

Q2

Environmental management :-

Environmental management is the management by which environmental problems are addressed such as pollution, climate change, global warming, ozone depletion and water pollution.

Environmental Problems :-

There are many environmental problems which exist in the earth.

1 Air Pollution :-

According to the United Nations, air pollution is the outdoor atmosphere which harms living organisms and environment.

Causes of air pollution :-

a) vehicle emission from factory  
Many vehicles and factories are operating in

Entities who create air pollution in the environment.

Source	Emissions
1 Thermal Power	$\text{CO}_2$ , $\text{CO}$
2 Steel Industry	$\text{CO}_2$ , $\text{CO}$
3 Pesticides	$\text{CO}_2$ , $\text{CO}$ , $\text{H}_2\text{S}$ , $\text{NH}_3$
4 Fertilizer	$\text{NH}_3$ , $\text{CH}_4$ , $\text{H}_2\text{S}$ , $\text{NO}_2$
5 Paper Industry	$\text{CO}$ , $\text{CO}_2$ , $\text{H}_2\text{O}$ , $\text{SO}_2$ , $\text{NH}_3$

Effects of air pollution:-

a - Plants :-

Air pollution different diseases cause in plants. There are many disease such as Abscission, discolorization.

b - Human

Air-pollution also cause multiple disease in human such as lungs disease, bronchi bronchules disease.

2 Water Pollution :-

Air pollution is also the cause of water pollution. when air pollution reacts with water then create

~~Secondary Pollution~~ : Acid rain which increase the pH of water which disturb aquatic life.

3 Global warming :-

Global warming is the process by which earth's <sup>average</sup> atmospheric temperature raised.

There are green house gases which absorb heat and not allow to go back.

How these environmental problem can be addressed.

• Air Pollution Management :-

In this management, purpose is to decrease the concentration of emission by different method.

• Physical method

• Chemical method

• Physical method :-

Absorption and wet absorbing method, which prevent air-pollution. This method is used in chimney's.

Chemical method :-

Catalytic reactor method which reduce environmental pollution. There is involved chemical by which which pollution is prevent.

• Reforestation :-

Plantation absorbs  $\text{CO}_2$  which makes environment friendly.  $\text{CO}_2$  is the main role played in green house gases. When we plantation at large level then our environment will be protected.

• Agriculture :- fertilizer

In organic and pesticides used in agriculture sector which is also

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Cause environment pollution.  
Organic fertilizer used in agriculture while land fertility sector should be maintain.

Efficient technology.  
Efficient technology should be used while less energy required and environment should be protected.

Q3

Environmental Pollution:-

According to the United Nation Organization: Air pollution is the outdoor atmosphere which harm living things and environment.

There are four steps of Environmental Pollution.

- 1) Determining ~~the~~ <sup>the</sup> priority of Pollutants.

2 Identifying the controlling measure.

Physical method

Chemical method

3 Legislation and implementation of environmental pollution.

4) Public engage and aware environmental pollution.

Sources of Pollution

There are two sources of pollution.

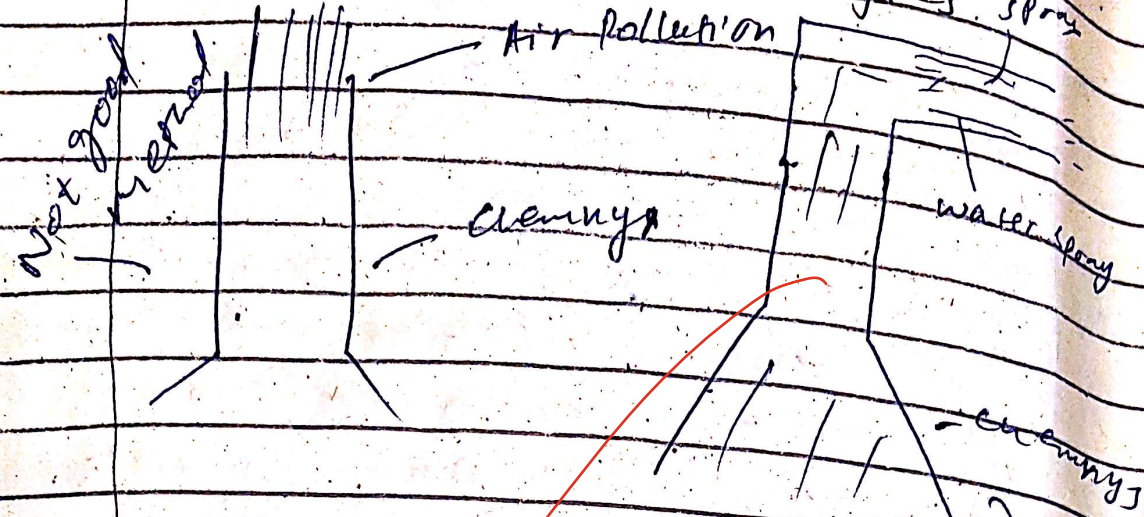
Point source :-

Point source is a specific place by which pollutants <sup>emit</sup> ~~extract~~ and a specific location in which pollutant disperse.

Secondary source :-

It is not determine source. It is mainly Agriculture ~~pollution~~ <sup>pollution</sup> such as water runoff.

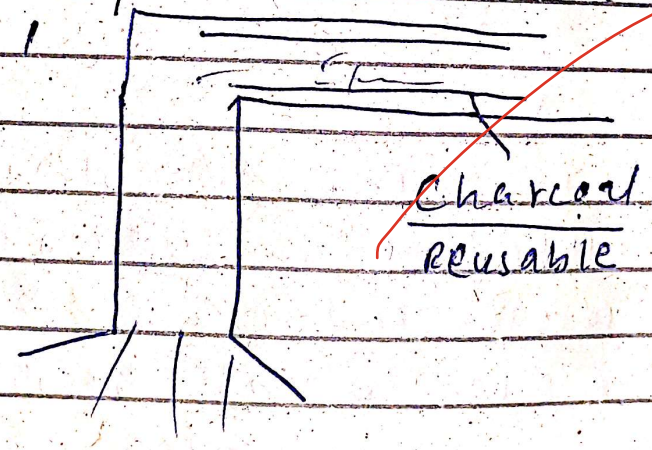
# Air Control Strategies



~~Absorption and wet scrubbing method~~ Good method

Absorption and scrubbing method is efficient method (95%). In this method air-pollution is properly treated in Chem. There are water spray is used to reduce the air pollution particle.

## • Absorption method :



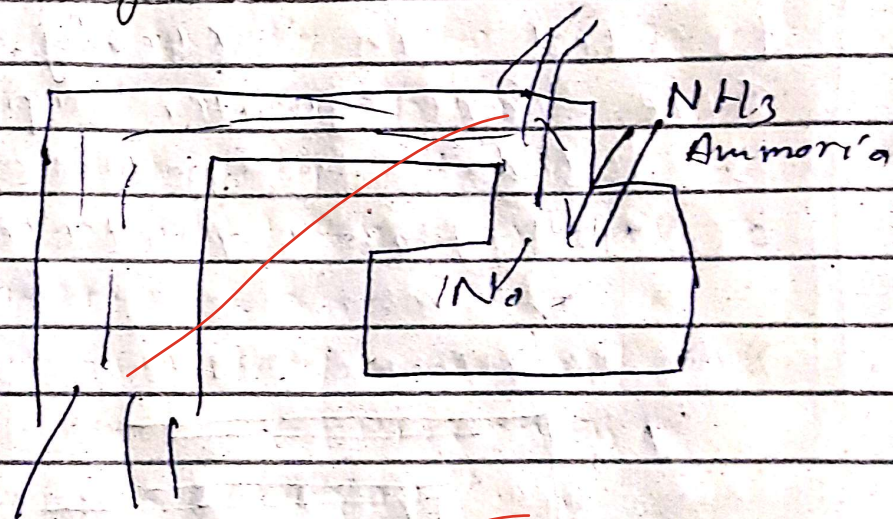
In this chimney, charcoal is used to adhere the air pollutant and air cleaned up to 95%.

Fabric filter or Bag Houses:-

Fabric filter is used in chimney which prevent pollutant particle and air outside. This method is 99.9% efficient.

Chemical method.

Catalytic reactor method :-



In this method Ammonia is used for preventing pollutant particle.

There would be broken NO and produce water.



and Nitrogen. This method is 95% efficient.

Conclusion :-

Air-pollution is dangerous to environment and human health. Air-pollution create in factories during production but there are method by which it ~~can~~ impacts can be prevented.

Q7. What is PEPA Act? Explain Introduction :-

In 1986~~8~~ President announced Pakistan will be environment council in future. In 1997, Pakistan ~~introduced~~ established Pakistan environmental protection Agency for protecting environment and promoting sustainability. ~~etc.~~

Pakistan Environmental Protection act :-

1. Prime minister ~~is~~ ~~the~~ ~~is~~ ~~the~~

Head of department.

There are ~~many~~ Council where different authorities will be present.

- 1) Ministry of forestry,
- 2) Ministry of Climate Change
- 3) Ministry of Human development
- 4) Ministry of Agriculture

Responsibilities of Council :-

- 1) Council is responsible to approve rules and regulation.
- 2) Responsibility to constitute committee.
- 3) Responsibility to arrange expertise.
- 4) Responsibility to conduct periodic meeting.
- 5) Responsibility to ~~provide~~ give recommendation relevant authority.
- 6) Responsibility to approve National environmental quality standard.
- 7) Responsibility to promote sustainability.
- 8) Responsibility to implement rule and regulation at ground level.

- Responsibility of Pepsa
- Responsibility of Environmental management.
- Focus on environment and development research
- To approval to environmental Protection Assessment
- To provide technical and scientific information to people
- Approving environmental pollution control.

Q4

## Biodiversity -

Thomas Robinso used the term biodiversity first time.

- According to Walter G. Rosen Biodiversity is the total living organism which exist on the earth.

According to the Global biological diversity, Biodiversity is the totality of gene.

Three levels :-

There are three levels of biodiversity.

• Genetic biodiversity :-

There are organisms different by gene.

Human being genes are different than plants and other animal.

• Specific diversity level :-

There are organisms which exist at specific political region.

For example

• Every region has different species.

• Eco - ~~environmental~~ System level :-

Every organism can live in own environment. They can not change their environment.

For example

Fish live in water they can not live in land.

Importance of bio diversity :-  
There are many importance  
of bio diversity.

1) Plants :-

Plants clean environment  
It absorbs  $\text{CO}_2$  which  
is dangerous to environment.  
According to United Nation  
Development Program (UNDP)  
\$30 bn pharmaceutical products  
sold in world which  
is made from plants.

2) Meat :-

We consume meat. This  
is our food requirement.

3) Religious fulfil :-

We slaught animal at  
Eid-ul-Adha this is our  
religious requirement. Animal  
is used.

4) Tourism :-

Tourist attract towards  
Natural environment. When  
you environment clean then  
tourist spent a lot of money

for visiting natural environment. It is a source of ~~more~~ wealth generation.

~~Biodiversity loss :-~~

~~when biodiversity is over used and exploited the natural resources this is called biodiversity loss.~~

~~• Deforestation :-~~

~~when a person ~~use~~ excessive used of plants and illegal cut the trees. This result biodiversity loss.~~

~~Effect :-~~

~~when plants are over used then global warming and climate change problem will be arised.~~

~~• Hunting :-~~

~~hunter over hunts animals in jungle which create biodiversity loss.~~

~~we use maximum meat which also the cause of biodiversity loss.~~

## Earthquake and Tsunami:-

Earthquake and Tsunami which are natural phenomena causes of ~~the~~ biodiversity loss. When Earthquake and Tsunami happen it result destruction and biodiversity loss.

## Population:-

When population high growth then further deforestation for colonies making. ~~more~~ animal will be used by population.

## Remedy :-

### Reforestation:-

Reforestation is the process when flora and fauna are established and ~~prohibit~~ on deforestation.

~~Population~~ less Child Awareness:-  
This awareness should be in people, while less use of natural resources.

Protected area :-

Protected area should be established for protecting ~~extinct animals~~ plant and animals.

Zoo :- Zoo is also made for protecting animal particular those animals which extinct. It should take breed where available and grow in zoo.

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