**THE UNITED REPUBLIC OF TANZANIA**
**NATIONAL EXAMINATIONS COUNCIL**

**010** **QUALIFYING TEST**

(For Private Candidates Only)

**Time: 3 Hours** **Tuesday, 11th November 2014 p.m.**

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**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** questions in that part.

4. All questions should be answered in English Language except Kiswahili subject in part II should be answered in Kiswahili.

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

6. 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 (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) Tanganyika and Zanzibar united on
   A $26^{th}$ April 1961 B $26^{th}$ February 1964 C $09^{th}$ December 1961
   D $26^{th}$ April 1964 E $05^{th}$ February 1964.

   (ii) For a town to achieve the status of a municipal council it should have a population of not less than _____ people.
   A 100,000 B 80,000 C 70,000 D 60,000 E 50,000.

   (iii) Which of the following is a sexually transmitted disease?
   A Tuberculosis B Cholera C Meningitis
   D Typhoid E Gonorrhea.

   (vi) The following are the sources of life skills:
   A parents, schools and religions B peer groups, schools and news papers
   C parents, religion and historical cites D parents, peer groups and ancestors
   E parents, environment and peer groups.

   (v) A polling station is a place where
   A population ballot is conducted B ballot casting takes place
   C councilors meeting takes place D political rallies take place
   E voters registration takes place.

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) Made up by the President, Vice President, Ministers, Deputy Ministers and Civil Service. | A Government |
| (ii) The supreme authority of a state to govern itself without external control | B State |
| (iii) An organ or institution for the control or direction of the public affairs in the country. | C Judiciary |
| (iv) A group of people with common culture and government occupying a territory. | D Legislature |
| (v) The organized political community in which the government exists with full political control. | E Executive |
| | F Nation |
| | G Sovereignty |
| | H Cabinet |

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

   (i) _____ are the rights which all men and women deserve because of their humanity.

   (ii) The ability of an individual to apply mental knowledge to control his/her environment and life as an acceptable member in a society is known as _____.

   (iii) The law making branch of government is known as _____.

   (iv) The people who are displaced due to various social or political problems such as war, drought or famine are known as _____.

   (v) The women's rights to plan the size of the family is known as _____.

4. Explain five problems facing the families.

## 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 jibu sahihi kwenye kitabu chako cha kujibia.

   Zulfa aliweza kukidhi madhumuni ya pesa anazozitaka Abdul kwani ile haikuwa mara ya kwanza kwa Abdul **kumchagiza** mkewe akachukue **chungu** cha pesa kwa wazee wake matajiri. **Haikumkiniki** Zulfa asiridhi kwa sababu alikuwa akimpenda sana Abdul na alikuwa tayari kwa lolote na kwa gharama yoyote. Ndoa yao ilikuwa ya kufungwa kwa mapenzi ya upande mmoja. Zulfa ndiye alikuwa wa kwanza kumuona Abdul akampenda na kufanya kila aliloweza kumnasa Abdul na kisha akafanikiwa kuolewa naye. Hivyo ilibidi afanye kila awezalo kumridhisha Abdul hata kama litamgharimu kwa kiasi kikubwa.

   Siku moja Abdul alipokuwa nyumbani, jioni akizungukia kwenye sofa alilokalia, akamwambia Zulfa kwa nini anatake zile pesa. "Napanga kisafari kizuri". Alisema Abdul. Moyo wa Zulfa ulimwenda mbio, lakini hakuthubutu kumuuliza Abdul. Moyo wa Zulfa ulijisemea, "alitaka **kuyoyoma** wapi mtu huyu? Hakusema, hakuuliza, hatauliza. Aulize aachwe?" Hata kama Abdul alihisi mshtuko wa Zulfa hakujali, kwani kuteseka kwa nafsi ya Zulfa ilikuwa ni furaha ya Abdul.

   Alijikaza sana Zulfa, akauliza baada ya muda, "Kisafari cha wapi?" "Dunia nzima." Alisema Abdul, **akibetua** mdomo kwa dharau kama vile ana hela mfukoni, "Ulaya, Amerika, Asia na baadhi ya nchi za Afrika." "Kwa shilingi laki moja?" Aliuliza Zulfa. "Oh!, *No* Zulfa, pesa hizo nazitaka tu kununulia zawadi kwa ajili ya marafiki zangu waishio Amerika na Kuwait.

Na wewe *darling* unahitaji zawadi nzuri ya kumpelekea wifi yako na kakako huko London, au siyo? Tukiwa tayari nitakuambia wanawake wa kizungu hupendelea nini ili umnunulie. Sasa safari ilimvutia Zulfa japo hakujua naye atakwenda au la! "Na safari kama hiyo hugharimu kiasi gani?" Aliuliza Zulfa. "Ah, kama milioni tano na nusu tu mpenzi." Alijibu Abdul kwa dharau ya wazi kama vile hizo pesa kazikalia chini ya sofa la thamani alilokalia. "Lakini *darling* hatuna utajiri huo, kwani hapa tulipo tunaishi nyumba ya kupanga. Tungepata hizo pesa tungejenga nyumba yetu ili tukijaliwa kupata mtoto, mwenetu atukute tumo kwetu." Alilalamika Zulfa.

**Maswali**

(a) Eleza maana ya maneno yafuatayo kama yalivyotumika katika kifungu cha habari:
   (i) Kumchagiza
   (ii) Chungu
   (iii) Haikumkiniki
   (iv) Betua
   (v) Kuyoyoma

(b) Mwandishi anatoa ujumbe gani anaposema, "Ndoa yao ilikuwa ya kufungwa kwa mapenzi ya upande mmoja."

(c) Habari hii huweza kufananishwa na ujumbe wa methali ipi?

6. Eleza kwa kifupi maana ya maneno yafuatayo:
   (a) Rejesta
   (b) Uhakiki
   (c) Mtindo
   (d) Dhamira
   (e) Muundo

7. Eleza maana tano kati ya fasihi simulizi na fasihi andishi.

8. Andika hadithi fupi yenye maneno 120 kuhusu mada ifuatayo; "Mvumilivu hula mbivu."

## ENGLISH LANGUAGE (20 Marks)

Answer **all** questions.

9. Write a composition of about 100 words on the following topic. “The Place I Like to Visit”.

10. Read the passage below carefully and then answer the questions that follow.

Many people think that eating food is simply something which is pleasant and necessary to satisfy hunger. They do not know that the great illness that they have is eating the wrong kinds of food. The reason behind this is the lack of knowledge on the functions of food in their bodies.

In some countries, e.g. Somalia, Ethiopia, Eritrea and Sudan there is much starvation and many people die each year because they eat insufficient food. In these counties the main cause of starvation is the low production of food. In East Africa, however, starvation and prolonged hunger are not as common as in other places as mentioned earlier because in most areas the climate and soil allow the production of enough food.

Food is necessary not only to satisfy hunger, but also to provide the body with certain nutrients to keep it healthy. Ill health due to poor diet is known as malnutrition. It is a common disease to children under five years. In East Africa malnutrition is not caused by lack of food, but it is due to lack of knowledge in food usage. It is important for people to realize that malnutrition causes a great deal of illness and death. Moreover, apart from many people who are obviously ill, there are many thousands who are weak and their bodies poorly developed due to improper feeding. These people are likely to get diseases, e.g. tuberculosis, diarrhoea and other infections and they do not recover quickly from those diseases.

However, the stakeholders like Home Economists should advise people on how best they can prepare diet and educate the community on food and nutrition. Also the Agricultural Officers may advise on the production of certain foods to serve the need.

**Questions**

(i) Many people in East africa eat unbalanced diet because

A they are always starving
B balanced diet is expensive
C they suffer from ill health
D of lack of knowledge
E they do not have alternative.

(ii) The main difference between Somalia and East African countries is that

A people in East Africa lack food while in Somalia they do not have knowledge
B there are more people in Somalia than in East African countries
C people in Somalia have food shortage while those in East Africa do not know the proper use of food
D starvation and hunger is so common in East Africa than in Somalia
E people in East Africa import food unlike Somalia.

(iii) According to the passage, malnutrition means lack of

A food in the human body
B human food knowledge
C the right kind of food in the body
D enough food production
E right preparation of food.

(iv) Whom among the following are most affected by malnutrition?

A Youths B Children C Elders D Nurses E Doctors.

(v) According to the passage, the problem of malnutrition should be solved by using

A home economics
B doctors in the hospitals
C teachers in schools
D every parents
E primary teachers.

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) Betty _____ parents live in the countryside has been selected to join the University of Dar es Salaam.

A who B whose C whom D which E what.

(ii) She was _____ clever that she managed to attempt well all the question.

A too B enough C to D so E as.

(iii) Mashaka is as intelligent _____ Zena in the class.

A as B than C more than D us E from.

(iv) Please switch _____ your phone in the examination room.

A of B on C off D in E out.

(v) Samwel tried hard _____ he did not manage to get into the football team.

A but B and C so D as E in order.

12. Fill in the blanks with the correct form of the verb.

(i) They (visit) _____ Arusha last month.

(ii) Would you like (dance) _____ with me.

(iii) Our teacher (do not) _____ allow us to sing in class often.

(iv) I feel like (change) _____ my hair style.

(v) I (teach) _____ my children to swim at this moment.

## SECTION B

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

## PART I: GEOGRAPHY AND HISTORY (40 Marks)

### 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) When the sun is overhead at the tropic of Cancer on 21st June, it is known as
A winter solstice B summer C summer solstice
D winter E tropic of Capricorn.

(ii) Which of the following aspect is **not** a characteristic of small scale agriculture?
A covers a small area. B use of high science and technology.
C production is mainly for food. D poor control of diseases.
E different crops are grown.

(iii) Winds blow from the area of
A low altitude to high altitude B low pressure to high pressure
C high pressure to low pressure D high altitude to low altitude
E high altitude to high altitude.

(iv) What is the compass bearing of NW?
A 135° B 180° C 315° D 225° E 045°.

(v) Which of the following climates has high temperature throughout the year?
A Hot desert B Tropical monsoon C Mediterranean
D Equatorial E Savannah.

(vi) The time recorded along the same meridian is known as
A local mean time B Greenwich Mean Time C great mean time
D standard time E time zone.

(vii) The instrument used to measure air pressure is known as
A Rain Gauge B Thermometer C Barometer
D Hygrometer E Anemometer.

(viii) Stevenson's box is painted white in order to
A allow movement of air B improve insulation
C allow free air to enter D allow thermometers to be placed
E decorate it.

(ix) One of the following is an example of non renewable energy.
A hydroelectric power B wind power C solar
D natural gas E charcoal.

(x) The highest mountain peak in the world is
A Everest B Kilimanjaro C Atlas D Kenya E Uluguru.

14. (a) Write the correct word or words which complete the following sentences.
(i) A line drawn on a map joining places of equal amount of sunshine is known as _____.
(ii) The equatorial low pressure belt is also known as _____.
(iii) A system of crops farming where a farmer moves from one area to another is known as _____.
(iv) The process of removing unwanted plants in a farm is _____.
(v) It involves both the science and art of growing crops and keeping livestocks _____.

(b) List down five problems arising from exploitation of forest resources.

## 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) One of the crucial changes in the evolution of man was
A development of the brain B discovery of the earliest man
C emergence of primates D hunting and gathering
E emergence of Zinjanthropus.

(ii) Which of the following statements about Early Stone Age is correct?
A Man domesticated animals and crops.
B Man depended on nature for his livelihood.
C Man made smaller and sharper tools.
D Man started making and using fire.
E Man established permanent settlement.

(iii) Which of the following best explains Mansa Kankan Musa?
A The ruler who founded Ghana Empire.
B The king who resisted Moroccan invasion.
C The political and religious leader of Asante Empire.
D The ruler who expanded and consolidated Songhai Empire.
E The ruler of Mali who paid a pilgrimage to Mecca.

(iv) During the pre-colonial period the most important handcraft industries in Africa were
A Salt making, gold mining and ship building industries

B Salt making, gold mining and car building industries
C Salt making, gold mining and manufacturing industries
D Salt making, gold mining and manufacturing industries
E Salt making, gold mining and processing industries.

(v) Which of the following is true of the characteristic of a communal society?
A Relations of production were not permanent.
B Some members of the society participated in slave trade.
C Land was their major productive force.
D There was private ownership of the major means of production.
E The major means of production were communally owned.

(vi) The range of productive activities man performs is determined by
A productive forces and means of production
B relations of productions and instruments of production
C productive forces and nature of the environment
D nature of the environment and capital
E objects of labour and instruments of labour.

(vii) The combination of producers, skills, experience and level of technology attained by society is called
A productive forces B means of production C relations of production
D productive activity E instruments of production.

(viii) Feudal relations in Zanzibar were reinforced by
A the abolition of slavery and slave trade B the expulsion of the Portuguese
C racialism and religion D the agents of colonialism
E the conflict between the Arabs and Africans.

(ix) Sultan Seyyid Said of Oman conquered the Mazrui dynasty in
A 1840 B 1914 C 1498 D 1837 E 1884.

(x) Before the 16th century East Africa trade was oriented towards
A North and South America B Middle and Far East
C Europe and America D Europe and Far East
E North and South Africa.

16. (a) Write the correct word, figure, or words which complete the following sentences in your answer booklet.
(i) The method which is used to identify archaeological findings whose ages are beyond 5,000 years is called _____.
(ii) In the third century B.C. the capital of Kush Empire shifted from Napata to _____.
(iii) The last great expansion of the Kingdom of Ethiopia was undertaken under the King called _____.
(iv) The founder of the Empire of Mali was called _____.
(v) The most important form of capital during mercantilism was _____.

(b) Outline 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) - (x), choose the correct answer from among the given alternatives and write its letter beside the item number

(i) The shortest length that can accurately be measured by vernier calipers is
A 0.1cm B 0.001cm C 0.01cm D 0.0001cm E 1.0cm.

(ii) Force has the same S.I. unit as
A pressure B power C weight D mass E energy.

(iii) Which of the following substances are made up of atoms?
A Copper and gold B Ammonia and copper C Argon and gold
D Water and gold E Oxygen and argon.

(iv) The pressure of a liquid in a tank depends on its
A volume B mass C weight D height E area.

(v) Which of the following factors when altered can affect the resistance of a conductor?
A Circumference. B Volume. C Length. D Density. E Mass.

(vi) A point where net magnetic field is zero is called
A dew point B zero point C fixed point
D neutral point E actual point.

(vii) Two characteristics of the image formed by a plane mirror are
A laterally inverted and virtual
B magnified and laterally inverted
C virtual and smaller than the object
D real and same size as the object
E larger and at the same distance behind the mirror.

(viii) Negative charge can be produced by rubbing polythene rod with
A cellulose B silk C fur D glass E ebonite.

(ix) Which of the following is an example of transparent material?
A Wood B Glass slab C Oiled paper
D Ground glass E Concrete block.

(x) Magnetic materials are made up of extremely small magnets called
A poles B lodestone C magnetite
D magnesia E domains.

18. (a) (i) State the fundamental law of static electricity.
(ii) What is the function of voltmeter in electric circuit?

(b) List down two uses of gold-leaf electroscope.

(c) How much work is done to lift a 9kg object through a height of 3m and then hold it at that position for 10 seconds?

(d) Mention three applications of earth's magnetic field.

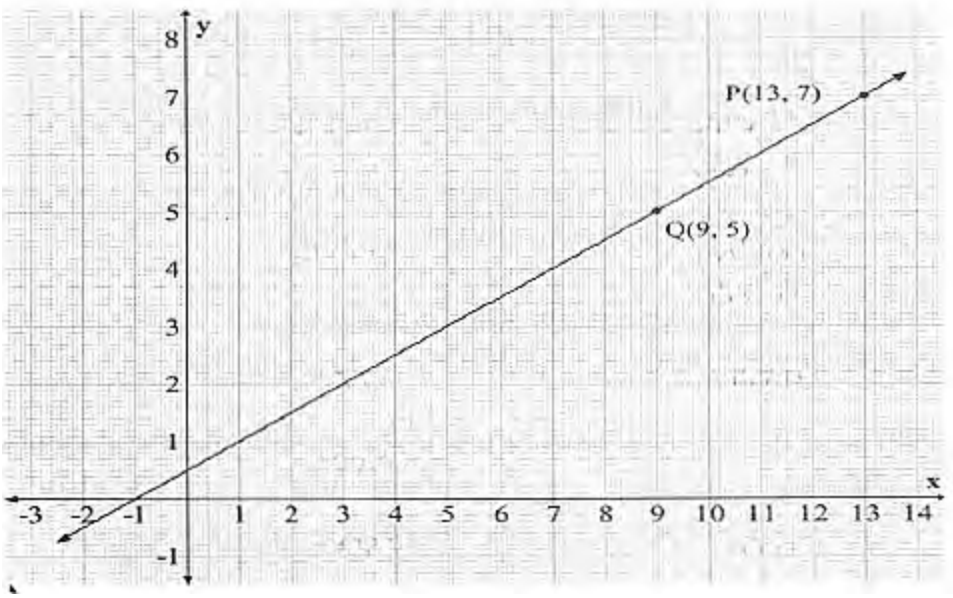
(e) (i) State Ohm's law.
(ii) The current of 4 ampere flows through a certain conductor at a potential difference of 20 volts. What current would pass on the same conductor when the potential difference changes to 16 volts?

## BASIC MATHEMATICS (20 Marks)

Answer **all** questions.

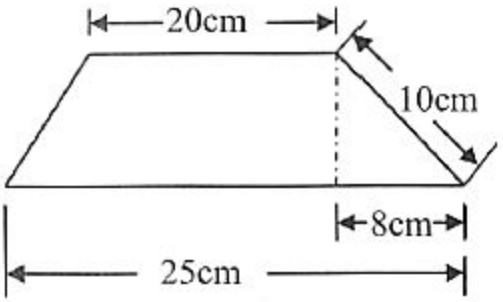
19. (a) Find the LCM of 18 and 36.
(b) A bag of maize weighs 3⅓ kilograms. What is the weight of 30 such bags?
(c) Calculate $0.8236 \times 2.02$ giving the answer correct to 4 significant figures.
(d) Solve the following pair of simultaneous equations by the substitution method:
$2x + 3y = 7$
$3x - y = 5$
(e) John sold his bicycle at 20% loss. If the amount lost was 10,000 shillings, find the selling price of the bicycle.

20. (a) Find the gradient of the line shown in the following figure:

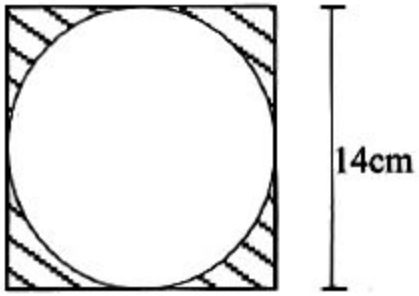


(b) Obtain the perimeter of a pentagon whose sides is 9 cm each.

(c) Calculate the area of the trapezium shown below:




(d) The figure below is formed by a square and a circle, what is the area of the shaded region?




(e) Express 0.2 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) - (v), choose the correct answer from among the given alternatives and write its letter beside the item number.

(i) The biotic component of the environment include
A rocks B soil C water D minerals E micro-organisms.

(ii) Which of the following structures distinguishes plant cell from animal cell?
A Plasma membrane. B Cytoplasm C Cell wall.
D Cell membrane. E Nuclear.

(iii) Ventilation and gas-exchange in fish takes place through a structure known as
A lungs B lungbook C spiracle D trachea E gills.

(iv) The function of sunlight energy in the human skin is to stimulate the synthesis of

A vitamin A B vitamin C C vitamin D
D vitamin K E vitamin B.

(v) The term "Zoology" in Biology describes a person who studies about
A plants only B animals only C fungi only
D plants and animals E animals and fungi.

(b) Fill in the blanks in **List B** by using the words or phrases given in **List A**.

**List A**

| |
|---|
| Poison, Corrosive, First aid Kit, An accident, First Aid, Flammable, Risk. |

**List B**

(i) _____ it is a small box in which medical facilities are stored for emergency treatment.

(ii) _____ is a dangerous situation that you may get on the way of assisting a sick or injured person or patient.

(iii) _____ is an expected event that can cause injury and sometimes death.

(iv) _____ are usually substances which can harm the body and cause death.

(v) _____ are substances which attack and destroy living tissue and other materials.

22. (a) Match the responses in **List B** with the phrases in **List A** by writing the letter of the correct response from **List B** beside the item number of **List A** in your answer booklet.

| List A | List B |
|---|---|
| (i) They move by biting numerous cilium. | A Euglena |
| (ii) They have simple structure and the capsid that protect their nucleic acid. | B Yeasts |
| (iii) Possess chlorophyll and make their own food. | C Mucor |
| (iv) They are Basidiomycotes consisting of the stem, cap and gills. | D Mushrooms |
| (v) They are Ascomycota growing on the surface of rotting fruits. | E Paramecium |
| | F Fungi |
| | G Virus |
| | H Amoeba |

(b) (i) Define the terms "immunity" and "personal hygiene".

(ii) Outline five principles of personal hygiene.

**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) The gas which is **not** present in the atmosphere is

A Neon B Helium C Krypton D Argon E Fluorine.

(ii) Mary saw the flammable sign on a box. Which of the following is the most correct observation?

A The box contained firewood.
B The box contained papers.
C The box had radioactive materials.
D The box contained toxic solution.
E The box contained spirit used in lamps.

(iii) If the results obtained from an experiment do not support the hypothesis, then one is required to

A change the experiment B identify a new problem
C leave out the results D ask for a help
E give ideas for further testing.

(iv) Milk is a mixture of water and fats. This type of mixture is called

A suspension B emulsion C solution
D precipitate E compound.

(v) A method by which the components of a coloured mixture can be separated and identified is called

A magnetization B chromatography C colour separation
D layer separation E filtration.

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

(i) The apparatus used to grind granules of a certain chemical to fine powder, includes _____ and _____.

(ii) The change of state of matter from gas to solid without passing through liquid state is called _____.

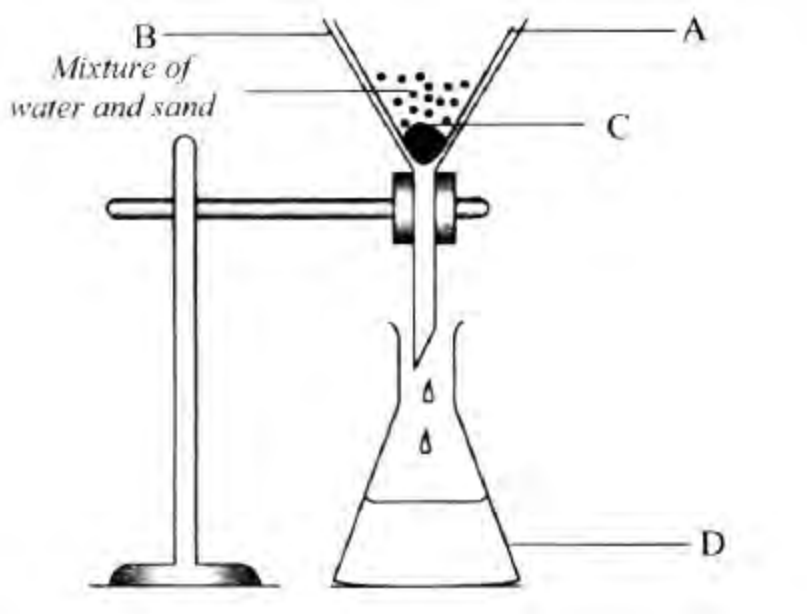
(iii) _____ is the factor in experiment that does not change.

(iv) _____ is a sudden loss of conscious caused by lack of sufficient blood and oxygen to the brain.

(v) _____ is used to accurately measure and dispense liquids.

(vi) The condition in which the lungs are not getting enough oxygen causing difficulty in breathing is called _____.

24. (a) Study the diagram below and answer the questions that follow.




(i) List three factors that affect the problem being investigated (variables).
(ii) State the necessary conditions for the rusting of an iron to occur.

(b) Match the uses of apparatus in **List A** with the corresponding apparatus in **List B** by writing the letter of the correct response beside the item number.

| List A | List B |
|---|---|
| (i) Holds hot substances and apparatus. | A Wire gauze |
| (ii) Helps to spread out flame. | B Burette |
| (iii) Used to deliver accurately a fixed volume of liquid. | C Pipette |
| (iv) Used to heat substances to a very high temperature. | D Tongs |
| (v) Used for accurate measurements of volumes. | E Trough |
| | F Crucible |
| | G Tile |
| | H Beaker |