



# CHEMISTRY

## AAKASH INSTITUTE ENGLISH

### ENVIRONMENTAL CHEMISTRY

**Assignment    Section    A    Competition    Level  
Questions**

1. The gaseous envelope around the earth is known as atmosphere . The lowest layer of this

is extended upto 10 km from sea level, this layer is

A. Troposphere

B. Stratosphere

C. Ionosphere

D. Mesosphere

**Answer: A**



**Watch Video Solution**

2. Those pollutants which are readily degradable by natural process are called

A. Biodegradable pollutant

B. Non-biodegradable pollutant

C. Primary pollutant

D. Secondary pollutant

**Answer: A**



**Watch Video Solution**

3. Troposphere pollutant contains.

A. Dust

B. Water vapours

C. Mist

D. All of these

**Answer: D**



**Watch Video Solution**

4. Which of the following is a secondary pollutant ?

A.  $CO$

B.  $O_3$

C. Pb

D.  $CH_4$

**Answer: B**



**Watch Video Solution**

5. Which one of the following pollutants causes irritation in eye?

A. CO

B.  $SO_2$

C.  $NO_2$

D. All of these

**Answer: B**



**Watch Video Solution**

6. A primary pollutant is

A. CO

B. DDT

C.  $CO_2$

D. All of these

**Answer: D**



**Watch Video Solution**

7. Name the following:

The gas that reduces oxygen carrying capacity of the blood.

A.  $SO_2$

B.  $CO$

C.  $NO$

D.  $SO_3$

**Answer: B**



**Watch Video Solution**



8. Which one of the following affects chlorophyll?

A. Sulphur dioxide

B. Nitrogen oxides

C. Carbon monoxide

D. Both 1 and 2

**Answer: A**



**Watch Video Solution**

9. Which one of the following oxides produces brown air of reddish brown haze?

- A. Oxides of sulphur
- B. Oxides of nitrogen
- C. Oxides of carbon
- D. All of these

**Answer: B**



**Watch Video Solution**

10. Which one of the following gaseous pollutants is carcinogenic?

A. Oxides of sulphur

B. Oxides of nitrogen

C. Arsenic

D. Oxides of carbon

**Answer: C**



**Watch Video Solution**

11. Greenhouse gases cause

A. Trap UV rays

B. Increase in temperature of atmosphere

C. Prevents global warming

D. All of these

**Answer: B**



**Watch Video Solution**

12. Greenhouse gas other than  $CO_2$  is

A.  $H_2$

B.  $N_2O$

C.  $O_2$

D.  $SO_2$

**Answer: B**



**Watch Video Solution**

**13. Photochemical smog does not contain**

A.  $O_3$

B. NO

C.  $NO_2$

D. All of these

**Answer: D**



**Watch Video Solution**

**14.** The most effective greenhouse gas is

A. CO

B.  $O_2$

C.  $H_2$

D. CFC'S

**Answer: D**



**Watch Video Solution**

**15. Acid rain is rainfall with a pH of**

A. 5.6

B. 6.2

C. 6.7

D. 7

**Answer: A**



**Watch Video Solution**

**16.** Which of the following gases does not cause acid rain ?

A.  $NO_2$

B.  $CH_4$

C.  $SO_2$



D.  $CO_2$

**Answer: B**



**Watch Video Solution**

**17. Assertion :** Acid rain causes lakes and rivers to become acidic .

**Reason :** Buildings materials like limestone, marble , etc. are weakened on reaction with acid rain.

A. Chlorosis

B. Increasing acidity of soil

C. Corroding bridges

D. All of these

**Answer: D**



**Watch Video Solution**

**18.** Interference in development and maturation of RBC is caused by

A. Hg pollution

B. Pb pollution

C. S pollution

D. All of these

**Answer: B**



**Watch Video Solution**

**19. Select viable pollutant**

A. Smoke

B. Moulds

C. Mist

D. Fumes

**Answer: B**



**Watch Video Solution**

**20.** Which one of the following is not a property of classical smog?

A. Occurs at low temperature

B. Secondary pollutant play significant role

C. does not Contain  $SO_2$

D. Dark brown coloured

**Answer: B,C**



**Watch Video Solution**

**21. Photochemical smog does not contain**

A.  $SO_2$

B.  $NO$

C.  $Cl_2$

D.  $NO_2$

**Answer: B**



**Watch Video Solution**

**22.** Photochemical smog is actually a cause of pollution of

A. Soil

B. Air

C. Noise

D. Water

**Answer: B**



**Watch Video Solution**

**23.** Photochemical smog includes the reduction of

A.  $SO_2$

B. NO

C.  $Cl_2$

D.  $NO_2$

**Answer: D**



**Watch Video Solution**

**24.** Earth is protected from UV rays by

A.  $N_2$

B.  $O_2$

C.  $O_3$

D.  $SO_3$



**Answer: C**



**Watch Video Solution**

**25.** Months in which ozone hole appears over poles is

- A. June-July
- B. August-September
- C. October-November
- D. December-January

**Answer: B**



**Watch Video Solution**

**26.** Depletion of ozone layer can not cause

A. Damage of DNA

B. Skin cancer

C. Cataract

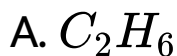
D. Rickets

**Answer: D**



Watch Video Solution

27. Which one of the following gases is known as chemical weed in troposphere?



**Answer: C**



28. Depletion of ozone layer causes

- A. Increased transpiration
- B. Damages paints and fibres
- C. Causes aging of skin
- D. All of these

**Answer: D**



29. Which causes water pollution?

A. Jet planes

B. Herbicides

C. Smoke

D. Combustion of fossils

**Answer: B**



**Watch Video Solution**

30. Most common and commercial water pollutant is

Industrial waste ; Fertilizers ; Detergents ;  
PCB's

A. Industrial waste

B. Fertilizers

C. Detergents

D. PCB's

**Answer: A**



Watch Video Solution

**31. Assertion :** The amount of BOD in the water is a measure of the amount of organic material in the water .

**Reason :** Clear water has BOD less than 5 ppm whereas highly polluted water can have BOD value of 17 ppm or more .

A. 17ppm

B. 12.2ppm

C. 7ppm

D. 5ppm

**Answer: D**



**Watch Video Solution**

**32. Eutrophication causes**

A. Nutrient enrichment of water bodies

B. Increase of oxygen in water bodies

C. Increase in number of aquatic organisms

D. All of these



**Answer: A**



**Watch Video Solution**

**33. Inorganic pollutant can damage**

A. Central nervous system

B. Liver

C. Kidneys

D. All of these

**Answer: D**



Watch Video Solution

34. Decomposition of organic matter through microbial activity is known as

A. Eutrophication

B. Stratification

C. Putrescibility

D. BOD

**Answer: C**



**35.** Permissible level of nitrate ions in the drinking water is

A. 40 ppm

B. 50ppm

C. 60ppm

D. 70ppm

**Answer: B**



**36.** Tooth decay is caused by deficiency of

A. Fluorides

B. Lead

C. Sulphates

D. Nitrates

**Answer: A**



**Watch Video Solution**

37. Laxative effect is caused by

A. Nitrates

B. Sulphates

C. Lead

D. Fluoride

**Answer: B**



**Watch Video Solution**

**38.** What is soil pollution and how is it caused ? Give a brief account of the measures which can reduce it.

- A. Soil productivity
- B. Quality of plants
- C. Purity of ground water
- D. All of these

**Answer: D**



**Watch Video Solution**

**39.** Which one of the following is not an organochlorine?

A. Parathion

B. DDT

C. BHC

D. Aldrin

**Answer: A**



**Watch Video Solution**

40. Which one of the following is least persistent insecticide?

A. Aldrin

B. Dieldrin

C. BHC

D. Carbamates

**Answer: D**



**Watch Video Solution**



41. Which one of the following is a herbicide?

A. Organochlorines

B. Organophosphates

C. Carbamates

D. Sodium arsenite

**Answer: D**



**Watch Video Solution**

42. Non-biodegradable industrial waste that can be utilized by cement industry is

A. Fly ash

B. Slag

C. Gypsum

D. Both 1 and 2

**Answer: D**



**Watch Video Solution**

**43.** Small quantity of industrial toxic waste is removed by

- A. Burning in open bins
- B. Controlled incineration
- C. Burning in closed bins
- D. Both 1 and 2

**Answer: A**



**Watch Video Solution**

**44.** Select non=biodegradable industrial waste

A. Waste from cotton mills

B. Waste from paper mills

C. Fly ash from thermal power plants

D. Waste from food processing units.

**Answer: C**



**Watch Video Solution**

**45.** Which one of the following is not a non-biodegradable industrial waste?

- A. Gypsum from fertilizer industries
- B. Mud and tailings from metal industries
- C. Slag from steel industries
- D. Waste from textile industries.

**Answer: D**



**Watch Video Solution**

**46.** Biodegradable wastes are mixed with water and cultured from bacterial species which produces a gas called

A. Methane gas

B. Ethane gas

C. Propane gas

D. Butane gas

**Answer: A**



**Watch Video Solution**

47. Sewage sludge does not contain

A. Nitrogen

B. Phosphorus

C. Potassium

D. All of these

**Answer: C**



**Watch Video Solution**

48. Green chemistry emphasizes on

A. Reaction that takes place in non-aqueous medium

B. Utilization of science to reduce adverse impact on environment.

C. Use of condensation polymers

D. Minimise the use of non-hazardous waste.

**Answer: B**



**Watch Video Solution**



**49.** In place of tetrachlorethene in dry-cleaning we use

- A. Sodium lauryl sulphate
- B. Sodium stearate
- C. Hydrogen peroxide
- D. Sodium bisulphite

**Answer: C**



**Watch Video Solution**

50. Chauvin, Grubbs and Schrock won 2005 Nobel prize for the development of

- A. Dumas method
- B. Kjeldahi's method
- C. Metahesis method
- D. Carius method

**Answer: C**



**Watch Video Solution**

# Assignment Section B Objective Type Question

## One Option Is Correct

1. Which air pollutant is not released by scooters and cars?

A.  $SO_2$

B. Fly ash

C. Hydrocarbons

D. CO

**Answer: B**





Watch Video Solution

2. Which is most harmful for the life on the globe?

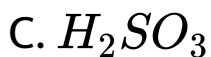
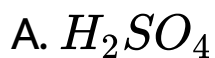
- A. Soil erosion
- B. Increasing desert
- C. Nuclear fall out
- D. Deforestation.

**Answer: C**



Watch Video Solution

3. The acid rain contains



D. All of these

**Answer: D**



**Watch Video Solution**

4. Which is not an air pollutant?

A.  $H_2$

B.  $H_2S$

C.  $SO_2$

D.  $O_3$

**Answer: A**



**Watch Video Solution**

5. Which is not a chemical pollutant?

A. Noise

B. Pesticides

C. Liquids

D. Solid wastes

**Answer: A**



**Watch Video Solution**

**6. DDT is**

A. An antibiotic

B. A fertilizer

C. A non-degradable pollutant

D. Dichlorodifluoro titanium

**Answer: C**



**Watch Video Solution**

7. Which does not cause pollution?

A. Thermal power plant

B. Hydro-electric plant



C. Nuclear power plant

D. Automobiles

**Answer: B**



**Watch Video Solution**

**8.** Gaseous carbon dioxide dissolves in water droplets to produce

A. Sulphonic acid

B. Carbonic acid

C. Sulphuric acid

D. Carboxylic acid

**Answer: B**



**Watch Video Solution**

**9. Organo mercury compounds are**

A. Herbicides

B. Fungicides

C. Soil conditioners

D. All of these

**Answer: B**



**Watch Video Solution**

**10.** HClO is a powerful

A. Pesticide

B. Insecticide

C. Germicide

D. Herbicide

**Answer: C**



**Watch Video Solution**

**11. Biosphere includes**

A. Hydrosphere

B. Atmosphere

C. Lithosphere

D. All of these

**Answer: D**



[Watch Video Solution](#)

12. If BOD a river is high, it means that river is

A. Not polluted

B. Very polluted

C. Gets least amount of light

D. Temperature of water is low

**Answer: B**



[Watch Video Solution](#)

**13.** Fluorosis, a bone disease is caused by the presence of

- A. Pesticidies in water
- B. Fluorides in water
- C. Carbon monoxide in air
- D. Photochemical

**Answer: B**



**Watch Video Solution**

14. "Ozone hole" refers to:

A. Increased concentration of  $O_3$

B. Reduction in the thickness of ozone layer in the stratosphere

C. Reduction in the thickness of ozone layer in the troposphere

D. Hole in ozone layers.

**Answer: B**



**Watch Video Solution**

15. Which one is incorrect statement regarding eutrophication?

A. In eutrophication dissolved  $O_2$  concentration decreases

B. Eutrophication occurs due to excess  $PO_4^{3-}$  present in  $H_2O$

C. Algae reduces dissolved  $O_2$  in  $H_2O$

D. Main cause of eutrophication is presence of  $NO_3^-$



**Answer: D**



**Watch Video Solution**

**16. Which are the most dangerous radiations?**

A. Gamma rays

B. Beta rays

C. Alpha rays

D. Radio waves

**Answer: A**



Watch Video Solution

17. Lung disease are four times more in Urban areas than Rural area. This is due to the presence of which

A.  $SO_2$

B.  $CO_2$

C.  $N_2$

D. Water-vapour

**Answer: A**



Watch Video Solution

**18.** The pollutant released by jet aeroplanes in the atmosphere as fluorocarbons are called

A. Photochemical oxidants

B. Photochemical reductants

C. Aerosols

D. Physical pollutants

**Answer: C**



19. Biological decay and release from ocean are important natural processes for the formation of



**Answer: B**



[Watch Video Solution](#)

20. Burning of fossil fuels is the main source of which of the following pollutants?

- A. Nitric oxide
- B. Carbon monoxide
- C. Sulphur dioxide
- D. Particulate matter

**Answer: C**



[Watch Video Solution](#)

21. Which one is not correct regarding green house effect?

A. It is due to high concentration of  $CO_2$  in atmosphere

B. It is influenced by gases such as  $CH_4$ ,  $O_3$  and CFC

C. It would result in the warning up of the earth

D. It would result in lowering the level of oceans due to high evaporation.

**Answer: D**



**Watch Video Solution**

**22. Which one is not a correct statement?**

A. Primary pollutants are those which are emitted directly from the source

B. Acid rain is primary pollutant

C. Particulates refer to all atmospheric substances that are not gases

D. All of these

**Answer: B**



**Watch Video Solution**

**23.** If *BOD* of a river is high it means that the river is

A. Not polluted



B. Very much polluted with inorganic chemicals

C. Very much polluted with organic chemicals

D. Polluted with pesticides

**Answer: C**



**Watch Video Solution**

**24. Which is not a water pollutant?**

A. Automobile exhaust

B. Plant nutrients

C. Oxygen demanding wastes

D. Disease causing agent.

**Answer: A**



**Watch Video Solution**

**25. Phosphate pollution is mainly caused by**

A. Weathering of phosphate rocks only

B. Phosphate rock and sewage

C. Agricultural fertilizers only

D. Sewage and agricultural fertilizers.

**Answer: D**



**Watch Video Solution**

**26.** Which of the following is not correctly matched?

A.

Column I

Column II

Photochemical smog

Warm dry climate

B.

Column I

Column II

Photochemical smog

Contains  $SO_2$

C.

Column I

Column II

Classical smog

Cool humid climate

D.

Column I

Column II

Classical smog

Reducing smog

**Answer: B**



**Watch Video Solution**

27. Which of the following is not a part of green chemistry?

A. Photochemistry

B. Sonochemistry

C. Nuclear chemistry

D. Biochemistry

**Answer: C**



**Watch Video Solution**

28. Which of the following is not a herbicide?

A. Sodium chlorate

B. Sodium arsenite

C. Polyphosphate

D. Triazines

**Answer: C**



**Watch Video Solution**

**29.** Water is often treated with chlorine (sodium hypochlorite ) to

- A. Increase oxygen content
- B. Kill germs
- C. Remove suspended particles
- D. Remove hardness

**Answer: B**



**Watch Video Solution**

**30.** Eutrophication causes reduction in

- A. Nutrients
- B. Dissolved salts
- C. Dissolved oxygen
- D. All of these

**Answer: C**



**Watch Video Solution**



31. Which is always present in photochemical smog ?



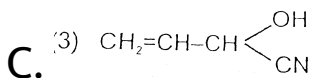
A. |



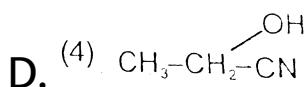
B.



C.



D.



**Answer: A**



**Watch Video Solution**

**32. Positive soil pollution is**

A. Reduction in soil productivity due to addition of pesticides fertilizers and industrial wastes

B. Reduction in soil productivity due to erosion and over use

C. Converting fertile land into barren land by dumping ash, garbage

D. All of these

**Answer: A**



**Watch Video Solution**

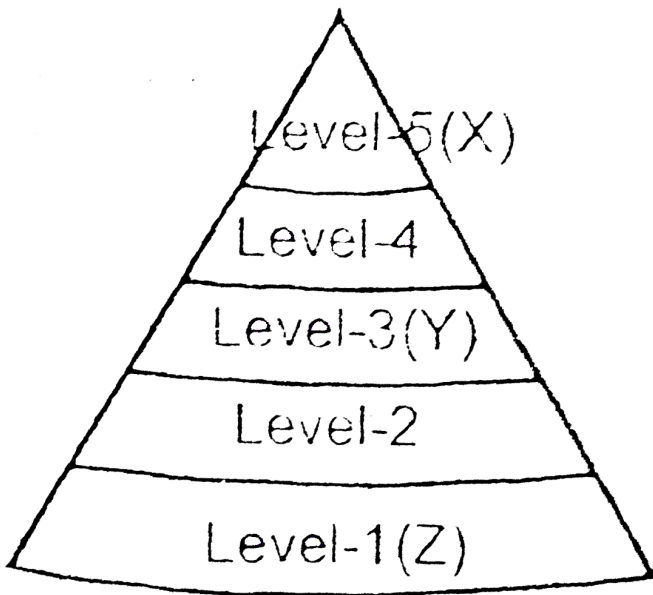
**33.** Increased asthmatic attacks in certain seasons are related to

- A. Eating of seasonal vegetables
- B. Wet and dry environment
- C. Inhalation of seasonal pollen grains.
- D. Low and high temperature.

Answer: C

 Watch Video Solution

34. Figure showing different trophic level.



If X, Y and Z is concentration of pesticide in

level 5,3 and 1 respectively, what is the relationship of X and Z with Y. respectively

A. Y and 100 Y

B. Y on both

C.  $\frac{Y}{100}$  and 100 Y

D. 100Y and  $\frac{Y}{100}$

**Answer: D**



**Watch Video Solution**

35. A green house effect causing gas which turns lime water milky. When is treated with carbon gives compound B. which of the following statements is not correct regarding B?

A. It binds with haemoglobin

B. It is also green house effect causing gas

C. It is one of serious air polluted

D. It is lethal gas.

**Answer: B**



Watch Video Solution

36. When rain is accompanied by a thunderstorm, the collected rain water will have pH?

A. Slightly higher by occurrence of thunderstorm is not there

B. Uninfluenced by occurrence of thunderstorm

C. Which depends upon the amount of dust in air

D. Slightly lower than that of rain water without thunderstorm.

**Answer: D**



**Watch Video Solution**

**37.** About 20 km above the earth, there is an ozone layer. Which one of the following



statements about ozone and ozone layer is true ?

A. Ozone layer is beneficial to us because ozone cuts out the ultraviolet radiation of the sun

B. The conversion of ozone to oxygen is an endothermic reaction.

C. Ozone is a triatomic linear molecular

D. Ozone layer is harmful to us because it cuts out a radiation useful for

photosynthesis.

**Answer: A**



**Watch Video Solution**

**38. Select the correct statement**

A. PAN, aldehydes, ketones, phenols, acid

rain are secondary pollutants

B. In Bhopal gas tragedy the extremely

toxic and deadly methyl isocyanate (MIC)

gas leaked from a storage tank.

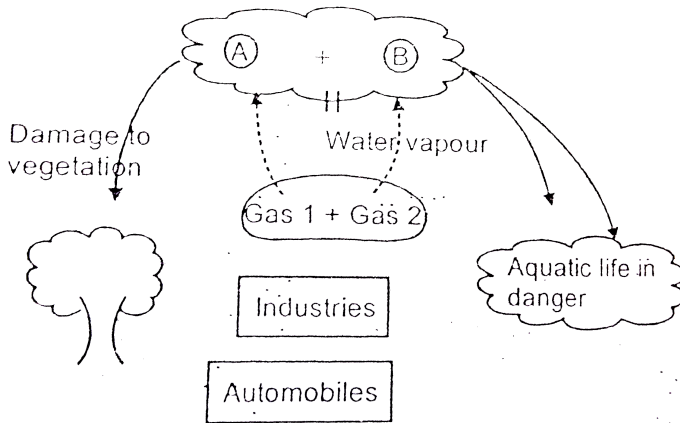
C. By green chemistry we mean producing the chemicals of our daily needs.

D. All of these

**Answer: D**



**Watch Video Solution**



39.

Gas 1, Gas 2, A and B respectively are

A.  $SO_2$ ,  $NO_2$ ,  $HNO_3$ ,  $H_2SO_4$

B.  $SO_2$ ,  $NO_2$ ,  $H_2SO_4$ ,  $HNO_3$

C.  $SO_3$ ,  $NO_2$ ,  $H_2SO_4$ ,  $HNO_3$

D.  $SO_3$ ,  $NO$ ,  $HNO_3$ ,  $H_2SO_4$

**Answer: B**



**Watch Video Solution**

**40.** Clean water with BOD value and pH range when it is recommended as a drinking water respectively should be

- A. Less than 5 pm and 5.5 to 9.5
- B. More than 5ppm and 5.5 to 9.5
- C. More than 10 ppm and 3 to 4
- D. More than 15 ppm and 8 to 10

**Answer: A**



**Watch Video Solution**

## Assignment Section C Linked Comprehension Type Questions

1. Pollutants are the substances which present in the environment in greater proportion than its natural abundance and resulting in harmful or detrimental effect on the quality of environment. Generally highly toxic

substances are considered . Generally highly toxic even substances that are normally considered harmless can cause pollution if they are present in underirable concentration.

Over exploitation of natural resourses uncontrolled mechanisation deforestation and extensive use of chemical fertilizers and pesticides have brought about many changes in different component of the environment .

Acid rain is due to the increase in the concentration of ..... in the atmospheres

A.  $O_3$

B.  $CH_4$

C.  $SO_2$  and  $NO_2$

D.  $O_2$  and  $CO$

**Answer: C**



**Watch Video Solution**

2. Pollutants are the substances which present in the environment in greater proportion than its natural abundance and resulting in harmful or detrimental effect on the quality of



environment. Generally highly toxic substances are considered . Generally highly toxic even substances that are normally considered harmless can cause pollution if they are present in underirable concentration.

Over exploitation of natural resourses uncontrolled mechanisation deforestation and extensive use of chemical fertilizers and pesticides have brought about many changes in different component of the environment .

Eutrophication causes reduction in

A. Dissovled nitrogen

B. Dissolved oxygen

C. Dissolved carbon dioxide

D. All of these

**Answer: B**



**Watch Video Solution**

**3.** Pollutants are the substances which present in the environment in greater proportion than its natural abundance and resulting in harmful or detrimental effect on the quality of

environment. Generally highly toxic substances are considered . Generally highly toxic even substances that are normally considered harmless can cause pollution if they are present in underirable concentration. Over exploitation of natural resourses uncontrolled mechanisation deforestation and extensive use of chemical fertilizers and pesticides have brought about many changes in different component of the environment .

Which one of the air pollutant is most toxic?

A.  $NO_2$

B.  $SO_2$

C.  $CO_2$

D. CO

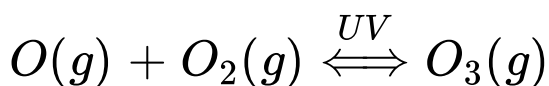
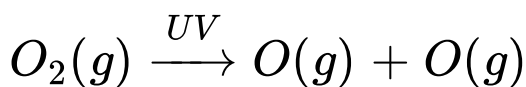
**Answer: D**



**Watch Video Solution**

4. Stratosphere contains a stable layer of ozone molecules which absorbs UV radiation from the sun. The presence of ozone in atmosphere serves, as a shield to protect

living organism on earth from the harmful effects of the solar ultraviolet radiation. The ultraviolet radiation are known to cause skin cancer. Ozone is formed in stratosphere by the following photochemical reactions.



Ozone is thermodynamically unstable and decomposes to molecular oxygen. Thus a dynamic equilibrium exists between the production and decomposition of ozone molecules.

Earth is protected from UV radiation by

A. Carbon dioxide layer

B. Nitrogen layer

C. Ozone layer

D. Oxygen layer

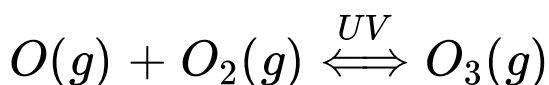
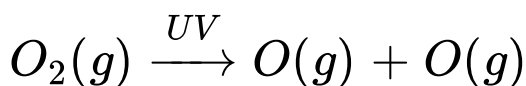
**Answer: C**



**Watch Video Solution**

5. Stratosphere contains a stable layer of ozone molecules which absorbs UV radiation from the sun. The presence of ozone in

atmosphere serves, as a shield to protect living organism on earth from the harmful effects of the solar ultraviolet radiation. The ultraviolet radiation are known to cause skin cancer. Ozone is formed in stratosphere by the following photochemical reactions.



Ozone is thermodynamically unstable and decomposes to molecular oxygen. Thus a dynamic equilibrium exists between the production and decomposition of ozone molecules.

The air pollutant which are responsible to deplete the ozone layer is

A.  $SO_2$

B.  $CO_2$

C.  $CO$

D. Oxides of nitrogen and CFC's

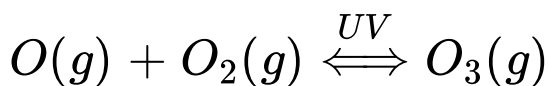
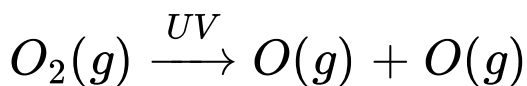
**Answer: D**



**Watch Video Solution**



6. Stratosphere contains a stable layer of ozone molecules which absorbs UV radiation from the sun. The presence of ozone in atmosphere serves, as a shield to protect living organism on earth from the harmful effects of the solar ultraviolet radiation. The ultraviolet radiation are known to cause skin cancer. Ozone is formed in stratosphere by the following photochemical reactions.



Ozone is thermodynamically unstable and

ecomposes to molecular oxygen. Thus a dynamic equilibrium exists between the production and decomposition of ozone molecules.

Maximum quantity of ozone is present in

- A. Stratosphere
- B. Mesosphere
- C. Troposphere
- D. Thermosphere

**Answer: A**



## Assignment Section D Assertion Reason Type Questions

1. Statement-1: Ozone protects earth from harmful UV radiation

and

Statement-2: CFC's are main source for ozone layer depletion.

A. Statement-1: is True, Statement-2 is True,

Statement-2 is a correct explanantion for

Statement-1

B. Statement-1 is True, Statement-2 is True,

Statement-2 is NOT a correct explanation

for Statement-1

C. Statement:1 is True, Statement -2 is False

D. Statement-1 is False, Statement-2 is True

**Answer: B**



**Watch Video Solution**

2. Statement-1: Classical smog occurs in cool and humid climate.

and

Statement-2 It is also termed as oxidising smog.

A. Statement-1: is True, Statement-2 is True,

Statement-2 is a correct explanation for

Statement-1

B. Statement-1 is True, Statement-2 is True,

Statement-2 is NOT a correct explanation

for Statement-1

C. Statement:1 is True, Statement -2 is False

D. Statement-1 is False, Statement-2 is True

**Answer: C**



**Watch Video Solution**

**3. Statement-1:** One of the source of carbon monoxide production is automobile exhaust  
and

**Statement-2:** CO is produced as a result of

incomplete combustion of fuel in automobile engines.

A. Statement-1: is True, Statement-2 is True,  
Statement-2 is a correct explanation for  
Statement-1

B. Statement-1 is True, Statement-2 is True,  
Statement-2 is NOT a correct explanation  
for Statement-1

C. Statement:1 is True, Statement -2 is False

D. Statement-1 is False, Statement-2 is True

**Answer: A**



**Watch Video Solution**

**4. Statement-1: CO is poisonous air pollutant.**

**Statement-2: CO binds with haemoglobin of blood and decreases the oxygen carrying capacity of blood.**

**A. Statement-1: is True, Statement-2 is True,**

**Statement-2 is a correct explanation for**

**Statement-1**



- B. Statement-1 is True, Statement-2 is True,  
Statement-2 is NOT a correct explanation  
for Statement-1
- C. Statement:1 is True, Statement -2 is False
- D. Statement-1 is False, Statement-2 is True

**Answer: A**



**Watch Video Solution**

5. Statement-1: Water is polluted by organic wastes

and

Statement-2: The amount of organic wastes is measured by the BOD.

A. Statement-1: is True, Statement-2 is True,

Statement-2 is a correct explanation for

Statement-1

B. Statement-1 is True, Statement-2 is True,

Statement-2 is NOT a correct explanation

for Statement-1

C. Statement:1 is True, Statement -2 is False

D. Statement-1 is False, Statement-2 is True

**Answer: B**



**Watch Video Solution**

**6. Statement-1 DDT is non-biodegradable**

**pesticide.**

**and**

Statement-2 DDT refer to dichloro diphenyl toluene.

A. (a) Statement-1: is True, Statement-2 is True, Statement-2 is a correct explanantion for Statement-1

B. (b) Statement-1 is True, Statement-2 is True, Statement-2 is NOT a correct explanation for Statement-1

C. (c) Statement:1 is True, Statement -2 is False

D. (d) Statement-1 is False, Statement-2 is

True

**Answer: C**



**Watch Video Solution**

7. Statement-1: In present of sunlight  $NO_2$  breaks up into nitric oxide and free oxygen atoms

Statement-2:  $NO_2$  is the one of the source of photochemical smog.

A. (a) Statement-1: is True, Statement-2 is True, Statement-2 is a correct explanantion for Statement-1

B. (b) Statement-1 is True, Statement-2 is True, Statement-2 is NOT a correct explanation for Statement-1

C. (c) Statement:1 is True, Statement -2 is False

D. (d) Statement-1 is False, Statement-2 is True

**Answer: B**



**Watch Video Solution**

**8. Statement-1:** Presence of excess of  $CO_2$  in atmosphere can increase the temperature of earth's atmosphere

and

**Statement-2:**  $CO_2$  is colourless and odourless gas.

- A. Statement-1: is True, Statement-2 is True,  
Statement-2 is a correct explanation for  
Statement-1
- B. Statement-1 is True, Statement-2 is True,  
Statement-2 is NOT a correct explanation  
for Statement-1
- C. Statement:1 is True, Statement -2 is False
- D. Statement-1 is False, Statement-2 is True

**Answer: B**



**Watch Video Solution**



9. Statement-1: Excess of  $CO_2$  in the air can be removed by green plants .

and

Statement-2: Green plants absorb  $CO_2$  in photosynthesis.

A. Statement-1: is True, Statement-2 is True,

Statement-2 is a correct explanation for

Statement-1

- B. Statement-1 is True, Statement-2 is True,  
Statement-2 is NOT a correct explanation  
for Statement-1
- C. Statement:1 is True, Statement -2 is False
- D. Statement-1 is False, Statement-2 is True

**Answer: A**



**Watch Video Solution**

**10.** Statement-1: Deficiency of fluoride in drinking water is harmful to human being.

and

Statement-2: Fluoride concentration more than 10 ppm causes harmful effect to bones and teeth.

A. Statement-1: is True, Statement-2 is True,

Statement-2 is a correct explanation for

Statement-1

- B. Statement-1 is True, Statement-2 is True,  
Statement-2 is NOT a correct explanation  
for Statement-1
- C. Statement:1 is True, Statement -2 is False
- D. Statement-1 is False, Statement-2 is True

**Answer: B**



**Watch Video Solution**

**Exercise**

1. Which of the following is greenhouse gas?

A.  $CH_4$

B.  $H_2$

C.  $O_3$

D. All of these

**Answer: 1,3**



**Watch Video Solution**

2. Which of the following is most responsible for global warming?

A. CFC

B.  $CH_4$

C.  $CO_2$

D.  $N_2O$

**Answer: 3**



**Watch Video Solution**

3. Which of the following gas can cause ACID rain?

A.  $SO_2$

B.  $NO_2$

C.  $CO_2$

D. All of these

**Answer: 4**



**Watch Video Solution**

4. The formation of photochemical smog depends upon

A. CO

B. NO

C.  $CO_2$

D.  $SO_2$

**Answer: 2**



**Watch Video Solution**



5. The gas responsible for the Bhopal tragedy was :

- A. Methyl isocyanide
- B. Propanenitrile
- C. Methyl isocyanate
- D. Peroxy acetyl nitrate

**Answer: 3**



**Watch Video Solution**

6. The pH of acid rain is

A. 7

B. Less than 5.6

C. Between 5.6-7.0

D. Between 7.0-9.0

**Answer: 2**



**Watch Video Solution**

7. High concentration of Pb in human blood damages

A. Kidneys

B. Liver

C. Brain

D. All of these

**Answer: 4**



**Watch Video Solution**

8. The culprit for the ozone layer depletion is

A. Nitrogen oxides

B. CFCs

C. UV-rays

D. Both (1)&(2)

**Answer: 4**



**Watch Video Solution**

9. BOD value less than 5 ppm indicates a water sample to be

- A. Rich in dissolved oxygen
- B. Poor in dissolved oxygen
- C. Not suitable for aquatic life
- D. Highly polluted

**Answer: 1**



**Watch Video Solution**

10. Which of the following is correct match?

A. Photochemical smog :  $SO_2$

B. Nitrate in drinking water : Blue baby syndrome

C. Phosphate fertilisers in water : BOD level of water increase

D. All are correct

**Answer: 4**



**Watch Video Solution**

## Assignment Section A

1. The layer of atmosphere which extends upto 10km from sea level is called

A. Troposphere

B. Stratosphere

C. ionosphere

D. Mesosphere

**Answer: 1**



**Watch Video Solution**

2. Those pollutants which are readily degradable by natural process are called

A. Biodegradable pollutant

B. Non-biodegradable pollutant.

C. Primary pollutant

D. Secondary pollutant

**Answer: 1**



**Watch Video Solution**



**3. Troposphere pollutant contains**

A. Dust

B. Water vapours

C. Mist

D. All of these

**Answer: 4**



**Watch Video Solution**

4. Which one of the following is a secondary pollutant?

A. CO

B.  $O_3$

C. Pb

D.  $CH_4$

**Answer: 2**



**Watch Video Solution**

5. Which one of the following pollutants causes irritation in eye?

A.  $CO_2$

B.  $SO_2$

C.  $NO_2$

D. All of these

**Answer: 2**



**Watch Video Solution**

6. A primary pollutant is

A. CO

B. DDT

C.  $CO_2$

D. All of these

**Answer: 4**



**Watch Video Solution**

7. Which one of the following is colourless and highly toxic gas which reduces oxygen carrying capacity of blood?

A.  $SO_2$

B. CO

C. NO

D.  $SO_3$

**Answer: 2**



**Watch Video Solution**

8. Which one of the following affects chlorophyll?

A. Sulphur dioxide

B. Nitrogen oxides

C. Carbon monoxide

D. Both (1) & (2)

**Answer: 1**



**Watch Video Solution**

9. Which one of the following oxides produces brown air or reddish brown haze?

- A. Oxides of sulphur
- B. Oxides of nitrogen
- C. Oxides of carbon
- D. All of these

**Answer: 2**



**Watch Video Solution**

10. Which one of the following gaseous pollutants is carcinogenic?

A. Oxides of sulphur

B. Oxides of nitrogen

C. Arsenic

D. Oxides of carbon

**Answer: 3**



**Watch Video Solution**



11. Greenhouse gases cause

A. Trap UV rays

B. Increase in temperature of atmosphere

C. Prevents global warming

D. All of these

**Answer: 2**



**Watch Video Solution**

12. Greenhouse gas other than  $CO_2$  is

A.  $H_2$

B.  $N_2O$

C.  $O_2$

D.  $SO_2$

**Answer: 2**



**Watch Video Solution**

**13. Photochemical smog involves**

A.  $O_3$

B. NO

C.  $NO_2$

D. All of these

**Answer: 4**



**Watch Video Solution**

**14.** One of the greenhouse gas is

A. CO

B.  $O_2$

C.  $H_2$

D. CFC's

**Answer: 4**



**Watch Video Solution**

**15. pH of acid rain is approximately**

A. 5.6

B. 6.2

C. 6.7

D. 7

**Answer: 1**



**Watch Video Solution**

**16.** Which is not a cause of acid rain?

A.  $NO_2$

B.  $CH_4$

C.  $SO_2$

D.  $CO_2$

**Answer: 2**



**Watch Video Solution**

**17. Acid rain causes**

A. Chlorosis

B. Increasing acidity of soil

C. Corroding bridges

D. All of these

**Answer: 4**



Watch Video Solution

**18.** Interference in development and maturation of RBC is caused by

A. Hg pollution

B. Pb pollution

C. S pollution

D. All of these

**Answer: 2**



 [Watch Video Solution](#)

**19.** Select viable pollutant

- A. Smoke
- B. Moulds
- C. Mist
- D. Fumes

**Answer: 2**



[Watch Video Solution](#)



20. Which one of the following is not a property of classical smog?

A. Occurs at low temperature

B. Secondary pollutant play significant role

C. Contains  $SO_2$

D. Dark brown coloured

**Answer: 2**



**Watch Video Solution**

21. Photochemical smog always contains

A.  $SO_2$

B.  $O_3$

C.  $HNO_3$

D. All of these

**Answer: 2**



**Watch Video Solution**

22. Photochemical smog is actually a cause of pollution of

A. Soil

B. Air

C. Noise

D. Water

**Answer: 2**



**Watch Video Solution**

23. Photochemical smog includes the reduction of

A.  $SO_2$

B. NO

C.  $Cl_2$

D.  $NO_2$

**Answer: 4**



**Watch Video Solution**

24. Earth is protected from UV rays by

A.  $N_2$

B.  $O_2$

C.  $O_3$

D.  $SO_3$

**Answer: 3**



**Watch Video Solution**

25. Months in which ozone hole appears over poles is

A. June-July

B. August-September

C. October-November

D. December-January

**Answer: 2**



**Watch Video Solution**

26. Depletion of ozone layer can not cause

A. Damage of DNA

B. Skin cancer

C. Cataract

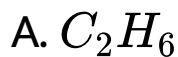
D. Rickets

**Answer: 4**



**Watch Video Solution**

27. Which one of the following gases is known as chemical weed in troposphere?



**Answer: 3**



**Watch Video Solution**



28. The depletion of the ozone layer causes

- A. Increased transpiration
- B. Damages paints and fibres
- C. Causes aging of skin
- D. All of these

**Answer: 4**



**Watch Video Solution**

29. Which causes water pollution?

A. Jet planes

B. Herbicides

C. Smoke

D. Combustion of fossils

**Answer: 2**



**Watch Video Solution**

**30.** Most common and commercial water pollutant is

A. Industrial waste

B. Fertilizers

C. Detergents

D. PCB's

**Answer: 1**



**Watch Video Solution**

**31.** For clean water BOD is less than

A. 17 ppm

B. 12.2 ppm

C. 7 ppm

D. 5 ppm

**Answer: 4**



**Watch Video Solution**

**32. Eutrophication causes**

A. Nutrient enrichment of water bodies

B. Increase of oxygen in water bodies

C. Increase in number of aquatic organisms

D. All of these

**Answer: 1**



**Watch Video Solution**

**33.** Inorganic pollutant can damage

A. Central nervous system

B. Liver

C. Kidneys

D. All of these

**Answer: 4**



**Watch Video Solution**

**34.** Decomposition of organic matter is brought about by

A. Eutrophication

B. Stratification

C. Putrescibility

D. BOD

**Answer: 3**



**Watch Video Solution**

**35.** Permissible level of nitrate ions in the drinking water is

A. 40 ppm

B. 50 ppm

C. 60 ppm

D. 70 ppm

**Answer: 2**



**Watch Video Solution**

**36.** Tooth decay is caused by deficiency of

A. Fluorides

B. Lead

C. Sulphates

D. Nitrates



**Answer: 1**



**Watch Video Solution**

**37. Laxative effect is caused by**

A. Nitrates

B. Sulphates

C. Lead

D. Fluoride

**Answer: 2**



[Watch Video Solution](#)

**38.** Soil pollution can result in decreased

- A. Soil productivity
- B. Quality of plants
- C. Purity of ground water
- D. All of these

**Answer: 4**



[Watch Video Solution](#)

**39.** Which one of the following is not an organochlorine?

A. Parathion

B. DDT

C. BHC

D. Aldrin

**Answer: 1**



**Watch Video Solution**

40. Which one of the following is least persistent insecticide?

A. Aldrin

B. Dieldrin

C. BHC

D. Carbamates

**Answer: 4**



**Watch Video Solution**

41. Which one of the following is a herbicide?

- A. Organochlorines
- B. Organophosphates
- C. Carbamates
- D. Triazine

**Answer: 4**



**Watch Video Solution**

42. Non-biodegradable industrial waste that can be utilized by cement industry is

A. Fly ash

B. Slag

C. Gypsum

D. Both (1) & (2)

**Answer: 4**



**Watch Video Solution**

**43.** Small quantity of industrial toxic waste is removed by

- A. Burning in open bins
- B. Controlled incineration
- C. Burning in closed bins
- D. Both (1) & (2)

**Answer: 1**



**Watch Video Solution**

**44.** Select non-biodegradable industrial waste

A. Waste from cotton mills

B. Waste from paper mills

C. Fly ash from

D. Waste from food processing units

**Answer: 3**



**Watch Video Solution**



**45.** Which one of the following is not a non biodegradable industrial waste?

- A. Gypsum from fertilizer industries
- B. Mud and tailings from metal industries
- C. Slag from steel industries
- D. Waste from textile industries

**Answer: 4**



**Watch Video Solution**

**46.** Waste from textile industries

A. Methane gas

B. Ethane gas

C. Propane gas

D. Butane gas

**Answer: 1**



**Watch Video Solution**

**47.** Sewage sludge does not contain

A. Nitrogen

B. Phosphorus

C. Potassium

D. All of these

**Answer: 3**



**Watch Video Solution**

**48.** Green chemistry emphasizes on

A. Reaction that takes place in non-aqueous medium

B. Utilization of sciences to reduce adverse impact on environment

C. Use of condensation polymers

D. Minimise the use of non-hazardous waste

**Answer: 2**



**Watch Video Solution**

49. In place of tetrachloroethene in dry-cleaning we use

- A. Sodium lauryl sulphate
- B. Sodium stearate
- C. Hydrogen peroxide
- D. Sodium bisulphite

**Answer: 3**



**Watch Video Solution**

50. Chauvin, Grubbs and Schrock won 2005 Nobel prize for the development of

- A. Dumas method
- B. Kjeldahl's method
- C. Metathesis method
- D. Carius method

**Answer: 3**



**Watch Video Solution**

1. Which one of the following statements regarding photochemical smog is not correct?

A. Photochemical smog is formed through photochemical reaction involving solar energy

B. Photochemical smog does not cause irritation in eyes and throat

C. Carbon monoxide does not play any role in photochemical smog formation

D. Photochemical smog is an oxidising agent in character

**Answer: 2**



**Watch Video Solution**

2. About 20 m above the earth, there is an ozone layer. Which one of the following statement about ozone and ozone layer is true?



A. It is beneficial to us as it stops U.V. radiation

B. Conversion of  $O_3$  to  $O_2$  is an endothermic reaction

C. Ozone has a triatomic linear molecule

D. It is harmful as it stops useful radiation

**Answer: 1**



**Watch Video Solution**

3. Which one of the following is responsible for depletion of the ozone layer in the atmosphere?

A. Polyhalogens

B. Ferrocene

C. Fullerenes

D. Freons

**Answer: 4**



**Watch Video Solution**

4. Which one of the following statements is not true?

A. Oxides of sulphur, nitrogen and carbon are the most widespread air pollutant

B. pH of drinking water should be between 5.5-9.5

C. Concentration of DO below 6 ppm is good for the growth of fish

D. Clean water would have a BOD value of  
less than 5 ppm

**Answer: 3**



**Watch Video Solution**

5. Which of the following is not caused due to  
 $SO_2$ ?

A. Cough

B. Shortness of breath

C. Spasm of larynx

D. Blindness

**Answer: 4**



**Watch Video Solution**

6. Which of the following has not adverse effect on human health?

A. NO

B.  $NO_2$

C.  $SO_2$

D. CO

**Answer: 1**



**Watch Video Solution**

7. Which of the following is not a greenhouse gas?

A.  $CO_2$

B.  $CH_4$



**Answer: 4**



**Watch Video Solution**

**8.** At which of the following pH, rain is called as acid rain?

A. 4

B. 6

C. 6.8

D. All of these

**Answer: 1**



**Watch Video Solution**

**9. Which of the following is Freon-11?**

A.  $CCl_3F$

B.  $CCl_2F_2$

C.  $CClF_3$



D.  $CF_4$

**Answer: 1**



**Watch Video Solution**

**10.** At which of the following concentration of sulphate it will have a laxative effect?

A. Above 300 ppm

B. Above 500 ppm

C. Above 400 ppm

D. Above 600 ppm

**Answer: 2**



**Watch Video Solution**

**11.** Measurement of dissolved oxygen that would be needed by the microorganism to oxidise the compounds is known as

A. Acid rain

B. BOD

C. COD

D. Ozone layer depletion

**Answer: 2**



**Watch Video Solution**

**12. Which of the following is herbicide?**

A. DDT

B.  $(CH_3)_2Hg$

C.  $NaClO_3$

D.  $C_2H_2$

**Answer: 3**



**Watch Video Solution**

**13.** Which of the following is the correct match?

A. Classical smog -  $NO_2$

B. Photochemical smog -  $SO_2$

C. Greenhouse gas -  $CH_4$

D. Both (1) & (3)

**Answer: 3**



**Watch Video Solution**

**14.** Which group correctly represent the photochemical smog produced during reaction of hydrocarbon in the combustion chamber of an engine?

A. Formaldehyde and PAN

B. Acrolein and PAN

C. Formaldehyde and acrolein

D. Formaldehyde, acrolein and PAN

**Answer: 4**



**Watch Video Solution**

**15.** Freons which cause damage to ozone layer are

A. Chemically unreactive

B. Non-toxic

C. Odourless

D. All of these

**Answer: 4**



**Watch Video Solution**

**16.** Ozone depletion over Antarctica is maximum in the month of

A. September and October

B. March and April

C. June and July

D. December and January

**Answer: 1**



**Watch Video Solution**

**17. Heat pollution affects mainly**

A. Vegetation

B. Aquatic creature



C. Rocks

D. Air

**Answer: 2**



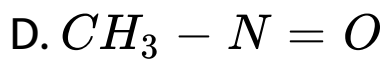
**Watch Video Solution**

**18.** Bhopal gas tragedy was caused by

A.  $CH_2CN$

B.  $CH_3NC$

C.  $CH_3N = C = O$



**Answer: 3**



**Watch Video Solution**

**19.** What is the name of chlorine containing antibiotic?

A. Chloretone

B. Chloroform

C. Chloromycetin

D. Carbontetrachloride

**Answer: 3**



**Watch Video Solution**

**20.** How much percentage of air by mass is present in troposphere?

A. 40

B. 8

C. 80

D. 100

**Answer: 3**



**Watch Video Solution**

## Assignment Section C

1. Which of the following is a sink for CO ?

A. Haemoglobin

B. Micro-organism present in the soil

C. Oceans

D. Plants

**Answer: 2**



**Watch Video Solution**

2. Which one of the following is not a common component of photochemical smog-----

A. Ozone

B. Acrolein

C. Peroxyacetyl nitrate

D. Chlorofluorocarbons

**Answer: 4**



**Watch Video Solution**

**3. Which one of the following statement is not true ?**

A. Oxides of sulphur, nitrogen and carbon are the most widespread air pollutant

B. pH of drinking water should be between

5.5 - 9.5

C. Concentration of DO below 6 ppm is

good for the growth of fish

D. Clean water would have a BOD value of

less than 5 ppm

**Answer: 3**



**Watch Video Solution**

4. Green chemistry means such reactions which

A. Study the reactions in plants

B. Produce colour during reactions

C. Reduce the use and production of hazardous chemicals

D. Are related to the depletion of ozone layer

**Answer: 3**







Watch Video Solution

5. Which of the following is a secondary pollutant?

A.  $CO_2$

B.  $N_2O$

C.  $SO_2$

D. PAN

**Answer: 4**



Watch Video Solution

6. Reason of lung cancer : -

A. Asbestos

B. Silica

C. Textiles

D. Paper

**Answer: 3**



**Watch Video Solution**

7.  $BOD_5$  is

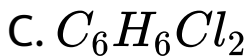
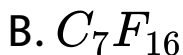
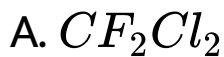
- A. Waste decomposed in 5 days
- B. Oxygen used in 5 days
- C. Microorganisms killed in 5 days
- D. Dissolved oxygen left after 5 days

**Answer: 2**



**Watch Video Solution**

8. Ozone in the stratosphere is deleted by



**Answer: 1**



**Watch Video Solution**

9. Which of the following is responsible for depletion of the ozone layer in the upper strata of the atmosphere :-

A. Polyhalogens

B. Ferrocene

C. Fullerenes

D. Freons

**Answer: 4**



**Watch Video Solution**

**10. Pick up the correct statement :**

A. CO which is a major pollutant resulting from the combustion of fuels in automobiles plays a major role in photochemical smog

B. Classical smog has an oxidizing character while the photochemical smog is reducing in character

C. Photochemical smog occurs in day time whereas the classical smog occurs in the morning hours

D. During formation of smog the level of ozone in the atmosphere goes down

**Answer: 3**



**Watch Video Solution**

**11.** In Antarctica, ozone depletion is due to the formation of which of the following compounds ?

A. Acrolein

B. Peroxy acetyl

C.  $SO_2$  and  $SO_3$

D. Chlorine nitrate

**Answer: 4**



**Watch Video Solution**

**12.** High concentration of fluoride is poisonous and harmful to bones and teeth at levels over

A. 1 ppm



B. 3 ppm

C. 5 ppm

D. 10 ppm

**Answer: 4**



**Watch Video Solution**

**13.** Nitrogen dioxide and sulphur dioxide have some properties in common. Which property is shown by one of these compounds, but not by the other ?

A. is used as a food-preservative

B. Forms 'acid-rain'

C. is a reducing agent

D. Is soluble in water

**Answer: 1**



**Watch Video Solution**

**Assignment Section D Assertion Reason Type  
Questions**

1. A: Ozone depletion potential is maximum in CFC's.

R: CFC loses active chlorine.

A. If both Assertion & Reason are true and the reason is the correct explanation of the assertion, then mark (1).

B. If both Assertion & Reason are true but the reason is not the correct explanation of the assertion, then mark (2)

C. If Assertion is true statement but Reason is false, then mark (3)

D. If both Assertion and Reason are false statements, then mark (4).

**Answer: 2**



**Watch Video Solution**

**2. A:** Photochemical smog is also known as oxidising smog.

R: Photochemical smog is chiefly composed of  $O_3$  PAN, etc.

A. If both Assertion & Reason are true and the reason is the correct explanation of the assertion, then mark (1).

B. If both Assertion & Reason are true but the reason is not the correct explanation of the assertion, then mark (2)

C. If Assertion is true statement but Reason is false, then mark (3)

D. If both Assertion and Reason are false statements, then mark (4).

**Answer: 1**



**Watch Video Solution**

**3. A:** Value of COD is greater than BOD.

**R:** Used oxygen is demanded by some chemicals for oxidation of inorganic and organic pollutants.

- A. If both Assertion & Reason are true and the reason is the correct explanation of the assertion, then mark (1).
- B. If both Assertion & Reason are true but the reason is not the correct explanation of the assertion, then mark (2)
- C. If Assertion is true statement but Reason is false, then mark (3)
- D. If both Assertion and Reason are false statements, then mark (4).

**Answer: 1**



**Watch Video Solution**

**4. A:** Productivity of eutrophic lake is maximum.

**R:** Eutrophication is mainly due to addition of  $SO_4^{2-}$  and heavy metals.

**A.** If both Assertion & Reason are true and the reason is the correct explanation of the assertion, then mark (1).



B. If both Assertion & Reason are true but the reason is not the correct explanation of the assertion, then mark (2)

C. If Assertion is true statement but Reason is false, then mark (3)

D. If both Assertion and Reason are false statements, then mark (4).

**Answer: 3**



**Watch Video Solution**

