GENERAL INSTRUCTIONS:
1. Total number of questions – 48
2. Write the question nos. correctly and all the answers to be written in the answer sheets provided.
3. All the questions are compulsory. Internal choices are given.

SECTION: A

I. MULTIPLE CHOICE QUESTIONS (Choose the correct answer from the choices given)

1. Which of these apply to Nitrogen?
   a) It is 78% by volume  
   b) It helps in photosynthesis
   c) It helps in burning
   d) It helps in respiration

2. About ______ of the earth is covered with water.
   a) half  
   b) one third
   c) two third 
   d) one fourth

3. The device that is used to open and close an electric circuit is an ________.
   a) electric bulb
   b) electric plug
   c) electric cell
   d) electric switch

4. A sea animal that does not have a streamlined body shape is ______________.
   a) whale
   b) octopus
   c) dolphin
   d) shark

5. Solubility of sugar in water can be increased by ________________.
   a) stirring
   b) heating
   c) cooling
   d) both a and b

6. No water enters the inverted glass when dipped in a vessel filled with water because, the space in the glass is filled with ________________.
   a) water
   b) liquids
   c) air
   d) water vapour

7. The process of falling down of water in the form of rain, hail or snow is called:
   a) precipitation
   b) evaporation
   c) condensation
   d) transpiration

8. A habitat consists of ________________.
   a) living organisms
   b) non-living organisms
   c) living and non-living organisms
   d) decomposers
9. The presence of air around us can be proved by:
   a) smelling it   b) seeing it   c) its colour   d) feeling it

10. A mimosa plant closes or folds its leaves when touched is due to:
    a) reproduction   b) excretion   c) stimuli   d) acclimatisation

11. What would happen if it does not rain in a region for a year?
    a) Soil will dry up   b) Water bodies will dry up
    c) Animals will die   d) All of the above

12. Which of the following statement is false?
    a) Rubber is an insulator   b) Most of the metals are conductors of electricity
    c) Graphite is a conductor of electricity   d) Our body is a bad conductor of electricity

13. Which among the following methods is used to separate a harmful solid from a useful solid?
    a) Handpicking   b) Filtration   c) Churning   d) Descantation

14. Which of the following processes does not release Carbon dioxide into the atmosphere?
    a) Exhalation   b) Burning   c) Photosynthesis   d) Both a and b

15. An electric cell has ________________ terminals.
    a) One   b) Two   c) Three   d) Four

SECTION: B  
(1X10 = 10 MARKS)

II. FILL IN THE BLANKS:

16. The animals that are eaten by the predators are called ________________

17. Breathing is a part of ____________________________

18. ________________ maintains the supply of water on land.

19. A weather cock shows the ________________ in which wind is blowing at a place.

III. NAME THE FOLLOWING:

20. The source of heat that heats up water bodies to form water vapour.

21. The process of separating an insoluble solid and a liquid by passing through a filter.

22. Collecting rain water and storing for future use.
IV. **REWITE THE FOLLOWING STATEMENTS CORRECTLY:**

23. Water dissolves different substances in equal amount.
24. Animals living in mountain regions have thin skin or fur.
25. Rate of evaporation is faster when water is cooled.

SECTION: C

(2X10 = 20 MARKS)

V. **QUESTIONS 26 TO 35 ARE VERY SHORT ANSWER TYPE QUESTIONS CARRYING 2 MARKS EACH. ANSWER THEM IN 1-2 SENTENCES.**

26. What is an electric circuit? Name the thin wire that gives off light in a bulb.
27. List two activities that are possible due to the presence of air.
28. Why water spilled on the floor dries up after sometime? Name the process by which plants add water vapour into the air.
29. What are insulators? Give two examples.
30. Define acclimatisation.

31. Match the following:
   a) Butter from curd - Roots reduced in size
   b) Pines and oaks - No more of the solute can be dissolved
   c) Aquatic plants - Mountain regions
   d) Saturated solution - Churning

32. **Identify the method of separation and define it:**

33. What is groundwater? Write any two sources of it.
34. Justify the given statements.
   a) Ocean and sea water is unfit for drinking.
   b) Areas of land covered with concrete affects the availability of ground water.
35. Draw and label the composition of air in the atmosphere.
VI. **QUESTIONS 36 TO 45 ARE SHORT ANSWER TYPE QUESTIONS CARRYING 3 MARKS EACH. ANSWER THEM IN 3-4 SENTENCES.**

36. What is flood? List any 2 damages caused by it.

37. a) Why electric cells stop producing electricity after sometime?
    b) In which of the arrangements shown below the bulb will glow? Why?

![Arrangement 1](#) ![Arrangement 2](#)

38. Specify any three adaptive features of a lion.

OR

38. Mention the adaptive features of a Squid and Octopus.

39. How is Oxygen refilled in the atmosphere?

40. a) How is the mixture of sand and water separated?
    b) What happens when steam comes in contact with the metal plate cooled with ice?

41. Explain any 3 adaptive features of a cactus plant.

42. Why is it better to breathe through nose than through mouth?

43. How would you separate the mixture of two immiscible liquids?

OR

43. How is salt obtained from sea water?

44. a) Define abiotic components with an example?
    b) Distinguish between reproduction and excretion.

45. a) State the direction of flow of current in an electric circuit.
    b) **Identify** the device and **label** the parts.
SECTION: E (5X3 = 15 MARKS)

VII. QUESTIONS 46 TO 48 ARE LONG ANSWER TYPE QUESTIONS CARRYING 5 MARKS EACH.

46. a) Draw and label the process of filtration using a filter paper. (3 marks)
    b) Write any two reasons for separating different components of a mixture with an example for each. (2 marks)

47. a) Why during an incident of fire, one is advised to wrap a woollen blanket over a burning object? (3 marks)
    b) Write one importance of air dissolved in water? (1 mark)
    c) Why earthworms come out of the soil during heavy rain? (1 mark)

48. a) Describe the structure of an electric cell. (3 marks)
    b) When is a switch said to be ‘on’. (2 marks)

OR

48. a) What is a torch? Name the main parts of a torch. (3 marks)
    b) Why are metals used for making wires? (2 marks)

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