CATHOLIC DIOCESE OF MOSHI

URU SECONDARY SCHOOL

FORM FOUR

KISWAHILI

Zoezi la 3

(1) Kwa kutumia mifano taja njia tano(5)za uundaji wa maneno.

(2) Bainisha mzizi asilia (asili) kwa kila neno katika maneno yafuatayo.

(a)Anawaandikisha.

(b)Mkimbizi.

(c)Muumbaji.

(d)Nisingelipenda.

(e)Kuburudika.

(f)Sadifu.

(e)Aliokota.

(f)Waliochopoka.

(g)Kipambanuliwe.

(h)Watakapokuja.

(3) Fikiria kwamba umechaguliwa kuwa Mbunge wa jimbo Fulani kwa kupata kura nyingi.

Andika hotuba ya kuwashukuru wapiga kura wako.

(4) Umechaguliwa kuandika kumbukumbu za kikao cha harusi huko kijijini kwenu, kwa kuzingatia

Vipengele muhimu vya uandishi na kumbukumbu za kikao; Andika kumbukumbu za kikao hicho.

HISTORY

Exercise 3

1. Briefly write in short the historical items

a) Explain the meaning of capitalism

b) Mention characteristics of capitalism

c)meaning of first world war

d) Outline short and long cause of First World War

e) What the effects of First World War on Africa

Essay question

2. Account for the rapid expansion of slave trade in East Africa during the 19th c

3. What brought about the chimurenga war southern Rhodesia in 1896_1897?

4. Draw sketch map of Africa and locate the following l

I. the Germany colony of Togo

II. Germany Cameroon protectorate

III .Germany East Africa

Iv. A coast city of with

V. south West Africa

GEOGRAPHY

Exercise 3

1. Define the following terms.
   a) Research
   b) Hypothesis
   c) Primary data
   d) Descriptive research
   e) Applied Research
   f) Qualitative Research
   g) Research tools
   h) Sampling techniques
2. Assess four importance of research
3. Outline five objectives of research

4. Discuss four uses of research output and recommendations
5. With definition name two types of sampling

PHYSICS

Exercise 3

INSTRUCTIONS

Where necessary the following constants may be used:

Acceleration due to gravity, g = 10m/s2

Density of water = 1g/cm3 or 1000kg/m3

Linear expansivity of steel = 0.000011/K

1.a)(i) Explain why a duck remain floating at one place as the wave passes by water in a lake

(ii) Explain why it is not advisable for soldiers to match across the bridge in rhythm.

b) Draw a waveform of:

(i) A loud, low-pitched note.

(ii) A soft, high pitched note.

The diagram below shows the electromagnetic spectrum. Region D represents visible light

Increasing frequency. →

A	B	C	D	E	F	G

Which region represents radiations?

(i)Capable of promoting the production of vitamin D in the skin?

(ii)Used in radar system?

(iii)Produced in nuclear reactors?

2. a) (i) draw a well-labelled diagram of a hydrometer.

(ii)Briefly explain how hydrometer can be used to measure the relative density of a liquid.

b)A hydrometer is used to measure the densities of liquids over the range 0.80 to 1.00g/cm3. If the area of cross-section of the stem is 0.50cm2 and the distance between the 0.80 and 1.00 divisions is 18cm, determine:

(i) The volume of the hydrometer below the 1.00 graduation.

(ii)The position of the 0.90 graduation.

3.a)(i) State Snell's law.

(ii)The refractive index of liquid is found to be 1.6. Using a graphical construction, determine the critical angle for the liquid.

b)(i)Could a camera with a concave lens instead of a convex lens still take picture? Explain.

(ii)Use a diagram to explain why short-sighted people cannot see distant objects clearly.

(iii)Explain using a diagram, the effect of inserting a suitable lens in front of the eye which will correct its defect.

c)A simple magnifying glass produces an enlarged erect image when an object is situated 10cm from the lens. If the length of the image is twice that of the object, calculate the focal length of the lens.

4.a)Define the following terms.

(i)Heat capacity.

(ii)Linear expansivity of a solid

b)(i) Why a bimetal strip made of brass and invar is curved outside with brass?

(ii) A steel tape of correct length at 150C is used to measure distance on a day when the temperature is 100C. What is the error in measuring a distance of 20m?

5.a)(i) Explain how a non-magnet can become a magnet by means of magnetic shielding

(ii) Mention two applications of earth's magnetic field in daily life

b)(i) State the Maxwell's Right hand screw Rule.

(ii) Using the Maxwell's Right hand screw Rule, show the direction of the field on two parallel current carrying conductor in the same direction. Show the direction of force.

c) A transformer is designed to work from 240V a.c mains to give a supply at 8V to ring house bells. The primary coil has 4800 turns.

(i)About how many turns would you expect it to have?

(ii)State how the voltage so required is reduced?

(iii) How is the efficiency of this transformer made as higher as possible?

(iv) Explain why the primary current decreases when a bell is being rung.

(v) What would happen if the transformer were connected to 240V d.c

6. a)Explain the use of radioactivity in

(i) Radioactive dating.

(ii) Radioactive tracer in plants.

b)(i) What is meant by a radioisotope?

(ii) When a nuclear of is bombarded with a certain particle, the nucleus is formed together with a proton. What is the bombarding particle? Write the nuclear reaction in (b) (ii) above.

c) The half-life of uranium X is 24 days. A sample contains 0.64g, plot the graph to represent the decay of the sample and hence determine.

(i) The mass remaining unchanged after 84days.

(ii) After how many days there will be exactly 0.25g unchanged.

COMMERCE

Exercise 3

1. By using diagram, briefly explain the following concept

a) Cheque

b) Bill of exchange

c) Promissory note

2. In order for the go down to operate effectively there are factors to keep into consideration. Outline any six factors

3. Explain the six reasons why small scale retailers survive more than large scale retailers despite of the small capital invested by small scale retailers

BIOLOGY

Exercise 3

1. Explain briefly the following terms
    a. Hibernation
    b. Aestivation

2. Explain three ways through which heat is lost and gained in mammals
3. List down the advantages and disadvantages of
    a. Ectothermy
    b. Endothermy
4. a. What is meant by the following terms
    i. Homeostasis
    ii. Positive feedback mechanism
    iii. Negative feedback mechanism

    b. Name four organs in a mammals body, which are involved in homeostasis.

BASIC MATHEMATICS

Exercise 3

1. Find the area of an equilateral triangle whose sides are 26m.
2. Two types of food M and N have units of contents shown in the table below

TYPE	PROTEIN	STARCH
M	3	4
N	2	3

The minimum daily intake of protein is to be 12 units and 13 units of starch.

Represent this information on a graph.

3. Find the probability that a number selected at random from the number -2, 0, 2, 4 and 16 will be a solution set of the equation (X +2) (X-4) =0
4. Find the area of the regular polygon having 36 sides inscribed in a circle of radius 20 cm.
5. Two triangles are similar. a side of one is 2 units long. The corresponding side of the other is 5 units long. What is the ratio of their areas?

ICS

Exercise 3

1. Describe four types of system software
2. Explain four types of application software.

3. Analyze four ways of creating a new presentation in power point.

4. Outline devices found in the CPU

BOOK KEEPING

Exercise 3

1. Why do we undertake auditing? Explain any four reasons

2. Given the following transactions;

Opening inventory.....50,000

Return inwards.....1000

Discount allowed...2000

Return outwards....800

Discount received..400

Cash received from

debtors.....125,000

Credit sales.....5,000

Cash paid to suppliers...60,000

Credit purchases...4,000

Closing inventory.....10,000

Prepare;

a) Debtors control a/c

b) Creditors control a/c

c) Income statement for the year ended 31st Dec 2018

3. Outline any four advantages of joint venture accounts.

4. Catholic Diocese of Moshi bought two Buildings ,the first one was bought for tsh 6,000,000/= on 1st January 2010 and the second Building for tsh 3,000,000 on 1st July 2011.The first building was sold for tsh 600,000

On 1st September 2012.The rate of depreciation is 10% fixed instalment method. Full year depreciation.

Required

a) Building account

b) Provision for depreciation account

C) Disposal account

d) Profit and loss account

e) Balance sheet

5. Outline any five sources of fund for nonprofit institutions.

CIVICS

Exercise 3

1. How political will enlighten stability and progress on Election process in Africa (Six point).

2. Discuss the contention that “corruption is a social evil among the Tanzania societies” and clearly show how the situation can be alleviated (six point).

3. How Tanzania can be responsible to their country (Give Six point).

4. Discuss six effort made by Tanzania in broadening the scope of Democracy in the country.

LITERATURE IN ENGLISH

Exercise 3

1. Define the following literary terms:
    a. Folk tale
    b. Legend
    c. Myth
    d. Fable
    e. Parable
    f. Trickster tale
2. Briefly write short notes on the genres of oral literature
3. Write three features of each of the following:
    a. Myths
    b. Legends
    c. Folk tales
4. Does oral literature exist in Tanzania? Give five reasons for your answer.

CHEMISTRY

Exercise 3

1. Explain what happen in each of the following if;

a) Sodium hydroxide is added to lead nitrate slowly till excess

b) Carbon dioxide gas is passed through lime water in excess

c) Dilute hydrochloric acid is added to copper (II) sulphate

d) Few drops of barium chloride is added to iron (II) sulphate

e) Silver nitrate is added to sodium chloride

f) Dilute nitric acid is added to copper metal

g) Lead nitrate decompose on heating

h) Aqueous magnesium sulphate is added into calcium carbonate

i) Zinc nitrate decompose on heating

j) Hydrated iron (II) sulphate is heated.

2. a) With examples define the following terms

i) Amphoteric oxide

ii) Basic oxide

ii) Peroxides

b) With the aid of chemical equation explain what happen if a little concentrated sulphuric acid is added into lead chloride.

3. a) Suggest why the nitrates of zinc and potassium behave differently on heating

b) Giving example, explain why preparation of metallic oxides by direct method is not intensively used.

c) Explain with the help of a balanced equation, why a freshly prepared nitric acid changes from clourless to yellowish brown colour on standing

ENGLISH LANGUAGE

Exercise 3

Fill the blanks by choosing a words from the box below

[Who, unless, nor, Jame's, for, at, of, since, on, James, by, to, in, was, or, where, what, even, if, however, from, after, with, is]

i. That man thanked the ..... helping him.

ii. My mother come.....Thursday.

iii. The were married ..... 1975.

iv. The refugees dies ..... hunger.

v. Lunyamula and Mwameja are interested .....football.

vi.They stayed with us ..... a week.

vii. Where is Mr..... wife staying?

viii. The father was neither brilliant..... his son.

ix. She will never succeed ..... hard she tries.

x..... is John talking to? To the teacher

2. Re - write the following sentence according to the given instruction.

i. Jane is short Pendo is also short.

(Use Both.....)

ii. She was not pretty. She was not clever.

(Use.....neither.....nor.....)

iii. She is intelligent. She must go Secondary School.

(Join the sentence using..... ..... because.....)

iv. Unless it rains the farmer won't harvest.

(Begin If.....)

v. You will pass examination if you work hard.

(Use Unless.....)