



BK BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
SENIOR SECONDARY | CO-ED DAY CUM BOYS' RESIDENTIAL SCHOOL
MID TERM EXAMINATION 2024-25
SCIENCE (086)



Class: VI

DATE: 16.09.24

Name:

Duration: 3 Hrs.

Max. Marks: 80

Exam R. No.

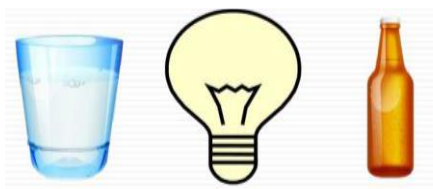
General Instructions:

- i This question paper consists of 39 questions. All questions are compulsory.
- ii Question paper is divided into five sections viz. A, B, C, D and E.
- iii Section A – question numbers 1-16 are multiple choice questions and 17-20 are assertion & reason, carrying 1 mark each.
- iv 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.
- v 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.
- vi 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.
- vii Section E – question numbers 37-39 are 3 Case Based units of assessment having 4 questions carrying 1 or 2 marks each.
- viii There is no overall choice. However, an internal choice has been provided in some questions. A student is expected to attempt only one of these questions.

SECTION A

(Select and write one most appropriate option out of the four options given for each of the Questions 1-20 of 1 mark each)

1. Which part of a mustard plant is edible? 1
(a) Seeds and roots (b) Leaves and stem (c) Seeds and leaves. (d) Stem and roots
2. Sita wants to make dal. What ingredients must she have to make this dish? 1
(a) Atta, water, spices (b) Rice, water and salt
(c) Mango, water and sugar (d) Pulses, water and salt
3. The food components needed for our body to carry out various activities are called: 1
(a) Ingredients (b) Nutrients (c) Fragments (d) Ornaments
4. All the deficiency diseases can be prevented by - 1
(a) Cleanliness (b) taking antibiotics (c) vaccination (d) taking a balanced diet
5. The image shows three objects made of glass: 1

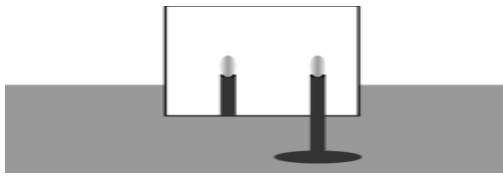


Which object can emit light?

- (a) Transparent glass (b) Bulb (c) Transparent bottle (d) All the above

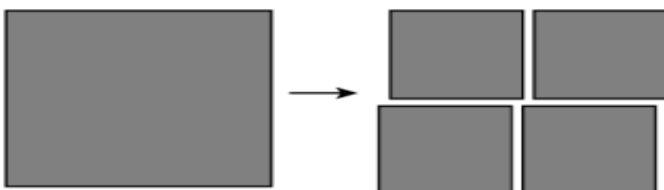
6. A student is writing a conclusion about the nature of reflection shown by a plane mirror. The image given below shows the reflection of a candle.

1



Which statement is correct based on the observation?

- (a) The plane mirror produces an upright image of the same size.
(b) The plane mirror produces an upright image of a smaller size.
(c) The plane mirror produces an upside-down image of the same size.
(d) The plane mirror produces an upside-down image of a smaller size.
7. The fibres which are obtained from plants and animals are called 1
(a) Natural fibre (b) synthetic fibre (c) mixed fibre (d) thin fibre
8. Separation of fibres of cotton from its seeds is known as 1
(a) Weaving (b) spinning (c) knitting (d) ginning
9. The separation technique that involves heating a solution until the liquid changes into a gaseous state, leaving behind a solid is known as 1
(a) Decanting (b) evaporation (c) sterilisation (d) chromatography
10. Which would be an example of an insoluble mixture? 1
(a) Oil and water (b) milk and water (c) ink and water (d) salt and water
11. Which of these following is present in all living organisms? 1
(a) Bones (b) muscles (c) cells (d) skin
12. If a potted plant is kept near a window from where light is coming in, the tip of the plant. 1
(a) Grows towards the window. (b) Grows away from the window.
(c) Grows straight up. (d) Does not grow
13. Which of the following is an example of physical change? 1
(a) A bud turning into a flower (b) Boiling of water
(c) Ripening of a tomato (d) Rusting of iron
14. A student cuts a square piece of paper into 4 small square pieces as shown. 1



What change is observed in the above action?

- (a) Change in composition (b) Change in shape
(c) Reduction of size (d) Difference in colour
15. Which of the following is a matter? 1
(a) Air (b) Steel (c) Water (d) All of these
16. Anything that has a mass and occupies space is called 1
(a) Classification (b) Volume (c) Matter (d) Air

For the following questions, two statements are given- one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes as given below

- a) Both A and R are true and R is the correct explanation of the assertion.*
- b) Both A and R are true but R is not the correct explanation of the assertion.*
- c) A is true but R is false.*
- d) A is false but R is true*

17. **Assertion (A):** Bear is an omnivorous animal. 1
Reason (R): Omnivorous animals eat only plant and plant products
18. **Assertion (A):** Opaque object forms a shadow when light falls on them. 1
Reason (R): Opaque objects do not allow light to pass through.
19. **Assertion (A):** Respiration is necessary for all living organisms. 1
Reason (R): It is through respiration that the body finally obtains energy from the food it takes.
20. **Assertion (A):** A piece of paper when burnt turns into ashes. 1
Reason (R): A piece of wood when burnt turns into ashes.

SECTION B

(Q.no.21-26 are very short answer questions of 2 marks each)

21. Why do organisms need food? Write two reasons. 2
OR
Name two ingredients in our food that are not obtained from plants or animals. Mention one source for each ingredient.. .
22. Why do we consider proteins as the ‘body-building food’? 2
23. What are Fabrics? Name some fabrics in your surroundings. 2
24. a) Why water is called universal solvent? 2
b) How will you separate water from petrol/oil?
25. Expansion and contraction are considered as reversible changes. Give reasons. 2
26. What are miscible and immiscible liquids? Give one example for each. 2

SECTION C

(Q.no.27-33 are short answer questions of 3 marks each)

27. a) What is Food web? 3
b) Define: (i) Parasite (ii) Decomposers
c) Differentiate between herbivores and carnivores. Give one examples of each.
28. a) What is obesity? Why does obesity occur? . 3
b) What are deficiency diseases? Give any two examples.
29. Distinguish between: 3
a) Transparent and opaque objects.
b) Luminous and non-luminous objects .
c) Image and Shadow.
30. Explain the process of making yarn from fibre. 3
31. Differentiate between living things and non-living things. 3
32. Explain with an example in which both reversible and irreversible changes occur. 3

33. a) What are the similarities between iron, copper and aluminium 3
b) Write any four properties of materials.
c) Metals have lustre (shine). Give reason why some metal articles become dull and lose their shine.

OR

- a) Define density. How is it related to floating and sinking in water? 2
b) What do you mean by hardness of materials? 1

SECTION D

(Q.no.34-36 are Long answer questions of 5 marks each)

34. Name the major nutrients in our food and write the functions of each. 5

OR

‘Water does not provide nutrients, but it is an essential component of food’. Explain.

35. Explain the construction of a pinhole camera. 5

OR

What is an eclipse? Draw and explain a solar eclipse.

36. a) Name and describe briefly a method which can be helpful in separating a mixture of husk from grains. 3
b) How is common salt obtained from sea water? 2

OR

- a) Name three methods used for separating substances from their mixtures? 3
b) Explain the method used to separate the sand and water from their mixture? 2

SECTION E

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

CASE STUDY-BASED QUESTION:

Read the given passages and answer the following questions.

37. It appears that in ancient times people used the bark and big leaves of trees or animal skins and furs to cover themselves. After people began to settle in agricultural communities, they learned to weave twigs, and grass into mats and baskets. Animal fleece or hair was twisted together into long strands and then woven into fabrics. The early Indians wore fabrics made out of cotton that grew in the regions near the river Ganga having black soil. Flax is also a plant that gives natural fibre. In ancient Egypt, cotton as well as flax were cultivated near the river Nile and were used for making fabrics. In those days stitching was not known. People simply draped the fabrics around the different parts of the body. With the invention of sewing needles, people started stitching fabrics to make clothes. Stitched clothes have gone through many variations since this invention. But, amazingly, even today saree, dhoti, lungi, or turban is used as an un-stitched piece of fabric.

- a) List some ways by which ancient times people used to cover themselves? 1
b) Name some un-stitched fabric still in use. 1
c) Which type of soil is suitable for growing cotton? 2

OR

- c) Describe the changes in clothing style among early people with the establishment of communities? 2

38. When we inhale, the air moves from outside to the inside of our body. When we breathe out, the air moves from inside our body to outside. Breathing is part of a process called respiration. In respiration, some of the oxygen of the air we breathe in, is used by the body. We breathe out carbon dioxide produced in this process. The process of breathing in animals like cows, buffaloes, dogs or cats is similar to humans. Respiration is necessary for all living organisms. It is through respiration that the body finally obtains energy from the food it takes. Some animals may have different mechanisms for the exchange of gases, which is a part of the respiration process. For example, earthworms breathe through their skin. Fish have gills for using oxygen dissolved in water. The gills absorb oxygen from the air dissolved in water. Respiration also takes place in plants. Exchange of gases in plants mainly takes place through leaves. The leaves take in air through tiny pores in them and use the oxygen. They give out carbon dioxide to the air. The amount of oxygen released in the process of food preparation by plants is much more than the oxygen they use in respiration.

Changes in our surroundings that makes us respond to them, are called stimuli. All living beings respond to stimuli, including plants. Flowers of some plants bloom only at night. In some plants flowers close after sunset. In some plants like Mimosa, commonly known as ‘touch-me-not’, leaves close or fold when someone touches them. These are some examples of responses of plants towards changes in their surroundings.

- a) Define the term respiration? 1
- b) Explain the process of Respiration in plants? 1
- c) What is stimuli? Give one example 2

OR

- c) How does earthworm and fish respire? 2

39. Anything that can be seen and touched is called an object. The objects could be of different shapes, colours and sizes. Some objects may be living like animals and plants while some may be non-living like chairs and tables. Objects are made of substances called materials. The matter of which an object is made is called material, for example, chair is made of wood, and book is made of paper. The placing of objects into groups according to certain features is called classification. Classification of objects into groups is important as it helps us in – 1. Finding an object from a large group, 2. Understanding some basic properties of an object, 3. Giving a clarity about similarities and differences amongst the various groups.

- a) What is classification? 1
- b) What are objects made up of? 1
- c) Give two example of materials made from object. 2

OR

- c) “Object grouping benefits the shopkeeper.” Justify your statement. 2

*****Best of Luck *****