# Environmental Chemistry

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Question 1.
Who sediment of suspended matter occurs?
(a) When soil is eroded from the air
(b) When soil is eroded from the land
(c) When soil is eroded from the water
(d) When soil is eroded from the rock

▼ Answer

Answer: (b) When soil is eroded from the land
Explanation:
Sediment of suspended matter occurs when the soil is eroded from the land. High levels of soil particles which are suspended in water interfere with the penetration of sunlight. This reduces the photosynthetic activity of aquatic plants and algae.

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Question 2:
A secondary pollutant is?
(a) $O_3$
(b) CO
(c) $CH_4$
(d) Pb

▼ Answer

Answer: (a) $O_3$
Explanation:
Primary pollutants include ammonia, sulfur dioxide, nitrogen dioxide and carbon monoxide. Secondary pollutants include ground-level ozone, acid rain and nutrient enrichment compounds. So, the correct option is $O_3$.

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Question 3.
Which is most harmful for life on globe?
(a) Deforestation
(b) Soil Erosion
(c) Increasing Desert
(d) Nuclear Fallout

▼ Answer

Answer: (d) Nuclear Fallout
Explanation:
Nuclear fallout, or simply fallout, is the residual radioactive material propelled into the upper atmosphere following a nuclear blast or a nuclear reaction conducted in an unshielded facility, so called because it "falls out" of the sky after the explosion and the shock wave have passed. While deforestation, soil erosion and increasing deserts can be controlled, nuclear fallout causes genetic mutation in humans and destruction that cannot be controlled or cured.

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Question 4.
Excess nitrate in drinking water can cause
(a) methemoglobinemia
(b) kidney damage
(c) liver damage
(d) laxative effect

▼ Answer

Answer: (a) methemoglobinemia
Explanation:
Excessive concentration of nitrate in drinking water is harmful and can cause methemoglobinemia (blue baby syndrome).

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Question 5.
What is the main reason for thermal pollution?
(a) Increase in the temperature of the ecosystem
(b) Increase in the chemical contains in water
(c) Hot water released by power plants and industries
(d) Pollution causing by vehicles

▼ Answer

Answer: (c) Hot water released by power plants and industries
Explanation:
The hot water released by power plants and industries that use large volumes of water to cool the plant. This result in a rise in temperature of the water bodies, due to this thermal pollution occurs.

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Question 6.
Water sample is reported to be highly polluted if BOD (Biological Oxygen Demand) value of sample becomes
(a) more than 17 ppm.
(b) equal to 10 ppm.
(c) equal to 5 ppm.
(d) less than 5 ppm.

▼ Answer

Answer: (a) more than 17 ppm.
Explanation:
Water sample is reported to be highly polluted if BOD value of sample is more than 17ppm.

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Question 7.
The pollutants released by jet aeroplanes in the atmosphere as fluorocarbons are called
(a) Photochemical oxidants
(b) Photochemical reductants
(c) Aerosols
(d) Physical pollutants

▼ Answer

Answer: (c) Aerosols
Explanation:
Aerosols are emitted into the air in the form of vapour or fine mist. Jet airplanes emit aerosols containing chlorofluorocarbons ($CCl_2F_2$) and ($CCl_3F$). The aerosols deplete ozone layer in the atmosphere.

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Question 8.
The birds lay eggs with shells that are much thinner than normal is an example of _____
(a) Bioaccumulation
(b) Mutation
(c) DNA sequence
(d) Mal nutrients

▼ Answer

Answer: (a) Bioaccumulation
Explanation:
The pesticides that eat by an organism keep on moving in an aquatic food chain. At each link in the food chain, these chemicals which do not pass out of the body get accumulated and cause bioaccumulation. High levels of pesticides such as DDT can cause thin shells in bird eggs.

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Question 9.
Which among the following is bio – degradable pollutant?
(a) Lead compounds
(b) Mercuric salts
(c) Pesticides
(d) Domestic wastes.

▼ Answer

Answer: (d) Domestic wastes.
Explanation:
Those pollutants which can be broken down into simpler, harmless, substances in nature in due course of time (by the action of micro-organisms like certain bacteria) are called biodegradable pollutants. Domestic wastes (garbage), urine, faecal matter, sewage, agriculture residues, paper, wood, cloth, cattle dung, animal bones, leather, wool, vegetable stuff or plants are biodegradable pollutants.

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Question 10.
The substance having the largest concentration in acid rain?
(a) $H_2CO_3$
(b) $HNO_3$
(c) HCl
(d) $H_2SO_4$

▼ Answer

Answer: (d) $H_2SO_4$
Explanation:
Acid rain contains $H_2SO_4$ > $HNO_3$ > HCl

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Question 11.
Which of the following is most abundant hydrocarbon pollutant?
(a) Butane
(b) Ethane
(c) Methane
(d) Propane

▼ Answer

Answer: (c) Methane
Explanation:
Most abundant hydrocarbon pollutant is methane.

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Question 12.
In Antarctica, ozone depletion is due to the formation of the following compounds
(a) Acroline
(b) Peroxy acetyl nitrate

(c) $SO_2$ and $SO_3$
(d) Chlorine nitrate

▼ Answer

Answer: (d) Chlorine nitrate
Explanation:
In Antarctica ozone depletion is caused due to the formation a chlorine compound called chlorine nitrate.

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Question 13.
Synthesis of ethanal commercially from which of the following reagent is the part of green chemistry?
(a) $CH_3CH_2OH$
(b) $CH_2 = CH_2$
(c) HC≡CH
(d) All of these

▼ Answer

Answer: (b) $CH_2 = CH_2$

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Question 14.
Lung diseases are four times more in urban areas than rural areas. This is due to presence of which of the following in atmosphere?
(a) $CO_2$
(b) $SO_2$
(c) $N_2$
(d) $O_2$.

▼ Answer

Answer: (b) $SO_2$
Explanation:
$SO_2$ is formed as a major pollutant. So, lung diseases are four times more in urban areas than in rural areas.

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Question 15.
In which of the following regions hydrogen and helium are found
(a) Stratosphere
(b) Mesosphere
(c) Exosphere
(d) Troposphere

▼ Answer

Answer: (c) Exosphere
Explanation:
$H_2$, He and ionic oxygen are present in exosphere.

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Question 16.
Which of the following organisms found in human waste that cause water pollution?
(a) Coliform bacteria
(b) Coliform bacteria
(c) Protozoa
(d) Parasitic worms

▼ Answer

Answer: (a) Coliform bacteria
Explanation:
Humans waste contains concentrated populations of coliform bacteria such as Escherichia coli and Streptococcus faecalis. These bacteria normally grow in the large intestine of the human body. Releasing of such wastes to water cause pollution in water bodies.

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Question 17.
One of the following is the chief source of water and soil pollution
(a) Agro industry
(b) Mining
(c) Thermal power stations
(d) All of these

▼ Answer

Answer: (c) Thermal power stations
Explanation:
Thermal power plant, agro industry and mining all are responsible for soil and water pollution. (Due to extraction of chemicals which cause pollution)

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Question 18.
Which among the following does not cause water pollution?
(a) Automoblie exhaust
(b) Plant nutrients
(c) Oxygen demanding wastes
(d) Disease causing agents .

▼ Answer

Answer: (a) Automoblie exhaust
Explanation:
Automoblie exhaust causes air pollution not the water pollution.

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Question 19.
The non-viable particulate among the following is
(a) Dust
(b) Bacteria
(c) Moulds
(d) Fungi

▼ Answer

Answer: (a) Dust
Explanation:
Dust is the particulate matter that causes choking and air pollution. Its allergic to people suffering from lungs diseases.
Bacteria, moulds and fungi can be sometimes useful for us.
Hence, option (1) is correct.

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Question 20.
Why thermal pollution causing the release of hot water by power plants is dangerous?
(a) They increase the solubility of oxygen
(b) They decrease the solubility of oxygen
(c) They dont dissolve oxygen
(d) They dissolve nitrogen

▼ Answer

Answer: (b) They decrease the solubility of oxygen
Explanation:
Hot water released by power plants and industries warm water bodies those which are connected to power plants and industries. This warm water decreases the solubility of oxygen and it changes the breeding cycles of various aquatic organisms.

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