

Date Planned : __ / __ / __	Daily Tutorial Sheet-6	Expected Duration : 90 Min
Actual Date of Attempt : __ / __ / __	Level-2	Exact Duration : _____

51. Classical and photochemical smog are :
- (A) both oxidising in nature (B) both reducing in nature
(C) oxidising & reducing respectively (D) reducing & oxidising respectively
- *52. Photochemical smog :
- (A) occurs in cool, humid climate
(B) occurs in warm, dry and sunny climate
(C) is a mixture of smoke, fog and SO₂
(D) is formed as a result of the action sunlight of unsaturated hydrocarbons & nitrogen oxides produced by automobiles & factories
53. The common components of photochemical smog besides ozone and nitric oxide are :
- (A) $\begin{array}{c} \text{O} \\ || \\ \text{H}-\text{C}-\text{H} \end{array}$ Formaldehyde (B) $\begin{array}{c} \text{O} \\ || \\ \text{H}_2\text{C}=\text{CH}-\text{C}-\text{H} \end{array}$ Acrolein
(C) $\begin{array}{c} \text{O} \\ || \\ \text{CH}_3-\text{C}-\text{OONO}_2 \end{array}$ Peroxyacetyl nitrate (PAN) (D) All the above
54. Photochemical smog causes serious health problems such as :
- (A) Irritation in the eyes (B) Headache, chest pain
(C) Cough, difficulty in breathing (D) All of the above
- *55. Photochemical smog leads to :
- (A) serious health problems (B) cracking of rubber
(C) extensive damage to plant life
(D) corrosion of metals, stones, building materials, rubber and painted surfaces.
56. The upper stratosphere consists of considerable amount of X. X protects us from the harmful ultraviolet (UV) radiations coming from the sun. These radiations cause skin cancer (melanoma) in humans. X is :
- (A) CO (B) CO₂ (C) O₃ (D) O₂
57. Ozone in the stratosphere is formed in the following manner :
- (A) $\text{CO(g)} \xrightarrow{\text{UV}} \text{C(s)} + \text{O(g)}$ (B) $\text{NO(g)} \xrightarrow{\text{UV}} \text{N(g)} + \text{O(g)}$
 $\text{O(g)} + \text{O}_2\text{(g)} \xrightleftharpoons{\text{UV}} \text{O}_3\text{(g)}$ $\text{O(g)} + \text{O}_2\text{(g)} \xrightleftharpoons{\text{UV}} \text{O}_3\text{(g)}$
 (C) $\text{CO}_2\text{(g)} \xrightarrow{\text{UV}} \text{C(s)} + 2\text{O(g)}$ (D) $\text{O}_2\text{(g)} \xrightarrow{\text{UV}} \text{O(g)} + \text{O(g)}$
 $\text{O(g)} + \text{O}_2\text{(g)} \xrightleftharpoons{\text{UV}} \text{O}_3\text{(g)}$ $\text{O(g)} + \text{O}_2\text{(g)} \xrightleftharpoons{\text{UV}} \text{O}_3\text{(g)}$
- *58. Which of the following statements are incorrect ?
- (A) Ozone is thermodynamically highly stable
(B) Ozone is thermodynamically unstable
(C) A dynamic equilibrium exists between the production and decomposition of ozone molecules
(D) Ozone once formed, does not decompose

59. Which of the following chemicals cause depletion of the ozone layer ?
- (A) NO_2 (B) Chlorofluorocarbon compounds (CFCs)
(C) Amino acids (D) Acrolein
60. CFCs or freons :
- I. are highly reactive II. non flammable III. non toxic
- (A) I and III (B) I and II
(C) II and III (D) I, II and III