

# **CHEMISTRY**

# BOOKS - KUMAR PRAKASHAN KENDRA CHEMISTRY (GUJRATI ENGLISH)

#### **ENVIRONMENT CHEMISTRY**

**Questions Section A** 

1. Define environmental chemistry.



2. Take a quick look at environment pollution.



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**3.** Give the details of different layer of atmosphere and briefly describe about the substance in it.



**4.** Write name of the pollutant found in Troposphere.



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**5.** Explain troposheric pollution done by oxides of sulphur with suitable examples.



**6.** Explain tropospheric pollution spaced by oxides of nitrogen.



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**7.** Explain in short: Pollution of troposphere done by hydrocarbon.



**8.** How does the troposphere get demaged by oxides of carbon ?



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**9.** Explain the damage of troposphere by CO and  $CO_2$ .



**10.** Carbon monoxide gas is more dangerous than carbon dioxide gas. Why?



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11. Explain tropospheric pollution in 100 words.



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**12.** Write a short note on the effect of Global warming and Greenhouse effect on

environment. **View Text Solution 13.** What can we do to reduce the rate of global warming? **View Text Solution** 

**14.** List gases which are responsible for greenhouse effect.



**15.** What would have happened if the greenhouse gases were totally missing in the earth's atmosphere? Discuss.



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**16.** What is acid rain? Explain the formation of acid rain by atmospheric pollutant.



17. Mention the effects of acid rain.



**18.** What steps should be taken to reduce the production of acid rain ?



**19.** Statues and monuments in India are affected by acid rain. How?



20. Explain effects of acid rain on Taj Mahal.



**21.** What efforts are being made by the government to save the Taj Mahal?



22. Explain types of particulate pollutants.



**23.** Write down the effect of particulate pollutants on the environment.



**24.** What is smog? How is classical smog different from photochemical smogs?

**25.** Give breif information about the types of smog.



**26.** Write down the reactions involved during the formation of photochemical smog.



**27.** Explain the formation of photochemical smog with reactions.



**28.** What are the harmful effects of photochemical smog and how can they be controlled?



**29.** Mention the components of photochemical song and its effects.



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**30.** What do you do to control the formation of photochemical smog ?



**31.** How ozone is formed from the oxygen present in atmosphere?



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**32.** What are the reactions involved for ozone layer depletion in the stratosphere?



**33.** How does the depletion of ozon layer done by chlorofluorocarbon ?



**View Text Solution** 

**34.** How did the depletion of ozone layer has created in the atmosphere over the Antarctica? Explain with reactions.



**35.** What do you mean by ozone hole? What are its consequences?



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**36.** Explain in short : Effect of ozone depletion on environment .



**37.** Summerize primary information about water pollution.



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**38.** Have you ever observed any water pollution in your area ? What measures would you suggest to control it?



**39.** What are the major causes of water pollution? Explain.



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**40.** What do you mean by Biochemical Oxygen Demand (BOD)?



**41.** Explain the water pollution occurs by the chemical pollutants.



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**42.** A large number of fish are suddenly found floating dead on a lake. There is no evidence of toxic dumping but you find an abundance of phytoplankton. Suggest a reason for the fish kill.



**43.** Give a brief explanation about about the international standards of drinking water.



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**44.** Summarize the quantities and differentiated quantities of different metals and ions at the international level of drinking water.



**45.** What are pesticides and herbicides ? Explain giving examples.



**View Text Solution** 

**46.** Write a note on effect of various pesticides on living things.



**47.** Explain the side effects of use of herbicides on living things.



## **View Text Solution**

**48.** Do you observe any soil pollution in your neighbourhood? What efforts will you make for controlling the soil pollution?



**49.** For your agricultural field or garden you have developed a compost producing pit. Discuss the process in the light of bad odour, flies and recycling of wastes for a good produce.



**50.** What is biodegradable and non-biodegradable waste?



**51.** How does the non-degradable industrial solid waste is disposaled?



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**52.** What is green fuel? Give the information about waste recycling.



**53.** What kind of steps should be taken to control environmental pollution?



**View Text Solution** 

**54.** How can domestic waste be used as manure?



**55.** What do you mean by green chemistry? How will it help decrease environmental pollution?



**View Text Solution** 

**56.** Give information on uses of green chemistry in day to day life.



1. What is environmental pollution?



**View Text Solution** 

2. Mention the types of pollution.



**View Text Solution** 

3. Mention the types of atmospheric pollution.



4. What is troposphere?



**View Text Solution** 

**5.** Which components are present in troposphere?



**6.** Which components are present in stratosphere?



**View Text Solution** 

**7.** Troposphere is made of turbulent, dusty zone containing air, much water vapour and clouds.



**8.** Mention the type of pollutants of tropospheric pollution.



**9.** Which are the atmospheric air pollutants?



**10.** Give the examples of particulates pollutants.



**11.** State the harmful effects of excessive production of sulfur oxide.



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12. How the nitrogen oxide is made?



**13.** How the excessive amount of nitrogen oxide is harmful?



# **View Text Solution**

**14.** What is green house effect?



**View Text Solution** 

**15.** What are the effects of smoking habits for pregnant women ?



**16.** Give the names of green house gases.



**View Text Solution** 

**17.** What is acid rain?



**18.** Give the name of the gases responsible for the acid rain.



## **View Text Solution**

19. Mention two ways to prevent and rain.



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**20.** Give the name of particulate pollutants with examples.

**21.** On which bases the non-viable particulates can be classified ?



**22.** Give the name of oxidizing and reducing smog.



**23.** State the name of components of photo chemical smog.



**24.** Mention two solutions to control photochemical smog.



25. How does the ozone gas become?





26. Write the uses of freon.



**27.** Mention the harmful effect of ultra violet radiations.



**28.** Mention the main causes for water pollution.



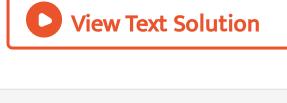
**View Text Solution** 

29. What is Bio-chemical oxygen demand?



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**30.** Mention the effect of chemical pollutants on human body.



31. Write two uses of PCBs.



**32.** What is Eutrophication?



**View Text Solution** 

**33.** What is responsible for soil pollution?



**34.** Give the two names of herbicides.



**View Text Solution** 

**35.** From where the biodegradeble wastes are generated?



**36.** What is green fuel?



**View Text Solution** 

**37.** How does biogas produce?



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**38.** State the action to central environmental pollution.



**39.** What is green chemistry?



**View Text Solution** 

**40.** Why water is used as a medium for reactions?



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Section B Objective Questions Fill In The Blanks

**1.** The substance that spreading pollution is called ....



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2. The fullform DDT is .......



**View Text Solution** 

**3.** The area of 10 km to 50 km from the sea level is called .......

**4.** Hydrocarbon compounds are made from ...... and ......



**5.** ...... has a capacity to stop the flow of oxygen.



**6.** ...... is formed by attaching carbon monoxide with hemoglobin in blood.



**View Text Solution** 

7. Carbon dioxide is found in .......



**View Text Solution** 

Excess amount of carbon dioxide is responsible for



9. ..... gas is used in aircondition.



**View Text Solution** 

**10.** ...... monument (wonder of world) is getting demage due to acid rain.



**View Text Solution** 



**12.** ...... and ...... is formed by reaction of ozone present in the air with hydrocarbon.



**13.** Skin cancer named ...... is caused by harmful UV radiation of sun.



**14.** A specific cloud is formed on antarctia in the winter is called .......



**View Text Solution** 

15. Known sources of pollution is known as .......



**View Text Solution** 

16. Unkown sources of pollution is known as

•••••

**17.** Concentration of dissolved oxygen in water is ...... and concentration of dissolved oxygen in air is ......



**18.** ..... is responsible for the deficiency of fluoride.



**19.** ...... and ...... chemicals reacts as a poison for nervus system.



**View Text Solution** 

**20.** Biogas is used in the production of ...... and its biproduct is used as .......



**View Text Solution** 

Section B Objective Questions State True Or False For The Following Statements

**1.** The lower area of atmosphere, where all living thing including human can stay is known as Troposphere.



**View Text Solution** 

**2.** Troposphere is spread upto 25 kms from sea level.



**3.** The area between 10 km to 50 km from sea level is called stratosphere.



**View Text Solution** 

**4.** The ozone layer protecting the lives is situated in the troposphere.



**5.** Fatal dieses of respiratory system in children are caused due to  $NO_2$  gas.



## **View Text Solution**

**6.** Carbon monoxide binds with the hemoglobin and forms carboxy-hemoglobin complex.



**7.** Carboxy hemoglobin is 100 times more stable than oxy-hemoglobin complex.



### **View Text Solution**

**8.** pH of rainy wates is around 5.6.



**View Text Solution** 

**9.** Smog is produced due to the spread of liquid particles and the evolution of the vapor

in the air.

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**10.** Particles with 5 micron size reaches to the longs directly.



**11.** Burning sensation is caused in nose and throat due to ozone and nitric oxide.



**12.** Concentration of oxygen in cold water is 100 ppm.



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**13.** If the concentration of dissolved oxygen of water is below 6 ppm then the growth of fish gets inhibited.



# Section B Objective Questions Assertion And Reason Type Questions

1. Assertion: pH of rainy water is around 5.6.

Reason : Water reacts with  $CO_2$  in atmosphere and produce  $H^{\,+}$  .

A. Both Assertion and Reason are correct

and the reason is the correct

explanation for assertion.

B. Both assertion and reason are correct,

but the reason is not correct

explanation of assertion.

C. Both the assertion and reason are incorrect.

D. The assertion is incorrect but the reason is correct.

#### **Answer: A**



**2.** Assertion: Acid rain is harmful for agriculture, trees and plants.

Reason: Acid rain dissolves and washer away nutrients needed for their growth.

A. Both Assertion and Reason are correct and the reason is the correct explanation for assertion.

B. Both assertion and reason are correct,

but the reason is not correct

explanation of assertion.

- C. Both the assertion and reason are incorrect.
- D. The assertion is incorrect but the reason is correct.

#### **Answer: A**



**3.** Assertion: It is necessary to know the concentration of flouride ion in dirnking water.

Reason: The increase in amount of fluride ion causes tribes in tooth and bones.

- A. Both Assertion and Reason are correct and the reason is the correct explanation for assertion.
- B. Both assertion and reason are correct,

  but the reason is not correct

  explanation of assertion.
- C. Both the assertion and reason are incorrect.

D. The assertion is incorrect but the reason is correct.

**Answer: A** 



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Section B Objective Questions Match The Following

**1.** Match the particle pollutants given in Part-I with their particles given in Part-II.

| Part- I   | Part-II  |
|-----------|--|
| (A) Smoke | (1) Generally obtained by the condensation of vapor during distilation.  |
| (B) Dust  | (2) Fine solid particles.  |
| (C) Mist  | (3) Produced by particles of spry liquids and by condensation of vapour. |
| (D) Fumes | (4) Formed during comburstion of organic matter.                         |



**2.** Match the water pollutants given in Part-1 with their source given in Part-2

| Part-I                       | Part-II  |
|------------------------------|--|
| (A) Poisonous<br>heavy metal | (1) Due to erosion of soil from the ariculture indusry and mineral industry. |
| (B) Insectisides             | (2) Domestic waste disposal system   |
| (C) Heavy<br>pollutants      | (3) By chemical factories and industries                                     |
| (D) Micro-<br>organisms      | (4) From the substances used to distroy insects, fung and creeds.            |

# Section C Multiple Choice Questions Mcqs Darpan S Examination Oriented Mcqs

**1.** The aggregation of social, biological, physical and chemical factors existing around us is called ........

A. environment

B. atmosphere

C. Both (A) and (B)

D. troposphere

**Answer: A** 



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2. The study of different methods and techniques used for analysis of chemical compounds included in branch of .......

A. Biochemistry

B. Analytical chemistry

- C. Inorganic chemistry
- D. Organic chemistry

#### **Answer: B**



- 3. Which one is rapidly degradable pollutants?
  - A. Agriculture waste
  - **B. Plastic materials**
  - C. Discarded vegetables

D. Heavy metals

#### **Answer: C**



## **View Text Solution**

**4.** Which one of the following is slowly degradable pollutants?

A. Agriculture waste

**B. Plastic materials** 

C. Discarded vegetables

D. Heavy metals

**Answer: A** 



**View Text Solution** 

**5.** Which one of the following is non-degradable pollutants?

A. DDT

B. Plastic material

C. Heavy metals

D. All of these

#### **Answer: D**



- **6.** Our environment consists of .......
  - A. Lithosphere
  - B. Hydrosphere
  - C. Atmosphere
  - D. All of these

#### **Answer: D**



- **7.** The region which is extended upto 500 km above sea level is known as .....
  - A. atmosphere
  - B. troposphere
  - C. stratosphere
  - D. environment

#### **Answer: A**



### **View Text Solution**

**8.** The lowest region of atmosphere in which all living beings including human beings reside is known as ......

A. troposphere

B. stratosphere

C. ozone layer

D. hydrosphere

## **Answer: A**



**View Text Solution** 

- 9. Which one is main pollutant in air?
  - A.  $O_2$
  - B.  $CO_2$
  - $\mathsf{C}.\,CO$
  - D.  $H_2$

**Answer: C** 

10. Which one is present in troposphere?

A.  $CO_2$ 

B.  $H_2O$ 

 $\mathsf{C}.\,N_2$ 

D. All of these

**Answer: D** 



11. Which one is present in stratosphere?

- A.  $N_2$
- $B.O_2$
- $C.CO_2$
- D. All of these

**Answer: D** 



# 12. Which one is particulate pollutant?

- A.  $SO_x$
- B.  $NO_x$
- C. *CO*
- D. Smog

#### **Answer: D**



**13.** Which one is gaseous pollutant of troposphere?

- A.  $NO_x$
- B. Dust
- C. Mist
- D. Fumes

**Answer: A** 



**14.** Which oxidizing agent required to convert sulphur dioxide into sulphur trioxide?

- A. dust
- B.  $H_2O_2$
- $\mathsf{C}.\,NO_2$
- D. All of these

#### **Answer: D**



# **15.** Which diseases cause by $SO_2$ ?

- A. Asthma
- B. Swelling
- C. Irritation to eyes
- D. All of these

#### **Answer: D**



**16.** Which ion when enters into soil act as fertilizer?

A. 
$$NO_3^-$$

$$\mathsf{B.}\,NO_2^-$$

$$\mathsf{C}.\,NO_x$$

D. 
$$SO_x$$

#### **Answer: A**



**17.** Which one is source of  $NO_x$ ?

A. Photosynthesis

B. Smoke generated by supersonic jet

C. Dioxygen

D. Hydrocarbon

**Answer: B** 



**18.** What is the effect of higher concentration of  $NO_2$  ?

A. Damage the leaves of plant

B. Decrease the rate of photosynthesis

C. Both (A) and (B)

D. None of these

Answer: C



**19.** Which one is carcinogens?

A.  $CO_2$ 

B. Hydrocarbon

 $\mathsf{C}.\,NO_2$ 

 $\mathsf{D}.\,CO$ 

**Answer: B** 



**20.** Which complex forms when carbon monoxide enters into body and binds with hemoglobin?

- A. Carboxyhemoglobin complex
- B. Hamencomplex
- C. Oxygen hemoglobin complex
- D. Acidic complex

#### **Answer: A**



**21.** At what proportion of carboxy-hemoglobin the oxygen carrying capacity of blood reduces ?

- A. 4 to 5%
- B. 3 to 4%
- C. 4 to 6%
- D. 3 to 5%

#### **Answer: B**



**22.** What effects are observed if the level of CO increase in pregnant woman?

- A. Premature birth
- B. Spontaneous abortion
- C. Deformed baby
- D. All of these

**Answer: D** 



**23.** State the proportion of  $CO_2$  in atmosphere.

A. 0.3~%

B. 33 %

 $\mathsf{C.}\ 0.03\ \%$ 

D.  $3.3\,\%$ 

# **Answer: C**



**24.** Which one decrease the amount of  $CO_2$  in atmosphere?

- A. Plants
- **B.** Animals
- C. Combution process
- D. Respiration

**Answer: A** 



**25.** The process of warming of the earth is known as ......

A. Green house effect

B. Global warming

C. Both (A) and (B)

D. Ozone effect

**Answer: C** 



26. Which one is green house gas?

A.  $CH_4$ 

B.  $O_3$ 

 $\mathsf{C}.\ CFCs$ 

D. All of these

#### **Answer: D**



# 27. From the following CFC is used in .......

- A. Foam plastic cup
- B. Refrigerator
- C. Airconditioner
- D. All of the given

#### **Answer: D**



**28.** By which process  $N_2O$  mix in environment

A. Combustion of coal

B. From petroleum

C. Oil paints

D. All of these

**Answer: D** 

?



**29.** Photosynthesis utilizes ...... tons of  $CO_2$  annually from atmosphere.

- A. 2200 crore
- B. 1600 crore
- C. 200 crore
- D. 2000 crore

# **Answer: A**



**30.** Increase in average temperature of earth may increases the possibilities of disease like

- A. asthma
- B. yellow fever
- C. weak eyesight
- D. headache

#### **Answer: B**



**31.** The pH of rain water is ......

A. 6.5

B.7.0

C. 5.6

D. 4.6

## **Answer: C**



**32.** Which acid is formed by reaction of rain water with  $CO_2$  ?

- A.  $H_2CO_3$
- $\mathsf{B.}\,H_2SO_3$
- $\mathsf{C}.\,H_3PO_3$
- D.  $NHO_3$

**Answer: A** 



33. State the product of reaction:

$$2SO_{2\,(\,g\,)}\,+O_{2\,(\,g\,)}\,+2H_{2}O_{\,(\,1\,)}\,
ightarrow$$

A.  $2H_2SO_3$ 

 $\operatorname{B.}2H_2SO_4$ 

C.  $4H_2SO_4$ 

 $\operatorname{D.}H_2SO_4$ 

## **Answer: B**



| <b>34.</b> Which one is viable | particulate | pollutant? |
|--------------------------------|-------------|------------|
|--------------------------------|-------------|------------|

- A. algae
- B. smoke
- C. dust
- D. mist

## **Answer: A**



**35.** Which one is non-viable particulate pollutant?

- A. Fumes
- B. Algae
- C. Fungi
- D. Bacteria

**Answer: A** 



**36.** What is called for natural spray of liquid produced by condensation of vapours present in air ?

A. mist

B. fumes

C. dust

D. smoke

**Answer: A** 



| <b>37.</b> The | combination | of | smoke | and | fog | known |
|----------------|-------------|----|-------|-----|-----|-------|
| as             |             |    |       |     |     |       |

- A. Fog
- B. Smog
- C. Mist
- D. All of these

# **Answer: B**



**38.** What is the other name for classical smog

A. Reducing smog

B. London smog

C. Both (A) and (B)

D. Los Angeles smog

**Answer: C** 



**39.** What is the other name for photochemical smog?

A. London smog

B. Los Angeles smog

C. Oxidizing smog

D. Both (B) and (C)

#### **Answer: D**



**40.**  $NO_2$  and  $O_3$  react with unburnt hydrocarbons present in polluted air and produce

- A. Formaldehyde
- B. Acrolein
- C. Peroxyacetyl nitrate
- D. All of these

#### **Answer: D**



**41.** Which layer is present in upper region of stratosphere?

- A.  $O_3$
- B. CFC
- $\mathsf{C}.\,CO_2$
- D. CO

**Answer: A** 



**42.** From which harmful effect ozone layer protects all living being?

A. Ultraviolet radiations coming from sunlight.

B.  $CO_2$  in atmosphere.

C. Effect of poisonous gas from

combustion of hydrocarbon

D. All of the above

# **Answer: A**



**43.** The substances that cause depletion of ozone or make it thinner are abbreviated as

A. TDS

B. GWP

C. ODS

D. BOD

**Answer: C** 



44. Which one known as ODS?

A. CFC

B. Bromo Flouro carbon

C. Both (A) and (B)

D. Oxyflouro carbon

**Answer: C** 



**45.** ODS are used in .......

A. refrigerator

B. water cooler

C. airconditioner

D. All of these

**Answer: D** 



**46.** What is caused by UV rays?

A. Skin cancer

B. Harmful genetic change in cell

C. Reduction in soil moisture

D. All of these

#### **Answer: D**



**47.** Which one is remedy to protect depletion of ozone layer?

A. Prevent the use of ODS

B. Decreasing the production of CFC upto 50%.

C. Both (A) and (B)

D. By releasing more  $CO_2$ 

#### **Answer: C**



48. State water pollutant from followings.

A. Microorganisms

B. Radioactive substances

C. Plant nutrients

D. All of the above

**Answer: D** 



**49.** Which water pollutant produce from water used for cooling in industries?

- A. Heat
- **B.** Pesticides
- C. Heavy metals
- D. None of these

**Answer: A** 



**50.** Which chemical is used to remove fluoride

from water?

- A.  $MgCl_2$
- B.  $CaCl_2$
- $\mathsf{C}.\,BaCl_2$
- D.  $SrCl_2$

**Answer: B** 



**51.** Which methods are used for removal or reduction of soluble salts and turbidity of water?

- A. Reverse osmosis
- B. Ion exchange
- C. Both (A) and (B)
- D. None of these

#### **Answer: C**



### 52. What is used in ion exchange method?

- A. Cationic resin
- B. Anionic resin
- C. Both (A) and (B)
- D.  $Cl_2$  water

#### **Answer: C**



**53.** Which cations can be removed by ion exchange method?

- A. Ca and Mg
- B. K and Na
- C. Ba and Al
- D. U and Ra

**Answer: A** 



**54.** Which one is easy, safe and reliable method to make water germ free ?

- A. by passing  $Cl_2$  gas
- B. by boiling water
- C. UV rays
- D. by proper devices

#### **Answer: B**



**55.** Which methods are used to make water germ free?

- A. Passing  $Cl_2$
- B. Passing of UV rays
- C. By bleaching powder
- D. All of these

**Answer: D** 



**56.** How much gm of bleaching powder required for chlorination of 1000 lit water?

- A. 5 gm
- B. 5 kg
- C. 50 gm
- D. 0.5 gm

#### **Answer: A**



# **57.** Which method is used to make water germ

free effectively and rapidly?

- A. Passing  $Cl_2$
- B. Passing Ozone gas
- C. By boiling
- D. None of these

#### **Answer: B**



**58.** Which part of soil is formed by decomposition of animal and plant wastes?

- A. Organic part
- B. Inorganic part
- C. Both (A) and (B)
- D. Rocks

**Answer: A** 



**59.** Which one is main cause for soil pollution?

A. Indiscriminate use of artifical fertilizers

B. Indiscriminate use of artifical fertilizers

C. Dumping of soild waste in soil

D. All of these

#### **Answer: D**



**60.** Which element present as impurity in artifical fertilizers?

- A. As
- B. Pb
- C. Cd
- D. All of these

**Answer: D** 



61. NPK like fertilizers induce which adverse effect in soil?

A. Reduced production of crops and vegetables

B. Hardening of soil

C. Decrease the ability of soil to absorb

water

D. All of these

# **Answer: A**



**62.** Which one is pesticides?

A. Insecticides

B. Fungicides

C. Herbicides

D. All of these

**Answer: D** 



63. ..... are found toxic for mammals.

A. Sodium chlorate

B. Sodium arsenic

C. Both (A) and (B)

D. Mercuric compounds

#### **Answer: C**



**64.** Which fungicide decomposed in soil and their products are harmful?

A. DDT

B. Mercuric compounds

C. BHC

D. None of these

**Answer: B** 



| <b>65.</b> | Which | one is | biod | degrad | lable | substance | e ? |
|------------|-------|--------|------|--------|-------|-----------|-----|
|------------|-------|--------|------|--------|-------|-----------|-----|

- A. Paper
- B. Kitchen wastes
- C. Both (A) and (B)
- D. Plastic

#### **Answer: C**



**66.** Which one is non-biodegradable substance

A. Paper

?

B. Kitchen wastes

C. Glass

D. All of these

**Answer: C** 



| <b>67.</b> Which | substance can | be recycled? |
|------------------|---------------|--------------|
|------------------|---------------|--------------|

- A. Paper
- B. Plastic
- C. Glass
- D. All of these

#### **Answer: A**



**68.** Which substance are present in industrial effluents?

A. Heavy metals

B. Plastic

C. Glass

D. All of these

**Answer: A** 



| <b>69.</b> Which one is main cause for deforestation? |  |  |  |  |  |
|---|--|--|--|--|--|
| A. Urbanization                                       |  |  |  |  |  |
| B. Industrialization                                  |  |  |  |  |  |
| C. Over population                                    |  |  |  |  |  |
| D. All of these                                       |  |  |  |  |  |
|   |  |  |  |  |  |
| Answer: D   |  |  |  |  |  |
| View Text Solution                                    |  |  |  |  |  |

**70.** Which one is natural fertilizer?

- A. Rhizobium
- B. Azotobacters
- C. Compost
- D. All of these

#### **Answer: D**



**View Text Solution** 

**71.** Which one is biofertilizers?

A. Rhizobium

- **B.** Azotobacters
- C. Both (A) and (B)
- D. None of these

#### **Answer: C**



- 72. Which plant extract act as insecticides?
  - A. Neem
  - B. Ak

- C. Dhatura
- D. All of these

#### **Answer: D**



- 73. Which fungi is known as insecticide?
  - A. Trichoderma
  - B. Batecorscume
  - C. Ossilatrial

D. None of these

**Answer: A** 



**View Text Solution** 

**74.** From which industry phenol waste produced?

A. Sugar

B. Petroleum

C. Detergent

D. Pesticides

**Answer: B** 



**View Text Solution** 

**75.** From which industry aromatic organic compound are produced ?

A. Dairy

B. Pesticide

C. Fertilizers

D. Sugar

#### **Answer: B**



## **View Text Solution**

**76.** Why the waste water produced by sugar industry becomes black and gives bad smell?

- A. Due to production of  $H_2S$  gas.
- B. As it is not decompose.
- C. Due to production of  $CO_2$  gas.

D. None of these

**Answer: A** 



**View Text Solution** 

**77.** Which metal ions are present in waste of electroplating and metal refining industry?

A. Nickel

B. Chromium

C. Zinc

D. All of these

#### **Answer: D**



**View Text Solution** 

**78.** ...... present in polluted water are also the food per bacteria.

- A. Organic compounds
- B. Inorganic compounds
- C. Soluble salts

D. Metals

#### **Answer: B**



**View Text Solution** 

**79.** For BOD, the sample of liquid waste kept for 5 days at ...... temp.

A. 293 K

B. 273 K

C. 298 K

D. 239 K

**Answer: A** 



**View Text Solution** 

**80.** The amount of dissolved oxygen required for oxidation of all the organic material present in liquid waste is known as ......

A. BOD

B. COD

- C. Both (A) and (B)
- D. None of these

**Answer: A** 



**View Text Solution** 

**81.** Which colour vessel is used for storage of biodegradable substance ?

- A. Yellow
- B. Green

C. Red

D. Black

**Answer: B** 



**View Text Solution** 

**82.** The science for environmentally favourable synthesis is known as ......

A. Biochemistry

B. Green chemistry

- C. Environmental chemistry
- D. Analytical chemistry

**Answer: B** 



**View Text Solution** 

**83.** For green chemistry..... principle is mentioned.

- A. Ten
- B. Twelve

C. Five

D. Twenty

**Answer: B** 



**View Text Solution** 

**84.** Which statement is correct regarding green chemistry?

A. Avoid use of catalyst.

B. Use harmful chemicals

C. Formation of wastes or byproducts should be prevented.

D. All of the above

**Answer: C** 



**View Text Solution** 

**85.** ...... was used as solvent for dry cleaning of clothes.

A. Tetrachloroethane

- B. Dichloro ethene
- C. Both (A) and (B)
- D. None of these

#### **Answer: A**



**View Text Solution** 

**86.** Which one is used as bleaching agent for washing clothes ?

A. Tetrachloroethane

B. Liquefied  $CO_2$ 

 $\mathsf{C}.\,H_2O_2$ 

D. None of these

# **Answer: C**



**View Text Solution** 

**87.** Due to which depletion of ozone layer take place?

A. CFC

- $B.O_2$
- C. COC
- D. FCC

#### **Answer: A**



- 88. Which one is correct for ozone layer?
  - A. It prevent all rays of sunlight.
  - B. It is harmful for living organisms.

C. It protects all living beings against harmful effect of UV radiation from sunlight.

D. All are correct

**Answer: C** 



**View Text Solution** 

Section C Multiple Choice Questions Mcqs Mcqs Asked In Competitive Exam

- **1.** Which of the following strategy is not a correct approach to reduce global warming
  - A. Reducing the green house has emission by limiting the use of fossil fules.
  - B. Increase the vegetation cover particularly the forest for photosynthetic utilization of  $CO_2$
  - C. Minimizing the use of nitrogen fertilizers  $\ \, \text{in agriculture for reducing} \ \, N_2O$

emission.

D. Increasing the use of air conditioners, refrigeration unit and production of plastic foams and propellants in aerosal spray cans.

#### **Answer: D**



2. The chemical entities present in thermosphere of the atmosphere are

A. 
$$O_2^+$$
 ,  $O^+$  ,  $NO^+$ 

B.  $O_3$ 

C. 
$$N_2$$
,  $O_2$ ,  $CO_2$ ,  $H_2O$ 

D. 
$$O_3,O_2^+,O_2^-$$

# **Answer: D**



**3.** Carbon monoxide (CO) is harmful to man because

A. it forms carbolic acid

B. it generates excess  ${\cal C}{\cal O}_2$ 

C. it is carcinogenic.

D. it competes with  $\mathcal{O}_2$  for hemoglobin.

# **Answer: D**



**4.** What are the chief pollutants of the atmosphere which are most likely to deplete the ozone layer?

A. Sulphur dioxide

B. Nitrogen oxide and fluorocarbons

C. Carbon dioxide

D. Carbon monoxide

# **Answer: B**



- 5. The process of 'eutrophication' is due to
  - A. Increase in concentration of insecticide in water.
  - B. increase in concentration of fluoride ion in water.
  - C. the reduction in concentration of the dissolved oxygen in water due to phosphate pollution in water.

D. attack of younger leaves of a plant by peroxyacetyl nitrate.

# **Answer: C**



**View Text Solution** 

6. Excess nitrate in drinking water can cause

A. Methemoglobinemia

B. Kidney damage

C. Liver damage

D. Laxative effect

**Answer: A** 



**View Text Solution** 

# Section C Multiple Choice Questions Mcqs Mcqs Asked In Board Exam

**1.** Which sequence for green house gases is truely based on GWP?

A.  $CFC > N_2O > CO_2 > CH_4$ 

B.  $CFC > N_2O > CH_4 > CO_2$ 

 $\mathsf{C.}\,CFC > CO_2 > N_2O > CH_4$ 

D.  $CFC > CH_4 > N_2O > CO_2$ 

#### **Answer: B**



**View Text Solution** 

2. Which ion is present in higher amount than its desirable limit in drinking water may cause blue baby disease ?

- A. Sulphate
- B. Nitrate
- C. Chloride
- D. Fluoride

# **Answer: B**



**View Text Solution** 

**3.** Which gas has greater contribution in global warming?

A.  $CH_4$ 

B. CFC

 $\mathsf{C}.\,NO_2$ 

D.  $CO_2$ 

# Answer: D



**4.** What is the prescribed standard of desirable limit of TDS (Total Dissolved Solids) of drinking water according to BIS?

- A. 250 ppm
- B. 500 ppm
- C. 200 ppm
- D. 300 ppm

# **Answer: B**



**View Text Solution** 

5. High concentration of which gas leads to stiffness of flower buds which eventually fall off from plants?

| A. | ozone |
|----|-------|
|    |       |

B.  $CO_2$ 

 $\mathsf{C}.\,SO_2$ 

D.  $NO_2$ 

# **Answer: C**



**View Text Solution** 

**6.** Which gas has contribution of  $8\,\%$  in globl warming ?

A. CFC

B.  $N_2O$ 

 $\mathsf{C}.\,O_3$ 

D.  $H_2O$ 

# **Answer: C**



**View Text Solution** 

**7.** Fly ash is mainly the waste produced by which industry?

- A. Dairy industry
- B. Detergent industry
- C. Petroleum industry
- D. Thermal Power industry

# **Answer: D**



**View Text Solution** 

**8.** Which air pollutant gas reduces the rate of photosynthesis?

- A.  $SO_2$
- $\mathsf{B.}\,NO$
- $\mathsf{C}.\,NO_2$
- D.  $SO_3$



**View Text Solution** 

**9.** Which of the following is non biodegradable?

- A. Paper
- B. glass
- C. Waste food product
- D. Rotten vegetable

# **Answer: B**



**View Text Solution** 

10. Which gas is responsible for acid-rain?

A.  $CO_2$ 

B.  $NH_3$ 

 $\mathsf{C}.\,CH_4$ 

D.  $NO_2$ 

#### **Answer: D**



**View Text Solution** 

**11.** Which of the following diseases is caused by ozone layer depletion?

A. Breast Cancer

- B. Lung Cancer
- C. Skin Cancer
- D. Blood Cancer



- 12. Effect of fluorosis disease is.....
  - A. irritation in stomach.
  - B. causes heart diseases.

- C. weakness of teeth and bones.
- D. weakness of vision



- **13.** In which of the following industries Flyash is produced as waste?
  - A. Fertilizer industry
  - B. Detergent industry

- C. Thermal power industry
- D. Dairy industry



- 14. Give full form of DDT.
  - A. Dichloro dimethyl trifluoro ethene
  - B. Difluoro diphenyl trichloro ethene
  - C. Dichloro diphenyl trichloro ethane

D. Difluoro dimethyl trichloro ethane

**Answer: C** 



**View Text Solution** 

**15.** It is not advisable to bleach paper by using Chlorine because ........

A. It reacts with lignin to form dioxin which is a carcinogenic compound.

B. It reacts with lignin to form dioxygen which is a carcinogenic compound.

C. It reacts with  $H_2O_2$  to form carcinogenic compounds.

D. It can not bleach paper.

Answer: A



**16.** Choose the correct option from the following to prevent soil pollution.

A. Use chemical fertilizers in the farm.

B. Use extract on Neem, Aak and Dhatura leaves to control pests.

C. Plastic wastes should be dumped in the soil.

D. Use chemical pesticides to save crop.

**Answer: B** 

**17.** What is the harmful effect of water having pH value less than 6.5 ?

A. It decreases the effect of chlorination.

B. Corrosion of pipe used for transportation of water takes place.

C. It releases harmful metals like Na, Mg.

D. Taste of water is changed.

Answer: B

**18.** What is another name for photo-chemical Smog ?

A. Los Angeles Smog

B. London Smog

C. Reducing Smog

D. Classical Smog

**Answer: A** 



View Text Solution

19. Identify A and B in the given reaction.

$$CF_2Cl_{2\,(\,g\,)} \stackrel{A}{\longrightarrow} B + CF_2Cl_{2\,(\,g\,)}$$

A. hv,  $Cl^-$ 

B. uv,  $Cl^-$ 

 $\mathsf{C}.\,uv,\,Cl$ 

D.  $hvCl^+$ 

#### **Answer: C**



# Section C Multiple Choice Questions Mcqs Mcqs Asked In Jee Neet Aieee

1. The green house effect is because of the

A. presence of gases, which in general are strong infrared absorbers, in the atmosphere.

B. presence of  $CO_2$  only in the atmosphere.

C. pressure of  ${\cal O}_3$  and  ${\cal C}{\cal H}_4$  in the atmosphere.

D.  $N_2O$  and chlorofluorohydrocarbons in the atmosphere.

# **Answer: A**



2. Which of the following is/are the hazardous pollutant(s) present in automobile exhaust gases?

(i) N2 (ii) CO (iii)  $CH_4$ (iv) Oxides of nitrogen A. (ii) and (iii) B. (i) and (ii) C. (ii) and (iv) D. (i) and (iii) **Answer: C View Text Solution**  **3.** Green chemistry means such reactions which:

A. produce colour during reactions.

B. reduce the use and production of hazardous chemicals.

C. are related to the depletion of ozone layer

D. study the reactions in plants.

## **Answer: B**

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

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

- B. Concentration of DO below 6 ppm is good for the growth of fish.
- C. Clean water would have a BOD value of less than 5 ppm.

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

# **Answer: B**



# **View Text Solution**

5. Assertion: Nitrogen and Oxygen are the main components in the atmosphere but these do not react to form oxides of nitrogen.

Reason: The reaction between nitrogen and oxygen requires high temperature.

- A. Both assertion and reason are correct,

  and the reason is the correct

  explanation for the assertion
- B. Both assertion and reason are correct,
  but the reason is not the correct
  explanation for the assertion
- C. The assertion is incorrect, but the reason is correct.
- D. Both the assertion and reason are incorrect.

## **Answer: A**



**6.** The concentration of fluoride, lead, nitrate and iron in a water sample from an underground lake was found to be 1000 ppb, 40 ppb, 100 ppm and 0.2 ppm, respectively. This water is unsuitable for drinking due to high concentration of:

A. Iron

B. Fluoride

C. Lead

D. Nitrate

#### **Answer: C**



**View Text Solution** 

7. The recommended concentration of fluoride ion in drinking water is up to 1 ppm as fluoride ion is required to make teeth enamel harder by converting  $\left[3Ca(PO_4)2.\ Ca(OH)_2\right]$  to :

A. 
$$[CaF_2]$$

 $\operatorname{B.}\left[3CaF_{2}\cdot Ca(OH)_{2}\right]$ 

C.  $\left[3Ca_3(PO_4)_2\cdot CaF_2
ight]$ 

D.  $\left[3ig(Ca(OH)_2ig]\cdot CaF_2ig]$ 

# **Answer: C**



8. Which oxide of nitrogen is not a common pollutant introduced into the atmosphere both due to natural and human activity?

A. NO

B.  $N_2O_5$ 

 $\mathsf{C}.\,N_2O$ 

D.  $NO_2$ 

# **Answer: B**



**View Text Solution** 

**9.** Among the following, the one that is not a green house gas is.....

A. Sulphur dioxide

B. Nitrous oxide

C. Methane

D. Ozone

# **Answer: A**



**View Text Solution** 

10. A water sample has ppm level concentration of the following metals: Fe = 0.2

, Mn = 5.0 , Cu = 3.0, Zn = 5.0. The metal that

makes the water sample unsuitable for drinking is.... A. Cu

B. Mn

C. Zn

D. Fe

# **Answer: B**



**11.** The reaction that is not involved in the ozone layer depletion mechanism in the stratosphere is ......

A. 
$$CF_2Cl_{2\,(\,g\,)} \stackrel{uv}{\longrightarrow} Cl_{\,(\,g\,)} + CF_2Cl_{\,(\,g\,)}$$

B. 
$$CH_4+2O_3
ightarrow 3CH_2=O+3H_2O$$

$$\mathsf{C}. \ HOCl_{\,(\,g\,)} \stackrel{hv}{\longrightarrow} OH_{\,(\,g\,)} \ + Cl_{\,(\,g\,)}$$

D. 
$$CO_{(g)} + O_{(g)} o Cl_{(g)} + O_{2(g)}$$

#### **Answer: B**



12. Excessive release of  $CO_2$  into the atomosphere results in :

A. polar vortex

B. depletion of ozone

C. formation of smog

D. global warming

**Answer: D** 



**13.** Among the gases (i) – (v), the gases that cause greenhouse effect are :

(i)  $CO_2$  (ii)  $H_2O$  (iii) CFC (iv)  $O_2$  (v)  $O_3$ 

A. i, ii, iii, and iv

B. i, iii, iv and v

C. i and iv

D. i, ii, iii and v

#### **Answer: D**



# Section D Ncert Exemplar Solution Multiple Choice Questions Mcqs

**1.** Which of the following gases is not a green house gas ?

A. CO

B.  $O_3$ 

 $\mathsf{C}.\,CH_4$ 

D.  $H_2O$  vapour

Answer: A

2. Photochemical smog occurs in warm, dry and sunny climate. One of the following is not amongst the components of photochemical smog, identify it.

A.  $NO_3$ 

 $B.O_3$ 

 $\mathsf{C}.\,SO_2$ 

D. Unsaturated hydrocarbon

#### **Answer: C**



- **3.** Which of the following statements is not true about classical smog?
  - A. Its main components are produced by the action of sunlight on emissions of auto mobiles and factories.
  - B. Produced in cold and humid climate.

C. It contains compounds of reducing nature.

D. It contains smoke, fog and sulphur dioxide.

# **Answer: A**



**4.** Biochemical Oxygen Demand, (BOD) is a measure of organic material present in water.

A. rich in dissolved oxygen.

B. poor in dissolved oxygen.

C. highly polluted.

D. not suitable for aquatic life

## **Answer: A**



- **5.** Which of the following statements is wrong?
  - A. Ozone is not responsible for green house effect.
  - B. Ozone can oxidise sulphur dioxide present in the atmosphere to sulphur trioxide.
  - C. Ozone hole is thinning of ozone layer present in stratosphere.

D. Ozone is produced in upper stratosphere by the action of UV rays on oxygen.

# **Answer: A**



**View Text Solution** 

**6.** Sewage containing organic waste should not be disposed in water bodies because it causes major water pollution. Fishes in such a polluted water die because of

- A. Large number of mosquitoes.
- B. Increase in the amount of dissolved oxygen.
- C. Decrease in the amount of dissolved oxygen in water.
- D. Clogging of gills by mud.

#### **Answer: C**



**7.** Which of the following statements about photochemical smog is wrong?

A. It has high concentration of oxidising agents.

B. It has low concentration of oxidising agent.

C. It can be controlled by controlling the release of  $NO_2$ , hydrocarbons, ozone etc.

D. Plantation of some plants like pinus helps in controlling photochemical smog.

# **Answer: B**



**View Text Solution** 

**8.** 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. Stratosphere
- B. Troposphere
- C. Mesosphere
- D. Hydrosphere

# **Answer: B**



**View Text Solution** 

**9.** Dinitrogen and dioxygen are main constituents of air but these do not react with

each other to form oxides of nitrogen because

A. the reaction is endothermic and requires very high temperature

B. the reaction can be initiated only in presence of a catalyst.

C. oxides of nitrogen are unstable.

D.  $N_2$  and  $O_2$  are unreactive.

# **Answer: A**



10. The pollutants which come directly in the air from sources are called primary pollutants. Primary pollutants are sometimes converted into secondary pollutants. Which of the following belongs to secondary air pollutants?

A. CO

B. Hydrocarbon

C. Peroxyacetyl nitrate

D. NO

#### **Answer: C**



View Text Solution

**11.** Which of the following statements is correct?

A. Ozone hole is a hole formed in stratosphere from which ozone oozes out.

- B. Ozone hole is a hole formed in the troposphere from which ozone oozes out.
- C. Ozone hole is thinning of ozone layer of stratosphere at some places.
- D. Ozone hole means vanishing of ozone layer around the earth completely.

### **Answer: C**



**12.** Which of the following practices will not come under green chemistry?

A. If possible, making use of soap made of vegetable oils instead of using synthetic detergents.

B. Using  $H_2O_2$  for bleaching purpose instead of using chlorine based bleaching agents.

C. Using bicycle for travelling small distances instead of using petrol/diesel

based vehicles.

D. Using plastic cans for neatly storing substances.

## **Answer: D**



**View Text Solution** 

**13.** Phosphate containing fertilisers cause water pollution. Addition of such compounds in water bodies causes.....

- A. enhanced growth of algae.
- B. decrease in amount of dissolved oxygen in water.
- C. deposition of calcium phosphate.
- D. increase in fish population.

**Answer: A::B** 



**View Text Solution** 

14. The acids present in acid rain are .........

| A. Peroxyacetylnitrate                               |
|--|
| B. $H_2CO_3$   |
| C. $NHO_3$   |
| D. $H_2SO_4$   |
| Answer: B::C::D  View Text Solution                  |
|  |
| <b>15.</b> The consequences of global warming may be |

A. increase in average temperature of the earth.

B. melting of Himalayan Glaciers.

C. increased biochemical oxygen demand.

D. eutrophication.

Answer: A::B



**16.** Acid rain is known to contain some acids. Name these acids and where from they come in rain?



**View Text Solution** 

17. Ozone is a toxic gas and is a strong oxidising agent even then its presence in the stratosphere is very important. Explain what would happen if ozone from this region is completely removed?

#### **View Text Solution**

**18.** Dissolved oxygen in water is very important for aquatic life. What processes are responsible for the reduction of dissolved oxygen in water?



**View Text Solution** 

**19.** On the basis of chemical reactions involved, explain how do chlorofluorocarbons cause thinning of ozone layer in stratosphere.



**20.** What could be the harmful effects of improper management of industrial and domestic solid waste in a city?



**21.** During an educational trip, a student of botany saw a beautiful lake in a village. She collected many plants from that area. She

noticed that villagers were washing clothes around the lake and at some places waste material from houses was destroying its beauty.

After few years, she visited the same lake again. She was surprised to find that the lake was covered with algae, stinking smell was coming out and its water had become unusable. Can you explain the reason for this condition of the lake?



**View Text Solution** 

**22.** What are biodegradable and non-biodegradable pollutants?



**View Text Solution** 

**23.** What are the sources of dissolved oxygen in water?



**24.** What is the importance of measuring BOD of a water body?



**25.** Why does water covered with excessive algal growth become polluted?



**View Text Solution** 

**26.** A factory was started near a village. Suddenly villagers started feeling the presence of irritating vapours in the village and cases of headache, chest pain, cough, dryness of throat

and breathing problems increased. Villagers blamed the emissions from the chimney of the factory for such problems. Explain what could have happened. Give chemical reactions for the support of your explanation.



**View Text Solution** 

27. Oxidation of sulphur dioxide into sulphur trioxide in the absence of a catalyst is a slow process but this oxidation occurs easily in the atmosphere. Explain how does this happen.

Give chemical reactions for the conversion of  $SO_2$  into  $SO_3$ .

28. From where does ozone come in the

29. How is ozone produced in stratosphere?



**View Text Solution** 

photo-chemical smog?



**30.** Ozone is a gas heavier than air. Why does ozone layer not settle down near the earth?



### **View Text Solution**

**31.** Some time ago formation of polar stratospheric clouds was reported over Antarctica. Why were these formed? What happens when such clouds break up by warmth of sunlight?

**32.** A person was using water supplied by Municipality. Due to shortage of water he started using underground water. He felt laxative effect. What could be the cause?



Section D Ncert Exemplar Solution Multiple Choice Questions Mcqs More Than One Correct Answer **1.** Which of the following conditions shows the polluted environment.

A. pH of rain water is 5.6.

B. amount of carbondioxide in the atmosphere is 0.03%.

C. biochemical oxygen demand

D. eutrophication

**Answer: C::D** 



**View Text Solution** 

## Section D Ncert Exemplar Solution Short Answer Type

1. Green house effect leads to global warming.

Which substances are responsible for green house effect?



Section D Ncert Exemplar Solution Match The Following

**1.** Match the terms given in Column-I with the compounds given in Column-II.

|             | Column-I                    | шц  | Column-II                            |
|-------------|-----------------------------|-----|--------------------------------------|
| (A)         | Acid rain                   | (1) | CHCl <sub>2</sub> - CHF <sub>2</sub> |
| (B)         | Photochemical smog          | (2) | CO                                   |
| (C)         | Combination with hemoglobin | (3) | CO <sub>2</sub>                      |
| (D) Depleti | Depletion of ozone          | (4) | SO <sub>2</sub>                      |
|             | layer                       | (5) | Unsaturated hydrocarbons             |



**2.** Match the pollutant(s) in Column-I with the effect(s) in Column-II.

|     | Column-I                     | Column-II                                      |
|-----|------------------------------|--|
| (A) | Oxides of sulphur            | (1) Global warming                             |
| (B) | Nitrogen dioxide             | (2) Damage to kidney                           |
| (C) | Carbon dioxide               | (3) 'Blue baby' syndrome                       |
| (D) | Nitrate in drinking<br>water | (4) Respiratory diseases                       |
| (E) | Lead                         | (5) Red haze in traffic and<br>congested areas |



**3.** Match the activity given in Column-I with the type of pollution created by it given in Column

II.

|     | Column-I (Activity)  |     | Column-II (Effect)  |
|-----|--|-----|---|
| (A) | Releasing gases to the atmosphere after<br>burning waste material containing sulphur | (a) | Water pollution.  |
| (B) | Using carbamates as pesticides   | (b) | Photochemical smog, damage to plant life,<br>corrosion to building material, induce breathing<br>problems, water pollution.             |
| (C) | Using synthetic detergents for washing clothes                                       | (c) | Damaging ozone layer.   |
| (D) | Releasing gases produced by automobiles and factories in the atmosphere              | (d) | May cause nerve diseases in human.  |
| (E) | Using chlorofluorocarbon compounds for cleaning computer part                        | (e) | Classical smog, acid rain, water pollution, induce<br>water pollution, breathing problems, damage<br>to buildings, corrosion of metals. |

**4.** Match the pollutants given in Column-I with their effects given in Column-II.

| Column-I |                                | Column-II                           |  |
|----------|--------------------------------|-------------------------------------|--|
| (A)      | Phosphate fertilisers in water | (1) BOD level of water<br>increases |  |
| (B)      | Methane in air                 | (2) Acid rain                       |  |
| (C)      | Synthetic detergents in water  | (3) Global warming                  |  |
| (D)      | Nitrogen oxides in air         | (4) Eutrophication                  |  |



## Section D Ncert Exemplar Solution Assertion And Reason Type

**1.** Assertion (A): Green house effect was observed in houses used to grow plants and these are made of green glass.

Reason (R): Green house name has been given because glass houses are made of green glass.

A. Both (A) and (R) are correct and (R) is the correct explanation of (A).

B. Both (A) and (R) are correct but (R) is not

the correct explanation of (A).

C. Both (A) and (R) are not correct.

D. (A) is not correct but R is correct.

### Answer: A::B::C::D



**2.** Assertion (A): The pH of acid rain is less than 5.6.

Reason (R): Carbon dioxide present in the

atmosphere dissolves in rain water and forms carbonic acid.

A. Both (A) and (R) are correct and (R) is the correct explanation of (A).

B. Both (A) and (R) are correct but (R) is not the correct explanation of (A).

C. Both (A) and (R) are not correct.

D. (A) is not correct but R is correct.

#### Answer: A::B::C::D



**3.** Assertion (A): Photochemical smog is oxidising in nature.

Reason (R) : Photochemical smog contains  $NO_2$  and  $O_3$ , which are formed during the sequence of reactions.

A. Both (A) and (R) are correct and (R) is the correct explanation of (A).

B. Both (A) and (R) are correct but (R) is not the correct explanation of (A).

C. Both (A) and (R) are not correct.

D. (A) is not correct but R is correct.

Answer: A::B::C::D



**View Text Solution** 

**4.** Assertion (A): Carbon dioxide is one of the important greenhouse gases.

Reason (R): It is largely produced by respiratory function of animals and plants.

A. Both (A) and (R) are correct and (R) is the correct explanation of (A).

B. Both (A) and (R) are correct but (R) is not the correct explanation of (A).

C. Both (A) and (R) are not correct.

D. (A) is not correct but R is correct.

Answer: A::B::C::D



**View Text Solution** 

**5.** Assertion (A): Ozone is destroyed by solar radiation in upper stratosphere.

Reason (R): Thinning of the ozone layer allows excessive UV radiations to reach the surface of earth.

A. Both (A) and (R) are correct and (R) is the correct explanation of (A).

B. Both (A) and (R) are correct but (R) is not the correct explanation of (A).

C. Both (A) and (R) are not correct.

D. (A) is not correct but R is correct.

Answer: A::B::C



**View Text Solution** 

**6.** Assertion (A): Excessive use of chlorinated synthetic pesticides causes soil and water pollution.

Reason (R) : Such pesticides are nonbiodegradable

A. Both (A) and (R) are correct and (R) is the correct explanation of (A).

B. Both (A) and (R) are correct but (R) is not the correct explanation of (A).

C. Both (A) and (R) are not correct.

D. (A) is not correct but R is correct.

Answer: A::B::C::D



**View Text Solution** 

**7.** Assertion (A): If BOD level of water in a reservoir is less than 5 ppm it is highly polluted.

Reason (R): High biological oxygen demand means low activity of bacteria in water.

A. Both (A) and (R) are correct and (R) is

the correct explanation of (A).

B. Both (A) and (R) are correct but (R) is not

the correct explanation of (A).

C. Both (A) and (R) are not correct.

D. (A) is not correct but R is correct.

Answer: A::B::C::D



**View Text Solution** 

# Section D Ncert Exemplar Solution Long Answer Type

**1.** How can you apply green chemistry for the following:

to control photochemical smog.



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**2.** How can you apply green chemistry for the following:

to avoid use of halogenated solvents in drycleaning and that of chlorine in bleaching.



**3.** How can you apply green chemistry for the following:

to reduce use of synthetic detergents.



**4.** How can you apply green chemistry for the following:

o reduce the consumption of petrol and diesel.



**5.** Green plants use carbon dioxide for photosynthesis and return oxygen to the

atmosphere, even then carbon dioxide is considered to be responsible for green house effect. Explain why?



**6.** Explain how does green house effect cause global warming.



7. A farmer was using pesticides on his farm. He used the produce of his farm as food for rearing fishes. He was told that fishes were not fit for human consumption because large amount of pesticides had accumulated in the tissues of fishes. Explain how did this happen?



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8. For dry cleaning, in the place of tetrachloroethane, liquefied carbon dioxide

with suitable detergent is an alternative solvent. What type of harm to the environment will be prevented by stopping use of tetrachloroethane? Will use of liquified carbon dioxide with detergent be completely safe from the point of view of pollution? Explain.



**Question For Module Section A** 

**1.** Give the examples of insecticides.



2. Which are the particulate pollutants?



**3.** Which complex is formed by carbon monoxide gas with hemoglobin?



**4.** Mention two general components of photochemical smog.



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**5.** What kind of side effects observed, if among of fluoride in drinking water is more than 10 ppm.



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#### **Question For Module Section B**

1. Write two uses of green chemistry in routine



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#### **Question For Module Section C**

1. Write the difference between chemical oxygen demand (COD) and biochemical oxygen demand (BOD).

