



# BK BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS  
SENIOR SECONDARY | CO-ED DAY CUM BOYS' RESIDENTIAL  
SCHOOL

ANNUAL EXAMINATION 2024-25

SCIENCE (086)



Class: VI

Date: 17.03.25

Name:

Duration: 3 Hrs.

Max. Marks: 80

Exam R. No.

General Instructions:

- This question paper consists of 39 questions. All questions are compulsory.
- Question paper is divided into five sections viz. A, B, C, D and E.
- Section A – question numbers 1-16 are multiple choice questions and 17-20 are assertion & reason, carrying 1 mark each.
- Section B – question numbers 21-26 are Very short Answer type questions carrying 2 marks each. Answers to these questions should be in the range of 30 to 50 words.
- Section C – question numbers 27-33 are short Answer type questions carrying 3 marks each. Answers to these questions should be in the range of 50 to 80 words.
- Section D – question numbers 34-36 are Long Answer type questions carrying 5 marks each. Answers to these questions should be in the range of 80 to 120 words.
- Section E – question numbers 37-39 are 3 Case Based units of assessment having 4 questions carrying 1 or 2 marks each.
- There is no overall choice. However, an internal choice has been provided in some questions.

## Section–A

*(Q.no.1-16 are multiple choice questions and 17-20 are assertion & reason, of 1 marks each)  
(Select and write one most appropriate option out of the four options given)*

- The tiny pores on the leaves that help in exchange of gases are: 1  
(a) Stomata (b) blowholes (c) buds (d) nostrils
- Which among the following set shows the correct pair of organism and its respiratory part? 1  
(a) Earthworm – nostrils (b) fish – gills (c) dolphin – gills (d) camel - horns
- Which part of the plant will prevent soil erosion? 1  
(a) Stem (b) Leaves (c) Roots (d) Both a. and c.
- Leaves in Cactus are reduced to spines for \_\_\_\_\_. 1  
(a) Respiration (b) Photosynthesis (c) Checking transpiration (d) None of the above
- Which of the following structures is made up of vertebrae? 1  
(a) Cartilage (b) backbone (c) skull (d) chest bone
- The hump of the camel stores \_\_\_\_\_. 1  
(a) Fat (b) Carbohydrates (c) Water (d) All of the above

7. How can you determine if an object is in motion? 1  
 (a) If it changes its position (b) If it makes a sound.  
 (c) If it is heavy. (d) If it is colourful.
8. Which among the following are the traditional Units of measurement? 1  
 i.Cubit ii.Metre iii.Handspan iv.Kilogram  
 (a) i & ii (b) ii & iii (c) i & iv (d) i & iii
9. Which of the following is a non-luminous object? 1  
 (a) Sun (b) Star (c) moon (d) Tube light
10. Which of the following controls the flow of current in a circuit? 1  
 (a) Switch (b) bulb (c) wire (d) insulator
11. \_\_\_\_\_ is used by sailors to find direction. 1  
 (a) Magnet (b) Flag (c) compass (d) Magnetic compass
12. The ratio in which atoms of hydrogen and oxygen combine to form water is \_\_\_\_\_. 1  
 (a) 1:1 (b) 1:2 (c) 2:1 (d) 3:1
13. Through the process of \_\_\_\_\_ water comes back to the surface of the earth in the form of rain, hail or snow. 1  
 (a) Transpiration (b) Precipitation (c) Condensation (d) Transpiration
14. Which gas is needed for combustion? 1  
 (a) Nitrogen (b) Oxygen (c) Carbon dioxide (d) Helium
15. Plastic waste can cause \_\_\_\_\_. 1  
 (a) Clogging drains (b) Poor aeration of soil (c) harm to animals (d) all of these
16. \_\_\_\_\_ are used in vermicomposting for decomposing wastes. 1  
 (a) Larva (b) Round worms (c) Red worms (d) Flat worms

**Directions:** In each of the following questions, a statement of Assertion is given and a corresponding statement of Reason is given just below it. Of the statements, given below, mark the correct answer as:

- 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) Both Assertion false and Reason are true.

17. **Assertion (A):** Xylem is water conducting tissue in plants.  
**Reason (R):** Phloem is food conducting tissue. 1
18. **Assertion (A):** Opaque object forms a shadow when light falls on them.  
**Reason (R):** Opaque objects do not allow light to pass through them. 1
19. **Assertion (A):** Water is considered as a good conductor of electricity.  
**Reason(R):** Those materials that allow electric current to pass through them are called good conductors. 1
20. **Assertion (A):** Materials that are not attracted towards magnet are called non-magnetic substances.  
**Reason (R):** Each magnet has two magnetic poles-North and South. 1

### Section–B

*(Q.no.21-26 are very short answer questions of 2 marks each .Answer in 30 to 50 words.)*

21. Why is reproduction important for organisms? 2
- OR**
- Write any four characteristics of living organisms. 2
22. How do the animals like Snail, Snake, Birds and Frog move from place to place? 2
23. Name the types of joints present in our body and write where they are located. 2
24. Differentiate between Biotic and Abiotic components of a habitat? 2
25. Identify the type of motion exhibited by each of the following : 2
1. Motion of earth around sun                      2. Motion of a pendulum
3. Giant wheel    4. The plucked strings of a guitar
26. Why air is considered as a mixture of gasses? Name the process by which oxygen is produced. 2

### Section– C

*(Q.no.27-33 are short answer questions of 3 marks each. Answer in 50 to 80 words.)*

27. Name three products produced by plants but commercially used by man also state the purpose for which they are used. 3
28. Differentiate between Parallel and reticulate venation. Give one example of each. 3
29. What are the functions of skeleton? 3
- OR**
- a. Write the number of bones present in the following parts: 2
- i. Rib Cage    ii. Vertebral column    iii. Skull    iv. Total bones in our body
- b. Write differences between Bone and Cartilage. 1
30. Define the following: 3
- (a) Habitat (b) Adaptation (c) Camouflage
31. What are different sources of light? How are they classified? 3
32. Write any three precautions that you must follow while handling electricity. 3
33. How can a non-magnetic substance be converted into a magnet. 3

### Section– D

*(Q.no.34-36 are Long answer questions of 5 marks each. Answer in 80 to 120 words.)*

34. Write the properties of light. How is a shadow formed? 5
- OR**
- Which Eclipse occurs when moon comes in between Earth and Sun? Draw diagram of that eclipse. 5
35. Draw the symbols for components of an electric circuit: 5
- (a) Cell (b) Battery of two cells (c) bulb (d) closed switch (e) wire
- OR**
- (a) What is a circuit? Draw an electric circuit diagram and label the components. 3
- (b) Write differences between electric insulators and conductors with examples. 2

36. State any five applications of magnets. 5

OR

Write five important properties of a Magnet. 5

**Section–E**

*(Q.no.37-39 are case based questions of 4 marks each)*

**37. Read the passage and answer the following questions**

Growing plants in a garden or in pots not only help us to understand the value of plants in our lives. Plants are used as food for existence, medicine for health, homes to live, materials to wear and so on. Plants beautify our surroundings, purify the air and produce oxygen by process called photosynthesis. By planting trees, air quality improves, pollution is filtered, and trees reduce wind speed and floods will not affect areas where there are many trees and plants growing. Since trees alter our surroundings to make our lives more sustainable, we should learn to value Plants.

a) Name the process by which plants produce oxygen. 1

b) Name any two medicinal plants which we generally grow at our home. 1

c) How trees are useful to us? 2

OR

c) According to you, why 'floods will not affect areas where there are many trees?' 2

**38. Read the passage and answer the following questions.**

Let us consider two different kinds of organisms from the desert and the sea – a camel and a fish. The body structure of a camel helps it to survive in desert conditions. Camels have long legs which help to keep their bodies away from the heat of the sand. They excrete small amount of urine, their dung is dry and they do not sweat. Since camels lose very little water from their bodies, they can live for many days without water. On the other side fishes have streamlined or pointed body, which helps them pierce inside water. Fish have slippery scales on their bodies. These scales protect the fish and also help in easy movement through water. Fish have flat fins and tails that help them to change directions and keep their body balance in water. Gills present in the fish help them to use oxygen dissolved in water.

(a) What help fish to change their directions in water? 1

(b) How fish breathe in water? 1

(c) Describe the features that enable camels to survive in desert conditions? 2

OR

c) How the presence of Scales help fish to live underwater? 2

**39. Read the passage and answer the following questions**

For the sake of uniformity, scientists all over the world have accepted a set of standard units of measurement. The system of units now used is known as the International System of Units (SI units). The SI unit of length is a metre. Each metre (m) is divided into 100 equal divisions, called centimetre (cm). Each centimetre has ten equal divisions, called millimetre (mm). Thus, 1m = 100 cm, 1 cm = 10 mm. For measuring large distances, metre is not a convenient unit but a larger unit called kilometre (km) is used.

a) What is the system used for measurements now-a-days? 1

b) Name the SI unit of length. 1

c) Arrange the following lengths in their increasing magnitude:  
1 metre, 1 centimetre, 1 kilometre, 1 millimetre. 2

OR

c) What is the need for a standard unit for measurements? 2

\*\*\*BEST OF LUCK\*\*\*