

P. Pages : 1

Time : Three Hours



GUG/W/18/11265

Max. Marks : 80

- Notes :
1. All questions are compulsory and carry equal marks.
 2. Illustrate the answers with suitable diagrams and examples.

1. Discuss structure and composition of atmosphere. 16

OR

 - a) What is global energy balance? Explain it. 8
 - b) Briefly explain green house effect. 8
2. Discuss changing monsoon in Holocene in the Indian subcontinent. 16

OR

 - a) Explain gaussian plume model. 8
 - b) Give the effects of urbanization on microclimate. 8
3. Discuss in detail role of hydroxyl and hydroperoxyl radicals in atmosphere. 16

OR

 - a) Explain chemistry of atmospheric particles and gases. 8
 - b) Describe acid base reactions in atmosphere. 8
4. Explain in detail Kyoto protocol, 1997 and Montreal Protocol, 1987. 16

OR

 - a) Discuss process of spring time ozone depletion over Antarctica. 8
 - b) What is carbon credit and carbon trading? 8
5.
 - a) Write a note on global energy balance. 4
 - b) Explain plume behavior. 4
 - c) Give the impact of climate change on atmosphere. 4
 - d) Explain chapman cycle. 4
