



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)
MARKING SCHEME



Class: VI
DATE: 16.09.24

Duration: 3 Hrs.
Max. Marks: 80

SECTION A

- | | |
|--|---|
| 1. (c) Seeds and leaves. | 1 |
| 2. (d) Pulses, water and salt | 1 |
| 3. (b) Nutrients | 1 |
| 4. (d) taking a balanced diet | 1 |
| 5. (b). Bulb | 1 |
| 6. (a) the plane mirror produces an upright image of the same size. | 1 |
| 7. (a) Natural fibre | 1 |
| 8. (d) ginning | 1 |
| 10. (a) Oil and water | 1 |
| 11. (c) cells | 1 |
| 12. (a) Grows towards the window. | 1 |
| 13. (b) Boiling of water | 1 |
| 14. (c) Reduction of size | 1 |
| 15. (d) All of these | 1 |
| 16. (c) Matter | 1 |
| 17. (c) A is true but R is false. | 1 |
| 18. (a) Both A and R are true and R is the correct explanation of the assertion. | 1 |
| 19. (a) Both A and R are true and R is the correct explanation of the assertion | 1 |
| 20. (b) Both A and R are true but R is not the correct explanation of the assertion. | 1 |

SECTION B

21. Organisms need food because
- (i) Food provides nutrient for the growth of our body
 - (ii) Food gives the energy to do work.
 - (iii) Food helps the body to grow and to repair damaged parts.
 - (iv) Food helps to protect the body against diseases.
- ½ x4=2
- OR
- Two ingredients in our food that are not obtained from plants or animals are salt and water. Salt is obtained from seawater and from rock. Water is obtained from the river, well, tube well, rain etc. 2
22. Proteins are required for making new cells. Thus, it helps in the growth of a person and also the development of muscles. 2
23. A cloth obtained by weaving or knitting yarn is called fabric. Bed -sheets, blankets, curtains, table clothes, towels and dusters are some of the fabrics in our surroundings. 2
24. a) water can dissolve much more substances than any other liquid found in nature but water cannot dissolve every substance. Hence, water is called as universal solvent. 1
- b) Water and petrol/oil are immiscible liquids, so they can be separated by using separating funnel method 1

25. When the cause of heating or cooling is removed, the substances return to their original state. Thus, expansion and contraction are reversible changes. 2
26. Liquids that get completely mixed with each other are called miscible liquids. E.g.: Honey, milk, vinegar etc. Liquids that do not mix with each other are called immiscible liquids. E.g.: Mustard oil, kerosene etc. 1+1=2

SECTION C

27. a). A network of interconnected food chains is called food web 1
- b). (i) A parasite is an organism that live on or inside another living organism (the host) and obtain food from them.
- (ii) Decomposer is an organism that feeds remains of a dead organism. $\frac{1}{2} + \frac{1}{2} = 1$
- c). Herbivore: Animals that eat only plants and plant products Examples- Deer, Cow.
Carnivore: Animals that eat other animals for meat or flesh Examples- lion, tiger, leopard. $\frac{1}{2} + \frac{1}{2} = 1$
28. (a). Eating too much fat-rich food will lead to a condition called obesity. The condition caused due to the deposition of fats in our body is termed as obesity. It occurs due to the excessive intake of fatty foods. Obesity leads to weight gain.
- (b). when a person eats such a food continuously for a long time which may not contain a particular nutrient, then this condition is called deficiency of that nutrient. Deficiency of one or more nutrients can cause diseases or disorders in our body. Such type of diseases are known as deficiency diseases. e.g. Kwashiorkor/Marasmus /Night blindness/Goitre . 1+2=3
29. a). Transparent- object through which we can see clearly. Translucent- object through which we can see, but not very clearly. Opaque- object through which we cannot see through. 1
- b). Luminous- objects that emit their light. Non-luminous- objects that do not emit their light 1
- c). Image it is formed when light is reflected from the object and reaches our eyes.
A shadow is formed when an object blocks the path of light it is always black in colour.
It does not show the feature or colours of the objects. It is always formed on the screen. 1
30. The process of making yarn from fibres is called spinning. In this process, fibres from a mass of cotton wool are drawn out and twisted. This brings the fibres together to form a yarn. A simple device is used for spinning is a hand spindle, also called Takli. Another hand- operated device used for spinning is charkha. Spinning yarn on a large scale is done with the help of spinning machines. After spinning, yarns are used for making fabrics. 3
31. Following are the differences between living and non-living things:
- | Living things | Non-living things |
|--------------------------------|---------------------------------------|
| They are made up of cells. | They are not made up of cells. |
| They can move on their own. | They cannot move on their own. |
| They have a definite lifespan. | They do not have a definite lifespan. |
| They reproduce. | They do not reproduce. |
| They need food to live. | They do not need food. |
32. Burning of a candle is an example of having both reversible and irreversible changes. When a candle burns, wax melts. Melting alone is a reversible change because on cooling solid wax is formed again. Burning wax produces carbon dioxide and water vapour which passes into the atmosphere and we cannot get back the candle from the products formed. So, this change is irreversible. 3
33. a) The similarities between iron, copper and aluminium are: i) they all have lustre, ii) They all are metals, iii) They all are hard, iv) They all conduct electricity. 1
- b) the four properties of materials are: i) Appearance, ii) Hardness, iii) Solubility and iv) Transparency 1
- c) Metals when exposed to air react with moisture and gases present in it, thereby forming a dull layer of some other compound on it. 1

OR

- a) Density is defined as the mass per unit volume of a substance.
 A substance having a density greater than that of water will sink in it, for example, a piece of iron aluminium. While, a substance which is less dense than water will float in it, for example, wood, cork or cotton.
- b) It is the property of materials that can be found out by pressing the materials.
 Hard materials - Materials that are difficult to compress or scratched easily are called hard materials. E.g.: Iron and other metals.

2 + 1 = 3

SECTION D

34. The various types of nutrients are:

- (i) **Carbohydrates:** They are mainly energy-providing nutrients.
- (ii) **Fats:** They provide energy for the body. They give much more energy than carbohydrates if consumed in same amount.
- (iii) **Proteins:** They are called body-building foods. Proteins help in the formation and repairing of body parts. Skin, hair, muscles, enzymes are made up of proteins.
- (iv) **Vitamins:** Vitamins help in protecting our body against disease. They also protect eyes, bones, teeth and gums.
- (v) **Minerals:** Minerals are essential for proper growth of body and to maintain good health

OR

Water is a vital component of our food because

- (i) It helps our body to absorb nutrients from food.
- (ii) It maintains the temperature of our body.
- (iii) Water transports nutrients throughout the body.
- (iv) Water helps in removing wastes in the form of urine and sweat.
- (v) We get water from various types of liquids, fruits and vegetables.

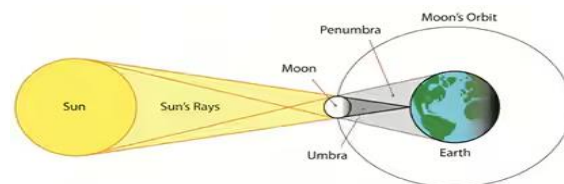
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35. The pinhole camera is made up of two boxes that fit together perfectly without any gaps. One side of each box has been ripped out. A small pinhole is made in the centre of the larger boxes opposite side, and a small square is glued to the smaller boxes opposite surface. Translucent paper is wrapped around a sliced portion. As the smaller box slides into the larger box, the pinhole in the smaller box faces the square strip. The open face of the small box is used to observe objects while blocking out light from behind. The smaller box can be dragged back and forth until the image is in focus.

1 + 1 + 3 = 5

OR

A temporary obstruction of an astronomical object or spacecraft by passing into the shadow of another body or having another body move in front of it causes an eclipse, which is an astronomical event.



A solar eclipse occurs when the Moon is between the Sun and Earth. As the Moon revolves, it comes in between the Sun and the Earth. The Moon blocks out the sunlight. Its shadow falls on the Earth. This is a Solar Eclipse. A solar eclipse occurs on a new moon day.

1 + 1 + 3 = 5

36. a) By using the process of winnowing, the husk can be separated from grains. When the mixture is allowed to fall down from a height, the lighter husk is carried away by air and the heavier grains fall on the ground. This method is based on the principle that a mixture with components of different weights (heavier and lighter) can be separated with help of wind. 3
- b) Sea water is allowed to stand in shallow pits, slowly the water gets heated by sunlight and changes into water vapour through evaporation. After complete evaporation of water, solid salt remains. This salt is sent for further purification before its utilisation in food. 2

OR

- a) Three methods used for separating substances are: Winnowing, Sieving, Handpicking, Threshing, Decantation.
- b) A combination of sedimentation and decantation is used to separate sand and water.
1. A mixture of sand and water is taken in a glass/container and left for some time.
 2. Sand settles at the bottom of the container during this process because it is heavier. This is called sedimentation.
 3. The clean water is then gradually moved to another container slowly leaving the sand in the original container. This process is called decantation. 3+2=5

SECTION E

CASE STUDY-BASED QUESTION:

37. a) Ancient times people used the bark and big leaves of trees or animal skins and furs to cover themselves. 1
- b) Saree, dhoti, lungi, or turban is used as an un-stitched piece of fabric. 1
- c) Black soil is suitable for growing cotton. 2

OR

- c) They learnt to weave. Animal fleece or hair was twisted together into long strands and then woven into fabrics. The early Indians wore fabrics made out of cotton and flax. 2
38. a) Respiration : Process by which 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. 1
- b) Exchange of gases in plants mainly takes place through leaves. The leaves take in air through tiny pores in them and use the oxygen. 1
- c) Changes in our surroundings that makes us respond to them, are called stimuli. 2

OR

- c) Earthworms breathe through their skin. Fish have gills for using oxygen dissolved in water. The gills absorb oxygen from the air dissolved in water. 2
39. a) The placing of objects into groups according to certain features is called classification 1
- b) Objects are made of substances called materials. 1
- c) For example, chair is made of wood, and book is made of paper. 2

OR

- c) The proper grouping of objects makes it easier to work. When we go to buy something, the shopkeeper finds it quickly because there are separate shelves for different items, and similar items are kept together. He would never be able to find it so quickly and easily if he randomly placed all of these. 2

**** Best of luck ****