



विद्या सर्वार्थ साधिका

ANANDALAYA  
ANNUAL EXAMINATION  
Class: VI

Subject: Science  
Date : 28-02-2024

MM : 80  
Time: 3 hours

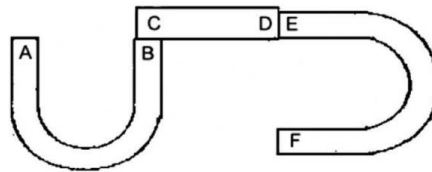
General Instructions:

- i. This question paper consists of 39 questions in 5 sections.
- ii. All questions are compulsory. However, an internal choice is provided in some questions. A student is expected to attempt only one of these questions.
- iii. Section A consists of 20 objective type questions carrying 1 mark each.
- iv. Section B consists of 6 Very Short questions carrying 02 marks each.
- v. Section C consists of 7 Short Answer type questions carrying 03 marks each.
- vi. Section D consists of 3 Long Answer type questions carrying 05 marks each.
- vii. Section E consists of 3 source-based/case-based units of assessment of 04 marks each with sub-parts.

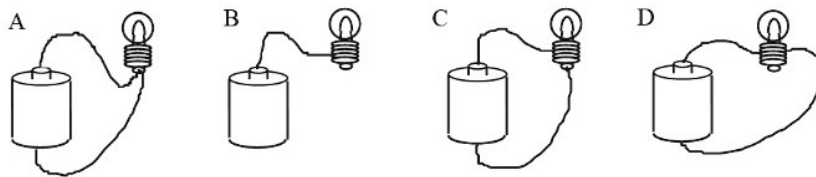
**SECTION A**

1. \_\_\_\_\_ and \_\_\_\_\_ methods are used for separating rice from dust to cook rice in the house. (1)  
(A) Winnowing and sieving (C) Winnowing and sedimentation  
(B) Threshing and winnowing (D) Sedimentation and Decantation
2. The leaves and roots of a Hibiscus plant have \_\_\_\_\_. (1)  
(A) Parallel venation with fibrous root (C) Reticulate venation with tap root  
(B) Reticulate venation with fibrous root (D) Parallel venation with tap root
3. \_\_\_\_\_ joint in our body helps us to move that part in all directions. (1)  
(A) Ball and Socket (B) Hinge (C) Fixed (D) Pivotal
4. Which of the following is not an adaptation of fishes for aquatic habitat? (1)  
(A) Gills (B) Streamlined body (C) Blow holes (D) Fins
5. An example for circular motion is \_\_\_\_\_. (1)  
(A) Motion of a bird (B) Motion of an ant (C) Hands of a clock (D) Playing on a swing
6. The circular images formed under a tree covered with a large number of leaves are the pinhole images of the \_\_\_\_\_. (1)  
(A) leaves (B) bird (C) tree bark (D) Sun
7. The filament of a bulb is made of \_\_\_\_\_. (1)  
(A) tungsten (B) copper (C) aluminium (D) brass
8. A compass is a small box with a \_\_\_\_\_ and \_\_\_\_\_ needle allows it to rotate freely. (1)  
(A) magnetised, pivoted (C) ordinary, fixed  
(B) magnetised, fixed (D) ordinary, pivoted
9. \_\_\_\_\_ present in the atmospheric air supports burning. (1)  
(A) Oxygen (B) Nitrogen (C) Carbon dioxide (D) Argon
10. When light is stopped by \_\_\_\_\_ object its shadow is formed. (1)  
(A) a transparent (B) a translucent (C) an opaque (D) a glass

11. 10 km = \_\_\_\_\_ cm (1)  
 (A) 1000 cm (B) 100 cm (C) 10,000 cm (D) 1,00,000 cm
12. The main function of the roots of the floating aquatic plants is \_\_\_\_\_. (1)  
 (A) to absorb water (C) to hold the plant firmly  
 (B) to absorb nutrients (D) All of the above
13. Select the common adaptive feature seen in birds and fishes for locomotion. (1)  
 (A) hollow bones (B) breast bones (C) shoulder bones (D) streamlined body
14. During photosynthesis, plants take in \_\_\_\_\_. (1)  
 (A) oxygen (B) carbon dioxide (C) water vapour (D) food
15. There are three magnets AB, CD & EF. If A is the North pole of the magnet, study the diagram carefully and select the correct option: (1)



- (A) ACF are the North Poles of the magnets (C) BEC are South Poles of the magnets  
 (B) ACE are the North Poles of the magnets (D) DFC are south Poles of the magnets
16. Which electric circuit is correctly connected for the bulb to glow? (1)



- (A) A (B) B (C) C (D) D

For question numbers 17 to 20, two statements are given-one labelled Assertion and the other labelled Reason. Select the correct answer to these questions from the codes (A), (B), (C) and (D) as given below.

- (A) Both Assertion and Reason are true and Reason is the correct explanation of Assertion  
 (B) Both Assertion and Reason are true but Reason is NOT the correct explanation of Assertion.  
 (C) Assertion is true but Reason is false  
 (D) Assertion is false and Reason is true.
17. Assertion: Muscles work in pairs. (1)  
 Reason : Muscles help the bones to move.
18. Assertion: Eyes must be exactly focussed in front of the point where the measurement is to be taken. (1)  
 Reason : Correct position of the eye is important for taking measurement.
19. Assertion: Shadows are formed when light passes through a transparent object. (1)  
 Reason : Shadow of a red rose is black in colour.
20. Assertion: The lit candle gets extinguished when it is covered with an inverted glass tumbler. (1)  
 Reason : As the air in the glass tumbler gets exhausted, so the lit candle gets extinguished.

## SECTION B

21. Write any two functions of the stem of a plant. (2)
22. How will you write the measurement of length? Give an example. (2)
23. (a) What is an electric circuit? (2)  
(b) In which direction current flows in an electrical circuit? (2)

**OR**

Draw the diagram of a dry cell and label its parts.

24. Draw the male part of the flower and label its parts. (2)
25. Choose two abiotic factors and justify how they support the growth of plants. (2)
26. What is an electrical switch? Name a simple switch that can be used in an electric circuit. (2)

## SECTION C

27. (a) Compare cartilage and bone by stating one similarity and one difference between them. (3)  
(b) What are carpels?
28. (a) What is a predator? (3)  
(b) What is a prey?  
(c) What adaptations do the predators have for hunting and the prey to escape from them in grasslands?
29. Explain the following bony protections and the organs protected by them: (3)  
(a) Rib cage (b) Back bone (c) Skull

**OR**

- (a) Explain the gait/movement of earthworms.  
(b) How does an earthworm fix parts of its body to the ground?

30. Sometimes we can identify an object by looking at the shadow, but sometimes we cannot identify the same object from its shadow. (3)  
Justify the statement with the help of three examples, book, hand and box.
31. Give reasons for the following statements; (3)  
(a) Some plants have narrow and thin ribbon-like leaves.  
(b) Frogs have strong back legs.  
(c) The stem of the lotus plant is long and hollow.
32. Write an activity to prove that repulsion is the sure test for magnetism and not attraction. Draw the necessary diagram. (3)
33. Write an activity along with a diagram to prove water vapour is present in air. (3)

## SECTION D

34. How will you make a compass in a cup of water? Explain with an appropriate labelled diagram. (5)

**OR**

- (a) Write the difference between magnetic and non-magnetic substances.  
(b) How to store magnets?  
(c) Why are we supposed to keep magnets away from mobiles?  
(d) When a bar magnet is rubbed with soil, to which part of the magnet is the soil particles attracted more?  
(e) Write one way a magnet can lose its magnetism.

35. (a) Why is the person in the picture covering his nose with a handkerchief? (5)  
(b) You are not supposed to breathe with your mouth. Why?  
(c) Name two components of air which vary from time to time or place to place.  
(d) Draw a pie chart representing the components of air along with their percentages.



**OR**

Explain the interdependence of plants and animals with an appropriate labelled diagrammatic representation.

36. (a) How are the climatic conditions in the desert? (5)  
(b) How do desert animals like rats and snakes survive in the hot desert?  
(c) Explain three adaptations of camels for living in desert?

**OR**

- (a) How are the climatic conditions on mountains?  
(b) How are yaks adapted for mountains?  
(c) How are trees adapted to the conditions on the mountains? (3 points)

### SECTION E

Questions 37 to 39 are Source-based/Case study-based questions of 4 marks with sub-parts.

37. Conductors and insulators are equally important. Our body is a conductor of electricity. Therefore, be careful when you handle electrical appliances. You might have seen danger sign on the poles, electric substations and many other places.  
(i) What are conductors of electricity? (1)  
(ii) What are insulators of electricity? (1)  
(iii) How are electric conductors and insulators useful to us in electricity? Explain with appropriate examples. (2)

**OR**

(iii) What precautions should we take to protect us from electric shock? (Any two)

38. We take a cup of water and add a few spoons of salt into it. Allow it to dissolve completely. Adding a few spoons of salt to that cup, we find that the salt remains at the bottom of the cup. When we heat this solution, it dissolves more salt.  
(i) What are saturated substances? (1)  
(ii) What is the solubility of a substance? (1)  
(iii) Name two substances which are soluble in water and two substances which are insoluble in water. (2)

**OR**

(iii) Describe the methods to get back salt and water from salt solution.

39. Desert plants lose very little water through transpiration. The leaves are either absent, very small, or they are in the form of spines. The leaf-like structure that we see in a cactus is a stem. It is also covered with a thick layer of waxy coating.  
(i) What is transpiration? (1)  
(ii) What is the use of a thick layer of waxy coating in cactus? (1)  
(iii) Which structure in the cactus performs photosynthesis? Why? (2)

**OR**

- (iii) (a) Why are leaves reduced to spines in cactus plants?  
(b) Write one more use of spines on the cactus.