



# 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

MARKING SCHEME

Duration: 3 Hrs.

Max. Marks: 80

## Section–A

- |                                 |   |
|---------------------------------|---|
| 1. (a) Stomata                  | 1 |
| 2. (b) fish – gills             | 1 |
| 3. (c) Roots                    | 1 |
| 4. (c) Checking Transpiration   | 1 |
| 5. (b) backbone                 | 1 |
| 6. (a) Fat                      | 1 |
| 7. (a) If it changes position . | 1 |
| 8. (d) i & iii                  | 1 |
| 9. (c) moon                     | 1 |
| 10.(a) Switch                   | 1 |
| 11. (d) Magnetic compass        | 1 |
| 12 (c) 2:1                      | 1 |
| 13. (d) Precipitation           | 1 |
| 14. (b) Oxygen                  | 1 |
| 15. (d) all of these            | 1 |
| 16. (c) Red worms               | 1 |

### Assertion and Reason

- |  |   |
|--|---|
| 17. b).Both A and R are true but R is not the correct explanation of the assertion.            | 1 |
| 18. a). Both A and R are true and R is the correct explanation of the assertion.               | 1 |
| 19. a). Both assertion and reason are true and reason is the correct explanation of assertion. | 1 |
| 20. b).Both A and R are true but R is not the correct explanation of the assertion.            | 1 |

## Section–B

21. Reproduction is very important for living organisms as it helps them to produce young ones of their own kind and maintains the continuity of life. 2

OR

Living things need food. Living things respire.

Living things respond to stimuli. Living things reproduce.

Living things show movement. Living things excrete.

Living things grow. Living things have definite lifespan.  $\frac{1}{2} \times 4 = 2$

22. 1.Snails move by crawling using a muscular foot.  
2. Snakes move by slithering or crawling.  
3. Birds move by flapping their wings up and down.  
4. Frogs move by jumping, swimming, gliding  $\frac{1}{2} \times 4 = 2$

23. Hinge joints: They are found in the knees, elbows, and fingers.  
Ball and socket joints: hip and shoulder joints.  
Pivotal joints: neck joint.  
Gliding joints: the wrist and thumb joints.  $\frac{1}{2} \times 4 = 2$

24. Abiotic: It refers to the non-living components of a habitat. e.g., air, soil, water, Sunlight  
Biotic: It refers to living components of a habitat. e.g., Humans, plants and animals 1+1

25. 1. Circular motion  
 2. Oscillatory motion  
 3. Rotational motion  
 4. Vibratory motion. ½ x4=2
26. Air contains gasses like oxygen, nitrogen and CO<sub>2</sub>. These gases retain their properties in the air. So, air is called a mixture of gasses. Oxygen is produced by Photosynthesis. 2

Section– C

27. Rubber: Extracted from the rubber tree, used for making tires due to its elasticity.  
 Cotton: Fibres from the cotton plant, used to produce textiles  
 Paper pulp: Derived from wood fibres, used to produce paper. 1+1+1=3
28. Parallel venation: Veins run parallel to each other from the petiole to the tip of the leaf.  
 Examples- Banana, Grass 1 + ½  
 Reticulate venation: The main vein runs through the centre giving rise to several smaller veins.  
 Examples- Peepal, Mango 1 + ½
29. The function of skeleton is: It forms the framework of body, it gives shape and structure to the body, it protects the internal organs, it helps in the movement and keeping body erect, and Ribs of chest help in breathing. 3

OR

- a. i. Rib cage (25 bones, including ribs and sternum)  
 ii. Vertebral column (33 bones, including vertebrae, sacrum and coccyx)  
 iii. Skull (22 bones)  
 iv. 206
- b.

	Bone	Cartilage
	Hard, rigid, calcareous and inelastic tissue Gives Mechanical support to the body.	Soft, flexible, and elastic tissue without calcium Gives cushioning effect between bones.

30. (a) A habitat is the natural environment where an organism lives, grows, and reproduces. 1  
 (b) Adaptation: the ability of living organisms to adapt to the surroundings in which it lives. 1  
 (c) Camouflage: The ability of an organism to change body colour to blend with the surroundings. 1
31. Sources of light are sun, stars, lamp, bulb etc.  
 Light sources classified into Natural and Artificial.  
 Natural sources of light include the sun, stars, fire, fire flies.  
 Flashlights, table lamps, neon signs, and televisions are some sources of. 3
32. Ans: Precaution s to be taken care .  
 i. Never attempt to experiment with the electric wires and the sockets.  
 ii. Never join the wires with bare hands.  
 iii. Never touch electrical switches or gadgets when our body is wet.  
 iv Wear rubber slippers while working with electric wires. 3
33. i) A magnet attracts magnetic substances such as iron, cobalt and nickel as well as some alloys  
 ii) Magnet has two poles: north and South Pole, unlike poles attract each other while like poles repel each other;  
 iii) Freely suspended magnet always align itself towards north-south direction. 1+1+1= 3

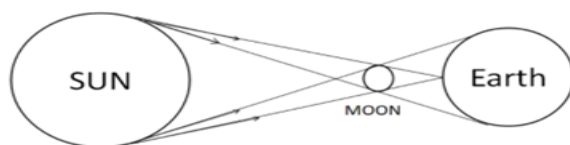
### Section– D

34. (i) Light is a form of energy.  
 (ii) Light always travels along a straight line.  
 (iii) Light does not need any medium for its propagation.  
 (iv) It can even travel through vacuum.  
 (v) Different coloured light has different wavelength and frequency.  
 Opaque objects obstruct light so a shadow is formed.

1+1+1+1+1 = 5

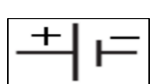
OR

Solar eclipse will be formed.

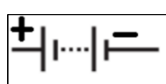


5

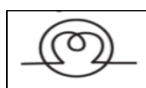
35.



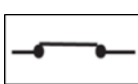
Cell



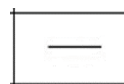
Battery of two cells



bulb



closed switch

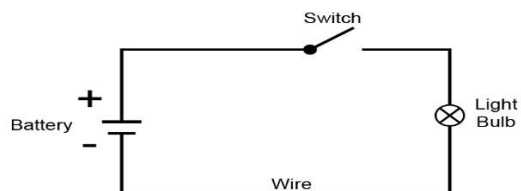


Wire

1+1+1+1+1 = 5

OR

- a. The diagram which shows the arrangement of electrical components in an electrical circuit with the help of their symbols is called a circuit diagram.



3

- b. A conductor allows current to flow easily through it. Example copper, water, iron.  
 Insulators don't allow current to flow through it. Example wood, plastic, glass.

2

36. Applications of magnet are:

- i) ATM, credit and debit cards have a magnetic strip.
- ii) Magnets are used in junk yards to separate iron objects from other waste materials.
- iii) Magnetic compass is used to find directions. It has a small magnetic needle at its centre.
- iv) Auto shutting doors in case refrigerators.
- v) Magnets are used in medical diagnosis (MRI)

1+1+1+1+1=5

OR

- i) A magnet attracts magnetic substances such as iron, cobalt and nickel as well as some alloys
- ii) Magnet has two poles: north and South Pole,
- iii) unlike poles attract each other while like poles repel each other;
- iii) Freely suspended magnet always align itself towards north-south direction.
- iv) Two poles cannot be separated.

1+1+1+1+1= 5

### Section–E

37. a) Photosynthesis. 1  
b) Tulsi or the Holy Basil Plant, Coriander Plant, Aloe Vera Plant, Mustard, Lemongrass . 1  
c) Plants are used as food , medicines , homes to live, fuel, shelter,for making paper. 2  
OR  
c) Trees and plants reduce Wind speed and floods .Roots stop soil erosion, stops water from entering into residential areas. 2
38. a) Fish have flat fins and tails that help them to change directions 1  
b) Gills present in the fish help them to use oxygen dissolved in water. 1  
c) The Camels have long legs ,thick skin,thick eye lashes,hump,and broad feet. 2  
OR  
c) Fish have slippery scales on their bodies. These scales protect the fish and also help in easy movement through water. 2
39. a) S.I. system. 1  
b) Metre (m) 1  
c) Ascending order of length: 1 mm ,1 cm, 1 m, 1 km 2  
OR  
c) For the sake of uniformity, scientists all over the world have accepted a set of standard units of measurement.

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