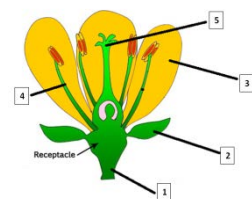
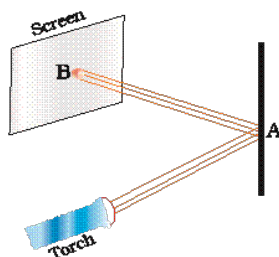
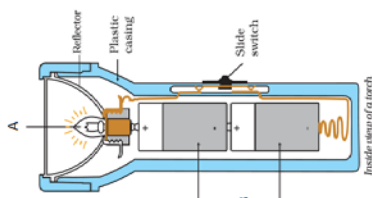




# ***- Teachers' Handbook*** ***(Based on learning outcomes)***

**CLASS-VI**

**SCIENCE**



# **FOREWORD**

## **CLASSES VI TO VIII**

### **SUBJECT – SCIENCE**

This document is prepared with a notion to enable the teachers to ascertain learning skills accurately in the subject of science for classes VI to VIII so that the minimum level of learning (MLL) may be attained by the children and their periodic assessment can be done to maintain the record of their progress.

## **ABOUT THE DOCUMENT**

- The document includes Learning Outcomes prepared by NCERT distinctively for classes VI, VII and VIII in Science and learners achievement sheet for the assessment of learners.
- It covers the full syllabus for each class and gives an insight into the progress made in each class by the students.
- The material in the documents can be used as an assessment tool for classes VI to VIII in the subject of science and it is meant both for teachers and the students.
- The document provides the crux of the Learning Outcomes and efforts are made to avoid direct information, definition and description, and instead an opportunity is provided to the children to correlate experience and explore the environment in its surroundings.
- This document reaches the desired Learning Outcomes targeting the competencies through multiple choice and open ended questions to access the learning levels of the students in each class.
- The language in the document is simple for the children to read and understand and the Progress sheet has been given to record the growth of every student by the teacher.
- In spite of the fact that all efforts are made to give full freedom to the child to explore but there might have been some discrepancies. Therefore, this document should be considered suggestive document and constructive suggestions as per the need can be incorporated.

**NOTE: These assessment tools are only suggestive for teachers. The teacher can modify these tools according to the need and level of students.**

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## CLASS VI

	<b>The learner—</b>
<b>SCI601</b>	<ul style="list-style-type: none"> <li>identifies materials and organisms, such as, plant fibres, flowers, on the basis of observable features, i.e., appearance, texture, function, aroma, etc.</li> </ul>
<b>SCI602</b>	<ul style="list-style-type: none"> <li>differentiates materials and organisms, such as, fibre and yarn; tap and fibrous roots; electrical conductors and insulators; on the basis of their properties, structure and functions.</li> </ul>
<b>SCI603</b>	<ul style="list-style-type: none"> <li>classifies materials, organisms and processes based on observable properties, e.g., materials as soluble, insoluble, transparent, translucent and opaque; changes as can be reversed and cannot be reversed; plants as herbs, shrubs, trees, creeper, climbers; components of habitat as biotic and abiotic; motion as rectilinear, circular, periodic etc.</li> </ul>
<b>SCI604</b>	<ul style="list-style-type: none"> <li>conducts simple investigations to seek answers to queries, e.g., What are the food nutrients present in animal fodder? Can all physical changes be reversed? Does a freely suspended magnet align in a particular direction?</li> </ul>
<b>SCI605</b>	<ul style="list-style-type: none"> <li>relates processes and phenomenon with causes, e.g., deficiency diseases with diet; adaptations of animals and plants with their habitats; quality of air with pollutants, etc.</li> </ul>
<b>SCI606</b>	<ul style="list-style-type: none"> <li>explains processes and phenomenon, e.g., processing of plant fibres; movements in plants and animals; formation of shadows; reflection of light from plane mirror; variations in composition of air; preparation of vermicompost, etc.</li> </ul>
<b>SCI607</b>	<ul style="list-style-type: none"> <li>measures physical quantities and expresses in SI units, e.g., length</li> </ul>
<b>SCI608</b>	<ul style="list-style-type: none"> <li>draws labelled diagrams / flow charts of organisms and processes, e.g., parts of flowers; joints; filtration; water cycle, etc.</li> </ul>
<b>SCI609</b>	<ul style="list-style-type: none"> <li>constructs models using materials from surroundings and explains their working, e.g., pinhole camera, periscope, electric torch, etc.</li> </ul>
<b>SCI610</b>	<ul style="list-style-type: none"> <li>applies learning of scientific concepts in day-to-day life, e.g., selecting food items for a balanced diet; separating materials; selecting season appropriate fabrics; using compass needle for finding directions; suggesting ways to cope with heavy rain/drought, etc.</li> </ul>
<b>SCI611</b>	<ul style="list-style-type: none"> <li>makes efforts to protect environment, e.g., minimising wastage of food, water, electricity and generation of waste; spreading awareness to adopt rain water harvesting; care for plants, etc.</li> </ul>
<b>SCI612</b>	<ul style="list-style-type: none"> <li>exhibits creativity in designing, planning, making use of available resources, etc.</li> </ul>
<b>SCI613</b>	<ul style="list-style-type: none"> <li>exhibits values of honesty, objectivity, cooperation, freedom from fear and prejudices.</li> </ul>

### Major parameters for evaluation:

PARAMETER	SUB PARAMETER	LEARNING OUTCOME
Identify	-----	SCI601
Differentiate/Classify	-----	SCI602, SCI603
Explain	-----	SCI606
Draw/ Measure	-----	SCI607,SCI608
Construct/Exhibit/ Conduct	-----	SCI604,SCI609, SCI612, SCI613
Application/Relate	Make efforts to protect environment	SCI605,SCI610,SCI611

## SAMPLE FORMAT FOR ASSESSMENT

## Learner's achievement Sheet

[illegible]

[illegible]

## INDEX

CHAPTER	CHAPTER NAME	PAGE NUMBER
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# CHAPTER 1

## FOOD- WHERE DOES IT COME FROM

### Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES																		
Identify					Differentiate/ Classify					Explain			Draw/ Measure	Construct/ Exhibit/ Conduct	Application /Relate			
Q 4	Q 9	Q 13	Q 14	Q 16	Q 8	Q 12	Q 15	Q 17	Q 18	Q 2	Q 3	Q 6	Q 11		Q 1	Q 5	Q 7	Q 10

### Learner's achievement Sheet

Name of student	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18

### Achievement level as per learning outcomes

**\*(A- not meeting the expected standard,**

**C- Approached the expected standard**

**D- Beyond the expected standard)**

[illegible]

## **MCOs**

**1. We do not eat same kind of food daily. There is so much variety in the food we eat.**

**These food items are made of**

- a) Two ingredients
- b) Many ingredients
- c) One ingredients
- d) No ingredients

**2. In South India people generally eat Idli-Sambar daily .What are the ingredients of Idli?**

- a) Rice, Water and Salt
- b) Rice and Dal
- c) Dal and Vegetables
- d) Dal and Spices

**3. Rohit ate eggs, rice and dal in his lunch .What are the sources of his food ingredients?**

- a) Plants
- b) Animals and plants
- c) Hen
- d) Plants of Pulses

**4. Name the plant whose parts than one part is edible.**

- a) Apple
- b) Mustard
- c) Lady finger
- d) Brinjal

**5. Paheli wants to know if any of our food comes from sources other than plants and animals.**

- a) Yes
- b) No
- c) Sea
- d) None of the above.

**6. Why does Organisms need food? Choose one correct statement.**

- a) Food helps us to grow.
- b) Because our body needs it
- c) Gives Energy to Organisms for performing activities
- d) All of the above.

**7. Why do boiled seeds fail to sprout?**

- a) Boiling damages the shape of seeds for germination
- b) Boiling damages certain protein required for germination
- c) Boiling damages their heat for germination
- d) Boiling make seeds colourless

**8. Name the food produced by insects that is eaten by human beings.**

- a) Milk
- b) Wax
- c) Honey
- d) Butter

**9. Name two ingredients in food that are not obtained from plants and animals**

- a) Ghee and Oil
- b) Water and Salt
- c) Honey and Salt
- d) Spices and Oil

**10. Why should we avoid wastage of food ?**

- a) A lot of hard work and money is invested by farmers to produce the food
- b) Because there are many amongst us who do not get sufficient food
- c). When we throw food, it creates pollution
- d). All of the above.

**11.Both seeds and leaves of this plant are edible. Select the correct option .**

- a) Mustard
- b) Wheat
- c) Pumpkin
- d) Maize

**12.Given below are the names of some animals**

- 1) Goat
- 2) Human being
- 3) Bear.
- 4) Eagle

**Which of the above mentioned animals form a pair of omnivores?**

- a) (1) and (2)
- b) (2) and (3)
- c) (3) and (4)
- d) (2) and (4)

**13.The part of a Banana plant which is not used as food is\_\_\_\_\_ -**

- a) Flower
- b) Fruit
- c) Stem
- d) Root

**14.Autotrophs prepare their own food while heterotrophs depend on other for their food.**

**Which among the following is an autotroph?**

- a) Man
- b) Mushroom
- c) Mango tree
- d) Cow

**15.Autotrophs prepare their food by the process of Photosynthesis. Which of the following organism use sunlight to make its food?**

- a) Cat
- b) Frog
- c) Snake
- d) Coconut tree

**16.Which part/parts of the Mustard plant is /are edible?**

- a) Fruit, roots
- b) Leaves ,seeds
- c) Roots and stem
- d) Fruit, Leaves

**17.Who are omnivores?**

- a) Those who eat plants only.
- b) Those who eat meat only.
- c) Those who eat both plants and animals
- d) None of the above.

**18.With regards to its natural eating habits, human is :-**

- a) a herbivore
- b) a carnivore
- c) an omnivore
- d) a granivore

## Answer Key (Chapter 1)

Q	ans.	Q.	ans.
1	b	13	d
2	a	14	c
3	b	15	d
4	b	16	b
5	b	17	c
6	d	18	c
7	b		
8	c		
9	b		
10	d		
11	a		
12	b		

## CHAPTER 2

### COMPONENTS OF FOOD

#### Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES															
Identify					Differentiate/ Classify	Explain				Draw/ Measure	Construct/ Exhibit/ Conduct	Application/ Relate			
Q 1	Q 3	Q 9	Q 7	Q 6	Q 3	Q 8	Q 10	Q 11	Q 16	Q 5	Q 15	Q 2	Q 4	Q 9	Q 12

#### Learner's achievement Sheet

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15

### Achievement level as per learning outcomes

**\*(A- not meeting the expected standard,**

**C- Approached the expected standard**

**D- Beyond the expected standard)**

[illegible]

## **MCQ**

**1. Which of the given food items are energy giving food?**

- i) Wheat
- ii) Ghee
- iii) Iodised salt
- iv) Spinach
- a) (i) and (iv)
- b) (ii) and (iv)
- c) (i) and (ii)
- d) (iii) and (iv)

**Q2. Sarthak advised his mother not to sieve wheat flour before making dough because**

- a) It Contains protein
- b) It Contains roughage which aids in digestion
- c) It Contains fat
- d) It Contains Vitamins

**Q3. Boojho was having difficulties 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.**

(A) Which deficiency is he suffering from?

- a) Loss of vision (Night blindness)
- b) Cataract
- c) Scurvy
- d) Beri-Beri

(B) Which food component may be lacking in Boojho's diet?

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

(C) Some food items that he should include in his diet are

- a) Carrot and Papaya
- b) Amla and Tomato
- c) Milk, Fish and Fish Oil
- d) (a) and (c)

**Q4. Paheli avoided eating vegetables but liked to eat biscuits, noodles and white bread. She frequently complained of stomach ache and constipation. Which food items should be included in her diet to get rid of the problem.**

- A) Milk and meat
- b) Pulses and paneer
- c) Dietary fibres or roughage
- d) Eggs and Liver

**Q5. While testing food items in a Laboratory, some drops of iodine fell on Paheli's socks and some on her teacher's Saree. The drops of iodine on the cotton saree turned blue black while colour of the socks did not change, because of the.**

- a) Presence of fat in saree
- b) Blue black colour indicates presence of starch layer on saree
- c) Presence of protein in saree.
- d) All of the above.



**Q6.Which Vitamin gets destroyed on cooking?**

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

**Q7.Which one of the following is not a major source of carbohydrates?**

- a) Wheat                      b) Gram                      c) Rice                      d)Maize.

**Q8.Modernisation has led to the development of life style disorder. Which of the following disease is caused due to lifestyle disorder?**

- a) Obesity and heart disease  
b) Lack of Vision and Goitre  
c) Bone decay and rickets  
d) None of the above

**Q9 Rohit was very tired when he came from school; his mother gave him a glass of water with glucose dissolved in it. Rohit felt refreshed because**

- a) Glucose provides protein to the body.  
d) Glucose is a source of Vitamin C  
c) Glucose is a source of instant energy  
d) Glucose is a source of Vitamin B

**Q10 Read the following statements about the diseases:**

- 1) Diseases are caused by germs.  
2) Diseases are caused due to lack of nutrients in our diet  
3) Diseases can pass from one person to another by touching  
4) Diseases can be prevented by taking a balanced diet.

**Which of the following pair best describe deficiency diseases:-**

- a) (1) and (2)                      b) (2) and (3)  
c) (2) and (4)                      d) (1) and (3)

**Q11 Minerals and vitamins are needed by our body in a very small quantity as compared to other components, yet they are important part of a balanced diet because :-**

- a) They give us energy  
b) Each one is essential for proper growth and to maintain good health  
c) Each one is good source of fat  
d) They clean our body.

**Q12 Does body weight of a person increase or decrease when suffering from dehydration.**

- a) Increases                      b) Decreases                      c)Remain same                      d) none of the above

**Q13.My Mother always discourage me to eat chips and junk food as.**

- a) They are very expensive  
b) They are unhealthy because they contain a lot of fat, chemical and leads to obesity  
c) Both (a) an (b)  
d) None of the above

**Q14 Why do Labourers need more carbohydrates?**

- a) They do more mental work.

- b) They do more physical work and need more energy.
- c) They do less physical work and need more energy.
- d) None of the above.

**Q15 Given below are the steps to test the presence of protein in food items**

- 1) Take a small quantity of food item in a test tube, add 10 drops of water to it and shake well.
- 2) Make a paste or powder of food to be tested.
- 3) Add 10 drops of caustic soda solution to the test tube, shake well
- 4) Add 2 drops of copper sulphate to it.

**Which of the following is the correct sequence of the steps**

- |                    |                    |
|--------------------|--------------------|
| a) (1),(2).(4),(3) | b) (2),(1).(4),(3) |
| c) (2),(1).(3),(4) | d) (4),(2).(1),(3) |

## Answer Key (Chapter 2)

<b>Q</b>	<b>ans.</b>	<b>Q.</b>	<b>ans.</b>
<b>1</b>	<b>c</b>	<b>11</b>	<b>b</b>
<b>2</b>	<b>b</b>	<b>12</b>	<b>b</b>
<b>3</b>	<b>a</b>	<b>13</b>	<b>b</b>
<b>3</b>	<b>b</b>	<b>14</b>	<b>b</b>
<b>3</b>	<b>d</b>	<b>15</b>	<b>b</b>
<b>4</b>	<b>c</b>		
<b>5</b>	<b>b</b>		
<b>6</b>	<b>c</b>		
<b>7</b>	<b>b</b>		
<b>8</b>	<b>a</b>		
<b>9</b>	<b>c</b>		
<b>10</b>	<b>c</b>		

## CHAPTER-3

### FIBRE TO FABRIC

#### Distribution of questions on the basis of Learning Outcomes

LEARNING OUTCOMES																			
Identify						Differentiate/ Classify			Explain		Draw/ Measure	Construct/Exhibit/ Conduct					Application/ Relate		
Q 3	Q 6	Q 7	Q 8	Q 11	Q 15	Q 2	Q 5	Q 13	Q 9	Q 17	Q 11	Q 4	Q 12	Q 16	Q 18	Q 19	Q 1	Q 10	Q 14

#### Learner's achievement Sheet

Name of student	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18	Q 19

## PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

\*(A- not meeting the expected standard,

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No	Name of the Student	Identify	Differentiate / Classify	Explain	Draw/ Measure	Construct /Exhibit/ Conduct	Application /Relate

## MCQs

**1. Swati and Sneha won the first prize in a Science quiz competition held at their school. They were very excited and decided to use the prize money to buy clothes for their parents for summers. Which fabric will be best suited for the summer?**

- a) Silk                      b) Cotton                      c) Wool                      d) Polyester

**2. Some natural fibres and their sources are given in column I and Column II. Group them in right order:**

Column I	Column II
Fibre	Source
A-cotton	1-Cocoon of silk worm
B-Jute	2-fleece of sheep
C-Wool	3-Stem of jute plant
D-Silk	4-Fruit of cotton plant

	A	B	C	D
a)	2	1	3	4
b)	3	2	1	4
c)	4	1	2	3
d)	4	3	2	1

**3. In India, jute is mainly grown in which states?**

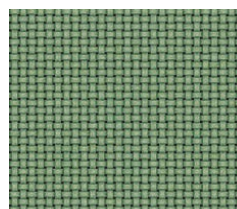
- a) Rajasthan, Haryana, Kerala.  
b) West Bengal, Bihar, Assam.  
c) West Bengal, Uttar Pradesh, Gujarat.  
d) Punjab, Haryana, Goa.

**4. What can be seen in the given figure?**

- a) Fibre                                      b) Thread  
c) Yarn                                      d) fabric

**5. Select the right sequence for manufacturing fabric:**

- a) Fibre  $\Rightarrow$  Yarn  $\Rightarrow$  fabric                                      b) Yarn    Fibre  $\Rightarrow$  fabric  $\Rightarrow$   
c) Fabric  $\Rightarrow$  Yarn  $\Rightarrow$  fibre                                      d) Yarn    fibre  $\Rightarrow$  fabric  $\Rightarrow$



**6. Name the process seen in the given figure:**



- a) Spinning                      b) Ginning                      c) Weaving                      d) Knitting

**7. Shivani knows that the wool is obtained from fleece of sheep. Are there any other animals from which we can obtain wool? If yes ,then select the right group of animals**

- a) Cow, dog, camel                      b) Deer, horse, elephant  
c) Rabbit, yak, camel                      d) Cat, tiger, lion

**8. Sunil visited a museum with his parents. He saw some special dresses which were worn by the warriors. He could not identify the fibre of those dresses. Help him in finding the correct fibre:**

- a) Silk                      b) Cotton                      c) Synthetic fibre                      d) Jute

**9. Synthetic fibres are made from \_\_\_\_\_**

- a) Wool                      b) Silk                      c) Jute                      d) Chemicals

**10. Name the Indian leader who was a part of the Independence movement. He also encouraged people to wear clothes made from homespun yarn.**

- a) Lal Bahadur Shastri                      b) Mahatma Gandhi  
c) Subhash Chander Bose                      d) Bhagat Singh

**11. Name the device shown in figure:**



- a) Takli                      b) Handloom                      c) Charkha                      d) Needle

**12. Sneha's mother is making a woolen sweater. Name the process involved in making sweater**

- a) Weaving                      b) Knitting                      c) Handloom    d) Ginning

**13. Select the right group of devices which are used for spinning:**

- a) Takli and Charkha                      b) Needle and handloom  
c) Looms and Needle                      d) None of the above

**14. Which materials were used as clothes in ancient time?**

- a) Bark and big leaves of trees                      b) animal skin and furs  
c) Both a) and b)                      d) None of the above

**15. Select the correct group of dresses which are used as an unstitched piece of fabric:**

- a) Shirt, Pant, Salwar, kameej                      b) Dhoti, Kurta, Payjama, sweater  
c) Dhoti, Sari, Lungi, Turban                      d) None of the above

**16. Shyam knows that burning of cotton yarn gives an odour similar to burning of a paper whereas both are different materials. Why do they have similar odour?**

- a) Because both are made up of plants  
b) Paper is made from chemicals  
c) Cotton is made up chemicals  
d) Both b) and c)

**17. Select the correct group of synthetic fibre.**

- a) Cotton, silk, wool, jute  
b) Polyester, nylon, acrylic, polycot  
c) Polyester, silk, nylon, cotton  
d) All of the above.

**18. On burning the synthetic fibres, they melt, shrink and give out an odour which is similar to burning of :**

- a) Wood                      b) paper                      c) Plastic                      d) cardboard

**19. The silk yarn shrinks away when exposed to flame and burns but does not melt. It has an odour of:**

- a) Burning of hair                      b) Burning of paper  
c) Burning of Plastic                      d) None of the above



### Answer Key (Chapter 3)

<b>Q</b>	<b>ans.</b>	<b>Q.</b>	<b>ans.</b>
<b>1</b>	<b>b</b>	<b>11</b>	<b>c</b>
<b>2</b>	<b>d</b>	<b>12</b>	<b>b</b>
<b>3</b>	<b>b</b>	<b>13</b>	<b>a</b>
<b>4</b>	<b>d</b>	<b>14</b>	<b>c</b>
<b>5</b>	<b>a</b>	<b>15</b>	<b>c</b>
<b>6</b>	<b>b</b>	<b>16</b>	<b>a</b>
<b>7</b>	<b>c</b>	<b>17</b>	<b>b</b>
<b>8</b>	<b>c</b>	<b>18</b>	<b>c</b>
<b>9</b>	<b>d</b>	<b>19</b>	<b>a</b>
<b>10</b>	<b>b</b>		

## CHAPTER 4

### SORTING MATERIALS AND GROUPS

#### Distribution of questions on the basis of Learning Outcomes

LEARNINGS OUTCOMES																
Identif y		Differentiate/ Classify						Explai n	Draw/ Measur e	Construct/Exhibi t/ Conduct			Application/ Relate			
Q 1	Q 4	Q 9	Q 2	Q 7	Q 1 3	Q 1 4	Q 1 5	Q 5		Q5	Q6	Q 12	Q 3	Q 8	Q 1 0	Q 1 1

#### Learner's achievement Sheet

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15

### Achievement level as per learning outcomes

**\*(A- not meeting the expected standard,  
B- Approaching the expected standard  
C- Approached the expected standard  
D- Beyond the expected standard)**

### B- Approaching the expected standard

### C- Approached the expected standard

**D- Beyond the expected standard)**

[illegible]

## MCQs

**1. Raju found a bag containing the following objects.**

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

Help Raju in finding out the object(s) which is/are opaque.

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

**2. 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

**3. 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.

**4. Which of the following material is not lustrous?**

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

**5. 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.

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

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

**7. 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)

**8. Which of the following statements is not true?**

- a) Materials are grouped for convenience.  
b) Materials are grouped to study their properties.  
c) Materials are grouped for fun.  
d) Materials are grouped according to their uses.

**9. Select the odd one from the following.**

- a) Tawa                      b) Spade                      c) Pressure cooker                      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

**11. Mixtures of red chilli powder in water, butter in water, petrol in water, and honey in water were given to Raju, Sham, Pawan and Rahul, respectively. Whose mixture is in the solution form?**

- a) Raju                      b) Sham                      c) Pawan                      d) Rahul

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

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

**13. Find the odd one out from the following:**

Chair, Bed, Table, Baby, Cupboard

- a) Chair                      b) Bed                      c) Table                      d) Baby

**14. What will be the exact order after matching the objects given in Column I with the materials given in Column II**

**Column I**

- (i) Surgical Instruments  
(ii) Newspaper  
(iii) Electrical switches  
(iv) Wool

**Column II**

- (P) Plastic  
(Q) Animal Product  
(R) Steel  
(S) Plant Product

- |    | (i) | (ii) | (iii) | (iv) |
|----|-----|------|-------|------|
| a) | P   | Q    | R     | S    |
| b) | Q   | P    | S     | R    |
| c) | R   | S    | P     | Q    |
| d) | Q   | P    | R     | S    |

**15. Find the odd one out from the following:**

Aluminium, Iron, Copper, Silver, Sand

- a) Aluminium                      b) Iron                      c) Silver                      d) Sand

### **Answer key(Chapter -4)**

<b>Q</b>	<b>Ans.</b>	<b>Q.</b>	<b>Ans.</b>
<b>1</b>	<b>c</b>	<b>9</b>	<b>d</b>
<b>2</b>	<b>b</b>	<b>10</b>	<b>a</b>
<b>3</b>	<b>d</b>	<b>11</b>	<b>d</b>
<b>4</b>	<b>c</b>	<b>12</b>	<b>c</b>
<b>5</b>	<b>b</b>	<b>13</b>	<b>d</b>
<b>6</b>	<b>c</b>	<b>14</b>	<b>c</b>
<b>7</b>	<b>c</b>	<b>15</b>	<b>d</b>
<b>8</b>	<b>c</b>		

## CHAPTER-5

### SEPARATION OF SUBSTANCES

#### Distribution of questions on the basis of Learning Outcomes

LEARNINGS OUTCOMES																
Identify		Differentiate/Classify	Explain					Draw/Measure	Construct/Exhibit/Conduct				Application/Relate			
Q2	Q7	Q1	Q8	Q12	Q13	Q14	Q15	Q3	Q5	Q4	Q5	Q9	Q3	Q6	Q10	Q11

#### Learner's achievement Sheet

Name of student	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15

**Achievement level as per learning outcomes  
(Grading: - A/B/C/D)**

**\* (A- not meeting the expected standard,  
B- Approaching the expected standard  
C- Approached the expected standard  
D- Beyond the expected standard)**

[illegible]



## **MCQs**

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

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

**2. 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)

**3. While preparing chapatis, Kamla 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

**Q.4 You might have observed the preparation of ghee from butter and cream at home. Some methods of separating material are given below.**

- (i) Evaporation      (ii) Decantation      (iii) Filtration    (iv) Churning

Choose the correct combination for preparation of ghee.

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

**Q. 5 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

**Q.6 During summers, Ramesh 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.

**Q.7 Small pieces of stone can be removed from rice by \_\_\_\_\_.**

- a) Threshing    b) Sieving      c) Winnowing d) Handpicking

**Q. 8 The process of settling of heavier particles is called \_\_\_\_\_.**

- a) Sedimentation      b) Decantation c) Filtration      d) Condensation

**Q.9 Which one of the following statements is incorrect?**



## **Answer Key (Chapter-5)**

<b>Q</b>	<b>Ans.</b>	<b>Q.</b>	<b>Ans.</b>
<b>1</b>	<b>d</b>	<b>9</b>	<b>a</b>
<b>2</b>	<b>d</b>	<b>10</b>	<b>c</b>
<b>3</b>	<b>b</b>	<b>11</b>	<b>b</b>
<b>4</b>	<b>b</b>	<b>12</b>	<b>b</b>
<b>5</b>	<b>b</b>	<b>13</b>	<b>c</b>
<b>6</b>	<b>c</b>	<b>14</b>	<b>c</b>
<b>7</b>	<b>d</b>	<b>15</b>	<b>d</b>
<b>8</b>	<b>a</b>		

## CHAPTER-6

### CHANGES AROUND US

#### Distribution of questions on the basis of Learning Outcomes

LEARNINGS OUTCOMES														
Identify		Differ entiate / Classif y	Explain						Draw/Me asure	Construct/Exhibit/ Conduct			Application/ Relate	
Q 1	Q 12		Q 2	Q 3	Q 8	Q 9	Q 10	Q 13		Q4	Q5	Q6	Q7	Q 14

#### Learner's achievement Sheet

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15

## PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

\*(A- not meeting the expected standard,

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No	Name of the Student	Identify	Differentiate / Classify	Explain	Draw/ Measure	Construct /Exhibit/ Conduct	Application /Relate

## **MCQs**

**1. Which of the following changes cannot be reversed?**

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

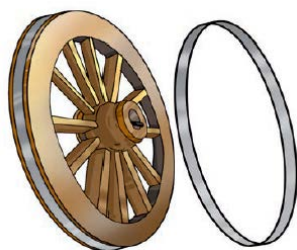
**2. Pick the change that can be reversed from the following:-**

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

**3. 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.

**4. 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.

**5. 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.

**6. While lighting a candle, Geeta 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)

**7. 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.

**8. When water is mixed with Plaster of Paris it becomes**

- a) Hard                      b) Soft                      c) Evaporate                      d) None of the these.

**9. When the iron blade is fixed to the wooden handle it is fitted**

- a) By boiling then cooling                      b) By freezing
- c) By cooling then heating                      d) By heating then cooling

**10. Iron expands on \_\_\_\_\_ .**

- a) Cooling      b) Heating      c) Freezing      d) None of these

**11. Baking of dough into bread is a kind of change**

- a) That cannot be reversed
- b) That can be reversed easily
- c) That can be reversed at high temperature
- d) Cannot say

**12. Which of the following is a desirable change?**

- a) Floods      b) Landslides      c) Burning of cooking gas      d) Earthquake

**13. Physical changes are :-**

- a) Always reversible                      b) Mostly reversible
- c) Always irreversible                      d) Mostly irreversible

**14. What kind of change is rising of sun?**

- a) Physical change                      b) Periodic change
- c) Reversible change                      d) Sudden change

**15. Change that leads to the formation of a new substance is called:**

- a) Physical change                      b) Reversible change
- c) Chemical change                      d) None of these

**Answer Key (Chapter—6)**

<b>Q</b>	<b>Ans.</b>	<b>Q.</b>	<b>Ans.</b>
<b>1</b>	<b>a</b>	<b>9</b>	<b>d</b>
<b>2</b>	<b>b</b>	<b>10</b>	<b>b</b>
<b>3</b>	<b>d</b>	<b>11</b>	<b>a</b>
<b>4</b>	<b>d</b>	<b>12</b>	<b>c</b>
<b>5</b>	<b>c</b>	<b>13</b>	<b>b</b>
<b>6</b>	<b>d</b>	<b>14</b>	<b>b</b>
<b>7</b>	<b>d</b>	<b>15</b>	<b>c</b>
<b>8</b>	<b>a</b>		



## **CHAPTER 7**

## GETTING TO KNOW PLANTS

## Distribution of questions on the basis of Learning Outcomes

LEARNINGS OUOTCOME																				
Identify				Differentiate/ Classify				Explain				Draw/Measure			Construct/Exhibit/ Conduct			Application /Relate		
Q4	Q7	Q9	Q14	Q1	Q3	Q5	Q11	Q2	Q6	Q10	Q12	Q18	Q7	Q14	Q13	Q8	Q13	Q19	Q15	Q20

## Learner's achievement Sheet

[illegible]

**Achievement level as per learning outcomes  
(Grading: - A/B/C/D)**

**\*(A- not meeting the expected standard,  
B- Approaching the expected standard  
C- Approached the expected standard  
D- Beyond the expected standard)**

[illegible]

## MCQs

**1. During a visit to garden students observed different categories of plants having different heights. What categories would that be?**

- a) herb, grass, creepers
- b) herbs, shrubs, trees
- c) trees, creepers, climbers
- d) herbs, creepers, climbers

**2. Sneha noticed that their gardener is removing some plants from the kitchen garden. She asked her mother why uncle is removing those plants? She replied these are weeds. Sneha got confused. “ what are weeds?”Explain her:**

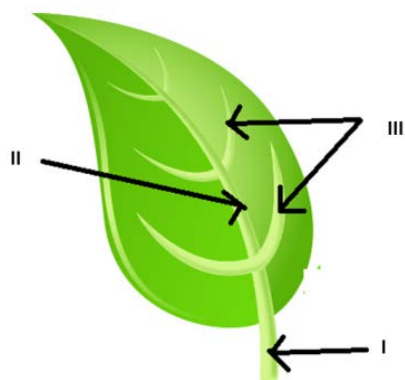
- a) Weeds are unwanted plants.
- b) They compete with desired plants for nutrients, water and sun light
- c) Weeds reduce growth of main plants
- d) All of the above.

**3 Name pair of some plants given in column I and their categories in columns II. Match them in right order.**

Column I	Column II
Name of plants	Category
A-Mints and lemon grass	1-trees
B-Aloevera and lavender	2-herbs
C-Mango and Neem	3-shrubs

- |    |   |   |   |
|----|---|---|---|
|    | A | B | C |
| a) | 2 | 3 | 1 |
| b) | 1 | 2 | 3 |
| c) | 3 | 2 | 1 |
| d) | 1 | 3 | 2 |

**4. A figure of leaf is shown.**



**The correct order of labeling of I,II,III will be**

- |    |         |         |         |
|----|---------|---------|---------|
|    | I       | II      | III     |
| a) | Mid Rib | Lamina  | Petiole |
| b) | Petiole | Mid Rib | Veins   |
| c) | Veins   | Mid rib | Lamina  |

**5. Plants with weak stem that cannot stand upright and spread on ground are called:-**

- a) Grass              b) Creepers              c) Climbers              d) Herbs

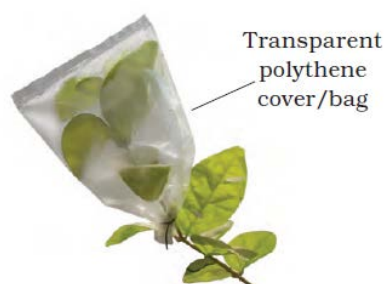
**6. Choose the correct statement about stem:-**

- a) Stem absorbs water and minerals from the soil  
b) Stem conducts water to leaves  
c) Stem keeps the plant upright  
d) Both b) and c)

**7. The design made by veins in a leaf is called:-**

- a) Mid rib              b) Lamina              c) Leaf venation              d) Petiole

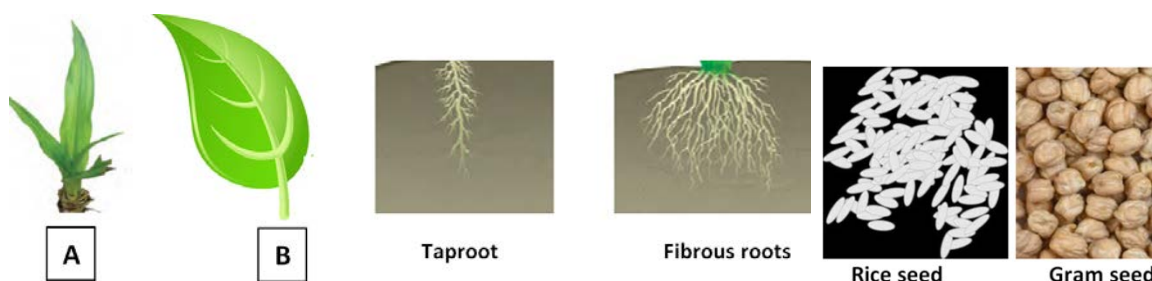
**8. Mrs. Manjit, a science teacher demonstrated an activity in her class. She had enclosed a healthy leafy branch of a plant in a polythene bag and tie up its mouth as shown in figure.**



**After a few hours students observed droplets of water on inner surface of polythene bag. From where did these droplets come out ?**

- a) From leaves in form of vapours  
b) Through transpiration  
c) Vapours condensed in water droplets  
d) All of the above

**9. Two leaves having different leaf venation are shown in figure. Correlate these leaves with types of roots and seeds of that plant.**



- (I) Leaf A with parallel venation. The roots of plant are fibrous and the seeds are monocot.  
(II) Leaf B with reticulate venation. The plant has taproot and dicot seeds .  
(III) Leaf A with reticulate venation having fibrous root and dicot seeds.  
(IV) Leaf B with parallel venation having taproot and monocot seed.

Choose the correct statement(s)

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

**10. what do leaves do for plants?**

- a) Leaves produce starch in presence of sunlight  
b) Leaves loose water through transpiration.  
c) Leaves of some plants also store food  
d) All of the above.

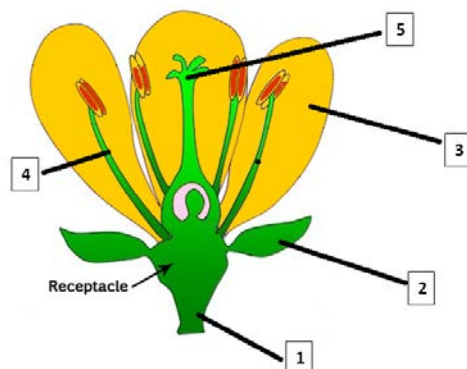
**11. We can not easily pull out the plants from soil. Which part of plants hold them firmly in soil?**

- a) Stem                      b) Root                      c) Leaves                      d) Flower.

**12. Sneha learnt about the function of stem and leaves but she did not know about the working of roots. Help her in finding the correct working of roots:-**

- a) Roots absorb water and minerals from soil  
b) Roots hold the plants in the soil.  
c) Roots of some plants also store food.  
d) All of the above

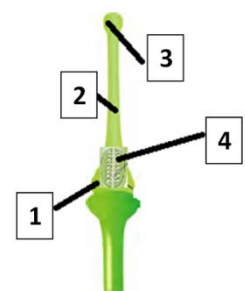
**13. A flower is shown in the given figure. Its labeling is done by coding. Choose the correct option :**



- |    | 1       | 2     | 3     | 4      | 5        |
|----|---------|-------|-------|--------|----------|
| a) | Pedicel | sepal | petal | stamen | pistil   |
| b) | Petiole | leaf  | sepal | pistil | anther   |
| c) | radical | sepal | petal | stigma | filament |
| d) | ovule   | style | sepal | petal  | ovary    |

**14. Parts of pistil is shown in given figure. Choose its part according to given number:**

- |    | 1      | 2      | 3      | 4     |
|----|--------|--------|--------|-------|
| a) | Ovary  | Ovule  | Stigma | Style |
| b) | Ovary  | Style  | Stigma | Ovule |
| c) | Stigma | Ovary  | Style  | Ovule |
| d) | Style  | Stigma | Ovule  | Ovary |



**15. Ram knows that green plants can prepare their own food by process of photosynthesis. What does happen in this process?**

- (I) Carbon dioxide, water, sunlight and chlorophyll are essential in this process
- (II) Glucose and oxygen are formed.
- (III) Oxygen is absorbed
- (IV) Carbon dioxide is produced

**Choose the correct option:-**

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

**16. Name the colorful part of flower**

- a) Sepal
- b) petal
- c) pistil
- d) stamen

**17. Choose the name of plant that bears a group of flowers:**

- a) Mustard
- b) China rose
- c) Sunflower
- d) Brinjal

**18. Ashima knows that a stem has two ways stream, in one water and mineral go up the stem what travels in the other?**

- a) Carbon dioxide
- b) Food
- c) Oxygen
- d) Water vapours

**19. Select the chemical/substance used for testing of starch in leaves and food items.**

- a) Litmus
- b) Iodine
- c) Salty water
- d) Chlorine

**20. A file in which collection of dry leaves is pasted is called:**

- a) Notebook
- b) Drawing book
- c) Practical file
- d) A Herbarium

**21. Which one of the following is a single flower**

- a) Chrysanthemum
- b) Marigold
- c) Petunia
- d) Sunflower

## Answer Key (Chapter- 7)

<b>Q</b>	<b>ans.</b>	<b>Q.</b>	<b>ans.</b>
<b>1</b>	<b>b</b>	<b>12</b>	<b>d</b>
<b>2</b>	<b>d</b>	<b>13</b>	<b>a</b>
<b>3</b>	<b>a</b>	<b>14</b>	<b>b</b>
<b>4</b>	<b>b</b>	<b>15</b>	<b>b</b>
<b>5</b>	<b>b</b>	<b>16</b>	<b>b</b>
<b>6</b>	<b>d</b>	<b>17</b>	<b>c</b>
<b>7</b>	<b>c</b>	<b>18</b>	<b>b</b>
<b>8</b>	<b>d</b>	<b>19</b>	<b>b</b>
<b>9</b>	<b>c</b>	<b>20</b>	<b>d</b>
<b>10</b>	<b>d</b>	<b>21</b>	<b>c</b>
<b>11</b>	<b>b</b>		

## CHAPTER 8

### BODY MOVEMENT

#### Distribution of questions on the basis of Learning Outcomes

LEARNINGS OUOTCOME																		
Identify						Differentiate/ Classify					Exp lain	Draw/Me asure		Construc t/ Exhibit/C onduct	Application/Re late			
Q 3	Q 6	Q 7	Q 8	Q 9	Q 13	Q 1	Q 2	Q 5	Q 10	Q 11	Q14	Q3	Q1	Q3	Q 4	Q 12	Q 15	Q 16

#### Learner's achievement Sheet

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 1 1	Q 12	Q 13	Q 14	Q 15	Q 16



## PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

\*(A- not meeting the expected standard,

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No	Name of the Student	Identify	Differentiate / Classify	Explain	Draw/ Measure	Construct /Exhibit/ Conduct	Application /Relate

## MCOs

1. Match the name of the animals given in column I with body parts used for movement given in column II

**Column I**

- (i) Birds
- (ii) Human being
- (iii) Cockroach
- (iv) Snails

**Column II**

- A whole body
- B modified forelimbs
- C Muscular foot
- D wings

- a) (i)\_B , (ii)\_ A, (iii)\_D , (iv)\_C
- b) (i)\_B , (ii)\_ C, (iii)\_A , (iv)\_D
- c) (i)\_D , (ii)\_ A, (iii)\_C , (iv)\_B
- d) (i)\_B , (ii)\_ C, (iii)\_A , (iv)\_D

2. Choose the incorrect statement from the following:

- a) Combination of bones and cartilage forms the skeleton in the body.
- b) Contraction of the muscle pulls the bones during movement.
- c) Cockroaches have an outer skeleton.
- d) Cartilages are harder than bones.

3. Fixed joints are the joints in which the bones cannot move. Choose fixed joints from the following:

- a) upper jaw and skull
- b) lower jaw and upper jaw
- c) knee and legs
- d) shoulder and arm

4. Raj fell from a tree and hurt his wrist. On examination ,the doctor confirmed that the wrist was fractured. It was detected with the help of :

- a) X-rays
- b) Blood test
- c) Both a & b
- d) None of these

5. The knee joint in between the thigh and lower leg is a :

- a) Hinge joint
- b) pivotal joint
- c) Fixed joint
- d) None of these

6. A cord of dense tissue that connects muscles to bone is a :

- a) Ligament
- b) Tendon
- c) Cartilage
- d) Fibre

7. Identify the type of joint in the figure given below:

- a) Hinge joint
- b) Ball and socket joint
- c) Fixed joint
- d) None of these.



8. Which part of the body moves when you open your mouth wide:

a)Skull

b)Brain

c)Upper jaw

d)Lower jaw

**9.Observe the figure .We are able to bend our fingers at every joint. How many bones does the middle finger have:**

a)3

b)4

c)5

d)None of these.



**10. The body parts are matched with their movements in our bod:-**

**Body part**

**Movement in our body**

(i)Arm

A) Rotates completely

(ii) Head

B) Moves on pivotal joint

(iii) Finger

C) Bends

(iv)Upper Jaw

D) Rotates partly

**Choose the incorrect option from the following:**

a) (i)-A

b) (ii)-B

c)(iii)-C

d) (iv)-D

**11.Observe the diagram and choose the option given The ear lobe is made up of \_\_\_\_\_**

a) Bone

b) Tendon

c) Cartilage

d) None of these



**12. Underwater divers wear fin-like flippers on their feet to :-**

a) Walk on water surface

b) Swim easily in water

c) Look like a fish

d) Walk on sea bed

**13. Select the right option after matching the columns**

**Column A**

**Column B**

i) Bone marrow

A) Production of white blood cells

ii) Stirrup

B) Reduces friction

iii)Cartilage

C) Smallest bone

a) i-A, ii-C, iii-B

b) i-B, ii-A, iii-C

c.) i-A, ii-B, iii-C

d) i-C, ii-A, iii-B

**14. The skeletal system :**

- a) Gives shape to the body
- b) Protects internal organs of our body
- c) Helps in the movement of body parts with the help of muscles.
- d) All of the above

**15. Maximum number of bones in human body are:-**

- a) 106
- b) 206
- c) 306
- d) 406

**16. Which bone in man is concerned with locomotion :-**

- a) Ulna
- b) Femur
- c) Humerus
- d) None of these.

## Answer Key (Chapter- 8)

<b>Q</b>	<b>ans.</b>	<b>Q.</b>	<b>ans.</b>
<b>1</b>	<b>a</b>	<b>13</b>	<b>a</b>
<b>2</b>	<b>d</b>	<b>14</b>	<b>d</b>
<b>3</b>	<b>a</b>	<b>15</b>	<b>b</b>
<b>4</b>	<b>a</b>	<b>16</b>	<b>b</b>
<b>5</b>	<b>a</b>		
<b>6</b>	<b>b</b>		
<b>7</b>	<b>b</b>		
<b>8</b>	<b>d</b>		
<b>9</b>	<b>a</b>		
<b>10</b>	<b>d</b>		
<b>11</b>	<b>c</b>		
<b>12</b>	<b>b</b>		

## CHAPTER 9

### THE LIVING ORGANISM & THEIR SURROUNDINGS

#### Distribution of questions on the basis of Learning Outcomes

LEARNINGS OUOTCOME																			
Identify			Differentiate/ Classify			Explain					Draw/M easure			Construct / Exhibit/C onduct		Application/R elate			
Q 4	Q 11	Q 14	Q 3	Q 9	Q 15	Q 2	Q 6	Q 8	Q 10	Q 13	Q 16	Q 2	Q 6	Q 7	Q 1	Q 5	Q 7	Q 12	

#### Learner's achievement Sheet

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16

## PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

\*(A- not meeting the expected standard,

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No	Name of the Student	Identify	Differentiate / Classify	Explain	Draw/ Measure	Construct /Exhibit/ Conduct	Application /Relate

## MCQs

**1. When we go to a hill station or travel to places at high altitude, we may experience difficulty in breathing. After some days, we get adjusted to the change in altitude & breathing becomes easier. Such small changes that take place over a short period of time in an organism due to change in their environment are called**

- a) Adaptation      b) Acclimatisation      c) Habitat      d) None of these

**2. Following are some features of plants :**

- i) They lose very little water through transpiration.
- ii) Their leaves are either absent, very small or present in shape of spines.
- iii) They lose a lot of water through transpiration
- iv) Their roots grow very deep into the soil

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

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



**3. Which of the following are characteristics of living beings.**

- a) Respiration                      b) Reproduction  
c) Respond to stimuli              d) All of these

**4. Observe the following figures**



Select an aquatic animal

- a) Deer                      b) cow                      c) fish                      d) camel

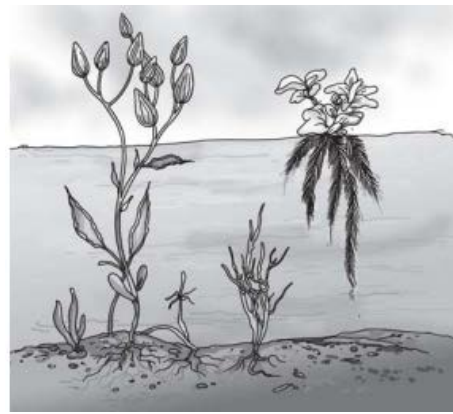
**5. Rama went to drink water in kitchen at night. When she switched on the lights, the cockroaches began to move to their hiding places. Choose the right option of characteristics of living things**

- a) Respond to stimuli              b) Reproduce  
c) Excretion                      d) Respiration



**6. Water plants show the following characteristics except:-**

- a) Long , hollow& light stem
- b) Ribbon-like leaves which can bend in flowing water
- c) Poorly developed roots
- d) Deep roots



**7. Arti is now in class VI. She wanted to wear her old dress which she liked a lot. The dress did not fit her. She was very shocked. Which characteristic of living beings is responsible for this**

- a) Living beings respond to stimuli
- b) Living beings need food .
- c) Living beings show growth .
- d) None of these

**8 Which of the following is a biotic component?**

- A)Plants
- b) Animals
- c)Microorganism
- d) All of these

**9 The plants & animals that live on land are said to live in terrestrial habitats .Which of the following is not a terrestrial habitat?**

- a) Forests
- b) grasslands
- c) deserts
- d) lakes

**10 Some marine animals like Octopus & squids do not have streamlined bodies to resist water movements. Select option which is true for its survival in sea water.**

- a) They stay deeper in the ocean, near the seabed& catch any prey that moves towards them
- b) They have gills to help them use oxygen dissolved in water
- c) Both ( a)&b)
- d) None of these

**11 What are the adaptative features of trees in mountain regions.**

- a) Cone shaped trees with sloping branches
- b) leaves are needle-like
- c) Both ( a)& (b)
- d) d) none of these



**12 Select the adaptative features of deer in order to run away from its predators**

- a) It has long ears to hear movements of its predators.
- b) It has eyes on sides of its head
- c) The speed of deer helps it to run away.
- d) All of the above.

**13. We all know that death is a natural process of all living things. All living organisms die, but they can exist only if there is -----**

a)Excretion

b)Nutrition

c) Reproduction

d) None of these

**14. Choose the odd one from below with respect to reproduction:-**

a) Seeds of plant

b) Eggs of hen

c) Roots of mango tree

d) Buds of potato

**15. Select the option which represents only abiotic components:-**

a)Tiger, deer , soil, air

b)Rocks, soil, air, water

c)Plants, soil, rocks, light

d) Temperature, rocks, air, animals

**16 All living things take food. Not all the food that is eaten is really used, only a part of it is utilised by the body. The rest has to be removed by body as wastes. The process of getting rid of these wastes by the living organisms is known as-----**

a)Reproduction

b) Excretion

c) Nutrition

d) Respiration

## Answer Key (Chapter-9)

<b>Q</b>	<b>ans.</b>	<b>Q.</b>	<b>ans.</b>
<b>1</b>	<b>b</b>	<b>13</b>	<b>c</b>
<b>2</b>	<b>b</b>	<b>14</b>	<b>c</b>
<b>3</b>	<b>d</b>	<b>15</b>	<b>b</b>
<b>4</b>	<b>c</b>	<b>16</b>	<b>b</b>
<b>5</b>	<b>a</b>		
<b>6</b>	<b>d</b>		
<b>7</b>	<b>c</b>		
<b>8</b>	<b>d</b>		
<b>9</b>	<b>d</b>		
<b>10</b>	<b>c</b>		
<b>11</b>	<b>c</b>		
<b>12</b>	<b>d</b>		

## **CHAPTER-10**

### **Motion and Measurement of Distance**

#### **Distribution of questions on the basis of Learning Outcomes**

LEARNINGS OUOTCOME															
Identi fy	Differentia te/ Classify		Explai n	Draw/Meas ure		Construct/ Exhibit/Cond uct			Application/Relate						
Q 1	Q 12	Q 13	Q 6	Q 9	Q 1 4	Q 3	Q 2	Q 7	Q 1	Q 2	Q 3	Q 5	Q 8	Q 1 0	Q 1 5

#### **Learner's achievement Sheet**

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16

**Achievement level as per learning outcomes  
(Grading: - A/B/C/D)**

**B- Approaching the expected standard**  
**C- Approached the expected standard**  
**D- Beyond the expected standard)**

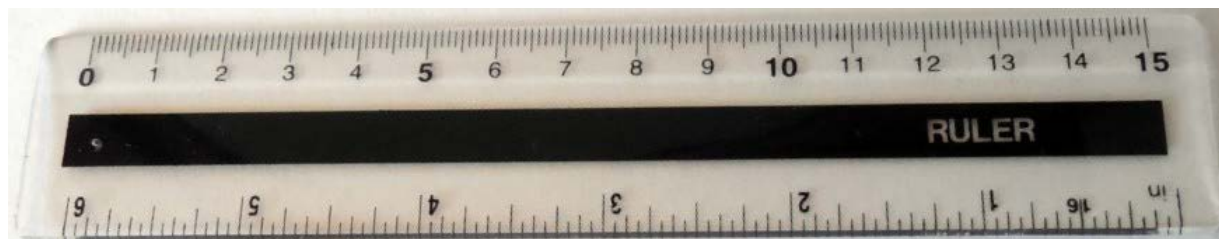
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## MCQs

**1. The distance between Chandigarh and New Delhi is usually expressed in units of**

- (a) millimetre
- (b) metre
- (c) centimetre
- (d) kilometre

**2. A measuring scale is usually supplied with a geometry box. Which of the following distance cannot be measured with this scale by using it only once?**



- (a) 10mm
- (b) 10cm
- (c) 1cm
- (d) 1Km

**3. A piece of ribbon folded five times is placed along a 30 cm long measuring scale. 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

**4. Motion that repeats itself after some period of time is called periodic motion. Which one is the example of periodic motion?**

- (a) Motion of earth around sun.
- (b) Motion of hands of a clock.
- (c) Motion of bob of simple pendulum.
- (d) All of the above.

**5. Look at the diagram shown below**



**Which things shall you require for measuring the length of the figure given?**

- (a) A thread
- (b) A measuring scale
- (c) Both (a) and (b)
- (d) none of these

**6. Which one of the following is not an example of rectilinear motion?**

- (a) A train moving along a straight track.
- (b) A lift moving up and down
- (c) Soldiers doing a march-past in a parade.

- (d) Movement of a car around a bend on the road.

**7. Amongst the units of length given below ..... is the biggest unit of measurement of length.**

- (a) cm (b) km  
(c) mm (d) m

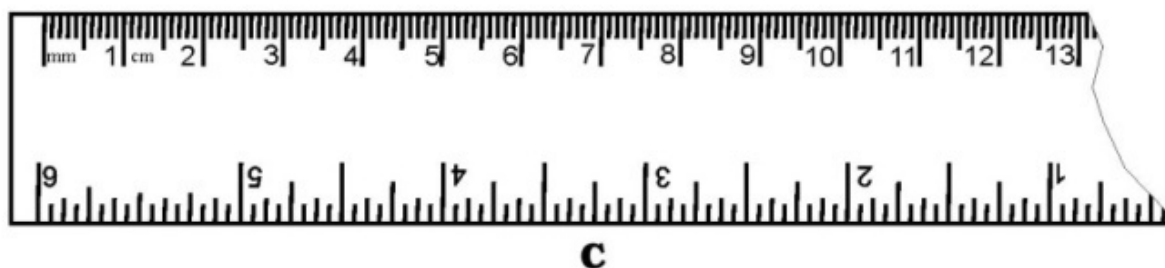
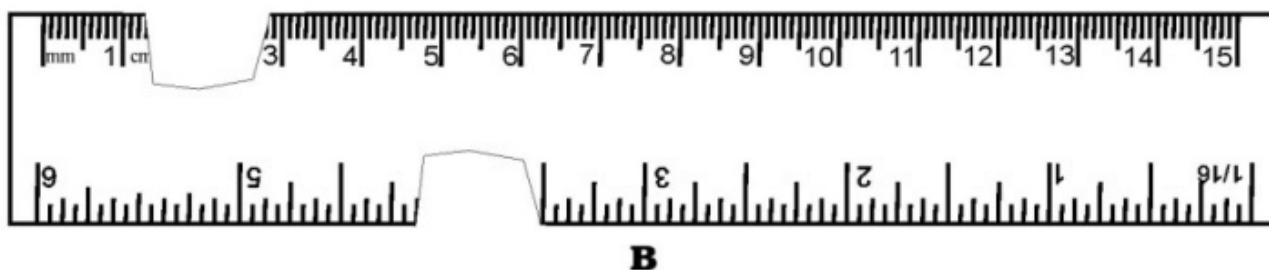
**8. 1Km=.....mm**

- (a) 1000 (b) 100  
(b) 100000 (d) 1000000

**9. 1m=.....mm**

- (a) 10 (b) 100  
(c) 20 (d) 1000

**10. You are provided three scales A, B and C as shown in Fig. 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.

**11. The height of the person is 1.65 m. His/her height in mm is**

- (a) 165 mm (b) 1650mm

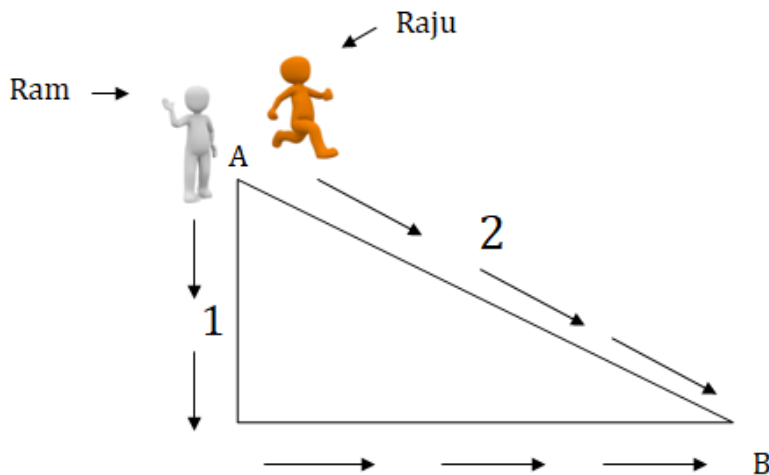
(c)16.5 mm

(d)16.50mm

**12. Which of the is not correctly matched**

Quantity	SI Unit
(a) Length	Meter
(b) Time	Day
(c) Weight	Kilogram
(d) Temperature	Kelvin

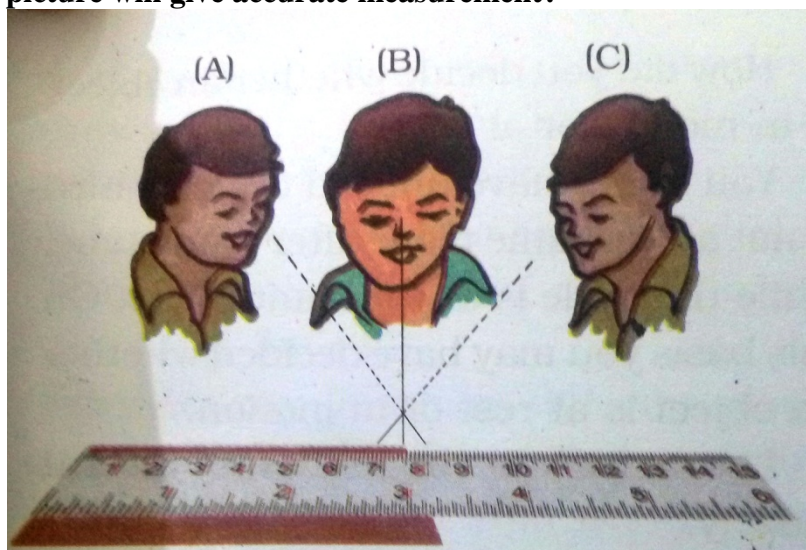
**13. Ram and Raju are playing in a ground. They start running from the same point A in the ground and reach point B at the same time by following the paths marked 1 and 2 respectively as shown in Fig. Which of the following is/are true for the given situation?**



As compared to Ram, Raju covers a

- (a) longer distance but with a lower speed.
- (b) longer distance with a higher speed.
- (c) shorter distance with a lower speed.
- (d) shorter distance with a higher speed.

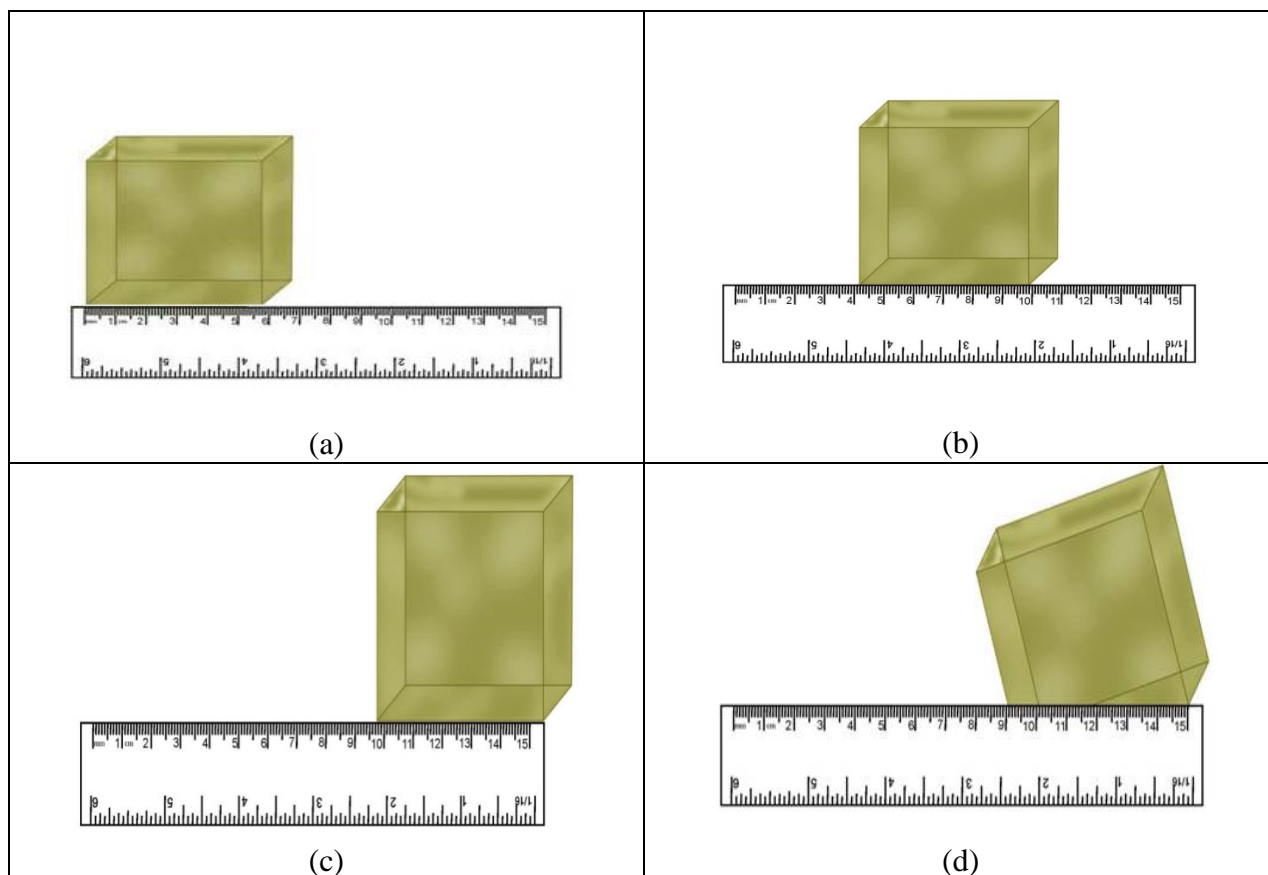
**14. Correct position of the eye is very important for taking measurements. Which position as shown in the picture will give accurate measurement?**





- (a) Position A
- (b) Position B
- (c) Position C
- (d) Same result in all the cases.

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



## Answer Key (Chapter- 10)

<b>Q</b>	<b>ans.</b>	<b>Q.</b>	<b>ans.</b>
<b>1</b>	<b>d</b>	<b>13</b>	<b>b</b>
<b>2</b>	<b>d</b>	<b>14</b>	<b>b</b>
<b>3</b>	<b>c</b>	<b>15</b>	<b>a</b>
<b>4</b>	<b>d</b>		
<b>5</b>	<b>c</b>		
<b>6</b>	<b>d</b>		
<b>7</b>	<b>b</b>		
<b>8</b>	<b>d</b>		
<b>9</b>	<b>d</b>		
<b>10</b>	<b>d</b>		
<b>11</b>	<b>b</b>		
<b>12</b>	<b>b</b>		

## CHAPTER 11

### LIGHT, SHADOWS AND REFLECTIONS

#### Distribution of questions on the basis of Learning Outcomes

LEARNINGS OUOTCOME																			
Identify		Differentiate/Classify				Explain			Draw/Measure		Construct/Exhibit/Conduct						Application/Relate		
Q6	Q8	Q9	Q10	Q11	Q13	Q3	Q4	Q15	Q2	Q3	Q1	Q2	Q3	Q6	Q14	Q5	Q7	Q12	

#### Learner's achievement Sheet

Name of student	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15

### Achievement level as per learning outcomes

**\*(A- not meeting the expected standard,**

**C- Approached the expected standard**

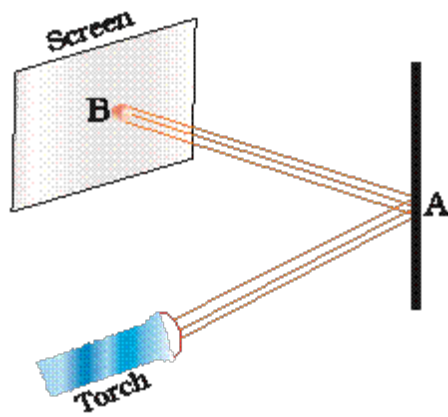
**D- Beyond the expected standard)**

60

## MCQs

1. Observe the picture given in 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?

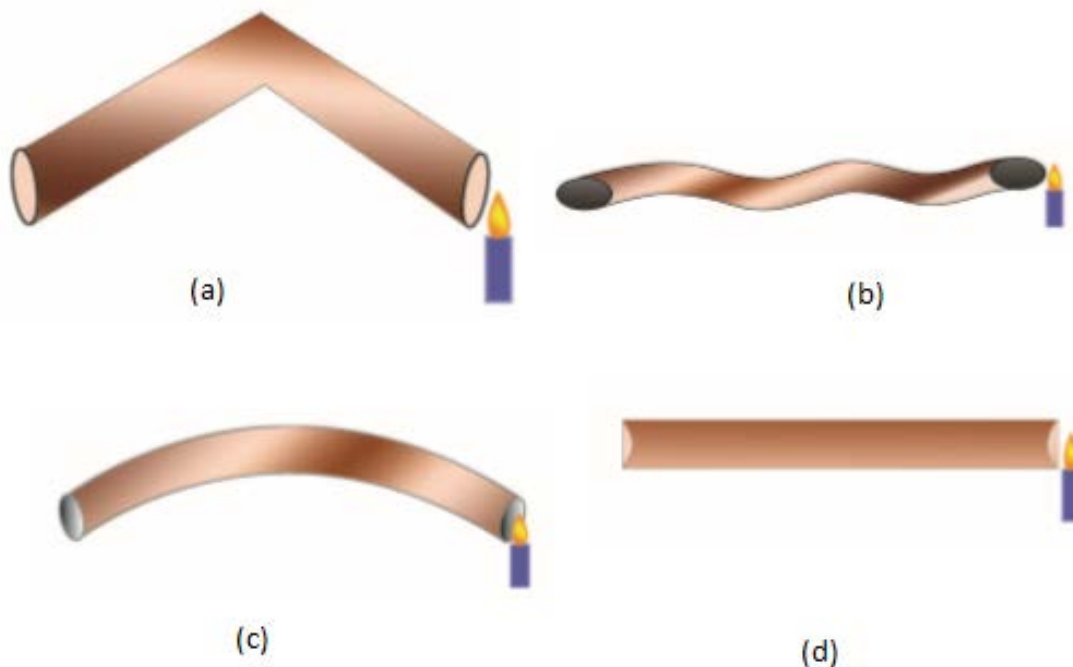


- (a) A wooden board
- (b) A glass sheet
- (c) A mirror
- (d) A sheet of white paper,

2. 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

3. Four students A, B, C and D looked through pipes of different shapes to see a candle flame as shown in Figure who will be able to see the candle flame clearly?



**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

**5. Paheli 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?**

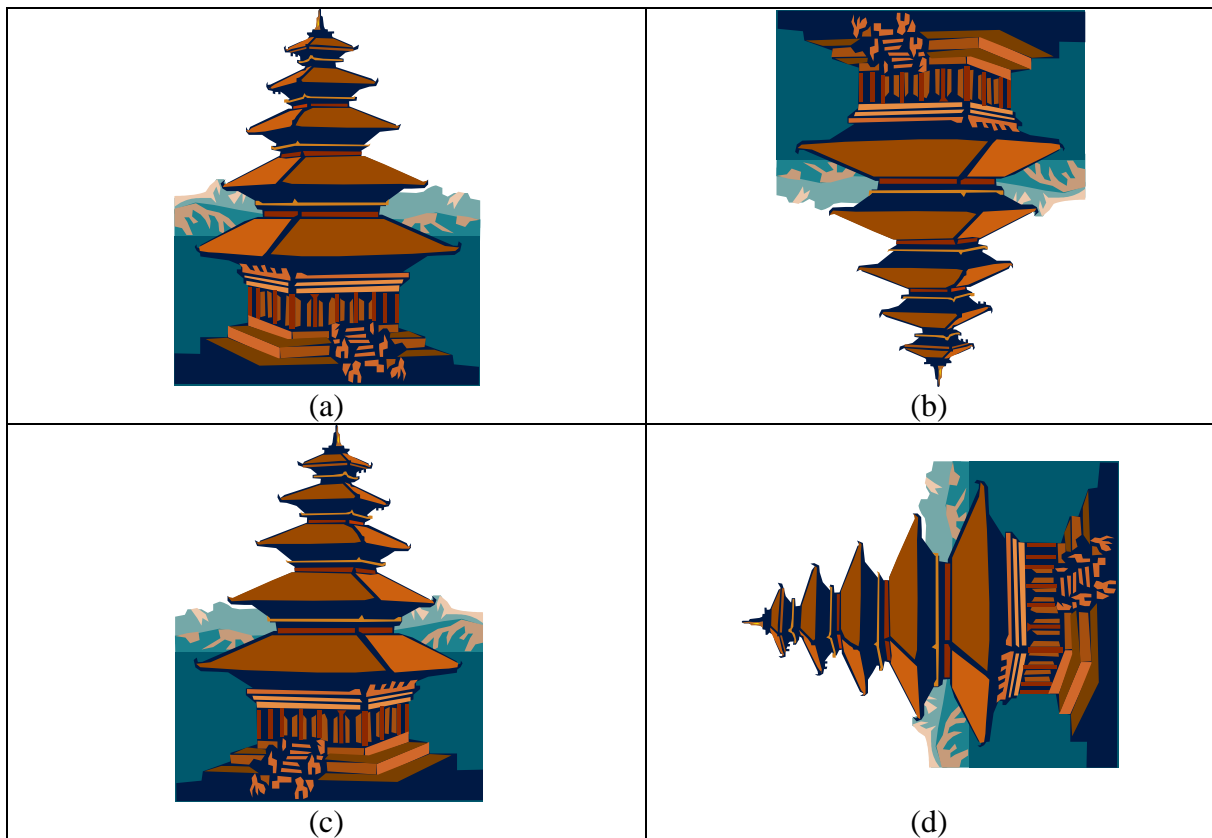
- (a) The shape of the shadow of the tree changes but the size remains the same.  
(b) The size of the shadow of the tree changes but the shape remains the same.  
(c) Both the size and shape of the shadow of the tree change.  
(d) Neither the shape nor the size of the shadow changes.

**6. Which of the following are luminous objects?**

- (a) Table                                      (b) Car  
(b) Fan                                        (d) Sun

**7. A student observes a Pagoda given in Figure through a pin hole camera. Which of the diagrams given depicts the image seen by her correctly?**



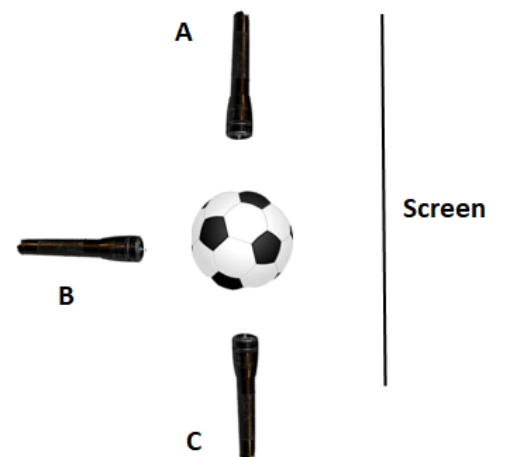


8. A dark shadow is formed if the object is

- (a) Transparent
- (b) Translucent
- (c) Opaque
- (d) All of these

9. Three torches A, B and C shown in Figure are switched on one by one. The light from which of the torches will form a shadow of the ball on the screen.

- (a) A only
- (b) B only
- (c) C only
- (d) All of these.



10. 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

Observe the table given below and answer the questions from **Q11- Q 14**

X	Y	Z
Door	Butter Paper	Water
Cardboard	Sunglasses	Air
Wall	Wax Paper	Glass Window
Book	Stained Glass	Thin piece of Polythene Sheet
Aluminum Paper	A	Reading Glass

**11. Objects in column Y shows following:-**

- (a) Light can pass through them partially.
- (b) We can see through them partially.
- (c) These are translucent.
- (d) All of the above.

**12. 'A' in the column Y can be replaced with:-**

- (a) Reading Glass                      (b) Brick
- (c) Vegetable Oil                      (d) Tree

**13. Column 'X' has following properties**

- (a) All opaque objects.
- (b) All luminous objects.
- (c) All transparent objects.
- (d) All translucent objects.

**14. Column 'Z' can also have**

- (a) Tracing Paper                      (b) Plastic scale
- (c) Notebook                      (d) oxygen

**15. Match column:-**

**Column 1**

(i) Shadow

(ii) Mirror

(iii) Sun

(iv) Wall

**Column 2**

A) Reflection

B) Screen

C) Opaque

D) Luminous

- (a) (i)-B; (ii)-A; (iii)-D; (iv)-C
- (b) (i)-A; (ii)-B; (iii)-C; (iv)-D
- (c) (i)-C; (ii)-D; (iii)-A; (iv)-B
- (d) (i)-D; (ii)-A; (iii)-C; (iv)-B



## Answer Key (Chapter- 11)

<b>Q</b>	<b>ans.</b>	<b>Q.</b>	<b>ans.</b>
<b>1</b>	<b>c</b>	<b>13</b>	<b>a</b>
<b>2</b>	<b>c</b>	<b>14</b>	<b>d</b>
<b>3</b>	<b>d</b>	<b>15</b>	<b>a</b>
<b>4</b>	<b>d</b>		
<b>5</b>	<b>c</b>		
<b>6</b>	<b>d</b>		
<b>7</b>	<b>b</b>		
<b>8</b>	<b>c</b>		
<b>9</b>	<b>b</b>		
<b>10</b>	<b>c</b>		
<b>11</b>	<b>d</b>		
<b>12</b>	<b>c</b>		

## CHAPTER 12

### ELECTRICITY AND CIRCUITS

#### Distribution of questions on the basis of Learning Outcomes

LEARNINGS OUOTCOME																								
Identify					Differen tiate/ Classify			Expl ain		Draw /Mea sure		Construct/ Exhibit/Condu ct					Application/Relate							
Q 6	Q 8	Q 1 7	Q 1 9	Q 2 0	Q 9	Q 1 3	Q 1 6	Q 3	Q 1	O15	Q 1 7	Q 1	Q 4	Q 5	Q 1 4	Q 2 0	Q 1	Q 2	Q 7	Q 1 0	Q 1 2	Q 1 5	Q 1 8	Q 2 1

#### Learner's achievement Sheet

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18	Q 19

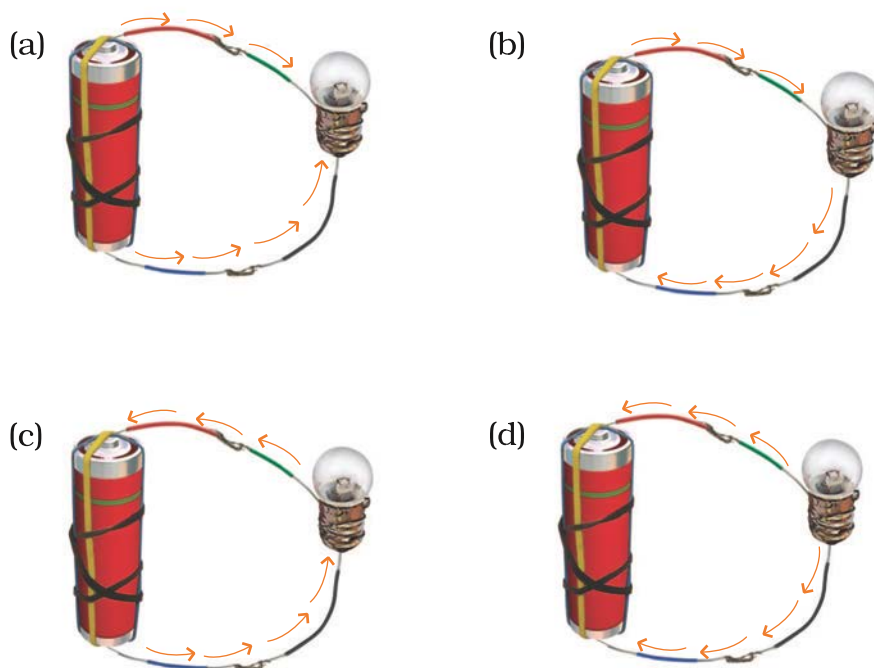
**Achievement level as per learning outcomes  
(Grading: - A/B/C/D)**

**\*(A- not meeting the expected standard,  
B- Approaching the expected standard  
C- Approached the expected standard  
D- Beyond the expected standard)**

[illegible]

## MCQs

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



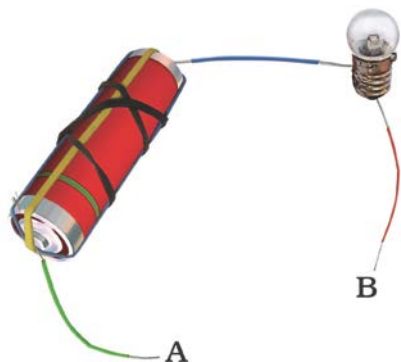
2. Choose the incorrect statement.

- (a) A switch is the source of electric current in a circuit.
- (b) A switch helps 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.

3. In an electric bulb, light is produced due to the glowing of

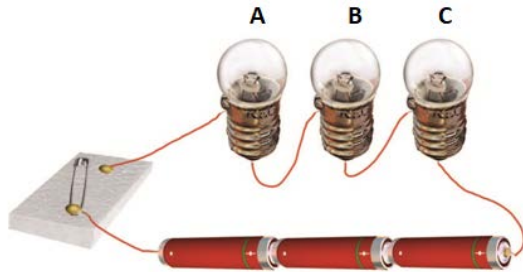
- (a) The glass case of the bulb.
- (b) The thin filament.
- (c) The thick wires supporting the filament.
- (d) Gases inside glass case of the bulb.

4. In the following arrangement shown in 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

**5. In the circuit shown in 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.

**6. Filament of a torch bulb is:-**

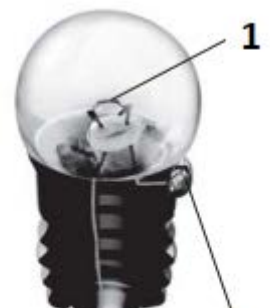
- (a) a metal case.
- (b) metal tip at the centre of the base.
- (c) two thick wires.
- (d) a thin wire.

**7. Paheli 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.

**8. A torch bulb has an outer case of glass that is fixed on a metallic base. Identify the label 1 and 2 in the figure**

- (a) 1-filament, 2-terminal.
- (b) 1-terminal, 2-filament.
- (c) 1-wire, 2-filament.
- (d) None of these.



**9. Observe the diagram of electric cell and choose the correct option from the following**

- (a) The metal cap is the positive terminal of the electric cell.



**Electric Cell**

- (b) The metal disc is the negative terminal of the electric cell.
- (c) Both (a) and (b)
- (d) None of these

**10. What will happen to the electric cell if we connect its two terminals without using a switch or a device?**

- (a) Cell will explode.
- (b) Nothing will happen to the cell.
- (c) Chemicals in the cell will get used up very fast and the cell will stop working
- (d) None of these.

**11. An electric bulb may fuse due to**

- (a) Break in its filament.
- (b) A break in the path of current
- (c) Both (a) and (b)
- (d) None of the above

**12 A combination of one or more cell in which chemical energy is converted into electricity and used as a source of power is called.....**

- (a) Battery      (b) Cell      (c) circuit      (d) None of these

**13. Non metal like ..... and ..... are good conductors of electricity**

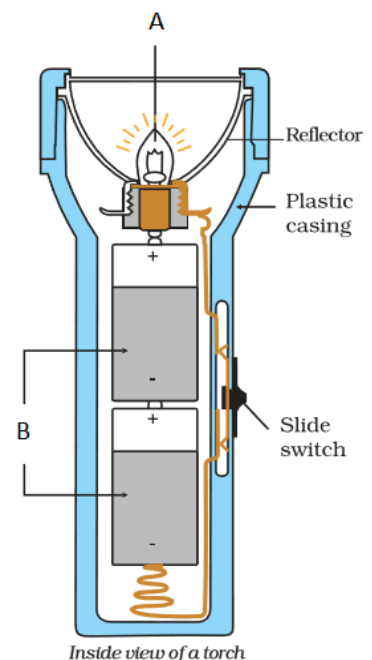
- (a) Wood and paper
- (b) Graphite and gas carbon
- (c) Glass and rubber
- (d) None of the above

**14. Since the bulb does not glow when there is only air in the gap between The drawing pins in switch, it means that air is also a/an.....**

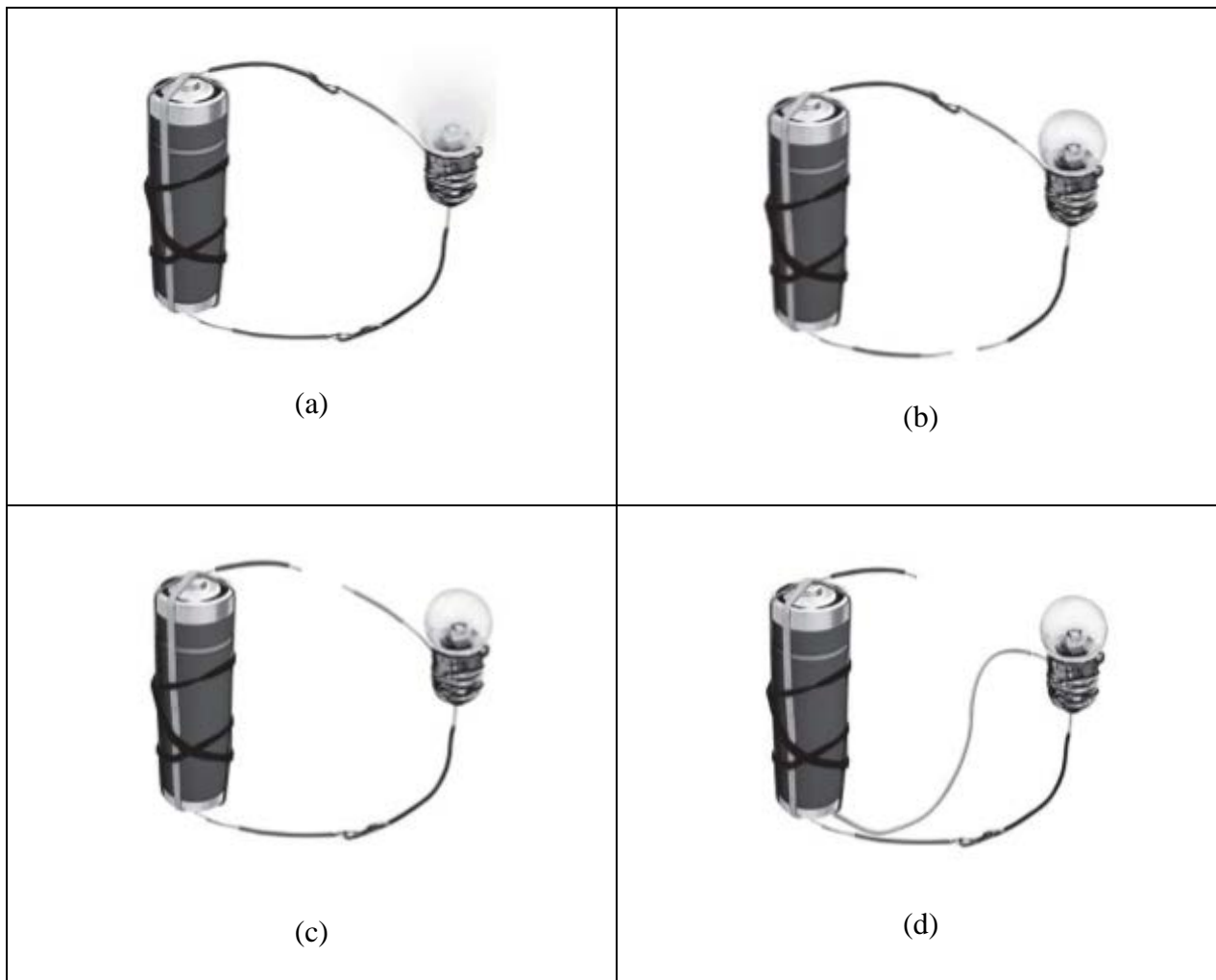
- (a) Conductor      (b) Insulator
- (c) Constructor      (d) None of the above

**Q15. Boojho has drawn the inside of the torch as in figure. When we close the switch, the circuit is completed and the bulb glows. He labeled various parts of torch but forgot to label two parts A and B. Choose the correct option.**

- (a) A- Bulb, B- Electric cells
- (b) A- Electric cells, B- Bulb
- (c) A- Switch, B- Boxes
- (d) A- Wire, B- Switch



**16. Observe the electric circuit given in above figures. According to you in which figure bulb will glow.**



**17. Which of the following item given in column A is not the match with those in column B**

**COLUMN A**

- a) Graphite
- b) Filament
- c) Rubber
- d) Electric Cell

**COLUMN B**

- Conductor
- Coiled wire inside the bulb
- Conductor
- Source of electric energy

**Q18. Why is it necessary to remove the plastic covering at the end of the wire before using it?**

- (a) To make it insulating
- (b) To make wire conductive
- (c) To make wire neutral
- (d) None of these

**Q19. Paheli collected different types of materials such as coin, cork, rubber, glass, keys, pins, plastic scale, wooden block, candle and sewing needle. Which of these are insulators?**

- (a) Cork, rubber, pins
- (b) Sewing needle, pins, coins
- (c) Cork, rubber, plastic scale
- (d) Candle, plastic scale, pins

## Answer Key(Chapter- 12)

Q	ans.	Q.	ans.
1	b	13	b
2	a	14	b
3	b	15	a
4	c	16	a
5	d	17	c
6	d	18	b
7	d	19	c
8	a		
9	c		
10	c		
11	a		
12	a		



## CHAPTER 13

### FUN WITH MAGNET

#### Distribution of questions on the basis of Learning Outcomes

LEARNINGS OUOTCOME																								
Identify						Differen tiate/ Classify			Explain			Draw/ Meas ure		Construct/ Exhibit/Conduct						Application/Rel ate				
Q 2	Q 3	Q 5	Q 6	Q 9	Q 12	Q 7	Q 10	Q 17	Q 4	Q 7	Q 8	Q3	Q 12	Q 1	Q 11	Q 13	Q 16	Q 18	Q 6	Q 14	Q 15	Q 19	Q 20	

#### Learner's achievement Sheet

Name of student	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15	Q 16	Q 17	Q 18	Q 19	Q 20

## PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

\*(A- not meeting the expected standard,

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No	Name of the Student	Identify	Differentiate / Classify	Explain	Draw/ Measure	Construct /Exhibit/ Conduct	Application /Relate

## MCQs

### 1. South pole of a magnet can be identified by :-

- a) By bringing another magnet having marked south and north poles.
- b) No matter what is written on a pole
- c) Using an iron rod
- d) Using a scale

### 2. Which of the following has property to attract iron?

- a) Scale
- b) Magnet
- c) Metal rod
- d) Glass rod

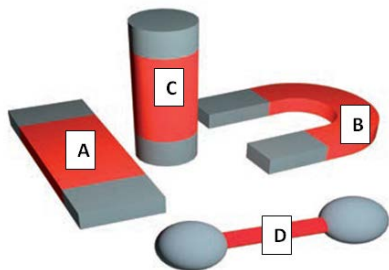
### 3. Magnets loose their properties if they are:-

- a) Heated
- b) Hammered
- c) Dropped from some height
- d) All of the above

### 4. Other than magnet which device is used to find direction?

- a) Thermometer
- b) Compass
- c) Hydrometer
- d) Electrometer

### 5. Different shapes of magnets are shown in the figure having name A,B,C,D.



Identify actual name of A,B,C,D,

	A	B	C	D
a)	Bar Magnet	U shape magnet	Cylindrical magnet	Ball ended magnet
b)	Ball ended magnet	Bar Magnet	U shape magnet	cylindrical magnet
c)	U shape magnet	cylindrical magnet	Ball ended magnet	Bar Magnet
d)	cylindrical magnet	Ball ended magnet	U shape magnet	Bar Magnet

### 6. While Ashmia's mother was stitching button on a shirt, the needle slipped from her hand on the floor. How can Ashima help her mother in finding needle?

- a) By rotating broom
- b) By rotating her hand
- c) By rotating magnet
- d) By rotating paucha

**7. A magnet was broken in five pieces. How many north poles will be present in broken pieces?**

- a) 10
- b) 5
- c) 0
- d) 2

**8. How does bullet train run without touching the ground?**

- a) Due to magnetic attraction
- b) Due to magnetic repulsion
- c) Both a) and b)
- d) None of the above

**9. Which rod was first found in Greece that had magnetic properties?**

- a) Bauxite
- b) Cryolite
- c) Magnetite
- d) None of the above

**10. The materials which are not attracted towards a magnet are called non magnetic materials. Select the non magnetic material from given options**

- a) Iron
- b) Cobalt
- c) Nickel
- d) Copper

**11. Which of the following is a confirmatory evidence of pure magnet?**

- a) Attraction
- b) Repulsion
- c) Both a) and b)
- d) None of these

**12. Main component(s) of Compass is/are:-**

- a) A small circular box with a glass cover
- b) a magnetized needle
- c) A dial with directions
- d) All of the above

**13. What will happen if a magnet is brought near a compass?**

- a) Magnetised needle gets deflected:-
- b) after slight deflection needle comes to rest
- c) Both a) and b)
- d) none of these

**14. Name the machine that is used to collect Iron junks from heap of garbage.**

- a) Tractor
- b) washing machine
- c) magnetic crane
- d) JCB

**15. In our homes we have lot of devices having magnet inside them. So we should keep other magnets away from these devices. A group of such devices (having magnet) is given below. Select the correct group**

- a) Cassettes, mobile, TV, Music system, compact disc, computer
- b) water tank, table, chair, tubelight
- c) Bed, sofa set, bulb

d) None of the above

**16. A freely suspended magnet always aligns in :-**

- a) South-North direction(S-N)
- b) North-South direction(N-S)
- c) East- West direction(E-W)
- d) West-East direction(W-E)

**17. Choose the magnetic material**

- |           |           |
|-----------|-----------|
| a) Rubber | b) Pencil |
| c) Nickel | d) copper |



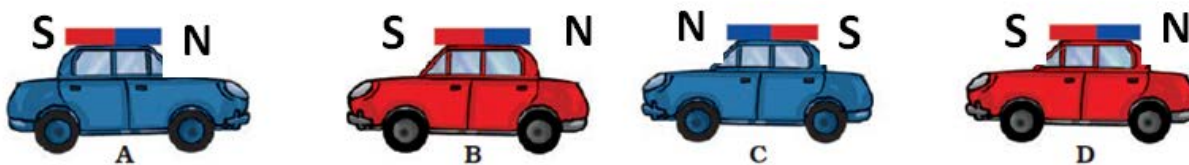
**18. In above figure, what is going on**

- a) Diagramme is being erased by eraser
- b) Playing with bar magnet
- c) Making simple magnet
- d) None of the above

**19. Few iron nails and screws got mixed with the sawdust when a carpenter was working with them. How can you help him in getting nails and screws back from the mixture?**

- a) By rotating a magnet in the mixture
- b) by placing a bar magnet near the mixture
- c) by placing a compass near the mixture
- d) By rotating hands in the mixture

**20. Four toy cars having magnets on their top are shown in the given figure. On the basis of magnetic properties which of the following observation(s) will be observed?**



- a) Car A will attract car B
- b) Car B will repel car C
- c) Car C will repel car D
- d) All of the above

**Answer Key (Chapter- 13)**

<b>Q</b>	<b>ans.</b>	<b>Q.</b>	<b>ans.</b>
<b>1</b>	<b>a</b>	<b>11</b>	<b>b</b>
<b>2</b>	<b>b</b>	<b>12</b>	<b>d</b>
<b>3</b>	<b>d</b>	<b>13</b>	<b>c</b>
<b>4</b>	<b>b</b>	<b>14</b>	<b>c</b>
<b>5</b>	<b>a</b>	<b>15</b>	<b>a</b>
<b>6</b>	<b>c</b>	<b>16</b>	<b>b</b>
<b>7</b>	<b>b</b>	<b>17</b>	<b>c</b>
<b>8</b>	<b>b</b>	<b>18</b>	<b>c</b>
<b>9</b>	<b>c</b>	<b>19</b>	<b>a</b>
<b>10</b>	<b>d</b>	<b>20</b>	<b>d</b>

## CHAPTER-14

### WATER

#### Distribution of questions on the basis of Learning Outcomes

LEARNINGS OUOTCOME																
Identify			Differentiate/Classify		Explain		Draw/Measure	Construct/Exhibit/Conduct			Application/Relate					
Q1	Q6	Q15	O14	O6	Q9	Q13	O11	O5	O7	O8	Q2	Q3	Q4	Q10	Q12	Q14

#### Learner's achievement Sheet

Name of student	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15

**Achievement level as per learning outcomes**  
(Grading: - A/B/C/D)

**\* (A- not meeting the expected standard,  
B- Approaching the expected standard  
C- Approached the expected standard  
D- Beyond the expected standard)**

[illegible]



## MCQs

**1. What are the sources from which we get water for our usage?**

- a) Ponds, rivers, oceans and wells
- b) Lakes, ponds, wells and rivers
- c) Oceans, lakes, ponds and taps
- d) None of the above

**2. The famous lines of the poem “Rime of the Ancient Mariner” says**

“Water water every where

Nor any drop to drink”

This is true for oceans and seas because\_\_\_\_

- a) Their water is saline and unfit for drinking
- b) Their water is sweet and fit for drinking
- c) Their water is sour and unfit for drinking
- d) Their water is bitter and unfit for drinking

**3. The sailor on a ship lost in the ocean can’t drink its water because\_\_\_\_**

- a) Water is saline
- b) Water is sweet
- c) Water is hot
- d) Water is very cold

**4. If you have to fetch water yourself from a faraway place rather than from water supply through taps. Would you use the same amount of water as on any other day?**

- a) No, my usage of water will reduce
- b) Yes, there will be no change in consumption of water
- c) I am not sure
- d) None of the above.

**5. Paheli wants to know about *the amount of water* that is required to produce one page of a book. It is \_\_\_\_\_**

- a) One glass
- b) Two glasses
- c) Ten glasses
- d) Five glasses

**6. One of the following may not be the source of water that we get from taps.**

- a) Ocean
- b) River
- c) Well
- d) Lake

**7. If we add one spoon of salt to half glass of water and then boil till all the water evaporates. What will happen to the salt dissolved in water?**

- a) It will also evaporates

- b) It will remain in the utensil
- c) Salt will start burning
- d) None of the above

**8. Take two similar plates. Place plate A in sunlight and keep the other plate B under shade. Now pour equal amount of water in the plates and observe them after half an hour.**

- a) Plate A will have more water than plate B
- b) Plate B will have less water than plate A
- c) Plate A will have less water than Plate B
- d) None of the above

**9. In sunlight, the rate of evaporation is \_\_\_\_ as compared to rate of evaporation in shadow.**

- a) Slow
- b) Fast
- c) Equal
- d) None of the above
- e)

**10. Drops of water appear on outer surface of the glass containing water with ice. This is because of:-**

- a) Transpiration
- b) Condensation
- c) Evaporation
- d) None of the above

**11. The supply of water on land is maintained by circulation of water between ocean and land in a continuous process. This process is called**

- a) Nitrogen cycle
- b) Water cycle
- c) Vapour cycle
- d) Condensation cycle

**12. In our country, most of the rainfall occurs during the \_\_\_\_\_ season.**

- a) Summer
- b) Winter
- c) Monsoon
- d) Spring

**13. \_\_\_\_\_ large sized buckets full of water is lost through transpiration by wheat plants that give us one kilogram of wheat**

- a) 10-15
- b) 100-120
- c) 20-25
- d) 200-300

**14. Excess of rainfall may lead to following problems**

- a) Heavy rains may lead to rise in the water level of rivers, lakes and ponds
- b) Villages, forests, crop fields and cities may get submerged by water
- c) It causes extensive damage to crops, domestic animals, property and human life
- d) All of the above

**15. What happens if it does not rain for a long period :-**

- a) Soil will become dry
- b) Some wells and ponds may dry up
- c) Ground water may become scarce
- d) All of the above

## Answer Key (Chapter -14)

Q	Ans.	Q.	Ans.
1	b	13	c
2	a	14	d
3	a	15	d
4	a		
5	b		
6	a		
7	b		
8	c		
9	b		
10	b		
11	b		
12	c		

## AIR AROUND US

LEARNINGS OUTCOME																		
Identify					Differentiate/Classify	Explain					Draw/Measure	Construct / Exhibit/Conduct		Application/Relationship				
Q5	Q9	Q10	Q16	Q18	Q14	Q2	Q6	Q8	Q11	Q13	Q3	Q3	Q4	Q1	Q7	Q12	Q15	Q17

[illegible]

# PROGRESS SHEET

### Achievement level as per learning outcomes

**(Grading: - A/B/C/D)**

**\*(A- not meeting the expected standard,**

## B- Approaching the expected standard

### C- Approached the expected standard

### D- Beyond the expected standard)

[illegible]

## MCQs

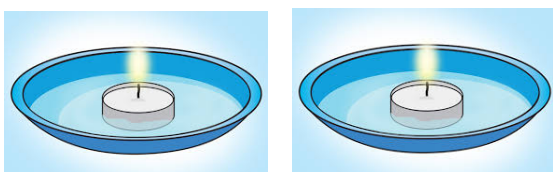
**1. In which of the following processes air plays an important role to separate the substances?**

- a) Evaporation
- b) Condensation
- c) Winnowing
- d) Decantation

**2. Which of the following statements is not true about air?**

- a) Air occupies space
- b) Air fills all the space in the container
- c) Air has no colour and it is transparent
- d) Air is just one substance

**3. In an experiment two candles of the same size are fixed in two shallow containers having some water in them. Cover each candle with inverted glass. On observation we can predict that**



- a) The water level will rise in inverted glass
- b) The water level will sink in inverted glass
- c) Burning candles will not blow out
- d) None of the above

**4. The major part of air (which doesn't support burning) is \_\_\_\_\_**

- a) Carbon dioxide
- b) Water vapours
- c) Nitrogen
- d) oxygen

**5. Plants and animals consume \_\_\_\_\_ for respiration and produce \_\_\_\_\_.**

- a) Oxygen, carbon dioxide
- b) Carbon dioxide, oxygen
- c) Nitrogen, oxygen
- d) Methane, oxygen

**6. The burning of fuel also produces smoke. The main constituents of smoke are**



- a) Carbon monoxide, carbon dioxide, water vapours and fine dust particles
- b) Water vapours and fine dust particles only
- c) Carbon monoxide, oxygen and carbon dioxide only
- d) Nitrogen oxide, carbon dioxide only

**7. The factories have long chimneys in them because**



- a) They takes the harmful smoke and gases away
- b) These look beautiful
- c) These helps the owner of the factory to increase production of final products
- d) These have no importance to society

**8. Why is it not a good habit to breathe through your mouth?**



- a) Breathing through nose prevents us from dust
- b) Breathing through mouth is nuisance for others
- c) Breathing through mouth make us ugly
- d) None of the above

**9. These two gases together make up 99% of the air. The gases are**

- a) Carbon dioxide and nitrogen
- b) Oxygen and carbon dioxide
- c) Nitrogen and oxygen
- d) Nitrogen and chlorine

**10. Which is the best explanation to explain the situation in which earthworms come out of the soil during heavy rains?**



Earthworm during heavy rains



- a) They can't sleep during heavy rains
- b) The noise from heavy rains, disturbs them
- c) They can't respire in the soil
- d) None of the above

**11. Which of the following is not assisted by air?**



- a) The windmill is used to run flour mills
- b) Windmill is used to generate electricity
- c) The movement of parachutes, yachts, gliders and airplanes
- d) Diesel and petrol cars

**12. Air pollution is caused by excess of**

- a) Nitrogen
- b) Hydrogen
- c) Water vapours
- d) None of the above

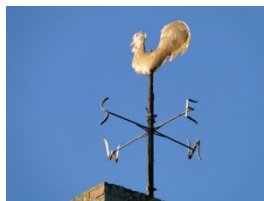
**13. Which of the following doesn't cause pollution?**

- a) Carbon dioxide
- b) Sulfur dioxide
- c) Hydrogen
- d) Carbon monoxide

**14. Air pollution effects are usually found on\_\_\_\_\_**

- a) Leaves
- b) Stems
- c) Roots
- d) Flowers

**15. A weather cock is used for which of the following\_\_\_\_\_**



- a) It shows the weather of the region
- b) It shows the altitude of the region
- c) It shows the level of pollutants in the atmosphere
- d) It shows the direction in which air is moving at that place

**16. The benefit of breathing through nose is**

- a) Mucus of the nose traps unwanted dust particles
- b) The hair of the nose traps the unwanted particles
- c) Both A and B
- d) Only B
- e)

**17. When sunlight is allowed to pass through a small slit in a dark room, we see some tiny shining particles dancing merrily. These are \_\_\_\_\_**



- a) Water vapours
- b) Carbon dioxide
- c) Oxygen
- d) Dust particles

## Answer Key(Chapter -15)

Q	ans.	Q.	ans.
1	c	13	c
2	d	14	a
3	a	15	d
4	c	16	c
5	a	17	d
6	a		
7	a		
8	a		
9	c		
10	c		
11	d		
12	d		

## CHAPTER-16

### GARBAGE IN, GARBAGE OUT

#### Distribution of questions on the basis of Learning Outcomes

LEARNINGS OUOTCOME															
Identify			Different iate/ Classify	Explain				Draw/Me asure	Construct/ Exhibit/Con duct		Application/Relate				
Q 5	Q 9	Q1 4		Q 3	Q 4	Q 8	Q1 5		Q13	Q6	Q10	Q 1	Q 2	Q 7	Q1 1

#### Learner's achievement Sheet

Name of student	Q 1	Q2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	Q 11	Q 12	Q 13	Q 14	Q 15

## PROGRESS SHEET

Achievement level as per learning outcomes

(Grading: - A/B/C/D)

\*(A- not meeting the expected standard,

B- Approaching the expected standard

C- Approached the expected standard

D- Beyond the expected standard)

Sr. No	Name of the Student	Identify	Differentiate / Classify	Explain	Draw/ Measure	Construct /Exhibit/ Conduct	Application /Relate

## MCQs

**1. It can be harmful to store food in non-food grade plastic bags. This is because These bags may be unsuitable for storing food.**

- a) These bags may be unsuitable for storing food
- b) The plastic bag might have been earlier used for some other purpose.
- c) People might have recycled them by simply washing them
- d) All of the above

**2. Plastic bags are often used for storing food. This is because**

- a) They don't leak easily
- b) They are less expensive than other traditional methods
- c) They can be transparent and food can be easily seen without opening the bag
- d) All of the above.

**3. What would be the best practice/s from the following to minimize over use of plastics and deal with garbage?**

- a) We should reuse the plastic bags if it is possible to do without any adverse effects
- b) We should not use plastic bags to store eatables
- c) We should make our family, friends and others to follow proper practices for disposing different kinds of wastes
- d) All of the above

**4. Paheli would like to suggest that containers used for storing poisonous substances should not be recycled to make plastic bags. Do you agree with Paheli?**

- a) No
- b) Yes
- c) Partially
- d) None of the above.

**5. Which of the following is a threat to environment?**

- a) Growing Plants
- b) Use of plastics excessively and ignorant about ways of their safe disposal
- c) Vermicomposting in large pits
- d) Recycling Paper.

**6. Vermicomposting is an environment friendly process to get rid of waste because**

- a) It helps us to reduce garbage
- b) It gives us valuable product
- c) It can save a lot of money of a farmer
- d) All of the above

**7. Vermicomposting is a environment friendly process in which we**

- a) Recycle plastic bags
- b) Recycle metallic items
- c) Process vegetable and fruit wastes with the help of red worms for composting
- d) None of the above

**8. Plastics are also major pollutants because**

- a) They are unbreakable

- b) They are environment friendly
- c) They reduce humidity
- d) They are non-biodegradable

**9. Which of the following statements is correct?**

- a) Red worms can eat plastic bags
- b) Red worms can survive in very hot or cold surroundings
- c) Red worms have sharp teeth
- d) Red worms have a structure called 'gizzard'

**10. There are two pits A and pit B. In pit A garbage from kitchen like fruit and vegetable peels, egg shells, waste food and some soil with red worms while in pit B there are polythene bags, broken glass, aluminium wrappers, broken plastic toys. What kind of changes you will observe in the pits after few weeks?**

- a) There will be no change in two pits
- b) The garbage in both pits will rot completely
- c) The garbage in pit A will rot while in pit B it will not.
- d) The garbage in pit B will rot while in pit A it will not rot.

**11. What is the best practice for a farmer after harvesting the crop?**

- a) He/she should burn the husk, dried leaves and part of crop plants
- b) The waste after harvesting could be converted into compost
- c) Farmer should send it for landfill
- d) None of the above

**12. What could be the ideal replacement for a plastic bag?**

- a) Paper Bags
- b) Cloth Bags
- a) Jute Bags
- d) All of the above

**13. In some cities and towns municipalities provide separate dustbins blue and green for collecting two kinds of garbage. Which of the following is true?**

- a) Blue Bin-Plastics, metals and glass  
Green Bin-Kitchen and other plant or animal wastes
- b) Blue Bin- Kitchen and other plant or animal wastes  
Green Bin-Plastics, metals and glass
- c) Both A and B
- d) None of the above

**Q14. When do we celebrate "World Environment Day"?**

- a) 5<sup>th</sup> June
- b) 5<sup>th</sup> July
- b) 20<sup>th</sup> September
- c) 15<sup>th</sup> December

**Q15. What are the three "R" that everyone should follow to save the environment?**

- a) Recycle, reduce and reuse
- b) Retain, refuse and recycle
- c) Regard, retain and replenish
- d) Recycle, refuse and reuse

**Answer Key(Chapter -16)**

<b>Q</b>	<b>Ans.</b>	<b>Q.</b>	<b>Ans.</b>
<b>1</b>	<b>d</b>	<b>13</b>	<b>a</b>
<b>2</b>	<b>d</b>	<b>14</b>	<b>a</b>
<b>3</b>	<b>d</b>	<b>15</b>	<b>a</b>
<b>4</b>	<b>b</b>		
<b>5</b>	<b>b</b>		
<b>6</b>	<b>d</b>		
<b>7</b>	<b>c</b>		
<b>8</b>	<b>d</b>		
<b>9</b>	<b>d</b>		
<b>10</b>	<b>c</b>		
<b>11</b>	<b>b</b>		
<b>12</b>	<b>d</b>		