

**BACHELOR OF TECHNOLOGY (C.B.C.S.) (2020 COURSE)**  
**B.Tech.Sem - IV CHEMICAL :SUMMER- 2022**  
**SUBJECT : ITC-II: INDUSTRIAL POLLUTION & ABATEMENT**

Day : Friday  
Date : 24-06-2022

**S-24444-2022**

Time : 10:00 AM-01:00 PM  
Max. Marks : 60

**N.B :**

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.

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**Q.1** What are the types of pollution? Describe in detail. What is the importance of pollution abatement in Chemical process industries? (10)

**OR**

What are the characteristics of Industrial waste water? Discuss in detail. Also state the Indian standards for the disposal of industrial effluent (10)

**Q.2** What are the methods of measurement of air pollutants? Describe collection efficiency in case of particulate pollution. (10)

**OR**

What are the adverse effects of air pollution on human health and environment? Describe in detail. (10)

**Q.3** What are the types of waste water pollutants? Describe the effects these pollutants on environment. (10)

**OR**

What is dissolved oxygen and chemical oxygen demand (COD) of any effluent? Describe the method of measurement of COD. (10)

**Q.4** Describe the basic operating principle and design of activated sludge process. (10)

**OR**

What are the advanced methods of waste water treatment? Describe any one method in detail. (10)

**Q.5** What is incineration? Describe regulations and standard laws for land pollution. (10)

**OR**

What is composting in solid waste management? Describe the importance of recovery and recycling. (10)

**Q.6** Why it is essential to treat pharmaceutical industry waste water? Describe the advanced methods applicable to treat pharmaceutical waste. (10)

**OR**

What is the composition of textile industry waste water? Describe the advanced methods used for its treatment. (10)

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