

## Environmental Issues

Question 1.

Ozone depletion is occurring widely in

- (a) troposphere
- (b) stratosphere
- (c) ionosphere
- (d) all of these.

Answer:

- (b) stratosphere

Question 2.

Select the correct arrangement of the types of ultraviolet radiation according to the intensity of their effect on human skin.

- (a)  $UV - A > UV - B > UV - C$
- (b)  $UV - B > UV - C > UV - A$
- (c)  $UV - C > UV - B > UV - A$
- (d)  $UV - A > UV - C > UV - B$

Answer:

- (b)  $UV - B > UV - C > UV - A$

Question 3.

Which of the following can cause DNA damage and mutations in humans ?

- (a) Absorption of  $UV - A$  and  $UV - B$
- (b) Absorption of  $UV - B$
- (c) Absorption of  $UV - A$
- (d) Absorption of  $UV - A$  and  $UV - C$

Answer:

- (b) Absorption of  $UV - B$

Question 4.

Increasing skin cancer and high mutation rate are the result of

- (a) ozone depletion
- (b) acid rain
- (c) CO pollution
- (d)  $CO_2$  pollution.

Answer:

- (a) ozone depletion

Question 5.

Montreal Protocol is associated with

- (a) control of emission of ozone depleting substances
- (b) control of radioactive wastes
- (c) control of desertification
- (d) protection and management of forests.

Answer:

- (a) control of emission of ozone depleting substances

Question 6.

Waterlogging and soil salinity are some of the problems that have come in the water of

- (a) Soil erosion
- (b) White revolution
- (c) Green revolution
- (d) Blue revolution.

Answer:

- (c) Green revolution

Question 7.

Non-biodegradable pollutants are created by

- (a) nature
- (b) excessive use of resources
- (c) humans
- (d) natural disasters.

Answer:

- (c) humans

Question 8.

According to the Central Pollution Control Board, particles that are responsible for causing great harm to human health are of diameter

- (a) 2.50 micrometers
- (b) 5.00 micrometers
- (c) 10.00 micrometers
- (d) 7.5 micrometers

Answer:

- (a) 2.50 micrometers

Question 9.

The material generally used for sound proofing of rooms like a recording studio and auditorium, etc. is

- (a) cotton
- (b) coir
- (c) wood
- (d) styrofoam.

Answer:

- (d) styrofoam.

Question 10.

Compressed Natural Gas (CNG) is

- (a) propane
- (b) methane
- (c) ethane
- (d) butane.

Answer:

- (b) methane

Question 11.

Which of the following is not a cause of natural pollution ?

- (a) Volcanic eruption

- (b) UV radiation
- (c) Forest fire
- (d) Mercury

Answer:

- (d) Mercury

Question 12.

The Government of India has passed the environment (Protection) Act in the year

- (a) 1990
- (b) 1987
- (c) 1986
- (d) 1992.

Answer:

- (c) 1986

Question 13.

Increased asthmatic attacks in certain seasons are related to

- (a) eating fruits preserved in tin containers
- (b) inhalation of seasonal pollen
- (c) low temperature
- (d) hot and humid environment.

Answer:

- (b) inhalation of seasonal pollen

Question 14.

Peroxyacyl nitrates (PAN) are formed through photochemical reactions between

- (a) sulphur oxides and hydrocarbons
- (b) nitrogen oxides and hydrocarbons
- (c) nitrogen oxides and  $O_3$
- (d)  $CFCl_3$  and  $O_3$ .

Answer:

- (b) nitrogen oxides and hydrocarbons

Question 15.

Which one of the following statements is incorrect regarding Bhopal gas tragedy ?

- (a) Methyl isocyanate gas leakage took place.
- (b) Thousands of human beings died.
- (c) Radioactive fall out engulfed Bhopal.
- (d) It took place in the night of December 2/3, 1984.

Answer:

- (c) Radioactive fall out engulfed Bhopal.

Question 16.

Chemicals responsible for the Bhopal gas tragedy were

- (a)  $CO_2$  and  $CH_4$
- (b) Phosgene and methyl isocyanate
- (c) polychlorinated biphenyls
- (d) dichloro diphenyl trichloroethane.

Answer:

(b) Phosgene and methyl isocyanate

Question 17.

Acid rains are produced by

- (a) excess  $\text{NO}_x$  and  $\text{SO}_2$  from burning fossil fuels
- (b) excess production of  $\text{NH}_3$  by industries and power plants
- (c) excess release of carbon monoxide by incomplete combustion of fossil fuels
- (d) excess release of  $\text{CO}_2$  by combustion and animal respiration.

Answer:

(a) excess  $\text{NO}_x$  and  $\text{SO}_2$  from burning fossil fuels

Question 18.

Select the correct match of air pollution source with the type of pollutant and the effect it produces.

- (a) Chemical factory  $\rightarrow \text{NO}_2 \rightarrow$  Ozone hole
- (b) Automobile exhaust  $\rightarrow \text{N}_2\text{O} \rightarrow$  Asphyxia effect
- (c) Heavy industry  $\rightarrow \text{CO}_2 \rightarrow$  Acid rain
- (d) Incinerators  $\rightarrow \text{NO}_x$  gases  $\rightarrow$  Photochemical smog

Answer:

(d) Incinerators  $\rightarrow \text{NO}_x$  gases  $\rightarrow$  Photochemical smog

Question 19.

Chlorofluorocarbons are air polluting agents which are produced by

- (a) diesel trucks
- (b) jet planes
- (c) rice fields
- (d) cellphones.

Answer:

(b) jet planes

Question 20.

Which of the following is a method used to get rid of particulate matter present in the exhaust from a thermal power plant ?

- (a) Magnetic precipitator
- (b) Chromatography
- (c) Electrostatic precipitator
- (d) Mass spectrometry

Answer:

(c) Electrostatic precipitator

Question 21.

World's most problematic aquatic weed is

- (a) Azolla
- (b) Wolffia
- (c) Eichhornia
- (d) Trapa.

Answer:

(c) Eichhornia

Question 22.

Which of the following causes biomagnification ?

- (a) SO<sub>2</sub>
- (b) Mercury
- (c) DDT
- (d) Both (b) and (c)

Answer:

- (d) Both (b) and (c)

Question 23.

The expanded form of DDT is

- (a) dichloro diphenyl trichloroethane
- (b) dichloro diethyl trichloroethane
- (c) dichloro dipyrydyl trichloroethane
- (d) dichloro diphenyl tetrachloroacetate.

Answer:

- (a) dichloro diphenyl trichloroethane

Question 24.

Which of the following materials takes the longest time for biodegradation ?

- (a) Cotton
- (b) Paper
- (c) Bone
- (d) Jute

Answer:

- (c) Bone

Question 25.

Among the following which one causes more indoor chemical pollution ?

- (a) Burning coal
- (b) Burning cooking gas
- (c) Burning mosquito coil
- (d) Room spray

Answer:

- (a) Burning coal

Question 26.

The green scum seen in the freshwater bodies is

- (a) blue green algae
- (b) red algae
- (c) green algae
- (d) both (a) and (c).

Answer:

- (d) both (a) and (c).

Question 27.

The loudness of a sound that a person can withstand without discomfort is about

- (a) 150 db
- (b) 215 db
- (c) 30 db

(d) 80 db.

Answer:

(d) 80 db.

Question 28.

The major source of noise pollution, worldwide is due to

- (a) office equipment
- (b) transport system
- (c) sugar, textile and paper industries
- (d) oil refineries and thermal power plants.

Answer:

(b) transport system

Question 29.

Catalytic converters are fitted into automobiles to reduce emission of harmful gases.

Catalytic converters change unburnt hydrocarbons into

- (a) carbon dioxide and water
- (b) carbon monooxide
- (c) methane
- (d) carbon dioxide and methane.

Answer:

(a) carbon dioxide and water

Question 30.

Which one of the following impurities is easiest to remove from wastewater ?

- (a) Bacteria
- (b) Colloids
- (c) Dissolved solids
- (d) Suspended solids

Answer:

(d) Suspended solids

Question 31.

Which one of the following diseases is not due to contamination of water ?

- (a) Hepatitis – B
- (b) Jaundice
- (c) Cholera
- (d) Typhoid

Answer:

(a) Hepatitis – B

Question 32.

Nuisance growth of aquatic plants and bloom-forming algae in natural waters is generally due to high concentrations of

- (a) carbon
- (b) sulphur
- (c) calcium
- (d) phosphorus.

Answer:

(d) phosphorus.

Question 33.

Which of the following is the most dangerous metal pollutant of automobile exhaust ?

- (a) Cadmium
- (b) Copper
- (c) Mercury
- (d) Lead

Answer:

- (d) Lead

Question 34.

Motor vehicles equipped with catalytic converter are advised to use unleaded petrol because

- (a) lead is a heavy metal .
- (b) lead causes inactivation of catalyst
- (c) lead decreases the efficiency of vehicle
- (d) lead increases burning of petrol.

Answer:

- (b) lead causes inactivation of catalyst

Question 35.

Which of the following is the way to control vehicular air-pollution in Indian cities ?

- (a) Use of CNG as fuel
- (b) Use of unleaded petrol in the vehicles
- (c) Use of catalytic converter in the vehicles
- (d) All of these

Answer:

- (d) All of these

Question 36.

A brief exposure to 150 dB sound may

- (a) damage ear drums
- (b) cause permanent impairing hearing ability
- (c) cause temporary impairing hearing ability
- (d) both (a) and (b).

Answer:

- (d) both (a) and (b).

Question 37.

A prolonged exposure to noise at 95 dB can produce

- (a) respiratory trouble
- (b) skin cancer
- (c) nervous tension and increased blood pressure
- (d) digestive spasm.

Answer:

- (c) nervous tension and increased blood pressure

Question 38.

Noise pollution may cause nervousness and irritability by stimulating the secretion of

- (a) thyroid hormone
- (b) adrenaline hormone

- (c) parathyroid hormone
- (d) none of these.

Answer:

- (b) ademaline hormone

Question 39.

Noise cause

- (a) headache by constricting blood vessels of the brain
- (b) eye strain by constricting the pupil
- (c) digestive spasms through anxiety
- (d) high blood pressure by decreasing cholesterol level in the blood.

Answer:

- (c) digestive spasms through anxiety

Question 40.

Green muffler scheme helps to reduce

- (a) air pollution
- (b) noise pollution
- (c) e-wastes
- (d) both (a) and (b).

Answer:

- (d) both (a) and (b).

Question 41.

A higher biochemical oxygen demand in a particular segment of a river indicates that

- (a) the segment is free from pollution
- (b) the segment is highly polluted
- (c) aquatic life has started flourishing
- (d) the river has high number of aquatic animals.

Answer:

- (b) the segment is highly polluted

Question 42.

The amount of biodegradable organic matter in sewage water can be estimated by measuring

- (a) biochemical oxygen demand
- (b) the growth of anaerobic bacteria in water
- (c) biogeological oxygen demand
- (d) the growth of aerobic bacteria in water.

Answer:

- (a) biochemical oxygen demand

Question 43.

Which of the following is referred to as the world's most problematic aquatic weed ?

- (a) *Abelmoschus esculentus*
- (b) *Eichhomia crassipes*
- (c) *Parthenium hysterophorus*
- (d) Planktonic algae

Answer:

- (b) *Eichhomia crassipes*



Question 44.

The term 'terror of Bengal' is used for

- (a) algal bloom
- (b) *Eichhornia crassipes*
- (c) increased biochemical oxygen demand
- (d) eutrophication.

Answer:

- (b) *Eichhornia crassipes*

Question 45.

*Escherichia coli* is used as an indicator organism to determine pollution of water with

- (a) industrial effluents
- (b) heavy metals
- (c) pollen of aquatic plants
- (d) faecal matter.

Answer:

- (d) faecal matter.

Question 46.

Contamination of water with sewage is indicated by of

- (a) *Escherichia*
- (b) *Entamoeba*
- (c) *Pseudomonas*
- (d) *Leishmania*.

Answer:

- (b) *Entamoeba*

Question 47.

Phosphate pollution is brought about by

- (a) phosphate rocks
- (b) automobile exhausts
- (c) sewage and phosphate rocks
- (d) sewage and agricultural fertilisers.

Answer:

- (d) sewage and agricultural fertilisers.

Question 48.

Minamata disease was caused due to the consumption of

- (a) sea food containing lot of cadmium
- (b) fish contaminated with mercury
- (c) oysters with lots of pesticides
- (d) sea food contaminated with selenium.

Answer:

- (b) fish contaminated with mercury

Question 49.

A disease caused by eating fish contaminated by industrial waste, containing mercury compounds, is called as

- (a) osteosclerosis
- (b) Hashimoto's disease

- (c) Bright's disease
  - (d) Minamata disease
- Answer:
- (d) Minamata disease

Question 50.

Fluoride pollution initially affects

- (a) kidneys
- (b) teeth
- (c) heart
- (d) brain.

Answer:

- (b) teeth

Question 51.

DDT residues are rapidly passed through food chain causing biomagnification because DDT is

- (a) water soluble
- (b) lipid soluble
- (c) moderately toxic
- (d) non-toxic to aquatic animals.

Answer:

- (b) lipid soluble

Question 52.

Which among the following is likely to have the highest levels of DDT deposition in its body ?

- (a) Sea gull
- (b) Phytoplankton
- (c) Eel
- (d) Crab

Answer:

- (a) Sea gull

Question 53.

Pollution from animal excreta and organic waste from kitchen can be most profitably minimised by

- (a) storing them in underground storage tanks
- (b) using them for producing biogas
- (c) dumping them in river
- (d) using them directly as biofertilisers.

Answer:

- (b) using them for producing biogas

Question 54.

Polyblend is

- (a) a mixture of two different types of plastics
- (b) a fine powder of recycled modified plastic
- (c) a blend of plastic and bitumen
- (d) none of these.

Answer:

(b) a fine powder of recycled modified plastic

Question 55.

Which of the following isotopes is most dangerous to human beings ?

(a) Phosphorus – 32

(b) Strontium – 90

(c) Caesium – 137

(d) Iodine – 131

Answer:

(b) Strontium – 90

Question 56.

If there is no greenhouse effect, then the average temperature at surface of earth would have been

(a) 15°C

(b) – 18°C

(c) – 6°C

(d) 10°C

Answer:

(b) – 18°C

Question 57.

Which of the following is correct for infrared radiations ?

(a) They are long wave radiations.

(b) They are short wave radiations.

(c) They are visible radiations.

(d) None of these.

Answer:

(a) They are long wave radiations.

Question 58.

High concentration of greenhouse gases has resulted in maximum rise of atmospheric temperature in

(a) tropic region

(b) middle latitude

(c) polar region

(d) temperate region

Answer:

(c) polar region

Question 59.

Greenhouse effect is due to

(a) accumulation of O<sub>3</sub> and depletion of CO<sub>2</sub>

(b) accumulation of both O<sub>3</sub> and CO<sub>2</sub>

(c) accumulation of CO<sub>2</sub> and depletion of O<sub>3</sub>

(d) presence of green plants on the Earth.

Answer:

(c) accumulation of CO<sub>2</sub> and depletion of O<sub>3</sub>

Question 60.

Which of the following is correct regarding 'El Nino' effect ?

- (a) Temperature rise leads to odd climatic changes
- (b) Cutting down the use of fossil fuels
- (c) Planting more trees
- (d) Slowing down the growth of human population

Answer:

- (a) Temperature rise leads to odd climatic changes

Question 61.

Ozone layer of upper atmosphere is being destroyed by

- (a) chlorofluorocarbons
- (b) SO<sub>2</sub>
- (c) O<sub>2</sub> and CO<sub>2</sub>
- (d) smog.

Answer:

- (a) chlorofluorocarbons

Question 62.

The major ozone-depleting substance out of the following is

- (a) CFCs
- (b) O<sub>2</sub>
- (c) nitrogen
- (d) all of these.

Answer:

- (a) CFCs