

B.K. BIRLA CENTRE FOR EDUCATION



SARALA BIRLA GROUP OF SCHOOLS A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL

PERIODIC TEST-I (2025-26) SCIENCE MARKING SCHEME

Class: VII Time: 1hour Date: 02/07/'25 Max Marks: 25

SECTION- A

- 1. (b) Radiation
- 2. (c) Onion
- 3. (c) oxygen

SECTION-B

- 4. The handles of cooking utensils are generally made of wood or plastic because wood and plastic are poor conductors of heat. Thus, they prevent the heat transfer from the hot utensils to our hands. 1+1
- 5. During the daytime, the land heats up much faster than the sea. The air above the land warms up and rises. The cooler air above the sea flows towards the land creating a convection current that causes the wind to blow from the sea towards the land. The cool breeze from the sea flowing towards the land during the day is called a sea breeze. At night, the land cools down much faster than the sea. The air above the sea warms up and rises. The cooler air above the land flows towards the sea to take its place. This sets up a convection current that causes the wind to blow from the land towards the sea. The cool breeze from the land flowing towards the sea during the night is called a land breeze.

1+1

- 6. Mineral acids, also known as inorganic acids, are acids derived from inorganic compounds. Hydrochloric acid (HCl), Nitric acid (HNO₃) etc. 1+1
- 7. Synthetic indicators are man-made substances used in chemistry to indicate the presence of acids or bases. They are created in laboratories and are not derived from natural sources like plants or minerals. Examples include phenolphthalein and methyl orange. 1+1

8.

Autotrophs	Heterotrophs
In this mode of nutrition, organisms make their own food.	In this mode of nutrition, organisms depend on other organisms for their food.
Such organisms are called autotrophs.	Such organisms are called heterotrophs.

- Producers such as green algae and green plants are autotrophs.
- Consumers such as pitcher plants, venus flytrap plants, fungi, bacteria, humans, and other animals are heterotrophs.

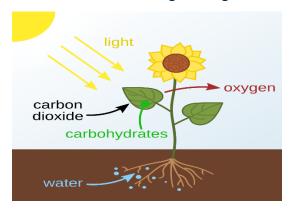
SECTION-C

9. Radiation is the transfer of heat that can occur even without a medium such as a solid, a liquid, or a gas.

Applications:

- 1. We generally wear light-coloured clothes in summer and dark-coloured clothes in winter.
- 2. The bottom surfaces of cooking utensils are often painted black.
- 10. * Neutralizing Stomach Acid with Antacids: 1+1+1
 - * Treating Bee Stings:
 - *Adjusting Soil pH in Agriculture:
 - * Preventing Tooth Decay:
- 11. The process of making food using raw materials such as carbon dioxide and water in the presence of sunlight and chlorophyll is called photosynthesis ('photo' means light and 'synthesis' means to produce).

carbon dioxide + water + sunlight → glucose + oxygen]



12.

- 1. A potted plant with healthy green leaves is kept in a dark room for 24-48 hours to deplete any stored starch in the leaves.
- 2. A portion of a leaf on both sides is covered with a piece of black paper or foil, ensuring no sunlight can reach that area.
- 3. The plant, with the leaf portion covered, is placed in bright sunlight for several hours.
- 4. After a few hours, the leaf is removed and tested for starch using the iodine test.
 - 5. The blue-black color in the exposed portion of the leaf proves that sunlight is necessary for photosynthesis, as it's the light-dependent stage where starch is produced.

**********ALL THE BEST*******