



CHEMISTRY

BOOKS - FULL MARKS CHEMISTRY

(TAMIL ENGLISH)

ENVIRONMENTAL CHEMISTRY

Textual Evaluation Solved Multiple Choice
Questions

1. The gaseous envelope around the earth is known as atmosphere. The region lying between an altitude of 11-50 km is

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

Answer:



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2. Which of the following is natural and human disturbance in ecology ?

A. Forest fire

B. Floods

C. Acid rain

D. Greenhouse effect

Answer:



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3. Bhopal Gas Tragedy is case of

A. thermal pollution

B. air pollution

C. nuclear pollution

D. land pollution

Answer:



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4. Haemoglobin of the blood forms carboxyhaemoglobin with

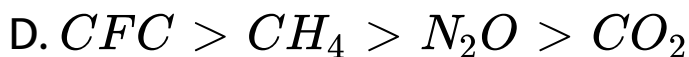
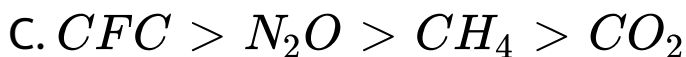
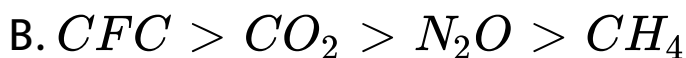
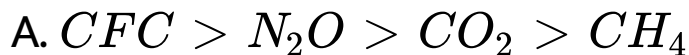
- A. Carbon dioxide
- B. Carbon tetrachloride
- C. Carbon monoxide
- D. Carbonic acid

Answer:



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5. Which sequence for greenhouse gases is based on GWP?



Answer:



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6. Photo chemical smog formed in congested metropolitan cities mainly consists of

A. Ozone, SO_2 and hydrocarbons

B. Ozone, PAN and NO_2

C. PAN , smoke and SO_2

D. Hydrocarbons, SO_2 and CO_2

Answer:



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7. Ozone depletion will cause.....

A. forest fires

B. eutrophication

C. bio magnification

D. global warming

Answer:



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8. Identify the wrong statement in the following

A. The clean water would have a BOD value of more than 5 ppm

B. Greenhouse effect is also called as Global warming

C. Minute solid particles in air is known as particulate pollutants

D. Biosphere is the protective blanket of gases surrounding the earth

Answer:



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9. Living in the atmosphere of CO is dangerous because it.....

A. Combines with O_2 present inside to form CO_2

B. Reduces organic matter of tissues

C. Combines with haemoglobin and makes
it incapable to absorb oxygen

D. Combines with haemoglobin and makes
it incapable to absorb oxygen

Answer:



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10. Release of oxides of nitrogen and hydrocarbons into the atmosphere by motor vehicles is prevented by using.....

- A. grit chamber
- B. scrubbers
- C. trickling filters
- D. catalytic converters

Answer:



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11. Biochemical oxygen Demand value less than 5 ppm indicates a water sample to be

- A. highly polluted
- B. Poor in dissolved oxygen
- C. rich in dissolved oxygen
- D. low COD

Answer:



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12. Match the list I and list II and select the correct answer using the code given below in the list



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13. Match the list I and list II and select the correct answer using the code given below in the list: List



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

Reason(R): High biological oxygen demand means high 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 and (R) is not the correct explanation of (A)

C. Both (A) and R are not correct

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

Answer:



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15. Assertion (A): Excessive use of chlorinated pesticide causes soil and water pollution.

Reason (R): Such pesticides are non-biodegradable

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

Answer:



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16. Assertion (A): Oxygen plays a key role in the troposphere.

Reason (R): Troposphere is not responsible for all biological activities

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

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

C. Both (A) and R are not correct

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

Answer:



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Textual Evaluation Solved Short Answer Questions

1. Dissolved oxygen in water is responsible for aquatic life. What processes are responsible for the reduction in dissolved oxygen in water?



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2. What would happen, if the greenhouse gases were totally missing in the earth's atmosphere?



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3. Define smog.



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4. Which is considered to be earth's protective umbrella' Why?



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5. What are bio-degradable and non-biodegradable pollutants?



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6. What are bio-degradable and non-biodegradable pollutants?



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7. From where does ozone come in the photochemical smog?



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



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9. What is green chemistry?



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10. Mention the standards prescribed by BIS for quality of drinking water.



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11. How does classical smog differ from photochemical smog ?



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12. What are particulate pollutants? Explain any three

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13. Even though the use of pesticides increases the crop production, they adversely affect the living organisms. Explain the function and the adverse effects of the pesticides.

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14. Ethane burns completely in air to give CO_2 while in a limited supply of air gives CO. The same gases are found in automobile exhaust. Both CO and CO_2 are atmospheric pollutants

(i) What is the danger associated with these gases?

(ii) How do the pollutants affect the human body?



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15. On the basis of chemical reactions involved, explain how do CFC's cause depletion of ozone layer in stratosphere ?



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16. How is acid rain formed? Explain its effect.



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17. Differentiate the following:



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18. Explain how oxygen deficiency is caused by carbon monoxide in our blood? Give its effect



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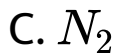
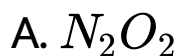
19. What are the various methods you suggest to protect our environment from pollution?



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Additional Questions Solved Choose The Correct Answer

1. Which one of the following is not present in trposphere ?



D. Water vapours

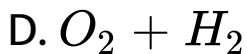
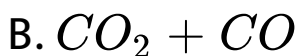
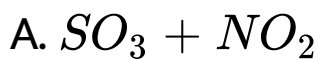
Answer:





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2. Which of the following pair of oxides is responsible for acid rain?



Answer:



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3. Which one of the following is produced as a result of incomplete combustion of coal?

A. CO_2

B. CO

C. SO_2

D. SO_3

Answer:



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4. 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_2

B. O_3

C. SO_2

D. Unsaturated hydrocarbons

Answer:



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Additional Questions Solved Match The Following

1. Match the following



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2. Match the following





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3. Match the following



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4. Match the following



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5. Match the following



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6. Match the following



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Additional Questions Solved Fill In The Blanks

1. An example for biodegradable pollutant is

.....



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2. An example for non-biodegradable pollutant

.....



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3. is the lowest layer of atmosphere.



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4. Ozone is present in layer of the atmosphere



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5. About 80% of the mass of the atmosphere is present in



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6.gas is used in the process of photosynthesis.



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7. gas potentially damage plant leaves and retard photosynthesis.



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8. The earth's surface get heated up by a phenomenon called.....



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9. The main constituent of layer responsible for global warming is



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10.pair of compounds is present in acid-rain water.



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11. is an example of viable particulate



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12.is an example of non-viable particulate matter.



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13. Particulate pollutants will result in the health hazard named as



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14. Coal miners may suffer from.....



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15. Textile workers may suffer from.....



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16. can be used to reduce particulate pollutant.



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17. Classical smog called London smog contains.....



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18. Classical smog is otherwise called.....



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19. Photochemical smog is otherwise called.....



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20. The three main components of photochemical smog are



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21. plantation can metabolise nitrogen oxide and control photochemical smog.



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22.pair of compounds is found to be highly responsible for depletion of ozone layer

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23. Freons are

 [View Text Solution](#)

24. Ozone layer is depleted by the reactive.....

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25. Examples for water borne diseases are.....



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26. The standard pH of drinking water is.....



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27. The alternate solvent used instead of tetrachloroethylene in dry cleaning is.....*



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28. is used for bleaching clothes in laundry.



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29.is used to bleach paper.



[View Text Solution](#)

30. is the most safest pesticide.



[View Text Solution](#)

31.acid is most abundant in acid rain



[View Text Solution](#)

32.causes less pollution.



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33. Besides CO_2 the other greenhouse gas is

.....



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34. BOD is a measure of



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35. The pollutant released in Bhopal gas tragedy was.....



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36. Eutrophication causes reduction in.....



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Additional Questions Solved Choose The Odd One Out

1. Choose the odd one out

A. Plant waste

B. DDT

C. Plastic

D. Nuclear waster

Answer:



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2. Choose the odd one out

A. Plant waste

B. Animal wastes

C. Paper

D. Nuclear waste

Answer:



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3. Choose the odd one out

A. N_2O_2

B. CO_2

C. $H_2O(vap)$

D. O_3

Answer:



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4. Choose the odd one out

A. O_2^+

B. O^+

C. N_2

D. NO^+

Answer:



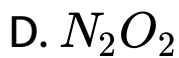
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5. Choose the odd one out

A. N_2

B. O_2

C. O_3



Answer:



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6. Choose the odd one out



Answer:



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Additional Questions Solved Choose The Correct Pair

1. Choose the correct pair:

A. CFC : Green house effect

B. CO: Carcinogenic

C. PAH :Acid rain

D. NO : Lung injury

Answer:



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2. Choose the correct pair:

A. NO_2 : asthma and lung injury

B. CFC : Carcinogenic

C. PAH : green house effect

D. CO_2 : acid rain

Answer:



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3. Choose the correct pair:

A. Classical smog : NO_2 and O_3

B. London smog : SO_2 , SO_3 and humidity

C. Photochemical smog : CO_2 and CO

D. Los Angel smog : NO_2 and NO_3

Answer:



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**Additional Questions Solved Choose The
Incorrect Pair**

1. Choose the incorrect pair:

- A. Photochemical smog : NO_2 and O_3
- B. Classical smog : SO_2 , SO_3 and humidity
- C. smog : smoke and fog
- D. Non viable particulate : Algae, Fungi

Answer:



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2. Choose the incorrect pair:

A. Viable particulate : bacteria , fungi

B. Non viable particulate : smoke, dust

C. Acid rain : $\text{HCl} + \text{HNO}_2$

D. Photochemical smog : $\text{NO}_2 + \text{O}_3$

Answer:



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3. Choose the incorrect pair:

A. Lead : Damage to kidney , liver

B. Sulphate : Laxative effect

C. Nitrate : Blue baby syndrome

D. TDS : Damage to bone and teeth

Answer:



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4. Choose the incorrect pair:

A. Insecticides : DDT , BHC

B. Herbicides : Organo mercury compounds

C. Herbicides : Sodium chlorate, sodium
arsenic

D. Industrial waste : Mercury copper

Answer:



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Additional Questions Solved Assertion Reason

1. Assertion (A): Depletion of ozone layer causes skin cancer.

Reason (R): Depletion of ozone layer will allow more UV rays to reach the earth surface and cause skin cancer.

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. (A) is correct but (R) is wrong.

D. (A) is wrong but (R) is correct.

Answer:



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2. Assertion (A): UV radiations damages the fish productivity

Reason (R): UV radiations affect the growth of phytoplanktons as a result food chain in ocean is disturbed.

- 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. (A) is correct but (R) is wrong.
- D. (A) is wrong but (R) is correct.

Answer:



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3. Assertion (A): The pH of acid rain is less than

5.6. Reason (R): CO_2 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. (A) is correct but (R) is wrong.

D. (A) is wrong but (R) is correct.

Answer:



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Additional Questions Solved Choose The Correct Statement

1. Choose the correct statement.

A. Instead of petrol, methanol is used as a fuel in automobiles.

B. Neem based pesticides are less safer than chlorinated hydrocarbons.

C. liquified carbon dioxide is harmful to ground water

D. H_2O_2 can be used as fuel.

Answer:



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2. Choose the correct statement.

A. Most of herbicides are non-toxic to mammals.

B. Insecticides like DDT, BHC, aldrin contaminate root crops.

C. Organomercury compounds are used as herbicides.

D. TDS of 10 ppm causes irritation in stomach and intestine

Answer:



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3. Choose the correct statement.

A. BOD is used as measure of degree of water pollution

B. Clean water would have BOD value more than 5 ppm.

C. Highly polluted water has BOD value of less than 3 ppm.

D. BOD measurements takes 2 hours.

Answer:



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Additional Questions Solved 2 Mark Questions

1. What is meant by environmental pollution?



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2. Write a note on constituents of earth's atmosphere



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3. What is called troposphere? How many layers are present in it? Give their names



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4. Write about hydrosphere (or) Why Earth is called as Blue planet?



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5. What is lithosphere ?



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6. What is biosphere?



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7. What is air pollution?



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8. What are the types of air pollutants? Give examples.



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9. Define greenhouse effect.



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10. What is Global warming?



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11. When rain water is named as acid rain?



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12. What is stone leprosy? How is it formed?



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13. What are fumes? Give one example.



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14. What are the techniques to reduce particulate pollutants?



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15. How will you control photochemical smog?



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16. What is meant by water pollution?



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17. What are the sources of water pollution?

Give examples.



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18. What is BOD?



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19. What is COD?



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20. What are total dissolved solids (TDS)?



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21. What are the constituents of soil?



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22. Define -soil pollution.



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23. Explain how industrial waste affects the soil.



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24. What is green chemistry?



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25. Write a note about dry cleaning of clothes.



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



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27. Which gases are responsible for greenhouse effect? List some of them.



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28. A large number of fishes 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 killing



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29. How carbon monoxide acts as a poison for human beings?



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30. Give three examples in which the principles green chemistry has been applied.



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Additional Questions Solved 3 Mark Questions

1. Write about Bhopal gas tragedy.



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2. Explain how the oxides of sulphur pollute the atmospheric air. Give its harmful effects.

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3. How oxides of nitrogen are harmful?

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4. Explain how hydrocarbons pollute the atmospheric air.

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5. Write notes about great London smog



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6. What are the effects of classical smog?



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7. Explain how oxides of nitrogen are introduced directly into the stratosphere?



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8. How chemical wastes pollute water?



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9. Explain the presence of fluoride in water and its hazardous effects?



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10. Explain the harmful effects of (i) lead (ii)

Nitrate in drinking water



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11. Explain how styrene is produced by traditional and greener routes?



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12. How acetaldehyde is commercially prepared by green chemistry?

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

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14. What is photochemical smog? What are its effects? How can it be controlled?

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15. (a) Define eutrophication and pneumoconiosis.

(b) Write differences between photochemical smog and classical smog.

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Additional Questions Solved 5 Mark Questions

1. Explain about the different layers of Earth's atmosphere



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2. What are the health effects of particulate pollutants?



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3. What are the effects of photochemical smog?



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4. Explain about the environmental impacts of ozone depletion.



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5. Explain the list of major water pollutants and their sources



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6. Describe about the causes of water pollution.



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7. What are the harmful effects of chemical water pollutants?



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8. Explain about green chemistry in day-to-day life.



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