

NOTES:-

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Chapter:- 11 Atmosphere

Q1:- What is atmosphere?

Ans:- The envelope of gases and water vapours surrounding the planet Earth is called atmosphere.

Q2:- What are pollutants / air pollutants?
List some of air pollutants?

Ans:- Pollutant:-

Anything in air, water or soil which has harmful effects on environment is called pollutant.

Air Pollutants:-

1. Sulphur oxides
2. Nitrogen oxides
3. Carbon dioxide
4. carbon monoxide
5. Methane
6. Ozone.

(sources and harmful)

Q3:- List some of the ↑ effects of sulphur dioxides (any pollutant) on human beings?

Ans:- Next Pg.

* Sulphur Oxides:-

→ Sources:-

1. Burning of coal and oil in factories.
2. Vehicles
3. Power plants.

* Harmful Effects:- (Environmental)

1. Causes acid rain
2. Damages lungs
3. Harms plants

→ Human beings:-

1. Lung Cancer
2. Bronchitis
3. Breathing Difficulties

* Nitrogen Oxides:-

→ Sources:-

1. Vehicle exhaust
2. Burning of fuel
3. Industrial processes.

Harmful effects:-

1. Causes Acid Rain
2. Damages lungs
3. Forms smog and harm plants.

Human Beings:-

1. Lung diseases
2. Cough
3. Headache.

* Carbon Dioxide :-

→ Sources:-

- 1- Burning of fuel
- 2- Respiration
- 3- Deforestation

→ Harmful Effects:

- 1- Causes global warming
- 2- Melts ice caps
- 3- Disturbs climate.

* Methane :-

→ Sources:-

1. Cattle waste
2. Rice fields
3. Landfills and gas leaks.

→ Harmful Effects:-

1. Causes global warming.
2. Forms ground level ozone.
3. Warms Air quality.

* Carbon Monoxide :-

Sources :- 1. Incomplete burning of fuel

2. Vehicle exhaust
3. Industrial emissions.

Q Harmful Effects:-

- 1- Reduce oxygen in Blood.
2. Causes headache and dizziness.
3. Brain Damage
4. Can lead to death.

* Ground Level Ozone:-

→ Sources:-

- 1- Vehicle emissions
2. Industrial gases
3. Reaction of sunlight and pollutants.

→ Harmful Effects:-

1. Irritates eyes and Lungs
2. Damages plants.
3. Forms smog

Q:- Relationship b/w greenhouse effect and global warming?

Ans:- The green house effect traps heat in the Earth's atmosphere and this trapped heat causes global warming.

Q:- Write 3 human activities that are responsible for air pollution?

- Ans:-
1. Cutting down of trees (Deforestation)
 2. Burning of garbage and crop waste.
 3. Burning of fossil fuels.

Q:- Write 3 natural processes contributing in air pollution?

Ans:- Volcanic eruptions release gases and ash.

2. Forest fires produce Smoke & CO_2 .

3. Dust storms spread fine particles in air.

Q:- List main sources of following air pollutants?

Ans:-

SO_2	:-	Sources	→	Same as Sulphur oxides
CO	:-	"	→	" " Carbon monoxide
NO_2	:-	"	→	" " Nitrogen oxides.

Global Warming.

Q:- Define Global Warming?

Ans:- The warming of the atmosphere due to our influence on green house effect is called global warming.

Q:- List some effects of Global warming?

Ans:- 1. Temperature of earth is increasing day by day.

2. Polar ice may melt increase sea level.

3. Atmosphere is becoming hotter.

4. Due to climate change, risk of flooding and drought is increasing.

Q:- List some gases responsible for Global warming?

Ans:- ① Carbon dioxide

② Methane

③ Nitrous oxide

④ Chloroflouro carbons.

Acid Rain

Q1: What is Acid Rain? / Define Acid Rain?

Ans: Acid rain is defined as rain having pH less than 5.6.

Q2: What is the effect of acid rain on iron and marble. Give balanced chemical Equations?

Ans: Marble buildings are broken down by acid rain:-



Q3: List some gases that causes acid rain?

Ans: 1. ~~Sulphur acid~~ Sulphur oxides
2. Nitrogen oxides

Q: List some effects of causes by acid rain?

Ans: 1. It damages plants and trees
2. It makes river and lakes acidic, ~~making~~ harming fish.
3. It damages buildings and monuments.

4. It erodes metals and stone structures.

5. Sulphuric acid eats metals.



6. Marble buildings are broken down by acid rain.



Q5: Justify acid rain is dangerous than normal rain?

Ans:- Acid rain is more dangerous as it contains harmful acids that damages life and buildings.

Q6: Strategies to Solve Acid Rain?

1. Reduce fossil fuel use.
2. Use clean energy sources.
3. Limit vehicle emissions.
4. Plant more trees.
5. Treat industrial waste before release.