

Q.22 Explain the term 'fire escapes' and 'floor area ratio'.  
(CO4)

### SECTION-D

**Note:** Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 What are the different classes of fires? Describe the different types of fire extinguishers used in chemical industries. (CO4)

Q.24 Discuss the secondary treatment of wastewater in detail. Explain the trickling filters with neat sketch. (CO2)

Q.25 List the various methods used for controlling gaseous pollutants. Explain the working principle of an absorption tower for controlling gaseous pollutants with diagram. (Co1)

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### 6th Sem / Chemical

### Subject : Pollution Control and Industrial Safety

Time : 3 Hrs.

M.M. : 60

### SECTION-A

**Note:** Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 Which of the following is a natural source of air pollution? (CO1)

- a) Automobiles                      b) Volcanoes
- c) Power plants                      d) Factories

Q.2 The device used for the removal of gaseous pollutants is: (CO1)

- a) Cyclone separator              b) Absorption tower
- c) Fabric filter                      d) Gravity chamber

Q.3 The parameter used to measure the organic strength of wastewater is: (CO2)

- a) BOD                                  b) pH
- c) TSS                                  d) TDS

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- Q.4 Which of the following is NOT a method of solid waste utilization? (CO3)
- a) Composting                      b) Incineration  
c) Landfilling                      d) Sedimentation
- Q.5 OSHA regulations primarily focus on: (CO4)
- a) Water Quality  
b) Air pollution control  
c) Employee safety and health  
d) Waste management
- Q.6 Which is NOT a class of fire? (CO4)
- a) Class A                              b) Class B  
c) Class D                              d) Class X

### SECTION-B

**Note:** Objective/ Completion type questions. All questions are compulsory. (6x1=6)

- Q.7 Name one man-made source of air pollution. (CO1)
- Q.8 What is the main parameter measured by BOD in water analysis? (CO2)
- Q.9 State one health hazard due to solid waste. (CO3)
- Q.10 Name any one hazardous component found in E-waste. (CO3)

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- Q.11 What does HARA stand for in industrial safety? (CO4)
- Q.12 Mention one type of body protection equipment used in chemical industries. (CO4)

### SECTION-C

**Note:** Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

- Q.13 Explain the working principle of an electrostatic precipitator with diagram. (CO1)
- Q.14 Explain the effects of particulate matter on human health. (CO1)
- Q.15 Explain incineration and composting briefly. (CO3)
- Q.16 Discuss any four effects of e-waste on the environment? (CO3)
- Q.17 What is TOC? How is it measured in water analysis? (CO2)
- Q.18 Describe any two methods of solid waste utilization. (CO3)
- Q.19 What is the role of OSHA in ensuring industrial safety? (CO4)
- Q.20 Explain the concept of Hazard and Operability study (HAZOP). (CO4)
- Q.21 Describe the hazards related to heat and toxic materials in industries. (CO4)

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