2 ½ Hours

Total Marks: 75

1. Attempt **all** questions.
2. **All questions** carry **equal** marks.
3. Draw **neat labeled diagrams** wherever necessary.
4. Use of **log tables** and **non-programmable calculator** is **allowed**.
5. For **Q.2, Q.3 and Q.4** attempt A and B **OR** C and D.

Q.1. Do as directed:(Any fifteen) **15**

1. What is Sheet erosion?
2. What is Hazardous waste?
3. State true or false: Dioxin is the carcinogenic by-product of plastic manufacturing process.
4. Define Photochemical smog.
5. Give one example of particulate air pollution.
6. Fill in the blank: _____ pollution is a resultant effect of pollutants coming from specific point or location.
7. What are SOx?
8. State the full form of IPCC.
9. Name any one greenhouse gases which damage the stratospheric ozone layer.
10. Fill in the blank: Two major mechanisms for living entities to overcome global warming are_____ and sequestration.
11. State any one adaptation strategy that could be used to deal with climate change in dry and sub-humid land?
12. What is Antarctic Ozone hole?
13. Fill in the blank: When fluorine, chlorine or bromine attach to carbon they form a group of compounds called _____.
14. Fill in the blank: Inside polar vortex, increase in chlorine monoxide correlates to decrease in_____.
15. Give one difference between Biostimulation and Bioaugmentation.
16. Give an example of plant used in bioremediation.
17. Give one word for: It is accessibility of the contaminant/pollutant to the organism.
18. State true or false Phytoextraction is defined as the uptake and degradation of organic compounds.
19. What do you mean by preliminary assessment in bioremediation?
20. Give an example of plant used in bioremediation.

Q.2 A	"Biological treatment methods are effective in treating even low concentration of contamination in air." Justify.	**08**
Q.2 B	Define water pollution? Explain types of water pollution.	**07**
	OR	
Q.2 C	Explain the steps involved in water quality assessment.	**08**
Q.2 D	What is Eutrophication? Enlist the measures to control eutrophication.	**07**
Q.3 A	What is greenhouse effect? Explain briefly.	**08**
Q.3 B	Give the significance of Kyoto protocol with respect to climate change.	**07**
	OR	
Q.3 C	Describe the mechanism which can be adopted to overcome climate change.	**08**
Q.3 D	Elaborate on Chloroflurocarbon family, its production and uses.	**07**
Q.4 A	Give a brief account on technique of In-situ bioremediation with suitable example	**08**
Q.4 B	How would you monitor efficacy of bioremediation?	**07**
	OR	
Q.4 C	Give a brief account on technique of Ex-situ bioremediation with suitable examples.	**08**
Q.4 D	Discuss phytoremediation methods to remove metal pollutant.	**07**
Q.5	Write Short notes on **any three** of the following:	**15**
a.	Soil erosion.	
b.	Antarctic Ozone Hole.	
c.	Effects of global warming.	
d.	Bioventing.	
e.	Measurement of bioremediation in field.	
