THE UNITED REPUBLIC OF TANZANIA
PRESIDENT'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

GEITA REGION

FORM FOUR MOCK EXAMINATION - 2020

BIOLOGY 01

CODE: 033/1

TIME: 3:00 HOURS **Friday, 24th July, 2020 a.m**

INSTRUCTIONS:-

1. This paper consists of section **A**, **B**, and **C**
2. Answer all questions in sections **A** and **B** and **two (2)** questions from section **C**. Question **thirteen (13)** is compulsory.
3. Except for diagrams which must be drawn in pencil, other writings should be in blue or black ink
4. Cellular phones and any other unauthorized material are not allowed in the examination room.
5. Write your examination number on every page of your booklet(s)

Q. NUMBER	TICK (√)	FOR EXAMINER'S ONLY	
		SCORE	EXAMINER'S INITIALS
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SECTION A: (15 Marks)

Answer **all** question in this section

1. For each of the following items (i) – (x) choose the most correct answer from among the given alternatives and write its letter beside the item number in the answer sheet provided

   i. The wings of ostriches and penguins the reduced pelvic girdles and hind limbs of whales and pythons and the reduces coccyx in hum being are referred to as

      A. Analogous Structure
      B. Vestigial Structure
      C. Divergent Structure
      D. Homologous Structure
      E. Mendel's Structure

   ii. A term which best describes a condition of a plant cell that has lost too much water is

      A. Haemolysis
      B. Turgidity
      C. Creanation
      D. Plasmolysis
      E. Osmosis

   iii. Example of diseases caused by virus are

      A. Common cold, rabies and cancer
      B. Corona, measles and chicken pox
      C. Tuberculosis, typhoid and corona
      D. Elephantiasis, malaria and bilharzia
      E. HIV, cancer and goiter

   iv. One of the characteristic used to identify producers in the ecosystem is.

      A. Feeding on the ready- made food
      B. Growing in the fertile soil
      C. Feeding on other organisms
      D. Making their own food
      E. Adding organic matter in the soil

v. Which of the following are parasitic eukaryotic organisms?

A. Brown algae and amoeba
B. Plasmodium and trypanasoma
C. Euglena and green algae
D. Amoeba and paramecium
E. Malaria and typhoid

vi. Which biology apparatus used to magnify specimens

A. Specimen bottle
B. Aquaria
C. Fishing nets
D. Hand lens
E. Petri dish

vii. A genotypic carrier couple for albinism married. What percentage of albinism and normal children would be expected from the marriage?

A. 100% normal
B. 75% albinism and 25% normal
C. 50% albinism and 50% normal
D. 25% albinism and 75% normal
E. 20% albinism and 10% normal

viii. The stamen of a flower consists of

A. Stigma and ovary
B. Anther and filaments
C. Filament and ovary
D. Anther and stamen
E. Ovary and anther

ix. One of the following is the metabolic waste product

A. Urine
B. Faces
C. Tears
D. Mucus
E. Sweat

x. The function of cones of the human eye is to

A. Sense of light
B. Reflect light
C. Protect the eye
D. Sense colour
E. Blind

2. Match the function of hormones in **list A** with their corresponding hormones in **list B** by writing the letter of the correct response beside the item number in the answer sheet provided.

List A		LIST B
I.	Stimulates reabsorption of sodium and chloride ions from the kidney	A. Thyroxin B. Insulin
II.	Increases reabsorption of water in the kidney tube	C. Glucagon D. Adrenaline
III.	Regulates sugar levels in the blood by converting glucose to glycogen	E. Ant diuretic hormone
IV.	Regulates metabolic rate in mammals	F. Aldosterone hormone
V.	Regulates sugar levels in the blood by converting glycogen to glucose	G. Progesterone.

SECTION B (60 Marks)

Answer **all** questions

3. (a) Define the following terms

i. Waste

ii. Waste disposal

(b) Brief explain characteristics of living things (any four)

4. (a) Give the difference between movement of curvature and locomotion

(b) You have been provided with features of joints. Name four types of joints according to the provided feature and for each type of a joint name two location where such joints are found as indicated in the table below.

FEATURE OF JOINT	TYPES OF JOINT	ITS LOCATION
i. Slightly movement where two bones surface move over each other		
ii. Allows movement in one plane only		
iii. Allows relation of gridles in all directions		
iv. Brings about rotation of the head		

5. (a) Briefly explain the process of heat regulation in response to cold
   (b) Give the role of insulin in human body.

6. (a) Explain the distinctive features of phylum anthorpoda
   (b) Draw a well labeled diagram of a moss plant.

7. Briefly explain the following biological phenomenon
   (a) Why an athlete muscles pain after astrenous exercise?
   (b) Ecological pyramids tapers towards its end
   (c) It is not advised to sleep in a poorly ventilated room with charcoal burner.
   (d) The rate of heart beat increases when one is frightened.

8. (a) You have been provided with the following biological equations.
   1. $C_6H_{12}O_6+6O_2 \longrightarrow 6CO_2+6H_2O+$ energy

   2. $6CO_2+12H_2O \xrightarrow[\text{Sunlight}]{\text{Chlorophyll}} C_6H_2O_6+6H_2O+6O_2$

   (i) Name the processes provided by equation 1 and 2 above.
   (ii) Suggest the site (cell organelle) in an organism where the named process in 8(a) (i) above.

   (b) State any two differences between the processes found in equation 1 and 2.

9. (a) What is Mutation

(b) Why Gregory Mandel choose to work with the garden pea (Pisum Sativa)? (Give **(5)** points).

10. (a) Name the part in the alimentary canal which concerns with the absorption of the digested food substance.

(b) Describe any four characteristics features of the part named in **5** (a) above

(c) Name the structure found in part named in 10 (a) above, responsible in absorption of digested food substances.

11. (a) Brief explain two ways through which **HIV** is transmitted from one person to another

(b) State four ways on how you would render first aid to a person who has ~~been bitten~~ by a snake.

12. (a) List factors that affected the rate of diffusion (**3**factors)

(b) Give four **(4)** components of blood.

Section C (25 Marks)

Answer **two (2)** questions from this section. Question number **13** in compulsory

13. Most people get negative altitude on bacteria in the sense that most of them are harmful. As a biologist, suggest six **(6)** ways that would make the majority of people believe that not all bacteria are harmful.

14. Write an essay on genetic engineering. Using the following guidelines

(a) Meaning of genetic engineering

(b) Application of genetic engineering (**4** points)

(c) Dangers of genetic engineering (**2** points)

15. With the aid of neat and well labeled diagram of the human ear, explain the mechanism of hearing. Describe the changes associated with each stage of human post natal growth and development.

THE UNITED REPUBLIC OF TANZANIA
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GEITA REGION

FORM FOUR MOCK EXAMINATION - 2020

BIOLOGY 2A

(ACTUAL PRACTICAL)

CODE: 33/2A

TIME: 2:30 HOURS Tuesday, 28th July, 2020 a,m

INSTRUCTIONS:-

1. This paper consists of two (2) questions. Answer **all** questions
2. Each question carries twenty five (25) marks.
3. Except for diagrams which must be drawn in pencil all writings must be in blue or black ink.
4. Cellular phones and any other unauthorized Material are not allowed in the examination room.
5. Write your examination number on every page of answer sheet(s) provided

Q. NUMBER	TICK (√)	FOR EXAMINER'S ONLY	
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1. You have been provided with test tubes, beakers, measuring cylinder, test tube rack, mortar and pastel, sources of heat, sterring rod, sieve (filter paper), solution **V**, specimen **M** and table reagents. Use them to carry out the experiment as instructed and then answer the question that follows.

   i. Prepare a solution from specimen **M** and label it as solution **K.**

   ii. Measure **10 mls** of solution **K** in a Measuring cylinder then pour it into a beaker labeled **R.**

   iii. Measure **10 mls** of solution **V** by using a measuring cylinder and pour it into a beaker labeled **R.**

   iv. Stir the mixed solution of **K** and **V** contained in a beaker labeled **R** thoroughly to get the homogeneous mixture.

QUESTIONS

(a) i. Outline procedures used to prepare solution **K** from its extracts (specimen **M**).

ii. Use the reagent provided to test the food substance present in solution **R.**

iii. Record your experimental results as shown in table 1 below

FOOD TEST	PROCEDURE	OBSERVATION	INFERENCE

(b) State two properties of each of the food substance(s) identified in solution **R**

(c) Why the Food substance(s) identified in solution **R** important in human body?

(d) Explain how the body reacts when the food substance(s) present in solution **R** are in excess.

(e) (i) Name the enzyme(s) responsible for the digestion of each food substance at the First part of their digestion along the alimentary canal

(ii) What are the condition(s) under which the digestion of food substance(s) presents in solution **R** is favorable.

2. You are provided with specimens **S, W, X, Y** and **Z.** Observe them carefully and answer questions that follows.

a) i. Write the common name of specimen **S, W, X, Y** and **Z**

ii. Classify specimen **S** to class level

iii. Mention four observable features of specimen **S**

iv. Outline two advantages and one disadvantage of specimen **S**

b) Observe specimen **W** and **X**

i. State the class where specimen **W** and **X** belongs

ii. Give a reason to why specimen **W** and **X** are found to the class stated in 2b (i) above.

iii. Mention three processes that occurs naturally in specimen **W** and **X** during germination

iv. Draw a well labeled longitudinal section of specimen **X.**

c) i. Mention types of tropism and stimulus responded by specimen **Y.**

ii. Give a reason to why specimen **Y** are beneficial to man.

iii. Name one communicable disease that might be transmitted by specimen **Z.**

JAMHURI YA MUUNGANO WA TANZANIA
OFISI YA RAIS
TAWALA ZA MIKOA NA SERIKALI ZA MITAA

MKOA WA GEITA
MTIHANI WA UTIMILIFU KIDATO CHA NNE —— 2020
KISWAHILI

MSIMBO: 021

MUDA SAA: 3:00 **Jumatano, 22 Julai, 2020 asubuhi**

MAELEKZO

1. Mtihani huu una sehemu **A, B** na **C.**
2. Jibu maswali **yote** sehemu **A** na **B.**
3. Sehemu **C** Jibu maswali **matatu (3)** tu.
4. Andika namba yako ya mtihani katika kila ukurasa wa karatasi ya kujibia.
5. Simu za mkononi haziruhusiwi katika Chumba cha Mtihani.

NAMBA	WEKA (√)	SEHEMU YA MSIMAMIZI	
		ALAMA	VIFUPISHO VYA MAJINA YA MSIMAMIZI
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SEHEMU A : (ALAMA 15)

Jibu maswali **yote** katika sehemu hii

1. Chagua herufi ya jibu sahihi katika vipengele i-x kisha andika herufi ya jibu katika kijitabu chako cha kujibia (alama 10)

   i. Nafasi katika kiarifu inayokaliwa na mtendwa
      A. Chagizo
      B. Kiima
      C. Shamirisho
      D. Kikundi kielezi
      E. Kikundi nomimo

   ii. "Mtawatambua walio wasikivu" ni aina gani ya Sentesni
      A. Setensi sahili
      B. Sentensi shurutia
      C. Setensi Ambatano
      D. Setensi Changamano
      E. Majibu yote ni sawa

   iii. Neno "anacheza" limeundwa kwa njia gani kati ya hizi zifuatazo:-
      A. Urudufishaji.
      B. Unyambulishaji
      C. Uambishaji
      D. Mpangilio tofauti wa vitamkwa au fonimu
      E. Utohoaji

   iv. Ni sifa ipi katika hizi zifuatazo inaonesha wasifu wa ndani wa uhusika wa kazi ya fasihi?
      A. Urefu wake
      B. Unene wake
      C. Upole wake
      D. Uchafu wake wa mwili
      E. Ukubwa wake.

   v. Sentensi moja inayoundwa na sentensi mbili tofauti ambapo sentensi mojawapo ina kishazi tegemezi. Ni aina gani ya sentensi?
      A. Sahihi
      B. Changamano
      C. Shurutia
      D. Ambatano

   vi. Jozi ipi ina vipengele sahihi vinavyounda umbo la ndani la kazi ya fasihi simulizi.
      A. Falsafa, Muundo, Ujumbe, Wahusika
      B. Mandhari, Msimamo, Ujumbe, Dhamira.
      C. Ujumbe, Mtazamo, Migogoro, Dhamira
      D. Ujumbe, Msimamo, Dhamira, Wahusika
      E. Lugha, Mgogoro, Falsafa, Mtindo

vii. Ni seti ipi inayoathiri kwa kiasi kikubwa matumizi ya lugha?
   A. Mofimu, muktadha, aina ya neno na mada.
   B. Neno, uhusiano wa wahusika, Muktadha na lengo
   C. Muktadha, Lengo, Uhusiano wa wahusika na mada
   D. Muktadha, Lengo la mazungumzo, sarufi na mada
   E. Mada, Lengo, aina ya maneno na Muktadha

viii. Bainisha neno lililoundwa kwa njia ya urudufishaji
   A. Shomeka
   B. Ngonga
   C. Pilika
   D. Pilipili
   E. Nonomesha

ix. "Chai ingali jikoni" Neno " ingali" katika sentesi hii ni aina gani ya neno ?
   A. Kitenzi kisaidizi
   B. Kivumishi
   C. Kiunganishi
   D. Kitenzi Kikuu
   E. Kishirikishi

x. Ni mambo gani mhakiki anapaswa kuzingatia katika uhakiki wa kazi za fasihi?
   A. Mawazo makuu na madogo
   B. Mtindo na Muundo
   C. Wahusika wa kazi ya fasihi
   D. Dhamira kuu ya Mwandishi
   E. Fani na maudhui

2. Chagua kifungu cha Maneno kutoka **orodha B** kinachotoa maelezo sahihi ya neno maneno ya **orodha A**. Andika herufi ya jibu sahihi kando ya namba ya kipengele cha swali (Alama 5)

ORODHA A	ORODHA B
i) Atakuja	A) Ni sentensi shurutia
ii) Kubadilisha rangi	B) Atakuja lina mofimu 4
iii) Kimtang'ata	C) Ni Sentensi yenye kosa kisarufi
iv) Ukwasi	D) Ni rejesta ya Tanga
v) Wingi wa nyumba	E) Ni Utajiri
	F) Ni Ufukara
	G) Ni nyumba
	H) Ni umasikini
	I) Atakuja lina mofimu tano
	J) Ni lahaja ya Kiswahili

SEHEMU B (ALAMA 40)

Jibu maswali **yote**

3. Tunga sentensi na kupigia mstari mofimu "**KI**" yenye dhima zifuatazo.
   (a) Kuonesha mtenda
   (b) Kuleta upatanisho wa kisarufi
   (c) Kuunda mzizi wa kitenzi
   (d) Kuonesha masharti
   (e) Kuonesha idadi ya umoja.

4. Sentensi zifuatazo ni tata. Toa maana mbili ili kuthibitisha utata huo (Alama 5)
   (a) Nimenunua paa
   (b) Usisahau kuchukua pamba
   (c) Ukija njoo na nyanya
   (d) Ninakuomba usinivunjie nyumba yangu
   (e) Daktari ataniunga mkono

5. Bainisha ngeli za nomino katika sentensi zifuatazo (Alama 5)
   (a) Mahali pale pana maji mengi
   (b) Mgonjwa yu taabani
   (c) Kucheza kule kunaleta afya
   (d) Lililoanguka limeoza, yaliyoanguka yameoza
   (e) Ukuta umeanguka

6. Taja njia zilizotumika kuunda maneno yafuatayo:- (Alama 5)
   (a) Namba
   (b) UKUTA
   (c) Imla
   (d) Kifaru
   (e) Barabara

7. Tambua mazingira ambamo maneno yafutayo yametumika (Alama 5)

   (a) Bosi, Karani, Mesenja
   (b) Mbuzi choma, chai moja
   (c) Ubatizo, Yehova, mfalme
   (d) Rufani, jinai, kujitetea
   (e) Kalamu, dawati, daftari chaki,

8. Tunga sentesi kwa kuonesha viambishi vya – O- rejeshi vifuatavyo:- (Alama 5)
   (a) –ye-
   (b) –cho-
   (c) –vyo-
   (d) –po-
   (e) –o-

9. Soma kifungu cha habari kifuatacho kisha jibu maswali.

Sikukuu ya kusheherekea uvunaji wa viazi vipya ilikuwa inakaribia na umuofia ilikuwa katika hali ya matayarisho. Hii ilikuwa ndiyo siku ambayo watu walitoa kafara kwa Ani, Mungu wa rutuba ya aridhi na mwamuzi wa mwenendo na uadilifu wa watu wote. Alikuwa Mungu aliyehusika sana na maisha ya watu, mababu wa umuofia waliozikwa katika ardhi yake.

Kwa sababu hii sikukuu ilifanywa kila mwaka kabla mavuno hayajaanza. Hakuna mtu ambaye angeanza kula viazi vipya kabla havijatolewa sadaka kwa Ani au Mahoka wa mababu wa umuofia.

Watu wote walifurahia siku hii na kungonja kwa **uchu** mkubwa kwa sababu yalikaribia majira ya vyakula maridhawa. Mwaka mpya watu waliokuwa na viazi vya mwaka uliopita ilibidi wavitupilie mbali kabla sikukuu hii haijaanza. Mwaka mpya ulitakiwa kuanza na vyakula vipya vilivyo vinono. Haikuwa heshima wala jambo la faraja kuendelea na vile vilivyokauka kutoka mwaka jana. Hata vyombo vya kupikia na kulia vilioshwa barabara. Kinu ambamo viazi vipya vilitwangwa kililazimu kusuguliwa sana.

Sikukuu ya viazi ilikuwa tukio la nderemo umuofia nzima, yeyote aliyekuwa na **mkono wenye nguvu** kama wazee wasemavyo, alitakiwa kualika wageni wengi karibu na mbali. Okonkwo aliwaalika ndugu wa wake zake na kwa sababu alikuwa na wake watatu, wageni hao walikuwa wengi wa kutosha.

Lakini Okonkwo hakuwa mtu wa kufurahia sikukuu za aina hii, ni kweli kwamba yeye aliweza kula sana, hata alipokunywa tembo alimaliza vibuyu vikubwa lakini kule kukaa bure bila kazi ndiko kulikomfanya asiwe na furaha. Furaha yake ilikuwa katika kazi ya shamba.

Sikukuu ilikuwa imekaribia na wake zake Okonkwo walisugua kuta za vibanda vyao vya udongo. Wao wenyewe walijipamba kwa kuchorachora matumbo yao na migongo. Wageni wengi walialikwa, hata Ikemefuna alikuwepo katika **Shamrashamra** hiyo. Kwao pia kulikuwa na sikukuu kama hii lakini hapa ilioneka kubwa na ya kufana zaidi. Na kwao sasa kilikuwa kitu kilichoanza kupotea katika kumbukumbu yake.

Maswali (alama 10)

a) Elelza sababu mbili (2) zilizowafanya wananchi wa Umuofia waisubiri kwa uchu mkubwa siku iliyoelezwa kwenye kifungu cha habari.

b) Kwa mujibu wa kifungu cha habari, eleza sifa moja **(1)** iliyomtofautisha Okonkwo na watu wengine wa Umuofia.

c) Eleza maana ya maneno yaliyopigiwa msitari kama yalivyotumika katika kifungu cha habari.
   (a) Uchu
   (b) Mkono wenye nguvu
   (c) Shamrashamra

d) Unafikiri ni sababu ipi ilipelekea viazi vyote vya zamani kutupwa na vyombo vyote kuoshwa?

e) Andika kichwa cha habari kinachofaa, kisichozidi maneno matano **(5)**.

SEHEMU C ALAMA 45

Jibu maswali **matatu (3)** kutoka katika sehemu hii

ORODHA YA VITABU

USHAIRI

• Wasakatonge	-	M.S. Khatibu (DUP)
• Malenga wapya	-	Takiluki (DUP)
• Mashairi ya Chekacheka	-	T.A. Mvungi (EP & D.LTD)

RIWAYA

• Takadini	-	Ben Hasson (MBs)
• Watoto wa Mama Ntilie	-	E. Mbogo (H.P)
• Joka la Mdimu	-	A. J. Safari (H.P)

TAMTHILIYA

• Orodha	-	Steve Raynolds (M.A)
• Ngoswe penzi kitovu cha Uzembe	-	Steve Raynolds (M.A)
• Kilio Chetu	-	Medical Aid Foundation (TPH)

10. Wewe ni afisa masoko katika kampuni ya NYAVU PRODUCT Mwanza, simu namba 255-062100233, toa tangazo katika gazeti la mwananchi kutangaza bidhaa yenu.

11. Miongoni mwa kazi za fasihi ni kuweka wazi maovu yaliyojificha na kuyakemea. Tunda washairi wawili uliowasoma kuthibitisha kauli hii (hoja tatu **(3)** kwa kila riwaya) ushairi)

12. Jina la kitabu ni kivutio cha wasomaji wa riwaya kwa kutumia riwaya teule mbili **(2)** ulizosoma linganisha majina ya vitabu jinsi yanavyosadifu yaliyomo.

13. Waandishi wengi huandika kazi zao kwa lengo la kutoa ujumbe katika jamii. Kwa kutumia tamthiliya mbili **(2)** thibitisha ukweli huo kwa hoja **(3)** kwa kila tamthiliya.

THE UNITED REPUBLIC OF TANZANIA
PRESIDENT'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

GEITA REGION

FORM FOUR MOCK EXAMINATION —— 2020

CIVICS

CODE: 011

TIME: 2:30 HOURS **Wednesday, 22nd July, 2020 p.m**

INSTRUCTIONS:-

1. This paper consists of section **A**, **B** and **C**.
2. Answer **all** questions in section **A** and **B** and three **(3)** questions from section **C**.
3. Cellular phones and any unauthorized materials are not allowed in the examination room.

Q. NUMBER	TICK (√)	FOR EXAMINER'S ONLY	
		SCORE	EXAMINER'S INITIALS
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SECTION A: (15 MARKS)

Answer **all** questions from this section

1. For each of the following items (i – x) choose the correct answer from among the given alternatives and write its letter besides the item number in the answer sheet

(i) A legal way by which a foreigners can be granted citizenship is

(A) Citizenship by naturalization
(B) Citizenship by descent
(C) Citizenship by registration
(D) Legal citizen

(ii) According to the constitution of Tanzania the cabinet consists of the followings

(A) President, Vice President, Minister and Deputy Ministers
(B) President, Vice President, Regional Commissioners and Ministers
(C) President, Vice President and all Ministers
(D) President, Vice President, Ministers, attorney General and Chief Justice,

(iii) The situation where both men and women enjoy the same right is termed as gender

(A) Equity
(B) Appreciation
(C) Equality
(D) Appraisal

(iv) Which of the following is not a form of the government

(A) Federations government
(B) Union government
(C) Republic government
(D) Parliament government

(v) The family stability is a result of

(A) Family, punishment and abuse of power
(B) Father, mother and children
(C) Food, shelter and clothes
(D) Love, respect, proper moral, cooperation and peace

(vi) A proposal for a new law is called

(A) Motion
(B) An appeal
(C) By law
(D) A bill

(vii) A condition where by individual rights are restricted to safeguard the right of other people is known as

(A) Limitation of human right
(B) Protection of human right
(C) Violation of human right
(D) The rule of law

(viii) Norms of conduct which differ from one society to another and change from time to time are known as

(A) Customs
(B) Tradition
(C) Beliefs
(D) Crafts

(ix) Which of the following is the organ which oversees the day to day activities and makes decision of matters concerning the village?

(A) Village development committee
(B) Village council
(C) Village government
(D) Village assembly

(x) Which of the following is not a correct characterization of the informal sectors in Tanzania.

(A) Business activities are regulated by taxation.
(B) Employees lack social security protection.
(C) Employee have little job security
(D) Lack of permanent business premises

2. Match the items in **list A** with the correct responses in **list B** by writing the letter of the corresponding response besides the item number in the answer sheet provided

LIST A	LIST B
(i) Is the ability of putting oneself in other people mood when they are faced by serious problems	A. Self-awareness B. Self confidence C. Self-worth D. Empathy E. Mood F. Emotion G. Assertiveness H. Positive relation I. Good relationship J. A good leader
(ii) Is a belief in your own ability to do things and be successful	
(iii) Is a feeling of confidence in yourself that you are a good and useful person	
(iv) Are strong feeling such as fear, love, anger, shyness	
(v) Is the ability of a person to know whom he/she wants and why	

SECTION B: (40 MARKS)

Answer **all** questions in this section. Each question carries **five (5)** marks

3. List down five **(5)** importance of government
4. Outline five **(5)** indicators of democratic election
5. Outline five **(5)** responsibilities of the society towards special groups
6. (a) Define proper behavior

   (b) List down four **(4)** elements of proper behavior
7. Briefly explain importance of obeying road signs (five points)
8. Outline five paramount determinants of development.
9. Mention five importance of manual and physical work
10. Briefly outline five Tanzania national symbols.

SECTION C: 45 MARKS)

Answer only **three (3)** questions from this section. Each question carries fifteen **(15)** marks

11. Justify as to why the government of Tanzania has prohibited the use of plastic bags as from 2018. Give six points.
12. The private sectors in Tanzania is growing very fast but facing many challenges. Suggest six measures to address the challenges facing the private sectors in Tanzania.
13. The debate on the merits and demerits of globalization sometimes generate more questions than answers in the light of this quotation, show six social – economic demerits of globalization in Tanzania.
14. Justify six social – economic impact of corona virus disease (COVID 19) in Africa continent.

THE UNITED REPUBLIC OF TANZANIA
PRESIDENT'S OFFICE.
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

GEITA REGION
FORM FOUR MOCK EXAMINATION ____ 2020
BASIC MATHEMATICS

CODE: 41

TIME: 3:00 HOURS **Thursday, 23rd July, 2020 a.m**

INSTRUCTIONS:-

1. This paper consists of sections **A** and **B** with a total of fourteen **(14)** questions.
2. Answer **all** questions in section **A** and **B.**
3. Each question in section **A** carries **six (6)** marks while in section **B,** each question carries **ten (10)** marks.
4. All necessary working and answers for each question must be shown cleary.
5. NECTA mathematical tables may be used
6. Cellular phones, calculators and any unauthorized materials are not allowed in the examination room.
7. The following constant may be used if necessary
   Radius of the Earth **(R) = 6400km** Pie $(\pi = 3.14)$
8. Write your examination number on every page of your answer sheet(s) provided.

Q. NUMBER	TICK (√)	FOR EXAMINER'S ONLY	
		SCORE	EXAMINER'S INITIALS
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SECTION A: (60 MARKS)

Answer **all** questions in this section

(a) Round off 0.078968 to

(i) Four significant figure

(ii) Two decimal places

(iii) Nearest thousandths

(b) Express $0.9\dot{6}$ in form $\frac{a}{b}$ where **a** and **b** are integers such that $b \neq 0$

2. (a) Solve for **x** if $\log_3(2x+1) - \log_3(x-3) = 2$

(b) Rationalize the denominator of

$$\frac{\sqrt{3}-1}{\sqrt{3}+1}$$

Then use the answer to find the numerical value by substitute $\sqrt{3} = 1.732$

3. (a) If $n(A \cap B') = 8, n(B \cap A') = 5$ and $n(A \cup B) = 20$

(i) Display the information in a Venn diagram

(ii) Give the values of $n(A)$ and $n(B)$

(b) A box contains 6 red marbles and 4 blue marbles. If one marble is drawn from the box and replaced, then a second is treated in the same way. What is the probability that

(i) They are both blue?

(ii) One is blue and the other one is red?

4. (a) Find the equation of a straight line passing through the point (5, 8) and having the same y-intercept as that of the line $2x - 4y = 8$.

Write it in standard form $ax + by + c = 0$

(b) Find the unit vector of the vector $r = 2i + 8j$

5. The lengths of two similar rectangles are **6cm** and **8cm**. if the area of the smaller rectangle is **73.8cm²**, find the area of the larger rectangle.

6. (a) Charles is growing plants. He measures the rate at which two of them are growing. Plant **A** grew **5cm** in 10 days and plant **B** grew **8cm** in 12 days. Which plant is growing more quickly?

(b) The frequency of a radio signal varies inversely to the wavelength. A signal of frequency **1200KHZ** which might be the frequency of an **A.M** radio station has a wavelength of **250m**. What is the frequency for a signal of wavelength of **400m**?

7. (a) Given the ratios **A:B** = 2:3, **B:C** = 6:7 calculate the ratio of **A:C**

(b) From the following Trial balance of **T.** Mungwe, draw up a trading, profit and loss account for the year ended 30 September, 2019.

Name of account	Dr	Cr
Capital		100,000
Cash	72,000	
Stock at start	50,000	
Purchases	161,580	
Sales		223,580
Wages	24,000	
Rent	10,000	
Rates	6,000	
	323,580	323,580

8. (a) In an **AP** the first term is -10 the 15^{th} term is 11 and the last term is 41. Find the sum of all terms in the progression.

(b) The sum of the first three terms of a **G.P** is $\frac{39}{10}$ and their product is **1**. Find the common ratio.

9. (a) In Δ ABC, $\hat{B}= 53°$ $a = 9cm$ and $c = 5cm$. Find the value of b

(b) A ledder reaches the top of a wall **18m** high when the other end on the ground is **8m** from the wall. Find the length of the ladder.

10. (a) Simplify the expression $\frac{2x^2-8}{x^2+x-6}$

(b) Solve the equation $x^2 - 6x - 16 = 0$ by using quadratic formula.

SECTION B: (40 MARKS)

Answer **all** questions in this section

11. Carefully study the frequency distribution table which shows the marks of 100 students in basic mathematics examination

Marks	41-50	51-60	61-70	71-80	81-90	91-100
Number of students	10	22	34	25	7	2

Calculate:

(a) The mean given, the assumed mean is 75.5

(b) The median in two decimal places

(c) The mode in two decimal places

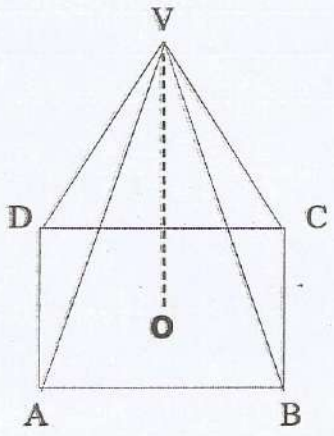
12. (a) A plane flies from (10°S, 30°E) to (27°N, 30°E) taking a time of 3 hours. Find its speed, giving your answer in both knots and kilometers per hour.

(b) In figure below **ABCD** is a rectangle in which **AB =3cm** and **BC=2cm.** V is a point such that **VA=VB=VC=VD=6cm** and **AO=OC**. Find

(i) The angle **VAD**

(ii) The length of **AC**

(iii) The angle between **VA** and plane **ABCD**



13. (a) Find the value of X given that $\begin{vmatrix} 2x & x \\ -4 & 3 \end{vmatrix} = 20$

(b) A translation takes the point (8, 5) to (12, -4). Find where it will take the point (5, 4)

(c) A point (x, y) is reflected on the line $y = x$ followed by a rotation through an angle of 180° clockwise about the origin. Find the image of (2, 3) under this double transformation.

14. (a) If $f(x) = -2x + 3$, find (i) $f^{-1}(x)$ (ii) $f^{-1}(3)$

(b) A manufacturing company makes plates and cups, both of which require time on two manufacturing machines. Plates require 1 hour on machine **A** and 2 hours on machine **B**, while cups requires 3 hours on machine **A** and 1 hour on machine **B**. each machine is operated for at most 15 hours per day. The profit on each plate is Tshs 250/= and on each cup is Tshs 400/=. How many plates and cups should be manufactured to maximize profit?

THE UNITED REPUBLIC OF TANZANIA
PRESIDENT'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

GEITA REGION

FORM FOUR MOCK EXAMINATION - 2020

HISTORY

CODE: 012

TIME: 3:00 HOURS **Friday, 24th July, 2020 p.m**

INSTRUCTIONS: -

1. This paper consists of section **A, B** and **C.**
2. Answer **all** questions from section **A** and **B** and **three (3)** questions from section **C.**
3. Cellular Phones and any unauthorized materials are not allowed in the examination room.
4. Write your examination number on every page of your answer sheet/booklet(s).

Q. NUMBER	TICK (√)	FOR EXAMINER'S ONLY	
		SCORE	EXAMINER'S INITIALS
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SECTION A: (20 MARKS)

Answer all questions in this section

1. For each of the items (i –xv) choose the correct answer from among the given alternatives and write its letter besides the item number.

(i) The family from which man evolved is known as

(A) Zinjathropus
(B) Homo Habills
(C) Primates
(D) Homo Sapiens
(E) Homo Erectus

(ii) The type of colonial agriculture which pre-dominated in Kenya was

(A) Plantation
(B) Peasant
(C) Settler
(D) Co-operatives
(E) Pastoralism

(iii) The theory of evolution was proposed by

(A) Louis Leakey
(B) Carl Peters
(C) Charles Darwin
(D) Herry Stanley
(E) Donald Cameroon

(iv) The first European nation to industrialize was

(A) Germany
(B) Britain
(C) France
(D) Belgium
(E) Poland

(v) The primitive communal societies were characterized by the following features EXCEPT

(A) Hunting and gathering
(B) Low production
(C) Exploitation of man by man
(D) Low level of technology
(E) Dependence on nature

(vi) Which of the following did not result from the early contact between East Africa and the people from the middle and Far East?

(A) Construction of fort Jesus
(B) Introduction of Islam
(C) Intermarriage
(D) Emergence of slave trade
(E) Growth of coastal towns

(vii) Which of the following is not a historical site in Tanzania

(A) Isimila
(B) Olduvai Gorge
(C) Kondoa Irangi
(D) Kilwa
(E) Kalenga

(viii) The collection of public and private documents are called

(A) Museums (B) Archives (C) Archaeology
(D) Oral traditions (E) Culture

(ix) The African coastal city states which grew as a result of trade relations between East Africa and external world

(A) Taghaza, Bigo and Timbuktu
(B) Lamu, Njombe and Pate
(C) Malindi, Kilwa and Mombasa
(D) Mombasa, malindi and Beira
(E) Zanzibar, Pate and Mombasa

(x) The British governor who was sent by British government to prepare Tanganyika for her independence because of the fear of TANU

(A) Sir. Donald Cameroon

(B) Sir. Horance Byatt

(C) Sir. Richard Turnbull

(D) Sir. David Livingstone

(E) Sir. Carl Peters

(xi) The first creature to walk in an upright fashion is called

(A) Primates

(B) Homo Habills

(C) Homo Sapiens

(D) Bipedalism

(E) Homo Erectus

(xii) During the 1840s the East African coastal trade was dominated by

(A) Mazrui Arabs

(B) Oman Arabs

(C) British traders

(D) German traders

(E) Indian traders

(xiii) The main factor for the decline of the Trans – Saharan trade into the 16th century was

(A) Spread of the Islamic Jihad in West Africa

(B) Rise of Savanna states

(C) European conquest

(D) Rise of coastal/Trans-Atlantic trade

(E) Scarcity of commodities in Northern Africa

(xiv) The following was one of the characteristics of colonial education EXCEPT

(A) It based on rudimentary curriculum

(B) It segregated the Africans

(C) It focused on literacy and numeracy

(D) It reflected the interests of the Africans

(E) It was provided to few people

(xv) Who commanded the respect of all and acted as a unifying force among the Masai?

(A) Kabaka

(B) Omukama

(C) Moran

(D) Warriors

(E) Laibons

2. Match the items in **LIST "A"** with the correct responses in **LIST "B"** by writing the letter of the corresponding response beside the item number in the answer booklet(s) provided.

LIST "A"	LIST "B"
(i) Franza – Ingleza war	A. 1853
(ii) Cold war	B. 1850s – 1870s
(iii) The second industrial development in Britain	C. 1953
(iv) The constitutional change which allowed the formation of political parties in Tanganyika	D. 1750s – 1850s
(v) The constitution which allowed the Gold coast people to be elected in the Legislative council.	E. 1948
	F. 1977
	G. It was fought between Boers and Khoikhoi
	H. It was a political war by religious functions in Buganda for British and Franch interest for the control of Buganda
	I. It was fought in Nigeria from 1967 – 1970
	J. Tension between the Eastern and Western bloc.

SECTION B: (35 MARKS)

Answer **all** questions in this section

3. Answer the following questions briefly

(i) Why some historians consider Mwl. Julius Kambarage Nyerere as an African hero of justice?

(ii) How Kwame Nkurumah's position in African history secure?

(iii) How did Africans became involved in the First World War?

(iv) How League of the Nation was a toothless dog?

(v) How Italo – Ethiopians conflict important to Africans during struggle for independence?

(vi) Explain briefly on how the 1919 treaty was a disaster to Germany.

4. Arrange the following historical events in chronological order by writing number 1 to 6 besides the item number in the answer booklet(s) provided.

(i) The Maji Maji war was unique in the way it united a number of different tribes in a common rebellion

(ii) The Germany authorities were surprised when their headquarters and officials were attacked.

(iii) The last and most serious revolt against German rule broke out in July 1905.

(iv) The immediate cause of discontent was the government cotton scheme.

(v) A prophet named Kinjekitile of Ngarambe declared that magic water will turn bullets into water.

(vi) Finally the revolt was ended in 1907.

5. Draw a map of Tanganyika and indicate by using roman numbers where the rulers below led resistance against Germans.

(i) Mangi Sina (ii) Abushiri and Bwana Heri (iii) Isike

(iv) Nyungu ya Mawe (v) Kinjekitile Ngwale

SECTION C: (45 MARKS)

Answer only **three (3)** questions from this section

6. The establishment of colonial rule in Africa goes together with the establishment of colonial military and legal institutions. Discuss why colonial military and legal institution established in colonies (Use six **(6)** points).

7. Examine six factors for the rise of Buganda Kingdom in the mid – 19th century.

8. Identify six factors for nationalism in Africa after the Second World War.

9. Through their activities the missionaries became fore runners of colonialism. Substantiate this statement by giving six points.

THE UNITED REPUBLIC OF TANZANIA
PRESIDENT'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

GEITA REGION
FORM FOUR MOCK EXAMINATION - 2020
CHEMISTRY 01

CODE: 032/1

TIME: 3:00 HOURS **Monday, 27th July, 2020 a.m**

INSTRUCTIONS:-

1. This paper consists of section **A, B**, and **C**
2. Answer **all** questions in sections **A** and **B** and one question from section **C**.
3. Cellular phones and any other unauthorized Materials are not allowed in the examination room.
4. Write your examination number on every page of your booklet(s)
5. The following constants may be used
6. Atomic masses Ca.=40, Mg=24, H=1, C=12,Na=24, K=39 0=16, Cu=63.5, Cl=35.5, Zn=65

Avogadro's number = 6.02×10^{23}
GMV at s.t.p = 22.4 dm^3
1 faraday = 96,500 coulombs
Standard pressure = 760 mmHg
Standard temperature = 273 k
I litre = sdm^3=1000 cm^3

Q. NUMBER	TICK (√)	FOR EXAMINER'S ONLY	
		SCORE	EXAMINER'S INITIALS
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SECTION A: (15 Marks)

Answer **all** question in this section

1. For each of the following items (i) – (x) choose the most correct answer among the given alternatives and write its letter beside the item number in the answer sheet provided

i. The magnesium salt responsible for permanent hardness of water is

A. Hydrogeucabonate
B. Sulphate
C. Nitrate
D. Carbonate
E. chloride

ii. which equation represent the combinations of methane

A. $CH_{4(g)} + 2O_{2(L)} \longrightarrow CO_{2(g)} + 2H_2O_{(L)}$
B. $CH_{4(L)} + 2O_{2(L)} \longrightarrow CO_{2(g)} + 2H_2O_{(S)}$
C. $CH_{4(L)} + 2O_{2(L)} \longrightarrow CO_{2(g)} + 2H_2O_{(S)}$
D. $CH_{4(g)} + 2O_{2(g)} \longrightarrow CO_{2(g)} + 2H_2O_{(L)}$
E. $CH_{4(g)} + 2O_{2(g)} \longrightarrow 2CO_{(g)} + 2H_2O_{(L)}$

iii. Which action should be taken immediately after concentrated sulphuric acid spilled on the skin?

A. It should be rinsed off with large quantities of water
B. It should be neutralized with sold **$CaCo_3$**
C. It should be neutralized with concentrated **NaoH**
D. The affected area should be wrapped tightly and shown to a medical provider
E. It should be neutralized with concentrated **KoH**

iv. Which fuels among the following are originated from fossil fuels.

A. Firewood and coal
B. Coal and firewood
C. Petrol and coal
D. Petrol and charcoal
E. Diesel and firewood

v. The method separating mixture of two liquid by their differences in boiling points in known as

A. Distillation
B. Simple distillation
C. Fractional distillation
D. Sublimation
E. Evaporation

vi. The granules of sold substance can be grinded into fine powder in the laboratory by:-

A. Pestle and filter funnel
B. Separating funnel and Motor
C. Pestle and filter paper
D. Thistle funnel and motor
E. Pestle and motor

vii. Which of the following statement is not correct about sulphur.

A. Sulphur is soluble in Carbondisulphide
B. Monoclinic sulphur is stable above 96°c
C. Flowers of sulphur is a fine powder of sulphur
D. Rhombic sulphur has a needle shaped crystal
E. Monoclinic sulphur has needle sharped

viii. When 0.125 faradays of electricity are passed through a copper II sulphate solution the mass of copper deposited will be

A. 16 g
B. 8g
C. 32g
D. 64g
E. 4g

ix. The occurrence of two or more compounds with the same molecular formula but different molecular structures is known as

A. Amphoterism
B. Isotopes
C. Allotropy
D. Isomerism
E. Isobars

x. Which of the following metals nitrates will not give a metal oxide on heating

A. Copper nitrate
B. Lead nitrate
C. Calcium nitrate
D. Silver nitrate
E. Zinc nitrate

2. Match the items in **List A** with responses in **list B** by writing the letter of the correct response beside the item number in the answer sheet provided.

List A	LIST B
I. Molar solution	A. Phenolphthalein
II. Concentrated solution	B. Mixture of commercial indicators
III. Strong acid	C. **36g** of **Hcl** in **1000 mc^3** of solution
IV. Strong base	D. **36.5g** of **Hcl** in **Idm^3** of solution
V. Universal indication	E. The solution with **18.4m**
	F. The solution with **0.1m**
	G. PH 2
	H. PH 4
	I. P^H 14
	J. P^H 7

SECTION B: (70 Marks)

Answer **all** questions in this section

3. (a) i. Explain why non-metals are oxidizing agent.

ii. Consider the reaction below

$3CUO_{(S)} + NH_{3(g)} \longrightarrow 3cu_{(s)} + 3H_2O_{(L)} + N_{2(g)}$

Which substance is reduced? How?

(b) What mass of CO_2 will occupy $224cm^3$ at **s.t.p**

4 (a) Outline three reasons why a bunsen burner is preferable heat source in a chemistry Laboratory

(b) Draw and give one function of the following

(i) Motor and pestle

(ii) Toxic

5 (a) With the aid of chemical equation briefly explain how

i. Temporary hardness of water can be removed by boiling

ii. Permanent hardness of water can be removed by chemical means

(b) Give six uses of water.

6 (a) State what will be observed if the following simple experiments are performed

i. Water is added to white copper **II** sulphate

ii. A glowing splint of wood is lowered into a gas jar containing carbonidioxide gas.

iii. Concentrated hydrochloric acid is added to a gas jar containing ammonia gas

(b) i. Mention two types of bonds and explain how are they formed.

ii. Briefly explain why it is not advisable to put off fire class **B** by using water.

7. An atom of element **Y** having atomic number 12 combine with an atom of element **Z** having atomic number 17 to form a compound.

(a) Writer the formula and state the type of bond formed in the compound

(b) Give four properties of the bond formed.

8 (a) Write the chemical symbol for

(i) Lithium

(ii) Boron

(iii) Argon

(iv) Kalium

(v) Sulphur

(b) In 8 (a) above identify elements which are

i. Most reactive element, give reason.

ii. Strong oxidizing agent. Give reason.

9. (a) Give three advantages of using chemical equation over word equation

(b) You are provided with a compound of 24.8% zinc, 27% chlorine and the rest is of water crystallization. Calculate the molecular formula of the compound if its molecular mass is 262.

10. (a) State four factors that determine the choice of good fuel.

(b) (i) What is the relationship between 2,2- dichloropentane and 2,2 – dichloro-3- methyl butane.

(ii) Write the opened structural formula of 2,2 - dichlorobutane.

11 (a) Manufacture of ammonia by Harber process is one of an example of equilibrium reaction of industrial importance. Explain the effect of temperature and pressure on this equation.

$N_{2(g)} + H_{2(g)} \rightleftharpoons 2NH_{3(g)}, \Delta H = -92KJmol^{-}$

(b) One of the physical property of metals is that, they are ductile, what does the term "ductile" means

12. a) How the concept of electrolysis is applied in

i. Production of gas (ii) Electroplating

(b) Explain three factors that govern the discharge of ions during electrolysis

SECTION C (15 MARKS)

Answer **one (1)** question from this section

13. "Agriculture is the backbone of our economy" but the addition of inorganic fertilizer in the farm is not as important as addition of organic manure. Discuss the correctness of this statement in four points.

14. Explain how sulphur is extracted from its deep deposit.

THE UNITED REPUBLIC OF TANZANIA
PRESIDENT'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

GEITA REGION
FORM FOUR MOCK EXAMINATION - 2020
CHEMISTRY 2A (Actual Practical)

CODE: 032/2A

TIME: 2:30 HOURS **Wednesday, 29th July, 2020 a.m**

INSTRUCTIONS: -

1. This paper consists of **two (2)** questions.
2. Answer **all** questions.
3. Cellular phones and scientific calculator are not allowed.
4. Write your examinations number on every page of your answer sheet(s) provided
5. Where necessary use the following constants.

   H= 1, C= 12, O = 16, Cl, = 35.5, Na = 23, N=14, S = 32, and Cu = 64.

   GMV at STP = 22.4 dm^3

   1 litter = 1 dm^3 = 1000cm^3

Q. NUMBER	TICK (√)	FOR EXAMINER'S ONLY	
		SCORE	EXAMINER'S INITIALS
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01. You are provided with the following solutions.

C: Containing **9.13g/dm³** of **Hx** acid.

D: Containing **1.00g** of sodium hydroxide in **0.25dm³** of the solution.

Questions.

a) Titrate the acid (in burette) against base (in conical flask) using drops of your indicator and obtain three titre value (three value readings).

b) With state symbols, write a balanced chemical equation for the reaction between "**C**" and "**D**".

c) i..... **cm³** of acid required ..... **Cm³** of the base for complete reaction

ii. Showing your procedures clearly, identify element **X** in an acid **HX**

02. You are provided with the following

E. A solution made by dissolving **20g** of sodium thiosulphate in **1dm³** of solution

F. A solution of **2m** of nitric acid

G. Distilled water

Stop watch and sheet of white paper

Procedures

i. Put a beaker (**100 cm³**) on top of the cross draw on the given sheet or paper

ii. Measure **25cm³** of **E**. using measuring cylinder and pour into a beaker in (i) above

iii. Using another measuring cylinder measure **5cm³** of **F** and pour into a beaker contain **E** and instantly start the stop watch.

iv. Stir the mixture with a glass rod while you keep on observing the cross from above, record the time taken for the cross to disappear

v. Repeat the procedures for different concentration of **E** by taking **2cm³, 15cm³, 10cm³** and **5cm³** of original **E** and make the total volume of **25cm³** by adding **G**.

Record the results as shown below

Table 1.

Volume of E (cm^3)	Volume of G (cm^3)	Time (S)
25		
20		
15		
10		
5		

Questions

a) Complete filling the table 1

b) i. Using the data in table **1** above, plot a volume - time graph (volume on **Y**– axis and time in sec on – **X**- axis)

ii. What does the shape of the graph indicate?

c) Write down Ionic equation of the reaction between **E** and **F**.

d) Why did the cross disappeared?

e) Write two uses of the product which obscured the cross

THE UNITED REPUBLIC OF TANZANIA
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REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

GEITA REGION

FORM FOUR MOCK EXAMINATION - 2020

GEOGRAPHY

CODE: 013

TIME: 3:00 HOURS Thursday, 23rd July, 2020 p.m

INSTRUCTIONS:-

1. This paper consists of section **A, B** and **C** with a total of **(10)** ten questions.
2. Answer all questions in sections **A** and **B** and any other two **(2)** questions from section **C**
3. Map extracted of Songwe river (**sheet 244/3**) is provided
4. Programmable calculators, cellular phones and any unauthorized materials are not allowed in the examination room.
5. Write your examination number on every page of your examination answer sheet(s)

Q. NUMBER	TICK (√)	FOR EXAMINER'S ONLY	
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SECTION A: (15 MARKS)

Answer **all** questions in this section

1. For each of the items (i) – (x), choose the correct answer from among the given alternatives and write its letter besides the item number in the answer sheet provided.

(i) Tanzania has being facing a problem of soil erosion due to poor farming method like over grazing and over cultivation. Which among the following are the best or good ways of farming that can be adopted by the farmers to avoid erosion?

A. Following, monoculture and inter cropping

B. Following, intercropping and crop rotation

C. Destocking, over cultivation and bush fire

D. Following, over cultivation and overgrazing

E. Destocking, over cultivation and following

(ii) What is the compass bearing of E N E?

A. 22.5° B. 67.5° C. 112.5° D. 157.5° E. 225°

(iii) Which of the following are examples of renewable sources of energy?

A. Biogas, solar energy and wind energy

B. Petroleum, tidal energy and Geothermal

C. Petroleum, coal and wood

D. Natural gas, nuclear energy and coal

E. Wood, coal and tidal energy

(iv) Sayi was asked to mention a stony desert which name would you choose for her?

A. Barchan B. Hamada C. Erg D. Reg E. Desert stone

(v) It was a wonderful event after several years when a river become young again in its valley. Identify the process that took place.

A. Regime B. Rejuvenation C. Capture

D. Delta E. Abrassion

(vi) Which features forms natural barrier to flood

A. Dam B. Delta C. Levee D. Rapid E. Water fall

(vii) Mbwana Samata had a chance to visit a limestone region for a study tour, which surface feature will be seen by him?

A. Tombolo B. Stalagmite C. Loess

D. Polje E. Underground stream

(viii) An important announcement was broadcast from London at **3:40pm GMT**. This was picked up by the navigator of a ship after leaving the coast of West Africa in longitude **10 ° W**. What was the local time of the ship.

A. 04:20pm

B. 03:20pm

C. 04:00pm

D. 03:00pm

E. 02:40pm

(ix) Which one of the following is not usually associated with soil?

A. Living organism

B. Mulching

C. Condensation

D. Hygroscopic water

E. Leaching

(x) The equatorial belt characterized by intense solar heating and low pressure is called:-

A. Horse Latitude

B. Pressure belt

C. Doldrum

D. Continental air mass

E. Polar wind

2. Match the description of vulcanicity features in **column A** with the corresponding features in **column B** by writing the letter of the correct answer besides the items number in the answer sheet(s).

COLUMN A	COLUMN B
(i) A saucer shaped mass of rock formed in the geosyncline	A. Dyke B. Crater C. Laccolith D. Lopolith E. Batholith F. Phacolith G. Caldera H. Sill I. Composite cone
(ii) A lens shaped strip of igneous rock formed when magma solidifies along the anticlines or synclines	
(iii) A depression formed on the summit of the cone after the plug has been blown off the top of the cone	
(iv) A rock sheet formed when magma solidifies horizontally along the bending plane	
(v) A wall of rock which cuts across the bending plane of the country rock	

SECTION B: (55 MARKS)

Answer **all** questions in this section

3. Study the printed map extracted of **Songwe River (sheet 244/3)** then answer the following questions

   (a) Calculate the area covered by the forest in **km²** by using grid method.

   (b) Measure the length of railway lines from grid reference 040118 to 130122

   (c) Describe the nature of the relief of the maped area.

   (d) Name four **(4)** physical features found on the map.

   (e) Giving evidence from the map, suggest three economic activities taking place in the area.

4. The table below shows agricultural production in Tanzania from 2001 to 2004 in "000 tones"

CROP/YEAR	**2001**	**2002**	**2003**	**2004**
Maize	60	35	60	80
Tobacco	30	30	20	25
Coffee	50	60	40	40

   (i) Present the data by using divided bar graph

   (ii) Comment on the nature of production

   (iii) Suggest other four methods which could be used to present data provided in the table

   (iv) Give two advantages and two disadvantages of the method used in 4 (i) above.

5. Mr. Ismail decided to conduct a research on "why Mara region has high degree of sexual discrimination" before starting his research work he decided to attend to national library.

   Explain why Mr. Ismail went to National library before attending to the research site at Tarime district.

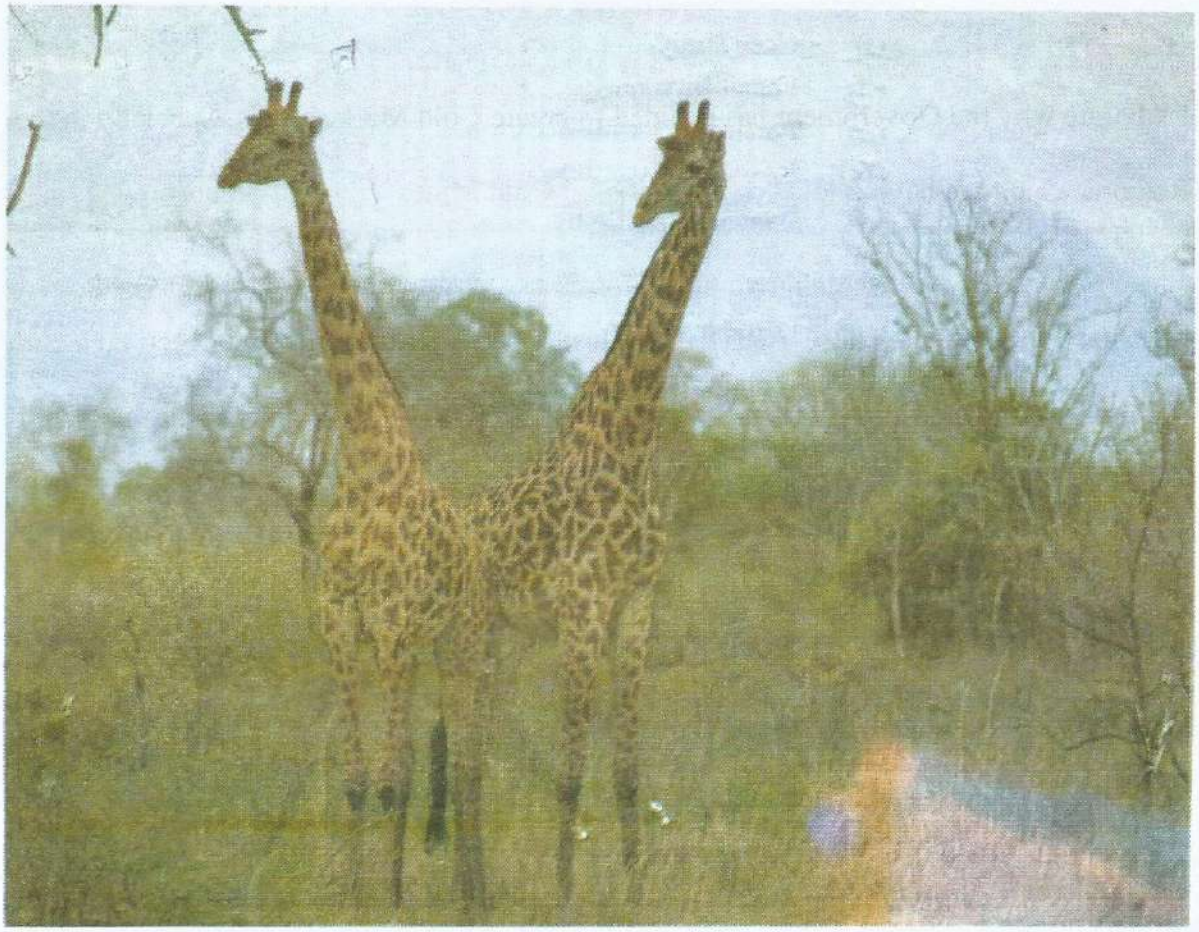
6. (a) Explain in short about " Reconnaissance surveying"

   (b) Why reconnaissance surveying is important to surveyor (four points)

   (c) (i) What is survey team?

   (ii) Mention three people involved in survey team and their function.

7. Carefully study the photograph provided below and then answer the question that follow



(a) Mention the features found at the foreground

(b) Mention any three factors which may cause the disappearance of the animals shown on the photograph

(c) Mention at least three regions where the photograph might be taken

(d) Give two economic importance of the area

(e) Suggest the type of climate that favour the existence of these animals.

SECTION C: (30 MARKS)

Answer **two (2)** questions from this section

8. Despite of the fact that the Government is strengthening importance services in Rural areas, still people are moving from Rural areas to Urban centers. Explain the pull factors that make these people to move from Rural to Urban centers (six **(6)** points).

9. Elaborate why the Government has decided to create Gold Market areas especially in the Regions which are having local or international Gold Mines (five **(5)** points)

10. Mr. Abdu was watching TBC ARIDHIO at his home with his family and observed a number of families suffering from flood problems around Lake Victoria. What do you think are the best measures that can be adopted by the societies that are found near the lakes to curb the problems of floods that face the societies? (explain five **(5)** points)

THE UNITED REPUBLIC OF TANZANIA
PRESIDENT'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

GEITA REGION

FORM FOUR MOCK EXAMINATION - 2020

ENGLISH

CODE: 022
TIME: 3:00 HOURS **Monday, 27th July, 2020 p.m**

INSTRUCTIONS:-

1. This paper consist of section **A, B** and **C** with a total of **twelve (12)** questions.
2. Answer all questions in section **A** and **B** and **three (3)** questions from section **C**
3. Cellular phones and any unauthorized materials are not allowed in the examination room.
4. Write your Examination number on every page of your answer booklet(s) provided.

Q. NUMBER	TICK (√)	FOR EXAMINER'S ONLY	
		SCORE	EXAMINER'S INITIALS
1			
2			
3			
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12			
TOTAL			

SECTION A: (15 MARKS)

Answer **all** questions in this section

1. For each of the following items (1) – (x) choose the most correct answer among the given alternatives and write its letter beside the item number in the answer booklet provided

(i) When I opened the front door, I ..... a letter inside.

A. Find B. Found C. Had found D. Was finding E. Have found

(ii) By this time next year, I ..... Completed form four examinations.

A. Will be B. Will C. Will have D. Have E. Shall have

(iii) Would you mind ..... the car for me?

A. To park B. Park C. Parking D. About parking E. From parking

(iv) His performance is ..... Than it was a year ago.

A. Good B. Best C. Very better D. More better E. Better

(v) Leticia; what time is it now? It is 04:20pm so this means that .....

A. It is twenty minutes to four in the evening
B. It is twenty minutes past four in the evening
C. It is four to twenty minutes in the evening
D. It is four to twenty minutes in the morning
E. It is twenty minutes past four in the morning

(vi) The noun "ladies" from "lady" in plural formation is correct but to add a suffix "ies" to a noun "boy" is not correct. Why is it not correct though both nouns end with letter "**y**"?

A. Because a "**y**" in "lady" is preceded by a consonant "**d**" while in "boy" it is preceded by a vowel "**o**"
B. Because both words are nouns
C. In both words, it is incorrect to add "-ies"
D. Because "lady" can be a verb and "boy" is always a noun
E. Because the word "lady" is related to "gentleman" while the word "boy is related to the word "girl"

(vii) "We have to study cooperatively". The word cooperatively is .....

A. Verb
B. An adjective
C. An adverb
D. A noun
E. A preposition

(viii) Samwel and ..... are students

A. Me
B. Her
C. I
D. Us
E. Himself

(ix) Asha is the girl ..... Father works at **IPP** media

A. Whom
B. Who his
C. Whose
D. Who her
E. Where

(x) Which sentence among the following sentences is grammaticaly and semantically correct?

A. Where you are reading?
B. Where reading are you?
C. Are you reading where?
D. Where are you reading?
E. You are reading where?

2. Match the descriptions of places in **list A** with the correct place names in **list B** by writing its letter beside the corresponding item number in the answer booklet(s) provided.

LIST A	LIST B
(i) The one who is not in the armed forces	A. Resort
(ii) The place where people go for holiday	B. Ancestor
(iii) A doctor who performs operations	C. Surgeon
(iv) The one who offers services willingly	D. Civilian
(v) Is a member of one's family for many generations ago	E. Volunteer
	F. Geologist
	G. Orchard

SECTION B: (40 MARKS)

Answer **all** questions in this section

3. Change the words in brackets into its appropriate noun form
   (a) Because of his (brave), he took the biggest share.
   (b) His (curious) enabled him to discover the fault.
   (c) Those who are fighting for (free) are ready to take risk.
   (d) His (approve) as a manager surprised us
4. Correct the following sentences where necessary

(a) My book is different than yours
(b) Every morning I am going for a work
(c) The door is open; please shut her
(d) He is more strong than I

5. Future expressions can be presented in a number of ways. Construct one sentence under each of the following forms to illustrate their use.
   (a) The use of "will" or "shall"
   (b) The use of verb "be" + "going" + "to infinitive"
   (c) The use of "present continuous form"
   (d) The use of verb "be" + "about to"

6. Suppose you are a journalist and you want to interview the minister of Agriculture about the Ministry Plan to support farmers in this year. How can you communicate with him using the given question guides in (a –d)?
   (a) How can you start the conversation?
   (b) How can you ask him to repeat the explanations you have not get well?
   (c) How can you intervene him when he is talking?
   (d) How can you close the conversations?

7. (a) There are special names given to group of things in English language. For example: A group of knives, spoons and forks is called cuttery. Using the words choir, students, crew, audience, committee and jazz. Complete the following expressions:
   (i) People listening to or watching a performance are.....
   (ii) People working on a ship or aircraft are .....
   (iii) A group of people singing a song together is .....
   (iv) People appointed to do a special task are .....

   (b) Re-write the following sentences according to the instructions given after each without changing its meaning.
   (i) I am a vegetarian
   (begin: I do not .....)
   (ii) Jack is a very good swimmer.
   (Begin: Jack swims .....)

   (iii) Re- write this sentence by replacing the underlined words with a single word.
   "The Guinea book of record is published <u>every year</u>"
   (iv) Re- write the following sentence by replacing the underlined words with two words " At the end of the performance, <u>the people sitting in the theatre applauded loudly</u>"
   (Begin with: "At the end of the performance, the .....")

8. Read the passage below carefully then answer the questions that follow.

In Tanzania schools, from Primary to Secondary education level Mathematics is stipulated by the Ministry of Education science and Technology to be taught to pupils or student. This forces all students to study it so as to help them in their life during and after school.

The Ministry has provided Mathematics teachers and books at schools, though they are not sufficient to some schools. The insufficiency cause few teachers to be over worked and more terrible. Students massively fail in Mathematics examinations.

One of the educational practitioners when he was asked on the ways to reduce or eliminate the massive failure in Mathematics at different schools, he said" The best way which we are doing now is to recruit science teachers including Mathematics teachers" in short, students themselves should be excited on Mathematics by solving as many questions as possible, individually and in groups. They should also consult their teachers. Moreover the education practitioners should supply sufficient mathematics books in all schools.

When students perform well in Mathematics, they will rise their overall performance of the school and the nation at large. Also they can be able to control well their accountant related issues during and after school.

QUESTIONS

(a) Suggest the suitable title of the passage in four to seven words.

(b) Suggest other ways of reducing or eliminating massive failure in Mathematics other than those mentioned in the passage you have read.

(c) Mathematics is a very important subject such that you are supposed to study it hardly. Mention and explain two social and economic activities in which you can use the knowledge you have acquired in mathematics after school. Explain in one paragraph.

(d) What do you think the Mathematics teachers should do to improve mathematics performance at school?

SECTION C: (45 MARKS)

Answer **three (3)** questions from this section

9. Imagine that you are the District commissioner.
   Write a speech of not less than 250 words to address your citizen's especially young people to employ themselves rather than waiting to be employed. Point out three negative effects of waiting to be employed and three ways of employing themselves.

LIST OF READINGS FOR QUESTIONS 10 -12

NOVELS AND SHORT STORIES

- A wreath for Fr mayer - S. N. Nduguru (1977)
- Unanswered cries - Osman Conteh, Macmillan
- Passed like A Shadow – B. M. Mapalala (2006, Dup)
- Spared – S. N Ndunguru (2004) Mkuki na Nyota
- Weep not Child - Ngugi wa Thiongo (1987) Heireman
- The interview – P. Ngugi (2002) Macmillan

PLAYS

Three suitors: one Husband	–	O. Mbia (1994)
The lion and the jewel	–	W. Soyinka (1963)
This time tomorrow	–	Ngugi wa Thiongo (1968)
The black Hermit	–	Ngugi wa Thiongo (1968)

POETRY

Songs of Lawino and Ocol	–	O. P Bitek (1979)
Growing up with Poetry	–	D. Rubadiri (ed) (1989)
Summomns	–	R. Mabala (1960)

10. Poets like other artists have messages to convey to the audience: Discus this statement using two poems you have read under this programme. Provide three points each poem.

11. Using two plays you have done in this section, discuss how some traditions, customs and beliefs have contributed to misunderstandings and underdevelopment in the society. Provide four (4) points from each play.

12. With reference to two novels you have read under this section, explain how the behavior of some characters affect the welfare of other people in the book and in our society. Give three (3) points from each novel.

THE UNITED REPUBLIC OF TANZANIA
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REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

GEITA REGION

FORM FOUR MOCK EXAMINATION - 2020

PHYSICS 1

CODE: 031/1

TIME: 3:00 HOURS **Thursday, 30th July, 2020 a.m**

INSTRUCTIONS:-

1. This paper consists of sections **A, B** and **C** with a total of **eleven (11)** questions.
2. Answer **all** questions in section **A** and **B** and two **(2)** questions from section **C**.
3. Cellular phones and unauthorized materials are not allowed in the examination room.
4. Non-programmable calculators may be used.
5. Write your examination number on every page of your answer booklet(s)
6. Where necessary the following constants may be used
   (i) Acceleration due to gravity $g = 10m/s^2$
   (ii) Density of water $\beta = 1.0g/cm^3$
   (iii) Pie $\pi = 3.14$
   (iv) Speed of sound in air $V = 340m/s$
   (v) Specific heat capacity of water =4.2J/$g°C$

Q. NUMBER	TICK (√)	FOR EXAMINER'S ONLY	
		SCORE	EXAMINER'S INITIALS
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SECTION A: (15 MARKS)

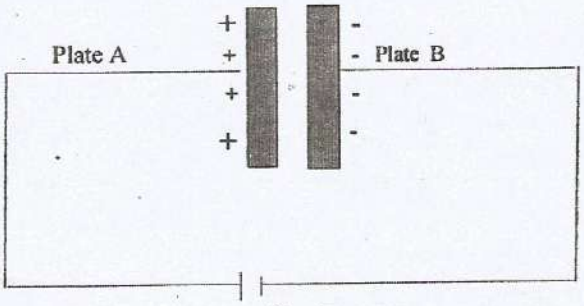
1. For each of the items (i) – (x) choose the correct answer among the given alternatives and write its letter besides the item number in the answer booklet provided.

(i) Erieth, a form one student asked by her physics teacher to measure the width of the football ground. Probably she used:

(A) Micrometer screw gauge
(B) Vernier calipers
(C) Tape measure
(D) Spring balance
(E) Measuring cylinder

(ii) Which of the following electronic waves have largest wavelength?

(A) Radio waves (B) Infrared (C) Gamma rays
(D) Ultraviolet (E) X-rays



(iii) The diagram above shows that:

(A) A capacitor is discharging
(B) A capacitor is charging
(C) A capacitor is charging and discharging
(D) A capacitor is producing current
(E) A capacitor is producing an e.m.f

(iv) What is used in cathode – ray oscilloscope to cause the movement of the trace?

(A) A horizontal electric field
(B) A horizontal magnetic field
(C) A vertical electric field
(D) A vertical magnetic field
(E) Both electric and magnetic fields

(v) Which of the following are inner planets?

(A) Saturn and Venus
(B) Pluto and Mars
(C) Neptune and Uranus
(D) Mercury and Venus
(E) Mercury, Venus and Jupiter

(vi) A type of switch that cuts off the flow of current when the current in a circuit exceeds a specific value and can be reset once the current in the circuit has returned to normal is called

(A) Fuse (B) Plug (C) Voltmeter
(D) Earthling wire (E) Circuit – breaker

(vii) When ultraviolet light falls on a metal surface electrons are emitted from the surface of a metal. This effect is called?

(A) Thermionic emission
(B) Spontaneous emission
(C) Photoelectric emission
(D) Electron emission
(E) Pluton emission

(viii) The count rate from a radioactive materials falls from 400 counts per second to 50 counts per second in 12 minutes. What is its half-life?

(A) 8 minutes (B) 6 minutes (C) 4 minutes
(D) 3 minutes (E) 2 Minutes

(ix) In physics the purpose of n-type doping is

(A) To produce an abundance of mobile or carrier electrons in the material
(B) To produce an abundance of holes in the valence bounds and holes in the valence band.
(C) To produce an abundance of both mobile or carrie electrons and holes in the valence band
(D) To produce few charges
(E) To produce d.c current

(x) The following rule is observed when "real is positive sign convention" is adopted for thin lenses.

(A) Distance from the lens to virtual object/images is negative
(B) Distance from the lens to virtual object or image is positive
(C) The focal length of concave lens is negative since the lens has real principal focus.
(D) The focal length of the convex lens is negative since the lens has virtual principal focus
(E) Distance from lens to real image are negative.

2. Match the items in **list A** with the correct responses in **list B** by writing the letter of the correct response beside the item number.

LIST A		LIST B
(i)	Used for very fast switching and microwave applications	A. Zener diode
(ii)	Used as voltage regulator device	B. Light – emitting diode
(iii)	They are commonly made up of silcon or germanium	C. Semiconductor diode
(iv)	Used in simple indicator lamps, huge display screen, optical fibre communication links	D. Metal-semiconductor diode
(v)	Manufactured for specific reverse break down voltage	E. Transistor

SECTION B: (60 MARKS)

3. (a) With the aid of a diagram explain to demonstrate different classes of lever and indicates the position of the pivot, effort and the load for each class.

   (b) In a certain machine, a force of **10N** moves down a distance of **5cm** in order to rise a load of **100N** through a height of **0.5cm**. Calculate velocity ratio of load.

4. A student traces the path of blue light as it enters and as it leaves a glass prism. Figure **1** shows the trace obtained by the student.

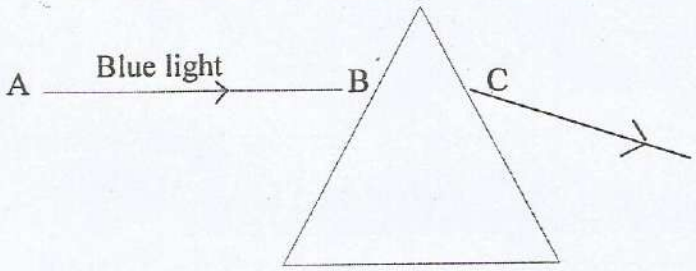


Fig. 1

   (a) (i) Draw and label at the point **B**, the angle of incidence **I** and the angle of refraction **r.**

   (ii) State in terms of the properties of light waves, why light refracts at **B**.

   (b) The angle of incidence for the ray of blue light at **B** is 45°.
   The refractive index of the glass is 1.5. Calculate the angle of refraction at **B**

5. (a) Briefly explain why an overhead telephone and electrical cable are left sagging during installation?

(b) Two batteries are connected in series with **8Ω** resistor as shown in the circuit below.

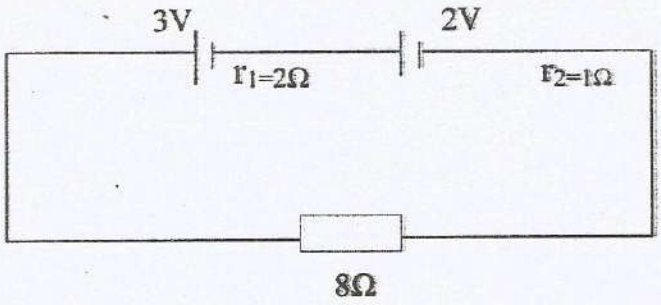


Fig. 2

Determine the **p.d** across the resistor **8Ω.**

6. (a) (i) What is linear **expensivity of a substance?**

(ii) Explain the biological **importance of the anomalous expansion of water.**

(b) The temperature of **500g of a certain metal is raised to 100°C and it is then placed in 200g** of water at **15°C. If the final steady temperature is 21°C, calculate the specific heat capacity of the metal.**

7. (a) With the aid of diagram **differentiate two types of ocean tides.**

(b) (i) Is scorpion a galaxy or constellation? Give reasons for your answer.

(ii) Distinguish between comet and meter.

8. (a) A car accelerates from rest in a straight line. During the first 14 seconds the acceleration is uniform and the car reaches a speed of **25m/s.** Calculate the acceleration of the car.

(b) At a later time, the driver applies the brakes to stop. He is wearing a seat belt and slows down in his seat. A bag on the seat next slides forwards, across the seat towards the front of the car. Using ideas about the forces acting, explain why the driver slows down but the bag slides forward?

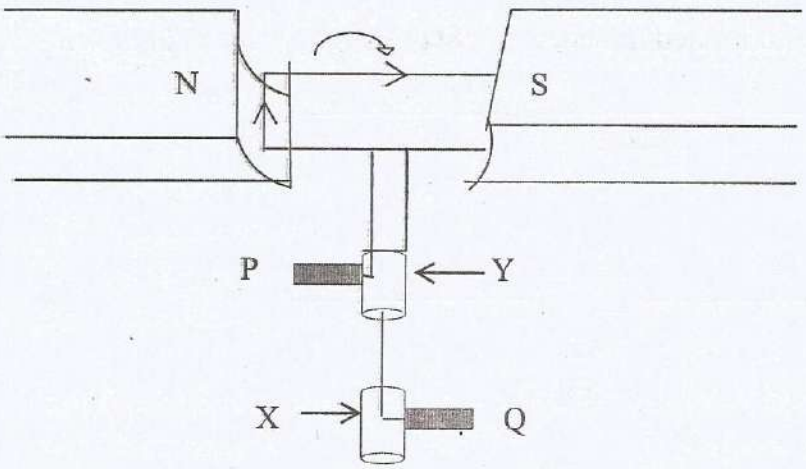
SECTION C: (25 MARKS)

Answer only **two (2)** questions from this section

9. (a) (i) What is the induction coil?

(ii) Mention two **(2)** advantages of **a.c** generator over the **d.c** generator.

(b) The figure below is a coil in a magnetic field. The coil is rotated in the direction as shown by the arrow.



(i) Name the parts labeled by **x** and **y.**

(ii) Mention the two factors affecting the magnitude of the induced e.m.f in the above figure.

(c) (i) Briefly explain why the core of a transformer is made of thin layers of the Metal insulated from one another.

(ii) Briefly describe the structure of a set up transformer and state how it works.

10. (a) (i) Draw the structure of the tracks of all radioactive rays that can be formed in the screen

(ii) It is said the artificial radioactivity is effectively made under the action of neutron than the action of proton, explain why?

(b) (i) Briefly explain why the radioactive source is kept inside a lead box leaving Only a small hole?

(ii) An element **Tin** (sn) has a total of 25 isotopes, the highest of which is represented by $108_{Sn\,50}$. Given that all 25 isotopes exist. Write down the symbol for the heaviest element.

11. (a) (i) Briefly explain why a bat can fly in a dark place without hitting obstacles.

(ii) If the range of the healthy human ear is **20HZ – 20,000HZ**, Calculate the smallest wavelength of sound that can be heard by health human ear.

(b) All electromagnetic waves have a wavelength and a frequency. They all have changing magnetic and electric fields.

(i) State other two **(2)** properties of all electromagnetic waves.

(ii) State the component of the electromagnetic spectrum used for satellite communication.

THE UNITED REPUBLIC OF TANZANIA
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REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

GEITA REGION

FORM FOUR MOCK EXAMINATION - 2020

PHYSICS 2A (PRACTICAL)

CODE: 031/2A

TIME: 2:30 HOURS **Friday, 31st July, 2020 a.m**

INSTRUCTIONS:-

1. This paper consists of **two (2)** questions.
2. Answer **ALL** questions
3. Cellular phones and scientific calculators are not allowed in the examination room.
4. For any diagram use a sharp pencil.

Q. NUMBER	TICK (√)	FOR EXAMINER'S ONLY	
		SCORE	EXAMINER'S INITIALS
1			
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TOTAL			

1. The aim of this experiment is to determine the acceleration due to gravity using a simple pendulum. You are provided with the following apparatus and materials; retort stand, pendulum bob, meter rule, stop watch and thread (string).

Proceed as follows:

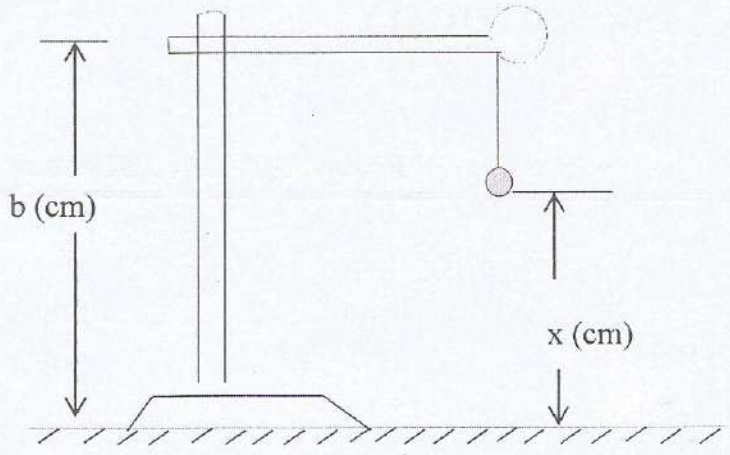
(a) Tie pendulum bob on the thread (string)

(b) Hang the pendulum bob on the retort stand so that the length **"b"** is approximately **100cm** from the floor.

(c) Measure the length of a pendulum to be **15cm** from the floor as **X cm.**

(d) Displace the pendulum bob at a small angle and release it. Record the time (t) for 10 complete oscillations.

Repeat the above procedure when varying **X** by **15cm** to obtain more five readings.



(i) Tabulate your reading value **x**, **(b-x)**, **t, T** and T^2

(ii) Plot the graph of **(b-x)** cm against T^2 **(sec²).**

(iii) Find the gradient from the graph.

(iv) Determine the acceleration due to gravity given that $\boldsymbol{x} = \frac{4\pi^2 b - T^2 g}{4\pi^2}$

(v) State four possible sources of errors.

2. In this experiment you are given the following apparatus, object labeled **M**, four **(4)** optical pins, four **(4)** office pins and soft board.

Proceed as follows:-

(a) Using your two or one hand, take the object **M**.

(b) Through a reflecting surface side of **M** look your face (your face and **M** should be at approximately **30cm** apart)

(c) (i) What is the name of object **M**?
(ii) Give two **(2)** characteristics of image formed by **M**.
(iii) Give out one **(1)** domestic use of **M**.

(iv) Name a device that contain **M** within it used for seeing objects that are above the eye level of the observer or for which the observer, or direct vision is obstructed

(v) State two **(2)** laws of reflection.

(d) By a well diagram, use the given apparatus to show how the image is formed using object **M**.