Date Planned : __ / __ / __	Daily Tutorial Sheet-7	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	Level-2	Exact Duration :_____

***61.** The CFCs are used in refrigerators, air conditioners, in the production of plastic foam etc. Which of the following statements are correct ?

(A) The CFCs are responsible for the depletion of the ozone layer.

(B) The CFCs get broken down by powerful UV radiations in the stratosphere, releasing chlorine free radical

$$CF_2Cl_2(g) \xrightarrow{UV} \dot{C}l(g) + \dot{C}F_2Cl(g)$$

(C) The chlorine radical then reacts with stratosphere ozone to form chlorine monoxide radicals and molecular oxygen

$$\dot{C}l(g) + O_3(g) \longrightarrow Cl\dot{O}(g) + O_2(g)$$

(D) Reaction of chlorine monoxide radical with atomic oxygen produces more chlorine radicals

$$Cl\dot{O}(g) + O(g) \longrightarrow \dot{C}l(g) + O_2(g)$$

***62.** In 1980s atmospheric scientists working in Antarctica reported about depletion of ozone layer commonly known as ozone hole over the South pole. Which of the statements are correct ?

(A) In summers, NO_2 and CH_4 react with chlorine monoxide and chlorine atoms forming chlorine sinks, preventing much ozone depletion.

(B) In summers, special type of clouds called polar stratospheric clouds are formed over Antarctica.

(C) The polar stratospheric clouds provide surface on which chlorine nitrate gets hydrolysed to form hypochlorous acid.

(D) Chlorine nitrate also reacts with hydrogen chloride to give molecular chlorine.

***63.** With the depletion of ozone layer more UV radiation filters into the troposphere. UV radiations lead to :

(A) Ageing of skin **(B)** Skin cancer

(C) Killing of phytoplanktons & damage to fish productivity

(D) Increase in the evaporation of surface water through the stomata of the leaves

***64.** Pollution of water originates from human activities. Through different paths, pollution reaches surface or ground water. Which of the following are true ?

(A) Easily identified source or place of pollution is called the point source.

(B) Non-point sources of pollution are those where a source of pollution cannot be easily identified.

(C) Municipal and industrial discharge pipes are non-point sources of pollution.

(D) Agricultural run off, acid rain, storm-water drainage (from streets etc) are point sources of pollution.

65. The most serious water pollutants are the disease causing agents called pathogens. Which of the following statements is/are true ?

I. Pathogens include bacteria and other organisms that enter water from domestic sewage and animal excreta.

II. Human excreta contain bacteria such as Escherichia coli and Streptococcus faecalis which cause gastrointestinal diseases.

(A) Only I **(B)** Only II **(C)** I and II **(D)** None of the above

***66.** Which of the following water pollutants are organic wastes ?

(A) Leaves, grass, trash **(B)** Pathogens

(C) Water soluble inorganic chemicals **(D)** Excessive phytoplankton growth

67. If the concentration of dissolved oxygen in water is below X ppm, the growth of fish gets inhibited X is :

(A) 10 **(B)** 12 **(C)** 6 **(D)** None of the above

***68.** The amount of oxygen required by bacteria to break down the organic matter present in a certain volume of a sample of water is called BIOCHEMICAL OXYGEN DEMAND (BOD). Which of the following statements are correct ?

(A) The amount of BOD in the water is a measure of the amount of organic material in the water, in the terms of how much oxygen will be required to break it down biologically.

(B) Clean water would have BOD value of more than 17 ppm whereas highly polluted water could have a BOD value of less than 5 ppm.

(C) Clean water would have BOD value of less than 5 ppm whereas highly polluted water could have a BOD value of more than 17 ppm.

(D) Clean water and polluted water both have BOD value of 5 ppm.

69. What is % by volume occupied by CO_2 in atmosphere ?

(A) Less than 1% **(B)** 1% - 2% **(C)** 5% **(D)** 5% - 10%

70. Depletion of ozone layer causes :

(A) Skin cancer **(B)** blood cancer **(C)** Cataract **(D)** Sunburn