

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

51.	Classical	and	nhotoc	hemical	emod ar	۰.
91 .	Classical	anu	DHOLOC.	пенисат	smog ar	е:

- (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 SO_2
- **(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:

(B)
$$H_2C = CH - CH$$
Acrolein

(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) o
- O_2
- **57.** Ozone in the stratosphere is formed in the following manner:

(A)
$$CO(g) \xrightarrow{UV} C(s) + O(g)$$

(B)
$$NO(g) \xrightarrow{UV} N(g) + O(g)$$

$$O(g) + O_2(g) \stackrel{UV}{\longleftarrow} O_3(g)$$

$$O(g) + O_2(g) \xrightarrow{UV} O_3(g)$$

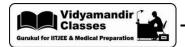
(C)
$$CO_2(g) \xrightarrow{UV} C(s) + 2O(g)$$

(D)
$$O_2(g) \xrightarrow{UV} O(g) + O(g)$$

$$O(g) + O_2(g) \xrightarrow{UV} O_3(g)$$

$$O(g) + O_2(g) \xrightarrow{UV} O_3(g)$$

- ***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