

Time: 3 hr.

**General Instructions:**

1. All questions are compulsory.
2. Attempt all questions section wise in the serial order neatly and leave one line after every answer.
3. Draw neat and labelled diagrams wherever required.

**Section - I**

(10×1=10)

Answer the following in one word :

1. What term is given to the skeleton of an animal present inside its body?
2. How many poles of magnet are formed if it is broken into two pieces?
3. Write the name of natural magnet.
4. Name the circuit in which the circuit is incomplete and no current flows.
5. Where is pencil cell used?
6. What is the percentage of nitrogen in air?
7. Name the gas necessary for burning of fuels.
8. Which organ is used by fish for breathing?
9. Name the female reproductive part of flower.
10. Which organ is protected by the skull in human body?

**Section - II**

Answer the following questions in brief :

(2×10=20)

1. How does a snail move from one place to another place?
2. Write few lines about hinge joint with one example.
3. What are magnetic substances? Write two examples.
4. Why should we not drop the magnets from a height?
5. Draw symbol for -  
a) Electric cell      b) Electric switch
6. Define conductors with two examples.
7. Why electric wires have plastic coating on them?
8. Why are tall chimneys installed in factories?
9. What will happen if we keep fish in a closed container without any aquatic plant in it?
10. Write a note on tap root with one example.



### Section - III

(3×10=30)

Answer the following :

1. Write three features that help the birds to fly in air.
2. How will you prove that magnetic poles have maximum magnetic power?
3. Write any three advantages of electric cells.
4. Define directive property of the magnet with diagram.
5. Draw diagram of inner view of electric bulb.

OR

Describe the structure of electric bulb.

6. Write any three uses of air.
7. How will you prove by an activity that air is present in water?
8. What is venation? What is the relationship between leaf venation and types of roots?
9. Explain any three uses of roots.
10.
  - a) What is fertilisation?
  - b) What is difference between climber and creeper?

### Section - IV

Answer the following questions in detail :

(6×1=6)

Q1. Match the following:

- |                     |                      |
|---------------------|----------------------|
| 1) Muscles          | a) Insulator         |
| 2) Magnetic keepers | b) Magnetic          |
| 3) Iron             | c) Broken filament   |
| 4) Fused bulb       | d) Biceps & Triceps  |
| 5) Plastic          | e) Tyres of vehicles |
| 6) Compressed Air   | f) Storing magnets   |

(5×1=5)

Q3. Multiple Choice Questions:

1. How many terminals does a bulb have?  
a) One   b) Three   c) Two   d) Four
2. Magnetic compass is used to -  
a) draw images   b) find direction   c) note time   d) give message
3. Earthworms come out of the soil during rainfall because -  
a) soil is dry  
b) there is no air left in soil  
c) they like rain  
d) they have to find food
4. Which gas is fixed by Rhizobium bacteria in the soil?  
a) Hydrogen   b) Nitrogen   c) Oxygen   d) Carbondioxide



5. Assertion (A) : We should not burn dry leaves

Reason (R) : Burning of leaves produce harmful gases.

- a) Both A and R are true and R is the correct explanation of A.
- b) Both A and R are true but R is not the correct explanation of A.
- c) A is true but R is false.
- d) A is false and R is true.

(4×1=4)

Q3. Case based study questions :

A group of students is conducting an experiment to categorise objects based on certain criteria. They have a collection of objects like red apples, wooden chairs, round balls & plastic toys. They want to categorise these objects.

- a) Give an example of an object that can be categorised based on its shape.
- b) Write an example of an object that can be categorised based on its colour.
- c) Give an example of an object that is hard and is used for sitting.
- d) Which of these objects can be eaten by students?

Q4. Diagram based questions -

(5)

- a) Label a, b, c, d, e, f, in the diagram of structure of flower. (6×½=3)
- b) What happens when pollen grains fall on the stigma of the flower? (2)

