THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL

010 **QUALIFYING TEST**

(For Private Candidates Only)

Time: 3 Hours **Monday, 06th November 2017 p.m.**

Instructions

1. This paper consists of sections A and B with a total of **twenty four (24)** questions.

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 section A part II should be answered in Kiswahili.

5. Calculators, cellular phones and any unauthorised materials are **not** allowed in the examination room.

6. 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.

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) Which of the following influence decision making at family level?
   - A Education and environment.
   - B Location and religious beliefs.
   - C Politics and experience.
   - D Age of the children and culture.
   - E Economic status and level of decision.

   (ii) The power to declare the state of emergency in Tanzania belongs to
   - A the leader of opposition party
   - B the power of the people
   - C the parliament
   - D the president
   - E the minister of defense.

   (iii) One of the requirements through which the citizenship can be acquired is
   - A birth and identification
   - B registration and birth
   - C birth and censor
   - D birth and voting
   - E naturalization and identification.

   (vi) Which one of the following characterized an individual with low self-esteem?
   - A Sympathy and empathy.
   - B Empathy and smoking.
   - C Fighting and empathy.
   - D Empathy and anxiety.
   - E Sympathy and smoking.

   (v) One of the importance of free and fair election is
   - A to attend the parliament
   - B to get rulers of good personality
   - C to get representatives
   - D to make power of the executive
   - E to ensure the ruling party stays in power.

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

List A	List B
(i) The year in which the third constitution of the United Republic of Tanzania was formed.	A 2013
(ii) The year in which the interim constitution formalized the establishment of single party system.	B 1977
(iii) The year in which the constitution marked the beginning of the presidential system of government.	C 2012
(iv) The year in which the constitution was based on Westminster model.	D 1992
(v) The year in which the fourth constitution was made in the United Republic of Tanzania.	E 1961
	F 1965
	G 1962
	H 1964

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

   (i) The Chief Justice of the United Republic of Tanzania is appointed by _____.

   (ii) The behaviour which is accepted by the people in the society is known as _____.

   (iii) A period when two people of different sex having a relationship with the aim of getting marriage is called _____.

   (iv) A system of laws and basic principles in governing a country is called _____.

   (v) An official public document that indicates when, to whom and where the person was born is known as _____.

4. (a) What is democratic government?
   (b) Briefly explain four features of democratic government.

PART II: KISWAHILI AND ENGLISH LANGUAGE (40 Marks)

KISWAHILI (Alama 20)

Jibu maswali **yote**.

UFAHAMU

5. Soma habari ifuatayo kisha jibu maswali yanayofuata.

Hadi hapo Sekai alitambua wazi kuwa yalikuwepo mambo mawili ya kuchagua. Kwanza ni kufikishwa mbele ya wazee ambapo adhabu ingekuwa kifo tu. Njia ya pili ilikuwa kutoroka katika kijiji kile.

Sekai alitambua kwamba njia ya kwanza ilihitaji ujasiri mkubwa. Angechagua hiyo kama tu hangekuwa na mtoto. Hata njia ya kutoroka nayo ilihitaji uwezo na busara. Njia hii ingeweka matumaini ya kuishi maisha mapya, namna ya kuanza uhai mpya, hasa kwa mtoto wake. Yeye na mwanawe ni lazima watoroke na kuyaweka maisha yao kati ya wanyama hatari na wageni. Ni uamuzi wa hatari, lakini kwa Sekai, kifo hangekisubiri.

Sekai alikwishamua lazima aondoke asubuhi itakayofuata. Sekai hakuwahi kutenda jambo kinyume na Makwati mume wake wala mila zao, isipokuwa kwa hilo la kulilia uhai wa mtoto wake ambaye alikuwa auawe kwa sababu ya kuwa zeruzeru ilibidi afanye maamuzi magumu. Uamuzi wake ulikamilika kwa usahihi na ushwari, sifa ambazo awali hakujua kua alikuwa nazo. Alimfunika mtoto aliyelala katika blanketi liliotengenezwa na magome ya miti na kumlaza mkekani. Kisha akainuka na kufanya maandalizi ya safari yake ambayo haikupangwa na hakujua mwisho wake. Akatoka hadi kwenye kibanda chake cha kupikia.

Aliyatikisa majivu ya moto uliobaki na ulitoa mwanga kiasi. sasa aliweza kuona ni kitu gani alihitaji katika safari yake. Alichukua mkuki pamoja na ngao ambayo Makwati aliiweka humo pamoja na nyama iliyokaushwa. Akaifunga katika kipande cha nguo iliyotengenezwa kwa magome ya miti. Halafu akachagua kibuyu kikubwa cha maji na kukifunika mdomo wake vizuri. Kisha akarejea kibandani kwake alikolala mwanawe.

Sauti ya jogoo aliyewika katika eneo hili ilimwamsha Sekai. Taratibu, ili asije kumwamsha mtoto, alitoka kibandani na kutazama mbingu, jinsi nyota na mwezi zilivyokuwa, alitambua mara moja kwamba mwanga wa jua haukua mbali sana. Huu ulikuwa wakati wa kuanza safari.

Maswali

(a) Andika kichwa cha habari uliyosoma kisichozidi maneno matano.

(b) Mwandishi ana maana gani anaposema, “kuyaweka maisha yao kati ya wanyama na wageni.”

(c) Unafikiri ni kwa sababu gani Sekai alifanya uamuzi wa kuchukua njia ya pili?

(d) Eleza sifa mbili alizokuwa nazo Sekai.

(e) Unapata funzo gani kutokana na kifungu hiki cha habari ulichosoma?

6. Eleza maana ya istilahi zifuatazo:
   (a) Ngano
   (b) Tarihi

7. Eleza maana na matumizi ya misemo ifuatayo:
   (a) Kuzunguka mbuyu.
   (b) Kuua tembo kwa ubua.
   (c) Mkono wa Birika.
   (d) Mtu kidole.
   (e) Kutingisha kiberiti.

8. Andika hadithi fupi yenye maneno kati ya mia moja (100) na mia moja hamsini (150) kuhusu mada ifuatayo; “Uchaguzi Mkuu wa Tanzania.”

ENGLISH LANGUAGE (20 Marks)

Answer **all** questions.

9. Write a composition of about 100 words on “Child Labour”.

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

    In many poor countries people suffer from malnutrition. Malnutrition, however, is not entirely due to lack of food, but often also due to improper diet.

At a certain stage of their lives, human beings must have special diet to ensure that they get what is required to grow and to remain healthy. to plan a diet properly, one must take into account a number of factors. Enough food must be taken to give the body enough energy to maintain body heat for working and building up tissues. A sufficient quantity of vitamins and mineral salts should be included in the diet. Vitamins are required for various physical and chemical processes. Mineral salts together with proteins help in the repair and growth of tissues. A sufficient quantity of water must also be taken, for water is an essential component of body cells.

A diet consisting mainly of carbohydrates does not give energy and may cause fatigue. A fatigued person shows lack of interest and is always tired. Furthermore, a diet consisting mainly of carbohydrates does not help the body to build up a resistance to diseases. A diet rich in proteins gives enough energy for a healthy life. The best diet, therefore, is a balanced diet.

Questions

(i) Where do people suffer from Malnutrition?

A In India. B In poor countries. C In Asia.
D In Tanzania. E In rich countries.

(ii) How does malnutrition affect a person?

A A person shows no desire for a diet consisting of carbohydrates.
B A person develops a taste for a protein-rich diet.
C A person stomach grows bigger and bigger.
D The mineral salts become the main ingredients of a person's diet.
E A person physical growth stops and his body simply wastes away.

(iii) What is the function of mineral salts and protein?

A To help in the repair and growth of brain.
B To help in the repair and growth of heart.
C To help in the repair and growth of tissues.
D To help in the repair and growth of bones.
E To help in the repair and growth of body.

(iv) What diet causes tiredness?

A A diet rich in proteins.
B A diet which gives enough energy.
C A diet rich in proteins and vitamins.
D A diet consisting mainly of carbohydrates.
E A diet which helps the body to build up a resists from diseases.

(v) What is the importance of vitamins in a person's diet?

A For certain physical and chemical processes.
B They form an important part of body cells.
C They increase the eating capacity.
D They help in the growth of muscles.
E They increase the life span.

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 in the answer booklet provided.

(i) She divided the cake _____ her six children.
A between B among C at D on E in.

(ii) How do you account _____ this terrible state of affairs?
A with B at C of D for E on.

(iii) I have lived here _____ five years.
A for B since C during D with E until.

(iv) This is the hospital _____ I was born.
A when B wherever C which D at which E where.

(v) She could give no reason _____ her daughter had left home.
A when B how C why D where E which.

12. Fill in the blank spaces with the correct form of the verb in brackets.

(i) She is an expert at making herself (understand) _____ in foreign languages?
(ii) I was expecting to _____ (see) you.
(iii) Yesterday afternoon the police (catch) _____ a thief in Samora Avenue.
(iv) Why are you (stare) _____ at me?
(v) Water always (freeze) _____ at zero degrees Centigrade.

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 in the answer booklet provided.

(i) The sun provides energy by releasing electromagnetic waves which are known as
A solar B sun shine C heat
D sun waves E sun rays.

(ii) Masses of tiny droplets of water or ice particles or both, which are suspended in the atmosphere are called
A snow B mist C hail D clouds E fog.

(iii) The difference between maximum and minimum temperature reached in a day is known as
A daily temperature range B daily mean temperature
C daily mode temperature D total daily temperature
E ratio daily temperature.

(iv) River development projects are schemes of water management for
A improving fishing activities B economic and social development
C hydroelectric power production D construction of dams
E controlling floods.

(v) The major environmental problem associated with over exploitation of forest resources is
A industrialization B afforestation C reforestation
D reafforestation E deforestation.

(vi) Conversion of mineral ore into a product ready to be used by man is called
A mining B developing C extracting
D processing E manufacturing.

(vii) The relationship between the direction on the map and compass direction is called
A map reading B map interpretation C map orientation
D map drawing E map measuring.

(viii) When measuring curved distance on a mpa one normally use
A mathematical formulae B string or thread C grid square
D graph paper E mathematical table

(ix) Given that 1:100000, the distance representing the denominator is
A ground B map C linear D curved E scale.

(x) When it is 7:00 am at Mtwara (45°*E*), what will be the location of Siberia which is 2:00 pm?
A 90°*W* B 70°*W* C 105°*E* D 45°*W* E 150°*E*.

14. (a) Write the correct word or words which complete the following sentences in the answer booklet provided.
(i) The practice of recovering the wasted land to make it useful is known as _____.
(ii) A place constructed for observing, measuring and recording weather elements is called _____.
(iii) The electronic device which is sent into space to provide various information is called _____.
(iv) The region in Tanzania where the Nomads dominate is _____.
(v) The ratio between distance on the map and the actual distance on the ground is known as _____.

(b) Write down five characteristics of small scale agriculture.

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 in the answer booklet provided.

(i) Which of the following statements is correct about man's struggle to master his environment?
A It was uneven and took place at the same time.
B It was even and took place at different times.
C It was uneven and took place in all places at the same time.
D It was uneven and took place at different times and places.
E It was even and took place at the same time and place.

(ii) Which of the following was **not** among the ways through which slaves were obtained?
A Raiding villages and capturing people.
B Selling criminals.
C Waylaying and ambush.
D Selling domestic slaves.
E Selling African nationalist prisoners.

(iii) The empire in West Africa which played a middleman's position in salt, gold and slave trade was
A Mali B Songhai C Ghana D Buganda E Oyo.

(iv) The rise and expansion of states in Africa was mostly stimulated by
A Resistance against Portuguese intrusion.
B Primitive accumulation of capital.
C Conquering neighbouring states.
D Establishment of colonialism.
E Establishment of political parties.

(v) One of the crucial changes in the evolution of man was
A bi-pedalism and using fore-limbs for walking
B development of the brain and bi-pedalism
C using hind-limbs for digging up roots and bi-pedalism
D walking on two legs and the discovery of iron
E using iron tools and the discovery of fire.

(vi) The skull of the earliest ancestors of man was discovered by Dr. Leakey in
A 1969 B 1859 C 1869 D 1959 E 1929.

(vii) Mombasa established an independent Sheikhdom in
A 1741 B 1781 C 1841 D 1481 E 1881.

(viii) During the commercial capitalism, European Kings were interested in
A getting colonies from Africa
B acquiring areas for investment
C abolishing slave trade
D civilizing the Africans
E accumulating gold, silver and spices.

(ix) The Portuguese attacks in East Africa during the 16th and 17th centuries led to
A the scramble for and partition of Africa
B the abolition of slave trade in Africa
C the spread of European industrialization in Africa
D the decline of coastal towns and empires
E the coming of the agents of colonialism in Africa.

(x) The leading commercial powers in the 15th century were
A Spain and Portugal
B Britain and America
C France and Holland
D Germany and Spain
E England and France.

16. (a) Write the correct word or words which complete the following sentences in the answer booklet provided.

(i) During the Trans-Saharan trade Bilma and Taghaza were famous for the production of _____.

(ii) The age group of the Maasai whose duty was to protect livestock against enemies and wild animals was known as _____.

(iii) During clan organization, effective control of the major means of production was under the _____.

(iv) A kingdom in South Africa which was led by Shaka was known as _____.

(v) The form of the feudal relations which developed along the coast of East Africa was called _____.

(b) Outline five ways through which primitive accumulation of capital was carried out.

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 among the given alternatives and write its letter beside the item number in the answer booklet provided.

(i) The scientific instrument used to measure the diameter of a thin copper wire is called
A half metre rule
B tape measure
C vernier caliper
D micrometer screw gauge
E thermometer.

(ii) The basic fundamental quantity is
A Force.
B Power.
C Pressure.
D Time.
E Energy.

(iii) A pond skater is capable of walking on the surface of water due to

A cohesive force B adhesive force C capillary action
D viscous force E surface tension.

(iv) The force causing the twisting of an elastic material is called

A attractive B repulsive C torsional
D compressional E restoring.

(v) Which among the following is a non-magnetic material?

A Iron B Cobalt C Nickel D Copper E Steel.

(vi) The force acting on a surface will produce a maximum pressure when the area over which it acts is

A small B large C very small D very large E zero.

(vii) The energy possessed by the body due to its state is called

A potential energy B kinetic energy C mechanical energy
D heat energy E chemical energy.

(viii) The loaded copper wire is said to suffer permanent deformation in a region known as

A elasticity B perfect elasticity C elastic limit
D plastic E plastic limit.

(ix) A ray of light leaving the mirror after reflection is called

A reflected ray B refracted ray C incident ray
D diffuse reflected ray E regular refracted ray.

(x) An electrostatic machine used to produce unlimited supply of sparks by induction is called

A electroscope B gold-leaf electroscope C electrophorus
D electrolytic capacitor E electrostatic generator.

18. (a) Write the name of the following symbols used to represent electric components in a Circuit.

Name	Corresponding Symbol
(i) _____	
(ii) _____	
(iii) _____	
(iv) _____	
(v) _____	

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

(i) The term that expresses numbers which are obtained as a result of measurement is called _____.

(ii) The kinetic theory of matter is used to account for elasticity, surface tension and _____.

(iii) The surface of the earth which is surrounded by a thick layer of air is called _____.

(iv) The instrument used in submarine to view objects on the surface of the sea is called _____.

(v) The vertical plane containing the earth's axis of rotation at any place is called _____.

BASIC MATHEMATICS (20 Marks)

Answer **all** questions.

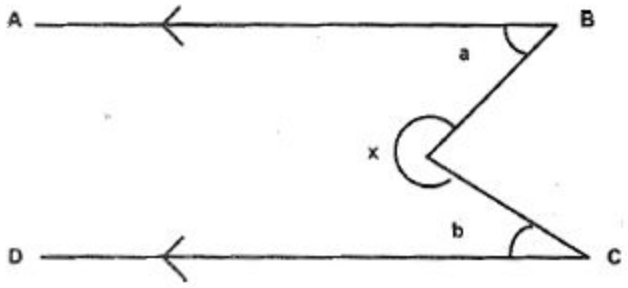
19. (a) Find the smallest number which is divisible by 17 and 15.

(b) Evaluate:

(i) $\frac{1}{12} + 12\frac{3}{4} \times \frac{2}{9} - 13\frac{5}{8} \times \frac{46}{327}$,

(ii) Divide $6\frac{1}{3}$ by $3\frac{1}{2}$.

(c) In the following figure, $a = 45°$ and $b = 36°$. Find the value of x.



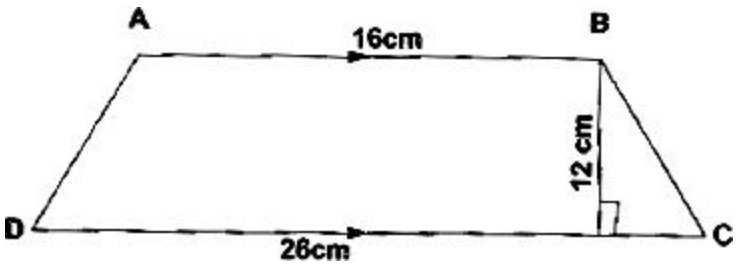
(d) Write the number 56872563:
(i) to the nearest million,
(ii) to four significant figures.

20. (a) A herd of 10,089 cattle is divided to three families, A, B and C in the ratio 2 : 3 : 4. Determine the number of cattle that are given to each of the three families.

(b) A trader bought a bus for 35,600,000/= and decided to sell it for 26,700,000/=. Calculate the percentage loss which the trader incurred.

(c) Solve the following system of simultaneous equations by the elimination method.
$2x - 3y = 6$
$2x + 3y = 2$

(d) In the trapezium ABCD, $AD = BC$.



Find:
(i) The perimeter of the trapezium.
(ii) The area of the trapezium.

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 in the answer booklet provided.

(i) The common symptom which appears in a person suffering from AIDS is
A vomiting B dizziness C anaemia
D swollen limbs E rapid loss of weight up 10 kg.

(ii) Which of the following is the end product of protein in digestions?
A Amino acid. B Protein. C Peptide.
D Glucose. E Oxygen.

(iii) The product of anaerobic respiration in animals is
A oxygen B alcohol C water
D carbondioxide E lactic acid.

(iv) The function of haemoglobin in the blood is
A to add red colour B to carry food C to absorb water
D to refresh air E to carry oxygen.

(v) The best way of rendering First Aid to a person who has been stung or bitten by a bee is
A to cut the injured part B to clean the bitten part with acid
C to tie the bitten part D to remove out the stung from the body
E to kill and remove the bee.

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

(i) A Division of Kingdom Plantae with member lacking true roots, stem and leaves is called _____.

(ii) A Kingdom consisting of members whose bodies has tubular mycelium called hyphae is known as _____.

(iii) A Kingdom consisting of members which are mainly aquatic dwellers including paramecium, amoeba and euglena is known as _____.

(iv) A Division of Kingdom Plantae consisting fern plant is known as _____.

(v) A Division of Kingdom Plantae consisting of microscopic single celled organism with no nucleus bound membrane is known as _____.

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

List A	List B
(i) A blood vessel which carries oxygenated blood from the lung to the heart.	A Capillary
(ii) A blood vessel which carries oxygenated blood from the heart.	B Aorta
(iii) A blood vessel which carries blood towards the kidney.	C Vena cava
(iv) A blood vessel which carries deoxygenated blood from the heart to the lungs.	D Pulmonary vein
(v) A blood vessel which carries deoxygenated blood towards the heart.	E Pulmonary artery
	F Renal artery
	G Renal vein

(b) (i) Define the term "Biology".

(ii) State four importance of studying Biology.

CHEMISTRY (20 Marks)

Answer **all** questions.

23. (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 in the answer booklet provided.

(i) The label FLAMMABLE on a chemical container represents
A combustible liquids B electrical equipment C ordinary combustibles
D combustible metals E corrosive substance.

(ii) The state of matter that has no definite size or shape is called
A solid B liquid C water
D gas E wood.

(iii) A substance that cannot be broken down into a simpler form by ordinary chemical means is called
A element B compound C mixture
D liquid E molecule.

(iv) If your clothing is on fire, what should you do?
A Never run. B Use water or a coat to put out fire.
C Roll on the floor. D Call people's attention.
E Get medical attention.

(v) Chemical change means

A the change is reversible
B produce no change of volume
C the change is complete
D new substance is produced
E produces no change of mass.

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

(i) The factor in the experiment that changes its value when the values of the other variables change is called _____.

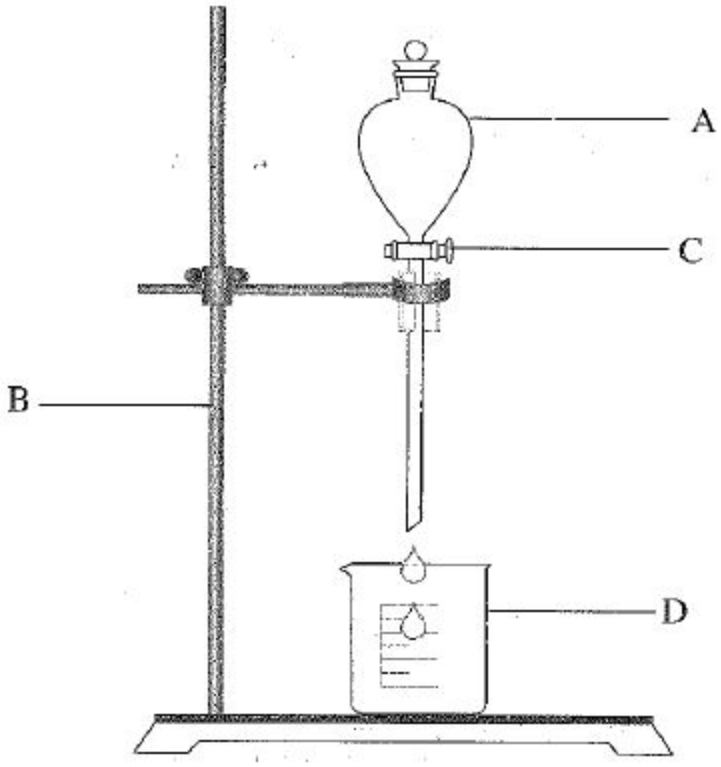
(ii) A chemical warning sign that represent a substance which reacts with oxygen easily is called _____.

(iii) A mixture of liquids that do not mix completely with each other is known as _____.

(iv) A narrow glass tube used to measure specific volumes of liquids is called _____.

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

24. (a) Study the following diagram representing a certain experiment then answer the questions that follow.



(i) Name the parts labelled A, B, C and D.

(ii) What process was taking place in the experiment?

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

List A	List B
(i) Everything found within our environment.	A Gas
(ii) Particles which are loosely connected, and take on the shape of the container.	B Liquid
(iii) Particles that are spread as far apart as possible and fill the shape of the container.	C Water
(iv) Particles stuck together, and cannot easily change.	D Solid
(v) A liquid that melt at a temperature of 0°C.	E Molecule
	F Matter
	G Air