies on rented warehouse may experience. (10mk)
b) The following information was extracted from the books of Economy traders in the month of March 2022.

1/3 Cash in hand 40,000 and bank overdraft 12,000.

3/3 Cash sales paid direct to the bank Shs.7,000.

5/3 Credit sales to Mugo Shs.10,000.

7/3 Received a cheque of Shs,9,000 from a debtor in full settlement of his account of Shs.10,000.

8/3 Deposited Shs.3,000 from cash till into the business bank account.

9/3 Paid for repairs in cash Shs.1,200.

10/3 Mwala a debtor settled his account of Shs,25,000 by cheque less 3% cash discount.

20/3 Withdrew Sh.1,300 from bank for personal use.

29/3 Deposited all cash except Shs. 2,300.

Required:

Prepare a duly balanced three column cash book. (10mks)

4a) Explain five factors that will motivate an entrepreneur to implement a business idea. (10mks)

b) Explain five reasons why the government requires public finance. (10mks)

5a) Outline five differences between a partnership and a cooperative society. (10mks)

b) Describe five methods that can be used to discourage trade between two countries. (10mks)

6a) Explain five benefits of national income statistics to a country. (10mks)

b) The following trial balance was extracted from the books Kieni traders as at 31st Dec 2022.

Kieni Traders

Trial balance

As at 31st Dec 2022

Details	Dr	Cr
Fixed Assets	292,600	
Current Assets	78,000	
Rent Income		23,000
Discount	3,000	2,000
General Expenses	89,000	
Carriage inwards	28,000	
Purchases /Sales	280,000	474,000
Returns	4,600	7,000
Stock 1/1/2022	460,000	
Drawings	33,000	
Current Liabilities		53,000
Capital		709,200
	1,268,200	1,268,200

Stock on 31st Dec, 2022 was Shs,54,000.

Required:

- i) Prepare trading, profit and loss account for the year ending 31st Dec 2022. (8mks)
- ii) Calculate working capital. (2mks)

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

CHEMISTRY

231/1

PAPER 1

THEORY

TIME: 2 HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

- Write your name and index number in the spaces provided.
- Answer **all** questions in the spaces provided
- KNEC mathematical tables and silent electronic calculators **may** be used for calculations.
- All workings **must** be clearly shown where necessary.
- Candidates should check the question paper to ascertain all the pages are printed as indicated

FOR EXAMINERS USE ONLY

Questions	Maximum Score	Students Score
1-28	80	

Answer **all** questions in the spaces provided

1. A certain element Y has atomic number 15 and mass number of 31.

a) How many electrons are in this element? (1mk)

.....
.....

b) Write the electron arrangement of the ion formed by element Y. (1mk)

.....

c) How would the atomic size of the above element compare with another atom X whose atomic number is 11 and mass number 23? Explain. (2mks)

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

2. Explain why the pH of 1.0 M hydrochloric acid is 2.0 while that of 1.0M ethanoic acid is 5.0. (2mks)

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

3. Ethanedioic acid (COOH)₂ is used instead of methanoic acid (HCOOH) to prepare carbon (II) oxide in the laboratory. It gives equal volume of carbon (II) oxide and carbon (IV) oxide.

a) If water is one of the products write an equation for the dehydration of elthanedioic acid. (1mk)

.....
.....

b) How can pure carbon (II) oxide be obtained from the mixture of the two gases? (2mks)

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

4. State the Charles' law. (1mk)

.....
.....

b. A volume of 120cm^3 of nitrogen gas diffused through a membrane in 40 seconds, how long will 180cm^3 of carbon (IV) oxide take to diffuse through the same membrane? (2mks)

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

5. A solution of chlorine in tetrachloromethane turns colourless when propene gas is bubbled through it.

a) What type of reaction takes place? (1mk)

.....

b) Write an equation for the above reaction. (1mk)

.....

c) State one use of ethane gas. (1mk)

.....

6. Study the information in the table below then answer the question that follow.

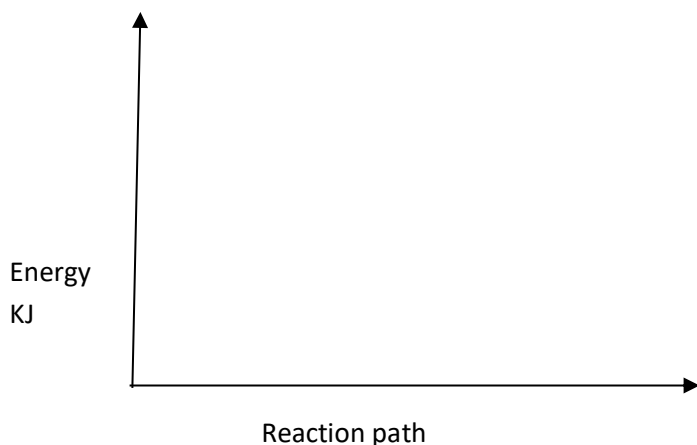
<i>Bond</i>	<i>Bond energy (KJmol^{-1})</i>
H – H	435
Cl – Cl	243
H – Cl	431

a) Calculate the enthalpy change for the following reaction. (2mks)



b) On the axis given below draw an energy level diagram for the reaction above.

(1mk)



7. 22.2cm³ of sodium hydroxide solution, containing 4.0 g per litre of sodium hydroxide were required for complete neutralization of 0.1g of a dibasic acid. Calculate the relative formula mass of the dibasic acid. (Na = 23.0, O= 16.0, H= 1.0)

(3mks)

.....

.....

.....

.....

.....

8. The melting and boiling point of molecular substances increase with increase in relative molecular mass. Explain why water with a lower relative molecular mass of 18 has a higher boiling point of 100°C than hydrogen sulphide with relative molecular mass of 34 and a boiling point of -61°C.

(2mks)

.....

.....

.....

.....

9. In an experiment to determine the solubility of solid Y in water at 30°C the following results were obtained:

Mass of evaporating dish = 26.2.

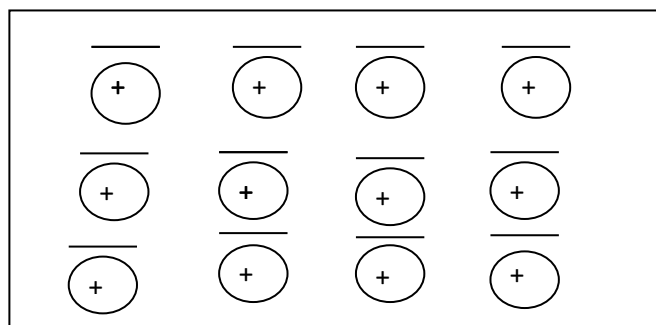
Mass of evaporating dish + saturated solution = 42.4g

Mass of evaporating dish + dry solid Y = 30.4g

Using the information, determine the solubility of solid Y at 30°C in grams per 100g. (2mks)

10. A, B, C and D are dyes present in a mixture. C is more soluble than B. A is more soluble than C while D is the least soluble in a given solvent. Draw a round paper chromatogram showing how they would appear when separated using the solvent. (2mks)

11. The diagram below shows a section of a model of the structure of element T.



Key



Charged nucleus



An electron

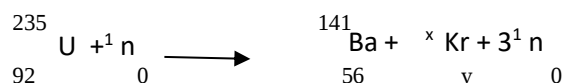
a. State the bonding type that exists in element T. (1mk)

.....

b. In which group of the periodic table does element T belong? Give a reason. (1mk)

.....

12. Determine the values of the scalars X and Y in the nuclear equation shown below.



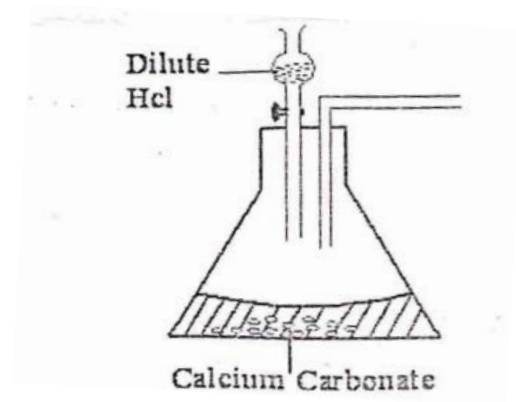
b. State one application of this type of reaction. (1mk)

.....

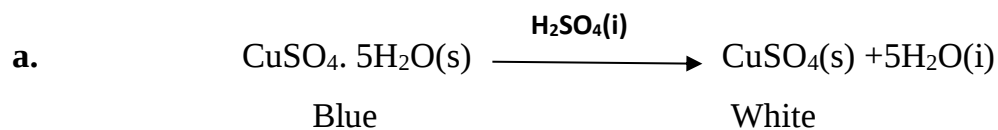
c. State one danger associated with exposure of human beings to radioactive substances. (1mk)

.....

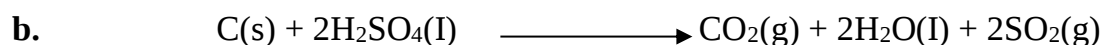
13. The diagram below shows an incomplete set up of the laboratory preparation of dry carbon (IV) oxide. Complete it. (2mks)



14. Write down the property of concentrated sulphuric (VI) acid shown in the following reaction. (2mks)



.....



.....

15. When excess chlorine gas is bubbled through dilute sodium hydroxide solution, the resulting solution acts as a bleaching agent.

a) Write an equation for the reaction between chlorine gas and sodium hydroxide solution. (1mk)

.....

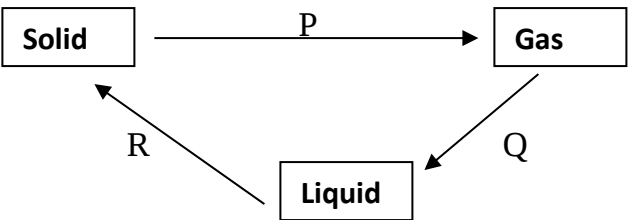
b) Explain how the resulting solution acts as a bleaching agent. (2mks)

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

16. An element P has a relative atomic mass of 88. When a current of 0.5 amperes was passed through the fused chloride for 32.16 minutes, 0.44g of P were deposited at the cathode. Determine the charge on an ion of P. (1 F = 96500 coulombs) (3mks)

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

17. Matter exists in three states which can be related as shown in the diagram below.



a) Name processes P and R. (2mks)

P.....

R.....

b) Explain whether process Q is exothermic or endothermic.

(1½ mks)

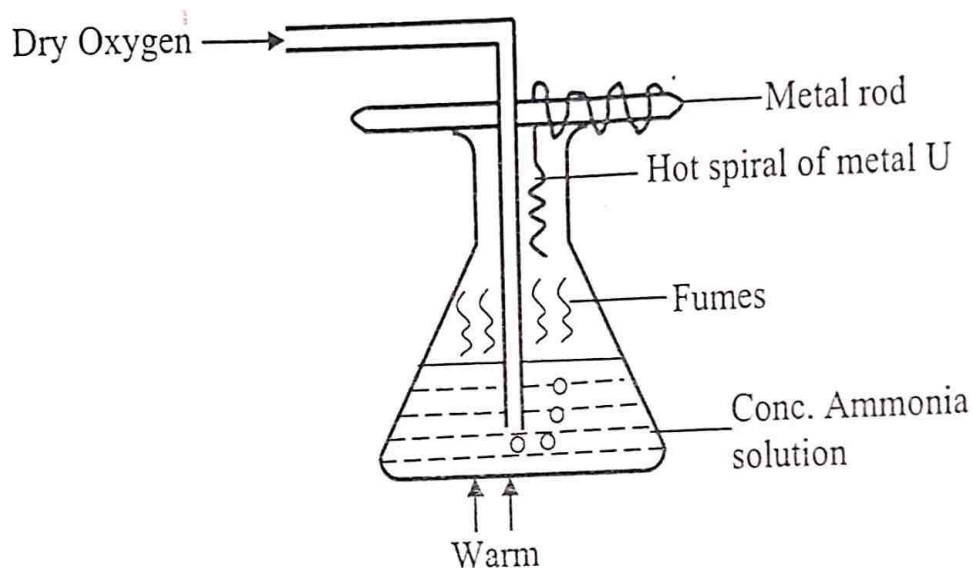
.....

.....

.....

.....

18. Study the diagram below.



a) Give the most likely identity of metal U.

(1mk)

.....

b) State two observations made in the conical flask.

(2mks)

.....

.....

.....

c) Write an equation for the reaction which took place between ammonia and oxygen inside the flask.

(1mk)

.....

.....

.....

19. In an experiment, soap solution was added to three separate samples of water. The table below shows the volumes of soap solution added in order to form lather with 1000cm³ of each samples before and after boiling.

	Sample I	Sample II	Sample III
Volume of soap added to unboiled sample (cm ³)	27.0	3.0	10.6
Volume of soap added after boiling the sample (cm ³)	27.0	3.0	3.0

a) Identify the sample that was likely to be soft water. Explain. (1mk)

.....

.....

b) Explain the change in the volume of soap solution in sample III. (1mk)

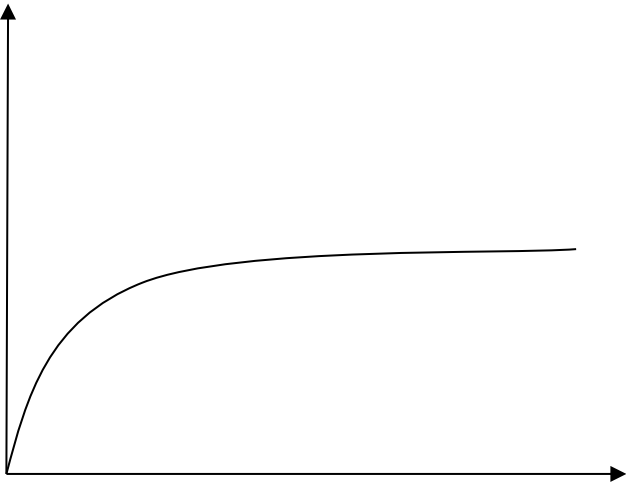
.....

.....

c) Give one disadvantage of hard water. (1mk)

.....

20. In an experiment to monitor the rate of reaction of magnesium and hydrochloric acid a student recorded the volume of hydrogen produced at regular time intervals and obtained the graph shown below.



- a) On the same set of axes sketch the curve expected if the experiment is repeated with a few crystals of copper (II) sulphate added to the reactants. (1mk)
- b) Explain the shape of your curve. (1mk)

.....

.....

- c) State the factor that can increase the rate of a reaction. (1mk)

.....

21. The grid below is a section of the periodic table. Study it and answer the questions that follow.

	A						D		
B				C			F		
E									

- a) State the name given to the family of B and E. (1mk)

.....

- b) Identify the most reactive metal. (1mk)

.....

- c) Which type of bond exists in the compound formed by A and F. Explain. (1 ½ mks)

.....

.....

.....

22. Write the formula of the chief ore (bauxite) from which aluminum is extracted. (1mk)

.....

- b. Explain the role of molten cryolite in aluminum smelting. (1mk)

.....

.....

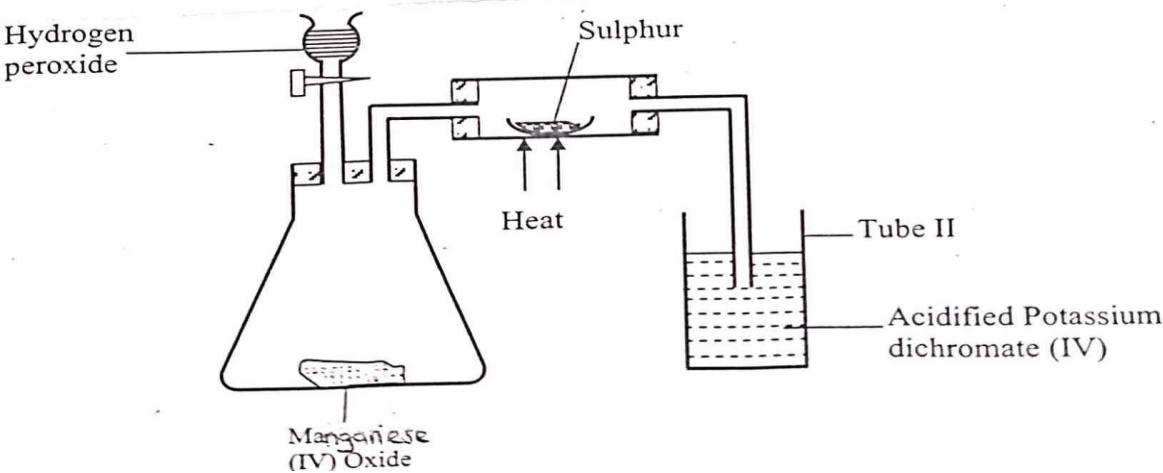
23. Aluminum does not apparently react with dilute nitric (V) acid to liberate hydrogen gas.

Explain. (1mk)

.....

.....

24. Study the diagram below.



a) State the role of manganese (IV) oxide in the set up shown above. (1mk)

.....

b) State and explain the observation made in tube II. (2mks)

.....

.....

.....

25. Two manila papers were placed at different levels of a non- luminous flame. Paper A was placed at the lowest part of the flame, while B was placed at the top.

a) Indicate the observations made on each manila paper. (1mk)

.....

.....

b) Explain the observation made on paper A. (1mk)

.....

.....

26. Starting with 50cm³ of 2.8M sodium hydroxide, describe how a sample of pure sodium sulphate crystals can be prepared. (3mks)

.....

.....

.....

.....

.....

27. In an experiment to determine the percentage of magnesium hydroxide in an anti-acid a solution containing 0.5g of the anti-acid was neutralized by 23.0cm³ of 0.10M hydrochloric acid. Given the relative formula mass of magnesium hydroxide is 58. Calculate the:

a) Mass of magnesium hydroxide in the anti-acid. (2mks)

.....

.....

.....

.....

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

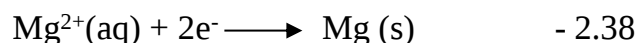
.....

.....

.....

28. Study the standard electrode potentials in the table below and answer the questions that follow.

EΘvolts



a) Which of the metals is the strongest reducing agent? (1mk)

.....

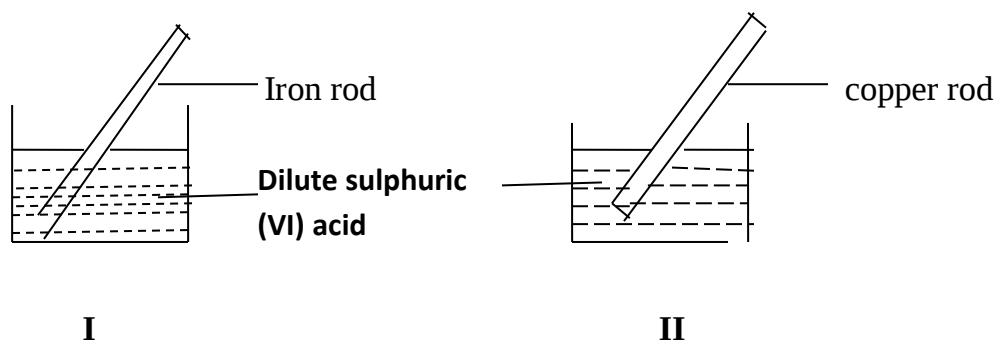
b) What observations will be made if a silver coin is dropped into an aqueous solution of copper (II) sulphate? Explain. (2mks)

.....

.....

.....

29. A student used the figure below to investigate the action of dilute sulphuric (VI) acid on some metals. Beaker I and II contained equal volumes of dilute sulphuric (VI) acid. To beaker I, a clean iron rod was dipped and to beaker II, a clean copper rod was dipped.



a) Describe the observations made in each beaker.

Beaker I (1mk)

.....

Beaker II (1mk)

.....

b) Explain observations in (a) above. (1mk)

.....

.....

.....

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

CHEMISTRY

231/2

PAPER 2

THEORY

TIME: 2 HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES.

- Write your name and index number in the spaces provided above.
- Answer **ALL** the questions in the spaces provided.
- Mathematical tables and silent electronic calculators may be used.
- All working **MUST** be clearly shown where necessary.

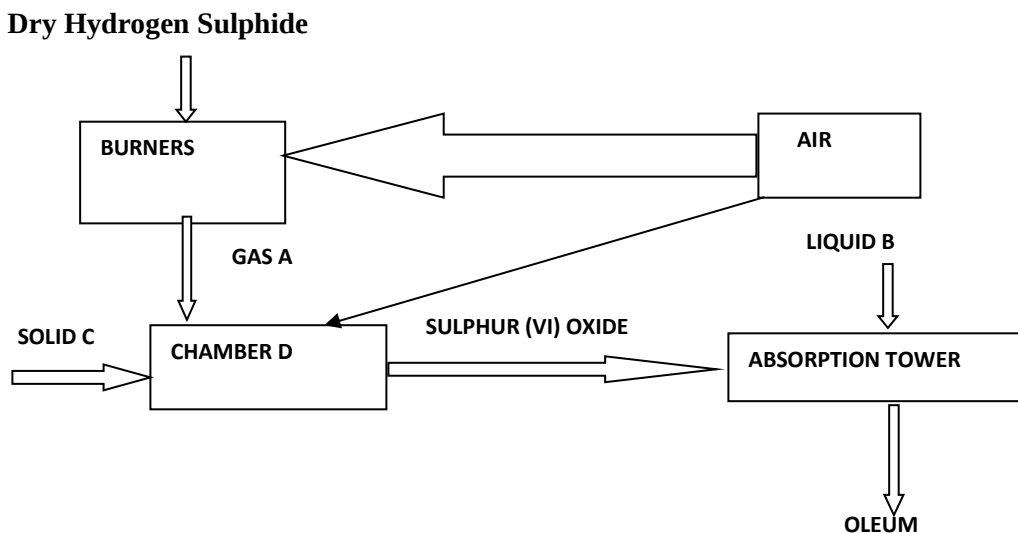
FOR EXAMINER'S USE ONLY.

Questions	Maximum score	Candidates score
1	13	
2	11	
3	13	
4	13	
5	12	
6	10	
7	8	
Total score	80	

Answer **ALL** the questions in the spaces provided

1. Sulphuric (VI) acid can be prepared using hydrogen sulphide as shown in flow chart below.

Study it and answer the questions that follow.



(a) Identify:

(i) Gas **A**: (1 mark)

.....

(ii) Liquid **B**: (1 mark)

.....

(b) (i) What function does solid **C** play in the chamber **D**? (1 mark)

.....

.....

(ii) Write an equation for the reaction in chamber **D**. (1 mark)

.....

(c) Explain the observations made if hydrogen sulphide gas is bubbled through copper (II) nitrate solution? (2 marks)

.....

.....

.....

(d)Write an ionic equation for the confirmatory test for hydrogen sulphide gas. 1 mark)

.....

.....

(e)Write a chemical equation to show the formation of concentrated Sulphuric (VI) acid from the oleum. (1 mark)

.....

.....

(f)Explain why in contact process SO₃ gas is **not directly dissolved in water to make concentrated sulphuric (VI) acid. (2 marks)**

.....

.....

.....

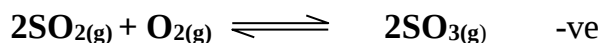
(g)Name the main pollutant from the process above and how it is controlled. (2 marks)

.....

.....

.....

(d) State two factors that increases the yield of sulphur (VI) oxide using the equation below. (1 marks)



.....

.....

.....

2.a) During an experiment a student added soap solution to separate samples of water until lather was formed. Below is a table showing the volumes of soap solution that was required to form lather with **100cm³** of each sample of water before and after boiling the samples.

	Volume (cm ³) of soap required by water sample		
	X	Y	Z
Before boiling	4.5	19.5	22.5
After boiling	4.5	19.5	4.5

i) (a) State the most likely source of water sample X. (1/2 mark)

.....

(b) Identify a salt most likely to be present in water sample Y. (1/2 mark)

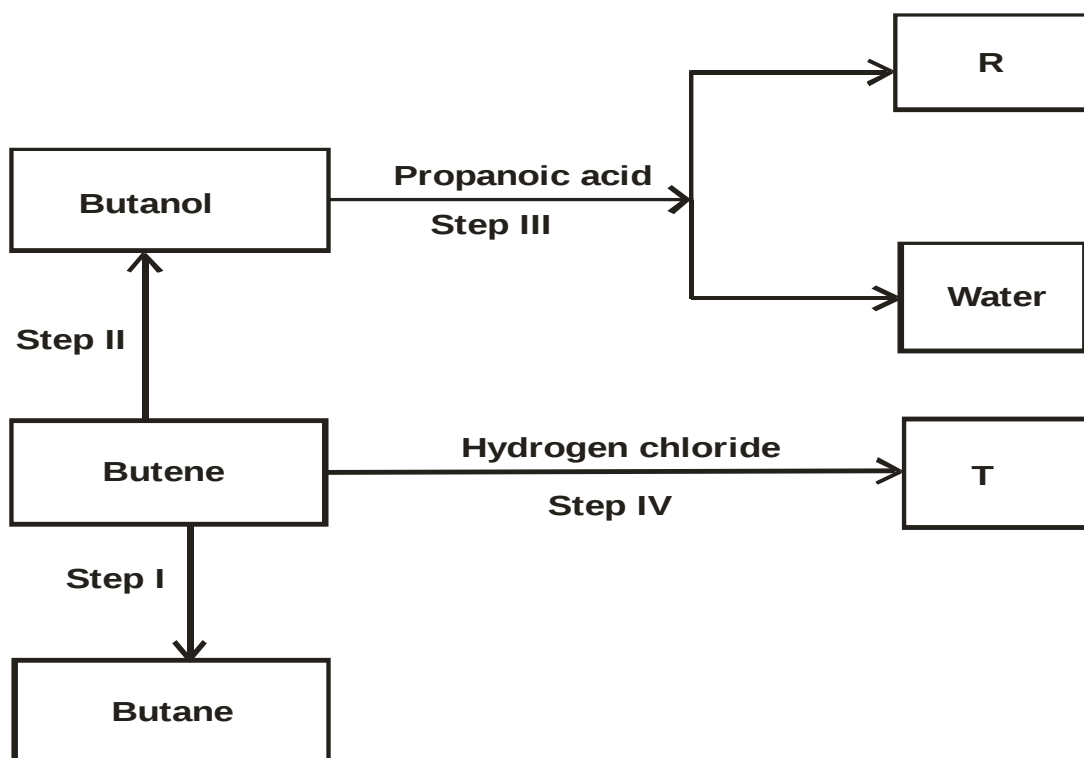
.....

ii) Write an equation for the reaction that may have occurred in water sample Z when it was being boiled. (1 mark)

.....

.....

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



i) Name the types of reaction that occurs in steps **I** and **II**

Step I : (1/2 mark)

Step II : (1/2 mark)

ii) What conditions are necessary for the reaction you have named in (i) above? (1 1/2 mark)

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

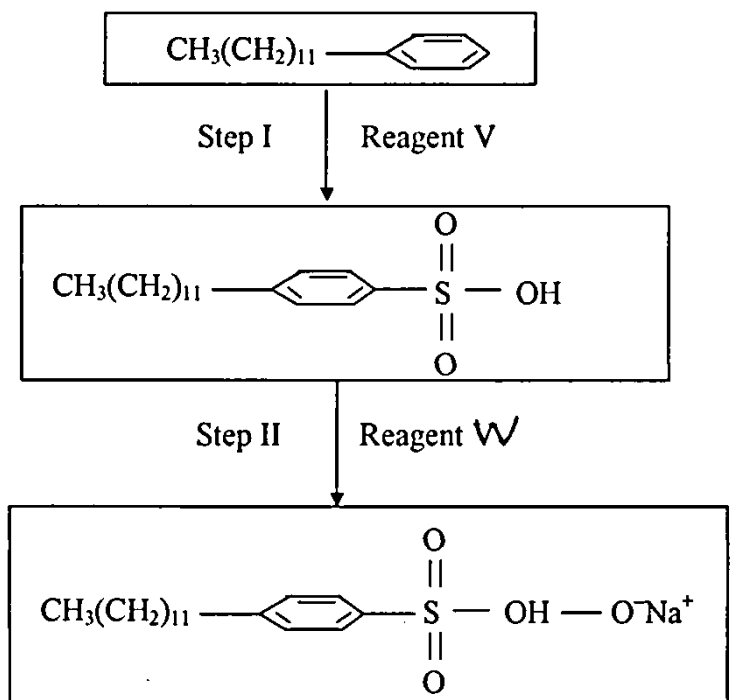
iii) Write a chemical equation for the reaction that takes place in step **IV** (1 mark)

.....
.....

iv) Why is substance **R** used in some soaps? (1/2 mark)

.....

c) The flow diagram below shows some of the steps followed during the industrial manufacture of a detergent.



i) What is a detergent? (1 mark)

.....
.....

ii) Identify reagents **V** and **W** (2 marks)

I) Reagent **V**

II) Reagent **W**

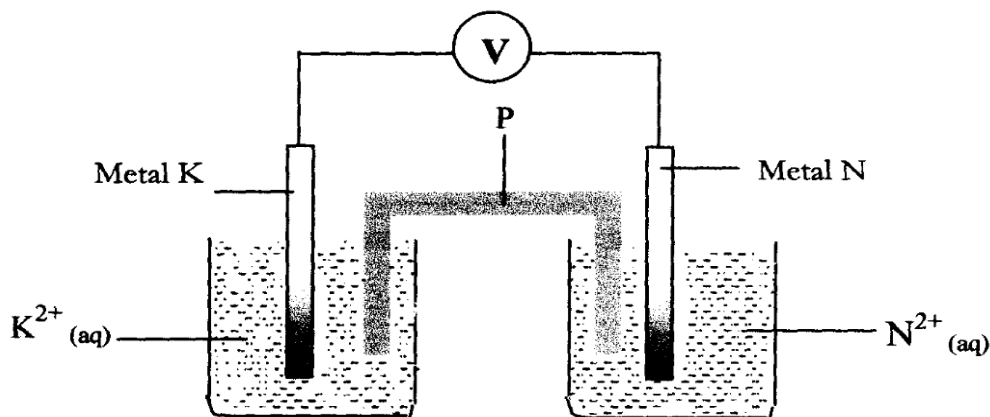
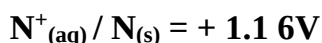
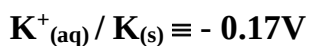
iii) Write an equation for the reaction that may occur when the detergent is added to water containing magnesium ions. (1 mark)

.....
.....

iv) State **one** advantage of using the above detergent. (1 mark)

.....
.....

3. Metals **K** and **N** were connected to form a cell as shown in the diagram below. Their reduction potentials are as shown below:



I. Write the equation for the half-cell reaction that occurs at
Metal **K** electrode

(1mark)

.....

Metal **N** electrode

(1mark)

.....

II) Identify **P** and state **two** roles in the above setup

(i). Identity of **P** (1 mark)

.....

(iii) **Two** Roles of **P** in the setup. (1 mark)

.....

.....

III. On the diagram, show the flow of :-

I. Electrons (1/2 mark)

II. Current. (1/2 mark)

IV. Calculate cell potential (E) for the cell represented in the setup above (1 mark)

.....

.....

.....

(b) The table gives the standard redox potentials for a number of half reactions. Use it to answer the questions that follow:-

	<u>(E⁰/Volts)</u>
$\text{Zn}^{2+}_{(\text{aq})} + 2\text{e}^{-} \rightleftharpoons \text{Zn}_{(\text{s})}$	-0.76
$\text{Fe}^{2+}_{(\text{aq})} + 2\text{e}^{-} \rightleftharpoons \text{Fe}_{(\text{s})}$	-0.44
$\text{I}^{2+}_{(\text{l})} + 2\text{e}^{-} \rightleftharpoons 2\text{I}^{-}_{(\text{aq})}$	+0.54
$\text{Fe}^{3+}_{(\text{aq})} + \text{e}^{-} \rightleftharpoons \text{Fe}^{2+}_{(\text{aq})}$	+0.77
$\text{Ag}^{+} + \text{e}^{-} \rightleftharpoons \text{Ag}_{(\text{s})}$	+0.88

(e) Relative to which half-cell reaction are the above electrode potentials expressed? (1/2 mark)

.....

.....

(ii) Calculate the e.m.f of the cell made up by combining the $\text{I}_{2(\text{l})}/2\text{I}^{-}_{(\text{aq})}$ electrode and

$\text{Zn}^{2+}_{(\text{aq})}/\text{Zn}_{(\text{s})}$ electrode (1marks)

.....

.....

.....

(ii) Which of the substances listed in the above table is :-

(1marks)

I. The strongest oxidising agent

.....

II. The strongest reducing agent

.....

(iv) Which substances could be used to convert iodide ions to iodine? Write balanced

equations for any possible conversions

(1mark)

.....

.....

(v) Draw a cell diagram formed between zinc and lead.

(2marks)

c) A steady current of **2.5A** was passed for **15** minutes through a cell containing divalent ions

M²⁺. During this process **0.74g** of metal **M** was deposited (IF = **96500C**)

Calculate the quantity of electricity passed in this cell

(1mark)

.....

.....

.....

ii) Determine the relative atomic mass of **M**

(2marks)

.....

.....

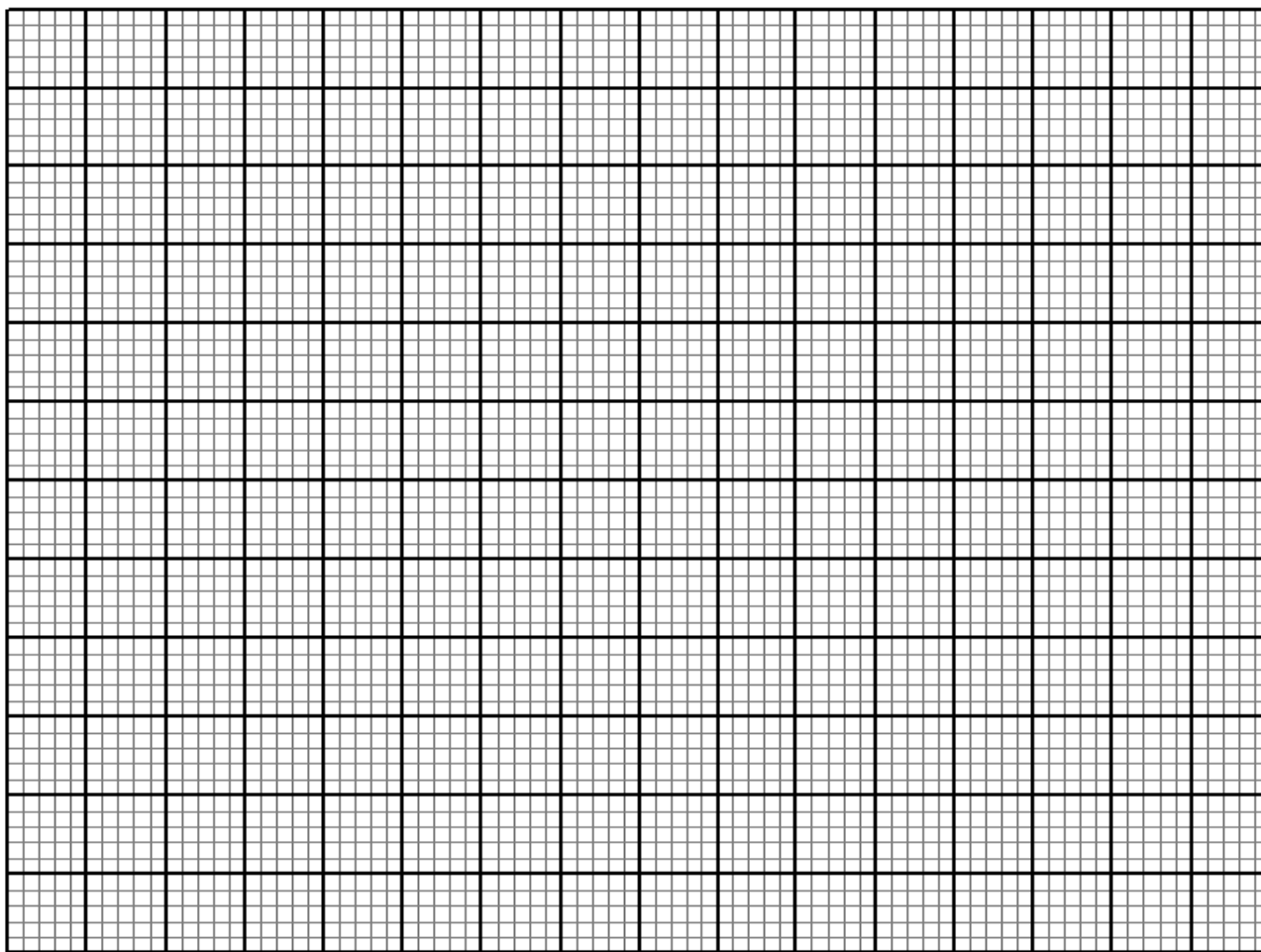
.....

.....

4. In an experiment, a student measured the amount of gas produced with time when excess **1.0 M** hydrochloric acid was reacted with **0.42 g** of a carbonate, XCO_3 and obtained the following results. (Note: The reaction was carried out at room temperature)

Time (minutes)	Volume of carbon (IV) oxide, cm^3
0.0	0
0.5	20
1.0	32
2.0	52
5.0	86
7.5	103
10.0	112
12.0	118
14.0	120
16.0	120
18.0	120

- a) On the graph paper provided, draw a graph of volume of carbon (IV) oxide against time. {3 mks}



b) From the graph,

i) Determine the time at which half the original mass of marble chips will have reacted. (1 mrk)

.....

i) Determine the reaction rate between the 5th and 6th minutes. (2 marks)

.....

.....

.....

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

.....

.....

ii) Calculate the total number of moles of carbon (IV) oxide produced in this reaction.

(Molar gas volume at **r.t.p** = **24 dm³**) (2 marks)

.....

.....

.....

iii) Determine the relative molecular mass of XCO₃. (2 marks)

.....

.....

.....

iv) Determine the relative atomic mass of X. (1 mark)

.....

.....

.....

d) On the same graph paper, draw a sketch of the curve that would be obtained if 0.5 M hydrochloric acid was used. Label the curve A. (1 mark)

5. Sodium metal tarnishes when exposed to air to form a white powder on its surface. A small piece of sodium metal was dropped into **30 g** of propanol and **2400cm³** of hydrogen gas produced at room temperature and pressure .The unreacted propanol was evaporated and white solid remained .(molar Gas Volume at room temperature and pressure =**24dm³** **Na=23** , **C=12** , **O= 16**)

a) (i)Give the name of the white powder formed on the original piece of sodium metal. **(1mark)**

.....

(ii)Explain how the white solid was formed. **(2marks)**

.....

.....

.....

b) (i)White down the chemical equation for the reaction between propanol and sodium metal.

(1mark)

.....

(ii)Determine the mass of sodium that reacted with propanol.

(2marks)

.....

.....

.....

(iii) What mass of propanol was evaporated?

(2 marks)

.....

.....

.....

(iv) The propanol was evaporated at **97⁰c** and the white solid remained unaffected at this

temperature .what is the difference in structure of propanol and white solid. **(1 mark)**

.....

.....

.....

c) (i) Name the inorganic liquid which liberates hydrogen gas with sodium metal. (1 mark)

.....

(ii) State two differences you would observe if similar pieces of sodium metal were dropped separately into beakers containing equal amount of propanol and liquid named in (i) above respectively. (2marks)

.....

.....

.....

6. The figure below is a section of periodic table. Study and answer the questions that follow. The letters do not represent the actual symbol of elements.

A								
					D		I	E
F	G		H					
J								

(i) Select the elements which belongs to the same chemical family. (1/2 mark)

.....

(ii) Identify the strongest reducing element. (1/2 mark)

.....

b) (i) The chloride of H vaporizes easily while the oxide of H has a high melting point. Explain the observation in terms of structure and bonding. (2marks)

.....

.....

.....

(ii) Blue and red litmus papers were dropped into solution of chloride of H, state and explain the observations made. (1mark)

.....

.....

c) K^+ has ionic configuration of 2:8:8

(i) Give the chemical family name to which element **K** belong. (1mark)

.....

(ii) Place element **K** on the above periodic table. (1mark)

d) The first and second ionization energies of element **G** at random are 665 kJ mol^{-1} and 560 kJ mol^{-1}

(i) Define the term the ionization energy. (1mark)

.....

.....

(ii) Write equations for the first and second ionization energies for element **G** indicating their energies. (1 mark)

.....

(iii) Explain your answer in (ii) above. (1mark)

.....

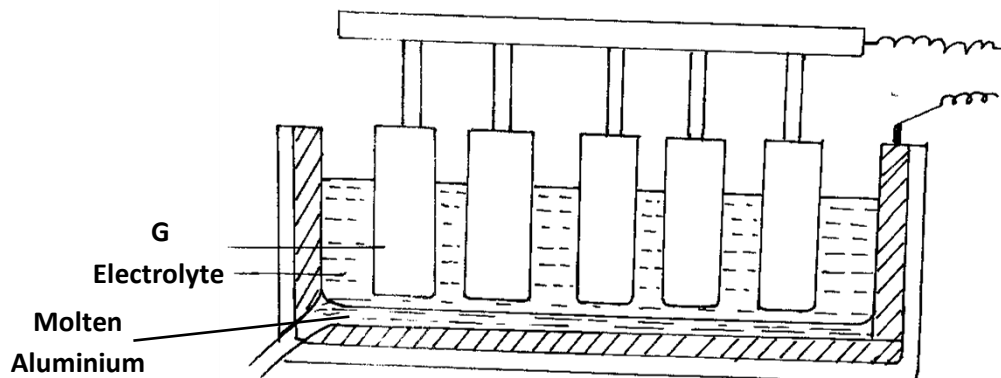
.....

e) Explain the difference in the atomic radii of **D** and **I**. (1mark)

.....

.....

7. The diagram below illustrates the Hall's cell for the extraction of Aluminium. Study it and answer the questions that follow.



(a) (i) Name the electrode labeled **G** **(1 mark)**

.....

(b) Electrolysis is carried at **800 – 900⁰C** and newly formed Aluminium is tapped off as a liquid. What does this indicate about the melting point of Aluminium? **(1 mark)**

.....

(c) (i) Give the ionic equations for the reaction that takes place at the cathode. **(1 mark)**

.....

.....

(ii) **The** anode has to be replaced frequently. Explain. **(1 mark)**

.....

.....

d) **Cryolite** is used in the extraction of aluminium from bauxite. State its function. **(1mark)**

.....

d) A piece of unpolished aluminium foil is not attacked by water steam and dilute hydrochloric acid. Explain. **(1mark)**

.....

.....

e) (i) The basic raw material for extraction of aluminium is bauxite. Name two major impurities in bauxite. **(1 mark)**

.....

(ii) State one property of duralium that make it more suitable than pure aluminium in aeroplane construction. **(1 mark)**

.....

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

CHEMISTRY

231/3

PAPER 3

PRACTICAL

TIME: 2¼ HOURS

SCHOOL..... SIGN.....

Kenya Certificate of Secondary Education.

PRACTICAL CONFIDENTIAL

A.

1. One burette 0 - 50 ml
2. One pipette 25.0 ml and a pipette filler
3. Two clean and dry conical flasks (250ml)
4. Six clean and dry test-tubes
5. pH chart (Full range)
6. One boiling tube
7. About 500cm³ of distilled water supplied in a wash bottle
8. One 250ml volumetric flask supplied with a stopper.
9. One 10ml measuring cylinder
10. One 50ml measuring cylinder
11. About 60cm³ of solution A
12. About 100cm³ of solution B
13. About 100cm³ of solution C
14. 100ml glass beaker
15. White piece of plain paper marked with a **cross** on it with a blue print
16. Thermometer
17. Stop watch/stop clock
18. One sticker / label
19. About 0.5 of solid sodium carbonate
20. About 2g of solid R
21. About 0.5g of solid V

B Access to:

1. Universal indicator solution (full range)
2. Phenolphthalein indicator
3. Bunsen burner, tripod stand and wire gauze
4. 2.0M sodium hydroxide solution supplied with a dropper
5. Acidified potassium manganate (VII) supplied with a dropper
6. 0.5M aqueous lead (II) nitrate solution supplied with a dropper
7. 2.0M ammonia solution supplied with a dropper.
8. 2.0M barium chloride solution
9. 2.0M lead nitrate solution
10. Bromine water
11. Potassium iodide solution

Note:

1. Solid R is a mixture of lead (II) carbonate and sodium sulphite in the ratio of 1:1
2. Solid V is oxalic acid
3. Solution A is prepared by dissolving 172cm³ of Conc. Hydrochloric Acid (Density 1.18g/cm³) in 400cm³ of distilled water and diluting with distilled water to make one litre solution.
4. Solution B is prepared by dissolving 15.8g of sodium thiosulphate (Na₂S₂O₃) in 600cm³ of distilled water and diluting with distilled water to make one litre solution.
5. Solution C is prepared by dissolving 4g of sodium hydroxide pellets in 600cm³ of distilled and diluting with distilled water to one litre.
6. Acidified potassium manganate (VII) is prepared by dissolving 3.0g of potassium manganate (VII) in 400cm³ of 2.0M H₂SO₄ and diluting with distilled water to one litre.

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

CHEMISTRY

231/3

PAPER 3

PRACTICAL

TIME: 2¼ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

INSTRUCTIONS:

- a) Answer ALL questions in the spaces provided in the question paper*
- b) You are NOT allowed to start working with the apparatus for the first 15minutes This time will enable you read through the question paper and make sure you have all the chemicals and apparatus required*
- c) KNEC Mathematical tables and electronic calculators may be used.*
- d) All working must be clearly shown where necessary*
- e) Candidates should answer the questions in English*

FOR EXAMINERS USE ONLY

Question	Maximum score	Candidate's score
1	19	
2	11	
3	10	
TOTAL SCORE	40	

1. You are provided with:

- i) Solution A which is 2.0M hydrochloric Acid (HCl)
- ii) Solution B, which is 0.1 M sodium thiosulphate ($\text{Na}_2\text{S}_2\text{O}_3$)
- iii) Solution C which is alkali of 0.1 M concentration

You are required to:

- i) Find the effect of change of temperature on the rate of reaction between sodium thiosulphate, solution B, and hydrochloric Acid, solution A.
- ii) Prepare a dilute solution of hydrochloric acid, solution A
- iii) Write an ionic equation for the reaction between hydrochloric acid, solution A, and the alkali solution C.

Procedure I

Using a measuring cylinder measure 10 cm^3 of solution B into a clean 100cm^3 glass beaker. Place it together with its contents on a white piece of paper marked with a **cross (X)** on it with bold blue print. Measure the temperature of the solution and record it as shown in the table below.

Using a clean measuring cylinder, measure 5cm^3 of solution A. add it to the contents of the beaker containing solution B and immediately start the stop watch. Record the time it will take for the cross (X) to become invisible when viewed above the reaction mixture in the beaker.

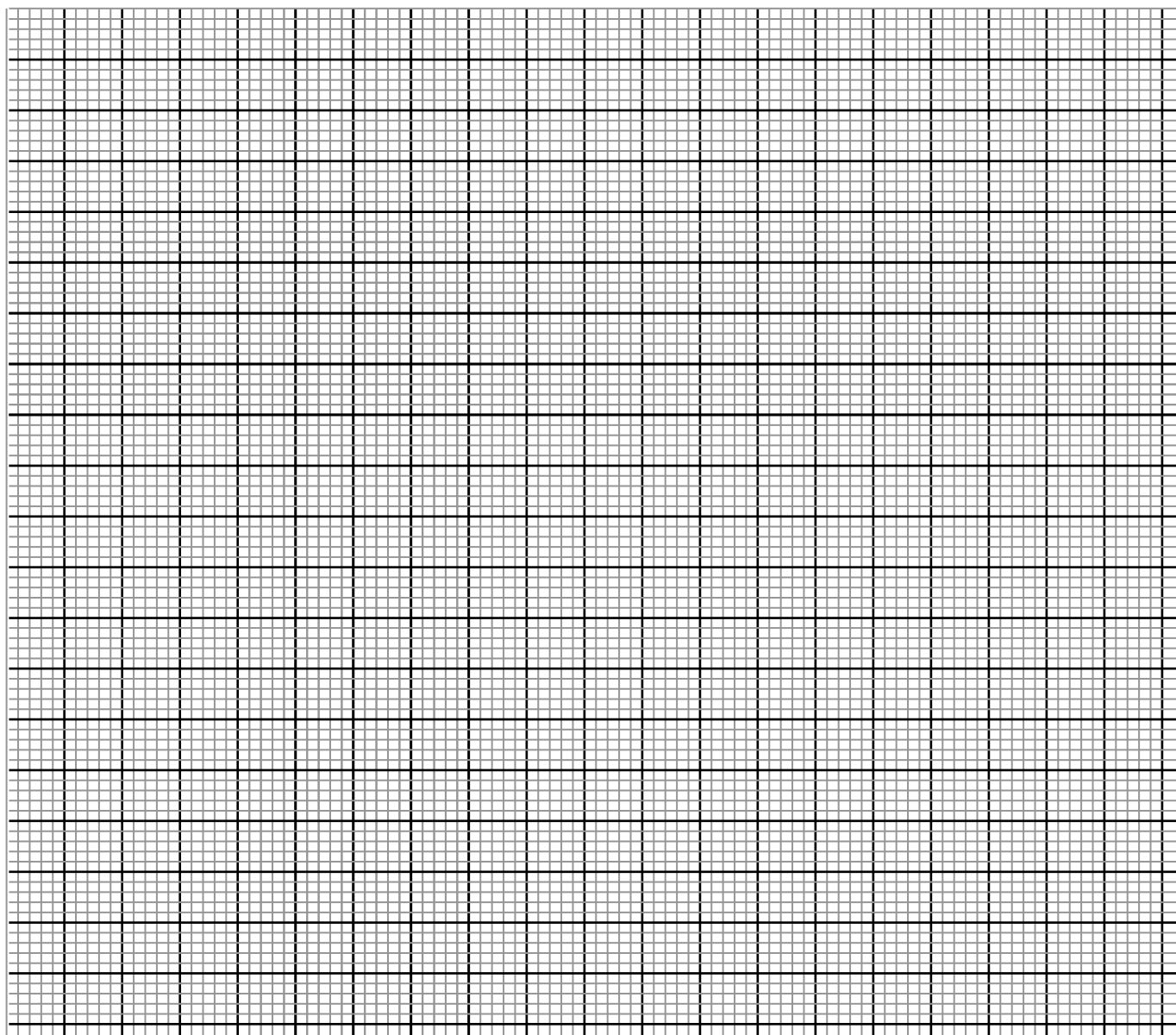
Wash the glass beaker used and repeat the experiment at the temperature indicated in the table below by warming sodium thiosulphate solution B to the stated temperature before adding hydrochloric Acid, solution A.

Table I

Experiment number	1	2	3	4	5	6	7	8
Volume of hydrochloric Acid, solution A (1 cm^3)	5	5	5	5	5	5	5	5
Volume of sodium thiosulphate solution B(cm^3)	10	10	10	10	10	10	10	10
Temperature ($^{\circ}\text{C}$) of sodium thiosulphate, solution B	Room temp.	30	35	40	45	50	55	60
Time in seconds								
Reciprocal of time $\left(\frac{1}{t}\right)$ per seconds, S^{-1}								

(6 marks)

- a) On the grid provided, plot a graph of reciprocal of time $\left(\frac{1}{t}\right)$ against temperature (3 marks)



- b) Comment on the effect of change in temperature on the rate of reaction between sodium thiosulphate, solution B and hydrochloric acid, solution A. (1mark)

.....
.....

- c) Use your graph to determine:

i) The time taken by the reaction when the temperature is 58°C. (1mark)

ii) The temperature at which the rate of the reaction is 0.045 sec⁻¹. (1mark)

PROCEDURE II

Using a clean measuring cylinder, place **12.5 cm³** of solution A in a 250ml volumetric flask. Add 200 cm³ of distilled water and shake. Add distilled water upto the mark. **Label this solution D.** Fill a burette with solution D. Using a pipette and pipette filler, place 25.0 cm³ of solution C into a 250 ml conical flask. Add two drops of phenolphthalein indicator and titrate with solution D until the pink colour disappears.

Record your results in table II. Repeat the titration two more times and complete the table.

Table II

	I	II	III
Final Burette Reading(cm ³)			
Initial Burette Reading(cm ³)			
Volume of solution D (cm ³)			

d) Calculate:

i) The average volume of solution D used. (1 mark)

ii) Moles of hydrochloric Acid, solution D used. (1 mark)

iii) Moles of Alkali solution C used. (1mark)

iv) Determine the reacting mole ratio between the hydrochloric acid, solution D, and the alkali, solution C. (1 mark)

v) Write ionic equation for the reaction between hydrochloric acid, solution A and alkali, solution C. (1mark)

(d) To the fourth portion, add 3 drops of acidified potassium manganate (VII).

Observation	Inference
(1 mark)	(1 mark)

(e) Transfer all the residue into a clean boiling tube, then add about 2cm³ of 2M nitric acid and add about 3cm³ of distilled water when all the solid has dissolved. Divide the resulting product into three equal portions.

(i) To the 1st portion add sodium hydroxide solution drop wise until in excess.

Observation	Inference
(½ mark)	(½ mark)

(ii) To the second portion, add ammonia solution drop wise until in excess.

Observation	Inference
(½ mark)	(½ mark)

(iii) To the third portion, add a few drops of potassium iodide solution.

Observation	Inference
(½ mark)	(½ mark)

3. You are provided with solid V. You are required to carry out the tests indicated below.

Place a spatulaful of solid V in a boiling tube. Add about 6 cm³ of distilled water and shake well.

Divide the mixture into four equal portions in test tubes.

a) To the first portion, add two drops of potassium manganate (VII) solution.

Observations	Inferences
(1 mark)	(1 mark)

b) To the second portion, add three drops of bromine water.

Observations	Inferences
(1 mark)	(1 mark)

(c) To the third portion, add all the sodium carbonate.

Observations	Inferences
(1 mark)	(1 mark)

(d) Test the pH of the solution using universal indicator solution provided.

Observations	Inferences
(½ mark)	(½ mark)

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

PHYSICS

232/1

PAPER 1

THEORY

TIME: 2 HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

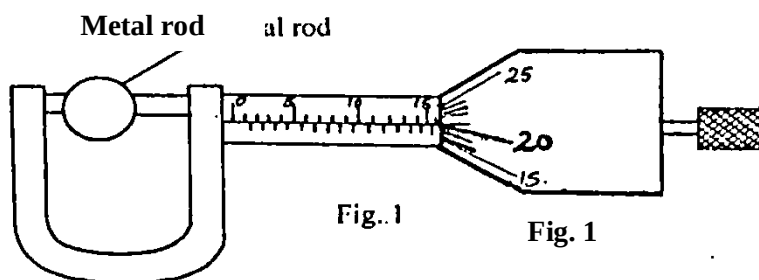
- Write your name, school and index number in the spaces provided above.
- Write the date of examination and sign in the spaces provided above.
- This paper consists of two sections, Section A and B.
- Answer **ALL** the questions in section A and B in the spaces provided.
- **ALL** answers and working **MUST** be clearly shown.
- Mathematical tables and electronic calculators **may be** used.
- Take acceleration due to gravity, $g = 10\text{m/s}^2$

FOR EXAMINER'S USE ONLY:

Section	Question	Maximum score	Candidate's score
A	1–12	25	
B	13	12	
	14	11	
	15	10	
	16	12	
	17	10	
	TOTAL	80	

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

1. Figure 1 below shows a micrometer screw gauge being used to measure the diameter of a metal rod. The thimble scale has 50 divisions.



Find the diameter of the metal rod.

(1 mark)

.....

.....

.....

2. Explain briefly how the temperature in a green house is kept higher than outside. **(2 marks)**

.....

.....

.....

The diagram shown in figure 2 below is an arrangement of three pulley wheels used to help in lifting loads. Use it to answer questions 3 and 4.

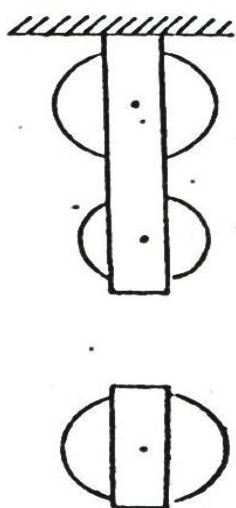


Fig. 2

3. Complete the diagram to show how the rope goes round the wheels, position of the load and the effort. **(2 marks)**

4. Write down the velocity ratio (VR) of the system.

(1 mark)

5. State how temperature affects the speed of sound in air.

(1 mark)

6. State **two** facts which show that heat from the sun does not reach the earth surface by convection.

(2 marks)

7. The diagram in figure 3 below shows water with negligible viscosity flowing steadily in a tube of different cross-section area. If at a point A, the cross section area is 120cm^2 and the velocity of water is 0.40ms^{-1} , calculate the velocity at B where cross section area is 4.0cm^2 ? (3 marks)

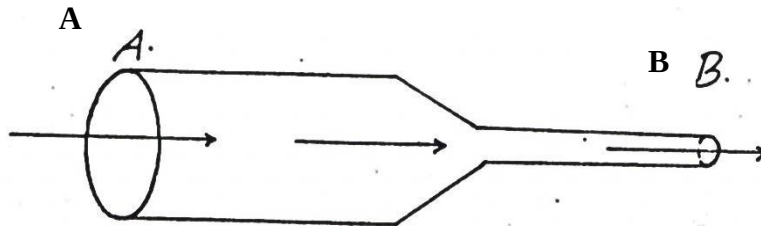


Fig. 3

8. A motor uses an electrical energy at a rate of 200W and raises a mass of 25kg through a vertical distance of 20m in 0.5 minutes. Determine the efficiency of the motor.

(3 marks)

9. Name **three** types of forces that act between bodies not in contact.

(3marks)

.....

.....

.....

10. How long will it take 240V, 3000W electric immersion heater to raise the temperature of 150 litres of water in a well-lagged calorimeter made of copper of mass 20kg from 15° to 70°C ?

(3 marks)

.....

.....

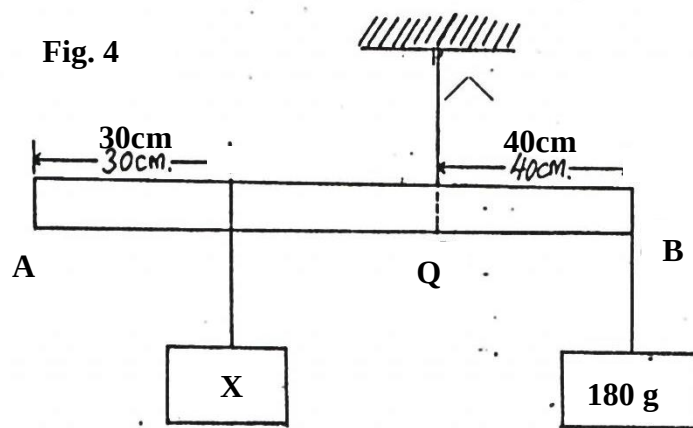
.....

.....

.....

11. The diagram shown in the Figure 4 below shows a system in equilibrium with the rule horizontal. AB is a uniform rule of length 1.0m and weight 1.8N. Calculate the weight of the block X.

(3 marks)



.....

.....

.....

.....

.....

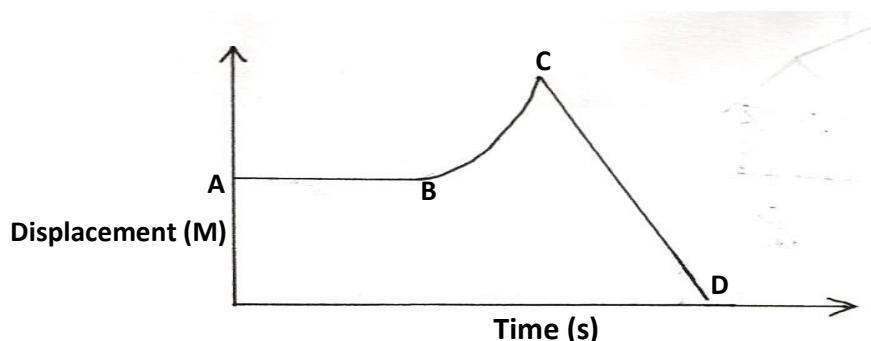
12. State the reason why a trailer carrying heavy loads has many wheels. (1 mark)

.....
.....

SECTION B (55 MARKS)

Answer ALL the questions

13.(a) The **figure5** below shows the displacement – time graph of the motion of particle.



(a) State the nature of the motion of the particle between

(i) A and B (1mk)

.....
.....

(ii) B and C (1mk)

.....
.....

(iii) C and D (1mk)

.....
.....

(b) A ball is thrown horizontally from top of a vertical tower and strikes the ground at a point 50 m from the bottom of the tower. Given that the height of the tower is 45m, determine the

(i) Time taken by the ball to hit the ground. (2m)

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

(ii) Initial horizontal velocity of the ball (2mks)

.....

.....

.....

.....

.....

(iii) Vertical velocity of the ball just before striking the ground. (2mks)

(take acceleration due to gravity g as 10m/s)

.....

.....

.....

.....

14. a) State the pressure law; (1 mark)

.....

.....

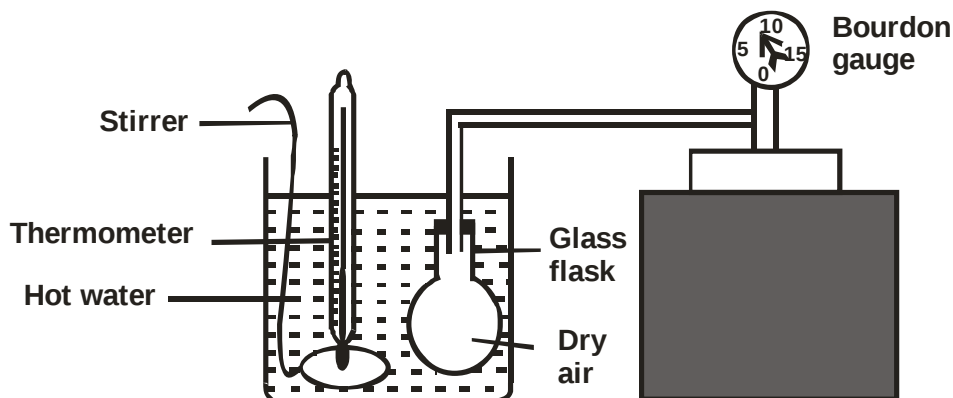
b) Explain how a gas exerts pressure. (2 marks)

.....

.....

.....

c) The figure below shows a set up used to verify pressure law.



i) State the measurement that may be taken in the experiment. (2 marks)

.....

.....

ii) Explain how the measurement in (i) above may be used to verify pressure law. (2 marks)

.....

.....

.....

.....

iii) A car tyre is at pressure of 5.0×10^5 Pa at a temperature of 37°C . While it is running the temperature rises to 75°C . What is the new tyre pressure? (Assume the tyre does not expand) (3 marks)

.....

.....

.....

.....

.....

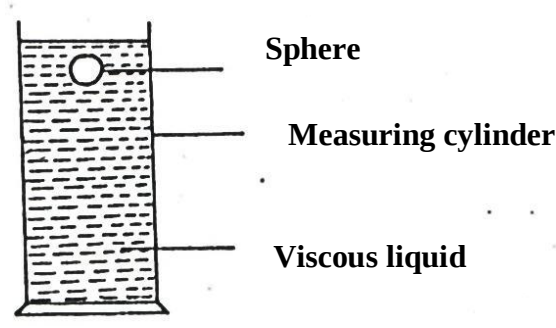
15. i) Distinguish between inelastic and elastic collisions. (2 marks)

.....

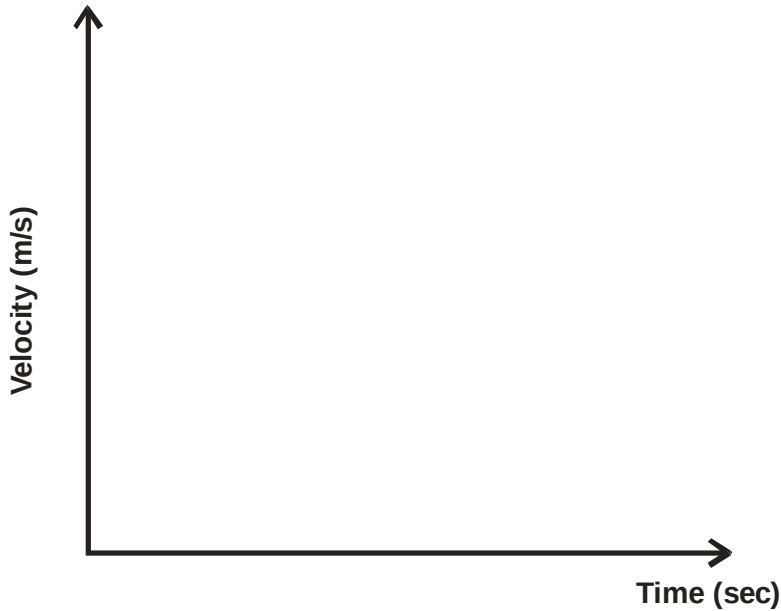
.....

.....

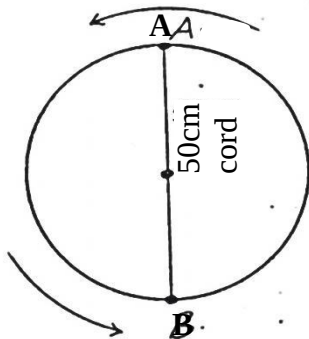
b) The diagram in Figure 6 below shows a sphere moving in a viscous liquid in a tall measuring cylinder.



- i) Show on the diagram the forces acting on the sphere. (3 marks)
- ii) Sketch a graph showing the variation of velocity with time in figure 7 below. Show on the graph the terminal velocity, V_T . (2 marks)



16. A mass of 1kg is attached to a cord of length 50cm. It is whirled in a circle in a vertical plane at 10 revolutions per second as shown in the **figure 8** below.



- a) Find the tensions in the cord when the mass is at:
- i) Highest point of the circle A. (2 marks)

.....

.....

.....

- ii) Lowest point of the circle B. (2 marks)

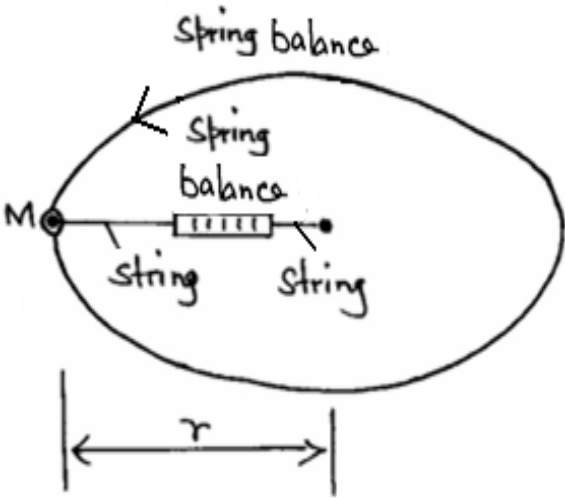
.....

.....

.....

.....

b).The diagram below shows a spring tied to an object, m, and rotated in a circular path of radius, r.



- (i).**What provides the force that keeps the object moving in a circular path. **(1 mark)**

.....

- (ii).** The speed of the object is constant but the body is accelerating. Explain. **(1 mark)**

.....

.....

- (iii).**If the object is whirled faster, what would happen to spring balance reading? **(1 mark)**

.....

.....

- (iv).** Give a reason for your answers in b(iii) above. **(1 mark)**

.....

.....

- v).** As the object is whirled round the string snaps and cuts off. Describe the subsequent path of the object. **1 mark)**

.....

.....

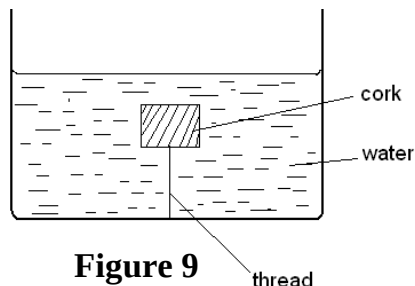
.....

17. (a) State the law of floatation. (1 mark)

.....
.....

(b) **Figure 9** shows a piece of cork held with a light thread attached to the bottom of a beaker.

The beaker is filled with water.



i) Indicate and label on the diagram the forces acting on the cork. (1 mark)

ii) Write an expression showing the relationship between the forces above. (1 mark)

.....
.....

A solid displaces 8.5cm^3 of liquid when floating in a certain liquid and 11.5cm^3 when fully submerged in the same liquid. The density of the solid is 0.8g/cm^3 . Determine:-

i) The upthrust on the solid when floating. (2 marks)

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

ii) The density of the liquid. (2 marks)

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

ii) The upthrust on the solid when fully submerged. (2 marks)

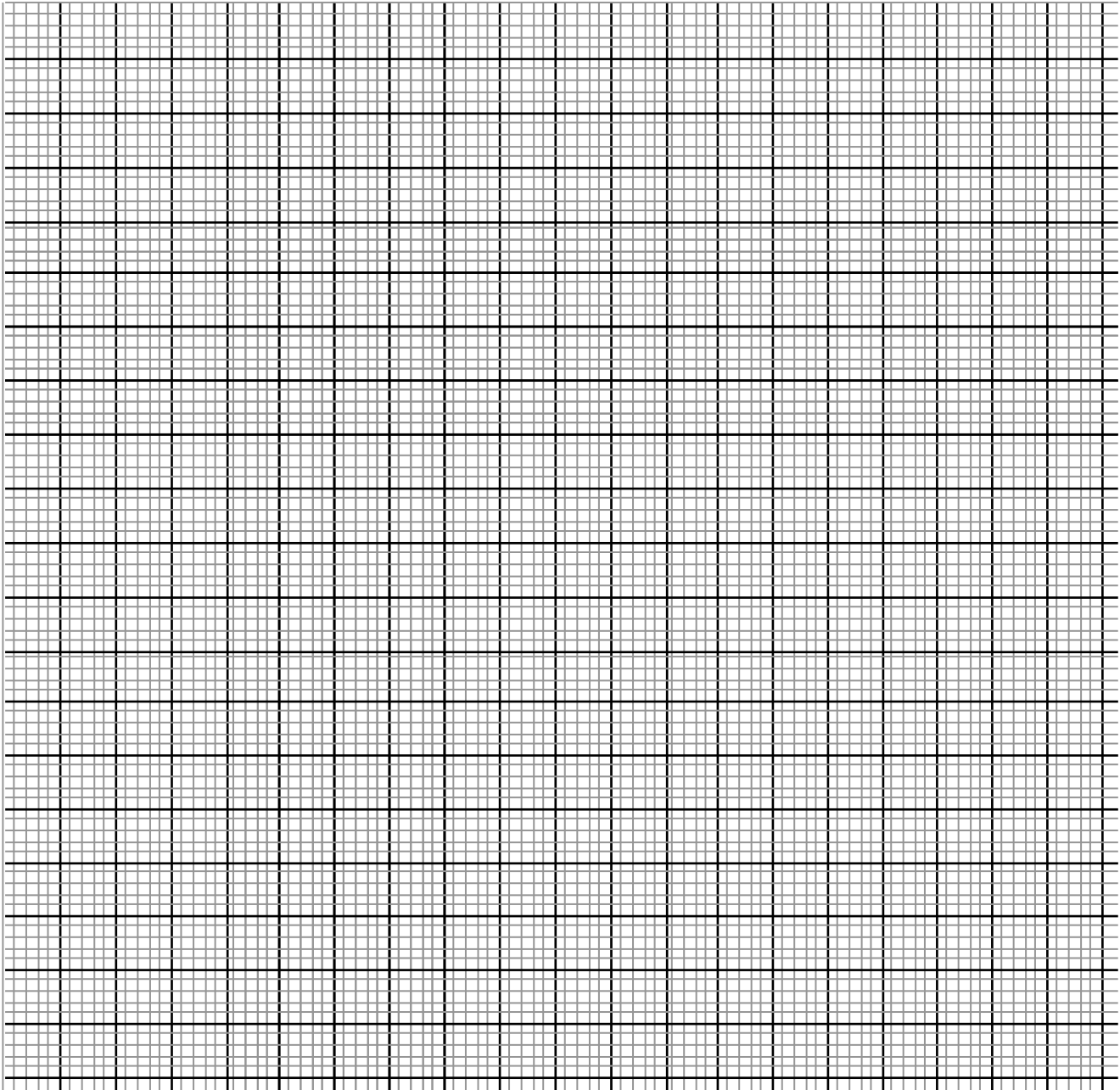
.....
.....
.....
.....

18.) The following results were obtained in a experiment to verify Hooke’s law when a spring was extended by hanging various loads on it.

Load (N)	0.00	1.00	2.00	3.00	4.00	5.00	6.00
Length of spring in cm	10.00	11.50	13.00	14.50	16.00	18.00	24.00
Extension	0.00						

(I) Complete the table for the extension e above. (1mk)

(II) Plot a graph of load (y-axis) against extension (5mks)



(III) From the graph determine the spring constant.

(2mks)

.....

.....

.....

.....

.....

(IV) Calculate the energy stored when the spring is stretched to 16 cm.

(2mks)

.....

.....

.....

.....

.....

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

PHYSICS

232/2

PAPER 2

THEORY

TIME: 2 HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

232/2

PHYSICS

PAPER 2

TIME 2 HRS

INSTRUCTIONS

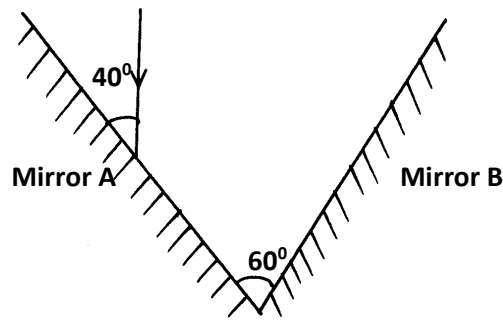
- i) Answer All questions in the spaces provided.*
- ii) Use the following CONSTANTS where applicable.*
- iii) All working must be clearly shown for numerical questions.*
- iv) Candidates should check to ascertain that all questions are printed as indicated in the table below.*

Constants

- i) Density of water = 1g/cm^3 or 1000kg/m^3 .
- ii) Gravitational acceleration = 10m/s^2 .

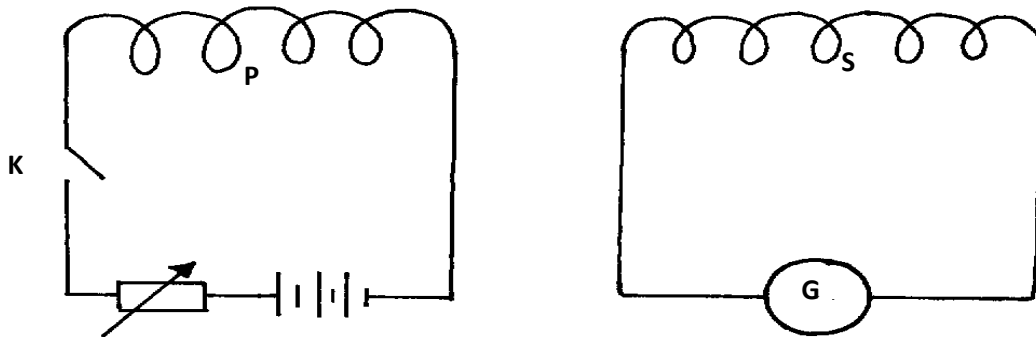
SECTION A (25 MARKS)

1. A ray is incident on two mirrors inclined at 60° as shown in the diagram below. (3mks)



Determine the angle of reflection on mirror **A**, hence trace the path of the ray as it leaves mirror **B**.

2. a) The coils **P** and **S** are connected as shown below. **P** is connected to a battery, rheostat and a switch **K**. **S** is connected to a galvanometer **G**.



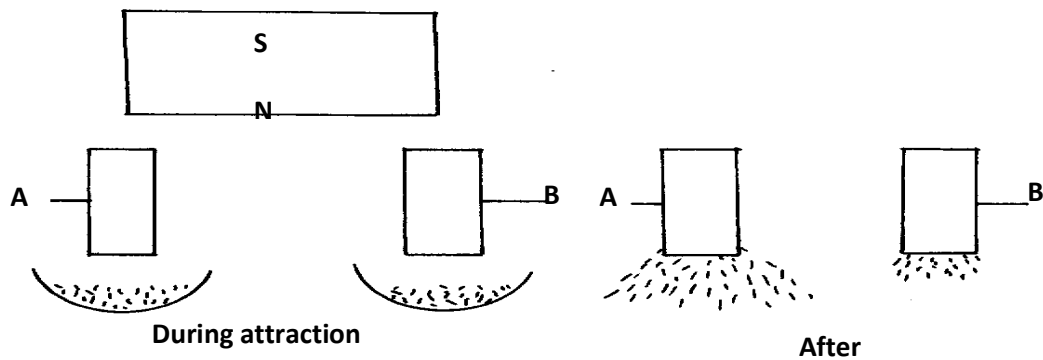
State the behavior of the pointer on **G** in the following cases;

- i) When **K** is switched on (closed) (1mk)

- II) When **K** is opened. (1mk)

- b) A transformer has 200 turns in the primary coil and 1000 turns in the secondary coil. If the transformer is 100% efficient and the current in the secondary coil is 0.15A, determine the current in the primary coil. (3mks)

3. Figure below shows a simple experiment using a permanent magnet and two metal bars A and B
Put close to the iron filings.



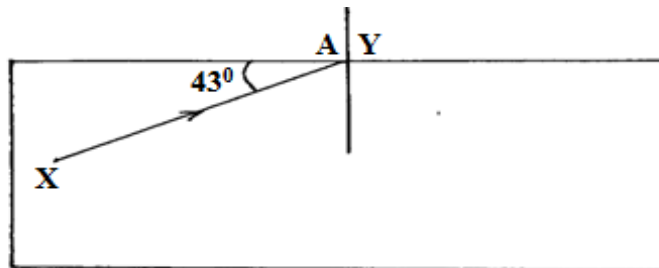
State with a reason which bar is made from a soft magnetic material. (2mks)

.....

.....

.....

4. The diagram below shows a ray of light xy traveling through a glass block of critical 42° to point A



a) Calculate the refractive index of the glass block.

(3mks)

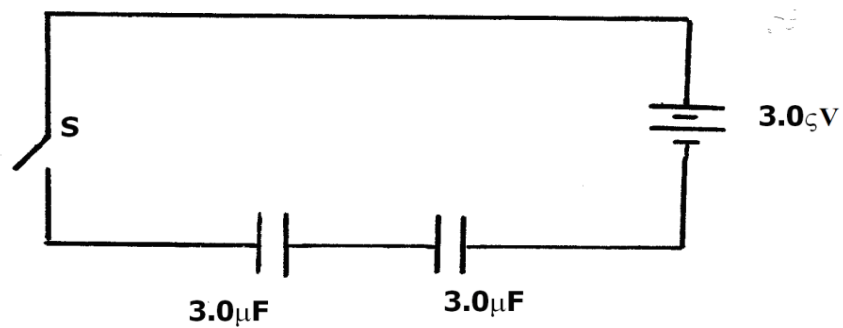
b) On the same diagram, draw the path of the ray as it travels past point A.

(1mks)

5. The photoelectrons liberated from an illuminated metal surface constitute a photoelectric current. What is the effect of decreasing the intensity of illumination on the magnitude of the photoelectric current? (1mk)

.....
.....

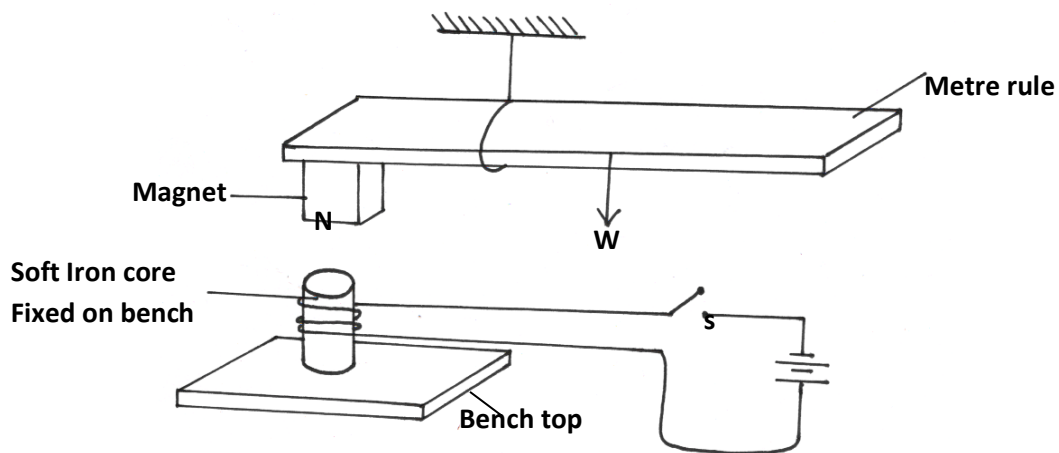
6. Figure below shows a battery of e.m.f 3.0v connected in series with two capacitors.



Determine the energy stored in the combined capacitors when the switch is closed.

(3mks)

7. The figure below shows a meter rule in equilibrium with the magnet and weight W. The Soft iron core is fixed to the bench.



State and explain the effect on the meter rule when the switch S is closed (2mks)

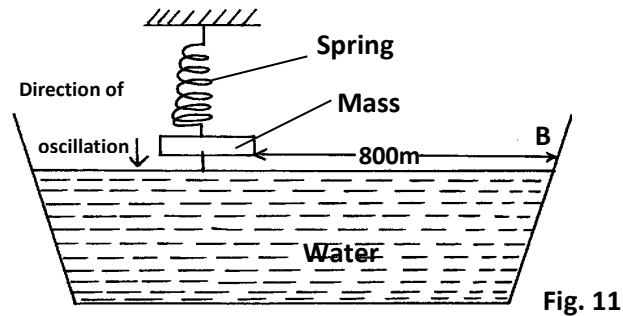
8. State how polarization is reduced in a dry cell. (1mk)

9. State two differences between the cathode ray tube (CRT) of a T.V and the cathode ray oscilloscope (CRO). (2mks)

10. Distinguish between a P-type and a N-type extrinsic semiconductors. (2mks)

SECTION B (55 MARKS)

11. (a) Students set up a mass attached to a spring such that when it oscillates it taps on water surface in a wide shallow tank as in figure 11 below.



The students measured time for 20 oscillations and found that the mass takes 36 seconds.

Determine:

- (i) The periodic time of the mass (2mks)
- (ii) The frequency of the waves produced on the water surface (2mk)
- (iii) The speed of the waves if the students counted four ripples between the mass and end **B** of the tank (3mks)
- (b) State any **two** factors that would increase the speed of sound in air (2mks)

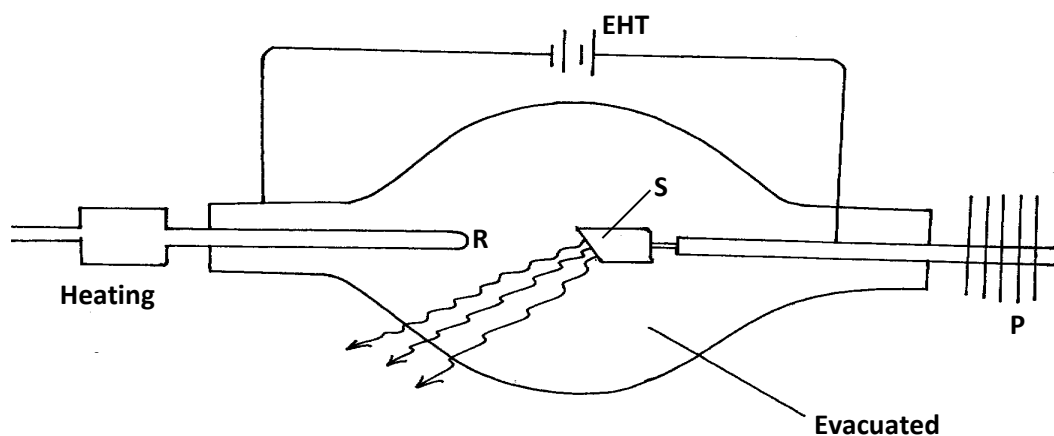
(c) An echo sounder of a ship received the reflected waves from a sea bed after 0.20s.

(i) Determine the depth of the sea bed if the velocity of sound in water is 1450m/s (2mks)

(ii) When the ship above passes over a sunken reef, the echo sounder receives an echo after 0.16s.

Determine the height of the sunken reef (2mks)

12.(a) The diagram below shows an X-ray tube drawn by a student. Use it to answer the questions which follow.



(i) State with reason the material used for the part labeled R. (2mks)

(ii) Why is the tube evacuated (1mk)

(iii) How can the wavelength of the X-rays emitted from this tube be reduced (1mk)

(b) X-rays are emitted when a tube operates at 3×10^2 V and a current of 0.01 A is passing through it (take $e = 1.6 \times 10^{-19}$ C, $m_e = 9 \times 10^{-31}$ kg). Calculate;

(i) The velocity of the electron on hitting the target. **(3mks)**

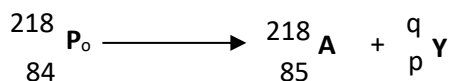
(ii) The minimum wavelength of the X-rays emitted **(3mks)**

C (i) State **one** properties of X-rays **(1mk)**

(ii) State **one** uses of X-rays **(1mk)**

13. a) Differentiate between a nuclear fusion and nuclear fission. **(2mks)**

b) The equation below represents a nuclear reaction.



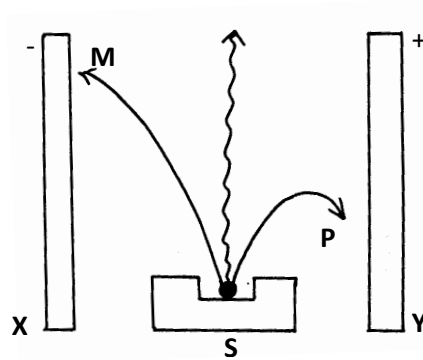
i) Determine the values of **p** and **q**. **(2mks)**

p.....

q.....

ii) Identify **Y**..... **(1mk)**

- c) The figure below represents deflection of various radiations from a radioactive source S placed in electric field between two plates X and Y.



Identify the radiations marked with letters **M** and **P**.

(2mks)

M.....

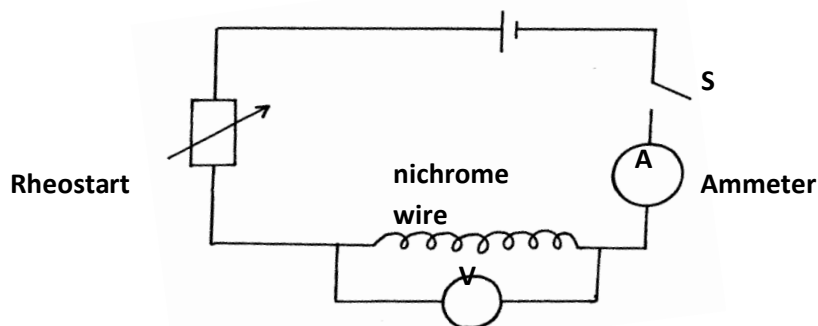
P.....

- d) A sample of radioactive substance initially has 8×10^{25} particles. The half life of the sample is 98 seconds. Determine the number of particles that will have decayed after 294 seconds. **(3mks)**

14. a) State Ohm's Law.

(1mk)

- b) The figure below shows a circuit that can be used to verify Ohm's law

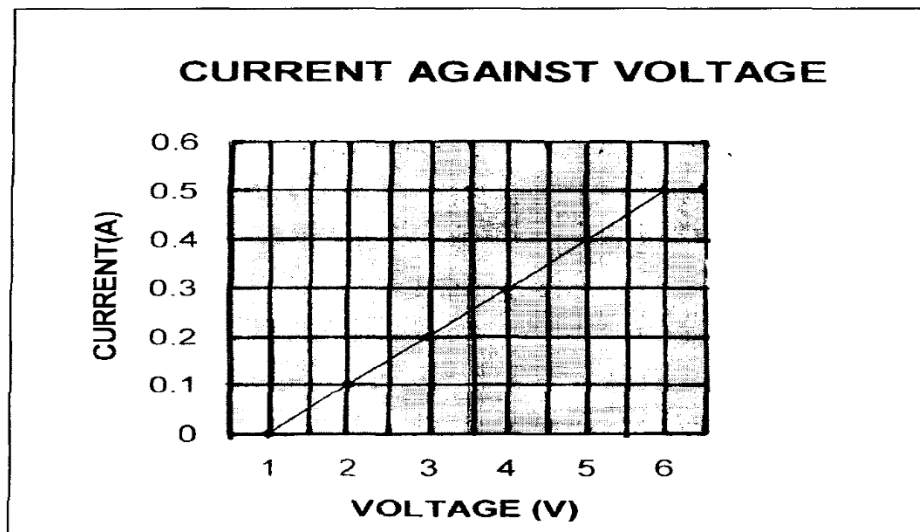


Explain briefly how the setup can be used to verify ohm's law

(3mks)

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

- c) The graph below was obtained from experiment to determine the effective resistance of two resistors connected in parallel. If the value of one resistor is 50 ohms. determine the value of the other resistor.



From the graph, determine

- i) effective resistance of the two resistors

(2mk)

- ii) the value of the other resistor

(3mks)

15. (a) An object **O** stands on the principal axis of a concave mirror as shown in figure 9 below.

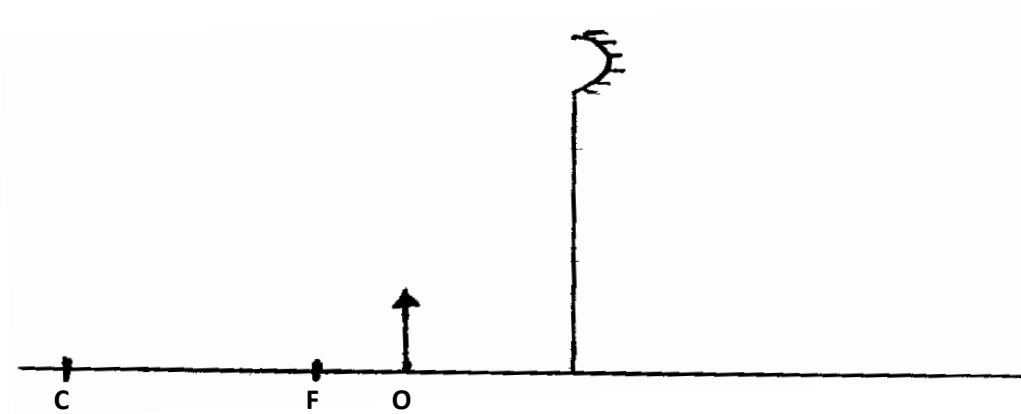
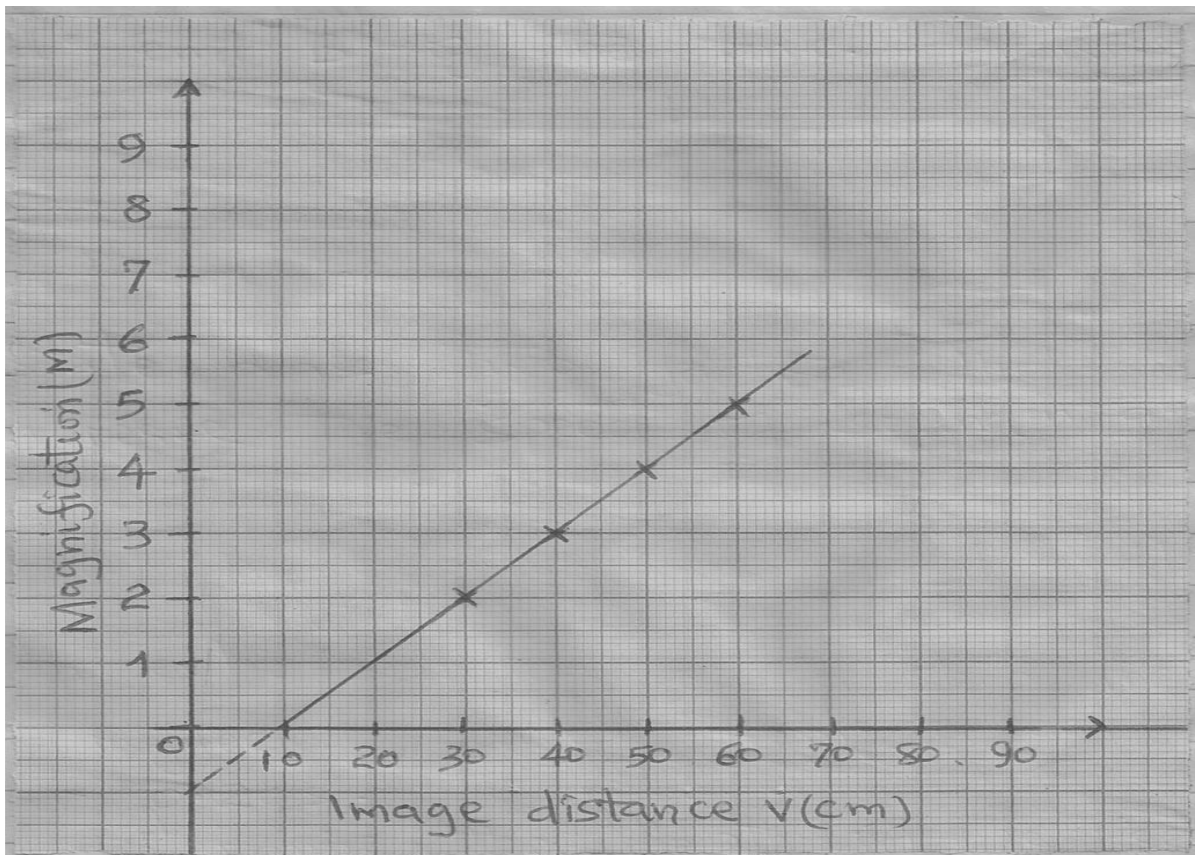


Fig. 9

- (i) By drawing suitable rays, show the position of the image (3mks)
- (ii) Determine the magnification of the image formed (2mks)

(b) In an experiment to determine the focal length of a converging lens, a group of form four students collected some data and used the results to plot the graph shown in figure below.



Using the graph above, determine:

(i) The object position when the image position is 45 cm

(2mks)

(ii) Slope of the graph.

(2mks)

(iii) The focal length of the lens given $m = \frac{v}{f} - 1$

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

PHYSICS

232/3

PAPER 3

PRACTICAL

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES:-

- Write your **name**, **index number** and **school** in the spaces provided above.
- Answer all the questions in the spaces provided above.
- You are supposed to spend the first 15 minutes of the 2 ½ hours allowed for this paper reading the whole paper carefully before commencing your work
- Marks are given for a clear record of the observations actually made their suitability, accuracy and the use made of them.
- Candidates are advised to record their observations as soon as they are made.
- Non- programmable silent calculators and KNEC Mathematical tables may be used.

QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
1	20	
2	20	
40		

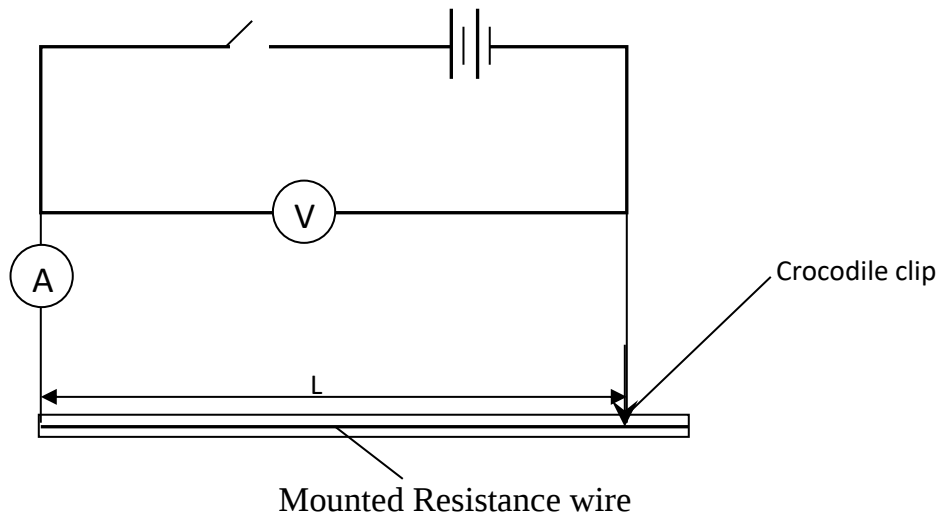
1. PART A

You are provided with the following apparatus .

- ✓ Two dry cells
- ✓ Resistance wire mounted on a mm scale
- ✓ An ammeter (0- 1 A)
- ✓ Cell holder
- ✓ Voltmeter (0- 3 V)
- ✓ 8 connecting wires, at least four with crocodile clips on one end.
- ✓ Switch

Procedure as follows:

a) Connect the circuit as shown in the diagram below.



b) Close the switch and disconnect the clip and record the voltmeter reading E

$E = \dots\dots\dots V.$

1mk

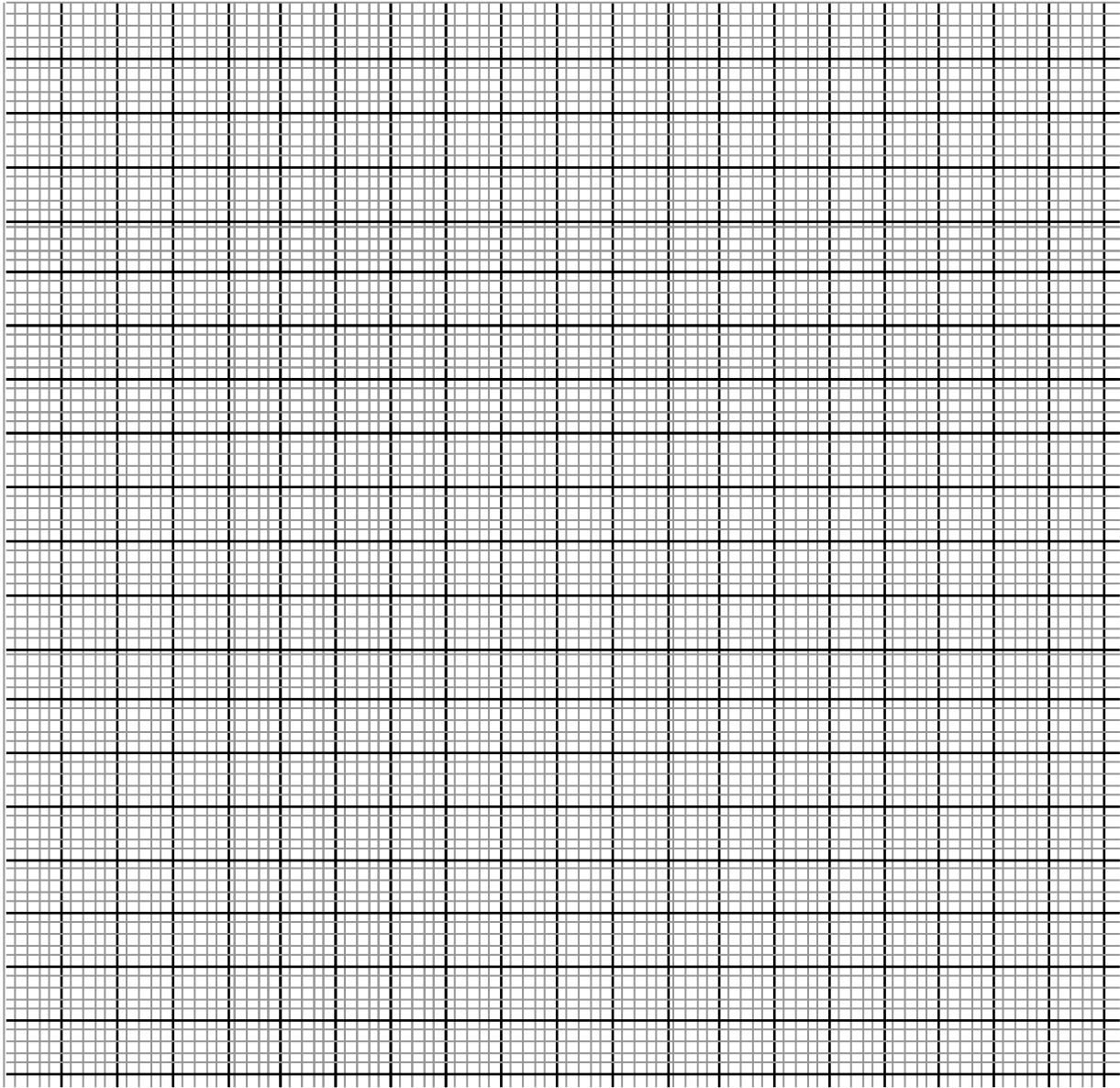
c) Connect the clip at c where L is 100cm across the terminals as shown in the figure and record the values on the table below

d) Repeat the procedure c for the other values of L and complete the table

Length L (cm)	95	80	65	50	35	20
Current I (A)						
P.D. (V)						
E- V (V)						

e) On the grid provided plot a graph of $(E - V)$ y-axis against I .

(5 mks)



f) Determine the slope S of the graph

(2 mks)

g) Given that $E = V + Ir$ determine r from your graph

(2 mks)

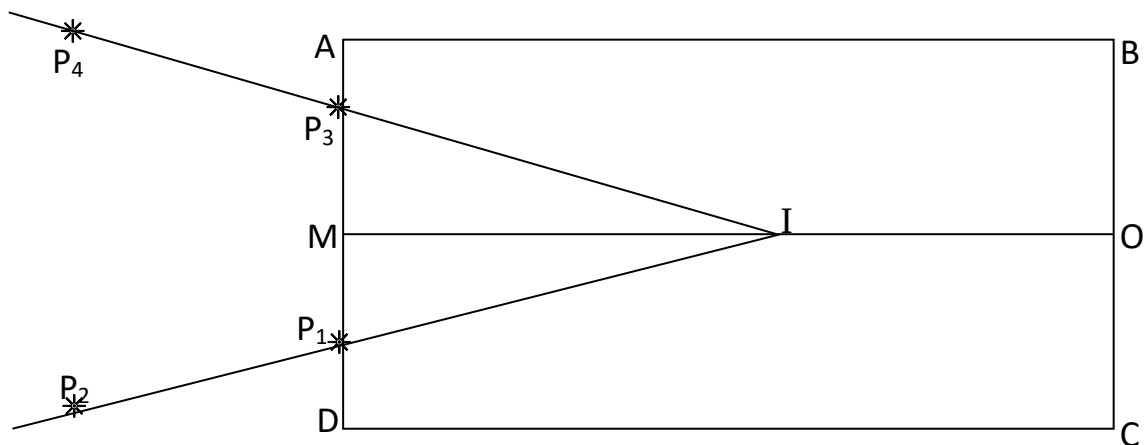
PART B

You are provided with the following apparatus

- Rectangular glass block
- 3 optical pins
- A soft board
- A plane paper
- 4 paper pins

Procedure as follows:

Place the rectangular glass block in the middle of the plane paper and trace its outline using a pencil. Remove the block .



Mark the point O, the mid point of BC M the midpoint of AD. Join O to M.

Measure $P_1M = P_3M = 2 \text{ cm}$

Measure OM: _____

- Place the plane paper on the soft board, stick it using the paper pins and carefully replace the glass block so that it can fit the outline .
- Press the object pin at O such that it is upright and touching the glass block and the second pin at P_1 also upright and touching the block.
- Press the third pin P_2 a short distance from the block such that P_1, P_2 and the image I lie on a straight line when viewed through the block with one eye.
- Remove the glass block and draw the line P_1P_2 to cut OM at I
- Repeat procedure (iii) and (iv) above with pins at P_3 and P_4 .

Measure the length IM

IM = _____ (1 mk)

vi. Find n given that $n = \frac{OM}{IM}$ (2 mks)

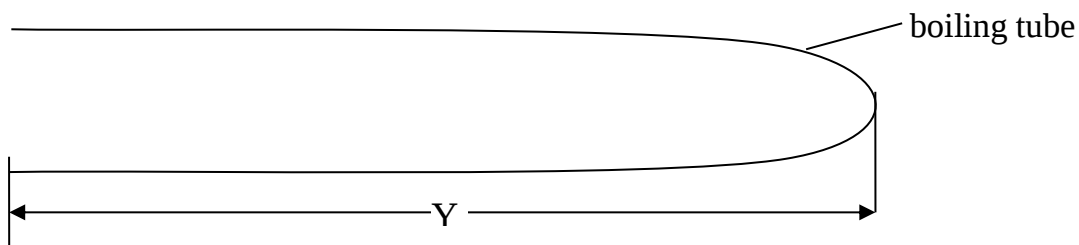
QUESTION 2

A. You are provided with the following

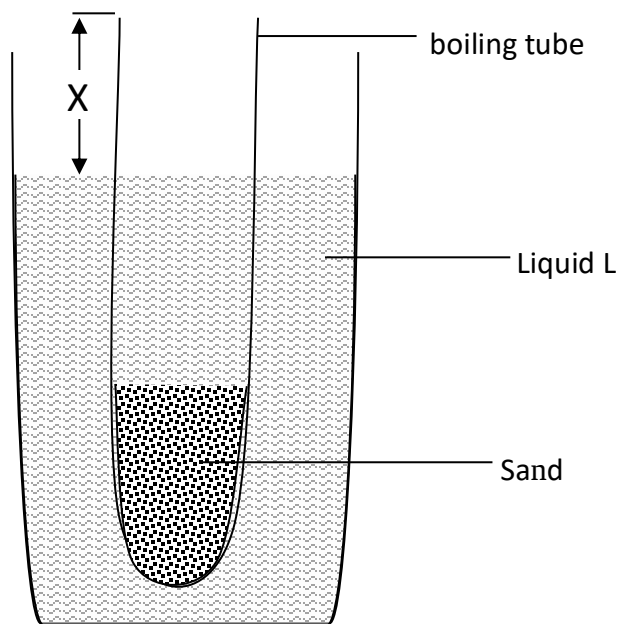
- a boiling tube
- Some sand
- Liquid L in a container
- A balance
- A half meter rule
- Some tissue papers
- Vernier calipers
- A 50g mass
- A string
- Stopwatch
- String
- A retort stand

Proceed as follows

a) Measure and record the total length Y of the boiling tube



b) Put the amount of sand provided into the tube and place it in liquid L as shown below



c) Measure and record the length X of the tube above the liquid level;
make sure that the boiling tube is upright

X = _____ cm 1mk

d) Determine the constant L given that $L = Y - X$ (2 mks)

e) Remove the boiling tube from the liquid, wipe it and measure the mass M of the tube and its content

f) Using the calipers, measure the diameters d_1 and d_2 at two different positions of the boiling tube (2 mks)

d_1 = _____ cm

d_2 = _____ cm

g) Determine the average d_{av} of d_1 and d_2

2mks

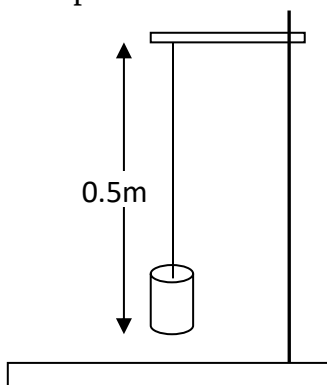
h) Determine the constant ϕ given that

$\phi = \frac{1.273 M}{L d_{av}^2}$ and give its unit

4mks

Part B

i) Now use the mass provided and set it up as shown below with the length of 0.5m



Displace the mass horizontally and release it and take the time t for 10 oscillation

$t =$ _____ sec (1 mk)

j) Determine the time T for one oscillation

(2 mks)

k) Determine the constant g given that

$g = \frac{4\pi^2 L}{T^2}$ and state its unit

(4 mks)

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

BIOLOGY

231/1

PAPER 1

THEORY

TIME: 2 HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES:

- (a) Write your name and Index 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 in this booklet.*

For Examiner'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	26	27	28	Grand Total	

Turn over

Answer **all** questions in the spaces provided

1. a) Grazers and browsers co-exist without problems with each other. Explain. **(2marks)**

.....

.....

.....

b) With reference to the leaves only give **two** adaptations of submerged hydrophytes. **(2marks)**

.....

.....

.....

2. a) i) Name the part of the eye where image is formed. **(1mark)**

.....

ii) State **two** characteristics of the image formed on part named in (a) above. **(2marks)**

.....

.....

b) State the functional difference between semi circular canals and the vestibule apparatus of the ear. **(2marks)**

.....

.....

.....

3. A layer of glycerine was applied on upper surface of a freshwater floating plant that had been kept in the dark for 24 hours. The plant was left undisturbed in bright light. After three hours test for starch carried out on the leaves produced a brown colour of iodine solution. Account for the observation. **(3 marks)**

.....

.....

.....

.....

.....

4. A form four student was walking around the school compound and saw leaves from Nandi flame tree on the ground.

(a) Name the hormone responsible for this phenomenon. (1 mark)

.....

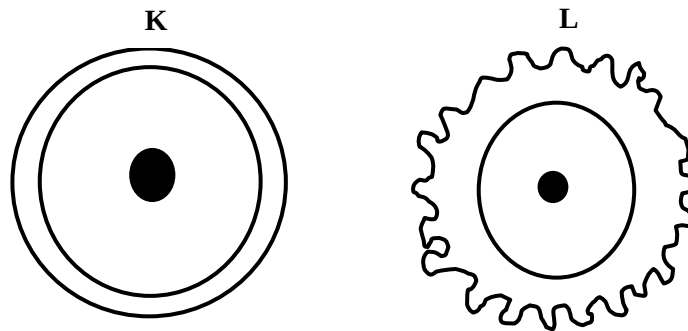
(b) State the significance of the above phenomenon to the tree. (2 marks)

.....

.....

.....

5. The following are diagrams of two pollen grains.



(a) State **one** observable difference between K and L. (1 mark)

.....

.....

(b) State the agent of pollination for each of them. (2 marks)

K

L

6. During oxidation of certain food substances, the respiratory quotient was found to be 0.718.

i) Name the type of food substance being oxidized. (1mark)

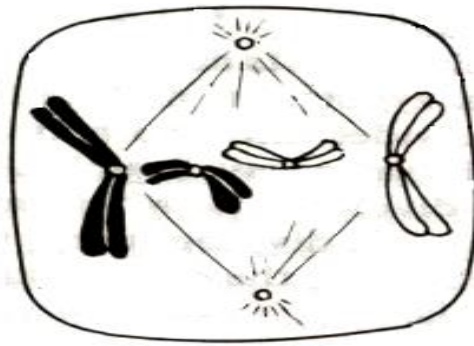
.....

ii) State **two** advantages of using the food substances named. (2marks)

.....

.....

7. The diagram below represents a cell at one stage of the cell division.



(a) Identify the stage. (1 mark)

.....

i) Is the cell of a plant or an animal? (1 mark)

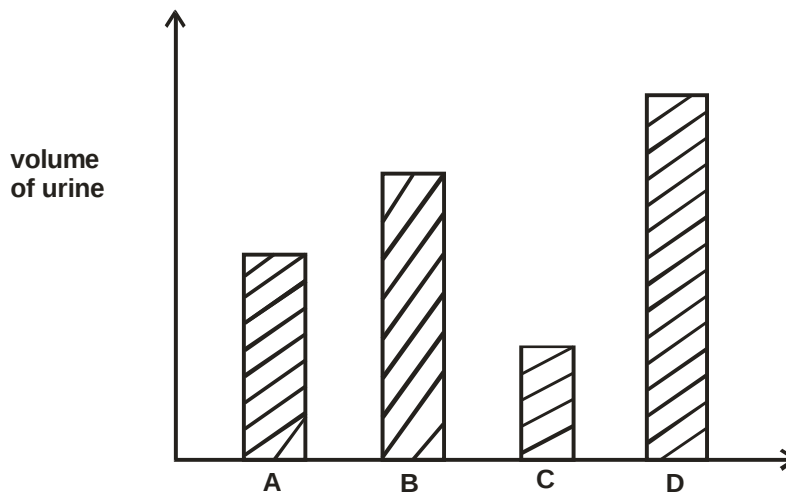
.....

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

.....

.....

8. The quantity of urine passed per day was measured in four mammals; A, B, C and D of the same species in their natural habitats. The results were as shown below.



i) In what form is nitrogenous waste likely to be in organism D? Explain. (3 marks)

.....

.....

.....

.....

9. Explain why it is advisable to breathe through the nose rather than the mouth in man. (2 mks)

.....

.....

.....

10. Name the valve which opens during:

i) Systole(1 mark)

ii) Diastole..... (1 mark)

11. State the branch of Biology that would be used in solving the problem of disputed parentage.

(1mark)

.....

12. Explain why carbohydrates are stored in their polysaccharide forms in both plants and animals.

(3 marks)

.....

.....

.....

.....

13. Name the organelles that are abundant in:

(a) Goblet cells(1 mark)

(b) Liver cells.....(1 mark)

14. Give a reason why it is difficult to calculate Respiratory Quotient (RQ) in plants. (2 marks)

.....

.....

.....

15. A biological washing detergent contains enzymes which remove stains like mucus and oils from clothes which are soaked in water with the detergent.

(a) Name the two groups of enzymes that are present in the detergent. (2 marks)

.....

.....

b) Why would the stains be removed faster with the detergent in water at 35°C rather than at 15°C? (2 marks)

.....

.....

.....

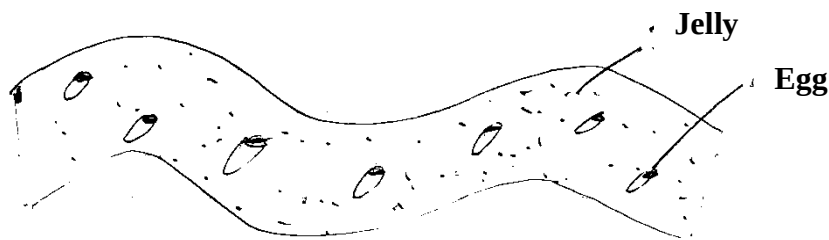
16. Explain why it is important to go for Voluntary Counselling and Testing (VCT) on HIV/AIDS. (2 marks)

.....

.....

.....

17. The diagram below shows the eggs of a certain amphibian.



a) State **three** functions of the jelly. (3 marks)

.....

.....

.....

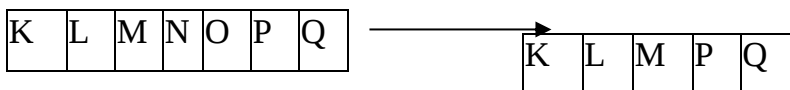
b) What is the biological importance of the organism laying many eggs? (1 mark)

.....

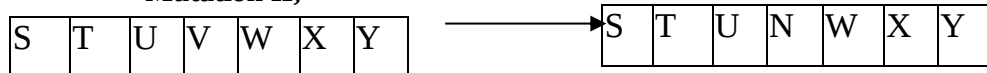
.....

18. The diagram below show various types of gene mutations.

Mutation I;



Mutation II;



i) Identify the type of mutations shown **above**

(2 marks)

.....

ii) Name **one** disorder that results from gene mutation II.

(1 mark)

.....

19. State **three** advantages of metamorphosis to the life of an insect

(3marks)

.....

.....

.....

20. (a) State **two** limitations of fossil records as an evidence for organic evolution theory.

(2marks)

.....

.....

.....

(b) State an idea that led to the formulation of Lamarck's theory of evolution.

(1mark)

.....

21. Explain what happens to red blood cells placed in distilled water for 20 minutes**(3 marks)**

.....

.....

.....

.....

22. Below is a photograph of an organism



i) Identify the class to which this organism belongs to. (1 mark)

.....

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

.....

.....

23. What are the functions of the odontoid process found on the axis bone of the vertebra (2mks)

.....

.....

24. Give **three** main reasons why plants do not require an elaborate excretory system like animals (3marks)

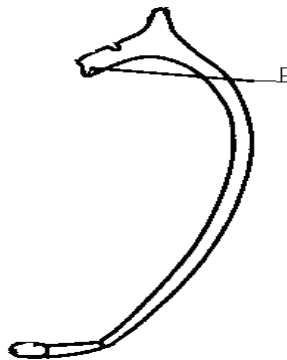
.....

.....

.....

.....

25. Study the diagram of an animal below and answer the questions that follow.



(i) Name the part labeled P (1mark)

P

(ii) How is the above structure adapted to its function? **(2marks)**

.....

.....

.....

26. State how herbaceous plants obtain their support **(3marks)**

.....

.....

.....

.....

27. a) Name **two** structures for gaseous exchange in aquatic plants. **(2 marks)**

.....

.....

b) Explain why guards cells have thicker inner walls and thinner outer walls. **(1 mark)**

.....

.....

28. Explain the significance of etiolation in plants growing in the dark **(2 marks)**

.....

.....

.....

.....

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

BIOLOGY

231/2

PAPER 2

THEORY

TIME: 2 HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

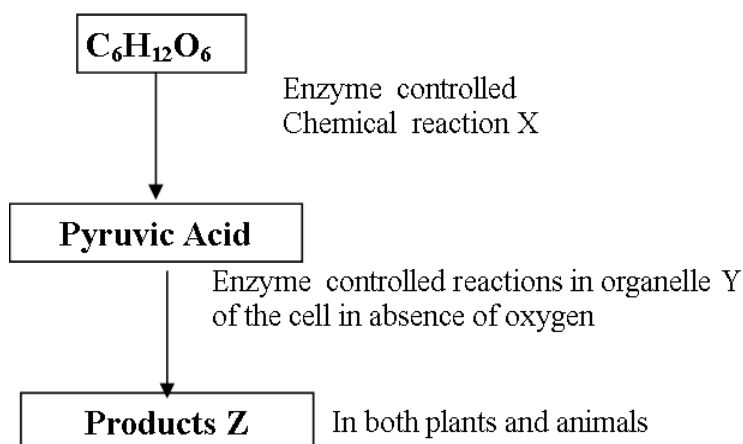
- Write your name and index number in the spaces provided above.
- Sign and write the date of examination in the spaces provided.
- Question **six** is compulsory.
- Choose either question 7 or 8

FOR EXAMINERS USE ONLY

QUESTION	MAXIMUM SCORE	CANDIDATE SCORE
1	8	
2	8	
3	8	
4	8	
5	8	
6	20	
7	20	
8	20	
TOTAL	80	

QUESTIONS

1. Study the flow chart below of a process that takes place in both plants and animals.



a) Name the above process. (1mk)

.....

b) i) In the above process name the chemical reaction represented by X. (1mark)

.....

ii) Name the part of the cell where the enzyme controlled reactions in b(i) above takes place.

(1mark)

.....

c) Name the products Z in

i) Plants..... (1mark)

ii) Animals..... (1mark)

d) What would be the fate of pyruvic acid if oxygen supply is available in the mitochondria of an animal cell (2marks)

.....

.....

.....

e) Define the term oxygen debt (1mark)

.....

.....

2. **In** a certain bird species red flight feathers is controlled by gene R while white flight feather is controlled by gene r. The heterozygous condition Rr results into pink flight feathers.

(a) Using a punnet square, find the genotype of a cross between pink flight feathered bird and white flight feathered bird. **(4 marks)**

(b) Which type of dominance is illustrated here? **(1 mark)**

.....

(c) i) Identify the nuclei acid whose base sequence is shown below. **(1 mark)**

G - A - C - U - A - G - C - G – U

.....

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

.....

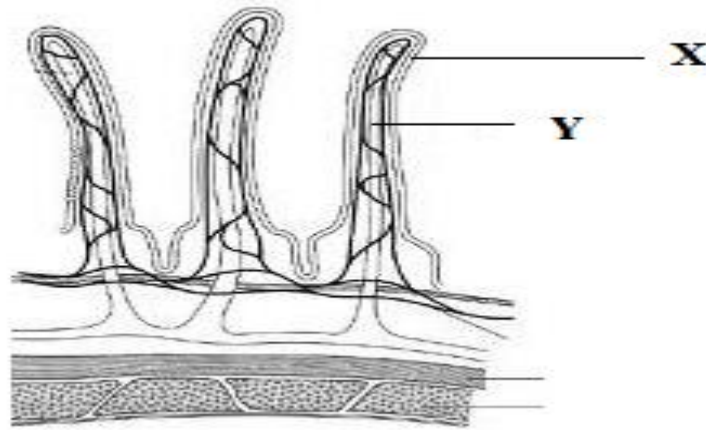
.....

(iii) If this nucleic acid was involved in protein synthesis, how many amino acid would be present in the protein synthesized. **(1 mark)**

.....

.....

3 .The diagram below represents a longitudinal section through the ileum wall.



a) Identify the structures labeled X and Y (2 marks)

X.....

Y.....

b) State one function of X and Y (2 marks)

X.....
.....

Y.....
.....

c) State two functions of the ileum (2 marks)

.....
.....

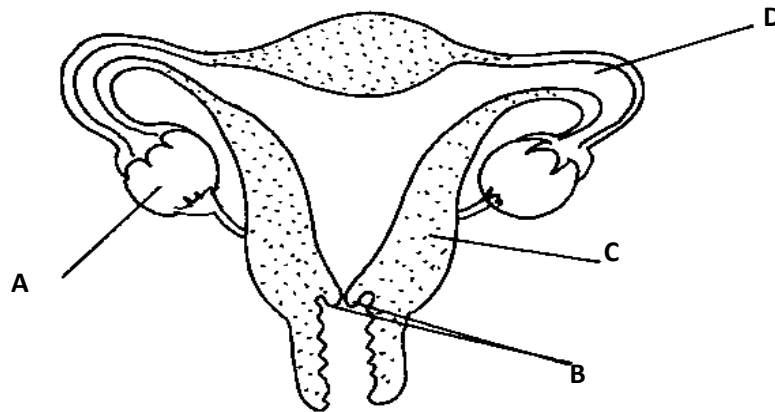
d) Explain the role of the liver in digestion (1 mark)

.....
.....

e) State the endocrine (hormonal) role of pancreas in a mammal (1 mark)

.....
.....

4. The diagram below represents the female reproductive system.



(a) Name the structures labeled A and C (2 marks)

A

C

(b) State the conditions that results if implantation occurs at point labeled D. (1 marks)

.....
.....

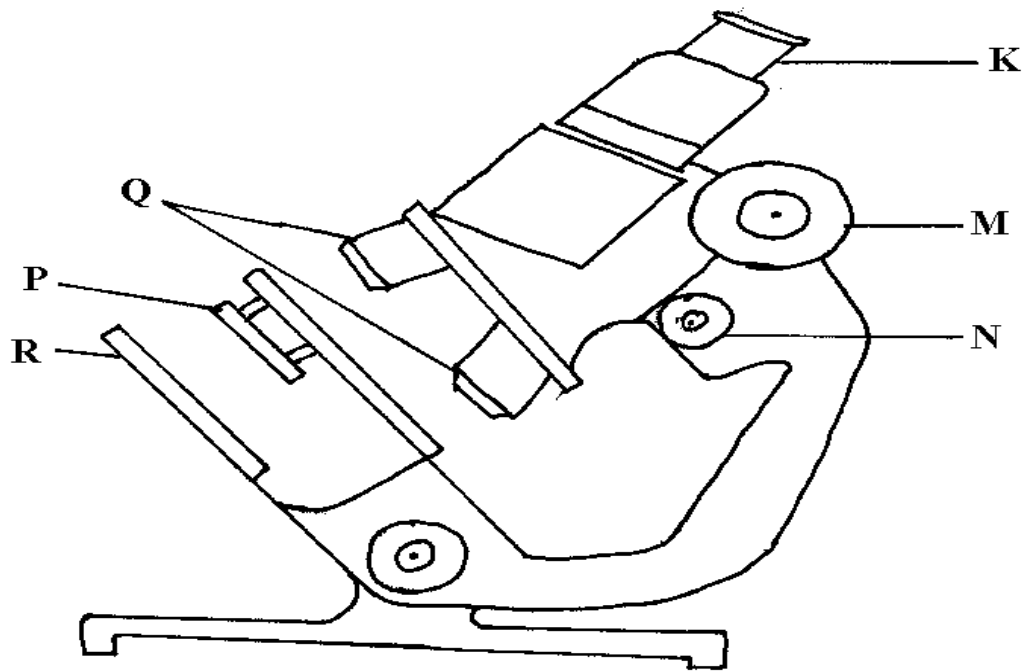
(c) Name the hormone secreted by the part labeled A and for each give one function (4 marks)

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

(d) What role does part labeled B play during pregnancy? (1 mark)

.....
.....

5. The diagram below shows some components of a light microscope.



a) Name the parts labeled (2 marks)

K

M

b) State the functions of (2 marks)

P

.....

Q

.....

c) A student was viewing a prepared slide of a plant cell under high power microscope. The features of the cell were blurred. Which one of the labeled parts of the microscope would the student use to obtain:-

(i) A sharper outline of the features. (1 mark)

.....

(ii) Give the formula used to calculate magnification in a light microscope. (1 mark)

.....

d) A student was preparing a section of a plant cell to be viewed on a light microscope. Give a reason for each of the following steps:-

(i)Cutting a very thin section **(1 mark)**

.....
.....

(ii)Staining the section **(1 mark)**

.....
.....

(iii)Putting the section in water **(1 mark)**

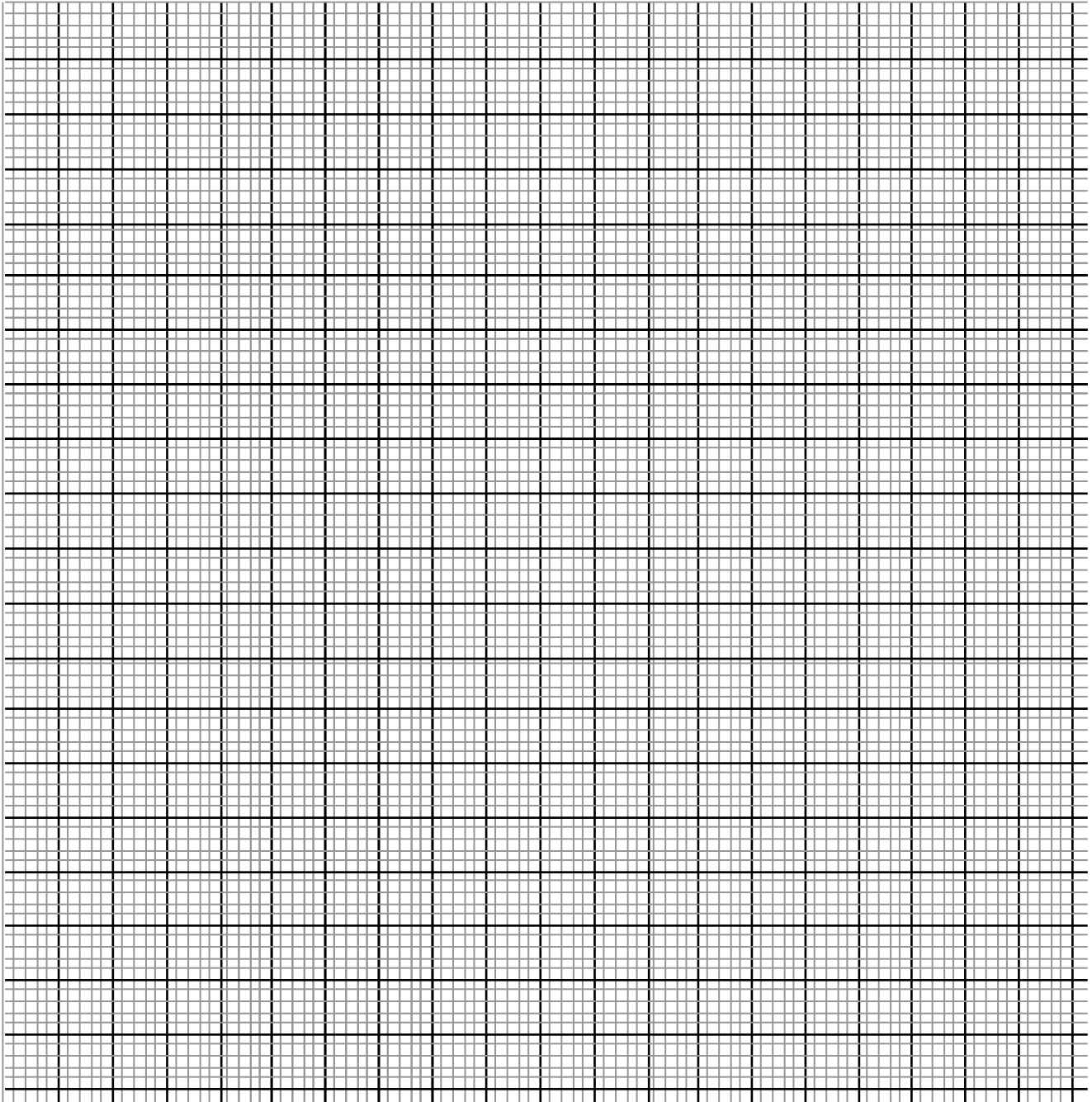
.....
.....

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

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

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

- a) On the same axes, draw graphs of dry weight of endosperm, embryo and the total dry weight against time. (7marks)



- b) What was the total dry weight on day 5? (1mark)

.....

- c) Account for:

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

.....

.....

.....

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

.....

.....

.....

iii) Decrease in total dry weight from day 0 to day 8. (1mark)

.....

.....

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

.....

.....

d) State **two** factors within the seed and two outside the seed that cause dormancy.

i) Factors within the seed (2marks)

.....

.....

ii) Factors outside the seed. (2marks)

.....

.....

e) Give **two** characteristics of meristematic cells (2marks)

.....

.....

7. Describe how the mammalian skin is adapted to its functions (20 mrks)

8. a) Describe how xerophytes are adapted to living in their habitat. (10 mks)

b) Explain how an upright position is maintained in herbaceous plants. (10 mks)

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

BIOLOGY

231/3

PAPER 3

PRACTICAL

TIME: 1¾ HOURS

SCHOOL..... SIGN.....

Kenya Certificate of Secondary Education.

BIOLOGY CONFIDENTIAL

Each candidate should be provided with the following.

1. 4 test tube.
2. Test tube rack.
3. 2 boiling tube.
4. 2 droppers.
5. 5 spatula of powder Q.
6. 5 spatula of powder R.
7. 1 measuring cylinder.
8. 6 labels.

Access to the following

1. 1% copper (II) sulphate.
2. Sodium hydroxide.
3. Iodine solution.

NB: powder Q is wheat flour

Powder R is SIFTED maize flour.

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

BIOLOGY

231/3

PAPER 3

PRACTICAL

TIME: 1¾ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

231/3

Biology paper 3

(Practical)

TIME: 1 ¾ HRS

INSTRUCTIONS TO CANDIDATES

- ❖ Write your name and index number in the spaces provided at the top of this page.
- ❖ Answer all the questions in the spaces provided.

For examiner's use only

Question	Maximum score	Candidate's score
1	13	
2	15	
3	12	
Total score	40	

1. You are provided with powder Q and powder R. Measure 10ml of distilled water and put it in a boiling tube. Put powder Q in the boiling tube, shake and make a solution. Label it solution Q. Measure 10ml of distilled water and put it in another boiling tube. Put powder R in the boiling tube, shake and make a solution. Label it solution R.

a) Using the reagents provided carryout food tests on the two solutions to determine the food present in the two solutions. (8mks)

Solution	Food	Procedure	Observation	Conclusion
Q				
R				

--	--	--	--	--

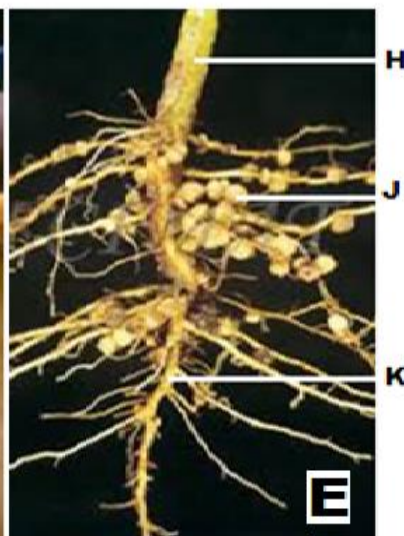
b (i). Which of the two food substances should be included in a diet to protect a child suffering from kwashiorkor? **(1mk)**

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

C (i) Name two enzymes in the human body which digest the food substances found in the powder. **(2mks)**

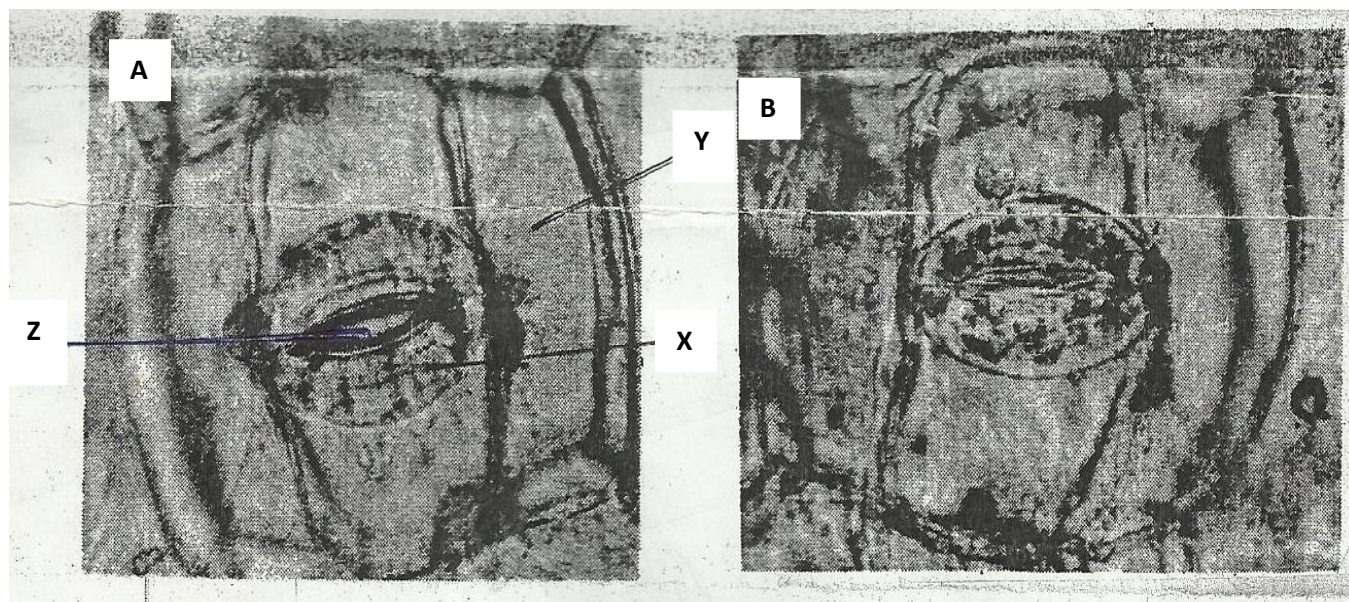
ii) State the organ from which each enzyme you have stated in c (i) acts. **(2mks)**

2. Observe the three photographs carefully and answer the questions that follow



- a) Identify the structures labeled H, J, and K (3mks)
- b) Suggest the group of plant from which the root is obtained (1mk)
- c) Explain the relationship found at point J (4mks)
- d) Explain how the relationship benefits a farmer. (2mks)
- e) State one difference between the relationships in photographs D and F. (1mk)
- f) Construct one food chain from the organisms in photograph D (1mk)
- g) State two disadvantages of the relationship shown in photograph F (2mks)

3. The photographs below show a certain physiological process.



a) Name the physiological process shown by the photographs. **(1Mark)**

b) Name cells X and Y. **(2Marks)**

X

Y

c) How is cell X adapted to function? **(2Marks)**

d) i) Name **two** substances that passes through part Z. **(2Marks)**

ii) Describe the significance of the process shown by figure A. **(2Marks)**

e) State three theories that explain the appearance of figure A and B. **(3Marks)**

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

MATHEMATICS

121/1

PAPER 1

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

Instructions to Candidates

- (a) Write your name, admission number and class in the spaces provided above.
- (b) Sign and write the date of examination in the spaces provided above.
- (c) This paper consists of **two** sections; **Section I** and **Section II**.
- (d) Answer **all** the questions in **Section I** and any **five** questions from **Section II**
- (e) **Show all the steps in your calculations, giving your answers at each stage in the spaces provided below each question**
- (f) Marks may be given for correct working even if the answer is wrong.
- (g) Non-programmable silent electronic calculators and KNEC Mathematical tables may be used, except where stated otherwise.

FOR EXAMINER'S USE ONLY

Section I

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

Section II

17	18	19	20	21	22	23	24	Total

Grand
Total

SECTION A (50MKS)

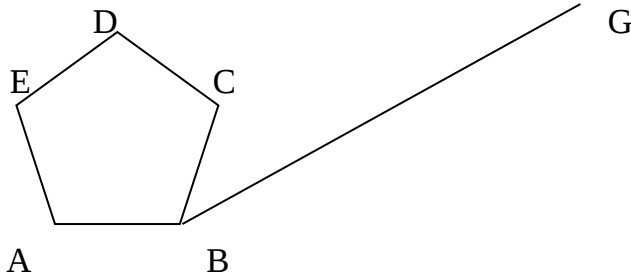
Answer ALL the questions in this section in the spaces provided.

1. Without using a calculator, evaluate $\frac{2\frac{1}{4} + \frac{3}{5} \div \frac{5}{6} \text{ of } 2\frac{2}{5}}{1\frac{7}{10}}$ leaving the answer as a fraction in its simplest form (3mks)

2. Solve for x in the equation $\frac{81^{2x} \times 27^x}{9^x} = 729$ (3 marks)

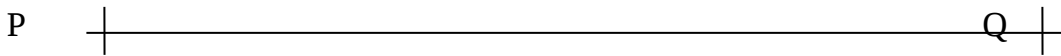
3. The length of a solid prism is 10cm, its cross-section is an equilateral triangle of side 6cm.
Find the total surface area of the prism. (3mks)

4. In the figure below ABCDE is a cross-sections of a solid. The solid has uniform cross-section. Given that BG is a base edge of the solid, complete the sketch, showing the hidden edges with broken **lines** (3mks)



5. A shopkeeper sell two types of pangas, type x and type y. Twelve type x pangas and five type y pangas cost sh. 1260, while nine type x pangas and fifteen type y pangas cost sh. 1620. Musembi bought nineteen type y pangas. How much did he pay for them? (4mks)
6. Ntutu had cows, sheep and goats in his farm. The number of cows was 32 and number of sheep was twelve times the number of cows. The number of goats was 1344 more than the number of sheep. If he sold $\frac{3}{4}$ of the goats, find the number of goats that remained. (4mks)

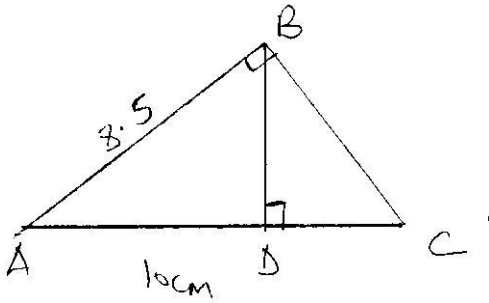
7. Given below is a line PQ. Without using a protractor construct another line through P making an angle of $37\frac{1}{2}^\circ$ with PQ. Using the constructed line subdivide BC into 7 equal **parts** **(4mks)**



8. Given that $OA = \begin{bmatrix} 4 \\ 5 \end{bmatrix}$ and $OB = \begin{bmatrix} -3 \\ 8 \end{bmatrix}$ find the mid-point m of AB **(2mks)**

9. Simplify $\left(\frac{X^3 - XY^2}{X^4 - Y^4}\right)^{-1}$ **(3 MKS)**

10. In the triangle, $AB = 8.5\text{cm}$, $AC = 10\text{cm}$ and $\angle ABC = 90^\circ$



Calculate:-

- i) The length of BC (1mk)
- ii) The length of BD (2mks)

11. Simplify $3\sqrt{5} - 2\sqrt{5}$ leaving the answer in the form $a + b\sqrt{c}$ where a, b , and c are rational number. (3mks)

12. Two matrices A and B are such that $A = \begin{pmatrix} K & 4 \\ 3 & 2 \end{pmatrix}$ and $B = \begin{pmatrix} 1 & 2 \\ 3 & 4 \end{pmatrix}$. Given that the determinant of $AB = 4$, find the value of K. **(3mks)**

13. A minibus covered a distance of 200km at an average speed of 100km/h. It travelled at a speed of 80km/h for $\frac{3}{5}$ of its journey. At what speed did it travel the remaining part of the journey? **(3mks)**

14. The table below shows marks scored by 40 students in a mathematics test.

Marks	30-39	40-49	50-59	60-69	70-79
No of students	2	9	14	7	8

Calculate the median mark **(2mks)**

15. Juma paid sh. 180 for a book after getting a discount of 10%. the shopkeeper made a profit of 20% on the sale of the set book. What percentage profit would the shopkeeper have made if no discount was allowed.? **(3mks)**

16. A rectangular tank has a hole in it such that 11cm^3 of water leaks out every 5 seconds. Using π as 3.142, calculate

i) the capacity of the water lost from the tank every hour **(2mks)**

ii) The time it takes to fill a cylindrical tank of radius 30cm and height 30cm into which the leaking water drains in hours to 4 significant **figures** **(2mks)**

SECTION II (50MARKS)

Answer Any Five Questions From This Section In The Spaces Provided.

17. A line L passes through points $(-2, 3)$ and $(-1, 6)$ and perpendicular to a line P at $(-1, 6)$

a) Find the equation of L (2mks)

b) Find the equation of P in 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 intercept of Q (3mks)

d) Find the Values of x and y (3mks)

18).Two shopkeepers Juma and Wanjiku bought some items from a wholesaler. Juma bought 18 loaves of bread, 40 packets of milk and 5 bars of soap while Wanjiku bought 15 loaves of bread, 30 packets of milk and 6 bars of soap. The prices of loaf of bread, a packet of milk and a bar of soap were ksh, 45, 50 and ksh, 150 respectively.

a) Represent

i) the number of items bought by Juma and Wanjiku using a 2×3 matrix **(1mk)**

ii) The price of items bought using a 3×1 matrix **(1mk)**

b) Use the matrix I (a) above to determine the total expenditure incurred by each person and hence the difference in their expenditure. **(3mks)**

c) Juma and Wanjiku also bought rice and sugar. Juma bought 36kg of rice and 23kg of sugar and paid ksh, 8160. Wanjiku bought 50kg of rice and 32kg of sugar and paid ksh, 11,340. Use the matrix method to determine the price of one kilogram of rice and one kilogram of sugar. **(5mks)**

19. The table below shows how income tax was charged on income earned in a certain year.

Taxable income per year (Kenya Pounds)	Rate (shilling per Kenya Pound)
1 - 3630	2
3631 - 7260	3
7261 - 10890	4
10891 - 14520	5

Mr. Gideon is an employee of a company and earns a salary of Ksh. 15,200 per month. He is housed by the company and pays a nominal rent of Ksh. 1050 per month. He is married and is entitled to a family relief of Ksh. 450 per month

i) Calculate his taxable income in k£ p.a. **(2mks)**

ii) Calculate his gross tax per month. **(4mks)**

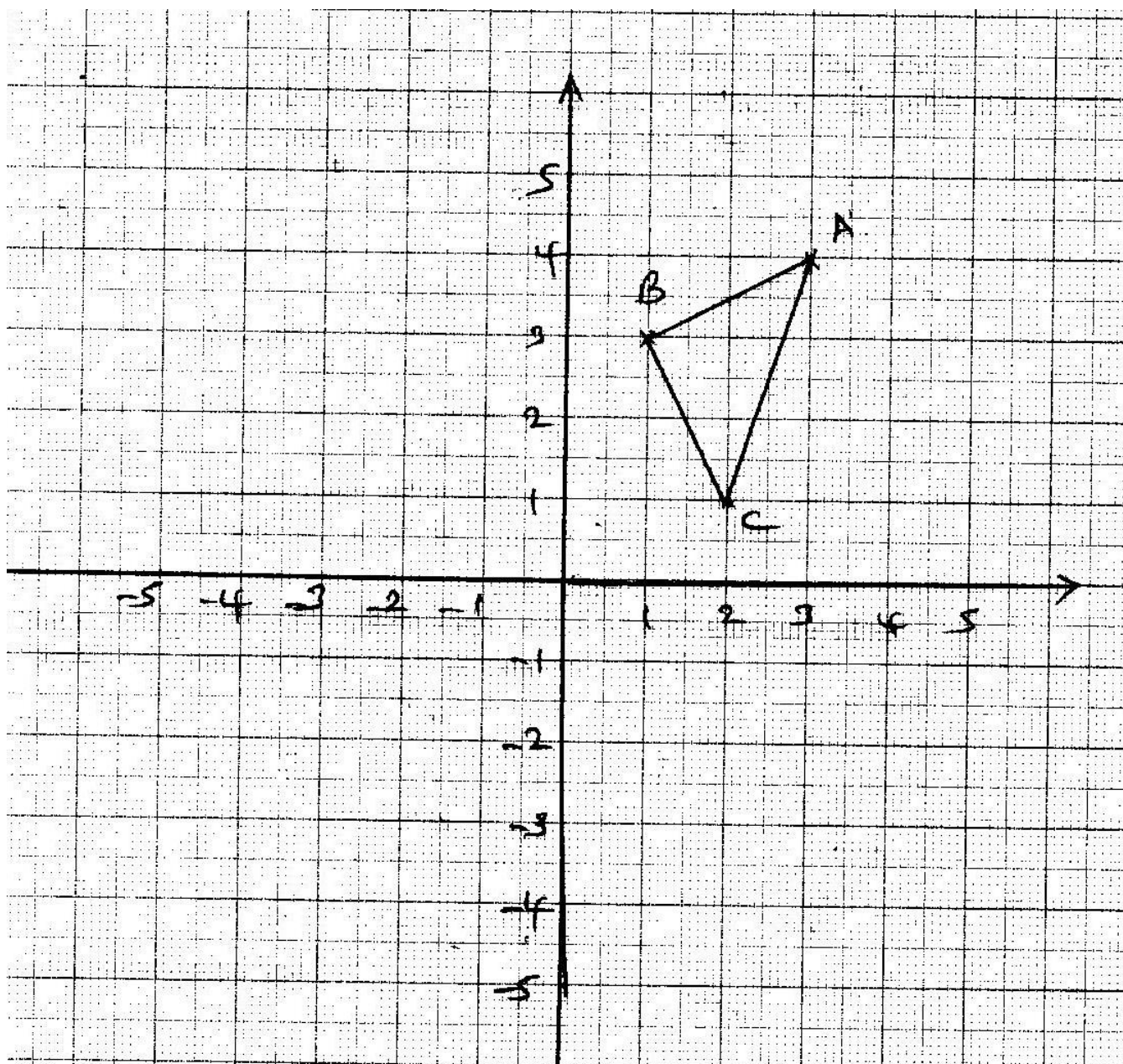
iii) Calculate his net tax per month **(2mks)**

iv) Calculate his net salary per month **(2mks)**

20. The diagram below shows a triangle ABC with A(3,4) B(1,3) and C(2,1)

a) Draw $\triangle A'B'C'$ the image of $\triangle ABC$ under a rotation of $+90^\circ$ about (0,0) (2mks)

b) Draw $\triangle A''B''C''$ the image of $\triangle A'B'C'$ under a reflection in the line $y = x$ (2mks)

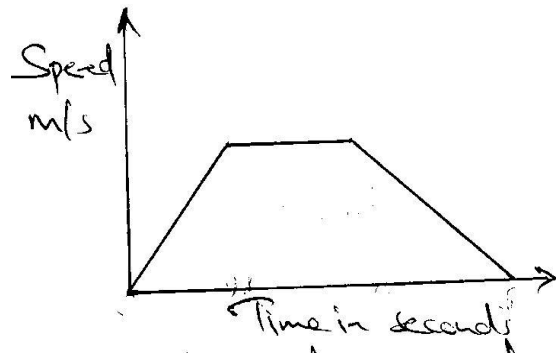


c) Draw $\triangle A'''B'''C'''$ the image of $\triangle A''B''C''$ under a rotation of -90° about (0,0) (2mks)

d) Describe a single transformation that maps $\triangle ABC$ onto $\triangle A'''B'''C'''$ (2mks)

e) Write down the equations of the lines of symmetry of the quadrilateral $BB'A'A'$ (2mks)

21. The diagram below shows the speed time graph for a train travelling between two stations. The train starts from rest and accelerates uniformly for 150 seconds. It then travels at a constant speed for 300 seconds and finally decelerates uniformly for 200 seconds



Given that the distance between the two stations is 10,450m, calculate the

- a) Maximum speed in km/h the train attained (3mks)
- b) Acceleration (2mks)
- c) Distance the train travelled during the last 100 seconds (2mks)
- d) Time the train takes to travel the first half of the journey. (3mks)

22. The table shows the mark scored by students in a maths exams

Class	30-39	40-49	50-59	60-69	70-79	80-89
No of students	3	17	27	23	8	2

a) Draw a cumulative frequency **curve** (3mks)

b) Use your graph to determine

i) The median (1mk)

ii) The quartile deviation (1mk)

iii) The number of students who scored above 67 (1mk)

c) Use an assumed mean of 64.5 to calculate the standard deviation of the above data. (4mks)

23. A circular lawn is surrounded by a path of uniform width of 7M. the area of the path is 21% that of the lawn

a) calculate the radius of the lawn **(4mks)**

b) Given further that the path surrounding the lawn is fenced on both sides by barbed wire on posts at intervals of 10 metres and 11 metres on the inner and outer sides respectively.

Calculate the total number of posts required for the fence **(4mks)**

c) Calculate the total cost of the post if one post cost shs.105 **(2marks)**

24. The displacement , S metres of a moving particles after t seconds is given by

$$S = 2t^3 - 5t^2 + 4t + 2$$

Determine

a) The velocity of the particle when t = **3seconds** **(3mks)**

b) The value of t when the particle is momentarily at rest **(3mks)**

c) The displacement when the particle is momentarily at rest **(2mks)**

d) The acceleration of the particles when t = 3 seconds **(2mks)**

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

MATHEMATICS

121/2

PAPER 2

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

Instructions to Candidates

- (a) Write your name, admission number and class in the spaces provided above.
- (b) Sign and write the date of examination in the spaces provided above.
- (c) This paper consists of **two** sections; **Section I** and **Section II**.
- (d) Answer **all** the questions in **Section I** and any **five** questions from **Section II**
- (e) **Show all the steps in your calculations, giving your answers at each stage in the spaces provided below each question**
- (f) Marks may be given for correct working even if the answer is wrong.
- (g) Non-programmable silent electronic calculators and KNEC Mathematical tables may be used, except where stated otherwise.

FOR EXAMINER'S USE ONLY

Section I

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

Section II

17	18	19	20	21	22	23	24	Total

Grand
Total

SECTION I (50 MARKS)

Answer ALL questions in this section.

1. Make y the subject of the formula in: $v = \frac{A \sqrt{x^2 + y^2}}{y}$ (3 marks)

2. Solve for x in the equation: $\text{Log}_8(6 - 2x) - \text{Log}_8(x - 2) = -1/3$ (3 marks)

3. Three quantities P , Q and R are such that P varies directly as the cube of Q and inversely as the square root of R . Find the percentage change in P if Q decreases by 10% and R decreases to 36%. (3 marks)

4. A circle with its centre at O (-2, 0) passes through a point (1, 4). Write down the equation of the circle in the form $x^2 + y^2 + ax + by + c = 0$ **(3 marks)**
5. Express: $\frac{\cos 30^\circ}{\tan 45^\circ + \sqrt{3}}$ in surd form and simplify by rationalizing the denominator **(3 marks)**
6. The position vectors of points P and Q are $\mathbf{p} = -2\mathbf{i} - \mathbf{j} + \mathbf{k}$ and $\mathbf{q} = 4\mathbf{i} - 5\mathbf{j} - 2\mathbf{k}$ and respectively. Find the magnitude of **OM** if M is a point that divides **PQ** in the ratio 1:2 correct to 4 significant figures. **(3 marks)**

7. a) Find the binomial expansion of $\left(1 + \frac{1}{2x}\right)^7$ up to the 4th term with increasing powers of x.

(2 marks)

b) Hence estimate the value of $(1.05)^7$ correct to 4 decimal places.

(2 marks)

8. A computer with a marked price of Kshs. 40000 can also be bought on hire purchase terms. Kibet bought the computer on hire purchase by making a deposit of Ksh 10000 and cleared the balance with equal 12 monthly installments of KShs. 3500 each. Determine the monthly interest rate of hire purchase to 2 significant figures.

(3 marks)

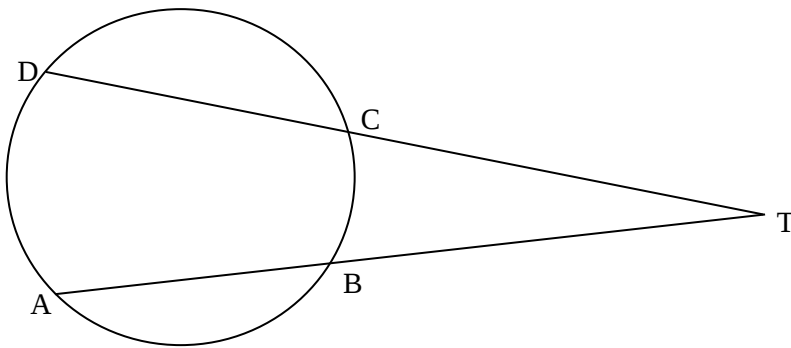
9. A dealer blends Kericho tea that costs sh 300 per 100g packet with Ketepa that costs ksh 160 per 200g packet. In what ratio must the dealer mix the two so that by selling a 100g packet of the blend for ksh 250, a profit of 25% is made? **(4 marks)**

10. Solve for θ in the equation: $\sin 2\theta = -0.5$ for $0^\circ \leq \theta \leq 360^\circ$ **(3 marks)**

11. Use completing of the square method to solve: $2x^2 - 6x + 4 = 0$ **(3 marks)**

12. A carpenter wishes to cut a 1m long piece of wood into 3 equal parts. He approximates the length of each piece to 0.33m. Calculate the percentage error due to this approximation
(3 marks)

13. Calculate length DT in the figure below given AT and DT are secants that intersect at T and $AB = 5$ cm, $BT = 4$ cm and $DC = 9$ cm.
(3 marks)



14. An arc of a circle of diameter 7 cm subtends an angle of 1.2 radians to the centre of the circle.
What is the length of the arc?
(2 marks)

15. Given matrix $A = \begin{pmatrix} x - 2x & x - 4 \\ x & 2 \end{pmatrix}$. Find the possible values of x if A is a singular matrix.
- (3 marks)**

16. Working together two taps A and B can fill a tank in 2 hours. By itself tap A can fill the tank in 6 hrs. Tap A and B are opened at the same time and after running for 1 hours, an outlet tap which can drain the full tank by itself in 12 hours is opened and Tap A is closed. Find the total time taken to fill the tank.
- (4 marks)**

SECTION II – 50 MARKS

Answer only FIVE questions from this section.

17. In a form 4 class there are 24 girls and 30 boys. The probability that a girl participates in games is 0.4 whereas that of a boy is 0.6.

a) A student is picked at random from the class. Find the probability that the student picked:

i) Is a boy and will participate in games **(2 marks)**

ii) Will not participate in games **(2 marks)**

b) Two similar bags A and B are such that, bag A contains 3 blue balls and 7 red balls while bag B contains 4 green balls and 8 blue balls. The balls are similar in shape and size. A ball is drawn from bag A and bag B. Determine the probability that:

i) One of the balls drawn is green. **(2 marks)**

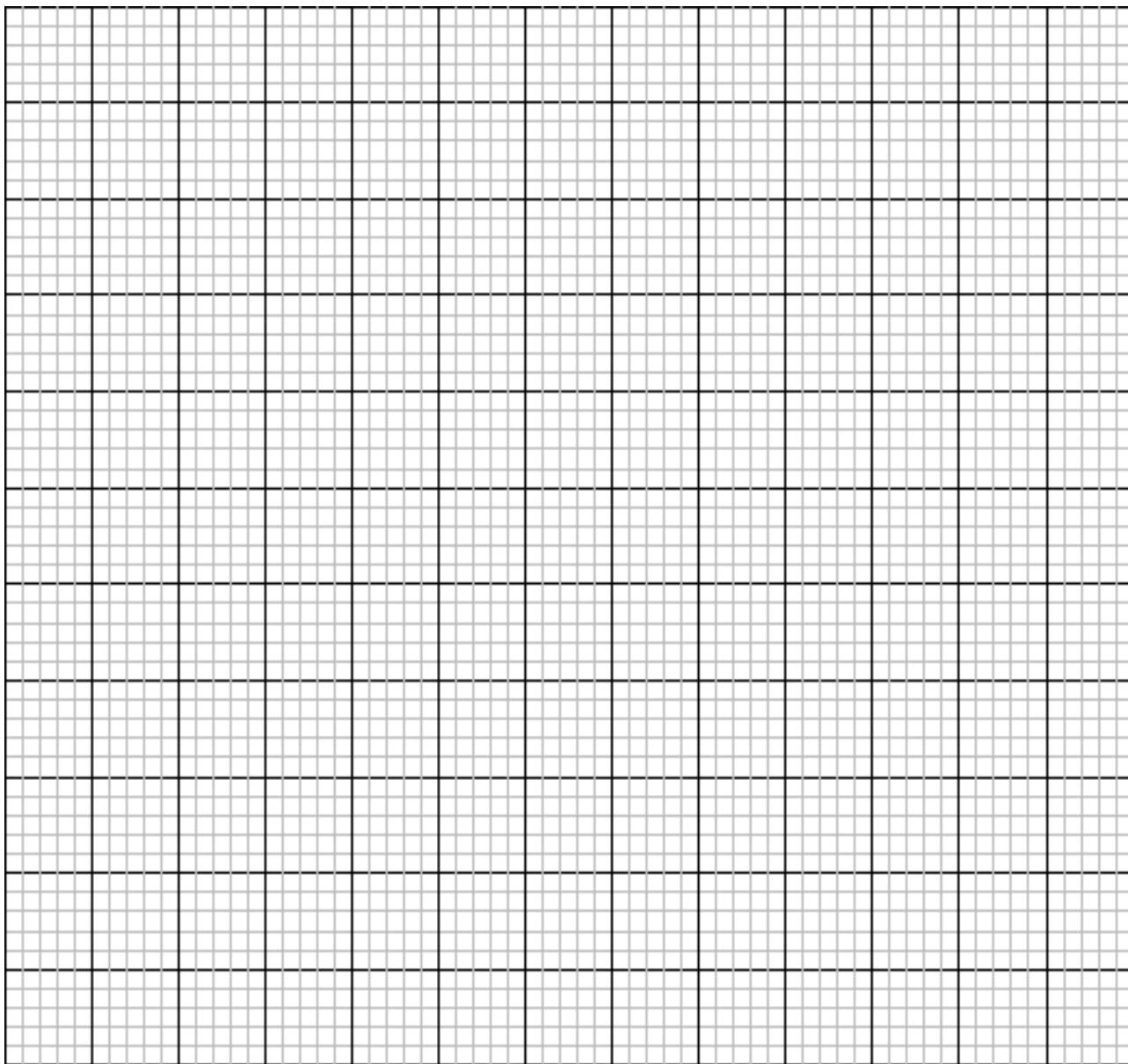
ii) The balls drawn are of the same colour. **(2 marks)**

iii) None of the balls drawn is red **(2 marks)**

- 18.** The table below gives the values of P and I showing the relationship between electrical power (P) and current (I) in a certain circuit.

P	1.050	1.350	1.650	1.950	2.250	2.400
I	0.995	1.697	2.700	3.698	4.403	5.196

- a)** Using a scale of 1 cm to represent 0.5 units on the horizontal axis and 2 cm to represent 0.5 units on the vertical axis, draw a graph of P against I on the grid provided. **(4 marks)**



- b)** What is the gradient of the graph? **(2 marks)**

c) From the graph, find:

i) The value of P when $I = 3.4$

(1 mark)

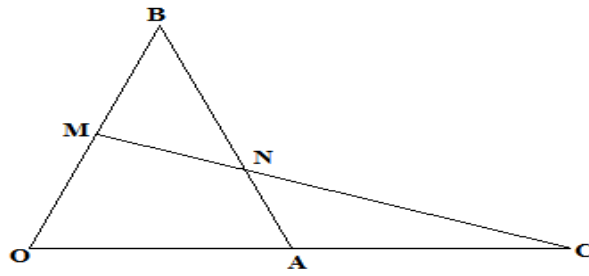
ii) The value of I when $P = 1.45$

(1 mark)

iii) The value of P when $I = 0$

(2 marks)

19. In the triangle OAB below, $\mathbf{OA} = \mathbf{a}$, $\mathbf{OB} = \mathbf{b}$ and $3\mathbf{OA} = 2\mathbf{OC}$. M divided $\mathbf{OB}$ in the ratio 1:1 .



a) Express in terms of $\mathbf{a}$ and $\mathbf{b}$ only, the vectors

i) $\mathbf{BA}$ (1 mark)

ii) $\mathbf{OC}$ (1 mark)

iii) $\mathbf{MC}$ (1 mark)

b) Given further that $\mathbf{MN} = h\mathbf{MC}$ and $\mathbf{BN} = k\mathbf{BA}$,

i) Express vector $\mathbf{MN}$ in two different ways in terms of $\mathbf{a}$, $\mathbf{b}$, h and k (2 marks)

ii) Find the value of h and k . (4 marks)

c) State the ratio $\mathbf{MN}:\mathbf{MC}$ (1 mark)

20. A group of people planned to contribute equally towards buying a plot valued at Ksh 270,000.

After the contribution, 2 members joined of the group. As a result, a refund of Ksh 1500 was made to the members who had already contributed..

a) Let the original number of people be x and express in terms of x :

i) The original contribution **(1 mark)**

ii) The new contribution **(1 mark)**

b) Find how much each member contributed finally **(5 marks)**

c) Calculate the percentage decrease in the contribution per person caused by the members who joined. **(3 marks)**

21. The table shows income tax rates for a certain year.

Monthly taxable pay K£	Rate of tax in Ksh. Per K£
1- 434	2
435 - 866	3
867- 1298	4
1299 - 1730	5
Over 1730	6

A company employee earns a monthly basic salary and is also given taxable allowances amounting to Ksh 10480. If the employees tax on the 5th band is Ksh 3420,

a) Calculate the employee's monthly taxable income tax in K£. **(2 marks)**

b) The employee is entitled to a personal tax relief of Ksh. 1056 per month. Determine the net tax. **(4 marks)**

c) In a certain month, the employee received a 25% increment in his basic salary. Calculate his net monthly pay. **(4 marks)**

22. a) The n^{th} term of a sequence is given by the relation $2n + n$

i) Write down the first 3 terms of the sequence. **(1 mark)**

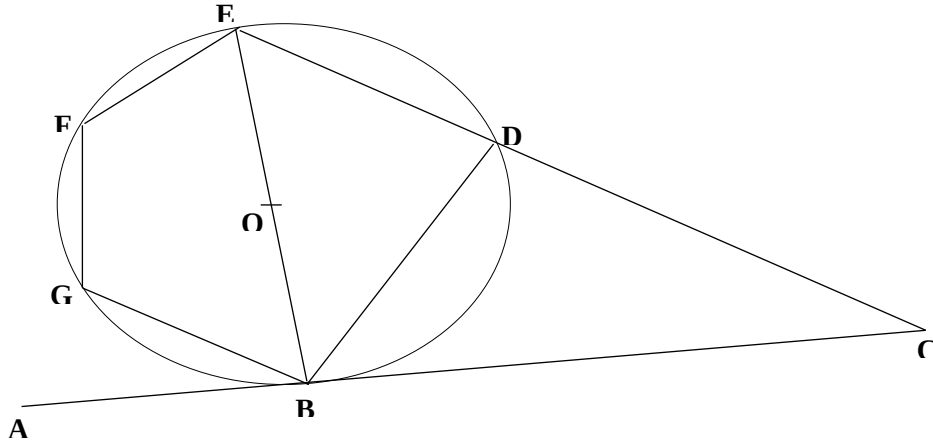
ii) Find the sum of the first 42 terms of the sequence. **(3 marks)**

b). Bacteria in a culture increases by 125% of every hour. The number bacteria in the culture at 0607h was 8000.

i) What will be the number of the bacteria in the culture after one hour. **(2 marks)**

ii) Determine the total number of bacteria in the culture at 0937h the same day **(4 marks)**

23. In the figure above, ABC is a tangent to the circle, centre O and BOE is a diameter. Given $FG = BG$ and angles $DBC = 48^\circ$ angle $GEF = 25^\circ$.



Giving reasons, find the size of angles:

i) BFE (2 marks)

ii) BGD (2 marks)

iii) DFE (2 marks)

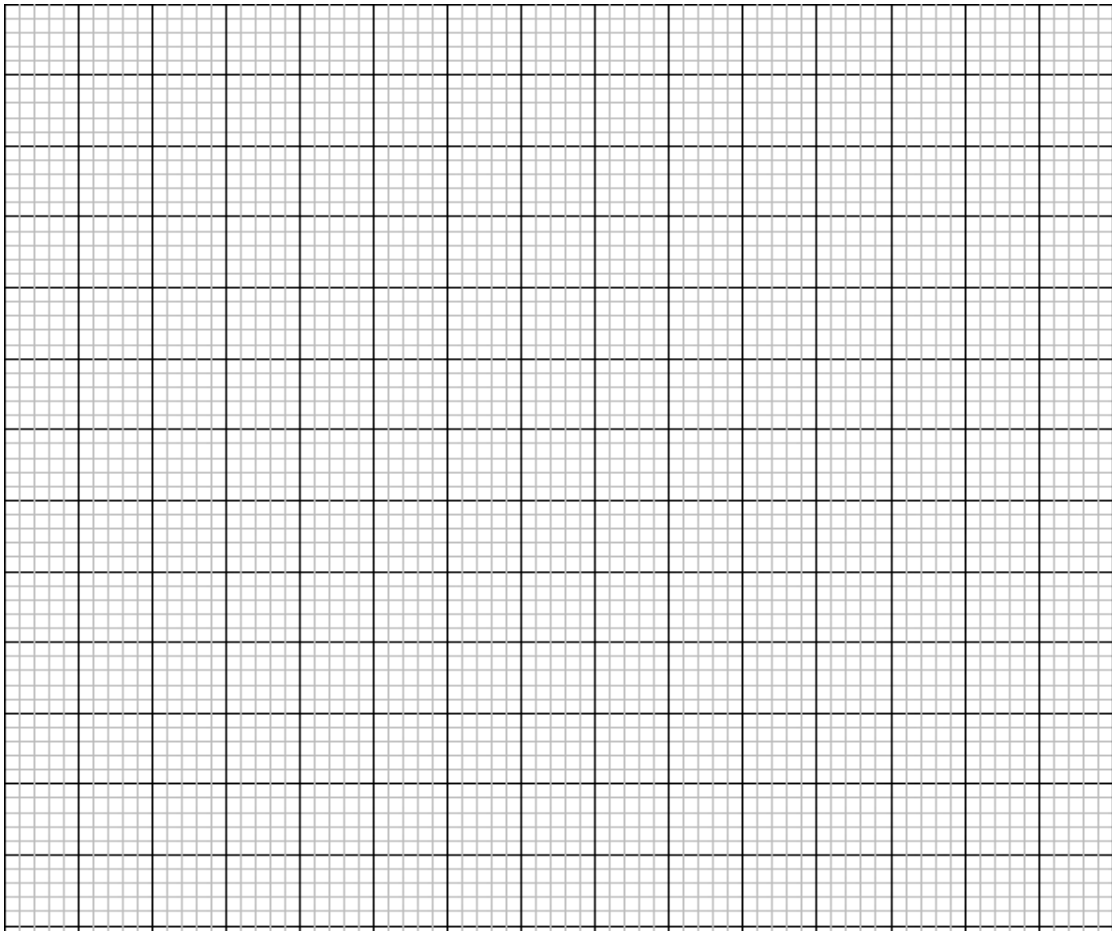
iv) Reflex DOE (2 marks)

v) BGF (2 marks)

24.a) Complete the table below for $y = -2 \sin x$ and $y = 3 \cos x$. (2 marks)

x	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°	330°	360°
-2 Sin x	0.00		-1.73			-1.00	0.00			2.00	1.73		
3 Cos x	3.00		1.50			-2.60	-3.00			0.00	1.50		

b) Draw the graph $y = -2 \sin x$ and $y = 3 \cos x$ using 1 cm to represent 30° horizontal axis and 2 cm to represent 1 unit on the vertical axis. (5 marks)



c) Use the graph to solve:

i) $3 \cos x + 2 \sin x = 0$ (1 mark)

ii) $1 - 2 \sin x = 2$ (2 marks)

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM COMPUTER STUDIES

451/1

PAPER 1

THEORY

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

INSTRUCTION TO CANDIDATES

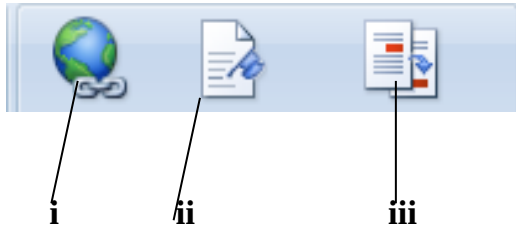
- ❖ Write your name and index number in the spaces provided above
- ❖ This paper consists of **two** sections A and B.
- ❖ Answer **ALL** questions in section A.
- ❖ Answer question **16** and any other **THREE** questions from section B.
- ❖ All answers should be written in the spaces provided on the question paper.

For Examiners Use Only

Section	Questions	Candidates Score
A	1-15	
B	16	
	17	
	18	
	19	
	20	
	TOTAL SCORE	

QUESTIONS

1. Name the parts labeled in the diagram below of a page layout properties **[3 marks]**



- i- _____
- ii- _____
- iii- _____

2. Explain briefly how an uninterruptible power supply (UPS) may help to protect a computer system and its data. **[1 mark]**

3. How is data verification different from data validation? **[1 mark]**

Give one example of data validation technique **[1 mark]**

Give one example of data verification technique **[1 mark]**

4. What kind of program is normally contained in a ROM chip and Explain briefly the main purpose of such a program. **[2 marks]**

5. Distinguish between system software and application software. [2 mark]

.....

.....

.....

6. Give the similarities between optical mark readers and optical character readers. [2 marks]

.....

.....

.....

.....

7. In word processing, distinguish between text insertion and overtyping. [2 marks]

.....

.....

.....

8. Explain, using examples where appropriate, the meaning of these computer terms.

(i) interrupt [2 Marks]

.....

.....

(ii) buffer [2 Marks]

.....

.....

9. Explain the following spreadsheet concepts:

(i) Automatic Recalculation. [1 mark]

.....

.....

(ii)What if analysis [1 mark]

.....

.....

10. Explain briefly why the advancement of computer technology has caused environmental hazards. **[2 marks]**

.....

.....

.....

(i)What is telecommuting? **[1 mark]**

.....

.....

(ii)State **four** benefits of telecommuting. **[2 marks]**

.....

.....

.....

.....

(ii)How is e-commerce different from e-business? **[1 mark]**

.....

.....

.....

11. (i)What is a coprocessor? **[1 mark]**

.....

.....

(ii)How does parallel processing work? **[1 mark]**

.....

.....

.....

(iii)What is pipelining? **[1 mark]**

.....

.....

12. (i)What is a driver program? [1 mark]
.....
.....

13. (ii). Give **one** example of hardware device that may serve more than one purpose (e.g., input and output). [2 marks]
.....

14. (i)How is a patent different from a trademark? [2 marks]
.....
.....
.....

(ii)What is the difference between unauthorized access and unauthorized use? [2 marks]
.....
.....
.....

15. (i)What is a workstation? [¹/₂ mark]
.....
.....

(ii)What is a server? [¹/₂ mark]
.....
.....

SECTION B

Answer question 16 (compulsory) and any other three questions from this section

16. (a) Explain the three control structures in programming [3 Marks]
- (b) State and describe three types of error can occur in programming [3 Marks]
- (c)(i) State **two** differences between a compiler and an interpreter [2 marks]
- (ii) Give **one** advantage of compilers over interpreters [1 mark]
- (iii) Give **one** advantage of interpreters over compilers [1 mark]
- (d) Draw the corresponding flowchart for the pseudo code below. [4 marks]

Assign 0 to A,

Repeat adding 1 to A,

Until A is greater than or equal to 5,

Print A.

17. (a) How is peer-to-peer network different from client/server network, considering how programs, data and information are stored? [2 marks]

(b) (i) Give **three** advantages of optical fibers over twisted-pair wires and coaxial cables.

[3 marks]

(ii) Suggest **two** disadvantages of optical fibers.

[1 mark]

(c) (i) Compare asynchronous and synchronous transmission.

[1 mark]

asynchronous	synchronous

(ii) Give one disadvantage of the c(i) above

[1 mark]

asynchronous	synchronous

(d) (i) Compare the following Ring ,star and bus network topologies.

[1 ½ marks]

Bus NetWork	Ring NetWork	Star Network

(ii) Give one **disadvantage** of each **[1 ½ marks]**

Bus NetWork	Ring NetWork	Star Network

(iii) Draw a diagram to represent the ring, star and bus topologies **[1 ½ marks]**

Bus NetWork	Ring NetWork	Star Network

(e) (i) Explain the term upload **[½ mark]**

(ii) If a 56K modem is operating at full speed, how long does it take to download a 1-MB file?

[2 marks]

18. (a). Describe the role of the systems analyst. **[2 marks]**

(b). Describe 2 techniques used by the systems analyst in requirements **specification**. **[2 marks]**

(b). In the software development process, what happens at the analysis stage? **[1 Mark]**

(c) Describe fully what is meant by the term *top-down design*? **[3 Marks]**

(d) The process of developing such software is an iterative process. What does *iterative* mean?

[1 Mark]

(e)(i) What are CASE tools? **[1 Mark]**

(ii) What is the purpose of CASE tools? **[1 Mark]**

(iii) What does CASE stand for? **[1 Mark]**

(f) Identify any two activities within the design stage of the software development process

[3 Marks]

- 19 (a).** Describe four functions of a single user operating system. **[4 Marks]**
- (b) Explain the need for an operating system to have a command language interpreter. **[1 Mark]**
- (c) Give 4 examples of the many processes which can be initiated by a user and which are then carried out by the operating system. **[4 Marks]**
- (d) What happens if a command entered by the user is not recognized by the operating system? **[1 Mark]**
- (e) Describe an advantage and a disadvantage to storing the operating system in RAM rather than in ROM? **[2 Marks]**
- (g) Describe three features that a **networkoperatingsystem** must have that a single user operating system does not need. **[3 Marks]**
- 20. (a)** Explain two reasons why computers use the binary system? **[2 Marks]**
- (b) What is meant by the term *word* in the phrase *16-bit word computer*? **[1 Mark]**
- (c) What is the decimal value of the largest integer that can be represented by a byte in a computer which deals only with positive numbers? **[1 Mark]**
- (d)What does the acronym ASCII stand for and what is ASCII? **[2 Marks]**
- (e) Complete the following table and note that no marks will be awarded for answers with missing or unclear working. **[6 Marks]**

BIN	DEC	HEX
	45	
		B6
11001		

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM COMPUTER STUDIES

451/2

PAPER 2

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

INSTRUCTIONS TO CANDIDATES

- a) Indicate your name and index number at the top right hand corner of each printout*
- b) Write your name and index number on the CD/Removable storage media provided*
- c) Write the name and version of software used for each question attempted in the answer sheet provided*
- d) Answer all questions*
- e) All questions carry equal marks*
- f) Passwords should not be used while saving in the CD/Removable storage medium*
- g) All answers must be saved in the CD/Removable storage medium*
- h) Make printout of the answers on the answer sheet*
- i) Arrange your printout and ties/staple them together*
- j) Hand in all printouts and the CD/Removable storage medium used*
- k) This paper consists of four printed pages*
- l) Candidates should check the question paper to ascertain all the pages are printed as indicated and that no question is missing*
- m) Candidates should answer the questions in English*
- n) ALL Data for currency data type should be formatted to Kenya Shillings*
- o) All the system Date and Time should be set to correct Kenya time and Date settings*

QUESTION ONE

a) The data below shows a spreadsheet for loan applicants from a youth fund from a certain county.

MEMBER NO	NAME	DATE OF BIRTH	DATE OF APPLICATION	GENDER	AGE	AMOUNT APPLIED
A001	ABC	1/3/1992	1/1/2016	M		Ksh 200,000.00
B001	CDE	2/6/1999	3/1/2016	F		Ksh 600,000.00
C008	FGH	5/6/1992	3/1/2016	M		Ksh 400,000.00
K001	JKL	2/7/1990	7/1/2016	F		Ksh 700,000.00
S007	MNO	2/9/1960	7/1/2016	M		Ksh 600,000.00
Z006	KRS	4/8/1992	2/2/2016	M		Ksh 500,000.00
A008	TUV	4/8/1960	3/2/2016	M		Ksh 700,000.00
B005	CED	2/6/1995	5/2/2016	F		Ksh 600,000.00
C011	HGF	5/6/1990	10/2/2016	M		Ksh 400,000.00
K012	LKJ	2/7/1970	6/1/2016	M		Ksh 700,000.00
S019	NOM	2/9/1991	4/6/2016	M		Ksh 600,000.00

Type the data as shown in the spreadsheet above name the worksheet as Original save the workbook as application. **(14 Marks)**

(b) Copy the worksheet named original above to another worksheet in the same workbook and name it as Evaluation.

(i) Fill the column for the (AGE) which is the difference between DATE OF APPLICATION and DATE OF BIRTH in years to the nearest whole number. **(6 Marks)**

(ii) Create a validation in the DATE OF APPLICATION such that it should be after DATE OF BIRTH. **(2 Marks)**

(iii) Format all columns having currency Data type to Kenya shilling. **(2 Marks)**

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

(iv) Create the columns COMMENT and AMT AWARDED.

The COMMENT is based on the following

- If the gender is male and the age by the data of applicable is greater than 30 years the COMMENT is INELIGIBLE otherwise ELIGIBLE.
- Amount awarded if a person is eligible if 80% of the amount applied.

(v) Fill in the two columns for the AMOUNT AWARDED and COMMENT using the formula. If an applicant is INELIGIBLE the amount awarded is left blank. **(10 Marks)**

(c) Copy the worksheet named Evaluation above to another worksheet in the same workbook and name it as final.

(i) Filter out data in the final in the final worksheet leaving out those who have been awarded a loan. **(2 Marks)**

(ii) Create a table showing the total amount awarded to all Males and total awarded to Females and total for both male and females. In the sample table below fill in the values using conditional if statement . **(6 Marks)**

	AMOUNT(Ksh)
MALE	
FEMALE	
<i>Total</i>	

(iii) Draw a pie chart representing the total amount for males awarded and females awarded **(2 Marks)**

(d) Print the following: **(4 Marks)**

(i) Original worksheet

(ii) Evaluate worksheet

(iii) Final worksheet

(iv) The pie chart

QUESTION TWO

The table below an extract of a manual data structure system used by a librarian of a particular school

ADMNO	S_NAME	CLASS	BOOK_NO	TITLE	BORROW TYPE	DATE_BORROWED	DATE_RETURNED
123	MIKE	1A	B001	COMPTER STUDIES BK 1	SHORT	2-1-2016	12-1-2016
456	JOHN	1B	A002	COMPREHENSIVE ENG BK 1	LONG	1-2-2016	17-1-2016
789	ADREW	1C	B003	KIE MATHEMATICS BK 1	LONG	1-3-2016	14-3-2016
987	JAMES	2A	D004	LONGHORN GEOGRAPHY BK2	SHORT	1-4-2016	8-4-2016
654	JACOB	2B	K005	KISWAHILI SHAIRI BK2	SHORT	1-5-2016	9-5-2016
321	NANCY	2C	B006	MATHEMATICS BK2	SHORT	2-3-2016	10-3-2016
879	MARY	3A	C005	HISTORY BK3	LONG	2-4-2016	17-4-2016
564	MERCY	3B	K009	FOUNDATION CHEMISTRY BK 1	LONG	2-5-2016	14-5-2016
213	PETER	3C	H001	KISWAHILI LUGHA BK 2	LONG	1-4-2016	18-4-2016
123	MIKE	1A	K005	KISWAHILI SHAIRI BK2	SHORT	1-5-2016	19-5-2016
456	JOHN	1B	B006	MATHEMATICS BK2	SHORT	1-4-2016	5-4-2016
789	ADREW	1C	C005	HISTORY BK3	SHORT	1-4-2016	7-4-2016
987	JAMES	2A	K009	FOUNDATION CHEMISTRY BK 1	LONG	1-5-2016	8-5-2016
654	JACOB	2B	H001	KISWAHILI LUGHA BK 2	LONG	1-4-2016	22-4-2016

The library charges 2 shillings per every book borrowed per day, if the book is not returned in time it attracts a penalty of 5 Shilling per day. The short loan is a maximum of seven days while the long loan is 14 days

a) From the table above create a database called library.

(i) Create THREE tables Student(ADMNO as primary key) and Book(BOOK_NO as primary key) and Borrow(Borrow_id as primary key which is auto number). **(6 Marks)**

(ii) Create relationship between the three tables **(2 Marks)**

(iii) Fill in the data in the three tables **(15 Marks)**

b) Create a the following queries

(i) Query named chargesqry for all charges for books on short loan the query should have the following fields(ADMNO,S_NAME,BOOK_NO,TITLE,BORROW TYPE,DATE_BORROWED,DATE_RETURNED,NO_OF_DAYS_BORROWED,NORMAL_C HARGE,PENALTY_CHARGE,TOTAL_CHARGE)(10 Marks)

(ii) Query named shortchargesqry for all charges for books on short loan the query should have the following fields(ADMNO,S_NAME,BOOK_NO,TITLE,BORROW TYPE,DATE_BORROWED,DATE_RETURNED,NO_OF_DAYS_BORROWED,TOTAL_CHARGE) **(2 Marks)**

(iii) Query named longchargesqry for all charges for books on long loan the query should have the following fields(ADMNO,S_NAME,BOOK_NO,TITLE,BORROW TYPE,DATE_BORROWED,DATE_RETURNED,NO_OF_DAYS_BORROWED,TOTAL_CHARGE) **(2 Marks)**

(iv) Create a report showing the total amount which the library has earned between any two dates on short loan save it as shortbetweendatesrpt format the currency data type to Kenya shillings **(6 Marks)**

(v) Create a report showing the total charged to a student for both long and short loan borrowing in one report save it as studentchrgprt format the currency data type to Kenya shillings **(4 Marks)**

c) Print the following **(4 Marks)**

(i) All tables with data

(ii) Both query with data

(iii) Shortbetweendatesrpt

(iv) studentchrgprt

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

HOME SCIENCE

441/1

PAPER 1

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

441/1

HOMESCIENCE

PAPER 1

TIME: 2 ½

INSTRUCTIONS

- This paper contains 3 sections: A, B and C
- Answer all questions in section A and B and any two questions from section C

FOR EXAMINER'S USE ONLY

SECTIONS	QUESTION	MAX. SCORE	ACTUAL SCORE
A	1 – 20	40 MARKS	
B	21	20 MARKS	
C	22 – 24	40 MARKS	

SECTION A (40 MARKS)

1. Differentiate between wear and tear (2mks)

.....

.....

.....

2. State **two** reasons for using fabric conditioner in laundry. (2mks)

.....

.....

3. Mention **two** ways of meeting social needs of a pregnant woman (2mks)

.....

.....

4. Explain giving an example, the meaning of a monochromatic colour scheme. (2mks)

.....

.....

.....

5. State **two** points to consider when choosing a laundry brush. (2mks)

.....

.....

6. Give **two** conditions necessary for steam to act as a raising agent (2mks)

.....

.....

7. Identify **three** methods of finishing the edges of sleeves other than using a cuff (3mks)

.....

.....

.....

8. Identify **two** ways of preventing umbilical cord infection at birth. (2mks)

.....

.....

.....

9. State **two** reasons why foods are fortified (2mks)

.....

.....

10. State **two** safety precautions to be exercised when handling calabashes. (2mks)

.....

.....

11. Give **two** reasons why a kitchen should be well lit. (2mks)

.....

.....

12. Outline **three** qualities of a well-made sleeve (3mks)

.....

.....

.....

13. Give **two** reasons for an open and coarse texture in creamed cake mixtures. (2mks)

.....

.....

.....

14. What is the role of VCT in safe parenting? (2mks)

.....

.....

.....

15. Give **three** methods used to attach collars to the neck line. (3mks)

.....

.....

.....

16. State the use of a water seal in a kitchen sink (1mk)

.....

.....

17. What is simmering? (1mk)

.....

.....

18. Give **two** reasons why plastics are becoming more popular in homes today. (1mk)

.....

.....

.....

19. Name **four** improvised cleaning materials (2mks)

.....

.....

.....

.....

20. Choose a suitable **one** course meal for an invalid. (2mks)

.....

.....

SECTION B (20 MARKS)

COMPULSORY

21. You have been asked to stay at home and carry out some household chores.

- (a) Describe how you will thoroughly clean a hurricane lamp to be used in the Evening (9mks)
- (b) Describe how you will wash a nylon petticoat for your younger sister. (6mks)
- (c) Describe how you will thoroughly clean a chopping board. (5mks)

SECTION C (40 MARKS)

Answer any two questions in this section

- 22.** (a) Give five importance of making a budget. (5mks)
- (b) Explain **four** factors that influence consumer buying. (8mks)
 - (c) Discuss **three** reasons why the use of charcoal should be minimized. (6mk)
 - (d) What is food fortification? (1mk)
- 23.** (a) Suggest **five** sanitary practices that 2 to 5 year old child should be taught. (5mks)
- (b) Explain **five** reasons for coating food before deep frying (10mks)
 - (c) State **five** points to consider when preparing and cooking green vegetable (5mks)
- 24.** (a) List any **five** effects of moist yeast on starch (5mks)
- (b) Give **four** limitations of complementary feeding (4mks)
 - (c) Which **five** preparations will you carry out once fabric before cutting out? (5mks)
 - (d) By use of three well labeled diagrams describe how you will make an overlaid Seam (7mks)

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

HOME SCIENCE

441/2

PAPER 2

TIME: 2½ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

HOMESCIENCE CLOTHING CONSTRUCTION

PAPER 2

PRACTICAL

2 ½ HOURS

A pattern of a child's dress bodice is provided. You are advised to study the sketches, instructions and layout before you begin the test.

1. MATERIAL PROVIDED

Pattern pieces

A front bodice

B Back bodice

C Back yoke

D Collar

E Back neck facing

2. Light weight cotton fabric 50cm long by 91cm wide.

3. Sewing cotton thread to match.

4. One large envelop.

The test

Using the materials provided, cut out and make the right half of a child's dress bodice as shown in the sketch to show the following.

a) Working of a bust dart.

b) Gathering of the front bodice ready for attaching the yoke Do not remove gathering stitches

c) The attachment of the back yoke to the back bodice using overlaid/lapped seam.

Do not neaten

d) The working of a machine fell seam at the shoulder.

e) The working of an open seam at the side of the bodice.

f) The joining of the back and the front neck facings at the shoulder.

g) The preparation of the collar and attaching it to the bodice.

h) Under stitching the facing and the free edge.

i) The working of a button hole.

At the end of the exam, remove all pins and unnecessary tacking from your work. Sew on a label bearing your name and index number on a single fabric. Fold and place it in the envelop provided. Do not put scraps of fabric in the envelop

SUCCESS MOCK EVALUATION

KCSE SERIES 1 EXAM

HOME SCIENCE

441/3

PAPER 3

TIME: 1¾ HOURS

NAME.....

SCHOOL..... SIGN.....

INDEX NO..... ADM NO.....

Kenya Certificate of Secondary Education.

441/3

HOME SCIENCE

(Food and Nutrition)

Paper 3

Practical

Time: 1¾ Hours

Planning session - 30 minutes

Practical test session – 1¼ hours

Instructions to candidates

1. Read the test carefully.
2. Write your name on every sheet of paper.
3. Textbooks and recipes may be used during the planning session as reference.
4. You will be expected to keep to your order of work during the practical session.
5. You are only allowed to take away your reference materials at the end of the planning session.
6. You are not allowed to bring additional notes to the practical.

The test

You have invited your cousin to visit you on Sunday and you plan to have lunch together. Using the food stuffs and ingredients listed below prepare, cook and present a two dish meal and a refreshing drink for both of you.

Ingredients

- Potatoes/maize flour/rice
- French beans/ green peas
- Tomatoes
- Sugar
- Margarine
- Carrots
- Chicken/ beef
- Coriander
- Salt
- Fruit in season
- Water
- Onions
- 1 clove garlic
- Fat/oil
- Royco

Planning session.

For each task listed below, use separate sheets of paper and make duplicate copies using carbon paper then proceed as follows:

1. Identify the dishes and write down the recipes.
2. Make a list of equipment and materials you will require.
3. Write down your order of work.

[illegible]

[illegible]

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

mwalimuconsultancy@gmail.com

***This is a Copyright Property of Mwalimu
Consultancy Ltd.***

Powered By Mr Isaboke