विद्या सर्वर्थि साधिका

General Instructions:

1. There are 15 questions in this question paper. All questions are compulsory.
2. Q. No. 1 to 6 are objective type questions and carry 1 mark each.
3. Q. No. 7 to 11 are short answer type questions and carry 2 marks each.
4. Q. No. 12 to 14 are also short answer type questions and carry 3 marks each.
5. Q. No. 15 is long answer type question and carries 5 marks.
6. How many terminals are there in a dry cell?
(A) one
(B) four
(C) two
(D) three
7. An outer skeleton is found in $\qquad$ .
(A) Cockroach
(B) Earthworm
(C) Fish
(D) Snake
8. In which of the following circuits (a), (b) and (c) given below, the electric cell/s will be used up very rapidly?

9. Which of the following processes help in transfer of water to air?
(A) Evaporation
(B) Condensation
(C) Transpiration
(D) Both (a) and (c)
10. The handle of electrical appliance is made up of plastic or wood. Why?
11. Which statement(s) is/are true or false?
(A) Rainwater contains dissolved gases.
(B) Sea water contains dissolved salts.
12. (a) Which technique of water conservation is depicted in the given figure?
(b) What is the use of catchment area shown in the figure?
(c) What is the advantage of having such a storage reservoir?

13. Pick the conductors which are not metals from the given:

Silver, Moist air, Copper, Salt solution, Impure water, Aluminium, Graphite
9. Water is a precious exhaustible natural resource. Water has to be used judiciously to
conserve it. You, as a responsible student suggest four ways to conserve water.
10. What will happen if:
(a) Our body have as many numbers of movable joints as the number of bones?
(b) Our backbone is made of one single long bone instead of so many vertebrae?
11. Name any two types of joints used by each of these professionals during the sports event:
(a) Swimmers
(b) Cricket Bowlers
12. Write scientific reason for the following statements:
(a) Distilled water is used in the batteries and not the tap water.
(b) When the electric heater is switched on, we get hot water from the tap
(c) The headlights of a car have reflectors behind the bulb.
13. The incomplete diagram of water cycle is given. Observe the figure carefully and answer the following questions:

(a) Draw the complete water cycle.
(b) Identify the processes A and B involved in this cycle and replace them with appropriate terms in the diagram. Define the processes A and B.
14. Sam went to science laboratory to observe the wings of cockroach and bird. He observed many differences in their wings. He discussed his observation with his science teacher, who asked him to answer the following questions. Imagine, you being Sam and answer them.
(a) Explain how the wings of cockroach and bird differ from each other.
(b) How are birds adapted for flying?
(c) How many legs are present in cockroach?
15. (a) Write one difference between movement and locomotion.
(b) List the functions of our ribcage.
(c) If a scale is tied along your entire arm, will you be able to bend your elbow? Justify your answer.
(d) Draw the diagram of ball and socket joint.
(e) List any two features that enable the fish to swim in water easily.

