

# **BRAIN INTERNATIONAL SCHOOL**

# **SESSION 2024-25**

CLASS: VI

**ANNUAL REVISION SHEET** 

SUBJECT: SCIENCE

#### **Chapter 6: Living organisms characteristics and habitats**

### 1. Multiple choice questions

1. The removal of waste substances from the body is called (a) reproduction (b) respiration (c) breathing (d) excretion

2. \_\_\_\_\_ is the structural and functional unit of all living things. (a) matter (b) cell (c) organ (d) tissue

### 2 Assertion / Reason questions

Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below (i) Both A and R are true and R is correct explanation of the assertion.

(ii) Both A and R are true but R is not the correct explanation of the assertion.

(iii) A is true but R is false.

(iv) A is false but R is true.

- a) Assertion: Some abiotic factors like air, water, light and heat are very important for growth of plants. Reason: Some of the above abiotic factors are important for all living organisms.
- b) Assertion: Deer has strong teeth and long ears.Reason: The speed of deer helps them to run away from prey.

#### **3** Case study/passage-based questions

Tigers are large wild cats that live in jungles and forests. They have strong, muscular bodies and sharp claws for hunting. Their orange coat with black stripes helps them blend into the tall grass and trees of their forest habitat, making it easier to hunt prey.

Frogs are amphibians that live in ponds, lakes, or marshy areas. They start life as tadpoles, which breathe through gills in the water. As they grow, they develop lungs to breathe air and can live both in water and on land. Frogs have smooth, moist skin that helps them absorb water.

- i. What are the characteristics of frogs that make them well-suited for living in ponds?
- ii. How can camel survive in the desert?
- iii. Write the difference between living and noon living things?
- iv. Why do bear have thick fur on the body?

- 1. What is function of slippery scales and gills on the body of fishes?
- 2. Like many animals although a car also moves but it is not considered as a living organism. Give 2 reasons.
- 3. Distinguish between the following.
  - I. Biotic components and Abiotic components
  - II. Adaptation and Acclimatization
- 4. Write the features of desert plants.

### Chapter7: Motion and measurement of distances.

#### 1 Multiple choice questions

- 1. The act of determining, size, capacity or quantity of an object is called
  - (a) unit (b) measurement (c) pace (d) motion
- 2. 10 millimeters is equal to
  - (a) 1 metre (b) 1 centimetre (c) 1 kilometre (d) 1 cubits

### 2 Assertion / Reason questions

Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below (i) Both A and R are true and R is correct explanation of the assertion.

- (ii) Both A and R are true but R is not the correct explanation of the assertion.
- (iii) A is true but R is false.
- (iv) A is false but R is true.
- a) Assertion: The motion of a ball rolling on the ground is nothing but a rectilinear motion.Reason: The motion of ball rolling on the ground is a combination of different types of motion.
- b) Assertion: Motion of moon around the earth is a circular motion.Reason: In a circular motion, the distance of object from a fixed point remains the same.

### 3 Case study/passage-based questions

A ball rolls across the floor. It starts from rest and gradually picks up speed. The ball rolls straight without changing direction. After a few seconds, it slows down and eventually stops. The Earth rotates on its axis. It takes 24 hours for the Earth to complete one full rotation. The Earth spins in a circle around an imaginary line called the axis.

- i. What type of motion does the ball exhibit as it rolls across the floor?
- ii. What type of motion is exhibited by the Earth as it rotates on its axis?
- iii. Write the difference between circular and rectilinear motion.

1 State the precautions, which should be taken while using a meter scale to measure the length of an object.

2. How can we measure a curved line? Elucidate

3. What are different types of motion? Explain with example.

4. Three students measured the length of a corridor and reported their measurements. The values of their measurements were different. What could be the reason for difference in their measurements? (Mention any three.)

## **Chapter8: Light shadows and reflection**

### **1** Multiple choice questions

- What is formed when light is blocked by an opaque object?
   (a) Shadow (b) Image (c) reflection (d) light
- 2. Which of the following objects will produce the darkest shadow?

(a) A transparent object (b) A translucent object (c) An opaque object (d) A glass object

### 2 Assertion / Reason question

Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below (i) Both A and R are true and R is correct explanation of the assertion.

- (ii) Both A and R are true but R is not the correct explanation of the assertion.
- (iii) A is true but R is false.
- (iv) A is false but R is true.
- **a)** Assertion: The shadow of an object is sharper and darker when it is placed closer to a light source.

Reason: The closer the object is to the light source, the larger the shadow becomes.

b) Assertion: Light travels in straight lines.Reason: Light bends when it passes through transparent materials like glass.

### 3 Case study / passage-based question

Sakshi is standing in front of a plane mirror placed on a wall. She notices that when she moves closer to the mirror, the image of her reflection becomes larger. Similarly, when she steps back, the image appears smaller. One day, she also places a transparent glass plate in front of the mirror. The reflection in the mirror becomes faint and less clear. Sakshi decides to check the shadow of an object when she moves it in front of a light source. She observes that when she places the object near the light source, the shadow is sharp and large, and when the object is moved farther from the light, the shadow becomes faint and smaller.

- i. What do you understand by reflection?
- ii. Why does Sakshi's reflection appear larger when she moves closer to the plane mirror?
- iii. What happens to the shadow when the object is moved farther from the light source?

- 1 What is the main difference between a shadow and a reflection?
- 2. Why do we see our reflection in a plane mirror?
- 3. Describe an activity to show reflection of light.
- 4. Elucidate rectilinear propagation of light with the help of an activity.

# Chapter9: Electricity and circuit

### **1** Multiple choice questions

- 1. A material which allows electricity to pass through it is
  - (a) Conductor (b) Insulator
  - (c) Transistor (d) None of these
- 2. The base of an electric cell is its \_\_\_\_\_ terminal
  - (a) Positive terminal (b) Negative terminal
    - (c) Positive o negative terminal (d) None of these

# 2 Assertion / Reason questions

- Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below (i) Both A and R are true and R is correct explanation of the assertion.
  - (ii) Both A and R are true but R is not the correct explanation of the assertion.
  - (iii) A is true but R is false.
  - (iv) A is false but R is true.
  - a) Assertion: Silver is not used to make electric wires. Reason: Silver is a bad conductor.
  - b) Assertion: Air is an insulator.Reason: Those materials that do not allow electric current to pass through them are called insulators.

# 3 Case study/ passage-based question

A group of students in Class 6 conducted an experiment to understand how electrical circuits work. They used a simple circuit setup with a battery, a bulb, and a switch. The circuit was initially open, meaning the switch was off, so the bulb did not light up. After closing the switch, the bulb lit up, indicating that the electric current was flowing through the circuit.

The students noticed that when they added more bulbs in the same circuit, the bulbs became dimmer. They wondered why this happened and wanted to explore how different components of the circuit affect the current and brightness of the bulbs.

- i. What is an electric circuit? Explain the components used in the experiment.
- ii. If the battery in the circuit was replaced with a stronger one, what do you think would happen to the brightness of the bulb and why?
- iii. Why did the bulb light up when the switch was closed?

- 1. What is the difference between a conductor and an insulator?
- 2. What precautions should you take when handling electrical appliances?
- 3. What will happen to the electric current in a circuit if the wire is replaced with a thicker one?
- 4. What is a electric circuit? Define and open and close switch

### **Chapter10: Fun with magnets**

#### **1** Multiple choice questions

- 1. The word magnet is derived from the old French word
  - (a) magnesia (b) magnus
  - (c) magnetite (d) magnetum
- 2. Which of the following is a natural magnet?
  - (a) Lodestone (b) Bar magnet
  - (c) Ball-ended magnet (d) Horse-shoe magnet

#### 2 Assertion / Reason questions

Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below (i) Both A and R are true and R is correct explanation of the assertion.

- (ii) Both A and R are true but R is not the correct explanation of the assertion.
- (iii) A is true but R is false.
- (iv) A is false but R is true.
- a) Assertion (A): The north pole of a freely suspended magnet points towards geographic north.Reason (R): Using pieces of iron we can make artificial magnets.
- b) Assertion (A): A simple magnetic compass can be prepared by inserting a magnetized iron needle in a piece of cork and allow the cork to float in water kept in a bowl
  Reason (R): In the above arrangement the needle must touch water while floating.

### 4 Answer the following question

- 1. Write the properties of a magnet.
- 2. Elucidate with the help of an activity how can you make your own magnet?
- 3. Why magnets need to be handled properly? Write the precaution that need to be taken while handle the Magnet.
- 4. what is a compass? How compass is to be used to find the directions.

### Chapter 11: Air around us

### **1** Multiple choice questions

What are the properties of air?
 (a) It occupies space
 (b) It
 (c) It has no colour and is transparent
 (d) a

(b) It is present everywhere around us(d) all of these

- Moving air is called

   (a) wind
  - (c) carbon

(b) Nitrogen(d) none of these

### 2 Assertion / Reason questions

Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below (i) Both A and R are true and R is correct explanation of the assertion.

- (ii) Both A and R are true but R is not the correct explanation of the assertion.
- (iii) A is true but R is false.
- (iv) A is false but R is true.
- a) Assertion: Air is a mixture of gases like oxygen, nitrogen, carbon dioxide, and water vapor. Reason: The presence of oxygen in the air is necessary for the survival of living organisms.
- b) Assertion: Air is a mixture of gases like oxygen, nitrogen, carbon dioxide, and water vapor. **Reason:** The presence of oxygen in the air is necessary for the survival of living organisms.

#### **3** Answer the following question

- 1. Explain the role played by air in the life of human, animals and plants.
- 2. How do plants and animals help each other in the exchange of gases in the atmosphere?
- 3. Why all the oxygen of atmosphere does not get used up though a large number of organisms are consuming it?
- 4. How will you show that air is dissolved in water?
- 5. How is the level of oxygen maintained in the atmosphere?