

M. Tech. First Year Second Semester (Chemical Engineering) (CBS)
13015 : Elective : Environmental Engineering & Waste Management : 2 CE 5

P. Pages : 1

Time : Three Hours



AW - 3725

Max. Marks : 80

- Notes :
1. All question carry marks as indicated.
 2. Answer **six** questions in all.
 3. Due credit will be given to neatness and adequate dimensions.
 4. Diagrams and chemicals equations should be given wherever necessary.
 5. Illustrate your answer necessary with the help of neat sketches.
 6. Discuss the reaction, mechanism wherever necessary.
 7. Use of pen Blue/Black ink/refill only for writing the answer book.

1. Discuss in detail the sources of Air Pollution. What are the effects of Air Pollution? Explain in brief. **13**
2. What are the different types of cyclone separators used in industry? Explain their applications and working in detail. **13**
3. Explain in detail the working of a bag filtration system. What are the different applications of bag filters. **13**
4. Explain in detail the role of Air pollutants in Global Warming. What are the effects of Global Warming? **13**
5. Explain in brief the Physical methods for the treatment of water and waste water. **14**
6. In which situation will you recommend the Ion Exchange method for water treatment? Discuss the process in detail. **13**
7. What is safe drinking water? Explain in detail the Chlorination method of disinfection? What are the advantages and disadvantages of Chlorination method? **13**
8. What are the anaerobic methods of treatment of waste water? Explain two stage anaerobic digestion in detail. **13**
9. What are the different methods of composting? What are the factors affecting the rate of composting? **13**
10. How is the site for a landfill selected? What precautions are to be taken at the landfill site? **14**
