

SHORT ANSWER TYPE QUESTIONS

- 1. Give an account of the composition of the atmosphere. [V. Imp.] Answer: Our atmosphere is composed of mainly two gases—nitrogen (78%) and oxygen (21%). Other gases like carbon dioxide, helium, ozone, orgon and hydrogen are found in lesser quantities. Apart from these gases, tiny dust particles are also present in the air.
- 2. How do Bacteria help plants use nitrogen? [V. Imp.] Answer: Nitrogen is essential for the survival of plant. But plants cannot take nitrogen directly from the air. Bacteria, that live in the soil and roots of some plants, take nitrogen from the air and change its form so that plants can use it.
- 3. How does nature balance our life? What is the result if this balance is disturbed? [V. Imp.]

Answer: Green plants use carbon dioxide to make their food and release oxygen. Humans or animals release carbon dioxide. The amount of carbon dioxide released by humans or animals seems to be equal to the amount used by the plants which make a perfect balance. But this balance is disturbed by burning of fuels, which add billions of tons of carbon dioxide in the atmosphere. As a result, the increased volume of carbon dioxide is affecting the earth's weather and climate.

4. Why is temperature in cities much higher than that of villages? Answer: In cities we find high rise buildings. The concrete and metals in these buildings and the asaphalt of roads get heated up during the day. This heat is released during the night. Another reason is that the crowded high rise buildings of the cities trap the warm air and thus raise the temperature of the cities.

5. Write a short note on the distribution of air pressure in atmosphere. [Imp.]

Answer: Air pressure is the pressure exerted by the weight of air on the earth's surface. As we go up the layers of atmosphere, the pressure falls rapidly. The air pressure is highest at the sea level and decreases with height. Horizonally the distribution of air pressure is influenced by temperature of air at a given place. In areas where temperature is high the air gets heated and rises. This creates a low pressure area. In areas having lower temperature, the air is cold, hence, it is heavy. Heavy air sinks and creates a high pressure area.

6. Why do astronauts wear special protective suits when they go to the moon?

Answer: Astronauts wear special protective space suits filled with air when they go to the moon. If they did not wear these space suits, the counter pressure exerted by the body of the astronauts would make the blood vessels burst. The astronauts would bleed.

7. How is rainfall important for us? What happens when there is excess rain? [V. Imp.]

Answer: Rainfall is very important for the survival of plants and animals. It brings fresh water to the earth's surface. If rainfall is less, there is water scarcity which sometime causes drought like situation. If there is excess rain, floods take place which make the life of the affected people miserable.

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