THE UNITED REPUBLIC OF TANZANIA NATIONAL EXAMINATIONS COUNCIL

010

QUALIFYING TEST

(For Private Candidates Only)

Time: 3 Hours Tuesday, 12th November 2013 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** questions in section A and choose only **one (1)** part in section B and answer **all** the questions in that part.
- 4. All questions should be answered in English except Kiswahili subject in part II should be answered in Kiswahili.
- 5. Calculators and Cellular phones are **not** allowed in the examination room.
- 7. Write your **Examination Number** on every page of your answer booklet(s).



SECTION A

PART I: CIVICS AND CURRENT AFFAIRS (60 Marks)

Answer **all** questions in this part.

| 1. | | each of the items (i) - (v), choose the correct answer from among the given alternatives and write tter beside the item number in the answer sheet provided. |
|----|-------|---|
| | (i) | Which of the following is not a form of local government? A village government B town council C municipal council D regional government E district council. |
| | (ii) | In democratic state leadership changes are made through A nomination B coup-de-tat C ballot D referendum E appointment. |
| | (iii) | Family stability is important because it A ensures job security B is a bridge to community development C prevents improper behavior D enables the people to live a comfortable life E prevents pre marital sex. |
| | (iv) | The civil rights which started to be practiced effectively in Tanzania after the year 1992 is the right to A form and join associations B vote and to be voted C have a fair trial D marry and have a family E work for fair wage. |
| | (v) | A person who pays tax timely can be characterized as A an entrepreneurial B a god fearing person C an investor |

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

D a generous person E a responsible person.

| List A | List B |
|---|--------------------------------------|
| (i) An electoral system in Tanzania. | A. Standing for election |
| (ii) Officials being responsible for their own actions. | B. Responsibilities of citizens |
| (iii) A good example of citizen participation. | C. Simple majority |
| (iv) An important condition for free and fair election. | D. Representative democracy |
| (v) A power to decide on behalf of others. | E. Rule of law |
| | F. Abiding to agreed code of conduct |
| | G. Accountability |

| 3. | Com | plete the following sentences by writing the correct word or words in your answer booklet. |
|----|-------|---|
| | (i) | The organization which is responsible for supervising and organizing elections in Tanzania is known as |
| | (ii) | The badge which all government publications bear is known as |
| | (iii) | refers to the ability of an individual to use one's knowledge effectively to solve various problems. |
| | (iv) | is a day or period of a year when people stop working to celebrate a special event. |
| | (v) | The Secretary General of the United Nations Organization (UNO) is known as |
| 4. | | Ty define the concept abuse of powers and suggest four ways which can be used to stop abuse of er by public officers. |

PART II: KISWAHILI AND ENGLISH LANGUAGE (40 Marks)

Jibu maswali **yote** katika sehemu hii.

KISWAHILI (20 Marks)

Jibu maswali **yote**.

UFAHAMU

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

Jamii huzaa utamaduni. Wanadamu wanaoshiriki katika maisha na maendeleo ya jamii huunda utamaduni huku wakijirekebisha kufuatana na wakati na mahali walipo. Mazingira na jamii ni mambo mawili muhimu ambayo hayawezi kutengwa wakati mtu yeyote anapojifunza utamaduni wa mahali fulani.

Ikiwa utataka kupata picha kamili ya utamaduni wa mtanzania ukihusianishwa na maendeleo ya jamii, hatuna budi kuugawanya wakati katika sehemu kuu tatu. Kwanza, jamii ya kitanzania kabla ya ukoloni, pili jamii ya kitanzania wakati wa ukoloni, na tatu jamii ya kitanzania baada ya kujitawala.

Utamaduni wa kitanzania kabla ya mkoloni kuingia humu nchini ulikuwa katika makabila. Hayo makabila yalikuwa ni jamii na kila jamii ilikuwa na utamaduni wake uliokuwa unakubaliwa na wanajamii wote. Kwa hiyo kulikuwa na tofauti za jadi, mila na desturi kati ya kabila na kabila. Mahali pengine hata kuoana kati ya makabila kulikuwa hakukubaliwi. Lakini pia, ingawa kila jamii ilikuwa na utamaduni wake, uliokuzwa na kuhifadhiwa kipekee, ilitokea kwamba mahali pengine vipengele vya utamaduni vya makabila mawili au zaidi vilifanana. Kufanana kwa vipengele vya utamaduni ndiko kunakoiunga jamii zaidi kuliko tofauti zao.

Wakati wa mkoloni tofauti zilizidishwa. Kutofautiana huko kulitokana na viwango vya maendeleo na mipaka ya makazi ya watu ambapo wakati mwingine ilikuwa ni vigumu kuishi karibu karibu. Kila kabila lilifanywa kama taifa dogo. Mipaka iliwekwa na sheria zinazoongoza usalama na uhusiano wa watu katika jamii zilitungwa. Kwa mfano, sheria za kumiliki ardhi ziliotofautiana kati ya makabila. Hali kadhalika sheria za ndoa na mikataba zilitungwa kwa kufuata mila, jadi na desturi za kabila zilizokuwepo.

Ingawa ilikuwa ni hivyo, jambo moja ambalo lilitokea wakati huo wa ukoloni na ambalo liliwaunga watanzania kama kitu kimoja halina budi kutambuliwa. Jambo hilo ni lugha ya Kiswahili. Ingawa lugha hii haikutiliwa mkazo shuleni na maofisini, lakini iliweza kuenezwa Tanzania nzima kwani kila mtanzania aliweza kuizungumza ingawa si kwa ufasaha. Kwa njia hii, hata wakati wa ukuaji wa siasa ya kupigania uhuru wa Tanganyika ulipoanza, watu waliweza kuzungumza kwa lugha moja na kuelewana.

| A | | | 1 | |
|----------|----|-----|------------|---|
| M | 96 | TX/ | a l | |
| TAT. | аз | ** | aı | ш |

- (a) Andika kichwa cha habari uliyosoma kisichozidi maneno matatu.
- (b) Fafanua sababu mbili zilizosababisha tofauti za utamaduni katika makabila ya nchini Tanzania.
- (c) Unafikiri ni kwa sababu gani wakoloni waliwatenga watanzania kwa makabila yao?
- (d) Eleza faida waliyoipata watanzania kwa kuzungumza lugha moja.
- 6. (a) Eleza kazi moja kwa kila mofimu kwa kuzungumza lugha moja.
 (i) Tulicheza (ii) Nilichosoma (iii) Sikubali (iv) Hucheza (v) Aliyeendesha
 - (b) Ainisha vielezi katika sentensi zifuatazo:
 - (i) Kijana alimwua nyoka kwa ujasiri.
 - (ii) Mwalimu wetu anafundisha vizuri.
 - (iii) Mtihani huu tumeufanya kwa kujiamini.
 - (iv) Mvua inanyesha kila siku.
 - (v) Chukua mzigo uupeleke kule.
- 7. Malizia methali zifuatazo:
 (a) Ujirani mwema _____.
 (b) Ukipanda upepo _____.
 (c) Usiache mbachao _____.
 (d) Uzuri wa mkakasi _____.
 (e) Mwenda Tezi na Omo
- 8. Andika insha fupi yenye maneno 120 kuhusu mada ifuatayo: "Watoto wa Mitaani."

ENGLISH LANGUAGE (20 Marks)

Answer all questions.

- 9. Write a composition of about 100 words on the following topic. "School Competition".
- 10. Read the passage below carefully and then answer the questions that follow.

The Maasai people of Tanzania and Kenya are famous for their colourful beads. The beads themselves come from India but they are strung together into necklaces or sewn onto leatherwork by Maasai women. They are worn by both men and women.

Children start collecting beads at a young age. As they grow much older they collect more and more. These are worn around their necks, their wrists and legs and also through their ears. The colours have great significance for the Maasai: blue is the colour of the sky and represents their belief to God, green is the colour of grass, the food of cattle, their most important possession, white is the colour of milk and red for blood, both milk and blood are important for the traditional Maasai diet.

| | A Maasai can read another person's beads as they show the age and position. Different patterns also identify Maasai clans. Beads are still an important part of Maasai life and they are also sold to tourists. Nowadays the beads are also worn by women from other tribes in Kenya and Tanzania as a fashion. | | | | | | | | | | | | | |
|-----|---|---|---------|------|---|-------|--|--|--|--|--|--|--|--|
| | Ques | Questions | | | | | | | | | | | | |
| | (i) | Where are Maasai people found in East Africa? | | | | | | | | | | | | |
| | (ii) | Why do people from other tribes wear beads? | | | | | | | | | | | | |
| | (iii) | What is the major thing which the Maasai own? | | | | | | | | | | | | |
| | (iv) | Which are the meaningful colours for the maasai? | | | | | | | | | | | | |
| | (v) | Which is the nutritious food for Maasai? | | | | | | | | | | | | |
| 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) | I have been singing ten years. A about B since C for | D | at | Е | in | | | | | | | | |
| | (ii) | She is old woman. A a B any C some | D | an | Е | the | | | | | | | | |
| | (iii) | Zanzibar got her independence 1964. A in B since C for | D | on | Е | at | | | | | | | | |
| | (iv) | Salim told me he could not come with us A what B that C which | b. D | then | Е | about | | | | | | | | |
| | | | | | | | | | | | | | | |

| | (v) | | at an | wone B so | derful d me | - | the | | D | a | | Е | any | |
|-----|--|--|---|---|---|-----------------|-------------------------------|-------------------------------|----------------------|----------|--------------|--------------------|-----------------|----|
| 12. | Chan (i) (ii) (iii) (iv) (v) | The He Shi | ne verbs in the man (paint) will marry a da (walk) to a grandmothe e (cook) ugali | the roo Europe school e r (be bo | m now. an, if he every m orn) in 1 | e (go) ornin | to Lond | | | | | | | |
| | | | | | | S | ECTIO | N B | | | | | | |
| | | | Choo | se only | one (1) | part a | and ansv | ver all qu | iesti | ons in t | hat | t part. | | |
| | | | PA | RT I: | GEOGI | RAPI | HY ANI |) HISTC | RY | (40 M | ar] | ks) | | |
| | | | | | | | APHY (er all qu | (20 Marl lestions. | ks) | | | | | |
| 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 type of rainfall which is formed when warm air rises over rainfall. | | | | | | | over co | cold air is known as | | | | | |
| | | A D | Orographic Mountainou | | В Е | Reli Cyc | ief clonic | | | (| С | Conve | ectional | |
| | (ii) | | nen do we get 23 rd Septeml 21 st March. | oer. | В | $21^{st} \\$ | the south June. Septemb | | ispł | | C | 22 nd Γ | D ecembe | r. |
| | (iii) | (iii) The main aim of land reclamation in the Netherlands is to A increase the area for fishing activities B increase the area for cultivation C reduce salinity of the ocean water D reduce the temperature of sea water E tape water for domestic uses. | | | | | | | | | | | | |
| | (iv) | The A D | hygrometer thermometer | | measure B E | win | perature d vane ometer. | is | | (| С | anemo | ometer | |
| | (v) | Wh A D | nich of the fol 1:5,000. 1:25,000. | lowing | scale is B E | 1:50 | argest? 00,000. | | | (| \mathbb{C} | 1:50,0 | 000. | |

| | (vi) | The | e line drawn o | n m | aps to | join | places w | ith equal l | height | above sea | level is k | nown as |
|-----|--------|-------|-------------------------------------|-------|----------|-------|-------------|---------------------------|----------|-------------|-------------|----------------------|
| | | A | longitudes | | | В | contour | S | | C | grid lin | es |
| | | D | form lines | | | Е | latitude | S. | | | | |
| | (vii) | The | e relationship l | betv | veen a | dist | ance on a | map and | the ac | tual distan | ce on the | ground is known |
| | | | margin | В | title | | C | key | D | scale | Е | north direction. |
| | (viii) | The | e process of pl | anti | ng tree | es in | an area v | which had | never | been occi | ipied by t | rees is called |
| | | A | reforestation | | | В | afforest | ation | | C | defores | tation |
| | | D | bush fallowing | ng | | Е | Terracii | ng. | | | | |
| | (ix) | The | e temperature | on t | he eart | th's | surface is | s affected | by | | | |
| | , | | aspect | | | | | | - | pressure | E | land lockedness. |
| | (x) | The | e area that is si | urro | unded | by v | water and | l is smalle | r than | a continer | nt is know | n as |
| | () | | lake | | gulf | - | | island | | canal | | river. |
| 14. | (a) | Wr | ite the correct | woı | d or w | ord | s which c | omplete t | he foll | owing sen | tences. | |
| | | (i) | The line of | h.: | ah a d | | lost or a | rainad ia a | ماامط | | | |
| | | (i) | The line at | WIII | CII a u | ay is | s lost of g | gained is C | aneu _ | | _• | |
| | | (ii) | | | - | | | - | ssing | and chang | ing the ma | aterials in order to |
| | | | make new j | proc | iucts is | S | | _• | | | | |
| | | (iii) |) The amoun | t of | water | vap | our prese | ent in the a | tmosp | here is cal | led | · |
| | | (iv) | • | | | | - | and for ce | ertain t | ime in ord | er to allow | w the soil to regain |
| | | | its fertility | 18 _ | | | _• | | | | | |
| | | (v) | | | | | | ner grows | more 1 | than one c | rop in the | same piece of land |
| | | | is known as | s | | · | • | | | | | |
| | (b) | Exp | plain five impo | orta | nce of | tour | rism in Ta | anzania. | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | Y (20 Mar III question | | | | |
| | _ | | | | | | | • | | | | |
| 15. | | | of the items (i) beside the item | | | ose | the corre | ect answer | from | among the | given alt | ernatives and write |
| | (i) | | | | | led | to the di | sruption o | f tradi | ng contact | s between | East Africa and |
| | (-) | Asi | | | 3 2 | , | | p | | 8 | | |
| | | A | The coming of | of th | e Aral | os in | East Afr | rica | | | | |
| | | В | The abolition | | | | | | | | | |
| | | C | The colonizat | tion | of Eas | st A | frica. | | | | | |
| | | D | The coming of | | | - | | | | | | |
| | | Ε | The decoloni | zati | on of I | East | African s | states. | | | | |

| (ii) | The Kamba, Makonde and A patrilineal societies C slave owning societies E feudal states. | Kikuyu are examples | of B D | matrilineal so pastoralist so | |
|--------|--|--|----------------|----------------------------------|---|
| (iii) | The feudal relation in which | n the power of the rule | er de | epended on the | e producers themselves was |
| | known as A slavery D umwinyi | B nyarubanjaE ntemiship. | | С | ubugabire |
| (iv) | When did man come into ex A More than thirty thousa C More than thirty million E Sixty three years ago. | nd years ago. | | | thousand years ago. ee million years ago. |
| (v) | The appearance of both Zing | janthropus and Homo | На | bilis marked th | ne beginning of a period in |
| | man's history known as A Early Stone Age D Iron Age | B New Stone Age E Late Stone Age. | | С | Middle Stone Age |
| (vi) | The main activities of man A making tools and using C agriculture and trade E domestication of anima | fire | e Ag B D | | on and animal keeping gathering |
| (vii) | Which one of the following A It enabled man to keep B It enabled man to fell tr C It enabled man to live in D It enabled man to warm E It enabled man to roast | hostile animals away. ees easily. n colder areas. n himself. | | scovery of fire | ?? |
| (viii) | What name is given to the t | | s wł | nich revolved a | around cattle ownership in |
| | East Africa during the pre-c A Ubugabire. D Age-set. | B Umwinyi. E Astoralism. | | С | Ubusoka. |
| (ix) | In which century did regula A 20 th century. D 4 th century. | r trading contacts beto B 8 th century. E 15 th century. | wee | | and the Middle East begin? 19 th century. |
| (x) | Factors which determine the A raw materials and exter B industries and commun C producers and technolo D productive forces and n E family labour and enough | nal markets ication networks gical advancement ature of the environm | | vities man per | forms are |

| 16. | (a) | Write the correct word or words which complete the following sentences in your answer booklet. |
|-----|-------|--|
| | | (i) The Portuguese king who sponsored the search for the sea route to the Far East was known as |
| | | (ii) The German East Africa Company in Tanganyika was represented by |
| | | (iii) The mode of production in which the major means of production were owned by the whole society during the pre-colonial period is called |
| | | (iv) Wangara, Bundu and Bambuk were famous for production of |
| | | (v) The traditional legislature of the Buganda kingdom was known as |
| | (b) | Outline five ways through which slaves were obtained. |
| | | PART II: PHYSICS AND BASIC MATHEMATICS (40 Marks) |
| | | PHYSICS (20 Marks) Answer all questions. |
| 17. | | each of the items (i) - (v), choose the correct answer from among the given alternatives and write tter beside the item number |
| | (i) | The instrument used to measure the pressure of a gas is called A Barometer B Manometer C Thermopile D Edser's apparatus E Hygrometer. |
| | (ii) | Which of the following liquids can unlikely form a concave meniscus when poured into a measuring cylinder? |
| | | A Soft drink. B Mercury. C Water. D Ethanol. E Alcohol. |
| | (iii) | Magnetic materials are made up of extremely small magnets called A lodestone B magnesia C magnetite D domains E electro magnets. |
| | (iv) | The image formed by plane mirror is always A magnified B diminished C real D virtual E inverted. |
| | (v) | The maximum displacement of the pendulum bob from its mean position is called A Length of the pendulum B Amplitude C Wavelength D Angular amplitude E Length of oscillation. |
| | (vi) | The function of gold-leaf electroscope is to A test the sign of charge B produce electricity C store electric charges D detect the presence of force E identify the divergence of the leaf |

| | (vii) | Force of attraction between molecules of the same substance is called | |
|-----|--------|--|-------------------|
| | | A Capillarity B Surface tension C Cohesion D Adhesion E O | Smosis. |
| | (viii) | Energy has the same S.I unit as | |
| | | A volume B power C force D density E w | ork. |
| | (ix) | A charged comb can attracts small pieces of paper because it exerts | |
| | | A attractive force B repulsive force C electrosts | atic force |
| | | D electrostatic induction E static electricity. | |
| | (x) | Water flows more easily than any other fluid because | |
| | | A it is less viscous B it is more viscous C has more | e friction |
| | | D it sticks to the surface E its molecules are very mobile. | |
| 10 | | () WI | |
| 18. | (a) | (i) What is a capacitor? | 1 0 1 |
| | | (ii) Three capacitors of 2 μF , 6 μF and 8 μF are arranged in series. Find the variation capacitor that would replace them. | value of a single |
| | (b) | (i) What is First Aid Kit? | |
| | (-) | (ii) Identify any three importance of First Aid. | |
| | (a) | (i) What is a capacitor? Define fundamental quantity. | |
| | (c) | (ii) Mention three instruments used for measuring the basic fundamental quantity. | ntitios |
| | | (ii) Mention three instruments used for measuring the basic fundamental qual | mmes. |
| | (d) | (i) State Hooke's law. | |
| | | (ii) List down two applications of elasticity in real life. | |
| | (e) | (i) Define power. | |
| | (-) | (ii) A pump of 20 W can raise 120 kg of water through a height of 60 meter i | n one minute |
| | | Find the energy consumed by the numn | |

BASIC MATHEMATICS (20 Marks)

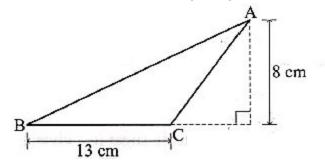
Answer all questions.

- 19. (a) Find the GCF of 156 and 180.
 - (b) James takes ²/₃ of an hour to read 30 pages of a story book. How long does he take to read one page? (Give your answer in minutes)
 - (c) Kalunde sells one litre of honey at sh 4,000. How many litres of honey will Kalunde sell to get 2,000,000?
 - (d) Solve the following pair of simultaneous equations by the elimination method:

$$4x + 3y = 1$$

$$4x - 2y = 6$$

- (e) Find the principal that will earn sh 4,000,000 at the rate of $2\frac{1}{2}$ % per annum in 4 years.
- 20. (a) Find the equation of a line which passes through the point (2,-4) and whose gradient is 2.
 - (b) Obtain the perimeter of a quadrilateral whose side is 5 cm each.
 - (c) Calculate the area of the following triangle ABC.



- (d) A car costing sh 5,000,000 is sold at a loss of 40%. What is the selling price of the car?
- (e) Express 1.36 as a proper fraction.

PART III: BIOLOGY AND CHEMISTRY (40 Marks)

BIOLOGY (20 Marks)

Answer all questions.

- 21. (a) 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 common symptom which appears in a child lacking protein in a diet is

A vomiting

B swollen head

C bleeding

D swollen stomach

E dizziness.

| (ii) | WI A C E | nich of the following structures Bicuspid valve Tricuspid valve Vilus. | is fo B D | und in the lungs? Alveoli Bile duct |
|--------|-------------------|--|-----------------|---|
| (iii) | Th | e major product of aerobic respi | iratio | on is |
| | A | oxygen | В | alcohol |
| | С | energy | D | carbohydrate |
| | Е | lactic acid. | | |
| (iv) | Th | e function of chlorophyll in the | phot | tosynthesis process is to |
| , , | | remove energy | В | absorb carbon dioxide |
| | C | absorb water | D | remove excess water |
| | Е | trap sunlight. | | |
| (v) | Th | e term "Biology means a study | of | |
| () | A | | В | animals only |
| | C | plants only | D | plants and animals |
| | E | animals and fungi. | | |
| Fill i | n th | e blanks in List B by using the v | word | s or phrases given in List A . |
| List | A | | | |
| I. di | | alutian Danadiat's salutian sa | | hudaarida ashitisa samaa adabata ashitisa |
| | | II, Hydrochloric acid, Porassiun | | n hydroxide solution, copper sulphate solution, rmanganate. |
| | | | | |
| List | В | | | |
| (i) | | is a reagent used to te | st re | ducing sugar in a given solution. |
| (ii) | | is a reagent used to te | est st | arch in unknown food sample. |
| (iii) | | is a reagent used to hy | ydro | lyse non-reducing sugar to reducing sugar. |
| (iv) | | is the reagent used to | neu | tralise the acid in a food sample. |
| (v) | | is the reagent used to | test | fat/oil in unknown food sample. |

(b)

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) | The structures through which water and mineral salts moves | | Stomata |
| | into the leaf. | В | Sponge mesophyll |
| (ii) | A part of a leaf consisting of larger intercellular air spaces. | С | Palisade mesophyll |
| (iii) | A part of a leaf packed with most of the chlorophyll in the | D | Epidermis |
| (111) | leaf. | Е | Xylem |
| () | | | Phloem |
| (iv) | Structures which allows atmospheric carbon dioxide to enter in the leaf. | G | Lamina |
| (v) | The structures through which manufactured food moves from the leaf to other parts of the plant. | | |

- (b) (i) Outline two distinctive features of Kingdom Fungi.
 - (ii) Why moss plant was placed in Division Bryophyta? Give three reasons.

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) Particles which make up a liquid are
 - A Closed together, but do not have definite order
 - B Compressed together and have definite order
 - C Far apart from each other with irregular order
 - D Far apart from each other with regular order
 - E Compressed together with irregular order.
 - (ii) Which of the following is a type of danger indicated by skull and crossbones?
 - A General danger from chemicals.

B Toxic.

C Flammable materials.

D Explosive.

- E Harmful or poisonous.
- (iii) The three components of the fire triangle are

A Fuel, heat and carbon

B Fuel, oxygen and heat

C Fuel, air and heat

D Fuel, nitrogen and heat

E Fuel, hydrogen and heat.

| | (iv) When a small amount of common salt is dissolved in a glass of water, the mixture formed is called | | |
|---------|--|--------------|--------------------|
| | A homogeneous | B immiscible | C heterogeneous |
| | D suspension | E emulsions. | 2 |
| | (v) Iron filling can be separateA separating funnel.D filtration. | 1 1 | using C magnet. |
| (b) | Fill in the blanks by writing the correct answer. (i) Physical changes of matter can occur if there is an increase or decrease in | | |
| | (ii) is a chemical reaction between a substance and oxygen in the presence of a flame | | |
| | (iii) An APW fire extinguisher contains pressurized with | | |
| | (iv) Factors that affect the problem being investigated are called | | |
| | (v) is a measure of the quantity of matter in an object. | | |
| 24. (a) | (i) Name and state the uses of the following apparatus labelled A, B and C: | | |
| | A | В | |
| | (ii) Name the second major constituent of air and specify its use. | | |
| (b) | For each of the items (i) - (v) in List A , choose the correct answer from the given alternatives in List B and write its letter beside the item number. | | |
| | L | List A | List B |
| | (i) Change from solid to gas s | state. | A Evaporation |
| | (ii) Change from liquid to gas | state. | B Sublimation |
| | | | C Expansion |
| | (iii) Change from gas to liquid | state. | D Melting |
| | (iv) Change from solid to liqui | id state. | E Deposition |

(v) Change from gas to solid state.

F Freezing

G Condensation.