

FORM 2 MIDTERM 2 EXAMS

(SMART-GRADE SERIES)

ALL SUBJECTS

Smart-grade Collection of Standard set of Mid-Term 2 Assessment Tests for the Current Class for all High Schools in the Republic of Kenya.

SUBJECTS TESTED;

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

SMART-GRADE SERIES

For Marking Schemes / Answers

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

MWALIMU CONSULTANCY

FORM 2 MIDTERM 2 EXAMS

SMART-GRADE SERIES

CHRISTIAN RELIGIOUS EDUCATION

TIME: 2½ HOURS

NAME..... ADM NO;

CLASS..... DATE.....

Answer all questions

- 1 a) Describe the characteristics of the suffering servant of Yahweh as prophesied by prophet Isaiah. **(8mks)**
b) From the story of the annunciation of Jesus birth identify the angel's message to Mary. **(5mks)**
c) What kind of Messiah did the Jews expect? **(7mks)**
2. a) Relate Mary's visit to Elizabeth (Luke. 1: 39 -45) **(6mks)**
b) Discuss the role of John the Baptist as a link between the Old Testament and the New Testament **(8mks)**
c) Mention **five** ways in which Christians prepare for the second coming of Christ. **(5mks)**
3. a) Give **seven** reason why Jesus accepted to be baptized yet he had no sins. **(7mks)**
b) Describe the healing of the Gerasene demoniac **(8mks)**
c) What are the characteristics of a true follower of Christ? **(5mks)**
4. a) **Describe** the commissioning of the seventy two disciples **(7mks)**
b) Explain **four** lessons learnt from commissioning of the twelve disciples. **(8mks)**
c) Give reasons as to why disciples are called today. **(5mks)**

5. **a)** Narrate the parable of the rich man and Lazarus (Luke 16:19-31) **(8mks)**
- b)** What is the relevance of the teachings on wealth and poverty to Christians? **(7mks)**
- c)** Mention the roles Christian have in fighting corruption. **(5mks)**

#END

FORM 2 MIDTERM 2 EXAMS

SMART-GRADE SERIES HISTORY AND GOVERNMENT

TIME: 2½ HOURS

NAME..... ADM NO;

CLASS..... DATE.....

HISTORY AND GOVERNMENT

TIME: 2 ½ HOURS

FORM 2

INSTRUCTIONS TO CANDIDATES.

- This paper consists of **three** sections **A, B** and **C**.
- Answer **all** questions in section **A**, **three** questions from Sec. **B** and **two** questions from section **C**.
- Answers to **all** questions should be written in the answer booklet provided.

	Section A	Section B				Section C		
Question No.	1-16	17	18	19	20	21	22	23
Marks								

Grand total

SECTION A(25MARKS)

Answer all questions from this section

1. Give **two** limitations of the evolution theory. (2mk)
2. State **one** economic activity of the early man. (1mk)
3. Give **two** reasons why Africa is the Cradle land of mankind. (2mks)
4. Mention **two** types of irrigation systems used in ancient Egypt. (2mks)
5. Give **one** advantage of the land enclosure system in Britain. (2mks)
6. Mention **two** advantages of the Barter System of Trade. (2mks)
7. Name **two** British engineers involved in the construction of roads on the 18th Century. (2mks)
8. State **two** limitations of cell phones. (2mks)
9. Give the **main** duty of Orkoiyot among the Nandi . (1mk)
10. Mention **two** reasons why the rulers of Malindi welcomed the Portuguese in the 18th C. (2mks)
11. Name the inventor of the electro dynamo. (1mk)
12. What was the contribution of Gottlieb Daimler to the development of road transport. (1mk)
13. State **two main** sources of energy during the industrial evolution period. (2mks)
14. Mention **two** Landmark Monuments left by the Portuguese in East Africa. (2mks)
15. Name the **first** Christian Missionary to establish a mission station in Rabai in 1844. (1mk)
16. State the original homeland of the Bantu speakers. (1mk)

SECTION B (45MARKS)

Answer any three questions from this section

17. (a) Identify any **five** uses of gold in Central Africa. (5mks)
(b) Explain **five** ways in which the skill of iron working spread in Africa (10mks)
18. (a) Mention **five** factors that facilitated the industrial revolution in Britain around the 18th and the 19th Centuries. (5mks)
(b) Explain any **five** effects of the Industrial revolution on the European society. (10mks)
19. (a) Identify **five** factors that facilitated the scientific revolution in Europe. (5mks)
(b) Explain any **five** negative impacts of the scientific discoveries in the society today. (10mks)
20. (a) Identify any three telecommunication devices. (3mks)
(b) Explain six challenges facing the transport sector in Kenya today. (12mks)

SECTION C (30 MARKS)

Answer any two questions from this section

21. (a) Identify **three** communities that are part of the Eastern Cushites in Kenya. (3mks)
(b) Explain **six** effects of the Cushitic migration into Kenya. (12mks)
22. (a) State **five** advantages of National Integration. (5mks)
(b) Explain **five** factors that promote national unity in Kenya. (10mks)
- 23.(a) Identify **three** peaceful methods of resolving conflicts in the society today. (3mks)
(b) Explain **five** levels of conflicts in the society today. (10mks)

FORM 2 MIDTERM 2 EXAMS

SMART-GRADE SERIES

GEOGRAPHY

TIME: 2¾ HOURS

NAME..... ADM NO;

CLASS..... DATE.....

Answer **all** questions .

1. (a) Give **three** branches of physical geography. (3mks)
(b) State **five** reasons why we study geography. (5mks)
2. (a) Give **two** results of the rotation of the earth. (2mks)
(b) Explain **four** reasons why the earth is said to be spherical. (8mks)
3. (a) Give **three** types of field work. (3mks)
(b) You have been asked to carry a field study on the types of rocks around the school;
(i) Give **three** methods you would use to collect the data. (3mks)
(ii) State **three** problems you may encounter during the field study. (3mks)
4. (a) What are **minerals**? (2mks)
(b) (i) Give **two** types of fossil fuels. (2mks)
(ii) Explain **three** economic importance of rocks. (2mks)
(c) State **two** factors which must be considered before exploitation of minerals is carried out. (2mks)
5. (a) What is a **photograph**. (2mks)
(b) (i) Give **two** types of aerial photographs. (2mks)
(ii) State **four** limitations in the use of photographs. (4mks)
6. (a) Give **four** causes of Earth movements . (4mks)
(b) Briefly describe the theory of continental drift as advanced by A. Wegner. (5mks)
(c) Give **three** boundaries associated with plate tectonic theory. (3mks)

7. (a) Differentiate between **weather** and **climate**. (2mks)
- (b) (i) Apart from latitudes and Altitudes give two other factors which influence climate of a place. (2mks)
- (ii) Describe how the following influence climate;
- Latitude (3mks)
 - Altitude (3mks)
- (c) (i) Give **two** examples of anabatic winds. (2mks)
- (ii) Describe the characteristics of desert (5mks)
8. (a) Give any **three** types of forests. (3mks)
- (b) (i) Give the names of grasslands in the following countries:
- Canada (1mk)
 - Argentina (1mk)
 - Australia (1mk)
 - South Africa (1mk)
- (ii) Explain **four** uses of Savanna vegetation. (8mks)
9. (a) (i) Name three types of grasslands. (3mks)
- (ii) State three characteristics of tropical hardwood forests. (3mks)
- (b) (i) Explain the significance of forest products to Kenya. (6mks)
- (ii) What is **agroforestry**? (1mk)

FORM 2 MIDTERM 2 EXAMS

SMART-GRADE SERIES

BIOLOGY

TIME: 2 HOURS

NAME..... ADM NO;

CLASS..... DATE.....

BIOLOGY

(THEORY)

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

- Write ***your name*** and your ***admission number*** in the spaces provided above.
- Sign and write the date of the examination in the spaces provided above.
- Answer ***all*** the questions in the spaces provided.

FOR EXAMINER'S USE ONLY:

QUESTIONS	MAXIMUM SCORE	CADNIDATE'S SCORE
1 – 30	100	

Answer **all** the questions

1. The scientific name of the cat is Felis catus classify the cat into; (3mks)

i) Kingdom.....

ii) Genus.....

iii) Species.....

2. Define the following branches of biology.

a) Ecology (1mk)

.....
.....

b) Anatomy (1mk)

.....
.....

3. State the functions of each of the following organelles.

a) Centrioles (1mk)

.....
.....

b) Ribosomes (1mk)

.....
.....

4. Name the Kingdom to which each of the following belong.

a) Spirogyra (1mk)

.....

b) Vibrio cholerae (1mk)

.....

c) Maize (1mk)

.....

5. The diagram below represents a cell organelle.



a) Identify the organelle. (1mk)

.....

b) Name the part labeled M. (1mk)

.....

c) State the function of the part labeled N. (1mk)

.....

.....

6. The organelle below was observed in a cell using a microscope.

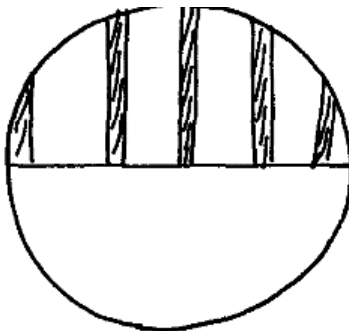


a) Identify the organelle above. (1mk)

.....

b) On the diagram, label the part where protein synthesis occurs. (1mk)

7. A form two students trying to estimate the size of onion epidermal cells observed the following on the microscope's field of view.



He counted 20 cells across the diameter of the field of view. Calculate the size of one cell in micrometers. (3mks)

.....

.....

.....

8. Explain the differences between turgor pressure and wall pressure. (4mks)

.....

.....

.....

.....

9. Distinguish between haemolysis and plasmolysis (4mks)

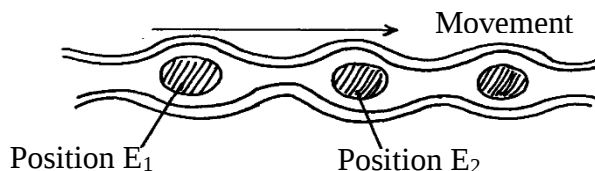
.....

.....

.....

.....

10. The diagram below shows how food moves along the human oesophagus and intestines



a) Identify the process illustrated in the diagram. (1mk)

.....

b) Explain the movement of the food bolus from position E₁ to position E₂. (1mk)

.....

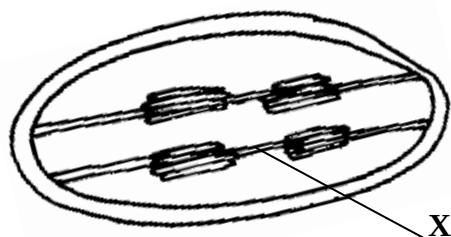
.....

.....

c) Name **one** component of the human diet that assist in the movement in (b) above. (1mk)

.....

11. **Below** is the structure of an organelle found in a plant.



i) Name the organelle (1mk)

.....

ii) State the functions of the organelle named above. (1mk)

.....

.....

iii) Name the part labeled X. (1mk)

.....

12. Suggest **two** functions of mucus secreted along the walls of the alimentary canal. (2mks)

.....

.....

13. Name **three** aspects of light that are important during photosynthesis. (3mks)

.....

.....

.....

14. The equation below shows a chemical reaction that takes place in green plants under certain conditions.



Name the;

i) Substance represented by X.....(1mk)

ii) Process represented by the equation.....(1mk)

15.a) Define the term symbiosis .

(1mk)

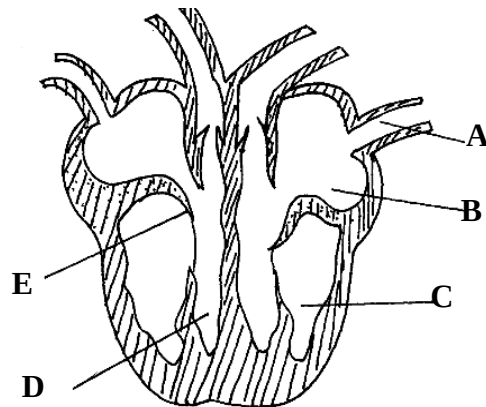
.....
.....

b) What are the final products of digestion of fats.

(2mks)

.....
.....

16. The diagram below shows a vertical section through amammalian heart.



a) Name the parts labeled A to E

(5mks)

A..... C..... E.....

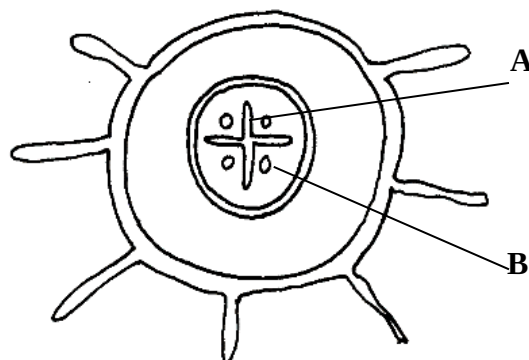
B D.....

b) Give a reason why the wall of chamber C is thicker than chamber D.

(2mk)

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

17. The figure below represents a transverse section of a young root.



(2mks)

B......

(2mks)

.....

.....

.....

.....

.....

.....

```

graph LR
    A[Broken platelets release] --> B[A]
    B --> C[Prothrombin]
    C --> D[B]
    D --> E[C]
    E --> F[Fibrin]

```

(2mks)

C.....

(2mks)

.....

.....

.....

21. Name **two** structures for gaseous exchange in amphibians (2mks)

.....

.....

22. The progress that occurs in plants is represented by the equation below:



a) Name the process (1mk)

.....

b) State **three** economic importance of the named process in (a) above. (3mks)

.....

.....

.....

23. State **one** role that is played by osmosis in;

i) Plants (1mk)

.....

.....

ii) Animals (1mk)

.....

.....

24.a) State **three** structural differences between arteries and veins in mammals . (3mks)

.....

.....

.....

.....

b) Name a disease that causes thickening and hardening of arteries. (1mk)

.....

26. Name the deficiency diseases of each of the following nutrients . (7mks)

Vitamin A.....

Vitamin B.....

Vitamin B₂.....

Vitamin C.....

Vitamin D.....

Calcium.....

Iodine.....

27. Explain how the red blood cells of mammals are adapted for efficient transport of oxygen. (2mks)

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

28.a) What is the importance of gaseous exchange in plants. (2mks)

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

b) Name the **three** gaseous exchange structures in plants. (3mks)

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

29. What are the respiratory structures in the following organisms. (5mks)

i. Mammals.....

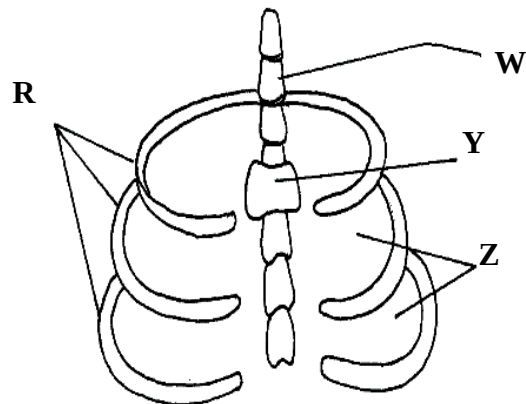
ii. Amoeba.....

iii. Fish.....

iv. Tadpoles.....

v. Insects.....

30. The diagram below represents apart of the rib cage.



a) Name the bones labeled **W**, **Y** and **R** (3mks)

W.....

Y.....

R.....

b) How does the part labeled **Z** facilitate breathing in? (3mks)

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

c) State **two** characteristics of respiratory surfaces. (2mks)

.....
.....

FORM 2 MIDTERM 2 EXAMS

SMART-GRADE SERIES

CHEMISTRY

TIME: 2 HOURS

NAME..... ADM NO;

CLASS..... DATE.....

233

CHEMISTRY

TIME: 2 HOURS

INSTRUCTIONS TO THE CANDIDATES:-

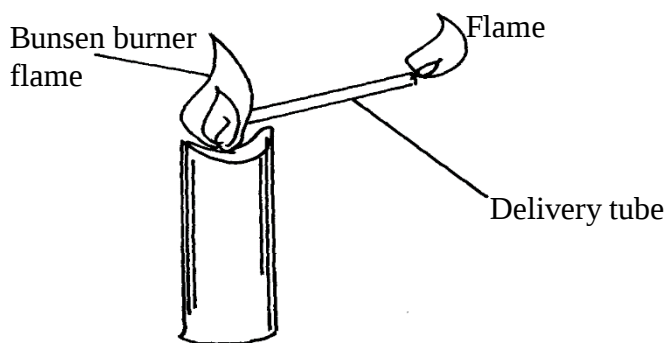
- Answer **all** the questions in the spaces provided.
- Write **your name** and **admission number**, **school**, **date** in the spaces provided.
- Mathematical tables and electronic calculators may be used for calculation.
- All workings **must** be clearly shown where necessary

FOR EXAMINER'S USE ONLY:

Question	Maximum score	Candidate's score
1-21	80	

Answer **all** the questions

1. Study the set-up below and answer the questions hat follow;



(a) What does the experiment demonstrate? (1mk)

.....

(b) When is this type of Bunsen burner flame produced? (1mk)

.....

(c) Give **two** characteristics of the type of flame used in the set-up (2mks)

.....

.....

2. (a) State the role of the following parts during fractional distillation of a mixture of water and ethanol.

(i) fractionating column (1mk)

.....

(ii) Glass beads in the fractionating column (1mk)

.....

(b) State any **two** applications of fractional distillation process. (2mks)

.....

.....

.....

3. A certain indicator was added to a solution. The pH value on the scale that was used with this indicator was read as 6.5

(a) Name the indicator (1mk)

.....

(b) State the nature of the solution (1mk)

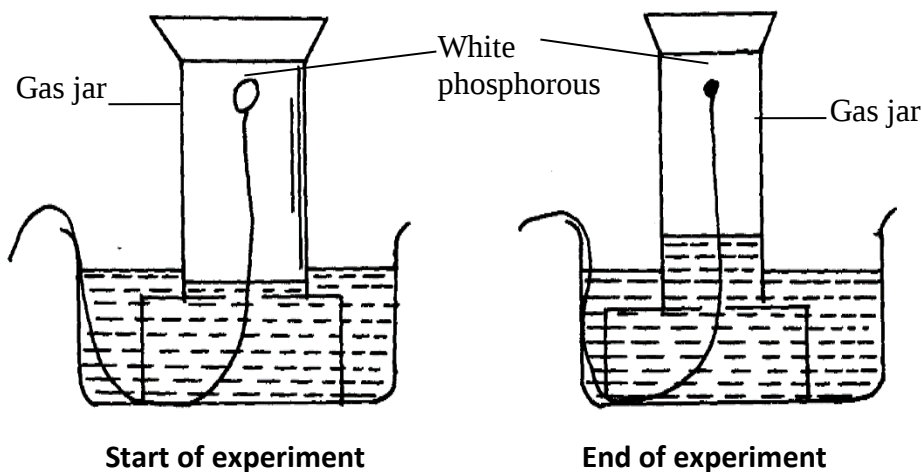
.....

(c) Why is the above indicator a better indicator than other common indicators used in the laboratories? (1mks)

.....

.....

4. A student set-up the experiment below:



(a) What was the aim of the experiment? (1mk)

.....

(b) Give the observations made. (1mk)

.....

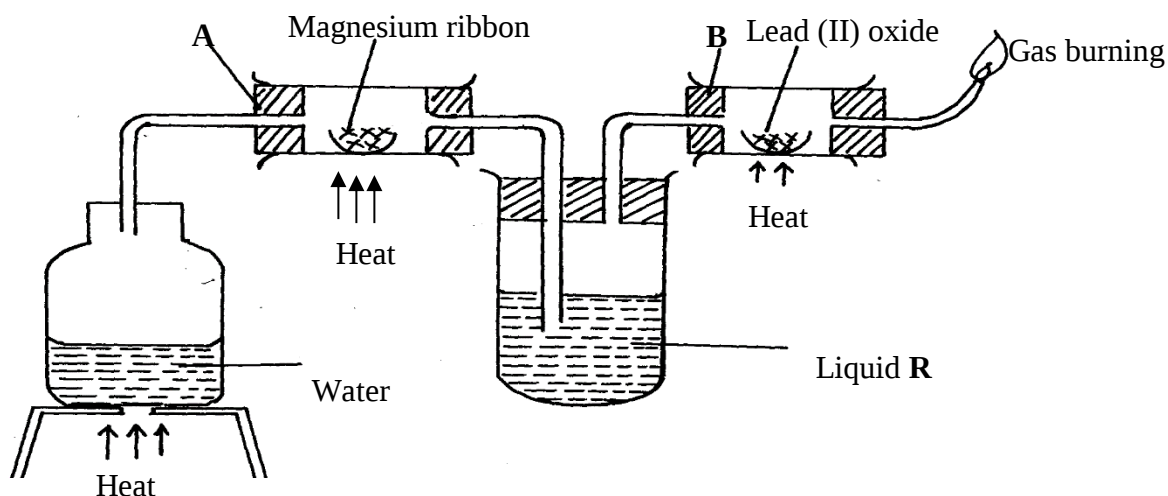
.....

(c) Write an equation for the reaction that takes place in the gas jar. (1mk)

.....

.....

5. The set-up below was used to prepare the gas and investigate its properties



(a) Write a chemical equation for the reaction in combustion tube A that leads to the formation of the gas. (1mk)

.....

(b) Identify liquid R. Why is it used? (1mk)

.....

(c) State the observation made at the end of the reaction in combustion tube B. (1mk)

.....

.....

6. A given element E has atomic number of 14 and consists of isotopes as shown below;

Isotope	X	Y	Z
Isotopic mass	28	29	30
Percentage abundance	92.2	4.7	3.1

(a) What are isotopes? (1mk)

.....

.....

(b) Determine the relative atomic mass of E (2mks)

(c) State the position of element E in the periodic table (1mk)

.....

7. Study the information in the table and answer the questions that follow;

Element	Atomic No.	Electronic arrangement	Boiling point (°C)
I	3		1617
J	13		2740
K	17		-34
L	18		-187
M	19		1033

(a) Select elements which belong to the same group. (1mk)

.....

(b) Which elements are in the gaseous state at room temperature (25°C). Explain. (2mks)

.....

.....

.....

(c) Write the:-

(i) Formula of the carbonate of the element J. (1mk)

.....

(ii) Chemical equation for the reaction between the most reactive metal and the most reactive non-metal. (1mk)

.....

.....

(d) Draw a dot (•) and cross (X) diagram for the compound formed between elements I and K (2mks)

(e) (i) Complete the table above by filling in the electronic arrangements of all the elements.(2½mks)

(ii) Identify the chemical family to which element I belongs. (1mk)

.....
.....

(f) Which elements form basic oxides? (1½mks)

.....
.....

(g) List any **two** uses of element L. (2mks)

.....
.....

8. A mixture contains the three gases Ethene, Hydrogen and Ammonia;

Gas	Water	Concentrated H ₂ SO ₄	Concentrated NaOH
Ammonia	Very soluble	Very soluble	Very soluble
Hydrogen	Slightly soluble	Insoluble	Insoluble
Ethene	Slightly soluble	Soluble	Insoluble

(i) Explain how you would obtain a sample of hydrogen gas from a mixture of the three gases.

(3mks)

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

9. Using dot (•) and cross (X) show the bonding in Carbon (II) oxide.

(2mks)

10. The following table gives some information about the physical properties of substances S, T, U and V. Use the information to answer the questions that follow;

Substance	M.pt (°C)	Hardness	Electrical conductivity in solid state	Electrical conductivity in molten state
S	High	Hard/brittle	Good	Good
T	High	Hard/brittle	Poor	Poor
U	High	Hard/brittle	Poor	Good
V	Low	Soft	Poor	Poor

(a) Which of these substances exists as a;

(i) Giant covalent structure

(1mk)

.....

(ii) Giant metallic structure

(1mk)

.....

(iii) Giant ionic structure

(1mk)

.....

(b) (i) Why is the melting point of V low?

(2mks)

.....

.....

.....

(ii) Why is U a good electrical conductor when in molten state and poor when in solid state?

(2mks)

.....

.....

.....

(c) (i) Which substance would you recommend for making the cooking pan? Explain

(2mks)

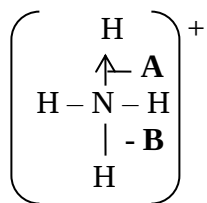
.....

.....

.....

(ii) Name the substance that can be used in the laboratory as an electrolyte. (1mk)

(iii) Study the structure below and answer the questions that follow;



Name the bond represented by **A** and **B** (2mks)

A.....

B.....

11. (a) Name **two** methods used to prepare soluble salts (2mks)

.....
.....

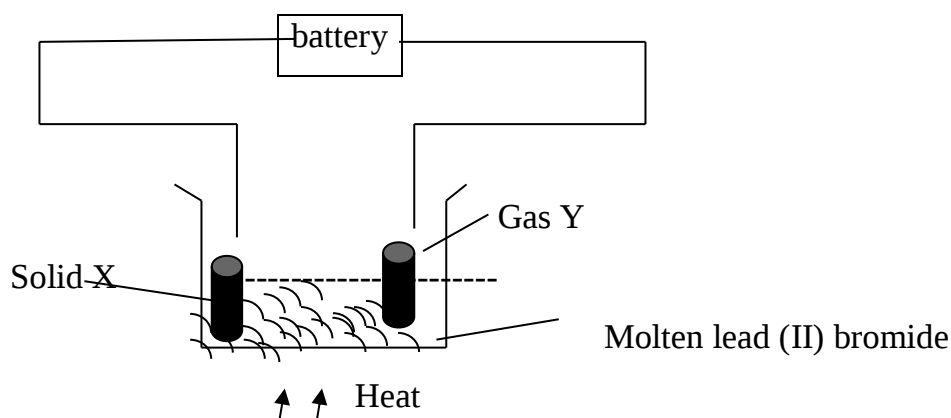
(b) (i) **Write** a chemical equation for the precipitation of Lead Chloride from Lead nitrate and Sodium chloride. (1mk)

.....

(ii) Give an ionic equation for the reaction in (b) above. (1mk)

.....
.....

12. The diagram below represents the electrolysis of molten lead (II) bromide





(a) Name (2mks)

i) Solid X.....

ii) Gas Y.....

b) Write ionic equations for the formation solid x and gas y (2mks)

Solid

X.....

Gas Y.....

c) On the diagram show the anode and the cathode (2mks)

(d) Give one precaution to be taken while carrying out the experiment (1mk)

.....

13. Give **two** properties of Carbon (IV) oxide that makes it suitable for use in fire extinguishers (2mks)

.....

.....

14. Copper (II) chloride solution and Copper metal are both conductors of electricity. Give **two** differences in their mode of conduction (2mks)

.....

.....

.....

15. Naturally occurring boron exists as two isotopes, boron-10 $\left({}_{5}^{10}\text{B} \right)$ with a relative abundance of 20% and boron-11 $\left({}_{5}^{11}\text{B} \right)$ with a relative abundance of 80%.

(a) How many electrons does each atom of boron contain? (½mk)

(b) How many neutrons does each atom of the most abundant isotope contain? (1mk)

(c) Draw the electronic structure of the most abundant isotope of boron (2mks)

16. Name two halogens. (2mks)

.....
.....

17. Define the following terms;

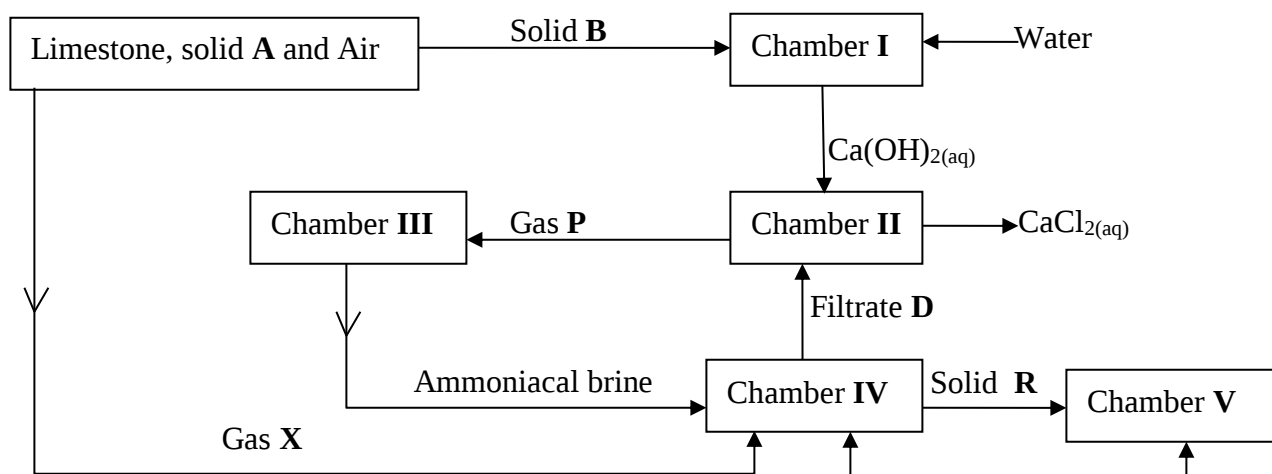
(a) Hygroscopy (1mk)

.....
.....

(b) Atom (1mk)

.....
.....

18. The flow chart below shows how sodium carbonate is manufactured by the solvay process. Study it and answer the questions that follow;



(3mks)

(ii) Gas X

(iii) Solid A

(iv) Solid **B**

(v) Filtrate **D**

(vi) Solid **R**

(1mk)

(i) chamber I

.....

(1mk)

(2mks)

.....

.....

(1mk)

.....

I								VIII
	II							
	K			III	IV	V	VI	VII
P				M				X
T								A

(i) What name is given to the group to which **P** and **T** belong? (1mk)

.....

(ii) Which letters represent non-metallic elements? (2mks)

.....

.....

(iii) What type of bond is formed when **P** and **X** react? Explain (2mks)

.....

.....

.....

(iv) Give the formula of the compound formed when element **K** and oxygen react. (1mk)

.....

(v) On the grid indicate with a tick the position of element **Q** that is in the second period of the periodic table and form **Q²⁻** ion. (1mk)

(vi) Write the formula of the oxide of **M** (1mk)

.....

20. The table below shows the products formed when nitrates of three metals were heated;

Nitrate	Products
U	Metal , Nitrogen (IV) oxide, Oxygen
V	Metal nitrite, Oxygen
W	Metal oxide, Nitrogen (IV) oxide, Oxygen

(a) Arrange the metals in order of increasing reactivity starting with the least reactive (1mk)

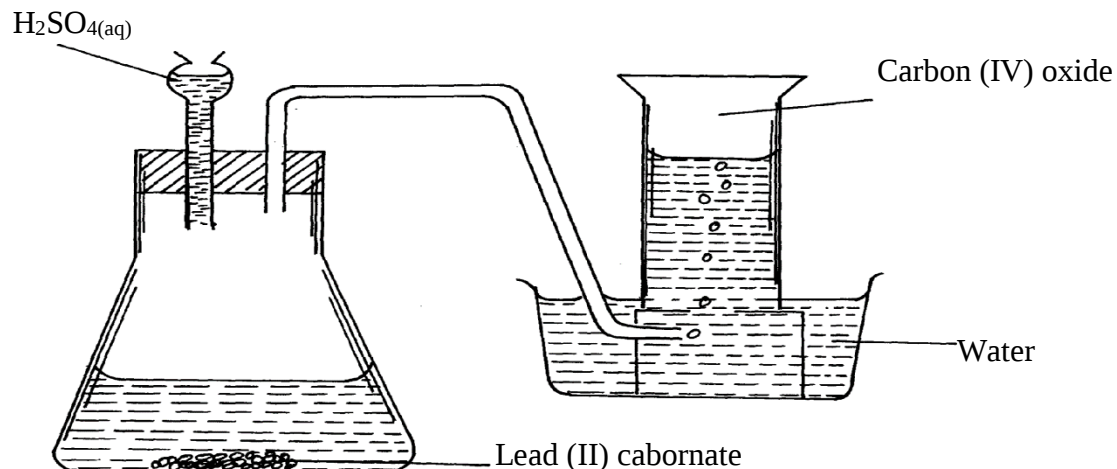
.....

(b) Give the formulae of two possible cations likely to be in Nitrate **V** (2mks)

.....

.....

21. A student set-up the apparatus shown below to prepare a few jars of dry Carbon (IV) oxide;



(a) (i) Identify any **three** mistakes in the set-up (3mks)

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

(ii) Write a chemical equation for the reaction above. (1mk)

.....
.....

(b) Explain the observation made when burning magnesium ribbon is lowered into a gas jar containing dry carbon (IV) oxide (3mks)

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

FORM 2 MIDTERM 2 EXAMS

SMART-GRADE SERIES

PHYSICS

TIME: 2 HOURS

NAME..... ADM NO;

CLASS..... DATE.....

INSTRUCTIONS TO CANDIDATES:

- Write **your name, admission number, date** of examination and the **name** of your school in the spaces provided above.
- **Sign and write** the **date** of examination in the spaces provided above.
- This paper consists of sections: **A and B**.
- Answer **all** the questions in section **A and B** in the spaces provided.
- All working **must** be clearly shown in the spaces provided.
- Mathematical tables and electronic calculators may be used.

For Examiner's Use Only

SECTION	QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
A	1 – 12	25	
B	13		
	14		
	15		
	16		
	17		
	18		
TOTAL SCORE		80	

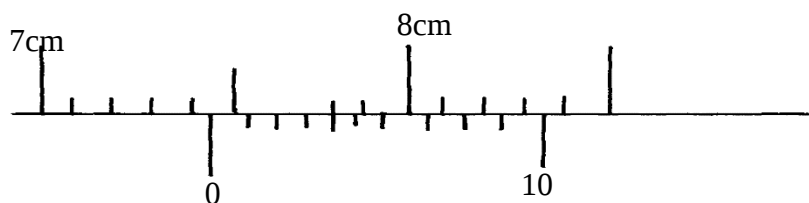
SECTION A (25MARKS)

Answer all question this section

1. Distinguish between mass and weight of a body stating the S.I units for each. (2mks)

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

2. The figure below shows part of scale of vernier calipers.



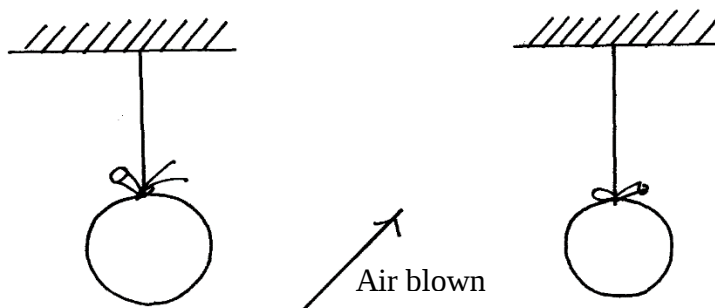
What is the reading indicated on the scale (1mk)

3. 180cm^3 of fresh water of density 100kg/m^3 is mixed with 2200cm^3 of sea water of density 1025kg/m^3 . Calculate the density of the mixture (4mks)

4. Explain why fish can survive under water when the surface is already frozen (2mks)

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

5. Two inflated balloons are at the same level while suspended from threads a short distance apart as shown below;



Some air is blown gently in the space between the balloon in horizontal direction. Explain what happens to the balloons. (2mks)

.....

.....

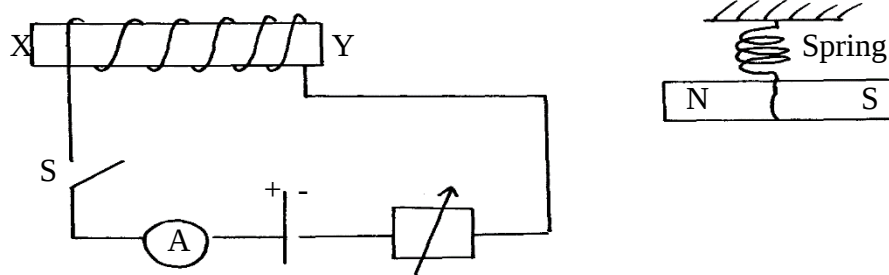
.....

6. State **one** advantage of an alkaline battery over a lead acid battery. (1mk)

.....

.....

7. The diagram below shows a permanent magnet suspended by a spring. State with reason the behaviour of the magnet when the switch is closed. (2mks)



.....

.....

8. **Convection** and diffusion both involve motion of fluids. Distinguish between the two. (2mks)

.....

.....

.....

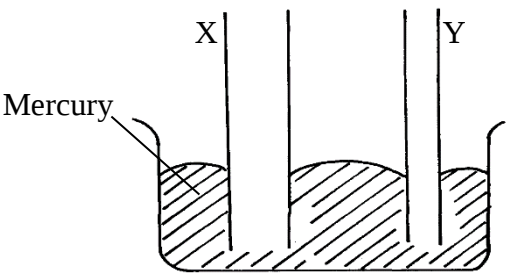
9. A negatively, charged rod is brought close to (but not touching) an uncharged sphere. If the sphere is momentarily earthed and then the rod is removed, briefly explain what happens. (2mks)

.....

.....

.....

10. Indicate on the diagram below, the level of mercury in the tubes X and Y (2mks)



11. An object weighs 1200N on a certain planet. What is the gravitational field strength of this planet if the object is 60kg? (3mks)

12. State **two** properties of a thermometric liquid. (2mks)

.....
.....

SECTION B (55MARKS)

Answer all question this section

13. (a) How does amplitude affect the loudness of musical note? (1mk)

.....
.....

(b) What can be done to reduce echo in theatre halls? (1mk)

.....
.....

(c) A girl stands some distance from a high wall and claps her hands;

(i) What **two** measurements would need to be made in order to determine the speed of sound? (2mks)

.....
.....

(d) Describe how you would make use of these measurements. (3mks)

.....

.....

.....

.....

.....

(e) A girl is standing between two cliffs A and B but nearer to cliff B than A. She stands 140m from wall **B** and shouts once. She hears two echoes and discovers that the time between the two echoes is 0.6seconds. Determine how far the girls if standing from the cliff given that the speed of sound in air is 340m/s. (3mks)

14. (a) State Hooke's law . (1mk)

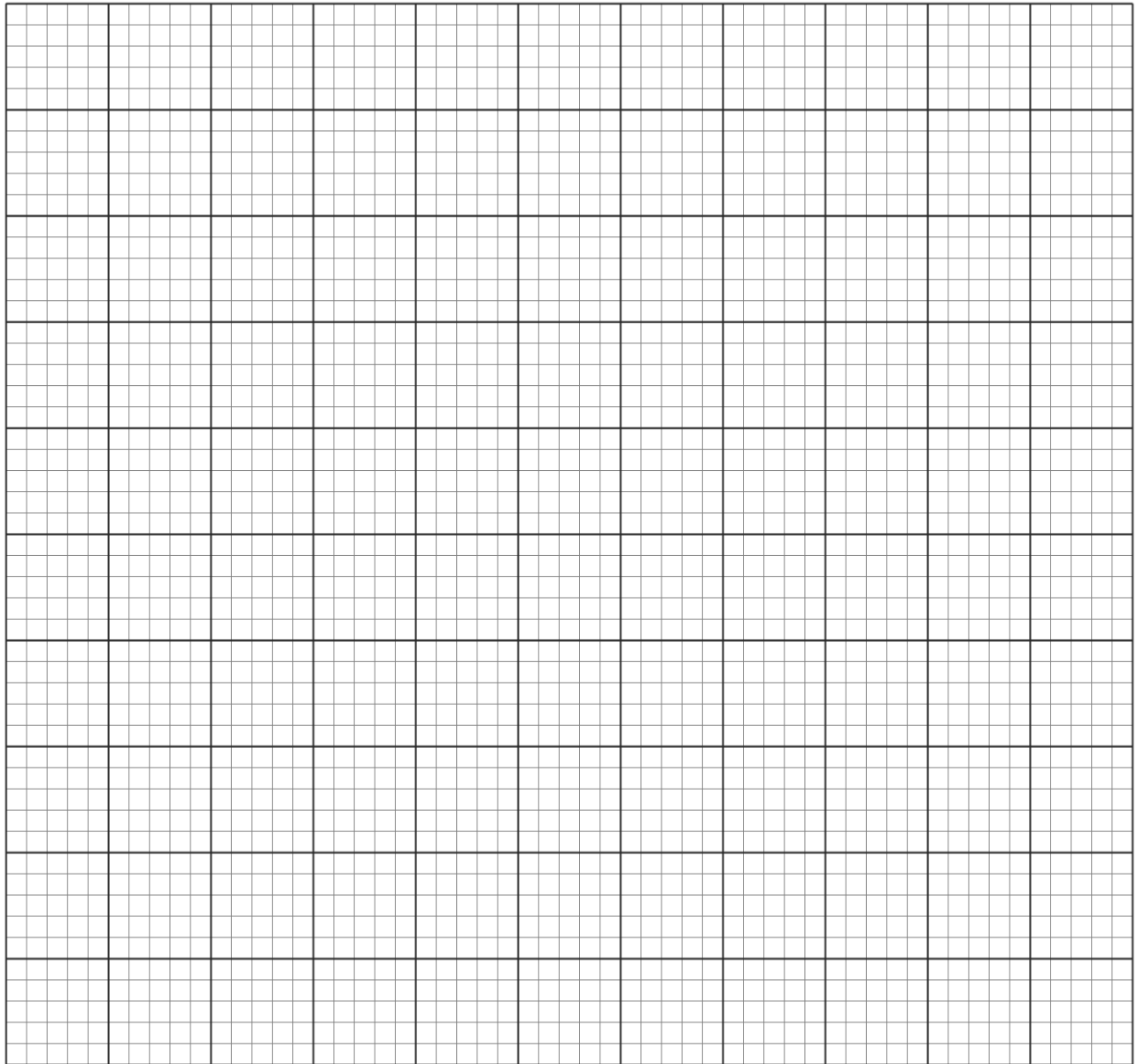
.....

.....

(b) The following readings were obtained when a spring was loaded gradually;

Load (N)	0	10	20	30	40	50	60	70	80
Extension (cm)	0	12	25	37	48	60	70	78	85

(i) Plot a graph of load (N) against extension (cm) (5mks)



(ii) Mark on your graph the elastic limit **P**.

(1mk)

(iii) Determine from the graph the elasticity constant of the material of the wire.

(3mks)

15. (a) Distinguish between streamline and turbulent flow.

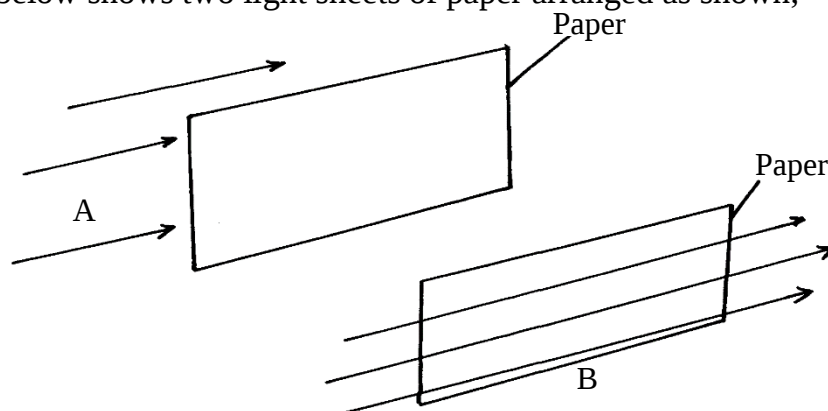
(2mks)

.....

.....

.....

(b) The figure below shows two light sheets of paper arranged as shown;



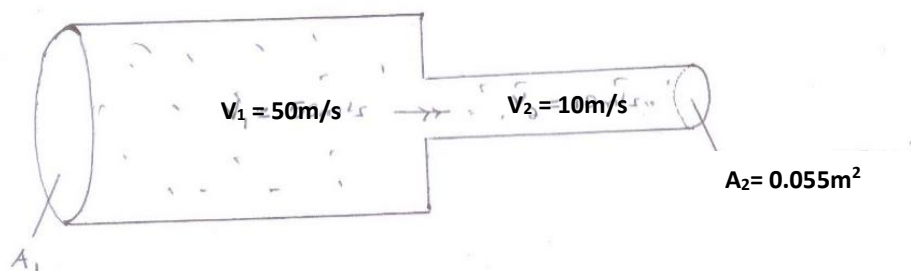
Explain the observation made when air is blown at the same speed and at the same time at point **A** and **B**. (2mks)

.....

.....

.....

(c) The diagram below shows an incompressible fluid moving through a tube of varied cross-sectional area. If the area of the small tube is 0.055m^2 , calculate the diameter of the larger tube. (3mks)



(d) Explain why a high speed jet has a sharp –nose shape (2mks)

.....

.....

.....

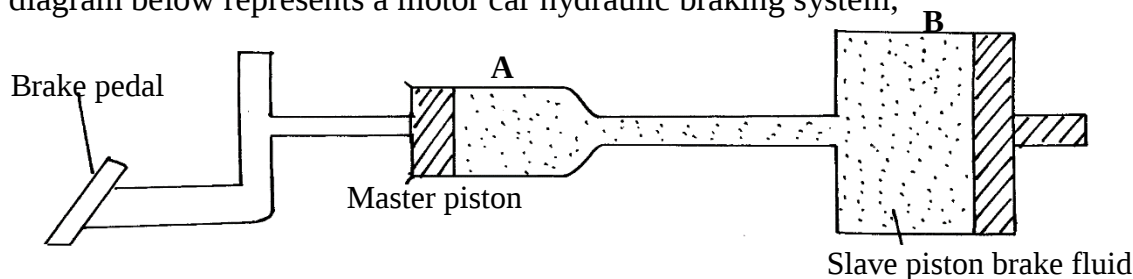
16. (a) Define **pressure** and give its S.I nits. (2mks)

.....

.....

.....

(b) The diagram below represents a motor car hydraulic braking system;



(i) State **two** properties of the liquid used as a brake fluid (2mks)

.....

.....

(ii) Given that in the diagram (b) above the master piston has an area of 15cm^2 and the slave piston has an area of 50cm^2 a force of 100N is applied on the master piston. Find the force used to stop the car. (3mks)

(c) Compare the values of pressure in the two pistons above and give a reason for your answer. (2mks)

.....

.....

.....

(d) Give a reason why gas is not suitable for use in place of the brake fluid. (1mk)

.....

17. (a) Define **centre of gravity**. (1mk)

.....
.....

(b) State **two** factors affecting stability of a book. (2mks)

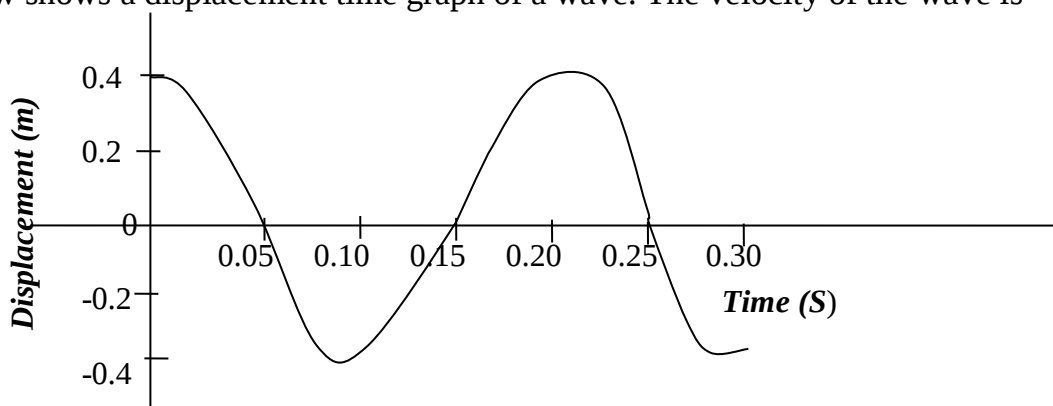
.....
.....

(c) Use simple sketches to show the three states of equilibrium. Name the states. (3mks)

18. (a) Distinguish between a **longitudinal wave** and a **transverse wave**. (1mk)

.....
.....

(b) The figure below shows a displacement time graph of a wave. The velocity of the wave is 0.4m/s



Determine;

(i) The amplitude (1mk)

.....
.....

(ii) The period

(1mk)

.....

.....

.....

(iii) The wavelength

(2mks)

.....

.....

.....

(c) State **one** disadvantage of a convex mirror when used as a car driving mirror

(1mk)

.....

.....

(d) What property of light is suggested by the formation of shadows?

(1mk)

.....

.....

FORM 2 MIDTERM 2 EXAMS

SMART-GRADE SERIES

AGRICULTURE

TIME: 2 HOURS

NAME..... ADM NO;

CLASS..... DATE.....

*Answers **all** questions in the spaces provided.*

1. What determines the colour of a particular soil? (1mk)

.....

2. Give **three** reasons why soil is important in crop production. (3mks)

.....

.....

.....

3. State **four** physical agents of weathering. (4mks)

.....

.....

.....

.....

4. List **four** tools used for laying concrete blocks when constructing a wall. (4mks)

.....

.....

.....

.....

5. Differentiate between the following :-

i) Seeded and seedling bed.

(2mk)

.....

.....

.....

ii) Tilt and tillage.

(2mks)

.....

.....

.....

6. State **four** climatic factors that influence crop production.

(4mks)

.....

.....

.....

.....

7. Name **four** types of water pumps.

(4mks)

.....

.....

.....

.....

8. Name **two** breeds of dairy goats kept in Kenya.

(2mks)

.....

.....

9. List down at least **five** characteristics of a typical beef cattle.

(5mks)

.....

.....

.....

.....

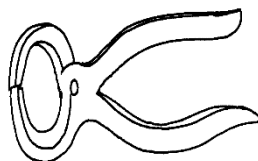
.....

10. a) Identify the tools labeled A,B,C and D

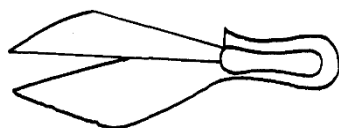
(2mks)



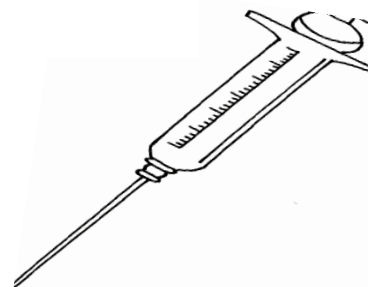
A



C



D



B

b) Give **one** use of each of the tools illustrated in (a) above.

2mks)

.....

.....

.....

.....

c) Name the part of the animal where specimen A is placed when in use.

(1mk)

.....

11. State **three** features of a good maize granary.

(3mks)

.....

.....

.....

12. Give **four** advantages of mulches on crops.

(4mks)

.....

.....

.....

.....

13. Mention **four** reasons for carrying out testing of a soil sample. (4mks)

.....

.....

.....

.....

14. State any **four** post – harvest practices. (4mks)

.....

.....

.....

.....

15. i) What is parasitism? (1mk)

.....

.....

ii) State **four** effects of parasites on livestock animals. (4mks)

.....

.....

.....

.....

16. Name **two** categories of plant nutrients. (2mks)

.....

.....

17. Mention **four** roles of nitrogen in plants. (4mks)

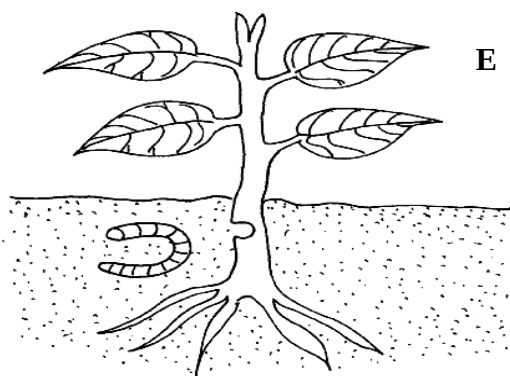
.....

.....

.....

.....

18. The diagram labeled **E** below shows a kale seedling attacked by a pest.



i) Identify the pest. (1mk)

.....

ii) What damage does the pest cause to the crop? (1mk)

.....

iii) State **one** method of controlling the pest. (1mk)

.....

19. State the importance of using certified seeds for planting. (4mks)

.....

.....

.....

.....

20. State **four** factors considered in determining the depth of planting. (4mks)

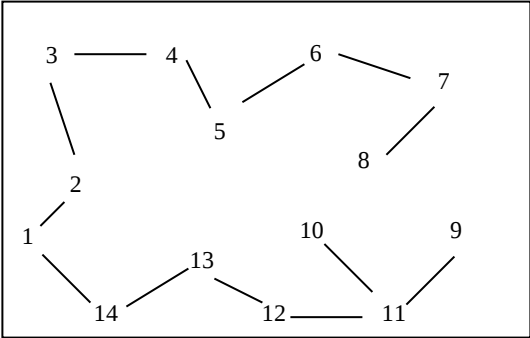
.....

.....

.....

.....

21. The diagram below shows a soil sampling method.



(i) **Identity** the method. (1mk)

.....

(ii) State **four** activities that are carried out during soil sampling in the field. (4mks)

.....

.....

.....

.....

(iii) What information should the sample have before being taken to the laboratory. (3mks)

.....

.....

.....

.....

22. Outline **two** positive effects of wind on crop production. (2mks)

.....

.....

23.State **four** agricultural practices that pollute water. (4mks)

.....

.....

.....

.....

24. Mention any **four** methods used in draining land during land reclamation. (4mks)

.....

.....

.....

.....

25.i) What is opportunity cost? (1mk)

.....

.....

ii) State **four** types of farm records. (4mks)

.....

.....

.....

.....

26. Outline **four** factors that affect rooting of cuttings. (4mks)

.....

.....

.....

.....

FORM 2 MIDTERM 2 EXAMS

SMART-GRADE SERIES BUSINESS STUDIES

TIME: 2 HOURS

NAME..... ADM NO;

CLASS..... DATE.....

565

BUSINESS STUDIES

TIME: 2 ½ HOURS

INSTRUCTIONS TO CANDIDATES:

- Write **your name** and **admission Number** in the spaces provided.
- Answer **all** the 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
MARKS														

QUESTION	15	16	17	18	19	20	21	22	23	24	25
MARKS											

TOTAL MARKS

--

Answer all the questions

1. Outline **four** man reasons why business enterprise exists. (4mks)

.....

.....

.....

.....

2. Highlight **four** benefits that a community should derive from a manufacturing firm. (4mks)

.....

.....

.....

.....

3. Outline **four** measures to be taken by a business man to improve internal business environment. (4mks)

.....

.....

.....

.....

4. State **four** ways in which HIV/AIDS prevalence has negatively affected business activities.(4mk

.....

.....

.....

.....

5. Outline **four** difficulties faced by a consumer in the process of satisfying his/her wants. (4mks)

.....

.....

.....

.....

6. State **four** reasons why choice is important in the satisfaction of human wants. (4mks)

.....

.....

.....

.....

.....

7. Indicate in the spaces provided the type of utility created by each of the following activities. (4mks)

	Activity	Type of utility
(a)	Carpentry	
(b)	Shop-keeping	
(c)	Teaching	
(d)	Importing	

8. Give any **four** reasons why occupational mobility of skilled labour is low. (4mks)

.....

.....

.....

.....

.....

9. State **four** circumstances under which an entrepreneur may want to change his or her business. (4mks)

.....

.....

.....

.....

.....

10. Explain **four** measures that the government can take to enhance entrepreneurial culture in Kenya. (4mks)

.....

.....

.....

.....

.....

.....

11. Identify the office equipment used to perform the following tasks: (4mks)

	Role	Office equipment
(a)	Removing pins form papers	
(b)	Printing postage impression on envelopes	
(c)	Transmitting printed messages e.g. maps	
(d)	Posting information to ledgers and preparation of payrolls	

12. State **four** ways in which a well planned office layout contributed towards efficiency of operation in an organization. (4mks)

.....

.....

.....

.....

13. Give **four** differences between an invoice and a proforma invoice. (4mks)

Invoice	Proforma Invoice

14. Credit cards are increasingly being used in transactions in Kenya. Highlight **four** disadvantages of using credit cards. (4mks)

.....

.....

.....

.....

15. Give any **four** reasons for privatization of government owned firms. (4mks)

.....

.....

.....

.....

16. Distinguish between a share and a debenture as a source of finance for a public limited company

Share	Debenture
(i)	(i)
(ii)	(ii)
(iii)	(iii)
(iv)	(iv)

17. State **four** factors that limit effectiveness of consumer organization in protecting consumers in Kenya. (4mks)

.....

.....

.....

.....

18. Give **four** benefits of Export processing zones to Kenya. (4mks)

.....

.....

.....

.....

.....

19. State **four** roles played by Kenya ports Authority in ensuring that sea transport operates Efficiently (4mks)

.....

.....

.....

.....

.....

20. Highlight **four** reasons why the motorbikes are quickly replacing bicycles as a choice for client (4mks)

.....

.....

.....

.....

.....

21.State **four** reasons why courier services are becoming popular in the delivery of letters and parcels

.....

.....

.....

.....

.....

22.Despite the remarkable shift to mobile phone system, landlines are still in use. State **four** reasons why organizations are still using landline communication. (4mks)

.....

.....

.....

.....

.....

23. Highlight **four** features of a bonded warehouse. (4mks)

.....

.....

.....

.....

24. State **four** measures that the owner of a warehouse may take to ensure its smooth operation. (4mks)

.....

.....

.....

.....

.....

25. Outline any **four** benefits of “Pooling of risks” to insurance Company. (4mks)

.....

.....

.....

.....

FORM 2 MIDTERM 2 EXAMS

SMART-GRADE SERIES

ENGLISH

TIME: 2 HOURS

NAME..... ADM NO;

CLASS..... DATE.....

101

ENGLISH

TIME: 2 HOURS

INSTRUCTIONS TO CANDIDATES:-

- Write your **name**, **admission number** and **the name of your school** in the spaces provided above.
- **Sign** and **write** the **date** of examination in the spaces provided above.
- Answer **all** questions in this question paper.
- Answers to **all** questions **must** be written in the spaces provided in this booklet.

FOR EXAMINER'S USE ONLY

QUESTION	MAXIMUM SCORE	CANDIDATE'S SCORE
TOTAL SCORE		

Read the passage below and answer the questions that follow. Keep to the information in the passage

Amadu Bah sat on a stool in the cramped front section of the tiny shed that served as his home and place of business. The front part, which opened directly onto the busy road a few feet away, was his shop and the shop was no more than the four feet deep by six feet wide, the range of goods on display was impressive. Amadu Bah, however, was unhappy, business had not been particularly good lately. On top of that, his wife had just given birth to twins, something he had not bargained for. It meant two extra mouths to feed rather than one, in addition to the four small children they already had and his younger brother, just arrived from Jollof. It was a heavy responsibility. And space! Space was really becoming a problem in the room at the back. He mulled over the question on how to raise additional income from his business. When he increased his prices his customers became annoyed and some refused to buy. If he kept his prices low, he made very little money on the things he sold. Only recently he had been forced to raise prices because his Syrian suppliers had started charging more.

Ah! It was a troublesome matter. He felt hot and uncomfortable. It was well into the dry season, and the tin walls of his shop seemed to magnify the sun's heat despite the open store front. In the back one of the new arrivals was screaming lustily. Just in front of the shop two of his other children were playing to a narrow strip of dirt separated from the road by a shallow gutter.

Three small boys, each about eleven or twelve, came up on the shop and asked for a loaf of bread and a tin of sardines. He told them his new prices and they pulled back, digging in vain in their pockets for extra money. They started calling his names. They began dancing around the front of the shop, just out of his reach, clapping their hands and yelling insults.

"Foulahman, go home, go home" they sang in delighted unison.

Amadu Bah was enraged. These brats were disrespectful towards him, trying to humiliate him, when he was doing nothing but struggle to make a living. They would never cheek their Siangan elders like that. Why were they doing to him? Did they think because he was a Foulah they were better than him?

He sat still and unblinking, outwardly oblivious to the boy's chants. Growing bold, one of them ventured a little too close to the counter. Bah swooped, catching him by the arm as he turned to run. The boy began to scream. Bah jumped over the counter and delivered a sharp slap to his face followed quickly by two heavy blows to the back. Then as he let go of him, he landed a parting shot to the boy's back to speed him on his way. Unfortunately, this last was powerful enough to cause the boy to lose his balance.

He fell forward into the gutter, hitting his forehead on the sharp concrete edge. Blood spurted out of a nasty gash just below the hair line and the boy lay motionless, his body crumpled between the narrow sides of the ditch. Bah was horrified. When he found his voice it was all he could to shout for help. Passers-by and neighbours came to his aid. The youngster was lifted out of the gutter and

a passing taxi was ailed to rush him to hospital. Bah went along, confused and disoriented. The whole thing had happened so fast. In a fraction of a second minor incident had transformed into a calamity. As he got into the taxi he was aware of hostile stares coming form the small crowd and some of the onlookers started to point accusing fingers at him.

The taxi rushed through the streets of Liberty with the boy still bleeding, though less profusely now. At the hospital they carried him into the emergency room where a nurse took over and started to clean the wound. A doctor came in and told them to wait outside. Bah sat by himself, wondering what he had done to deserve this misfortune. He prayed alternatively for the boy’s recovery and for his family’s safety. The angry crowd that had gathered a the scene of the accident was not a good sign. After an hour, the doctor came out and announced that the boy was out of danger. Amadu Bah had never felt so relieved in his life!

(Adapted from The Price of Liberty by Canton)

(a) What problems made life difficult of Amadu Bah at home? **(2mks)**

.....

.....

.....

(b) Briefly explain the dilemma Amadu Bah faced in connection with his business. **(2mks)**

.....

.....

.....

(c) Why do the boys have a negative attitude towards Amadu Bah? **(2mks)**

.....

.....

.....

(d) Both the injured boy and Amadu Bah were to blame for what happened. Do you agree with this statement? Support your answer with evidence from the passage. **(4mks)**

.....

.....

.....

.....

.....

2. Read the following poem and answer the questions on it;

SPIDER

Slow
As a limping cow
Or a mighty bull
With its leg split in two
A great black spider comes out of the earth,
And climbs up the wall
Then painfully sets his back against the trees
Throws out his threads for the wind to carry,
Weaves a web that reaches the sky.

(Literature: Reading Fiction, Poetry and Drama, McGrawhill, 2000)

(a) State **three** ways to effectively recite the above poem. (3mks)

.....

.....

.....

.....

(b) Write other words that rhyme with the following; (4mks)

Bull
Wall
Earth
Trees

(c) Write other words that sound exactly like the ones below; (2mks)

Throws
Two

(d) The word ‘**wind**’ has another different meaning from the one used in the poem. Write a sentence to illustrate that other meaning. (1mk)

.....

.....

3. (a) Rewrite the following sentences choosing the correct alternatives from those in brackets (10mks)

(i) (This/These) ladies are professional secretaries in (this/these) college.

.....
.....

(ii) The (scene/sin) in the play shows the dangers of (sin/scene)

.....
.....

(iii) The (cart/cat) made deep (rats/ruts) on the muddy road.

.....
.....

(iv) My niece (leaves/lives)in that small (hut/hat).

.....
.....

(v) Daddy drums up a (tin/din) on the (din/ tin) tambourine.

.....
.....

(b) Fill in the blanks with the most appropriate choice between the two given in bracket (5mks)

(i) Of the two subjects, I like this one(more/most).

(ii) Kiprono enjoys football more than(any/ any other) outdoor game.

(iii) This year's exam was(more hard/ harder) than last year's game.

(iv) In the heat of January, a glass of passion juice tastes(delicious /deliciousy).

(v) (Whoever/Whomever)..... I pick will lead the discussion.

(c) **Complete each of the following sentences using the correct preposition.** (5mks)

- (i)1963, Kenya gained independence.
- (ii)Scientific investigations, HIV/AIDS is mainly transmitted.....unprotected sexinfected people.
- (iii)popular belief, lightning can strike twice in the same place.

(d) **Complete each of the following sentences by using the correct form of the words in brackets** (5mks)

- (i) We usually write ourin the evenings. (compose)
- (ii) The man was arrested because his neighbours made maliciousagainst him. (allege)
- (iii) It is unclear whether or not,is determined by heredity. (person)
- (v) When we are happy, we reveal ournature. (Please)
- (v) Her argument was obviously(error).

(e) **Supply appropriate question tags.** (5mks)

- (i) We really love you
- (ii) I am busy
- (iii) You won't come
- (iv) Students must always obey school rules
- (v) Let us go

(f) **Re-write the following passage, filling the blanks with a suitable word from the ones given in brackets. Use the words in their correct form.** (10mks)

Viola woke up with a swollen (i)(chick/cheek) and a throbbing jaw. (It's/Its) (ii)that wretched tooth again!" she (iii)..... (grown/groaned holding her jaw cautiously. She(iv).....(new/knew) she had to (v)(see/sea) a dentist (vi)..... (write/right) away. She couldn't (vii).....(wait/weight) any longer for she was in (viii).....(grate/great) pain. She decided to call on Cheptoo, an old lady and neighbour (ix)..... (to/too) get some painkillers, before she went (x)the dentist.

(g) Re-write the following sentences according to the instructions given in brackets. (5mks)

(i) Will I get time to do it? (Begin: I wonder.....)

.....

.....

(ii) I will never do it again. (Begin: Never....)

.....

.....

(iii) I am going to Tanzania next week Neno said my sister is getting married.

(Punctuate the sentence correctly)

.....

.....

(iv) Keben will marry Chesang. Her parents agree. *(Combine into one sentence using a conditional clause.)*

.....

.....

(v) There is fresh food in the kitchen. *(Replace the underlined word with another which is opposite in meaning.)*

.....

.....

(h) Change the verbs in brackets into the present continuous tense. (5mks)

(i) The cows.....(graze) in the field.

(ii) John and Mary(read) in the library.

(iii) I(go) tomorrow

(iv) Kipngeno(hop) on one foot.

(v) We(dig) until noon.

(i) Change the following sentences into the passive voice.

(5mks)

(i) Chebet kicked the ball.

.....
.....

(ii) Chelangat cooked the dinner last night.

.....
.....

(iii) Zebras surrounded our school bus.

.....
.....

(iv) Patrick Njiru won the safari rally.

.....
.....

(v) The dog ate the meat.

.....
.....

(j) Fill in the blanks in the following sentences with appropriate quantifiers

(5mks)

(i) He isn't very popular. He hasfriends.

(ii) You must be quick. We havetime left.

(iii) Get yourself some oranges. There are left in the fridge.

(iv) The weather has been dry recently. We have hadrain.

(v) The husband has been very reckless. He hastime for the family.

(20mks)

[illegible]

[illegible]

FORM 2 MIDTERM 2 EXAMS

SMART-GRADE SERIES

KISWAHILI

TIME: 2½ HOURS

NAME..... ADM NO;

CLASS..... DATE.....

MAAGIZO:

- Andika **Jina** **lako** na **namba** yako katika nafasi ulizoachwa hapo juu.
- Weka sahihi yako na tarehe ya mtihamu
- Jibu maswali yote.
- Andika majibu yako katika nafasi ulizoachiwa.

UFAHAMU

Soma taarifa hii kisha jibu maswali yafuatayo

SUKARI UTAMU AU SUMU MWILINI?

Watu wengi hawawezi kunywa chai au uji bila kutia sukari. Wanatumia sukari kwa hamu na ghamu bila kutambua kuwa hiyo ni sumu. Wanayojiongeza mwilini.

Ni kweli usiopingika kuwa wazee wetu wa jadi waliishi muda mrefu wakiwa na siha njema kuliko sisi. Hii ni kwa kuwa waliishi katika kipindi ambacho sukari inayotengenezwa viwandani haikuweco. Iwapo ilikuweco, ilikuwa bidhaa ya wateule waungwana na hawangeweza Kuigharamia.

Watafiti wa masuala ya afya wamegundua kuwa sukari inayotayarishwa viwandani sasa hivi haina virutubishi vyovyote. Umuhimu wake ni kutia ladha tamu tu. Umuhimu huu hauwezi kulinganishwa na madhara yanayoletwa na sukari hii. Baada ya kusagika mwilini, sukari hii huacha masalia ya asidi mwilini yenye sumu niayoathiri siha. Hali kadhalika, utaratibu wa viwandani wa kutayarisha sukari ili iwe nyeupe na kuichuja hugaribu virutubishi vinavyoweza kuwa muhimu mwilini.

Matumizi ya sukari kwa wingi husababisha madhara mbalimbali mwilini. Kwanza, kuchangia kuoza na kuharibika kwa meno, pili, sukari nyeupe imehusishwa na ongezeko la maradhi ya kisukari, moyo na hipoglisimia au upuingufu wa sukari mwilini matumizi holete ya sukari huleta kipandauso au ognjwa wa ghafla wakuumwa upande na kichefuchefu sukari huleta kipanda uso ugonjwa wa ghafla wa kuumwa upande mmoja wa kichwa unaoambatana na kichefuchefu, kutapika na matatizo ya ngozi na figo, pamoja na ongezeko la kolestroli kemikali hii ya kolestroli inaporundikana moyoni, hufanya mishipa inayotoa damu moyoni kuisambaza mwilini na pia kuifanya kuwa myembamba na sugu. Moyo hulazimika kusukuma damu kwa nguvu na huenda moyo ukackoka na kukoma kufanya kazi..

Madhara haya ya sukari ndiyo yanayowafanya watu wengi, kukiri kuwa sukari ingawa ni tamu, ni sumu mwilini.

Wataalamu wa lishe wamependekeza ulaji wa vyakula kama nafaka, matunda, mboga na miwa ambavyo vimejaa sukari asilia.

Fauka ya hayo,sukari inayotoka katika asali ni bora zaidi kwa mwili wa mwanadamu. Asali huwa na sukari asilia, vitamini, madini na amino asidi.Hivi vyote huwa na manufaa mbalimbali mwilini mathlani,asali huupa mwili nishati inayohitajika kuendesha shughuli za viungo.Licha ya hayo, asali huuchangamsha mwili. asali huwa na kemikali amabazo husaidia watoto kukua vizuri. Huweza kuzidisha kiwango cha hemoglobin kupunguza uwezekano wa watoto kuwa na ‘Anemia’ (upungufu wa damu). Halikadhalika, Asali husaidia katika usagaji wa chakula iwapo itatumiwa kabla ya mlo.

Matumizi ya kijiko kimoja cha asali kila siku husaidia mwili kujikinga dhidi ya magonjwa ya kukohoa. Asali husaidia pia kuondoa harufu mbaya kinywani.

Asali inaweza kutumiwa kujipaka. Inapotumiwa kwa njia hii, hutunza ngozi na kuifanya ing’are, huondoa vipetele na ugumu wa ngozi pamoja na kutibu kule ngozi iliko katika katika. Asali pia hutibu vidonda.Viwanda vingi vya vipodozi hutumia asali kama mali ghafi muhimu katika utengenezaji wa bidhaa hizo.

MASWALI.

a) Kutokana na taarifa hii,kwa nini wazee wa zamani waliishi muda mrefu wakiwa na siha njema kuliko watu wa siku hizi? (ala.1)

.....
.....

b) Taja matumizi mawili ya sukari nyeupe. (ala2.)

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

c) Onyesha madhara matatu ya sukari nyeupe mwili. (ala. 3)

.....

.....

.....

.....

d) Taja aina ya sukari iliyo na manufaa mwilini mwa mwanadamu na kwa nini? (ala.2)

.....

.....

.....

e. Eleza manufaa ya asali;

i) Ndani ya mwili (ala.2)

.....

.....

.....

ii) Nje ya mwili. (ala.2)

.....

.....

.....

f. Eleza maneno yafuatayo kama yalivyotumika:

i) Hamu na ghamu.

.....

.....

ii) Akina yahe.

.....

.....

iii) Sugu.

.....

.....

MUHTASARI /UFUPISHO (ALAMA 15)

Soma taarifa ifuatayo kisha ujibu maswali kulingana na maaqizo.

Siku hiyo nilipitia mahali hapo kama yalivyokuwa mazoea yangu. Nilimuona yule mtu amelala pale pale hatingishiki kama nilimuono yule mtu kama nilivyokuwa nikimuona siku hizi zote, mwaka nenda mwaka rudi. Nilisimama huku. Nikishangaa kwa mara nyingine tena.

Nilikuwa najitayarisha kujiendea na hamsini zangu,mtu huyo alipojipinda kwa mbali sana; Kwa haki nilidhani macho yangu yananihadaa. Nikayakodoa zaidi ili nione vizuri zaididibura iliyonifunukia pale kwa muda, hakuna lililotendeka. Nikafikicha macho yangu nikitumia nishani yote iliyomo mwilini mwangu, ili niyatoe matongo ambayo nilituhumu kwamba yalitia zingezinge nadhari yangu kiasi cha kunifanya kutoona barabara. Nilipohakikisha ya kwamba ni akili yangu tu iliyokuwa imenihadaa nikaamua kuendelea na safari yangu kwenda kujitafuatia riziki.

Hatua ya kwanza na ya pili, moyo haukunipa. Sauti katika kilindi cha moyo wangu ikanisihi na kunitafadhalisha nitazame nyuma. Kutua jicho nyuma, nikamasa mtu huyo akigeuka. Ni kashtuka sana! Jambo la kwanza nilidhani macho yangu yameingiwa na kitu kilichoyafanya kuona mambo.

Pili nilidhani iwapo niliyoyaona yana msingi wowote, basi huenda ama nina wazimu au yule mtu ni mzuka, hasa kwa vile ilionekana ni mimi tu nimuonaye. Nilikuwa niko katika hali ya kufanya uamuzi kuhusu dhana zangu hizi,mtu huyu alipojigeuza. Kisha akafunua macho! Moyo ulinienda mbio. Nilitaka kutifua vumbi wazimu usinizidie, lakini sikupata nafasi. Mtu yule alijizoazoa na kuketi kitako. Kisha akatokwa na maneno katika Lugha iliyofanana sana na Kiswahili. Niliyaelewa aliyokuwa akisema. Ajabu ya maajabu mtu huyo alidai ya kwamba tangu alipolana baada ya chakula cha mchana hakuota ndoto hata moja bali usingizi wake ulikuwa mithili ya gogo! Sasa nina hakika kwamba ikiwa sina wazimu, basi kiumbe yule aliyevaaa ngozi iliyochakaa sana katika mpito wa miaka hakika ana wazimu. Nilitaka Kuhakikisha hivyo nilimkumbusha kwamba amelala mahali hapo kwa muda wa miaka mingi sana.

Kusikia hayo alianza kunikagua akasema numevaa kizungu. Akanitajia tofauati nyingi baina ya vijana aliowazoea na mimi. Mwisho wa yote akaniuliza kama siku hiyo si tarehe kumi na nane mwezi wa Desemba Mwaka 1897. Nikadhani anafanya mzaha kwa hivyo nikacheka. nilipoona kicheko changu kinamuudhi. nikamwambia siku hiyo ni tarehe kumi na nane mwezi wa pili mwaka wa 1997. Nilipoona ameshangaa. Kwa dhati,nikagundua ukweli. Alikuwa amelala kwa karne nzima!

MASWALI:

a) Eleza hoja muhimu zinazojitokeza katika aya tatu za Mwanzo . (Maneno75- 85)(ala. 7,2 9 jumla mtiririko)

Matayarisho.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Jibu.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

b) Kwa maneno yako mwenyewe fupisha aya mbili za mwisho bila kubadilisha maana .

(Tumia maneno 40-50)

(ala.6)

Matayarisho.

.....

.....

.....

.....

.....

.....

.....

.....

Jibu.

.....

.....

.....

.....

.....

.....

.....

.....

MATUMIZI YA LUGHA (ALAMA 40)

a) Andika sentensi katika ukubwa

(ala.2)

Mtoto alitishwa na mtu.

.....

.....

.....

.....

.....

b) Ainisha mofimu katika Kitenzi hiki

(ala.3)

Kilichomfisha.

.....

.....

.....

.....

.....

c) Andika upya sentensi hii kwa kufuata maagizo

Kalamu ilipopotea mwanafunzi aliingiwa na kiwewe.

(ala.2)

(Anza: Kupotea)

.....

.....

.....

d) Andika kwa wingi.

(ala.2)

Ua wake una ua nzuri na kubwa.

.....

.....

e) Toa mifano miwili;

(ala.4)

i) Sauti ghuna ambazo ni vipasuo.

.....

.....

.....

ii) Sauti sikhuna ambazo ni vikwamizwa/zo

.....

.....

.....

f) Andika kinyume **(ala.1)**

Chakula hiki kitamu Nitakimeza.

.....

.....

g) Kwa kutolea mifano ya sentesi, bainisha matumizi ya rifa'a (kibaiNishi) **(ala.3)**

.....

.....

.....

.....

.....

h) Kanusha Sentensi hii kwa umoja **(ala.2)**

Nywele zenu hukatika mnapochana.

.....

.....

i) Tunga sentensi yenye muundo ufuatao. **(ala.3)**

Kihisishi + Kiashiria + nomino + Kivumishi + kitenzi + kielezi.

.....

.....

.....

j) Tofautisha sentensi zifuatazo kimaana **(ala.2)**

i) Ninge kuwa na Pesa ningenunua nguo nzuri

.....

.....

ii) Ningalikuwa na pesa ningalinunua nguo nzuri.

.....

.....

k). Badala ya nomino iliyopigiwa mstari, tumia nomino iliyowekwa kwenye, vifungo. **(ala.4)**

(i) Embe ambalo unakula lina viini vya maradhi. (Chakula)

.....
.....

ii) Kitabu ambacho unasoma ni cha nani? (vitabu)

.....
.....

l) Tumia kimilikishi kilicho kwenye mabano kukamilisha sentensi. **(ala.2)**

i) Mtoto.....amekuja (- ake)

ii) Limauliko kwenye kabati (- enu)

m) Kamilisha sentensi zifuatazo kwa kutumia tashbihi mwafaka.

i) Huyu Chepkoriri hachezi na wenzake nje; achungwa kama.....

ii) Yule mlevi ni mchafu kama.....

n) Ziandike tena sentensi zifuatazo ukizingatia wakati ufaao kulingana na maagizo **(ala. 4)**

i) Chakula kinachoiva vizuri ndicho kinacholiwa. (mazoea)

.....
.....

ii) Mtoto akilala nitapiga nyumba deki,nioshe vyombo na nipike, (ujao)

.....
.....

o) Andika sentensi upya ,kulingana na maagizo. **(ala.1)**

Kwa nini hukumfahamisha kuwa mkutano ni hapo kesho.? (Jinsi ya kutendeshwa)

.....
.....

p) Unda nomino mbili mbili kutokana na vitenzi. **(ala. 4)**

i) Sajili.....

ii) hakiki.....

ISIMU JAMII (ALAMA 10)

a) Wewe ni Afisa wa elimu wilayani, mwenye umri wa miaka 39. Unapoenda kazini unakutana na watu walioorodheshwa hapo chini. Andika jinsi. Utakavyo waamkua kiola mmoja wao. (Al 4)

i) Mchuuzi wa mboga wa miaka 60 (Sitini)

.....

.....

.....

ii) Kiongozi wako wakidini.

.....

.....

.....

iii) Mke au mume wako akitoka safari.

.....

.....

iv) Tarishi wa kike/kiume ofisini mwako.

.....

.....

b) Fafanua mambo matatu ambayo watu huzingatia katika kuteua maneno na miundo ya sentensi wanapozungumza au kuandika **(ala.6)**

.....

.....

.....

.....

.....

.....

.....

.....

FORM 2 MIDTERM 2 EXAMS

SMART-GRADE SERIES HOME-SCIENCE

TIME: 2 HOURS

NAME..... ADM NO;

CLASS..... DATE.....

INSTRUCTIONS TO CANDIDATES:

- Answer **all** the questions in section on the spaces provided.

1. Name **three** surfaces on which clothes can be ironed (3mks)

.....

.....

.....

2. a) Outline **four** general rules for making seams. (4mks)

.....

.....

.....

.....

b) Discuss **five** points that influence the choice of a seam. (10mks)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

3. a) Mention **three** types of drainage system. (3mks)

.....

.....

.....

b) Give **four** reasons for keeping the drainage systems clean. (4mks)

.....

.....

.....

.....

4. Discuss the cleaning action of a detergent. (6mks)

.....

.....

.....

.....

.....

.....

.....

5. Name **four** categories under which clothes are sorted out. (2mks)

.....

.....

.....

.....

6. State **two** precaution to take when using grease solvents. (2mks)

.....
.....

7. Give **two** uses of mangles. (2mks)

.....
.....

8. Identify **two** practices that would help prevent loss of colour during laundry. (2mks)

.....
.....

9. Name **four** communicable diseases.

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

10. State the use of each of the following;

a) Water seal. (1mk)

.....

b) U or S – bend or bottle trap.

.....

11. Write down **four** sanitary practices one needs to acquire. (4mks)

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

12. Give **three** reasons which make plastic more popular than metals in making laundry equipment. (3mks)

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

13. State **three** factors to consist or when choosing storage equipment for laundry work.(3mks)

.....

.....

.....

14. Give **two** qualities of good pegs fro hanging clothes. (2mks)

.....

.....

15. Explain how you can work out a machine fell seam. (2mks)

.....

.....

.....

16. State advantages of using a commercial pattern. (2mks)

.....

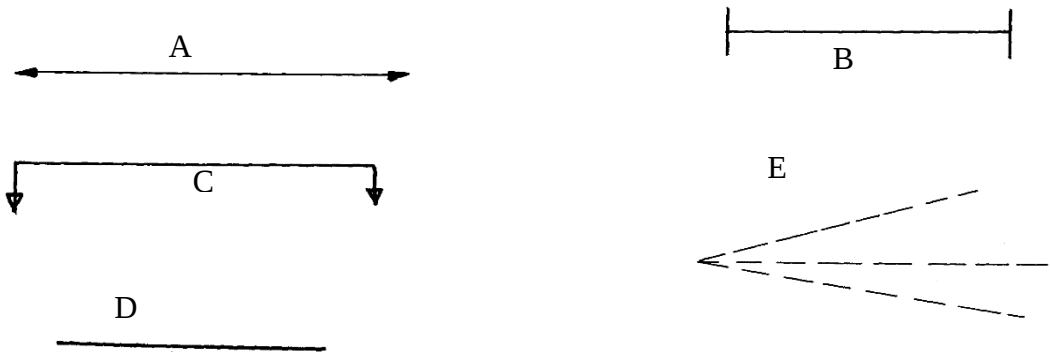
.....

17. Give **two** reasons for airing clothes after ironing them. (2mks)

.....

.....

18. Identify the following pattern makings.



19. State **four** methods of transferring pattern makings (4mks)

.....

.....

.....

.....

20. Define the following terms.

(5mks)

a) Consumer

.....
.....

b) Nutrition.

.....
.....

c) Food

.....
.....

d) Goods

.....
.....

e) Food nutrients.

.....
.....

21. Differentiate between.

a) Informative and competitive advertising.

(2mks)

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

b) Electronic media and print media.

(2mks)

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

22. List **four** equipments that are used for drying garments.

(2mks)

.....
.....

.....

.....

23. Give **four** advantages of using ironing board instead of a table. (4mks)

.....

.....

.....

.....

24. State **five** uses of fabric conditioner. (5mks)

.....

.....

.....

.....

.....

.....

25. Identify effects of laundry processes on woolen fibres. (3mks)

.....

.....

.....

26. Give **two** reasons why French seam is commonly used on children garments. (2mks)

.....

.....

27. Mention **two** uses of bleaches in the laundry work. (2mks)

.....

.....

FORM 2 MIDTERM 2 EXAMS

SMART-GRADE SERIES MATHEMATICS

TIME: 2 HOURS

NAME..... ADM NO;

CLASS..... DATE.....

MATHEMATICS

TIME: 2 ½ HOURS

INSTRUCTIONS TO CANDIDATES:

- Write your **name, admission number** and school in the spaces provided above.
- This paper consists of two sections; **I** and **II**
- Answer **all** the questions in section **I** and any five questions in section **II** in the spaces provided.
- All working **must** be clearly shown in the spaces provided.
- Electronic calculators and KNEC mathematical tables may be used.

FOR EXAMINERS' USE ONLY:

Section I

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

Section II

Questions	17	18	19	20	21	22	23	24	TOTAL
Marks									

GRAND TOTAL

SECTION I (50 MARKS)

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

1. Without using logarithm tables or a calculator evaluate.

$$\underline{0.015 + 0.45 \div 1.5}$$

$$4.9 \times 0.2 + 0.07$$

giving the answer in decimal form.

(3mks)

2. The size of an interior angle of a regular polygon is 156° . Find the number of sides of the polygon.

(2mks)

3. Factors the expression $a^2 - b^2$

(1mk)

Hence find the exact value of $63.7^2 - 36.3^2$

(2mks)

4. Arrange the following fractions in ascending order $\frac{7}{24}$, $\frac{5}{16}$, $\frac{3}{8}$, $\frac{9}{32}$, $\frac{1}{4}$ (2mks)

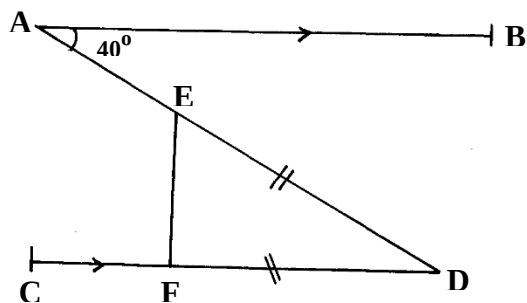
5. A clock loses 6 minutes in every 24hours. If it is showing the correct time at mid- day on Monday. What is the correct time on Thursday when the clock shows 6.00p.m (3mks)

6. Without using a calculator evaluate $2\frac{1}{4} + \frac{3}{4} \div \frac{5}{6}$ of $2\frac{2}{5}$ leaving the answer as a $1\frac{7}{10}$ fraction in its simplest form (4mks)

7. Use logarithms to evaluate $\frac{8.072 \times (0.7432)^{\frac{1}{2}}}{(0.824)^2}$ (3mks)

8. Evaluate $\frac{64^{-\frac{1}{2}} \times 27000^{\frac{2}{3}}}{2^{-4} \times 3^0 \times 5^2}$ (4mks)

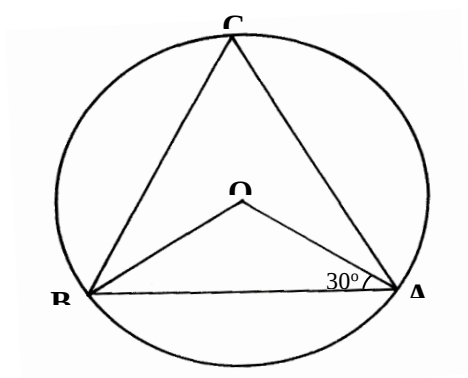
9 In the figure below line AB is parallel to line CD; angle BAD = 40° and Line DE = DF



Calculate the size of angle CFE

(3mks)

10. In the figure below O, is the centre of the circle and angle OAB = 30°



Calculate the size of angle ACB.

(3mks)

11. Calculate the perimeter of a rhombus whose diagonals are 12cm and 5 cm

(4mks)

12. A metal hemisphere of radius 12cm is melted down and recast into the shape of a cone of base radius 6cm. find the perpendicular height of the cone. **(4mks)**

13. The coordinates of the line AB are A (4,6) and B (12,10) . Find the equation of a perpendicular line to line AB, passing through the mid-point of the line AB **(3mks)**

14. Two similar jugs have capacities 0.25 litres and 2 litres respectively. If the circumference of the smaller jug is 5.8cm calculate the circumference of the larger jug. **(3mks)**

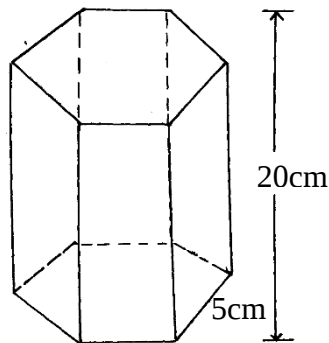
15. Find the range of values of x which satisfy the inequality. $2x + 1 < 11 < 6x - 1$.

Illustrate your answer on the number line

(4mks)

16. The figure below represents a hexagonal prism, whose height is 20cm. the cross – section of the prism is a regular hexagon of side 5 cm. Calculate the volume of the prism; give your answer to 2dp

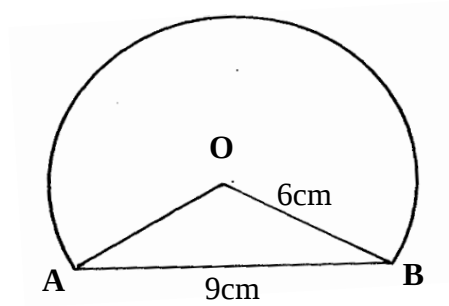
(4mks)



SECTION II (50 MARKS)

Answer only five questions in this section in the space provided.

17. The figure below shows part of a circle centre O, radius 6cm; the Length of the chord AB is 9 cm



a) Calculate the area of the major segment

(7mks)

b) Given that the sides of triangle are 7cm, 9cm and 11cm. Calculate the area of the triangle.

(3mks)

18 a) By choosing any three suitable pairs of values of x and y complete the table of values for each function.

(i) $\frac{x}{2} + 3y = 15$

2

(2mks)

x			
y			

(ii) $\frac{x}{3} - y = 4$

3

(2mks)

x			
y			

b) Using the grid provided , and on the same axes, draw the lines $\frac{x}{2} + 3y = 15$ and $\frac{x}{3} - y = 4$ **(4mks)**

c) Use your graph to solve the equations $\frac{x}{2} + 3y = 15$

(2mks)

$\frac{x}{3} - y = 4$

19. The ratio of Kipto's Salary to Mary's is 5:3. Kipto's salary rose by 12% to Kshs. 22400.

Mary's salary was also raised by $x\%$. The total of their new salaries was Kshs. 36 200.

a) Calculate

(i) Kipto's Salary before the increase **(2mks)**

(ii) Mary's Salary before the increase. **(2mks)**

(b) Determine Mary's salary after the increase. **(1mk)**

(c) What was the percentage increase in Mary's Salary. **(2mks)**

(d) Determine the new ratio of their salaries. **(2mks)**

(e) Calculate the combined percentage increases for both of them. **(1mk)**

20.The mean mass of 5 boys is 54.4 kg. Three boys of masses 52kg, 55.1 kg and 57.5 kg join the five. Calculate the mean mass of the 8 boys **(3mks)**

b) The table below shows the distribution of ages of workers in certain organization.

Age (Years)	Number of Workers
20 – 24	5
25 – 29	10
30 – 34	18
35 -39	15
40 - 44	12

i) State the modal class **(1mk)**

ii) Calculate the mean age **(3mks)**

iii) Calculate the median age **(3mks)**

21. a) A solid sphere of radius 8.4cm is dropped into a cylinder of radius 12cm and containing water upto a height of 10cm.

Determine the new height of water in the cylinder

(6mks)

b) If the mass of the sphere is 100g; determine

(i) Density of the solid.

(2mks)

(ii) Volume of similar solid which is irregular given that its mass is 800g; correct to the nearest cm^3 .

(2mks)

22. If $x + y = 3$ and $x^2 + y^2 = 29$. Determine the values of

(i) $x^2 + 2xy + y^2$ (1mk)

(ii) $2xy$ (1mk)

(iii) $x^2 - 2xy + y^2$ (1mk)

(iv) $x - y$ (2mks)

(b) Find the values of x and y (3mks)

(c) If $x = -2$ is a root of $x^2 + kx + 8 = 0$, find the other root. (2mks)

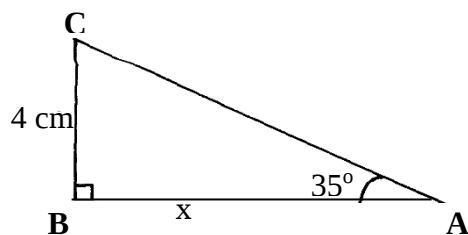
23. a) Two observers, A and B 500m apart observe a kite in the same vertical plane and from the same side of it. The angles of elevation of the Kite are 30° and 20° respectively. Find how high, the Kite was from the observers. (6mks)

Solve the equation $\cos x = \sin 5x$

(2mks)

- c) In the right angle triangle below. Find the length of AB in 2d.p

(2mks)



24. A rectangle has a diagonal of 15.2cm. The diagonal makes an angle of 28° with the shorter side of the rectangle

a) Calculate

(i) The Length and width of the rectangle. **(4mks)**

(ii) The are of the rectangle. **(2mks)**

(b) A triangular plot has two equal sides. The two equal sides meet at an angle of 40° . The area of the plot is 128.56m^2 . Calculate the lengths of the sides of the plot. **(4mks)**

THE END

For Marking Schemes, Contact Mr Isaboke

0746-222-000/0742-999-000

Mwalimu Consultancy Ltd

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***

Powered By Mr Isaboke