

Name/ Index No :-

Time : 2 Hours

Part - I

Underline the most suitable answer

(1) A moist slice of bread is observed after a week. The micro - organism that can observed commonly on it is,
(1) yeast (2) mucor (3) algae (4) amoeba

(2) Select the answer which shows the groups of organisms that A and B organism shown in the diagram belong.

- (1) arthropoda, molluska
- (2) reptilia, cnidaria
- (3) Aves, mollusks
- (4) arthropoda, cnidaria



A



B

(3) Select the plant having leaves with margins as shown in the diagram.

- (1) rose
- (2) shoe flowers
- (3) Aloe
- (4) bryophyllum

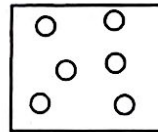


(4) Which of the following function is not done by an underground stem?

- (1) Perennation (2) storing food
- (3) vegetative propogation (4) photosynthesis

(5) This diagram shows an arrangement of particles in a certain matter. Select the fact that cannot be explained by it.

- (1) arrangement of particles in a gas
- (2) discontinuous nature of matter
- (3) ability of compressing
- (4) having a definite volume

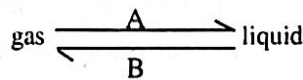


(6) Which of the following is the instance of not fading the magnetic property of a magnet?

- (1) dropping a magnet down (2) subjecting to a high teperature
- (3) storing properly (4) keeping closer to a strong magnetic field

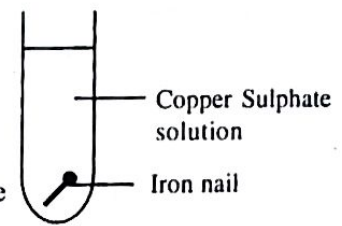
(7) Select the suitable words for the changes A and B shown above.

- (1) A - Fusion, B - freezing
- (2) A - Sublimation, B - Vapourization
- (3) A - Condensation, B - vapourization
- (4) A - Vapourization, B - freezing



(15) Which of the following is not an observation obtained when a cleaned iron nail is added to a copper sulphate solution as shown in the diagram?

- (1) decreasing the colour of the solution
- (2) emitting a brown colour gas
- (3) increasing the temperature
- (4) depositing a reddish brown substance at the bottom of the test tube



(16) Which of the following is the boiling point of pure water at the standard atmospheric pressure?

- (1) 100 °C
- (2) 0 °C
- (3) 103 °C
- (4) 77 °C

(17) There are instances of using microorganisms to control pests. Select the answer which describes this

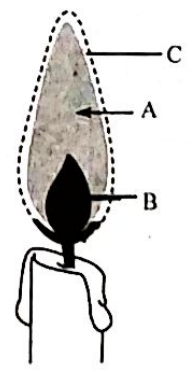
- (1) paratism
- (2) biological control
- (3) immunization
- (4) decomposition

(18) Select the correct statement of the following statements.

- (1) Sound of birds is an artificial sound
- (2) Humming of bees becomes from fast motion of their wings
- (3) Xylophone is an instrument that produces sound by vibrating plates
- (4) All artificial sounds are harmful to man

(19) Select the answer which shows A, B, C zones present in the candle flame respectively

- (1) A - non-luminous, B - luminous, C -external
- (2) A - non-luminous, B - external, C - luminous
- (3) A - luminous, B - non luminous, C - external
- (4) A - luminous, B - external, C - non luminous



(20) Which of the following substance gets subjected to sublimation?

- (1) wax
- (2) ice
- (3) iron
- (4) iodine

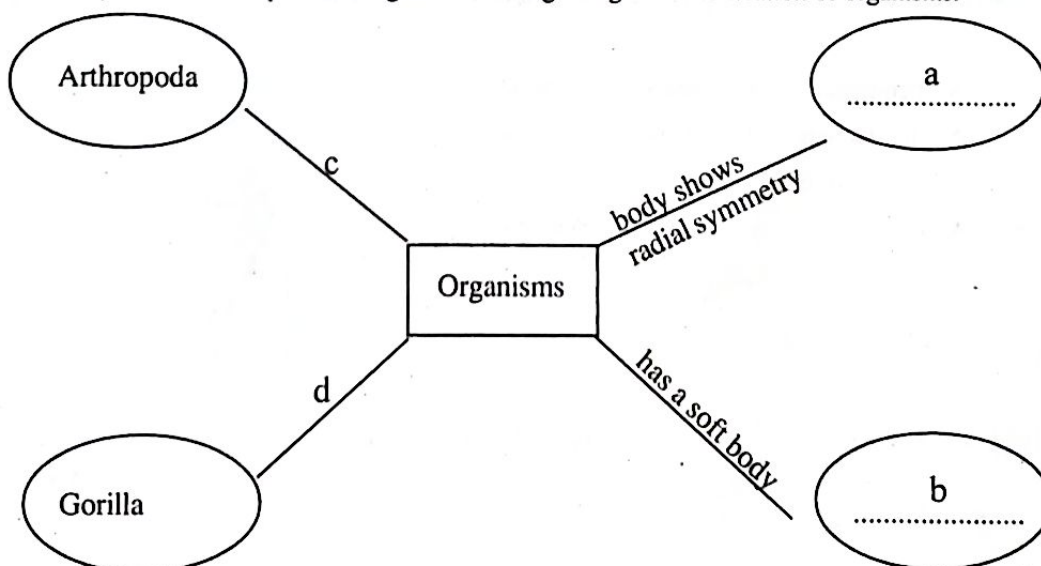
Part II

- Question no 01 is compulsory. Select any four questions from the other six questions and answer for 05 questions.

01. (A) Two sets of plants found by two children in grade 8 in their environmental observation are shown below.

Student A	Student B
pandanus	banana
orchid	temple flowers
curry leaves	chillies
sugar cane	manioc
papaw	"kenda"

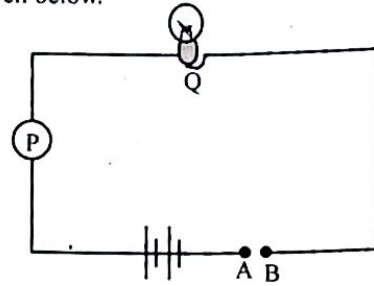
- (i) Select one plant each from the above two sets of plants which is suitable for the features shown below.
 - a) with propagative roots
 - b) with underground stems
 - (ii) What is the function done by aerial roots in orchid plants?
 - (iii) One method of removing water from a plant is transpiration. What is meant by transpiration?
 - (iv) One plant present in the set of student B is adapted to reduce transpiration. Name this plant and write the adaptation shown by it for it.
 - (v) Ethyl alcohol can be produced by the action of a certain micro - organism on the juice, extracted by crushing the stem of sugar cane.
 - (a) Name the micro -organism that contributes for this action.
 - (b) Name the group of micro-organism that the above mentioned micro organism belongs?
 - (vi) Micro-organisms cause diseases for animals as well as plants. Select one plant each from the above two sets of plants A and B and write the disease caused by micro-organisms for them.
- (B) complete the incomplete chart given below regarding the classification of organisms.



- (i) Name the invertebrate groups suitable for a and b places.
- (ii) Write a specific characteristic possessed by the animal groups that the given animals belong for c and d places.
- (iii) Write one advantage of classifying organisms.

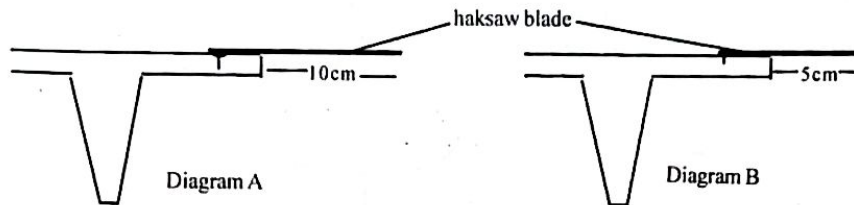
02. A circuit prepared for testing electric conductivity of materials is given below.

- (i) Draw the standard symbol for the accessory Q
- (ii) The materials given below were connected separately to the gap A B and observed
 - * a copper wire
 - * a nichrome wire
 - * plastic ruler
 - * a needle
 - * an eraser



- (iii) What substances out of the above list should be placed in between A and B to light the bulb Q?
- (iii) Write 2 other physical properties possessed by the materials that conduct electricity.
- (iv) Write the function done by the instrument P connected to the circuit. Mark its positive (+) and negative (-) terminals by copying the above circuit in your answer sheet.
- (v) A nichrome wire and a copper wire with equal width and length are kept separately in between the A and B gap. Explain the difference of the brightness of the bulb you observed.
- (vi) What is the physical property possessed by the above both wires to show the above difference?
- (vii) Mention the standard unit used for measuring the above physical property.

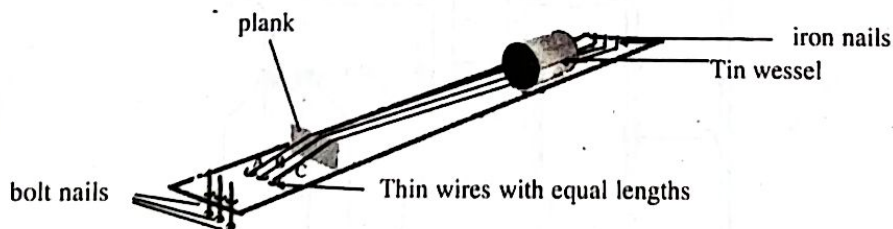
03. (A)



The above diagrams show how two equal hacksaw blades are clamped separately to two tables?

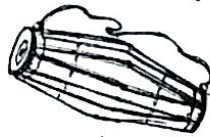
- (i) What hacksaw blade should be vibrated to give a sharp sound?
- (ii) The increase in which physical property of sound is the reason for it?
- (iii) The hacksaw blade A above vibrates 50 times in 10 seconds. Calculate the frequency of it.

(B) This diagram shows a musical instrument prepared by a student.



- (i) What is the device used to produce sound by this instrument?
- (ii) The frequency of the sound created by the wire B is higher than that of A. If so write two features that differ B wire from A wire.
- (iii) What is the reason for connecting one end of these wires to bolt nails?
- (iv) For what is a tin vessel connected to this instrument?

- (v) Write the parts that are vibrated in the musical instruments given below to produce sound.

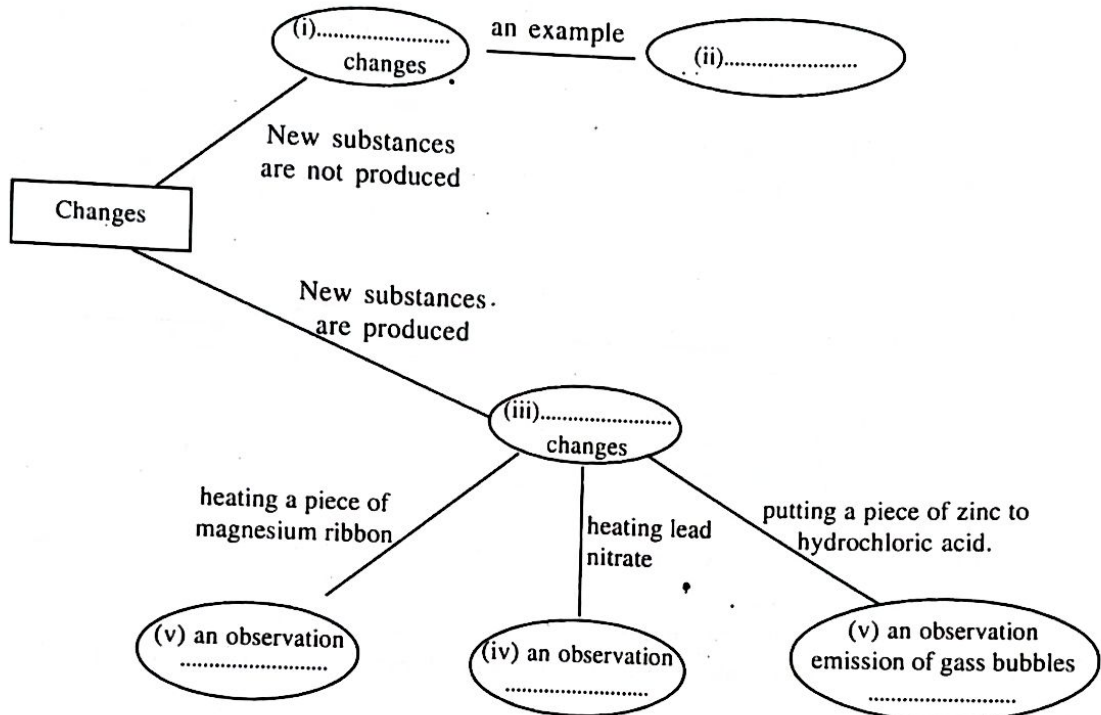


(a)

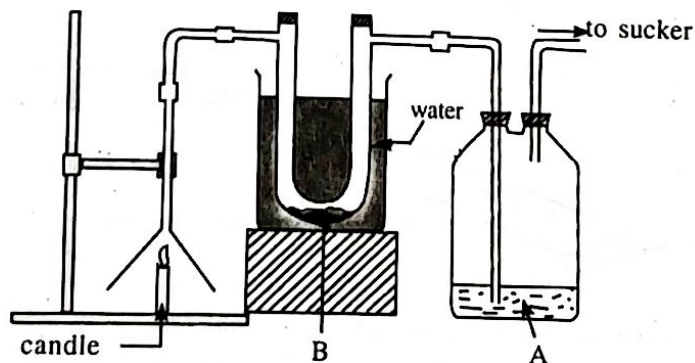


(b)

- (vi) Write a disease condition for which musical therapy is used as a treatment method?
04. (A) Complete this incomplete concept map regarding changes in matter.

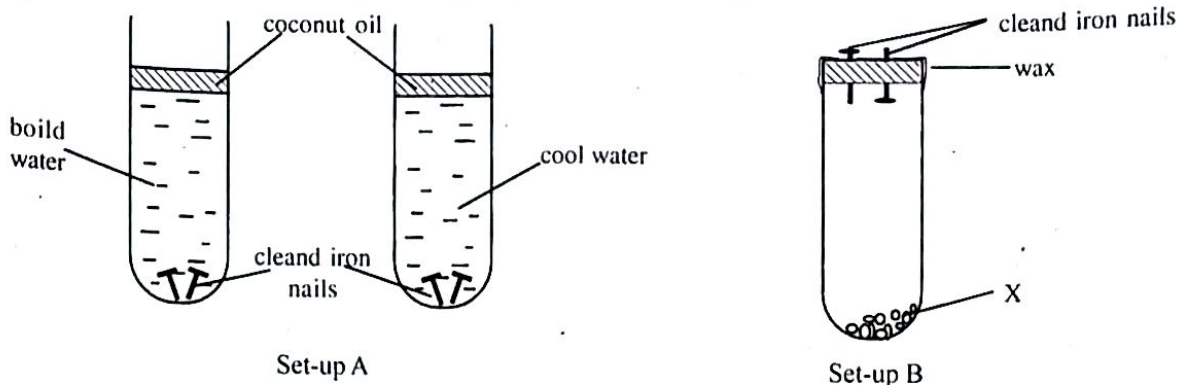


- (B) The set-up prepared to observe products produced in combustion of fuel is shown below.



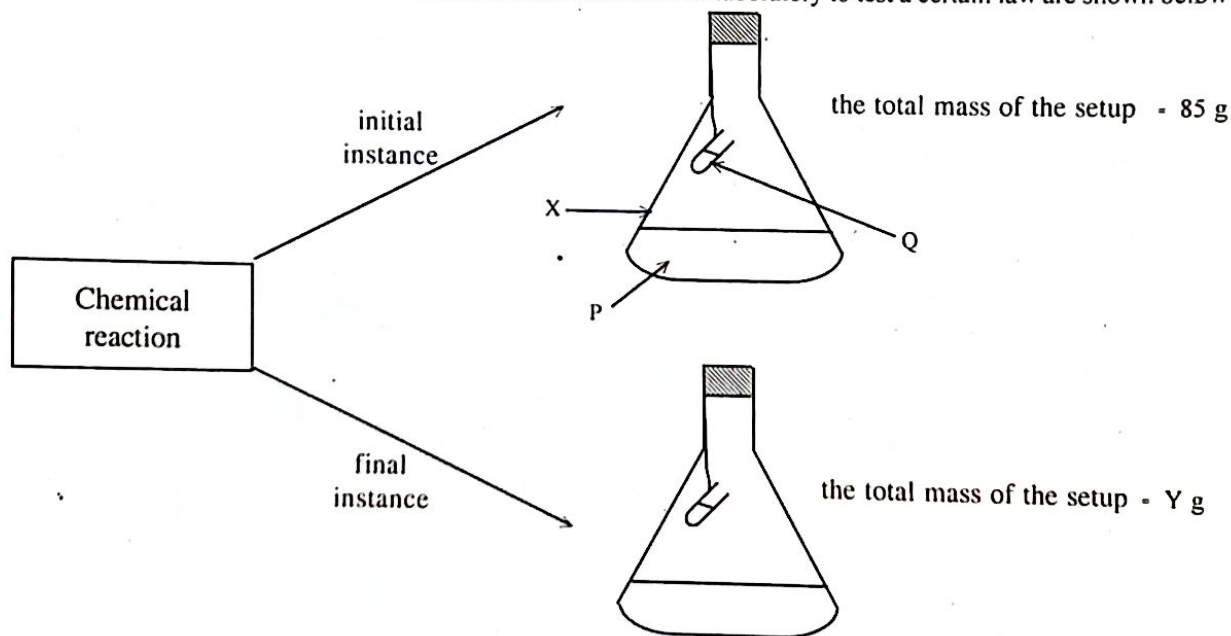
- What are the substances used as A and B in the above activity?
- Explain the changes taken place in the substance B after sometimes of lighting the candle
- To show the emission of which product in combustion is the substance A used?
- What are the factors needed for combustion?

05. Two set - ups for an activity related to rusting of iron are shown below.



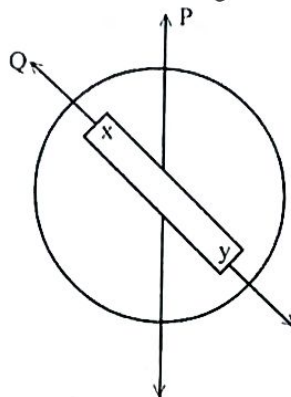
- (i) Why boiled water is added to one tube in the set-up A?
- (ii) What is expected by putting a layer of coconut oil on to water in the tubes in this set-up?
- (iii) (a) What is the observation obtained after several days of preparing the set up A
(b) According to it what is your conclusion?
- (iv) What is the function done by the substance X in the set-up B?
- (v) Why is wax applied around the mouth of the tube here?
- (vi) What is expected by fixing the two iron nails either sides in the set up B?
- (vii) The effect of which factor needed for rusting can be concluded by the set up B?
- (viii) write 2 strategies used to protect iron from rusting.

06. (A) The information about a chemical reaction done in the laboratory to test a certain law are shown below



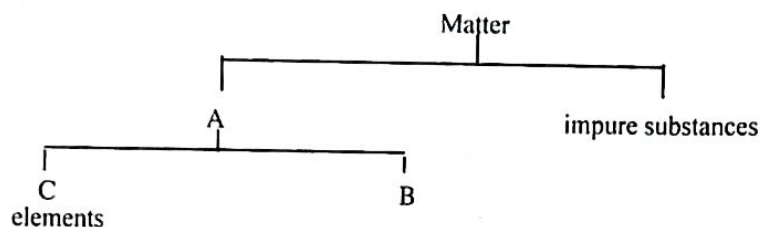
- (i) Write the suitable answers in front of the instances given below.
 - (a) Name the instrument X.
 - (b) Suggest 2 chemicals that can be used for chemicals P and Q.
 - (c) What is the mass Y according to the given information?
 - (d) What is the colour of the precipitation produced in the instrument X at the final instance?
- (ii) Write the law which can be introduced by considering the masses of the initial and the final instances.
- (iii) Who is the scientist who forwarded this law for the first time?

(B) This diagram shows how the earth magnetic field is located.



- (i) Identify the directions shown as P and Q and name them.
- (ii) What is the pole shown as X in the earth magnet?

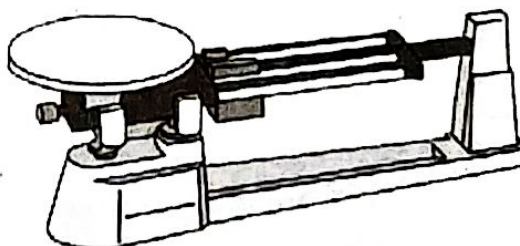
07. Answer the questions below using the block diagram related to matter.



- (i) Write the suitable words for the places A and B according to the above chart.
- (ii) Classify the matter given below to the groups B and C. sulphur, glucose, water, salt
- (iii) Write a difference between A above and impure substances.
- (iv) Two instruments need to calculate a certain physical property of pure water are shown below.



X



Y

- (a) Identify the above instruments X and Y and name them.
- (b) Write separately 2 physical quantities of pure water that can be measured by the instruments X and Y.
- (c) Write a fact that should be considered when the instrument X is used.
- (v) Write another physical property that can be used to decide the purity of a substance other than the physical property mentioned in part iv.
- (vi) Write the elements present in copper sulphate.