THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL

010 **QUALIFYING TEST**

(For Private Candidates Only)

Time: 3 Hours **Tuesday, 16th October 2012 p.m.**

Instructions

1. This paper consists of sections A and B.

2. Section A consists of **two (2)** parts and section B consists of **three (3)** parts.

3. Answer **all** the questions in section A and choose **one (1)** part in section B and answer **all** the questions in that part.

4. Section A carry **60 marks** while section B carries **40 marks**.

5. All questions should be answered in English except Kiswahili subject in part II that should be answered in Kiswahili.

6. Calculators are **not** allowed in the examination room.

7. Cellular phones are **not** allowed in the examination room.

8. Write your **Examination Number** on every page of your answer booklet(s).

SECTION A (60 Marks)

PART I: CIVICS AND CURRENT AFFAIRS (20 Marks)

Answer **all** questions in this part.

1. For each of the items (i) - (v), choose the correct answer from among the given alternatives and write its letter beside the item number in the answer booklet provided.

   (i) Assertiveness means ability of a person to
   A appreciate himself
   B state needs and opinions with confidence
   C understand his feelings
   D sustain mental, emotional and physical tension
   E feel the same way like others who are suffering.

   (ii) In constitutional monarchy, the government is led by the
   A Queen B President C Chancellor D Archduke E Prime Minister

   (iii) The national flag is designed mainly to be used
   A as a symbol of freedom and unity of the people B as a government badge
   C during national celebrations including sports D as a national seal stamp
   E in all reputable offices.

   (iv) The Chief Executive of District Council is the
   A Chairman B Director C District Commissioner
   D Mayor E Councilor.

   (v) Courtship is important because is a period
   A of avoiding HIV/AIDS B of joy and love
   C of initiation for boys and girls D of preparation for marriage
   E where marriage is consummated.

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

List A	List B
(i) Accommodates children born from previous marriages.	A. Nuclear family
(ii) Promotes unity and solidarity among relatives.	B. Couple family
(iii) The offspring assumes adulthood responsibilities.	C. Single parent family
(iv) May face pressure from relatives to break the marriage bond to lack of children.	D. Step family
(v) Develops out of the absence of social cohesion in the clan.	E. Child headed family
	F. Extended family
	G. Unstable family

3. Complete the following sentences by writing the correct word or words in your answer booklet.

   (i) The laws enacted by local government are known as _____.

   (ii) The great charter of freedoms (Magna Carta) was issued by King John of England in the year _____.

   (iii) The election within a political party which aims to select the party candidate who will compete with candidates from other parties is known as _____.

   (iv) The socially constructed relationship between men and women in regard of roles and behaviour is referred to as _____.

   (v) In Tanzania citizenship by _____ is open to applicants from the Commonwealth countries.

4. Explain briefly five factors which influence human behaviors in the society.

PART II: KISWAHILI AND ENGLISH LANGUAGE

KISWAHILI (20 Marks)

UFAHAMU

Jibu maswali **yote** katika sehemu hii.

5. Soma habari ifuatayo kisha jibu maswali yanayofuata kwa kuandika herufi ya jibu sahihi kwenye kitabu chako cha kujibia.

   Lugha ni sauti za kusemwa na binadamu kwa kutumia mdomo, ulimi, meno na kadhalika. Sauti hizi zina utaratibu wake wa kupangilia kuunda maneno, tungo na sentensi zinazotumika katika lugha inayohusika. Aidha maneno na sentensi zinazoundwa zina maana maalum kwa ajili ya lugha hiyo.

   Kama tusingalikuwa na lugha maisha yangalikuwa magumu na pasingalikuwa na mawasiliano baina ya watu. Aidha mazingira yetu tusingeweza kuyapanga na kuyaweka kwenye utaratibu ambao ungetufanya kupambana na mazingira na vyote vilivyomo ndani yake. Bila lugha tusingalikuwa na maendeleo yoyote kwani tungalishindwa kupashana habari na kupata mawazo ya kimaendeleo toka ndani ya nchi au nchi za nge kwa mazungumzo au maandishi (vitabu) na kadhalika.

   Wafanyabiashara kama Waarabu walitumia lugha ya Kiswahili kuwasiliana na wenyeji wa pwani, hivyo kurahisihsa maelewano. Nao wakoloni walilazimika kujua lugha ya Kiswahili ili waweze kuwasiliana na kueneza shughuli zao kwa wananchi, yaani Waafrika. Vilevile kwa wamisionari na mashehe, lugha ya Kiswahili iliwarahisishia kazi zao za kueneza dini, kwani kulikuwa na maelewano mazuri. Aidha wanasiasa katika mihadhara na mijadala yao na katika harakati zao za ukombozi, lugha ya Kiswahili ilikuwa kiungo muhimu na ilitumika barabara.

Nidhahiri kuwa, lugha ni chombo cha kupashana habari na kuwasiliana. Mawasiliano yanaweza kuwa ya kuafikiana au kufarakana, kuleta vita au amani, kujenga au kubomoa. Matokeo hayo hutegemea aina ya taarifa na namna zinavyoletwa.

Maswali

(i) Kwa mujibu wa habari uliyosoma lughi ni
A taratibu na mpangilio wa maneno na sentensi
B semi zisemwazo kwa kutumia mdomo, ulimi na kadhalika
C sauti zenye utaratibu wa kuunda maneno, tungo na sentensi
D sauti za binadamu ambazo hutumia mdomo, ulimi na meno
E semi zisemwazo na viumbe wote.

(ii) Mwandishi anaona kwamba umuhimu mkubwa wa lugha ni
A kuleta maafikiano miongoni mwa watu
B kuratibu mazingira na kupambana na vyote vilivyomo
C kuleta maendeleo kwa njia ya vitabu kutoka nje ya nchi
D kurahisisha maisha ya binadamu kwa kuleta mawasiliano
E kutoa mawazo kwa njia ya maaandishi.

(iii) Ipi kati ya sentensi zifuatazo ni sahihi kulingana na habari uliyoisoma?
A Maendeleo huletwa na lugha za kigeni.
B Mawasiliano huletwa na lugha.
C Kiswahili pekee kilileta maendeleo mazuri.
D Wageni walipenda Kiswahili.
E Kiswahili kilizungumzwa na watu wa pwani tu.

(iv) Ni wito gani anaotoa mwandishi katika aya ya mwisho kuhusu lugha?
A Tutumie lugha vizuri.
B Tutumie lugha kupashana habari.
C Tuendeleze lugha zetu zote.
D Tusiruhusu wageni kutumia lugha yetu.
E Tuheshimu lugha ya Kiswahili.

(v) Kichwa cha habari kingefaa kiwe
A Lugha ya Kiswahili
B Matumizi ya Lugha
C Umuhimu wa Lugha
D Tujifunze Lugha
E Lugha.

6. (a) Kwa kila sentensi zifuatazo ainisha vielezi vilivyomo na uoneshe aina ya kila kielezi.
(i) Aliahidi kumpenda Dina daima dumu.
(ii) Anatembea kitoto.
(iii) Alitupa kamba mara tatu.

(b) Sahisha sentensi zifuatazo:
(i) Kisomo ni muhimu, hivyo ni budi tukitilie mkazo.
(ii) Baba amenunua samani zenye samani kubwa.

7. (a) Taja aina mbili za viwakilishi unavyovifahamu na utunge sentensi moja kwa kila aina.

(b) Tegua vitendawili hivi
(i) Nyumbani kwetu kuna papai zuri lakini siwezi kulila.
(ii) Kitendawili cha ajabu kina matone ya ajabu.

(c) Kamilisha methali hii: Riziki ya mbwa _____.

8. Andika insha fupi yenye maneno 120 katika kitabu chako cha kujibia kuhusu mada ifuatayo: 'Ajali za barabarani.'

ENGLISH LANGUAGE (20 Marks)

Answer **all** questions.

9. Write a composition of not more than 120 words on the following topic; 'My future plans.'

10. Read the following passage carefully and then answer the questions that follow by writing the letter of the correct answer besides the item number in your answer booklet.

Amina is my best friend. She belongs to a very big family. They are eighteen of them. They live in a big compound with three houses in it. Each house is for a different wife. Amina's mother is the first wife of her father so they live in the biggest house. Her mother has four children, Amina, her two elder sisters and her young brother, and then there are ten other children from the other wives.

Amina likes her two step-mothers and they like her too. Her father always insists that his three wives should love each other. He teaches the same to his children.

Amina is teaching some of the younger children to read at the moment. Her father thinks that education is very important and he wants both the girls and boys to go to school. He wants Amina to go to the university and get a good job. He tells her that she is the cleverest of all. But may be he says that to all his other children too! Amina likes living with so many people because she always likes to talk or play. Everybody likes her because she is good-humored.

Questions

(i) Amina's father has three wives and
A sixteen children B thirteen children C fourteen children
D fifteen children E four children..

(ii) Why does everybody like Amina?
A She is cheerful B She teaches younger children C She has friends
D She has a big family E She lives in the biggest house.

(iii) If Amina will get a degree will be able to
A be like others B teach the children
C get a good job D get a good status
E get a good future.

(iv) What does Amina's father teach his children?
A to read B to live in big house C to talk and play
D to get a job E to love each other.

(v) Who live in the main house?

A Amina's two step-mothers.
B Amina her step-mother and one brother.
C Amina's father and mother.
D Amina, her mother, her sisters and one brother.
E Amina and her two step mothers.

11. For each of the items (i) - (v), choose the correct answer from among the given alternatives and write its letter beside the item number.

(i) His mother has a car, she drives it _____.

A himself B itself C herself D myself E yourself.

(ii) I can speak English _____ I can not speak French.

A and B but C also D then E if

(iii) The police station is _____ of the college.

A east B on east C in the east D on the east E at east.

(iv) Change the statement "I never drink beef" into reported speech.

A He said that he never drunk beer
B He said that he never drink beer
C He said that he is not drinking beer
D He said that he never drank beer
E He said that he drinks beer.

(v) A _____ of students was waiting in front of the headmaster's office to see him.

A gang B army C team D crew E crowd

12. Complete the paragraph below by filling in the blanks with the correct forms of the words in brackets.

Scientists study how things change. Everything (change) (i) _____, either naturally or because something (happen) (ii) _____ to it. Some changes are permanent, but others can be (reverse) (iii) _____. If you freeze water it becomes ice, then, if the ice is (heat) (iv) _____ it becomes water again. Knowing about how things can change allows scientists to make predictions and invent new products. As a result, scientists have (make) (v) _____ great improvements in our lives.

SECTION B (40 Marks)

This section consists of three parts
Part I: Geography and History
Part II: Physics and Mathematics
Part III: Biology and Chemistry

Choose only **one (1)** part and answer **all** questions in that part.

PART I: GEOGRAPHY AND HISTORY

GEOGRAPHY (20 Marks)

Answer **all** questions.

13. For each of the items (i) - (x), choose the correct answer from among the given alternatives and write its letter beside the item number.

(i) The tropical savannah land is potentially important for.
A extensive wheat farming B irrigated orchard farming C large plantations of cocoa
D inland fish culture E cattle rearing.

(ii) A cluster of stars is known as
A bolide B elliptical C galaxy D planetoids E meteoroids.

(iii) WSW compass direction is equivalent to the following compass bearing
A 247.5° B 135° C 245.5° D 225° E 202.5°.

(iv) Which of the following sentences is mostly true about small scale agriculture?
A It includes farming and keeping of animals. B Modern tools and machinery are used.
C Farmers grow varieties of food crops. D It relies on irrigation.
E It aims at producing crops for selling only.

(v) Maps which show natural and man made features are known as
A statistical maps B atlas maps C contour maps
D topographical maps E world maps.

(vi) Which of the following represents the largest scale?
A 1:10,000 B 1:500,000 C 1:50,000 D 1:25,000 E 1:20,000.

(vii) Which of the following is a dominant physical feature of the African Continent?
A Valley B Plateau C Basin D Mountain E Plain.

(viii) _____ represents horst Mountains.
A Atlas B Meru C Ruwenzori D Elgon E Kilimanjaro

(ix) Agricultural practice which involves the haphazard cutting and burning of vegetation is part of
A extended farming B nomadic farming C substance farming
D mixed farming E shifting cultivation.

(x) Which of the following climate has the smallest diurnal range of temperature?
A Hot deserts B Tropical Monsoon C Mediterranean
D Equatorial E Savannah.

14. (a) Complete the following sentences by writing the correct answer in the answer booklet.
(i) The region found on the western margins of landmasses between latitude 20° and 30° north and south of equator is known as _____.

(ii) The lines drawn on map showing places of equal amount of sunshine are _____.

(iii) The system of cultivation in which the same crop is grown year after year on the same field is called _____.

(iv) The actual amount of water vapour present in a certain volume of air at a given temperature is known as _____.

(v) The lines which indicate location of places in degrees east or west of Greenwich in maps are known as _____.

(b) Briefly explain any five evidences to prove that the earth is spherical.

HISTORY (20 Marks)

Answer **all** questions.

15. For each of the items (i) - (x), choose the correct answer from among the given alternatives and write its letter beside the item number.

(i) Many kings in West Africa participated in the slave trade because it
A helped the spread of Christianity B encouraged trade in gold and salt
C encouraged the construction of industries D enabled kings to visit Europe and An
E brought wealth and power to them.

(ii) Which of the following statements is historically correct about Early Stone Age?
A Man lived by hunting and farming. B Man lived by hunting and gathering.
C Man used iron tools. D Man began to grow food crops.
E Man started to engage in barter trade.

(iii) One of the changes brought by Sultan Said Sayyid in Zanzibar was the
A introduction of clove plantations B establishment of sugar cane plantations
C importation of Indian labourers D introduction of sisal plantations
E abolition of slave trade.

(iv) The basic aim of colonial education in East Africa was to
A prepare Africans for self-governance B educate sons of chiefs C educate all Africans
D strengthen colonial exploitation E civilize Africans.

(v) The partition and colonization of the African continent in the last quarter of the nineteenth century was due to the development of
A mercantile capitalism B neo-colonialism C monopoly capitalism
D competitive industrial capitalism E feudal societies.

(vi) Imperial British East African Company was led by
A Karl Peters B William Macknnon C Cecil Rhodes
D Vasco da Gama E George Goddie.

(vii) Missionaries, Traders and Explorers are regarded as agents of colonialism because they
A colonized Africa on behalf of their mother countries
B signed the contracts on behalf of the colonial governments
C participated in 1884 - 1885 Berlin Conference
D sent information about Africa in Europe
E looked for slaves in Africa to work in European plantations.

(viii) Man domesticated crops and animals during the
A Early stone age B Iron stone age C Late stone age
D Middle stone age E Nuclear age.

(ix) The main reason for the 1884 - 1885 Berlin Conference was to
A abolish slave trade in East Africa B divide the African continent
C form the League of Nations D introduce the legitimate trade
E appoint Bismarck as a Chancellor.

(x) The system which allowed few people to own land was known as
A Communalism B Capitalism C Socialism D Feudalism E Colonialism

16. (a) Write the correct word or words which complete(s) the following sentences in your answer booklet.
(i) A decade is a period of _____ years.

(ii) The Trans-Saharan trade was one of the major factors for the creation and consolidation of the Empire of Ghana, Mali and _____.

(iii) "Nyarubanja" as a form of feudal system in East Africa was dominant among the _____.

(iv) An ancient Kingdom in central Africa which was famous in gold production was known as _____.

(v) The Triangular slave trade was conducted between West Africa, America and _____.

(b) Briefly explain the five effects of the Portuguese rule in East Africa.

PART II: PHYSICS AND BASIC MATHEMATICS (40 Marks)

PHYSICS (20 Marks)

Answer **all** questions.

17. For each of the items (i) - (v), choose the correct answer from among the given alternatives and write its letter beside the item number

(i) Which phenomenon is taking place when kerosene rises up a wick?
A Surface tension. B Elasticity. C Osmosis.
D Capillarity. E Meniscus.

(ii) Magnets are often fitted on the doors of freezers and some cupboards so as to
A keep away the heat B keep the inside environment warm
C keep the door tightly closed D keep iron away
E keep the inside condition cool.

(iii) A force of 25N is used to move an object through a distance of 1.5m in one minute. The power dissipated by the force is
A 37.5W B 0.625W C 62.5W D 3.75J E 0.625J.

(iv) Which of the following devices work by the help of atmospheric pressures?
A Bicycle pumps and hydraulic press B Lift pumps and hydrometers
C Hydrometer and Siphon D Lactometers and thermometers
E Flushing tanks and syringes.

(v) Liquid A has a density of $1.03 g/cm^3$ and liquid B has a density of $0.97 g/cm^3$. The hydrometer will sink
A more in B than in A B more in A than in B C equally in both liquids A and B
D in liquid B only E in liquid A only.

(vi) The elastic force constant of a spring is obtained by the ratio of
A tension and extension B mass and extension C applied force and weight
D tension and mass E mass and applied force.

(vii) Buoyancy is mainly determined by two factors, namely
A volume and mass B weight and mass C volume and density
D weight and density E density and mass.

(viii) The sky appear blue while being observed from the earth because of
A regular reflection of sunlight B irregular refraction of sunlight
C diffuse refraction of sunlight D selective scattering of sunlight
E regular diffraction of sunlight.

(ix) Which of the following pairs of materials when rubbed together becomes negatively charged?
A Comb and hair. B Fur and hard rubber. C Glass and silk.
D Hard rubber and glass. E Fur and glass.

(x) When walking, a man exhibit which type of equilibrium?

A Stable equilibrium. B Unstable equilibrium.
C Both stable and unstable equilibrium. D Neutral equilibrium.
E Both stable and neutral equilibrium.

18. (a) Mention two differences between mass and weight.

(b) The volume of water in a cylinder is 20 cm^3. If a stone of mass 200g is placed in a cylinder the level of water rises to 70 cm^3. Calculate the density of stone.

(c) Distinguish between electromotive force (e.m.f) and potential difference (p.d).

(d) List down three properties of images formed by plane mirrors.

(e) A certain spring has a force constant of k = 25N/cm. If an object of mass 500g were hung from the spring, how far in centimeters would it stretch? (Use gravitational force g = 10N/kg).

BASIC MATHEMATICS (20 Marks)

Answer **all** questions.

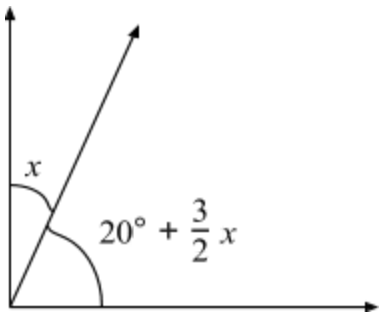
19. (a) Solve the following system of simultaneous equations by using the substitution method.
$3x + 4y - 27 = 0$
$5x + y - 11 = 0$

(b) Diana began her journey at 9:45 a.m. After 1 hour and 30 minutes she met her father. They talked for 55 minutes and then Diana continued with her journey. Two hours and 46 minutes later she arrived at the place where she was going.

(i) How long did the whole journey take?
(ii) At what time did she arrive where she was going?

(c) One leg of a right−angled triangle is 24 cm long. If the area of the triangle is 84 cm^2 , find the length of the hypotenuse and the remaining side.

(d) Calculate the value of x, from the figure given below.



20. (a) In a group of 75 girls, 54 like hockey and 42 like tennis.
    (i) Display this information in a venn diagram.
    (ii) How many like both sports?

    (b) Show the solution of the inequality $|x - 4| \leq 5$ on the number line.

    (c) Joan borrowed Tshs 200,000/= for a period of 6 years at 20% simple interest per annum. Find:
    (i) the amount of interest payable on the loan.
    (ii) the total amount to be repaid.

    (d) By completing the square, solve the quadratic equation $6x^2 - 14x - 12 = 0$.

PART III: BIOLOGY AND CHEMISTRY

BIOLOGY (20 Marks)

Answer **all** questions.

21. (a) For each of the items (i) - (v), choose the correct answer from among the given alternatives and write its letter beside the item number.

    (i) The following is a list of diseases caused by virus
    A typhoid, influenza and common cold
    B cholera, influenza and common cold
    C malaria, influenza and common cold
    D AIDS, influenza and common cold
    E gonorrhea, influenza and common cold

    (ii) The function of a synovic fluid is to
    A cause movement
    B control the equilibrium of the bone
    C change the direction of joints
    D assemble joints
    E lubricate joints for proper movement.

    (iii) Goiter is a deficiency disease caused by lack of one of the following minerals
    A calcium B iron C iodine D potassium E zink.

    (iv) Gaseous exchange in fish takes place through
    A gills B spiracle C lungs D lung book E skin.

    (v) Pulmonary portal artery carries blood from
    A head to the lung
    B heart to the lung
    C lung to the head
    D body to the lung
    E lung to the heart.

(b) Complete the following sentences by writing the correct word or words in your answer booklet.

(i) A distinguishing feature of a plant cell from animal cell is _____.

(ii) The vascular tissue which conducts water and mineral salts in plants is known as _____.

(iii) A term referring to the removal of unwanted metabolic material from the body is _____.

(iv) Oxygen in the blood is carried by _____.

(v) The vill in the small intestine increases the surface area for _____.

22. (a) Match the items in **List A** with the 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) Layer packed with most of the chlorophyll.	A. Songe messophyll
(ii) Allows the exchange of gas in and out of the leaf.	B. Epidemis
(iii) Allows air to circulate freely and reach the cells.	C. Palisade mesophyll
(iv) Covering of the photosynthesizing organ.	D. Stomata
(v) Hold the leaf organ to the stem.	E. Cuticle
	F. Xylem
	G. Petiole

(b) (i) Mention any four symptoms of HIV/AIDS.

(ii) Suggest any three preventive measures for HIV/AIDS.

CHEMISTRY (20 Marks)

Answer **all** questions.

23. (a) For each of the items (i) - (v), choose the correct answer from the given alternatives and write its letter beside the item number.

(i) Three components of fire triangle are

A heat, fuel and kerosene
B heat, fuel and hydrogen
C heat, fuel and carbon
D heat, fuel and oxygen
E heat, fuel and diesel.

(ii) Burns caused by hot liquids or vapour are called

A injuries B scars C scalds D wounds E bruises.

(iii) The change of a state of matter from gas to solid without passing through liquid state is known as

A sublimation B condensation C deposition
D evaporation E solidification.

(iv) Matter is made up of

A gases B liquid molecules C small blocks
D small particles E elements.

(v) What type of fire is associated with electrical equipment?

A class A B class E C class D D class B E class C.

(b) Fill in the blanks by writing the correct answer.

(i) Matter exists in _____ physical states.

(ii) Fainting is a sudden loss of _____ .

(iii) The process of coating iron or steel with zinc is called _____.

(iv) The systematic process of finding solution to the problem is called _____.

(v) The method used to separate sand from water is called _____.

24. (a) Write the meaning of the following warning signs:

(i) 

(ii) 

(iii) 

(iv) 

(v) 

(vi) 

(b) (i) Define hypothesis.
(ii) Why are warning signs important?
(iii) List down the two (2) things that are necessary for rusting to occur.