

### 3. AIR

Class: V

Subject: Science

#### I. Choose the correct answer.

- Chlorofluorocarbon is used in  
a) Refrigerator      b) air conditioners      **c) Both**      d) None
- Which of the following gas is released by automobiles?  
**a) Carbon monoxide**      b) Oxygen      c) Hydrogen      d) Nitrogen
- A wind mill is used to produce  
a) chemical energy      b) mechanical energy  
**c) electric energy**      d) All of these
- Influenza is caused by  
a) fungus      b) bacteria      **c) virus**      d) protozoa
- Height of mesosphere which lies after troposphere is  
a) 70 to 75 km      b) 75 to 80 km      **c) 80 to 85 km**      d) 85 to 90km

#### II. Fill in the blanks.

- Second highest layer of Earth's atmosphere is Thermosphere.
- Releasing substances like chemical compounds into the atmosphere is known as Air pollution.
- Airborne diseases can be caused by Micro organism.
- The Ozone layer protects us from the harmful UV rays coming from the sun.
- Nitrogen is used by plants as nitrates.

#### III. Match the following.

- |                 |   |                |
|-----------------|---|----------------|
| 1. Troposphere  | - | Weather change |
| 2. Stratosphere | - | Ozone layer    |
| 3. Exosphere    | - | Space craft    |
| 4. Thermosphere | - | Satellite      |
| 5. Mesosphere   | - | Meteors        |

#### IV. Answer in brief.

##### 1. What are the different layers of atmosphere?

- Troposphere
- Stratosphere
- Mesosphere
- Thermosphere

➤ Exosphere

## 2. What is air pollution?

The presence of harmful substances in the air which can have an adverse effect on living beings and the environment is called air pollution.

## 3. Name some of the air borne diseases?

Diphtheria, Whooping Cough and Tuberculosis are some of the common airborne diseases caused by bacteria.

## 4. What is global warming?

Air pollution results in the accumulation of carbon dioxide in the atmosphere. When gases like carbon dioxide are present in the atmosphere in large amount, they increase the atmospheric temperature.

## 5. Mention two ways of controlling air pollution.

- i. We need to reduce our usage. We can reuse or recycle few items.
- ii. Switch off fans and lights when you are not using them.

## V. Answer in detail.

### 1. List the importance of air.

Air is important for all the living organisms. Without air no life can exist on the earth. We take in oxygen from the air and release carbon dioxide.

Plants in turn use carbon dioxide present in the air to produce their food. The gases such as oxygen, nitrogen, carbon dioxide and hydrogen present in the air are important to us for many reasons

### 2. Explain any three airborne diseases.

#### Diphtheria:

It is caused by the bacteria, *Cornebacterium diphtheria*. It generally affects the upper respiratory tract (nose and throat) and causes fever, sore throat and chocking of air passage.

#### Whooping Cough:

Whooping cough is caused by *Bordetalla pertusis*. It also affects the respiratory tract and causes mild fever, severe cough ending in whoop.

#### Tuberculosis:

Tuberculosis is caused by the bacteria, *Microbacterium tuberculosis*. When we breathe, the bacteria present in the air gets into the lungs and affect it. Infected person has to be treated with anti-tubercular drugs for a period of 6 months to one year.