

COMPETENCY BASED QUESTIONS

CLASS VI SUBJECT: SCIENCE

CHAPTER 1 – FOOD: WHERE DOES IT COME FROM?

1. Given below are names of some animals.

- (i) Goat
- (ii) Human beings
- (iii) Cockroach
- (iv) Eagle

which of the above animals form a pair of omnivores?

- (a) (i) and (ii)
- (b) (ii) and (iii)
- (c) (iii) and (iv)
- (d) (ii) and (iv)

Ans. (b) Human beings and Cockroach.

2. Honeybee makes honey from

- (a) pollen
- (b) petals
- (c) nectar
- (d) bud.

Ans. (c) nectar.

3. Below are the names of some animals.

- (i) Cow
- (ii) Sheep
- (iii) Horse
- (iv) Ox

Which of the above are sources of milk for human beings?

- (a) (i) and (iii)
- (b) (i) and (ii)
- (c) (ii) and (iii)
- (d) (iii) and (iv)

Ans. (b) Cow and Sheep.

4. Given below is a list of edible plants.

- (i) Banana
- (ii) Pumpkin
- (iii) Lady's finger
- (iv) Brinjal

Which pair of plants have two or more edible parts?

- (a) (i) and (ii)
- (b) (ii) and (iii)
- (c) (iii) and (iv)
- (d) (i) and (iv)

Ans. (a) Banana and Pumpkin.

5. The part of a banana plant not used as food is

- (a) flower
- (b) fruit
- (c) stem

(d) root.

Ans. (d) root.

6. Read each set of terms and identify the odd set.

(a) Cow, milk, butter

(b) Hen, meat, egg

(c) Goat, milk, meat

(d) Plant, vegetable, buttermilk

Ans. (d) Plant, vegetable, buttermilk

7. Read the clues and fill up the blanks given below each of them.

(a) Honeybees suck from flower.

N _ _ T _ R

Ans. (a) NECTAR

(b) Animals which eat other animals.

_ A _ N _ V _ R _ S

Ans. (b) CARNIVORES

(c) Animals which eat only plants and plant products.

HE _ B _ _ _ _ E _

Ans. (c) HERBIVORES

(d) Animals which eat both plants and animals.

_ M N I _ O _ _ _

Ans. (d) OMNIVORES

8. Given below are jumbled words which are names of parts of a plant. Rearrange them to get the correct words.

(a) LILCHI

(b) ITRUF

(c) SEANBOYA

(d) GURSA

(e) ROUNDGUNT

Ans. The rearranged words are:

(a) CHILLI

(b) FRUIT

(c) SOYABEAN

(d) SUGAR

(e) GROUNDNUT

9. Identify the animals in the grid given below as figure and categorize them into herbivore, carnivore and omnivore.

T	A	C	O	W	O	L	F
T	A	R	W	X	G	O	R
N	N	O	L	I	O	N	O
E	T	W	Q	L	A	N	G
H	U	M	A	N	T	W	O

Ans.

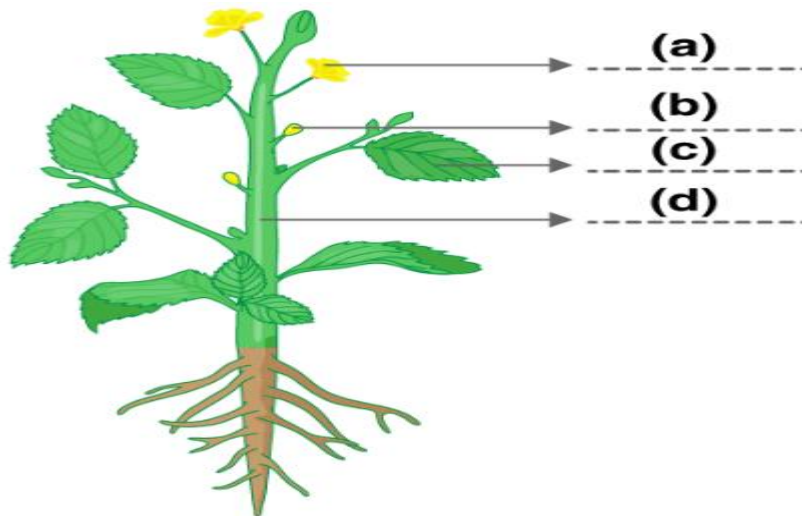
T	A	C	O	W	O	L	F
T	A	R	W	X	G	O	R
N	N	O	L	I	O	N	O
E	T	W	Q	L	A	N	G
H	U	M	A	N	T	W	O

Herbivore – Cow, Goat, Hen

Carnivore – Wolf, Lion, Frog

Omnivore – Cat, Rat, Crow, Human, Ant, Owl

10. Label the different parts of the plant in the figure given below.



Ans.

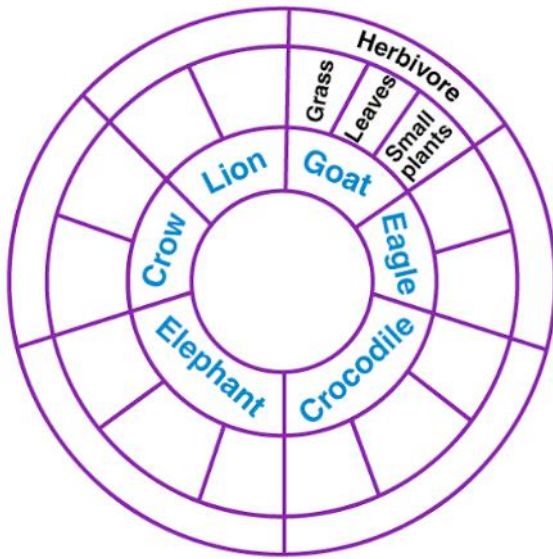
(a) Flower

(b) Floral bud

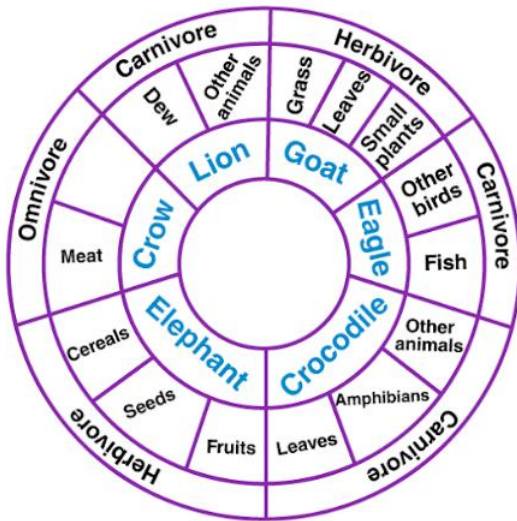
(c) Leaf

(d) Stem

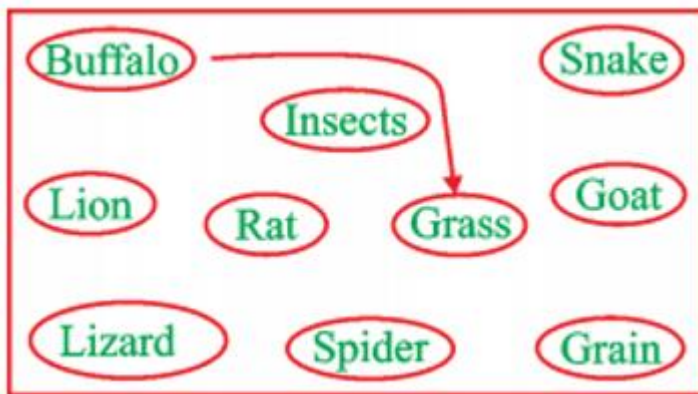
11. Read the names of animals written in the inner ring of the given figure. Within the second ring write the types of food they eat and the category to which they belong (based on the eating habit) in the outermost ring.



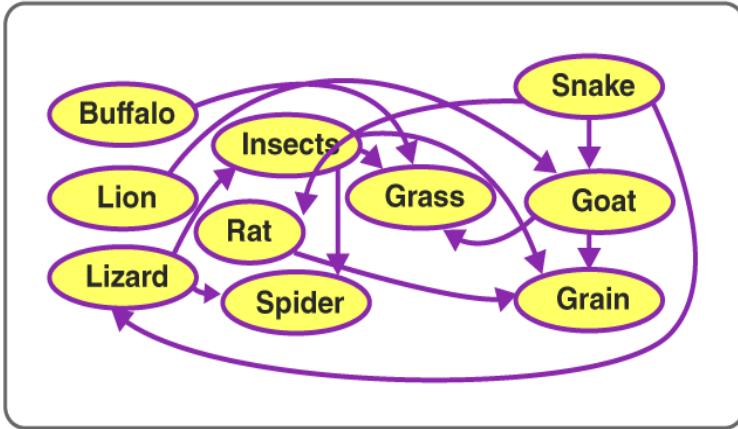
Ans.



12. Connect the animal with the food it eats by an arrow using different colours in the given figure.



Ans.



Buffalo – Grass

Lion – Goat

Lizard – Insects, Spider

Rat – Grain

Insect – Grain, Grass

Spider – Insects

Snake – Rat, Lizard, Goat

Goat – Grass, Grain

CHAPTER 2 COMPONENTS OF FOOD

1. Which one of the following food items does not provide dietary fibre?
 - (a) Whole grains
 - (b) Whole pulses
 - (c) Fruits and vegetables
 - (d) Milk

Ans. (d) Milk

2. Which of the following sources of protein is different from others?
 - (a) Peas
 - (b) Gram
 - (c) Soyabeans
 - (d) Cottage cheese (paneer)

Ans. (d) Cottage cheese (paneer)

3. Which of the following nutrients is not present in milk?
 - (a) Protein
 - (b) Vitamin C
 - (c) Calcium
 - (d) Vitamin D

Ans. (b) Vitamin C

4. Read the food items given below:
 - (i) Wheat
 - (ii) Ghee
 - (iii) Iodised salt
 - (iv) Spinach (palak)

Which of the above food items are “energy giving foods”?

- (a) (i) and (iv)
- (b) (ii) and (iv)
- (c) (i) and (ii)
- (d) (iii) and (iv)

Ans. (c) (i) and (ii)

5. Read the following statements about diseases.
 - (i) They are caused by germs.
 - (ii) They are caused due to lack of nutrients in our diet.
 - (iii) They can be passed on to another person through contact.
 - (iv) They can be prevented by taking a balanced diet.

Which pair of statements best describe a deficiency disease?

- (a) (i) and (ii)
- (b) (ii) and (iii)
- (c) (ii) and (iv)

(d) (i) and (iii)

Ans. (c) (ii) and (iv)

6. Given below are the steps to test the presence of proteins in a food item:
- (i) Take a small quantity of the food item in a test tube, add 10 drops of water to it and shake it.
 - (ii) Make a paste or powder of food to be tested.
 - (iii) Add 10 drops of caustic soda solution to the test tube and shake well.
 - (iv) Add 2 drops of copper sulphate solution to it.
- Which of the following is the correct sequence of the steps?

(a) i, ii, iv, iii

(b) ii, i, iv, iii

(c) ii, i, iii, iv

(d) iv, ii, i, iii

Ans. (b) ii, i, iv, iii

7. Unscramble the following words related to components of food and write them in the space provided.

(a) reinpot _____

(b) menliars _____

(c) tivanmi _____

(d) bocatradhyer _____

(e) nitesturn _____

(f) tfa _____

Ans. (a) Protein (b) Minerals (c) Vitamin (d) Carbohydrates (e) Nutrients (f) Fat

8. Fill in the blanks given below:

(a) Egg yolk is rich in _____ and egg albumin is rich in _____.

(b) Deficiency diseases can be prevented by taking a _____.

(c) Eating too much of fat rich foods may lead to a condition called _____.

(d) The component of food that does not provide any nutrient to our body and yet is essential in our food is _____.

(e) The vitamin that gets easily destroyed by heating during cooking is _____.

Ans. (a) fat, protein (b) balanced diet (c) obesity (d) roughage (e) Vitamin C

9. Read the items of food listed below. Classify them into carbohydrate rich, protein rich and fat rich foods and fill them in the given table.

Moong dal, fish, mustard oil, sweet potato, milk, rice, egg, beans, butter, butter milk (chhachh), cottage cheese (paneer), peas, maize, white bread.

Ans.

Carbohydrates Rich Food Item (A)	Protein Rich Food Item (B)	Fat Rich Food Item (C)
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Sweet potato, rice, maize, white bread	Moong dal, fish, milk, egg, beans, butter milk (chhachh), cottage cheese (paneer), peas	Mustard oil, fish, milk, egg, butter
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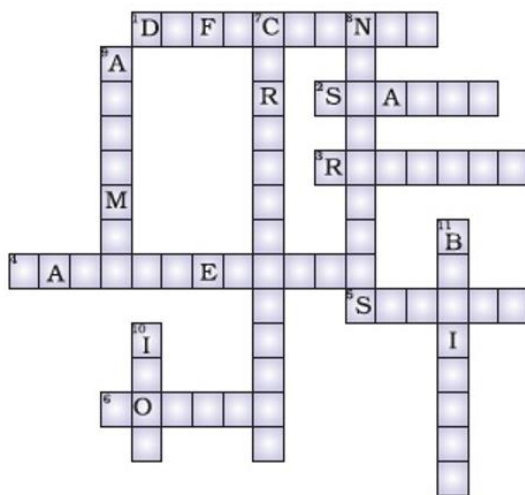
10. Rohan was having difficulty in seeing things in dim light. The doctor tested his eyesight and prescribed a particular vitamin supplement. He also advised him to include a few food items in his diet.
- Which deficiency disease is he suffering from?
 - Which food component may be lacking in his diet?
 - Suggest some food items that he should include in his diet.

Ans. (a) Rohan is suffering from night blindness which results in difficulty of seeing things in dim light.

(b) Deficiency of vitamin A causes night blindness. Hence vitamin A might be lacking in his diet.

(c) In his diet, Rohan can include food items such as carrot, spinach, papaya, milk, green leafy, vegetables, fish oil, etc. which are rich in vitamin A.

11. Solve the cross-word puzzle given as Figure from the clues given below.



Across

- Lack of nutrients in our diet over a long period causes these diseases (10)
- Rice and potato are rich in this type of carbohydrate (6)
- Deficiency disease in bones making it become soft and bent (7)
- The diet that provides all the nutrients that our body needs, in right quantities, along with adequate amount of roughage and water (8, 4)
- Deficiency disease with bleeding gums (6)
- Disease caused due to deficiency of iodine (6)

Ans. 1. DEFICIENCY 2. STARCH 3. RICKETS 4. BALANCED DIET 5. SCURVY 6. GOITRE

Down

- Starch and sugar in our food are rich in this type of energy giving nutrient (13)
- The term given to the useful components of food (9)

9. The disease caused by deficiency of iron in diet (7)

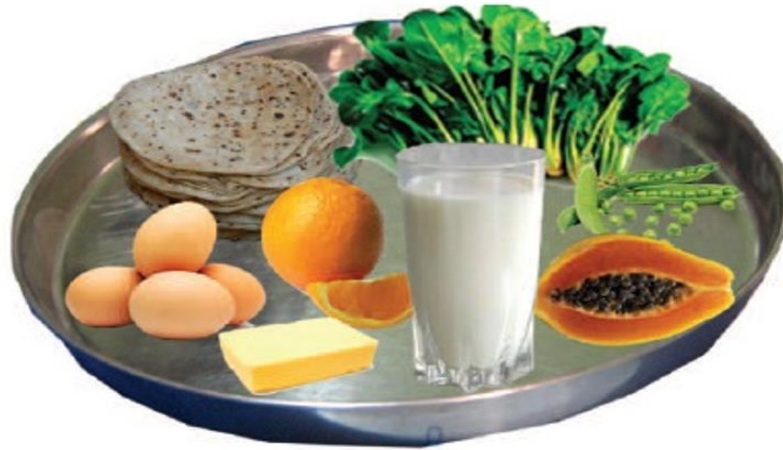
10. Green leafy vegetables, liver and apples are rich in this mineral (4)

11. Deficiency disease caused due to lack of Vitamin B 1 in the diet (8)

Ans. 7. CARBOHYDRATES 8. NUTRIENTS 9. ANAEMIA 10. IRON 11.

BERIBERI

12. Observe the items given in figure given below carefully and answer the questions that follow.



- (a) Food item rich in carbohydrates is (i) .
- (b) Egg is a rich source of protein, the mineral (ii) and vitamin (iii) .
- (c) (iv) is a rich source of fat.
- (d) Milk provides (v), vitamin D and (vi) (mineral)
- (e) (vii) (fruit) is a rich source of vitamin A.
- (f) Spinach is a good source of the mineral (viii) .
- (g) Both eggs and (xi) are rich in (x) .

Ans. (i) Chapati (ii) phosphorus (iii) D (iv) Butter (v) protein (vi) calcium (vii) papaya (viii) iron (ix) peas (x) proteins

13.



Food Items Rich in Component 'X'

Observe the given and answer the following questions:

(a) The food items shown are mainly rich in 'X', a nutrient component of food. What is 'X'?

Ans. (a) X is Protein

(b) Name the disease caused by deficiency of component 'X'.

Ans. (b) Kwashiorkor

(c) What is the main function of this food component?

Ans. Proteins are required for growth and repairing of tissues in our body. They help in building new tissues.

(d) What are the chemicals used to test the presence of the 'X' in the food items?

Ans. (d) Copper sulphate, Caustic Soda and Biuret Reagent

14. Reena performed the following test on the given food sample

Water soluble food sample + iodine solution → observed blue black colour.

Which component of food is present in it?

A. Proteins

B. Vitamins

C. Starch

D. Fat

Ans. C. Starch

15. From given help box find out the correct vitamin or mineral and write it at the centre of the given images A and B.

Vitamin D	Vitamin C	Iron	Proteins	Iodine
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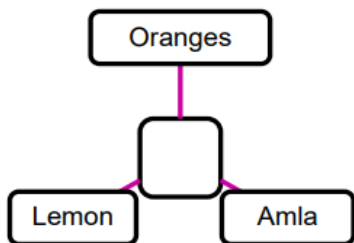


Image A

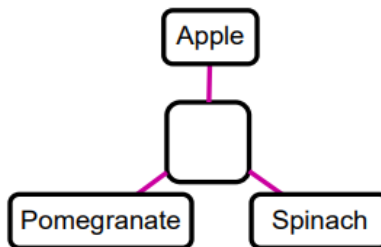


Image B

Ans. In Image A Vitamin C

In image B Iron

16. Case Study Question

We know that each dish is usually made up of one or more ingredients, which we get from plants or animals. These ingredients contain some components that are needed by our body. These components are called nutrients. The major nutrients in our food are named carbohydrates, proteins, fats, vitamins and minerals. In addition, food contains dietary fibres and water which are also needed by our body. With some simple methods we can test whether cooked food or a raw ingredient contains one or more of these nutrients. For carrying out these tests, you will need solutions of iodine, copper Sulphate and caustic soda. You will also need a few test tubes and a dropper. Try these tests on cooked food items as well as raw materials. If the required solutions are not available in readymade form, you can prepare them as given in the Table. There are many types of carbohydrates. The main carbohydrates found in our food are in the form of starch and sugars.

Table:

A dilute solution of iodine can be prepared by adding a few drops of tincture iodine to a test tube half filled with water.
Copper sulphate solution can be prepared by dissolving 2 g of copper sulphate in 100 ml of water.
10 g of Caustic soda dissolved in 100 ml of water makes the required solution of Caustic soda.

Q1. Starch and sugar are the forms of carbohydrates mainly present in our food?

- (a) True
- (b) False

Ans. (a) True

Q2. To make the solution of caustic soda, we need to dissolvein 100 ml of

- (a) Iodine and water
- (b) Salt and water
- (c) Caustic soda and salt
- (d) Caustic soda and water

Ans. (d) Caustic soda and water

Q3. Which of the following is NOT required to test the presence of nutrients in food?

- (a) Vinegar solution
- (b) Iodine solution
- (c) Copper Sulphate
- (d) Caustic soda solution

Ans. (a) Vinegar solution

Q4. What are nutrients? Give one example?

Ans. Our food is made up of one or more ingredients. These ingredients contain components that are needed by our body. These components are called Nutrients. For example- Proteins

Q5. Name all the components present in our food?

Ans. The major nutrients in our food are carbohydrates, proteins, fats, vitamins and minerals. Apart from nutrients, food also contains dietary fibres and water.

CHAPTER – 3 FIBRE TO FABRIC

1. Sunidhi wants to present her friend a gift made of plant fibre. Which out of the following will she select?

- (a) Jute bag
- (b) Woollen shawl
- (c) Silk saree
- (d) Nylon scarf

Ans. (a) Jute Bag

2. Which statement out of the following is incorrect?

- (a) Use of charkha was popularized by Mahatma Gandhi as a part of the Independence Movement.
- (b) In India, jute is mainly grown in Kerala and Punjab.
- (c) To make fabric, the fibres are first converted into yarns.
- (d) Sufi saint Kabir was a weaver.

Ans. (b) In India, jute is mainly grown in Bihar, West Bengal, Assam and Andhra Pradesh.

3. Which of the following materials did people use in ancient times for making clothes?

- (i) Leaves of trees
 - (ii) Newspaper
 - (iii) Metal foils
 - (iv) Animal skins and furs
- (a) (i) and (ii)
 - (b) (i) and (iii)
 - (c) (ii) and (iii)
 - (d) (i) and (iv)

Ans. (d): Leaves of trees and Animal skins and furs.

4. Which of the following is not a natural fibre?

- (a) Cotton
- (b) Jute
- (c) Nylon
- (d) Flax

Ans. (c) Nylon, it is a synthetic fibre manufactured using chemicals at factories.

5. Which set of substances is not used for making fibres?

- (a) Silk, chemicals
- (b) Yak hair, camel hair
- (c) Husk, bones
- (d) Flax, wool

Ans. (c) Husk, bones

6. Ajay went to a cloth shop. There he found a fabric which was smooth to touch, and had vibrant colour and shine. The fabric could be

- (a) cotton
- (b) wool
- (c) silk
- (d) jute.

Ans. (c) Silk, it is obtained from the cocoon of the silkworm.

7. Which part of the jute plant is used for getting jute fibre?

- (a) Flower
- (b) Stem

(c) Fruit

(d) Leaf

Ans. (b) Stem

8. Yarn is woven to get fabric using

(a) charkha

(b) spinning machines

(c) looms

(d) knitting needles.

Ans. (c) looms

9. Beera is a farmer. His field has black soil, and the climate is warm. Which fibre-yielding plant should he grow in his field?

(a) Jute

(b) Cotton

(c) Coconut

(d) Wool

Ans. (b) Cotton, Places having black soil and warm climatic condition is good for yielding cotton plants.

10. The correct sequence to get cloth is

(a) fibre → fabric → yarn

(b) fibre → yarn → fabric

(c) fabric → yarn → fibre

(d) yarn → fibre → fabric.

Solution:

(b): fibre → yarn → fabric

11. Binny wants to make yarn from the fibre at home. Which of the following will he use to carry out the task?

(a) Power loom

(b) Handloom

(c) Charkha

(d) Knitting needles

Ans. (c) Charkha, Spinning is the method of making yarn from fibres. Charkha is a simple hand-operated device used for spinning.

12. Yarn, fabric and fibres are related to each other. Show the relationship by filling the blanks in the following sentence.

The fabric of a cotton saree is made by weaving cotton_____ which in turn is made by spinning thin cotton_____.

Ans. yarn, fibres

13. Some terms related to fabrics are jumbled up and given below. Write them in their correct form.

(a) onttoc

(b) sinnping

(c) vingwea

(d) bisref

Ans. (a) Cotton

(b) Spinning

(c) Weaving

(d) Fibres

14. State whether the following statements are true or false. If false, correct them.

(a) Silk is a plant fibre.

(b) Jute is obtained from the leaves of a plant.

(c) Weaving is a process of arranging two sets of yarn together.

(d) Cotton yarn on burning gives an odour similar to that of a burning paper.

Ans. (a) False. Since silk is an animal fibre obtained from silkworms.

(b) False. Since jute is obtained from the stem of a plant.

(c) True

(d) True

15. Match the articles given in column I with the articles in column II.

Column I	Column II
(a) Sweater	(i) Cotton
(b) Cotton bolls	(ii) Wool
(c) Dhoti	(iii) Ginning
(d) Gunny bags	(iv) Jute

Ans. (a) – (ii), (b) – (iii), (c) – (i), (d) – (iv)

16. Fill in the blanks to complete the life story of cotton fibre.

My parents, cotton plants were grown in _____ soil and _____ climate. The plants bore fruits called _____. I, the cotton fibre, was separated from seeds in the cotton bolls by the process of _____. Other cotton fibres and myself were made into yarn by the process of _____. The yarn was _____ to give beautiful colours and then to get cotton fabric.

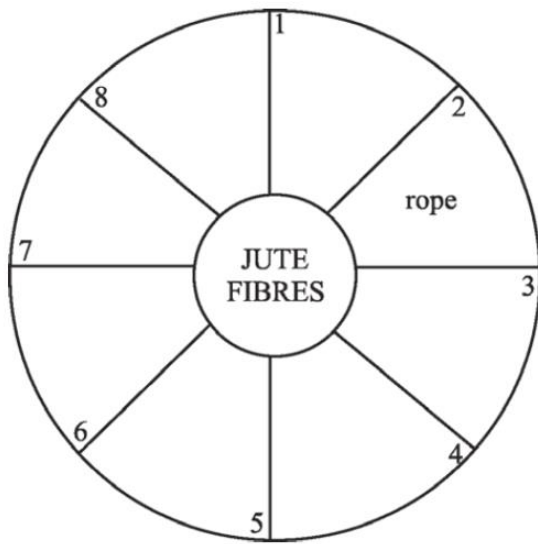
Ans. (i) black (ii) warm (iii) cotton bolls (iv) ginning (v) spinning (vi) dyed

17. Match the terms given in column I with the statements given in column II.

Column I	Column II
(a) Weaving	(i) A single yarn used to make a fabric
(b) Knitting	(ii) Combing of cotton fibres to remove seeds
(c) Spinning	(iii) Yarns are made from these thin strands
(d) Ginning	(iv) These are spun from fibres and then used to make fabrics
(e) Fibre	(v) Process of arranging two sets of yarns together to make a fabric
(f) Yarn	(vi) Process of making yarn from fibres

Ans. (a) – (v), (b) – (i), (c) – (vi), (d) – (ii), (e) – (iii), (f) – (iv)

18. Fill in the names of useful items made from jute fibres in the given figure.



Ans.



CHAPTER 4 SORTING MATERIALS INTO GROUPS

1. An iron nail is kept in each of the following liquids. In which case would it lose its shine and appear dull?

- (a) Mustard oil
- (b) Soft drink
- (c) Coconut oil
- (d) Kerosene

Ans. (b) Soft drink

2. Pick one material from the following which is completely soluble in water.

- (a) Chalk powder
- (b) Tea leaves
- (c) Glucose
- (d) Saw dust

Ans. (c) Glucose

3. You are provided with the following materials

- (i) Magnifying glass
- (ii) Mirror
- (iii) Stainless steel plate
- (iv) Glass tumbler

Which of the above materials will you identify as transparent?

- (a) (i) and (ii)
- (b) (i) and (iii)
- (c) (i) and (iv)
- (d) (iii) and (iv)

Ans. (c) (i) and (iv)

4. Rehana found a bag containing the following materials

- (i) Mirror
- (ii) Paper stained with oil
- (iii) Magnet
- (iv) Glass spectacles

Help Rehana in finding out the material(s) which is/are opaque.

- (a) (i) only
- (b) (iv) only
- (c) (i) and (iii)
- (d) (ii) and (iv)

Ans. (c) (i) and (iii)

5. While doing an activity in class, the teacher asked Harshita to handover a translucent material. Which among the following materials will Harshita pick and give her teacher?

- (a) Glass tumbler
- (b) Mirror
- (c) Muslin cloth
- (d) Aluminium foil

Ans. (c) Muslin cloth

6. Which pair of substances among the following would float in a tumbler half filled with water?

- (a) Cotton thread, thermocol
- (b) Feather, plastic ball
- (c) Pin, oil drops
- (d) Rubber band, coin

Ans. (b) Feather, plastic ball

7. Which among the following are commonly used for making a safety pin?

- (a) Wood and glass
- (b) Plastic and glass
- (c) Leather and plastic
- (d) Steel and plastic

Ans. (d) Steel and plastic

8. Which of the following materials is not lustrous?

- (a) Gold
- (b) Silver
- (c) Wood
- (d) Diamond

Ans. (c) Wood

9. Find the odd one out from the following

- (a) Tawa
- (b) Spade
- (c) Pressure cooker
- (d) Eraser

Ans. (d) Eraser

10. Which type of the following materials is used for making the front glass (wind screen) of a car?

- (a) Transparent
- (b) Translucent
- (c) Opaque
- (d) All the above

Ans. (a) Transparent

11. During summer holidays, a group of children collected a lump of salt, green grass, broken glass piece, a small thermocol box, pen, iron nail, glass marbles, hair, naphthalene ball, a piece of sugar candy (mishri) and tried to group them on the basis of properties given in table below. Help them in filling the Table.

Name of the material	Appearance (Hard/Soft)	Transparency (Transparent/Translucent/Opaque)	Floats/Sink in water	Soluble/ Insoluble in water
Lump of salt	Hard	Opaque	Sink	Soluble
Green grass	Soft	Opaque	Floats	Insoluble
Broken glass piece	Hard	Transparent	Sink	Insoluble
Thermocol box	Soft	Opaque	Floats	Insoluble
Pen	Hard	Opaque	Floats	Insoluble
Iron nail	Hard	Opaque	Sink	Insoluble
Glass marbles	Hard	Transparent	Sink	Insoluble
Hair	Hard	Opaque	Floats	Insoluble
Naphthalene ball	Hard	Opaque	Floats	Insoluble
A piece of sugar candy (mishri)	Hard	Opaque	Sink	Soluble

12. Arrange the jumbled words to arrive at the appropriate names of materials and also write two uses of each.

- (a) milaunim
- (b) tcaslp
- (c) soekrnee
- (d) gavnier

Ans. (a) Aluminium (b) Plastic (c) Kerosene (d) Vinegar

13. Match the objects given in Column I with the materials given in Column II.

Column I	Column II
(a) Surgical Instruments	(i) Plastic
(b) Newspaper	(ii) Animal product
(c) Electrical Switches	(iii) Steel
(d) Wool	(iv) Plant product

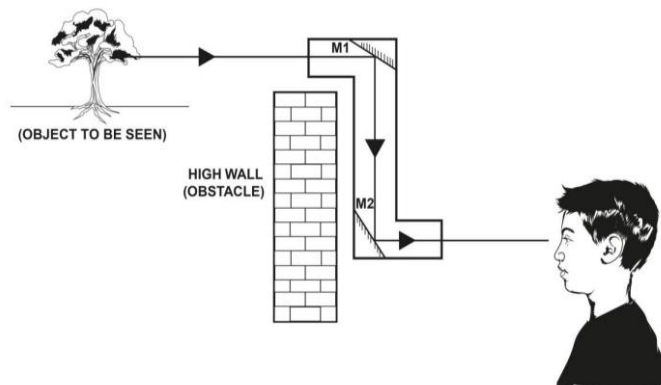
Ans. (a) – (iii) (b) – (iv) (c) – (i) (d) – (ii)

14. Pick five objects from the word box given as figure which are opaque and would sink in water.

O	S	T	P	L	E
A	T	L	E	E	R
C	O	I	N	A	A
O	N	K	C	F	S
A	E	E	I	W	E
L	L	Y	L	R	R

Ans. (i) Coin (ii) Stone (iii) Key (iv) Pencil (v) Eraser

15.



(a) Why is Sachin not able to see through the wall?

- A. The wall is transparent.
- B. The wall is translucent.
- C. The wall is opaque.
- D. The wall is reflective

Ans. C. Wall is opaque

(b) Name the device Sachin is using to see the tree on the other side of the wall.

- A. Microscope
- B. Periscope
- C. Telescope
- D. Electroscope

Ans. B. Periscope

(c) Describe how this device allows Sachin to see over the wall.

Ans. Any two from:

Reflection of light from object/tree

At right angles, from two plane mirrors, which are in parallel to each other

(d) Periscopes are often used by in national defence. Describe two possible uses of this device by the military.

Ans. 1. Use in submarine

2. Used by soldiers in trenches to see enemies.

CHAPTER 5 SEPARATION OF SUBSTANCES

1. Harshita bought some vegetables such as French beans, lady's finger, green chillies, brinjals and potatoes all mixed in a bag. Which of the following methods of separation would be most appropriate for her to separate them?

(a) Winnowing
(b) Sieving
(c) Threshing
(d) Hand picking

Ans. (d) Hand picking

2. Komal's grandmother is suffering from diabetes. Her doctor advised her to take 'Lassi' with less fat content. Which of the following methods would be most appropriate for Komal's grandmother to prepare it?

(a) Filtration
(b) Decantation
(c) Churning
(d) Winnowing

Ans. (b) Decantation

3. Which of the following mixtures would you be able to separate using the method of filtration?

(a) Oil in water
(b) Cornflakes in milk
(c) Salt in water
(d) Sugar in milk

Ans. (b) Cornflakes in milk

4. Which amongst the following methods would be most appropriate to separate grains from bundles of stalks?

(a) Hand picking
(b) Winnowing
(c) Sieving
(d) Threshing

Ans. (d) Threshing

5. Four mixtures are given below
(i) Kidney beans and chick peas
(ii) Pulses and rice
(iii) Rice flakes and corn
(iv) Potato wafers and biscuits

Which of these can be separated by the method of winnowing?

(a) (i) and (ii)
(b) (ii) and (iii)

(c) (i) and (iii)

(d) (iii) and (iv)

Ans. (d) (iii) and (iv)

6. While preparing chapatis, Vandana found that the flour to be used was mixed with wheat grains. Which out of the following is the most suitable method to separate the grains from the flour?

(a) Threshing

(b) Sieving

(c) Winnowing

(d) Filtration

Ans. (b) Sieving

7. You might have observed the preparation of ghee from butter and cream at home. Which method(s) can be used to separate ghee from the residue?

(i) Evaporation

(ii) Decantation

(iii) Filtration

(iv) Churning

Which of the following combination is the correct answer?

(a) (i) and (ii)

(b) (ii) and (iii)

(c) (ii) and (iv)

(d) (iv) only

Ans. (b) (ii) and (iii)

8. In an activity, a teacher dissolved a small amount of solid copper sulphate in a tumbler half filled with water. Which method would you use to get back solid copper sulphate from the solution?

(a) Decantation

(b) Evaporation

(c) Sedimentation

(d) Condensation

Ans. (b) Evaporation

9. During summer, Binni John carries water in a transparent plastic bottle to his school. One day he left his bottle in the school. The bottle still had some water left in it. The following day, he observed some water droplets on the inner surface of the empty portion of the bottle. These droplets of water were formed due to

(a) boiling and condensation.

(b) evaporation and saturation.

(c) evaporation and condensation.

(d) condensation and saturation.

Ans. (c) evaporation and condensation.

10. Mohini asked for a glass of water from Mohan. He gave her a glass of ice-cold water. Mohini observed some water droplets on the outer surface of the glass and asked Mohan how these droplets of water were formed? Which of the following should be Mohan's answer?

- (a) Evaporation of water from the glass.
- (b) Water that seeped out from the glass.
- (c) Evaporation of atmospheric water vapour.
- (d) Condensation of atmospheric water vapour.

Ans. (d) Condensation of atmospheric water vapour.

11. The process of condensation is the reverse of

- (a) Evaporation
- (b) Condensation
- (c) Transpiration
- (d) Elimination

Ans. (a) Condensation is the reverse of evaporation.

12. A mixture of pebbles and stones from sand can be separated using

- (a) Decantation
- (b) Filtration
- (c) Sieving
- (d) Hand picking

Ans. (c) Sieving allows the fine sand particles to pass through the holes of the sieve while the bigger stones and pebbles remain on the sieve.

13. Name the method used for separating heavier and lighter components by blowing air.

- (a) Sieving
- (b) Threshing
- (c) Winnowing
- (d) Sedimentation

Answer (c) Winnowing

14. Sheela, Saima and Ravi have to dissolve maximum amount of sugar in the same amount of milk so as to win in a game. Ravi took hot boiling milk while Saima took ice cold milk. Sheela managed to get milk at room temperature. Whom do you think would win the game and why?

Ans. The solubility of solids in liquids increases with temperature.

Ravi would win the game because he will be able to dissolve the maximum amount of sugar in hot boiling milk.

Saima will be able to dissolve the minimum amount of sugar in ice-cold milk.

Sheela will be able to dissolve more sugar than Saima since the milk is at room temperature.

15. Fill in the blanks with appropriate words:

- (i) Small pieces of stone can be removed from rice by _____.
- (ii) _____ are obtained from stalks by threshing.
- (iii) Husk from wheat flour is generally removed by _____.
- (iv) The process of settling of heavier particles is called _____.
- (v) Filtration is helpful in separating an insoluble _____ from a _____.

- Ans. (i) handpicking
(ii) grains
(iii) sieving
(iv) sedimentation
(v) solid, liquid

16. State whether the following statements are true or false.

- (a) A mixture of oil and water can be separated by filtration.
- (b) Water can be separated from salt by evaporation.
- (c) A mixture of wheat grains and wheat flour can be separated by sieving.
- (d) A mixture of iron filings and rice flour can be separated by magnet.
- (e) A mixture of wheat grains and rice flakes can be separated by winnowing.
- (f) A mixture of tea leaves and milk can be separated by decantation.

- Ans. (a) False – A mixture of oil and water can be separated by separating funnel.
(b) True
(c) True
(d) True
(e) True
(f) True

17. Match the mixtures in Column I with their method of separation in Column II.

Column I	Column II
(a) Oil mixed in water	(i) Sieving
(b) Iron powder mixed with flour	(ii) Hand-picking
(c) Salt mixed with water	(iii) Decantation
(d) Lady's figure mixed with French beans	(iv) Magnet
(e) Rice flour mixed with kidney beans	(v) Evaporation

- Ans. (a) - (iii) Decantation
(b) - (iv) Magnet
(c) - (v) Evaporation
(d) - (ii) Hand-picking
(e) - (i) Sieving

18. Both Sarika and Mohan were asked to make salt solution. Sarika was given a teaspoonful of salt and half a glass of water, whereas Mohan was given twenty teaspoons full of salt and half a glass of water.

(a) How would they make salt solutions?

(b) Who would be able to prepare saturated solution?

Ans. (a) To make a salt solution, mix the salt in water and by continuous stirring results in a salt solution.

(b) Mohan will be able to prepare a saturated solution when some salt will be left undissolved even after mixing the maximum salt in water.

CHAPTER 6 – CHANGES AROUND US

1. Pick the change that can be reversed from the following.

- (a) Cutting of trees
- (b) Melting of ghee
- (c) Burning of candle
- (d) Blooming of flower

Ans. (b) Melting of ghee

2. Which of the following change cannot be reversed?

- (a) Hardening of cement
- (b) Freezing of ice cream
- (c) Opening a door
- (d) Melting of chocolate

Ans. (a) Hardening of cement

3. An iron ring is heated. Which of the following statement about it is incorrect?

- (a) The ring expands.
- (b) The ring almost comes to the same size on cooling.
- (c) The change, in this case, is reversed.
- (d) The ring changes its shape and the change cannot be reversed.

Ans. (d) The ring changes its shape and the change cannot be reversed.

The change is reversible, the ring expands on heating and comes back to its original size on cooling.

4. While lighting a candle, Kushal observed the following changes.

- (i) Wax was melting
- (ii) Candle was burning
- (iii) Size of the candle was reducing
- (iv) Melted wax was getting solidified

Of the above, the changes that can be reversed are

- (a) (i) and (ii)
- (b) (ii) and (iii)
- (c) (iii) and (iv)
- (d) (i) and (iv)

Ans. (d) Wax was melting; Melted wax was getting solidified

5. Salt can be separated from its solution (salt dissolved in water), because

- (a) mixing of salt in water is a change that can be reversed by heating and melting of salt
- (b) mixing of salt in water is a change that cannot be reversed
- (c) mixing of salt in water is a permanent change
- (d) mixing of salt in water is a change that can be reversed by evaporation

Ans. (d) mixing of salt in water is a change that can be reversed by evaporation.

6. Rolling of chapati and baking of chapati are the changes that

- (a) can be reversed
- (b) cannot be reversed
- (c) can be reversed and cannot be reversed, respectively
- (d) cannot be reversed and can be reversed, respectively

Ans. (c) can be reversed and cannot be reversed, respectively.

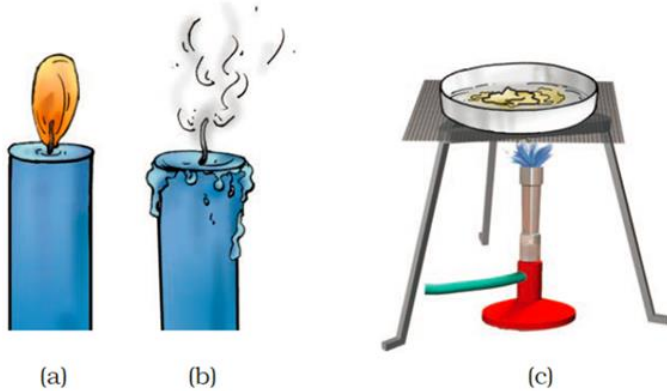
7. The iron rim is made slightly smaller than the wooden wheel. The rim is usually heated before fixing into the wooden wheel because on heating the iron rim

- (a) expands and fits onto the wooden wheel
- (b) contracts and fits onto the wooden wheel
- (c) no change in the size takes place
- (d) expands first, then on cooling contracts and fits onto the wooden wheel.

Ans. (d) expands first, then on cooling contracts and fits onto the wooden wheel.

8. Look at the given figure, which shows three situations

- (a) a burning candle
- (b) an extinguished candle
- (c) melting wax.



Which of these shows a reversible change and why?

Ans. Melting of wax in figure (c) is a reversible change because the melted wax can be solidified again.

9. Can we reverse the following changes? If yes, suggest the name of the method.

- (a) Water into water vapour
- (b) Water vapour into water
- (c) Ice into water
- (d) Curd into milk.

Ans. (a) Water into water vapour – Yes, by using the method of condensation, water vapour can be converted to water.

(b) Water vapour into the water – Yes, by using the evaporation method, water can be converted to water vapour.

(c) Ice into the water – Yes, by freezing method, water can be converted to ice.

(d) Curd into milk – No, it is an irreversible process.

10. Which of the following changes cannot be reversed?

- (a) Blowing of a balloon
- (b) Folding a paper to make a toy aeroplane
- (c) Rolling a ball of dough to make roti
- (d) Baking cake in an oven
- (e) Drying a wet cloth
- (f) Making biogas from cow dung
- (g) Burning of a candle

Ans. The following changes cannot be reversed: (d), (f), (g)

11. Give one example in each case:

- (a) Change which occurs on heating but can be reversed.

Ans. Heating of an iron rod

(b) Change which occurs on heating but cannot be reversed.

Ans. Baking of chapati

(c) Change which occurs on cooling but can be reversed.

Ans. Formation of ice from water

(d) Change which occurs on mixing two substances, but can be reversed.

Ans. Formation of salt solution

(e) Change which occurs on mixing two substances, but cannot be reversed.

Ans. Mixing of cement with water

12. Mohan mixed flour and water and

(i) made dough,

(ii) rolled the dough to make chapati,

(iii) baked the chapati on a pan,

(iv) dried the chapati and ground it in a grinder to make powder.

Identify the changes (i) to (iv) as the changes that can be reversed or that cannot be reversed.

Solution:

(i) An irreversible change.

(ii) A reversible change.

(iii) An irreversible change.

(iv) An irreversible change.

13. On Seema's birthday, her brother Simba was helping her to decorate the house for the birthday party and their parents were also busy making other arrangements. Following were the activities going on at Seema's home:

(i) Simba blew balloons and put them on the wall.

(ii) Some of the balloons got burst.

(iii) Seema cut colourful strips of paper and put them on the wall with the help of tape.

(iv) She also made some flowers by origami (paper folding) to decorate the house.

(v) Her father made dough balls.

(vi) Mother rolled the dough balls to make puris.

(vii) Mother heated oil in a pan.

(viii) Father fried the puris in hot oil.

Identify the activities at Seema's home as those that can be reversed and those which cannot be reversed.

Solution:

Activities which are reversible:

(i) Simba blew balloons and puts them on the wall.

(iv) She also made some flowers by origami (paper folding) to decorate the house.

(v) Her father made dough balls.

(vi) Mother rolled the dough balls to make puris.

(vii) Mother heated oil in a pan.

Activities which are irreversible:

(ii) Some of the balloons got burst.

(iii) Seema cut colourful strips of paper and put them on the wall with the help of tape.

(viii) Father fried the puris in hot oil.

CHAPTER 7 GETTING TO KNOW PLANTS

1. Which one of the following best describes characteristics of a tree?
 - A. Weak stem which cannot stand upright.
 - B. Thick, woody stem with branches high on the plant.
 - C. Green, tender stem.
 - D. Thick, woody stem with branching near the base.

Ans. B. Thick, woody stem with branches high on the plant.

2.



The picture shows a pumpkin. The spreading stems shown indicate that a pumpkin should be classified as a:

- A. Herb
- B. Shrub
- C. Creeper
- D. Tree

Ans. C. Creeper

3. Which of the following combination of features would you observe in grass?
 - (a) Parallel venation and fibrous root
 - (b) Parallel venation and tap root
 - (c) Reticulate venation and fibrous root
 - (d) Reticulate venation and tap root

Ans. (a) Parallel venation and fibrous root

4. Which of the following is the correct match between the characteristics of stem and the category of plant?
 - (a) weak stem which cannot stand upright: Creeper
 - (b) green tender stem: Shrub
 - (c) thick, hard stem with branching near the base: Tree
 - (d) thick, hard stem with branches high on the plant: Herb

Ans. (a) weak stem which cannot stand upright: Creeper

5. Which of the following is not the primary function of stem?

- (a) Conduction of water
- (b) Photosynthesis
- (c) Formation of branches
- (d) Bears flowers and fruits

Ans. (b) Photosynthesis

6. Which of the following is not a correct match?

- (a) Petiole: attaches leaf to stem
- (b) Lamina: green flat part of leaf
- (c) Margin: gives shape to the leaf
- (d) Veins: transpiration

Ans. (d) Veins: transpiration

7. Read the following sentences about photosynthesis:

- (i) Sunlight, carbon dioxide, chlorophyll and water are necessary.
- (ii) Oxygen is absorbed.
- (iii) Leaves carry out photosynthesis.
- (iv) Proteins are made during photosynthesis.

Choose the correct pair of sentences that are true to photosynthesis

- (a) (iii) and (iv)
- (b) (i) and (iii)
- (c) (ii) and (iv)
- (d) (i) and (iv)

Ans. (b) (i) and (iii)

8. Which of the following terms constitute the female part of the flower.

- (a) sepals, petal and stamen
- (b) stigma, style and ovary
- (c) ovary, stamen and stigma
- (d) ovary, style and stamen

Ans. (b) stigma, style and ovary

9. Fill in the blanks:

- a. (a) The small green leaves at the base of flowers are known as _____.
- b. (b) The swollen basal part of the pistil is the _____ which bears the _____.
- c. (c) Stamen has two parts called _____ and _____.
- d. (d) The young unopened flower is termed as _____.

Ans. (a) sepals (b) ovary, ovules (c) filament, anther (d) bud.

10. Solve the riddles given below:

(a) "I have a green tender stem and I am much shorter than you. Who am I?"

(b) I come out first from the seed when it is soaked in water. I provide anchorage to plants. Who am I? Write another function that I perform.

Ans. (a) I am a 'Herb'. Herbs are the small plants with a green and tender stem.

(b) I am 'Root'. Root comes out first from the seed when it is soaked in water. Another function of the root is to absorb water and mineral from the soil.

11. Match the parts of plant given in Column I with their function in Column II

Column I	Column II
(a) Flower	(i) Excretion
(b) Leaf	(ii) Photosynthesis
(c) Stem	(iii) Reproduction
(d) Root	(iv) Bears branches
	(v) Anchorage

Ans. (a) - (iii) (b) - (ii) (c) - (iv) (d) - (v)

12. Sohan wanted to test the presence of starch in leaves. He performed the following steps.

- a. (1) He took a leaf and boiled it in water,
- b. (2) He placed the leaf in a petri dish and poured some iodine over it.
He did not get the expected result. Which step did he miss? Explain.

Ans. To remove the green colour of the leaf, firstly the leaf has to be boiled in the water next it has to be boiled in alcohol so that chlorophyll comes out.

Sohan missed the step of not boiling the leaf in the alcohol which removes the chlorophyll and therefore, he did not get the expected result (i.e., change in colour of the leaf).

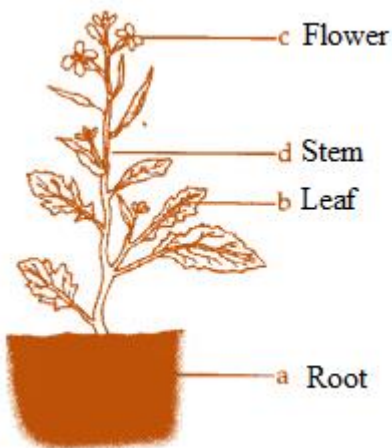
13. Read the function of parts of a plant given below:

- (a) fixes plant to the soil
- (b) prepares starch
- (c) takes part in reproduction
- (d) supports branches and bears flowers

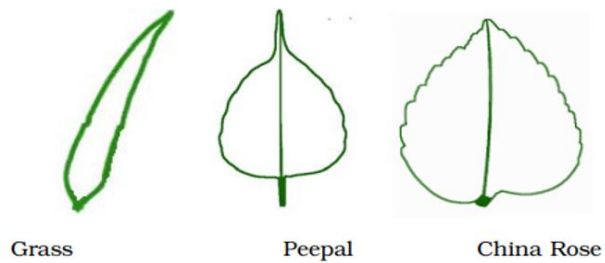
In the given diagram, write the names of the parts whose functions at the appropriate space.



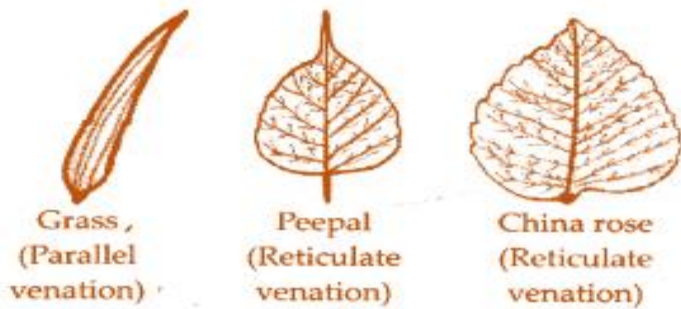
- Ans. (a) Fixes plant to the soil – Root
(b) Prepares starch – Leaf
(c) Takes part in reproduction – Flower
(d) Supports branches and bears flowers – Stem



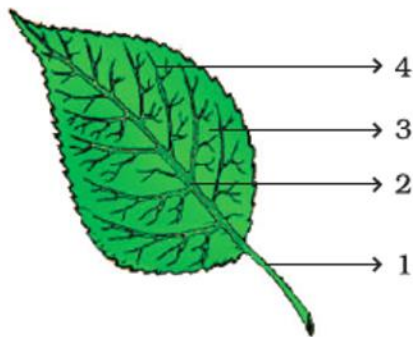
14. Draw the veins of leaves in the given figure below and write the type of venation.



Solution:

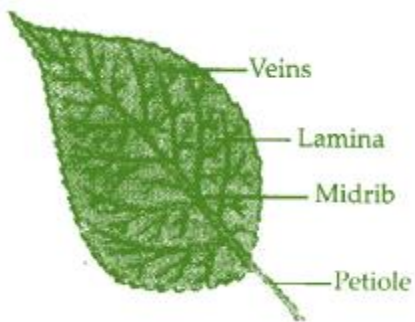


15. Observe the given figure and attempt the questions that follow it.



- Label the parts 1, 2, 3 and 4 in the diagram.
- What type of venation does the leaf have?
- What type of venation is seen in grass leaves?

Ans.



(a) Part 1 – Petiole

Part 2 – Midrib

Part 3 – Lamina

Part 4 – Veins

(b) The leaf has reticulated venation. In reticulate venation, veins form a network like an appearance.

(c) In grass leaves, parallel venation is seen.

16. Identify the wrong statements and correct them.

(a) The anther is a part of the pistil.

(b) The visible parts of a bud are the petals.

- (c) Lateral roots are present in a taproot.
- (d) Leaves perform the function of transpiration only.

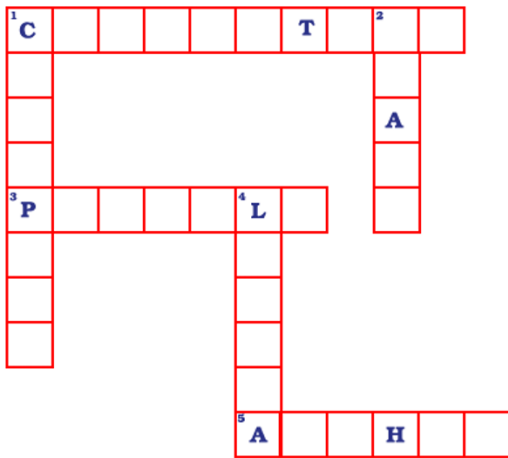
Ans. (a) The statement is wrong – Anther is a part of the stamen.

(b) The statement is wrong – The visible parts of a bud are the sepals.

(c) The statement is correct.

(d) The statement is wrong – Leaves perform various functions other than transpiration, such as gaseous exchange through tiny pores called stomata, photosynthesis etc.

17. Solve the crossword given in the figure as per the clues given below it.



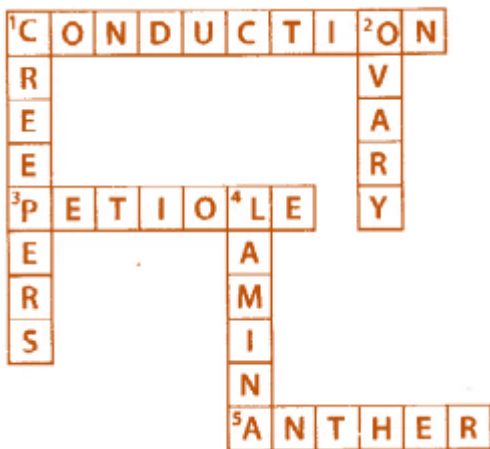
Across

- 1. The term that describes the upward movement of water in a stem.
- 3. The part of the leaf which is attached to the stem.
- 5. This part is attached to the tip of the filament.

Down

- 1. Plants that are weak and spread on the ground.
- 2. Ovules are present in this part of the flower.
- 4. Is the broad part of a leaf?

Ans.



18. Fill in the blanks with the terms that are listed below.

Anther, male, ovary, ovule, petals, pistil, stamen, filament.

Sepals, (a) _____, stamens and (b) _____ are the parts of a flower. Stamen is made up of (c) _____ and (d) _____ and it represents the (e) _____ part of the flower. The female part of the flower is called the (f) _____. The basal, swollen part of the pistil is called the (g) _____ which contains the (h) _____.

Ans.

(a) petals

(b) pistil

(c) anther

(d) filament

(e) male

(f) pistil

(g) ovary

(h) ovules

19. Case Based Question

Plants can be classified into three categories: herbs, shrubs and trees. Plants with green and tender stems are called herbs. They are usually short and may not have many branches. For example- Tomato. Some plants develop branches near the base of stem. The stem is hard but not very thick. Such plants are called shrubs. For example- lemon. Some plants are very tall and have hard and thick stem. The stems have branches in the upper part, much above the ground. Such plants are called trees. For example- mango.

Plants with weak stems that cannot stand upright but spread on the ground are called creeper, while those that take support and climb up are called Climber. These are different from the herbs, shrubs and trees.

Q (1) is an example of herb?

(a) Mango

(b) Tomato

(c) Pumpkin

(d) Lemon

Ans. (b) Tomato

Q (2) Plants that spread on the ground are called Climbers?

(a) True

(b) False

Ans. (b) False

Q (3) Name the plant type, in which the stems have branches in the upper part, much above the ground.

- (a) Shrubs
- (b) Climbers
- (c) Trees
- (d) Creepers

Ans. (c) Trees

Q (4) What kind of plants are called Creepers?

Ans. Plants with weak stems that cannot stand upright but spread on the ground are called creeper.

Q (5) Briefly explain with an example, what do you mean by “shrubs?”

Ans. Some plants develop branches near the base of stem. The stem is hard but not very thick. Such plants are called shrubs. For example- lemon.

CHAPTER 8 BODY MOVEMENTS

1. Which of the following parts of our body help us in movement?

- (i) Bones
- (ii) Skin
- (iii) Muscles
- (iv) Organs

Choose the correct answer from the option below.

- (a) (i) and (iii)
- (b) (ii) and (iv)
- (c) (i) and (iv)
- (d) (iii) and (ii)

Ans. (a) (i) and (iii)

2. Which of the following joints is immovable?

- (a) Shoulder and arm
- (b) Knee and joint
- (c) Upper jaw and skull
- (d) Lower jaw and upper jaw

Ans. (c) Upper jaw and skull

3. Which of the following organisms does not have both muscles and skeleton for movement?

- (a) dog
- (b) snail
- (c) earthworm
- (d) human being

Ans. (c) earthworm

4. Underwater divers wear fin-like flippers on their feet to

- (a) swim easily in water.
- (b) look like a fish.
- (c) walk on water surface.
- (d) walk over the bottom of the sea (sea bed).

Ans. (a) swim easily in water.

5. Snail moves with the help of its

- (a) shell
- (b) bone
- (c) muscular foot
- (d) whole body

Ans. (c) muscular foot

6. How many muscles work together to move a bone?

- (a) One
- (b) Two
- (c) Three
- (d) Four

Ans. (b) Two

7. Name the type of joint of your hand which help you to grasp a badminton racquet.

Ans. Hinge joints

8. Provide one-word answers to the statements given below.

(i) Joint which allows movement in all directions.

Ans. Ball and socket joint

(ii) Hard structure that forms the skeleton.

Ans. Bone

(iii) Part of the body with a fixed joint.

Ans. Upper jaw with the skull

(iv) Help in the movement of body by contraction and relaxation.

Ans. Muscles

(v) Bones that join with chest bone at one end and to the backbone at the other end.

Ans. Ribs

(vi) Framework of bones which gives shape to our body.

Ans. Skeleton

(vii) Bones which enclose the organs of our body that lie below the abdomen.

Ans. Pelvic bones

(viii) Joint where our neck joins the head.

Ans. Pivotal joint

(ix) Part of the skeleton that forms the earlobe.

Ans. Cartilage

9. Write the type of joint which is used for each of the following movements:

(a) A cricket bowler bowls the ball.

(b) A girl moves her head in right and left direction.

(c) A person lifts weights to build up his biceps.

Ans. (a) Hinge joint and ball and socket joint

(b) Pivotal joint

(c) Hinge joint

10. Match the name of the animals given in Column I with its body parts used for movement given in Column II.

Column I	Column II
(a) Human being	(i) Fins
(b) Cow	(ii) Wings
(c) Snake	(iii) Legs
(d) Eagle	(iv) Whole body
(e) Fish	(v) Limbs

Ans. (a) – (iii) (b) – (v) (c) – (iv) (d) – (ii) (e) – (i)

11. Given below is a list of different types of movements in animals.

Running, Jumping, Walking, Slithering, Crawling, Flying, Swimming, Creeping
Write the types of movements seen in each animal.

- | | |
|------------------|---------------|
| (a) Duck | (b) Horse |
| (c) Kangaroo | (d) Snail |
| (e) Snake | (f) Fish |
| (g) Human beings | (h) Cockroach |

Ans. (a) Duck – Walking, Flying, Swimming

(b) Horse – Running, Walking

(c) Kangaroo – Jumping

(d) Snail – Creeping, Crawling

(e) Snake – Slithering

(f) Fish – Swimming

(g) Human beings – Walking, Running, Jumping, Swimming, Crawling

(h) Cockroach – Walking, Flying, Running

12. (a) Unscramble the jumbled words and write them in the blank spaces provided.

- | | | | |
|-------------------|-------|----------------------|-------|
| (i) neosb | | (v) arctigeal | |
| (ii) tnemevom | | (vi) epahs | |
| (iii) iontcaronct | | (vii) sangro inerlan | |
| (iv) lsecsum | | (viii) laxaeriont | |

(b) Read the following paragraph and fill in the blanks using the words you unscrambled.

_____ (a) _____ and _____ (b) _____ form the skeleton of the human body. They provide the framework, give _____ (c) _____ to the body and help in _____ (d) _____. They protect the _____ (e) _____. The bones are moved by alternate _____ (f) _____ and _____ (g) _____ of two sets of _____ (h) _____ attached to them.

Ans. (a) (i) Bones (ii) movement (iii) Contraction (iv) Muscles (v) Cartilage (vi) Shape (vii) Internal organs (viii) Relaxation

(b) (a) Bones (b) Cartilage (c) shape (d) movement (e) Internal organs (f) Contraction (g) Relaxation (h) Muscles

13. In the given figure, there are two snakes of the same size slithering on sand. Can you identify which of them would move faster and why?



Ans. Snake “A” will move faster than snake “B”. Since a snake forms loops in its body while slithering. Each loop of the snake gives it a forward push by pressing against the ground. Hence, the snake with a larger number of loops moves much faster than the snake with a lesser number of loops.

14. Case Study Question

We are able to bend or rotate our body in places where two parts of our body seem to be joined together — like elbow, shoulder or neck. These places are called joints. Bones are joined together at these joints. Bones cannot be bent. So, it is not one long bone from the upper arm to our wrist. It is different bones joined together at the elbow. Similarly, there are many bones present in each part of the body. We can bend or move our body only at those points where bones meet. There are different types of joints in our body to help us carry out different movements and activities.

We will learn about ball and socket movement with the help of an activity. Roll a strip of paper into a cylinder. Make a small hole in an old rubber or plastic ball and stick the cylinder on the ball. Put the ball in a small bowl. Now, imagine that the paper cylinder is your arm and the ball is its end. The bowl is like the part of the shoulder to which your arm is joined. The rounded end of one bone fits into the cavity (hollow space) of the other bone. Such a joint allows movements in all directions.

The joint where our neck joins the head is a pivotal joint. It allows us to bend our head forward and backward and turn the head to our right or left.

Hinges allow only back and forth movement. The elbow has a hinge Joint that allows only a back-and-forth Movement.

Q1. Which joint allows movements in all directions?

- (a) Ball and socket
- (b) Pivotal joint
- (c) Hinge Joint
- (d) Both (a) and (c)

Ans. (a) Ball and socket joint

Q2. The Elbow has a..... that allows only back and forth Movement.

- (a) Pivotal joint
- (b) Hinge Joint
- (c) Ball and socket
- (d) None of the above

Ans. (b) Hinge Joint

Q3. The places where bones are joined together are called joints?

- (a) True
- (b) False

Ans. (a) True

Q4. Explain how are we able to bend our Elbow?

Ans. As we know that bones cannot be bend but Elbow is not one long Bone from the upper arm to our wrist. It is different bones joined together at the Elbow. We can bend or move our body only at those points where bones meet.

Q5. What is the function of the Pivotal joint?

Ans. The joint where our neck joins the head is a pivotal joint. It allows us to bend our head forward and backward and turn the head to our right or left.

CHAPTER 9 THE LIVING ORGANISMS — CHARACTERISTICS AND HABITATS

1. Which of the following cannot be called a habitat?

- (a) A desert with camels.
- (b) A pond with fishes.
- (c) A jungle with wild animals.
- (d) Cultivated land with grazing cattle.

Ans. (d) Cultivated land with grazing cattle.

2. Following are some features of plants

- (i) They lose a lot of water through transpiration.
- (ii) Their leaves are always broad and flat.
- (iii) They lose very little water through transpiration.
- (iv) Their roots grow very deep into the soil.

Which of the combination of above features are typical of desert plants?

- (a) (i) and (ii)
- (b) (ii) and (iv)
- (c) (ii) and (iii)
- (d) (iii) and (iv)

Ans. (d) (iii) and (iv)

3. Ritika comes across an animal having a stream-lined and slippery body. What is the habitat of the animal?

- (a) Water
- (b) Desert
- (c) Grassland
- (d) Mountain

Ans. (a) Water

4. Which of the following are characteristics of living beings?

- (i) Respiration
- (ii) Reproduction
- (iii) Adaptation
- (iv) Excretion

Choose the correct answer from the options below:

- (a) (i), (ii) and (iv) only
- (b) (i) and (ii) only
- (c) (ii) and (iv) only
- (d) (i), (ii), (iii) and (iv)

Ans. (d) (i), (ii), (iii) and (iv)

5. Earthworms breathe through them

- (a) skin

- (b) gills
- (c) lungs
- (d) stomata

Ans. (a) skin

6. Which of the following is not an example of response to stimulus?
- (a) Watering in mouth when we see delicious food items.
 - (b) Closing of leaves of mimosa plant when touched.
 - (c) Shutting our eyes when an object is suddenly thrown in our direction.
 - (d) A chick hatching out of an egg.

Ans. (d) A chick hatching out of an egg.

7. Which of the following is correct for respiration in plants?
- (a) Respiration takes place only during day time.
 - (b) Respiration takes place only during night.
 - (c) Respiration takes place both during day and night.
 - (d) Respiration takes place only when plants are not making food.

Ans. (c) Respiration takes place both during day and night.

8. Which of the following is an incorrect statement about excretion?
- (a) Excretion takes place in plants.
 - (b) Excretion takes place both in plants and animals.
 - (c) Excretion is the process of getting rid of excess water only.
 - (d) Secretion is one method of excretion.

Ans. (c) Excretion is the process of getting rid of excess water only.

9. Choose the set that represents only the biotic components of a habitat.
- (a) Tiger, Deer, Grass, Soil
 - (b) Rocks, Soil, Plants, Air
 - (c) Sand, Turtle, Crab, Rocks
 - (d) Aquatic plant, Fish, Frog, Insect

Ans. (d) Aquatic plant, Fish, Frog, Insect

10. Which one of the following is not associated with reproduction?
- (a) A new leaf coming out of a tree branch.
 - (b) A dog giving birth to puppy.
 - (c) A seed growing into a plant.
 - (d) Chick hatching from an egg.

Ans. (a) A new leaf coming out of a tree branch.

11. Choose the odd one out from below with respect to reproduction.
- (a) Eggs of hen

- (b) Seeds of plants
- (c) Buds of potato
- (d) Roots of mango tree

Ans. (d) Roots of mango tree

12. Although organisms die, their kind continue to live on earth. Which characteristic of living organisms makes this possible?

- (a) Respiration.
- (b) Reproduction.
- (c) Excretion.
- (d) Movement.

Ans. (b) Reproduction.

13. If you happen to go to a desert, what changes do you expect to observe in the urine you excrete? You would

- (i) excrete small amount of urine.
- (ii) excrete large amount of urine.
- (iii) excrete concentrated urine.
- (iv) excrete very dilute urine.

Which of the above would hold true?

- (a) (i) and (iii)
- (b) (ii) and (iv)
- (c) (i) and (iv)
- (d) (i) and (ii)

Ans. (a) (i) and (iii)

14. Unscramble the given words below to get the correct word using the clues given against them.

- (a) SATPADAOINT specific features or certain habits which enable a living being to live in its surroundings
- (b) RETECOXNI Waste products are removed by this process
- (c) LUMISIT All living things respond to these
- (d) ROUCDPRETOI Because of this we find organisms of the same kind

Ans. (a) ADAPTATIONS

(b) EXCRETION

(c) STIMULI

(d) REPRODUCTION

15. Using the following words, write the habitat of each animal given in figure (a to d).
Grassland, Mountain, Desert, Pond, River



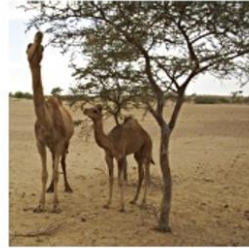
(a)



(b)



(c)



(d)

Ans. (a) Deer – Grassland

(b) Frog – It is red-eyed tree frog that lives in a tropical rain forest (not in a pond).

(c) Yak – Mountain

(d) Camel – Desert

16. Classify the following habitats into terrestrial and aquatic types.

Grassland, Pond, Ocean, Rice Field

Ans. Terrestrial habitats – Grassland, Rice field

Aquatic habitats – Pond, Ocean

17. Fill in the blanks:

(a) Saline water, hot air and sand are components of a habitat.

(b) The habitat of plants and animals that live in is called the aquatic habitat.

(c) enable a plant or an animal to live in its surroundings.

(d) Plants and animals that live on land are said to live in habitats.

Ans. (a) Abiotic (non-living)

(b) Water

(c) Adaptations

(d) Terrestrial

18. Read the features of plants given below:

(a) Thick waxy stem

(b) Short roots

(c) Cone shaped plants

(d) Sloping branches

(e) Small or spine-like leaves

(f) Hollow stem

Choose the type of plant for every feature given in a, b, c, d, e and f from the list given below:

Aquatic plant, Desert plant, Mountainous plant

Ans. (a) Thick waxy stem – Desert plant

(b) Short roots – Aquatic plant

(c) Cone-shaped plants – Mountainous plant

(d) Sloping branches – Mountainous plant

(e) Small or spine-like leaves – Desert plant

(f) Hollow stem – Aquatic plant

19. Case Based Question

The place where organisms live is called habitat. Habitat means a dwelling place (a home). The habitat provides food, water, air, shelter and other needs to organisms. Several kinds of plants and animals live in the same habitat. The plants and animals that live on land are said to live in terrestrial habitats. Some examples of terrestrial habitats are forests, grasslands, deserts, coastal and mountain regions. On the other hand, the habitats of plants and animals that live in water are called aquatic habitats. Lakes, rivers and oceans are some examples of aquatic habitats. There are large variations among terrestrial habitats like forests, grasslands, deserts, coastal and mountain regions located in different parts of the world.

The organisms, both plants and animals, living in a habitat are its biotic components. The non-living things such as rocks, soil, air and water in the habitat constitute its abiotic components.

Que.1) Habitat means

a) Grassland

b) Dwelling place

c) Terrestrial habitat

d) All of the above

Ans. b) Dwelling place

Que. 2) Which of the following is an aquatic habitat?

a) Lakes

b) Forest

c) Oceans

d) Both (a) and (c)

Ans. d) Both (a) and (c)

Que.3) Non-living things are the biotic components of a habitat.

a) True

b) False

Ans. b) False

Que.4) Write a short note on biotic and abiotic components of a habitat?

Ans. The organisms, both plants and animals, living in a habitat are its biotic components. The non-living things such as rocks, soil, air and water in the habitat constitute its abiotic components.

Que.5) How terrestrial habitats are different from aquatic habitats?

Ans. The plants and animals that live on land are said to live in terrestrial habitats. Some examples of terrestrial habitats are forests, grasslands, deserts, coastal and mountain regions. On the other hand, the habitats of plants and animals that live in water are called aquatic habitats. Lakes, rivers and oceans are some examples of aquatic habitats.

CHAPTER 10 MOTION AND MEASUREMENT OF DISTANCES

1. The distance between Chandigarh and Delhi is usually expressed in units of
 - (a) decametre
 - (b) metre
 - (c) centimetre
 - (d) kilometre

Ans. (d) kilometre

2. Which of the following does not express a time interval?
 - (a) A day
 - (b) A second
 - (c) A school periods
 - (d) Time of the first bell in the school

Ans. (d) Time of the first bell in the school

3. Figure shows a measuring scale which is usually supplied with a geometry box. Which of the following distance cannot be measured with this scale by using it only once?



- (a) 0.1 m
- (b) 0.15 m
- (c) 0.2 m
- (d) 0.05 m

Ans. (c) 0.2 m

4. A piece of ribbon folded five times is placed along a 30 cm long measuring scale as shown in the given figure.



The length of the ribbon is between

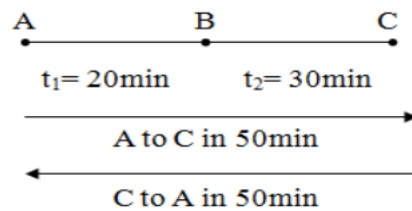
- (a) 1.15 m – 1.25 m
- (b) 1.25 m – 1.35 m
- (c) 1.50 m – 1.60 m
- (d) 1.60 m – 1.70 m

Ans. (b) 1.25 m – 1.35 m

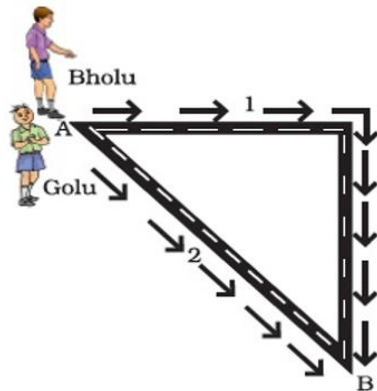
According to the above figure, the five times folded ribbon piece is $(27.5 - 2)$ cm $\times 5$ = 1.275 m long approximately.

5. Kritika moves on a straight road from point A to point C. She takes 20 minutes to cover a certain distance AB and 30 minutes to cover the rest of distance BC. She then turns back and takes 30 minutes to cover the distance CB and 20 minutes to cover the rest of the distance to her starting point. She makes 5 rounds on the road the same way. Kritika concludes that her motion is
- only rectilinear motion.
 - only periodic motion.
 - rectilinear and periodic both.
 - neither rectilinear nor periodic.

Ans. (c) rectilinear and periodic both.

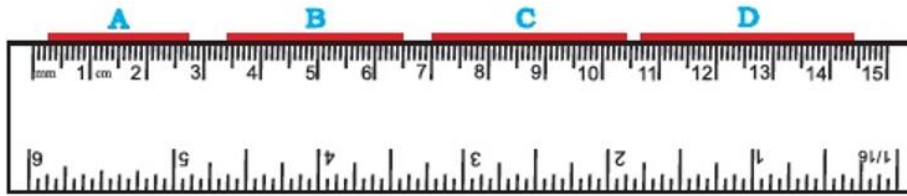


6. Bholu and Golu are playing in a ground. They start running from the same point A in the ground and reach point B at the same time by following the paths marked 1 and 2 respectively as shown in the given figure. Which of the following is/are true for the given situation.



As compared to Golu, Bholu covers a

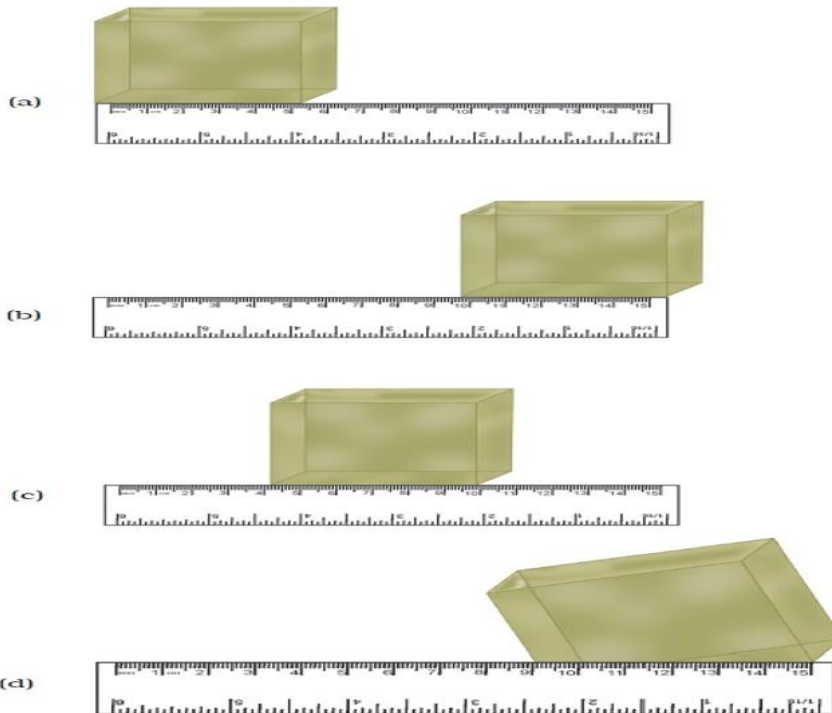
- longer distance but with a lower speed.
 - longer distance with a higher speed.
 - shorter distance with a lower speed.
 - shorter distance with a higher speed.
- Ans. (b) longer distance with a higher speed.
7. Four pieces of wooden sticks A, B, C and D are placed along the length of 30 cm long scale as shown in the given figure. Which one of them is 3.4 cm in length?



- (a) A
- (b) B
- (c) C
- (d) D

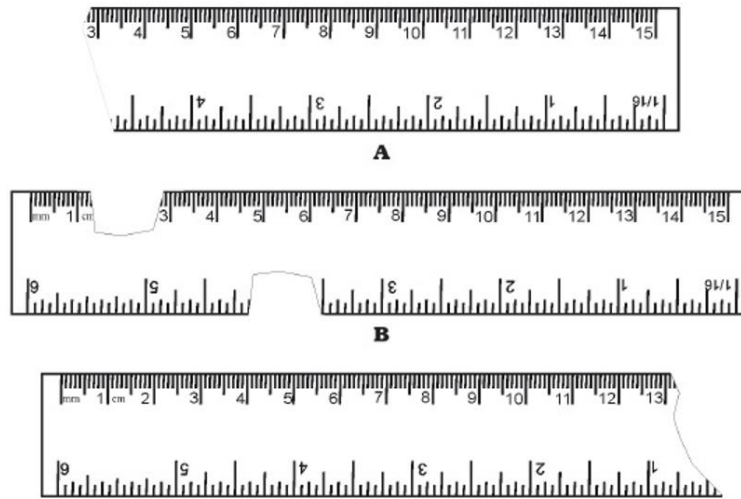
Ans. (c) C, We can observe from the given figure, that stick C lies between 10.4 cm and 7 cm. So, its length is $(10.4 - 7)$ cm = 3.4 cm.

8. Which of the following figure shows the correct placement of a block along a scale for measuring its length?



Ans. (b)

9. You are provided three scales A, B and C as shown in the given figure to measure a length of 10 cm.



For the correct measurement of the length, you will use the scale

- (a) A only
- (b) B only.
- (c) C only.
- (d) Any of the three scales.

Ans. d) Any of the three scales.

10. The second hand of a clock moves _____ than the hour hand.
- (a) Faster
 - (b) Slower
 - (c) With the same speed
 - (d) Faster only at some intervals

Ans. (a) The second hand of a clock moves faster than the hour hand. The second hand completes one round in 60 seconds, whereas the hour hand completes one round in 12 hours.

11. Correct the following.

- (i) The motion of a swing is an example of rectilinear motion.
- (ii) $1\text{ m} = 1000\text{ cm}$

Ans. (i) The motion of a swing is an example of periodic motion as it repeats its motion after a fixed interval of time.

- (ii) $1\text{ m} = 100\text{ cm}$.

12. Fill in the blanks

- (i) Motion of an object or a part of it around a fixed point is known as motion.
- (ii) A body repeating its motion after certain interval of time is in motion.
- (iii) In rectilinear motion, object moves..... a line.
- (iv) SI unit of length is

Ans. (i) Circular

- (ii) periodic
- (iii) along; straight
- (iv) metre

13. Write one example for each of the following type of motion.

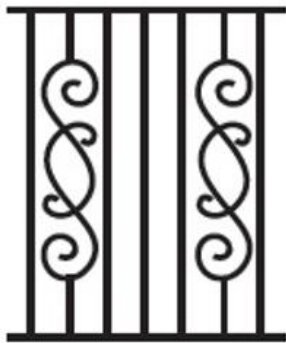
- (i) Rectilinear
- (ii) Circular
- (iii) Periodic
- (iv) Circular and periodic

Ans. (i) Rectilinear – An apple falling vertically downwards.

(ii) Circular – The motion of a point marked on the hands of a clock.

(iii) Periodic – Motion of a child on a swing.

(iv) Circular and periodic – Blades of a rotating fan.



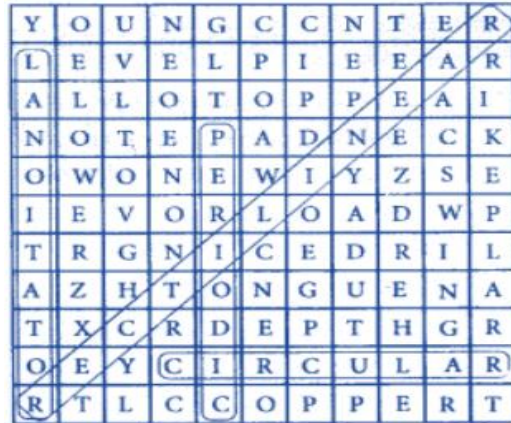
14. The photograph given as above figure shows a section of a grille made up of straight and curved iron bars. How would you measure the length of the bars of this section, so that the payment could be made to the contractor?

Ans. As the grille is made up of straight and curved iron bars, so the length of the curved bars can be measured with the help of thread first and then can be further measured using a scale. The straight bars can be measured with measuring tape.

15. Identify the different types of motion in the following word diagram given as figure.

Y	O	U	N	G	C	C	N	T	E	R
L	E	V	E	L	P	I	E	E	A	R
A	L	L	O	T	O	P	P	E	A	I
N	O	T	E	P	A	D	N	E	C	K
O	W	O	N	E	W	I	Y	Z	S	E
I	E	V	O	R	L	O	A	D	W	P
T	R	G	N	I	C	E	D	R	I	L
A	Z	H	T	O	N	G	U	E	N	A
T	X	C	R	D	E	P	T	H	G	R
O	E	Y	C	I	R	C	U	L	A	R
R	T	L	C	C	O	P	P	E	R	T

Ans.



16. Four children measure the length of a table which was about 2 m. Each of them used different ways to measure it.

(i) Sam measured it with a half metre long thread.

(ii) Gurmeet measured it with a 15 cm scale from her geometry box.

(iii) Reena measured it using her hand span.

(iv) Salim measured it using a 5 m long measuring tape.

Which one of them would get the most accurate length? Give reason for your answer.

Ans. (iv) Salim measured it using a 5 m long measuring tape. By using a 5 m long measuring tape which is longer than the table, Salim would get the most accurate length. So, he can measure the length of the table in one go accurately.

17. Match the events related to motion in Column I with the types of motions given in Column II.

Column I	Column II
(a) A moving of a sewing machine	(i)Circular motion
(b) Movement of tip of the minute hand of a clock in one hour	(ii)Rotational motion
(c) A moving swing	(iii)Periodic motion

Ans. (a) – (ii), (b) – (i), (c) – (iii)

18. Sohan was riding in his bicycle along a straight road. He classified the motion of various parts of the bicycle as (i) rectilinear motion, (ii) circular motion and (iii) both rectilinear as well as circular motion. Can you list one part of the bicycle for each type of motion? Support your answer with reason.

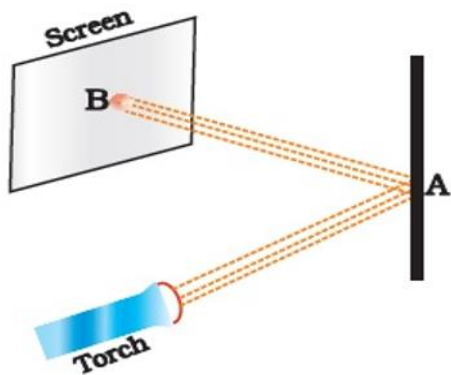
Ans. (i) Rectilinear motion: Handle of the bicycle has rectilinear motion. It moves in a straight line as the wheels of bicycle move forward.

(ii) Circular motion: Pedal of the bicycle is having circular motion it rotates with its shaft but does not move from its place.

(iii) Rectilinear and circular motion: Wheel of the moving bicycle is having both circular and rectilinear motion. Wheels rotate on their shafts as well as move forward on the ground.

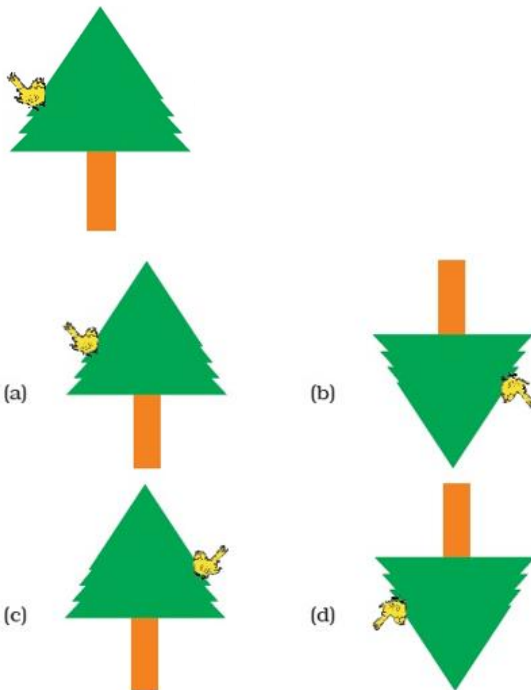
CHAPTER 11 LIGHT, SHADOWS AND REFLECTIONS

1. Observe the picture in the given figure carefully.



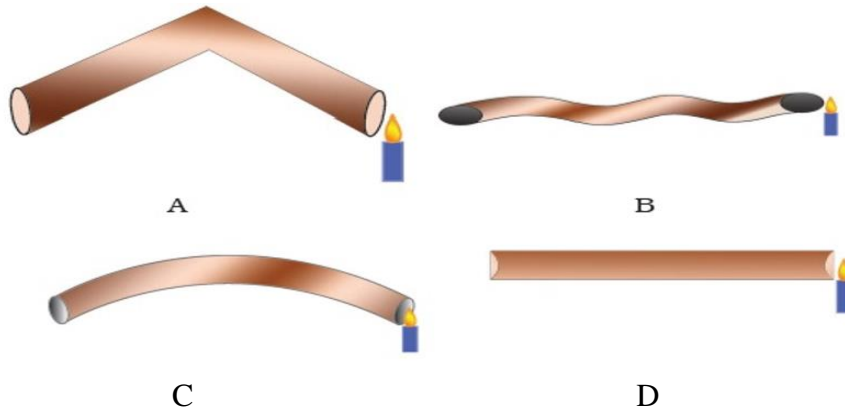
A patch of light is obtained at B, when the torch is lighted as shown. Which of the following is kept at position A to get this patch of light?

- (a) A wooden board
 - (b) A glass sheets
 - (c) A mirror
 - (d) A sheet of white paper
- Ans. (c) A mirror
2. A student observes a tree in the given figure through a pin hole camera. Which of the diagrams given in the figure (a) to (d), depicts the image seen by her correctly?



Ans. (b)

3. Four students A, B, C and D looked through pipes of different shapes to see a candle flame as shown in the given figure.



Who will be able to see the candle flame clearly?

- (a) A
- (b) B
- (c) C
- (d) D

Ans. (D)

4. Which of the following is/are not always necessary to observe a shadow?

- (a) Sun
- (b) Screen
- (c) Source of light
- (d) Opaque object

Ans. (a) Sun

5. Rachna observed the shadow of a tree at 8:00 a.m., 12:00 noon and 3:00 p.m. Which of the following statements is closest to her observation about the shape and size of the shadow?

- (a) The shape of the shadow of the tree changes but the size remains the same.
- (b) The size of the shadow of the tree changes but the shape remains the same.
- (c) Both the size and shape of the shadow of the tree change.
- (d) Neither the shape nor the size of the shadow changes.

Ans. (c) Both the size and shape of the shadow of the tree change.

6. Which of the following can never form a circular shadow?

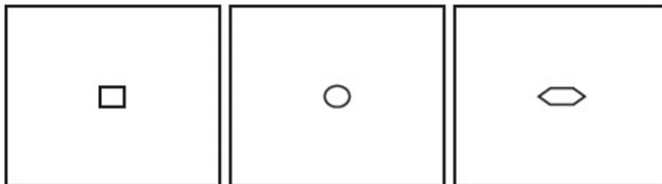
- (a) A ball
- (b) A flat disc
- (c) A shoe box
- (d) An ice cream cone

Ans. (c) A shoe box

7. Two students while sitting across a table looked down on to its top surface. They noticed that they could see their own and each other's image. The table top is likely to be made of:
- (a) unpolished wood
 - (b) red stone
 - (c) glass sheet
 - (d) wood top covered with cloth

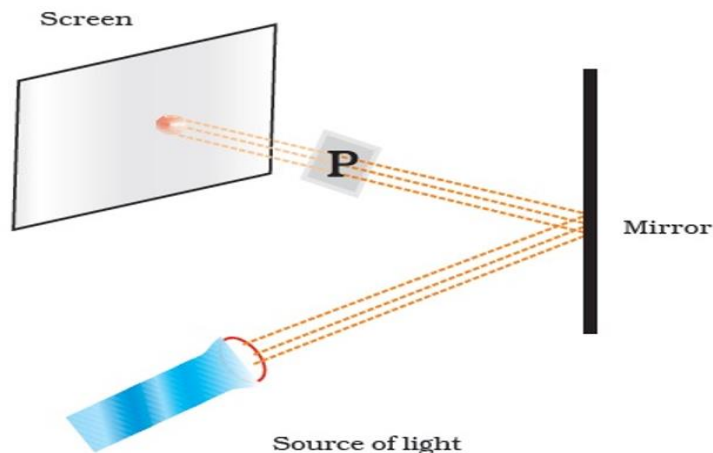
Ans. (c) glass sheet

8. You have 3 opaque strips with very small holes of different shapes as shown in the given figure. If you obtain an image of the sun on a wall through these holes, will the image formed by these holes be the same or different?



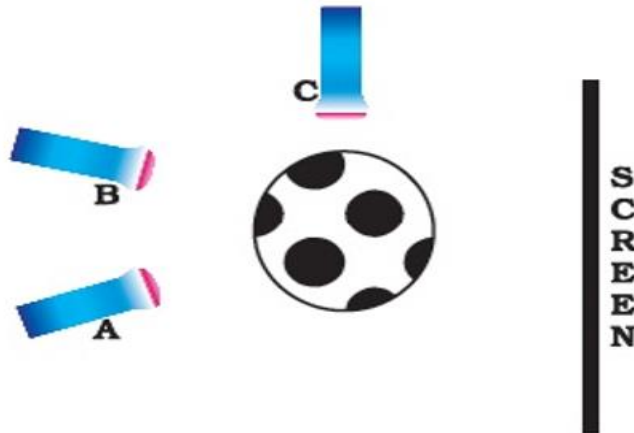
Ans. All these three objects form the same images. These opaque strips will act as pinholes and image of the sun will be obtained on the wall.

9. Observe the picture given in the figure. A sheet of some material is placed at position 'P', still the patch of light is obtained on the screen. What is the type of material of this sheet?



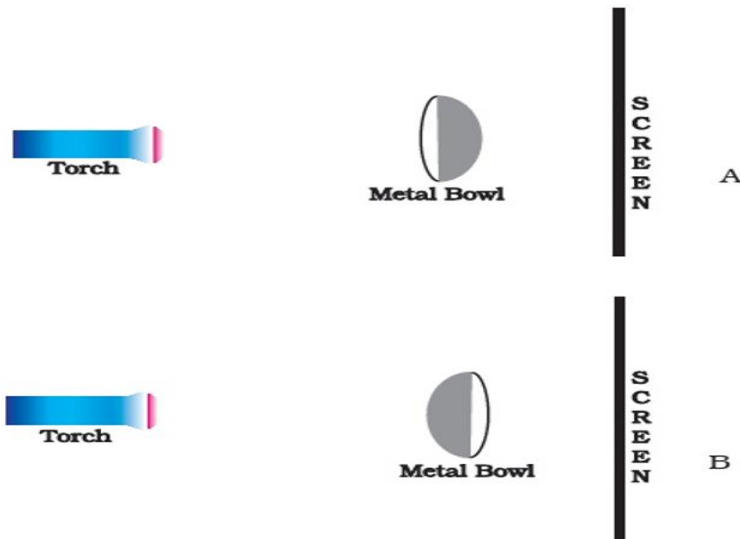
Ans. Light passes through only transparent material hence, sheet P must be of transparent material as it allows light to pass through it.

10. Three torches A, B and C shown in the figure are switched on one by one. The light from which of the torches will not form a shadow of the ball on the screen.



Ans. We know that light travels in a straight line. The light from torch C will not form a shadow of the ball on the screen. Since torch C is placed parallel to the screen light cannot pass through the screen.

11. Look at the figure given in the figure.



Will there be any difference in the shadow formed on the screen in A and B.

Ans. No, shadows formed on the screens A and B will be the same.

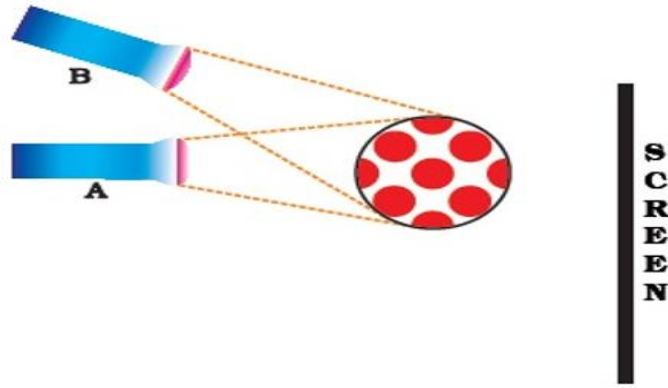
12. Correct the following statements.

- (i) The colour of the shadow of an object depends on its colour of the object.
- (ii) Transparent objects allow light to pass through them partially.

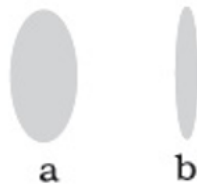
Ans. (i) No, the colour of the object does not depend on the colour of the shadow since the shadow is usually dark in colour.

(ii) Transparent objects allow most of the light to pass through them. Translucent objects allow light to pass through them partially.

13. A torch is placed at two different positions A and B, one by one, as shown in the given figure.



The shape of the shadow obtained in two positions is shown in the figure a and b.



Match the position of the torch and shape of the shadow of the ball.

Ans. A → a;

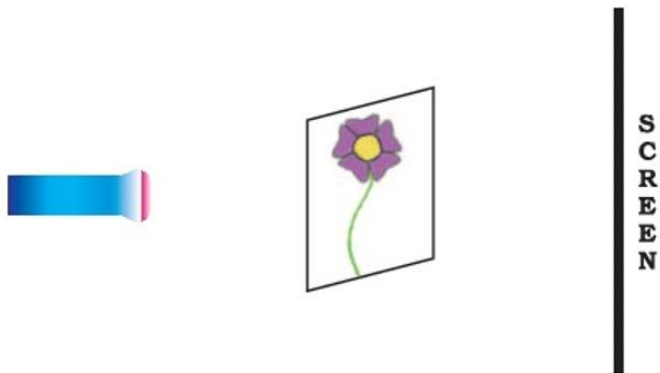
Position A will form the shadow 'a'.

B → b

Position B will form the shadow 'b'.

As the position of torch changes, we can observe the change in the shape of the shadow.

14. In the given figure, a flower made of thick coloured paper has been pasted on the transparent glass sheet. What will be the shape and colour of shadow seen on the screen?



Ans. The shadow formed will be of the shape of a flower along with the stalk and the shadow will be dark in colour.

15. A sheet of plywood, a piece of muslin cloth and that of a transparent glass, all of the same size and shape were placed at A one by one in the arrangement shown in the figure. Will the shadow be formed in each case. If yes, how will the shadow on the screen be different in each case? Give reasons for your answer.



Ans. Shadow will not be formed in any of the cases. Only the piece of muslin cloth and the sheet of plywood will cast a shadow on the screen.

(i) The piece of muslin cloth will form a lighter shadow as it allows light to pass through it partially.

(ii) The sheet of plywood will form a dark shadow as it blocks the path of light completely.

(iii) The transparent glass will allow most of the light to pass through it. So, no shadow will be obtained on the screen.

16.



Tom, his mother and father are holding the placards in their hands as shown in the above figure. Who among them will be able to read his/her placard the same in a plane mirror?

A. Dad

B. Mom

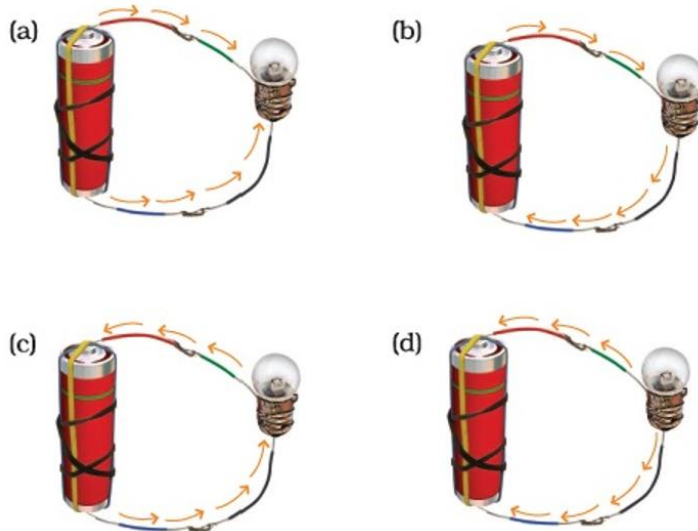
C. Tom

D. The whole family

Ans. B. Mom

CHAPTER 12 ELECTRICITY AND CIRCUITS

1. Choose from the options a, b, c and d given in the figure, which shows the correct direction of current.



Ans. (b)

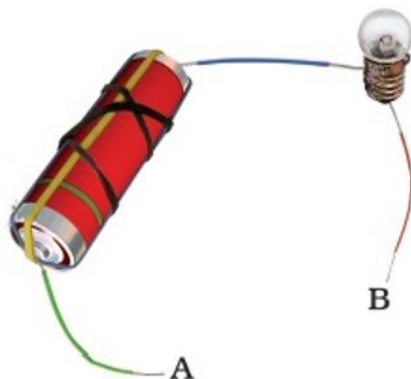
2. Choose the incorrect statement.
- (a) A switch is the source of electric current in a circuit.
 - (b) A switch help to complete or break the circuit.
 - (c) A switch helps us to use electricity as per our requirement.
 - (d) When the switch is open there is an air gap between its terminals.

Ans. (a) A switch is the source of electric current in a circuit.

3. In an electric bulb, light is produced due to the glowing of
- (a) the glass case of the bulb.
 - (b) the thin filament.
 - (c) the thick wires supporting the filament.
 - (d) gases inside glass case of the bulb.

Ans. (b) the thin filament.

4. In the following arrangement shown in the given figure, the bulb will not glow if the ends A and B are connected with

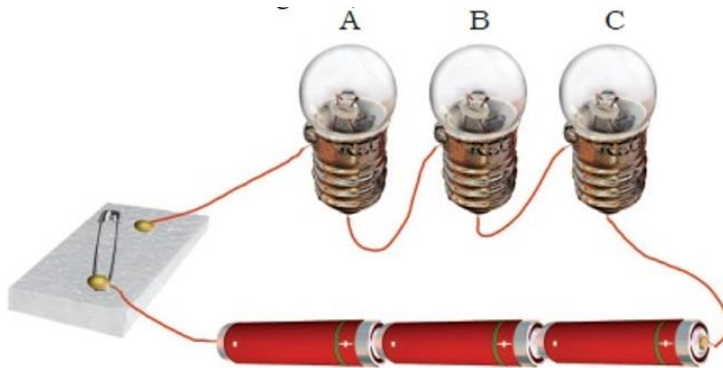


- (a) A steel spoon

- (b) A metal clip
- (c) A plastic clip
- (d) A copper wire

Ans. (c) A plastic clip

5. In the circuit shown in the given figure, when the switch is moved to 'ON' position,



- (a) the bulb A will glow first.
- (b) the bulb B will glow first.
- (c) the bulb C will glow first.
- (d) all bulbs will glow together.

Ans. (d) all bulbs will glow together.

6. Filament of a torch bulb is

- (a) a metal case.
- (b) metal tip at the centre of the base.
- (c) two thick wires.
- (d) a thin wire.

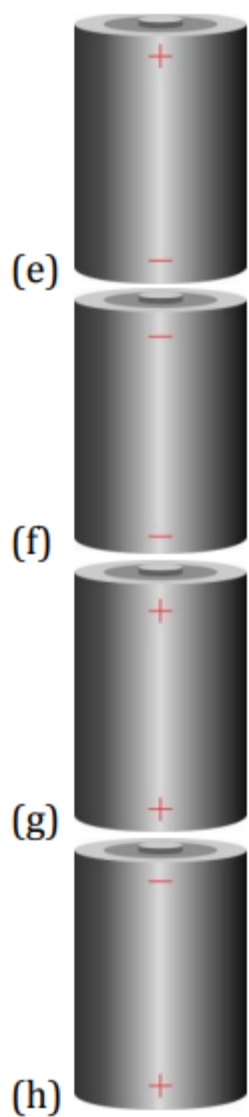
Ans. (d) a thin wire.

7. is running short of connecting wires. To complete an electric circuit, she may use a

- (a) glass bangle.
- (b) thick thread.
- (c) rubber pipe.
- (d) steel spoon.

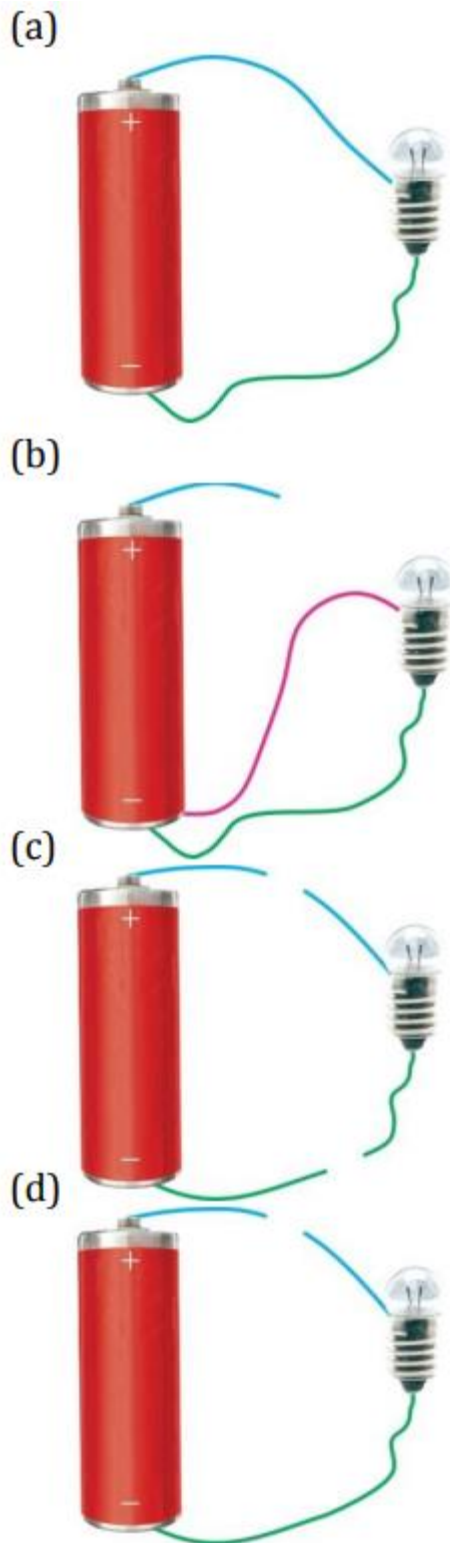
Ans. (d) steel spoon.

8. In the given pictures, which one shows the correct sign positions?



Ans. (a) In an electric cell, metal cap is the positive terminal of the electric cell and the metal disc is the negative terminal.

9. Observe the given diagrams. Which one shows the complete circuit?



Ans. (a) The first diagram has a complete circuit, and hence here the bulb glows.

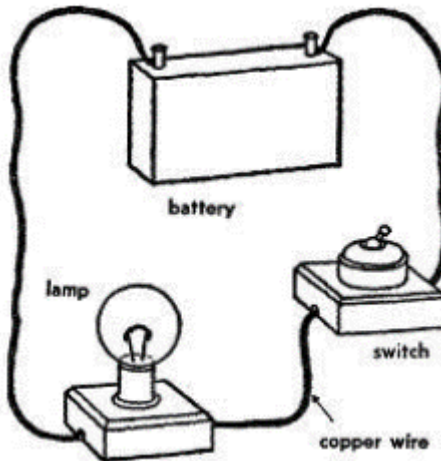
10. In which circuit will the bulb or bulbs glow brightest?

- (a) A simple circuit with one bulb and one battery.
- (b) A simple circuit with one bulb and two batteries.
- (c) A simple circuit with two bulbs and one battery.

(d) Bulb/bulbs will be equally bright in all the above cases.

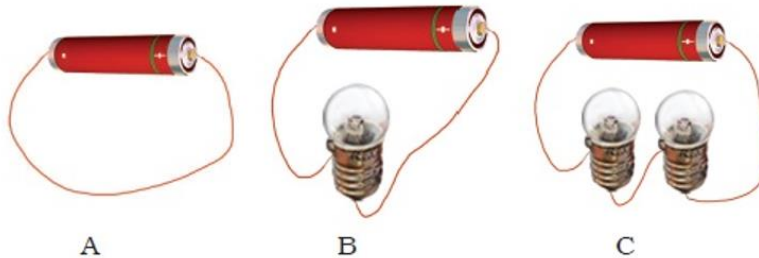
Ans. (b) Two batteries provide a greater flow of electricity than one and hence the bulb will glow more brightly.

11. Will the bulb glow in the arrangement shown in the figure? Give reasons.



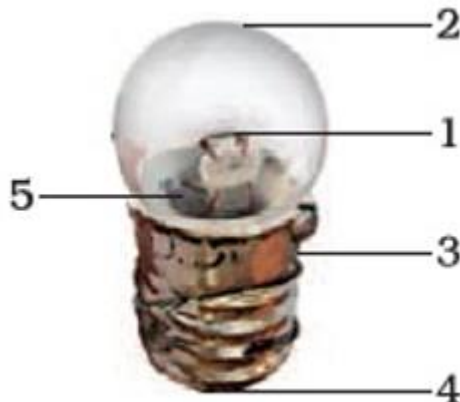
Ans. Yes, the bulb will glow in the arrangement shown in the figure because the circuit is complete i.e., there is a continuity in the circuit without any break.

12. In which of the following circuits A, B and C given in the given figure, the cell will be used up very rapidly?



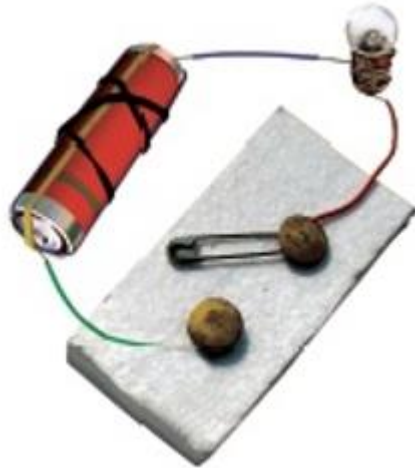
Ans. In circuit A, the cell will be used up very rapidly.

13. Figure shows a bulb with its different parts marked as 1, 2, 3, 4 and 5. Which of them label the terminals of the bulb?



Ans. Labels 3 and 4 are the terminals of the bulb.

14. Will the bulb glow in the circuit shown in the given figure? Explain.



Ans. No, the bulb will not glow in this circuit because the switch is open and the circuit is broken. Current flows only in a closed circuit.

15. An electric bulb is connected to a cell through a switch as shown in Fig. 12.7. When the switch is brought in 'ON' position, the bulb does not glow. What could be the possible reason/s for it? Mention any two of them.



Ans. When the switch is brought in 'ON' position, the bulb does not glow. There could be following reasons for it:

- (i) Loose connections.
- (ii) Connecting wires are broken.
- (iii) The cell is a used one.
- (iv) The bulb is fused.

16. Kritika connected two bulbs to a cell as shown in the given figure.



She found that filament of bulb B is broken. Will the bulb A glow in this circuit?
Give reason.

Ans. No, the bulb will not glow in this circuit as the filament of bulb B is broken. Due to the breakage in the circuit current does not flow.

17. Which of the following arrangement A, B, C and D given in the figures should not be set up? Explain, why.



A



B



C



D

Ans. Arrangement A should not be set up since the current flows from a negative terminal to the positive terminal which will exhaust the cell very quickly as the large current will flow through it.

18. Figure A and B, show a bulb connected to a cell in two different ways.



- a. (i) What will be the direction of the current through the bulb in both the cases. (Q to P or P to Q)
- b. (ii) Will the bulb glow in both the cases?
- c. (iii) Does the brightness of the glowing bulb depend on the direction of current through it?

Ans. (i) In the case of Q to P: the current flows from the positive terminal to the negative terminal.

In case of P to Q: the current flows from the negative terminal to the positive terminal.

(ii) Yes, the bulb will glow in both the cases as the current is flowing and the circuit is complete.

(iii) No, the brightness of the glowing bulb does not depend on the direction of current through it. Amount of current and voltage in the circuit decides the brightness of the glowing bulb.

19. Think of six activities which use electric current. Also name the devices used to perform the activity.

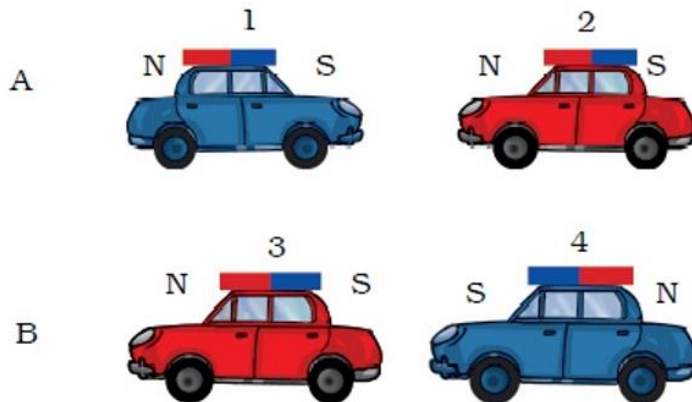
Activity you perform	Device
Example : Get light	Torch
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Ans.

Activity you perform	Device
Get light	Torch
Make toast	Toaster
Heat water	Geyser
Listen to music	CD Player
Watch movies	Laptop/TV
Cook food	Microwave/Heater

CHAPTER 13 FUN WITH MAGNETS

1. Observe the pictures A and B given in the figure carefully.

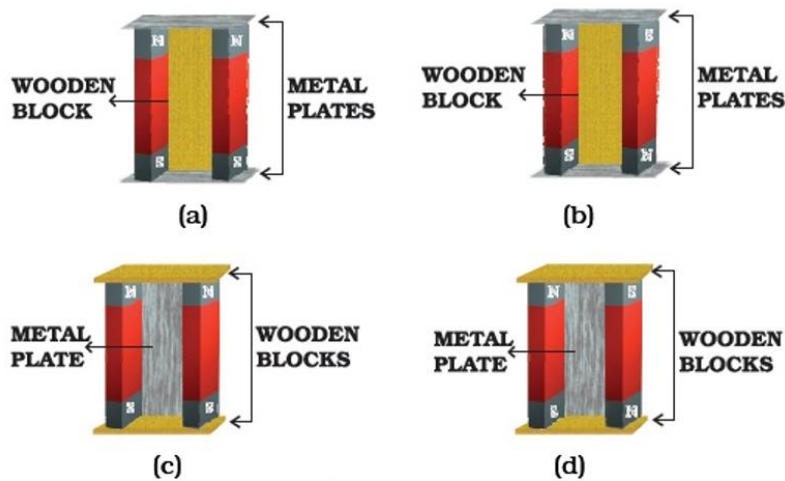


Which of the following statement is correct for the above given pictures?

- (a) In A, cars 1 and 2 will come closer and in B, cars 3 and 4 will come closer.
 (b) In A, cars 1 and 2 will move away from each other and in B, cars 3 and 4 will move away.
 (c) In A, cars 1 and 2 will move away and in B, 3 and 4 will come closer to each other.
 (d) In A, cars 1 and 2 will come closer to each other and in B, 3 and 4 will move away from each other.

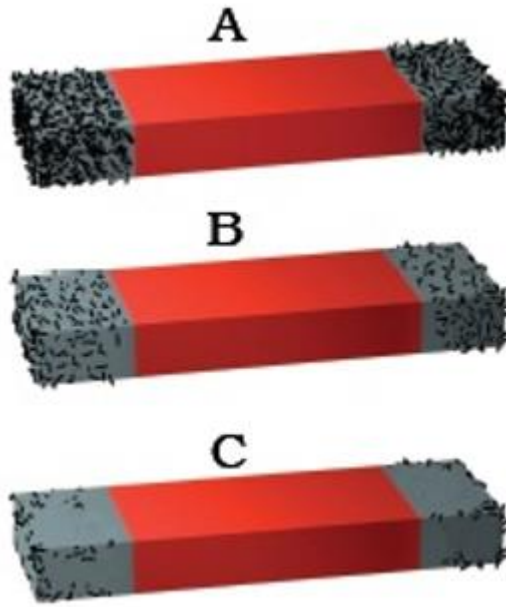
Ans. (d) In A, cars 1 and 2 will come closer to each other and in B, 3 and 4 will move away from each other.

2. The arrangement to store two magnets is shown by figures (a), (b), (c) and (d) in Fig. 13.2. Which one of them is the correct arrangement?



Ans. (b)

3. Three magnets A, B and C were dipped one by one in a heap of iron filing. Fig. 13.3 shows the amount of the iron filing sticking to them.



The strength of these magnets will be

- (a) $A > B > C$
- (b) $A < B < C$
- (c) $A = B = C$
- (d) $A < B > C$

Ans. (a) $A > B > C$

4. North pole of a magnet can be identified by

- (a) Another magnet having its poles marked as North pole and South pole.
- (b) Another magnet no matter whether the poles are marked or not.
- (c) Using an iron bar.
- (d) Using iron filings.

Ans. (a) Another magnet having its poles marked as North pole and South pole.

5. A bar magnet is immersed in a heap of iron filings and pulled out. The amount of iron filling clinging to the

- (a) North pole is almost equal to the south pole.
- (b) North pole is much more than the south pole.
- (c) North pole is much less than the south pole.
- (d) Magnet will be same all along its length.

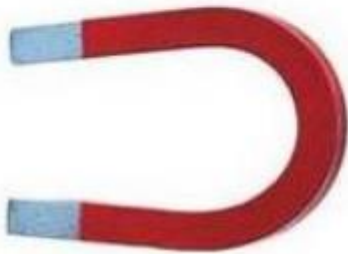
Ans. (a) North pole is almost equal to the south pole.

6. (a) Identify the type of magnets:

i.

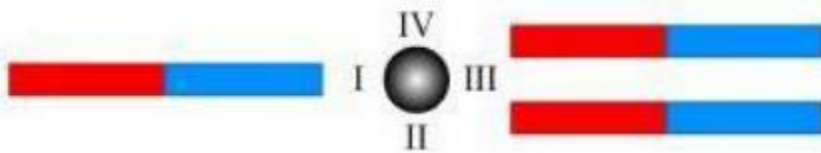


ii.



Ans. i. Bar Magnet ii. Horse-shoe magnet

7. In an experiment, Rodger places a small iron ball between three magnets of equal strengths, as shown in the given figure. The magnets are at equal distances from the ball. The ball will move towards point

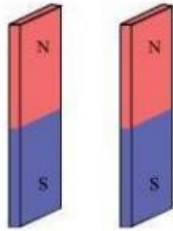


- (a) I (b) II (c) III (d) IV

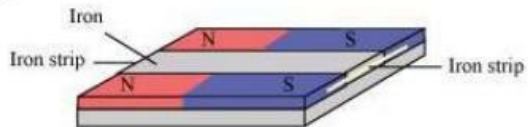
Ans. (c) The ball will move towards point III since it is forces of attraction are more at point III due to the greater number of magnets.

8. Ajay has two bar magnets, as shown in the given figure. He wants to store them safely. Which of the following diagrams correctly shows the method employed by Ajay?

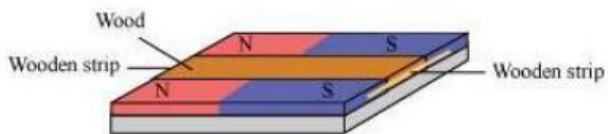
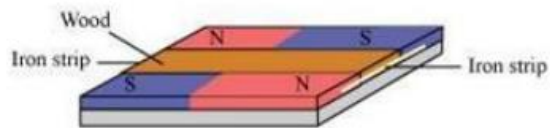
(a)



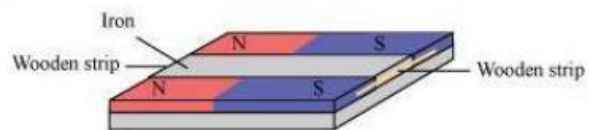
(b)



(c)



(d)



Ans. (b) Bar magnets should be kept in pairs with their unlike poles on the same side. They must be separated by a piece of wood while two pieces of soft iron should be placed across their ends.

9. Fill in the blanks

(i) When a bar magnet is broken; each of the broken part will have pole/poles.

(ii) In a bar magnet, magnetic attraction is near its ends.

Ans. (i) two

(ii) more

10. Rohit dipped a bar magnet in a heap of iron filings and pulled it out. He found that iron filings got stuck to the magnet as shown in the figure.



(i) Which regions of the magnet have more iron filings sticking to it?

(ii) What are these regions called?

Ans. (i) The ends of the magnet have more iron filings attached to it.

(ii) Magnets have two poles, namely the North Pole and the South Pole. Hence, these regions are called poles of the magnet.

11. Four identical iron bars were dipped in a heap of iron filings one by one. Figure shows the amount of iron filings sticking to each of them.



(a)



(b)



(c)



(d)

(a) Which of the iron bar is likely to be the strongest magnet?

(b) Which of the iron bars is not a magnet? Justify your answer.

Ans. (a) Iron bar (a) is likely to be the strongest magnet since more amount of iron filings have stuck to the magnet than any other bars.

(b) Iron bar (b) is not a magnet since none of the iron filings sticks to the magnet.

12. Match Column I with Column II (One option of A can match with more than one option of B)

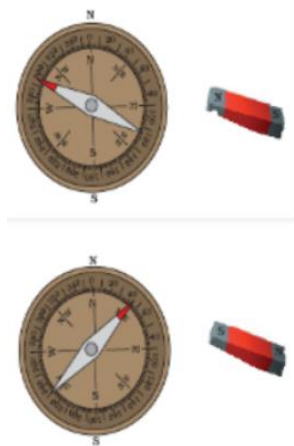
Column I	Column II
(a) Magnet attracts	(i) rests along a particular direction
(b) Magnet can be repelled	(ii) iron
(c) Magnet if suspended freely	(iii) by another magnet
(d) Poles of the magnet can be identified by	(iv) iron filings

Ans. (a) - (ii), (iii), (iv) (b) - (iii) (c) - (i) (d) - (iii)

13. Figure shows a magnetic compass. What will happen to the position of its needle if you bring a bar magnet near it? Draw a diagram to show the effect on the needle on bringing the bar magnet near it. Also draw the diagram to show the effect when the other end of the bar magnet is brought near it.



Ans. The magnetic needle of the compass will get deflected.



14. Mandeep kept a magnet close to an ordinary iron bar. He observed that the iron bar attracts a pin as shown in the given figure.



What inference could he draw from this observation? Explain.

Ans. He could infer from this observation that the iron bar is induced with magnetic properties and iron bar acts as a magnet till the magnet is kept near it.

15. A bar magnet is cut into two pieces A and B, from the middle, as shown in the given figure.



Will the two pieces act as individual magnets? Mark the poles of these two pieces. Suggest an activity to verify your answer.

Ans. Yes, the two broken pieces A and B will act as individual magnets. A magnet will always have two poles – the North and South Pole. Hence, now each piece will have two poles.

By using the test of repulsion between the newly formed magnets we can detect the poles of broken magnets.

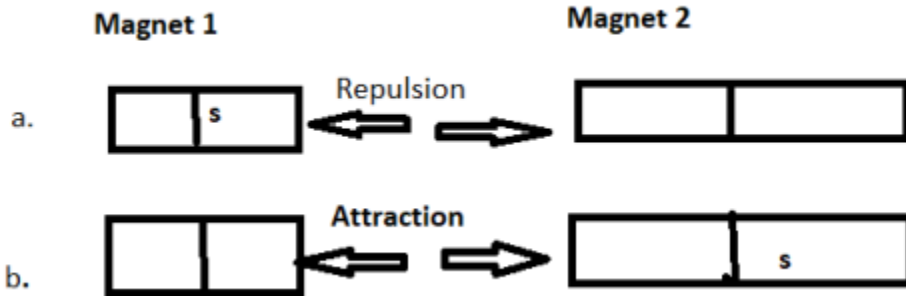


16. Which of the following gets attracted to a magnet:

- A. Plastic comb
- B. Iron clip
- C. Paper notebook
- D. Silver cup

Answer B. Iron clip

17.



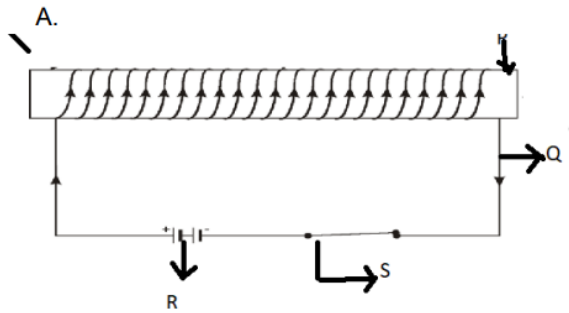
Observe the picture given above and mark the missing poles of the magnets in the table given below:

	Poles of magnet 1		Poles of magnet 2		Interaction
a.		S			Repulsion
b.				S	Attraction

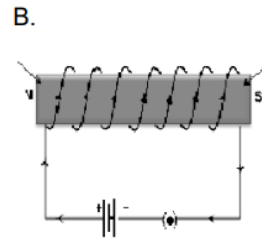
Ans. a. N (S) S N

b. N S N (S)

18.



(1)



(2)

Study the image (figure 1) given above and answer the following question.

- i. Which of the images would be the stronger electromagnet?
- ii. Give reason to support your answer (question i).
- iii. Label the parts shown in the figure as p, q and r.

Ans. i. Image A considered to be the strong electromagnet.

ii. More turns in the coil

iii. Label P- Iron core Q- Insulated wire R-Power source/cell

CHAPTER 14 - WATER

1. Which of the following activity does not involve the use of water?

- (a) Washing clothes
- (b) Bathing
- (c) Cleaning utensils
- (d) Drying wet clothes

Ans. (d) Drying wet clothes

2. In which of the following activities will you use the minimum amount of water?

- (a) Bathing
- (b) Brushing teeth
- (c) Washing clothes
- (d) Mopping a room

Ans. (b) Brushing teeth

3. The quantity of water required to produce one page of your book is

- (a) one bucket
- (b) ten buckets
- (c) two glasses
- (d) few drops.

Ans. (c) two glasses

4. Water in our tap comes from a

- (a) river
- (b) lake
- (c) well
- (d) river, lake or well

Ans. (d) river, lake or well

5. In which of the following case evaporation of water will be the slowest?

- (a) A tray of water kept in sunlight.
- (b) A kettle of water kept on a burner.
- (c) A glass of water kept in a room.
- (d) A bucket of water kept on rooftop.

Ans. (c) A glass of water kept in a room.

6. Transpiration is a process in which plants

- (a) receive water from soil
- (b) absorb water vapour from air
- (c) prepare food from water
- (d) release water vapour

Ans. (d) release water vapour

7. Clouds are

- (a) tiny drops of water floating in air
- (b) mixture of dust and water vapour
- (c) particles of water vapour
- (d) rain drops in air.

Ans. (a) tiny drops of water floating in air

8. Wells are fed by

- (a) pond water
- (b) lake water
- (c) rainwater

(d) groundwater

Ans. (d) groundwater

9. Floods caused extensive damage to

(a) crops

(b) property and human life

(c) domestic animals

(d) all of the above

Ans. (d) all of the above

10. "Catch water where it falls" is the basic idea behind

(a) recycling of water

(b) making dams to store water

(c) rainwater harvesting

(d) condensation of water vapour.

Ans. (c) rainwater harvesting, it is a method used to collect rainwater. By storing the water, we can increase the availability of water which is collected and stored for later use.

11. Look at the figure given below:



Write down activities shown in this figure in which water is being used.

Ans. The activities shown in the given figure in which water is being used are:

(i) Water is used for bathing.

(ii) Water is used for washing clothes.

(iii) Water is lifted from the well to store water and for drinking purposes.

12. Write any two activities which require more than a bucket of water.

Ans. The two activities which require more than a bucket of water are:

(i) For irrigation purpose, we require more water.

(ii) For washing a large number of clothes.

13. Write any two activities which require less than one bucket of water.

Ans. The two activities which require less than one bucket of water are:

(i) For brushing teeth.

(ii) For washing hands.

14. Fill in the blanks selecting words from, the following list.

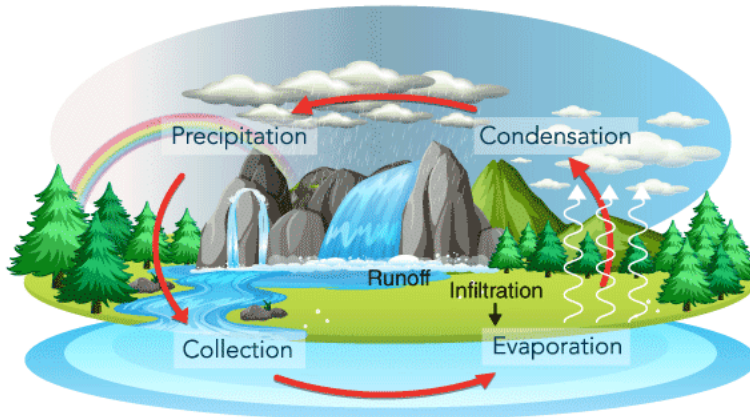
Snow, rain, clouds, vapour, evaporation, transpiration.

Water, as _____ goes into atmosphere by the processes of _____ and _____ and forms _____, which on condensation fall in the form of _____ and _____.

Ans. Vapour, Evaporation, Transpiration, Clouds, Snow, Rain

15. Draw a diagram to show how seawater reaches a lake or pond.

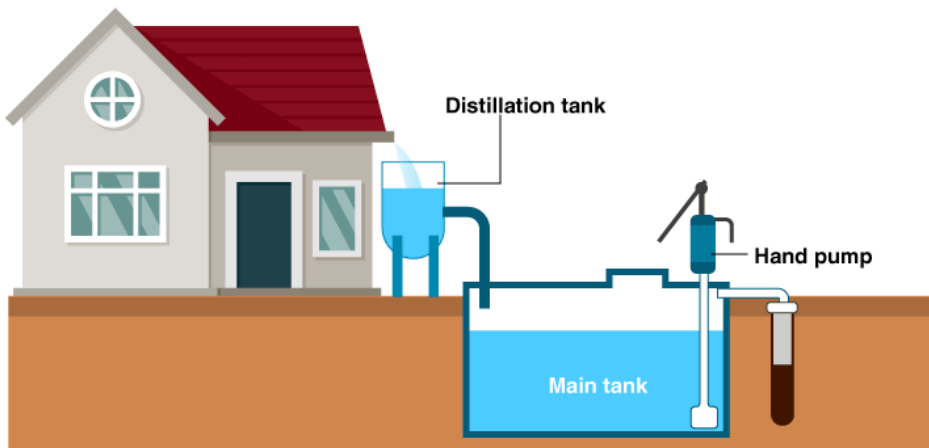
Ans.



16. Explain the process of rooftop rainwater harvesting with the help of a suitable diagram.

Ans. Rooftop rainwater harvesting – is a method where rainwater is collected from the rooftop to a storage tank through pipes. This water needs to be filtered before using because it may contain some soil from the roof. Instead of collecting rainwater directly in the tank, the pipes can go directly into a pit in the ground. This then enters into the soil to recharge or refill the groundwater.

Diagram which shows the process of rooftop rainwater harvesting:



CHAPTER 15 AIR AROUND US

1. Which of the following statements is incorrect?

- (a) All living things require air to breathe.
- (b) We can feel air but we cannot see it.
- (c) Moving air makes it possible to fly a kite.
- (d) Air is present everywhere but not in soil.

Ans. (d) Air is present everywhere but not in soil.

2. Wind does not help in the movement of which of the following?

- (a) Firki
- (b) Weather cock
- (c) Ceiling fan
- (d) Sailing yacht

Ans. (c) Ceiling fan

3. What is not true about air?

- (a) It makes the windmill rotate.
- (b) It helps in the movements of aeroplanes.
- (c) Birds can fly due to presence of air.
- (d) It has no role in water cycle.

Ans. (d) It has no role in water cycle.

4. Mountaineers carry oxygen cylinders with them because

- (a) there is no oxygen on high mountains.
- (b) there is deficiency of oxygen on mountains at high altitude.
- (c) oxygen is used for cooking.
- (d) oxygen keeps them warm at low temperature.

Ans. (b) there is deficiency of oxygen on mountains at high altitude.

5. Rohit took an empty plastic bottle, turned it upside down and dipped its open mouth into a bucket filled with water. He then tilted the bottle slightly and made the following observations.

- (i) Bubbles of air came out from the bottle.
- (ii) Some water entered the bottle.
- (iii) Nitrogen gas came out in the form of bubbles and oxygen got dissolved in water.
- (iv) No bubbles formed, only water entered the bottle.

Which observations is/are correct?

- (a) (i) and (ii)
- (b) (iv) only
- (c) (iii) and (iv)
- (d) (i) only

Ans. (a) (i) and (ii)

6. Which of the following components of air is present in the largest amount in the atmosphere?
- (a) Nitrogen
 - (b) Oxygen
 - (c) Water vapour
 - (d) Carbon dioxide

Ans. (a) Nitrogen

7. The components of air which are harmful to living beings are
- (a) nitrogen and carbon dioxide.
 - (b) dust and water vapour.
 - (c) dust and smoke.
 - (d) smoke and water vapour.

Ans. (c) dust and smoke.

8. Usha took a lump of dry soil in a glass and added water to it till it was completely immersed. She observed bubbles coming out. The bubbles contain
- (a) water vapour
 - (b) only oxygen gas
 - (c) air
 - (d) none of these

Ans. (c) air

9. State whether the following statements are true or false. If false, correct them.
- (a) Plants consume oxygen for respiration.
 - (b) Plants produce oxygen during the process of making their own food.
 - (c) Air helps in the movements of sailing yachts and glider but plays no role in the flight of birds and aeroplanes.
 - (d) Air does not occupy any space.

Ans. (a) True

(b) True

(c) False – Air helps in the movement of sailing yachts and gliders and also helps in the flight of birds and aeroplanes.

(d) False – Air does occupy space.

10. Name some such musical instruments in which air plays an important role.

Ans. Mouth organ, harmonium, shehnai, trumpet, trumpet and flute.

11. In the boxes of Column I the letters of some words got jumbled. Arrange them in proper form in the boxes given in Column II

Column I	Column II																
(a) <table border="1"><tr><td>D</td><td>I</td><td>L</td><td>L</td><td>M</td><td>W</td><td>I</td><td>N</td></tr></table>	D	I	L	L	M	W	I	N	(a) <table border="1"><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table>								
D	I	L	L	M	W	I	N										
(b) <table border="1"><tr><td>Y</td><td>N</td><td>O</td><td>G</td><td>X</td><td>E</td></tr></table>	Y	N	O	G	X	E	(b) <table border="1"><tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table>										
Y	N	O	G	X	E												
(c) <table border="1"><tr><td>M</td><td>E</td><td>S</td><td>K</td><td>O</td></tr></table>	M	E	S	K	O	(c) <table border="1"><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table>											
M	E	S	K	O													
(d) <table border="1"><tr><td>T</td><td>U</td><td>D</td><td>S</td></tr></table>	T	U	D	S	(d) <table border="1"><tr><td> </td><td> </td><td> </td></tr></table>												
T	U	D	S														

Ans. (a) WINDMILL

(b) OXYGEN

(c) SMOKE

(d) DUST

12. Make sentences using the given set of words.

(a) 99%, oxygen, nitrogen, air, together

(b) Respiration, dissolved, animals, air, aquatic

(c) Air, wind, motion, called

Ans. (a) 99% of the air is made up of Oxygen and nitrogen together.

(b) Aquatic animals use dissolved air for respiration.

(c) The air in motion is called wind.

13. A list of words is given in a box. Use appropriate words to fill up the blanks in the following statements

Air, oxygen, wind, water vapour, mixture, combination, direction, road, bottles, cylinders.

(a) The _____ makes the windmill rotate.

(b) Air is a _____ of some gases.

(c) A weather cock shows the _____ in which the air is moving at that place.

(d) Mountaineers carry oxygen _____ with them, while climbing high mountains.

Ans. (a) wind

(b) mixture

(c) direction

(d) cylinders

14. Observe the picture carefully and answer the following questions.



- (a) What is covering the nose and mouth of the police man?
 (b) Why is he putting a cover on his nose?
 (c) Can you comment on air quality of the place shown in the figure?

Ans. (a) The policeman has worn a mask to cover his nose and mouth.

(b) He has put a mask on his nose to protect himself from dirt and polluted air. Since the mask avoids exposure to the harmful exhaust of vehicles, thus prevents the harmful gases and dust particles entering our body.

(c) In the given figure the quality of air is bad since it is polluted. Due to the smoke and harmful gases such as carbon monoxide and sulphur dioxide emitted by the automobiles along with dust particles the air is polluted.

15. Match the items of Column I with the items of Column II

Column I	Column II
(a) Weather cock	(i) Gases and fine dust particles
(b) Mountaineers	(ii) Sailing yacht
(c) Fine hair inside the nose	(iii) Oxygen cylinders
(d) Smoke	(iv) Direction of air flow
(e) Wind	(v) Prevent dust particles

Ans. (a) – (iv), (b) – (iii), (c) – (v), (d) – (i), (e) – (ii)

CHAPTER 16 – GARBAGE IN, GARBAGE OUT

1. The method of preparing compost with the help of earthworms is called

- (a) Composting
- (b) Vermicomposting
- (c) Manuring
- (d) Decomposing

Ans. (b) Vermicomposting

2. If you dump kitchen waste in a pit, it may, after sometime

- (a) convert into compost
- (b) convert into vermicompost
- (c) remain as such
- (d) remain forever in its dried form.

Ans. (a) convert into compost

3. Which of the following activities does not reflect responsible behaviour with regard to waste disposal?

- (a) Goods carried in paper bags or cloth bags.
- (b) Waste collected in polythene bags for disposal.
- (c) Waste separated into those that degrade and those that do not.
- (d) Making handicrafts with used up notebooks.

Ans. (b) Waste collected in polythene bags for disposal because Polythene bags are non-biodegradable. They remain as such in the environment and are very harmful for nature.

4. Gitika gave the following ill effects of the practice of burning dried leaves and other plant parts.

- (i) Burning degrades the soil.
- (ii) Burning produces harmful gases/fumes.
- (iii) Precious raw materials to obtain manure at a low cost is lost.
- (iv) Lot of heat is generated unnecessarily.

The correct reasons of why we should not burn leaves are

- (a) i, ii and iv only
- (b) i, ii, iii and iv
- (c) ii and iii only
- (d) ii, iii and iv only.

Ans. (b) i, ii, iii and iv

5. A garbage collector separate items mentioned below in the garbage into red, green and blue containers for their transfer to landfill, composting pit, and recycling unit respectively.

Items:

- (i) Plastic bags
- (ii) Newspaper and journals
- (iii) Screw and nuts
- (iv) Vegetable peels
- (v) Metal chips
- (vi) Eggshells

Which item was transferred to which bin?

S. No.	RED	GREEN	BLUE
1.	(i) and (iv)	(ii) and (iii)	(v) and (vi)
2.	(i) and (iii)	(ii) and (v)	(iv) and (vi)

3.	(i), (iii) and (v)	(iv) and (vi)	(ii) only
4.	(i) and (v)	(ii) and (iv)	(iii) only

Ans.

3.	(i), (iii) and (v)	(iv) and (vi)	(ii) only
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6. The steps required for conversion of kitchen garbage into manure are given below in a jumbled form.

- (i) Put garbage in a pit.
- (ii) Cover the bottom of the pit with sand.
- (iii) Cover the pit loosely with a gunny bag or grass.
- (iv) Add worms.

Which of the following shows the correct sequence of the above steps?

- (a) (ii); (i); (iii); (iv)
- (b) (i); (ii); (iii); (iv)
- (c) (ii); (i); (iv); (iii)
- (d) (iv); (i); (ii); (iii)

Ans. (c) (ii); (i); (iv); (iii).

7. Read the items mentioned in columns-I and II and fill in the related process in column III.

Column I	Column II	Column III
(a) Organic waste	Earthworms	(i)
(b) Garbage	Dig pit and fill with garbage	(ii)
(c) Old newspaper	Paper bags	(iii)

Ans.

Column I	Column II	Column III
(a) Organic waste	Earthworms	(i) Vermicomposting
(b) Garbage	Dig pit and fill with garbage	(ii) Landfill
(c) Old newspaper	Paper bags	(iii) Recycling

8. Correct the definitions of certain terms given below by changing only one word.

- (i) Compost: Substances converted into manure for use in industries.
- (ii) Landfill: Garbage buried underwater in an area.
- (iii) Recycling: Reuse of unused material in the same or another form.

Ans. (i) Compost: It is a process in which substances converted into manure for use in agricultural fields.

(ii) Landfill: It is a process in which garbage buried under the soil in an area.

(iii) Recycling: It is a process in which reusing of used materials in the same or another form.

9. Provide a suitable term that expresses the meaning of each of the following statements.

- (a) Greeting cards made from newspaper.
- (b) Contents of the waste bins.
- (c) Worms converting certain kinds of waste into manure.
- (d) An area where a lot of garbage is collected, spread out and covered with soil.

Ans. (a) Recycling

(b) Garbage

(c) Vermicomposting

(d) Landfill

10. Read the poem written below and then answer the questions from the information gathered from the book or elsewhere.

Blue and Green
Two bins, you mean?
Yes, they are there
to throw your waste.
But not in a hurry
Nor in a haste.
Select from waste, sieve if seems muddy
Separate all items and when they are ready
Place in a blue bin, or one that is green
For a voyage to the landfill, or for composting.

(i) Name the two kinds of waste that need to be separated from each other in two different waste bins.

(ii) Name two items of waste each that need to be sent to a (a) landfill, (b) for composting

Ans. (i) The two kinds of waste that need to be separated from each other in two different waste bins are named as biodegradable waste and non-biodegradable waste.

The bin containing biodegradable waste can be converted into simpler forms with the help of microbes which can be used as manure.

The bin containing non-biodegradable waste cannot be converted nor recycled. Hence the waste can be used for landfill.

(ii) (a) The two items that can be sent to landfill are metal pieces, empty glass bottles, plastic plates etc.

(b) Wastes from the kitchen like vegetable peels, dry leaves, animal dung etc can be sent for composting.

11. Put a tick (✓) against the garbage items given in the Table given below which could be converted into manure. Put a cross (X) against the others.

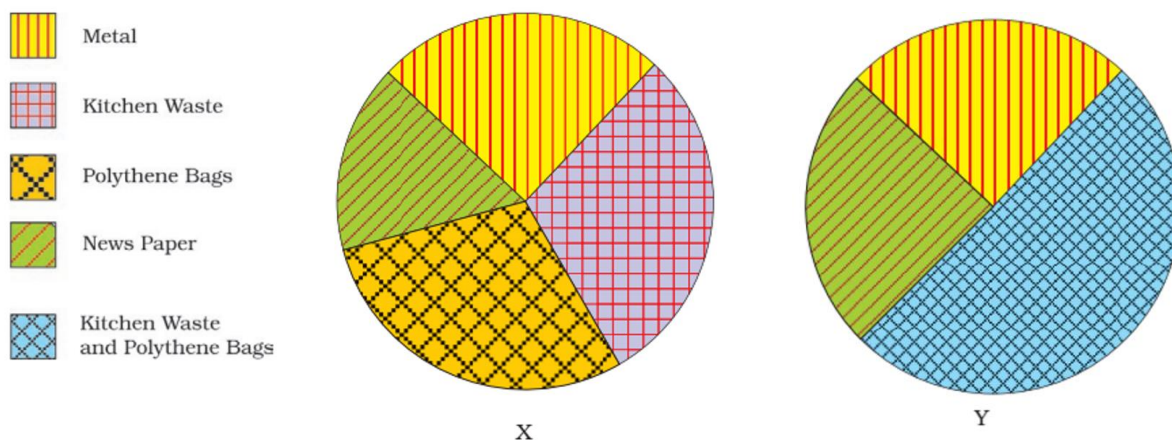
Garbage Items: Eggshells, Straw, Dry flowers, Pebbles, Broken pieces of glass, Nails and screws, Plastic bangles, Leftover food, Steel broken vessel, Dead animals.

Ans.

S. No.	Garbage Items	Make manure or not
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1.	Eggshells	Yes
2.	Straw	Yes
3.	Dry flowers	Yes
4.	Pebbles	No
5.	Broken pieces of glass	No
6.	Nails and screws	No
7.	Plastic bangles	No
8.	Leftover food	Yes
9.	Steel broken vessel	No
10.	Dead animals	Yes

12. The pie charts A and B showed in the given figure are based on waste segregation method adopted by two families X and Y respectively.



Which of the two families X or Y do you think is more environmentally conscious and why?

Ans. Family X is more environmentally conscious because they segregated biodegradable and non-biodegradable substances separately. They are aware of disposing of waste materials in the wrong manner. So, they disposed of kitchen waste (biodegradable) and polythene bags (non-biodegradable) separately unlike family Y who disposed of kitchen waste and polythene bags together as one waste.

13. Given below are steps in vermicomposting and each step has been given an alphabet. Rearrange the steps in the correct sequence and write the alphabets on the chart provided. One step is done for you.

A Sprinkle water to keep it moist

B Cover with a gunny bag or grass

C Spread sand on the floor of the pit.

D Place red worms in the pit

E Add vegetable peels and fruits waste in the pit.

F Dig a pit in a suitable place, in your garden.

Ans. Step 1 – F

Step 2 – C

Step 3 – E

Step 4 – A

Step 5 – D

Step 6 – B

14. Write 3 sentences on what comes to your mind when you chance to see the following.

(a) A rag picker.

Ans. (i) When we come across a rag picker, he represents poor people or under poverty people.

(ii) He sorts out the biodegradable waste from non- biodegradable waste.

(iii) He exposes himself to the harmful substances generated by the solid waste which causes various diseases.

(b) A cow eating a polythene bag.

Ans. (i) A cow eating a polythene bag is unsafe, it shows the irresponsible behaviour of citizens by throwing garbage in the form of polythene bag.

(ii) A cow is exposed to hazardous material generating from the garbage.

(iii) A cow may choke itself from the polythene bag.

Ans. (c) A foul odour emanating from garbage at the entrance of your house.

(i) It indicates the production of a large quantity of waste.

(ii) We expect others to clear the waste generated by us. This shows our irresponsibility towards garbage disposal.

(iii) The foul garbage shows unhealthy surrounding with an unpleasant sight which would lead to the spread of various diseases.

15. Safari karamcharis collect the garbage in trucks and take it to a low-lying open area, called a landfill. There the part of the garbage that can be reused is separated out from the one that cannot be used as such. Thus, the garbage has both useful and non-useful components. The non-useful component is separated out. It is then spread over the landfill and then covered with a layer of soil. There are some things in the garbage rot. They form manure which is used for the plants. The rotting and conversion of some materials into manure is called 'composting'.

In some cities and towns, municipalities provide separate dustbins for collecting two kinds of garbage. Usually, one is coloured blue and the other green. The blue bin is for materials that can be used again — such as Plastics, metals and glass. These are the materials that do not rot in the garbage heaps. The Green bins are for collecting kitchen and other plant or animal wastes. This type of wastes rots completely when buried in the soil. Thus, it is necessary to separate wastes into two groups. You must have noticed garbage heaps of dried leaves on the roadside. Most of the time these are burnt. But burning these produces smoke and gases that are harmful for our health.

Q1. A low-lying area where wastes materials are dumped is called

- (a) Compost
- b) Roadside
- (c) Landfill
- (d) Dustbin

Ans. (c) Landfill

Q2. Burning of heaps of dried leaves on the roadside can affect our health.

- (a) True
- (b) False

Ans. (a) True

Q3. Which of the following waste material rot completely in the garbage heap?

- (a) Plastic
- (b) Metal
- (c) Animal waste
- (d) All of the above

Ans. (c) Animal waste

Q4. What is composting?

Ans. The process of rotting and converting of wastes materials into manure is called composting.

Q5. Why is it important to have separate dustbins for wastes materials?

Ans. Waste materials like metals, glass and plastic do not rot over time in the garbage heap, so they need to be separated out from products like animals and plants wastes, kitchen wastes as they rot completely when buried in the soil.
