

- Q.25 Discuss the role of venturi scrubber in air pollution control
- Q.26 Define Smoke, fog and fly ash
- Q.27 Draw the labeled diagram of ESP
- Q.28 Explain the sedimentation process for collection of particulates
- Q.29 Explain the working of centrifugal separator
- Q.30 Discuss the method for desulphurization of fuel gases
- Q.31 Write the health hazards of solid waste pollution
- Q.32 Discuss importance process modification
- Q.33 Write about types of sampling of water pollution
- Q.34 Discuss the working of trickling filters
- Q.35 Discuss any one of the following
- Maintenance of equipment
 - Incineration

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

- Q.36 Discuss about air sampling and its types. Explain the concept of stack sampling in detail
- Q.37 With the help of neat diagram explain the working of spray towers
- Q.38 Write a short note on any two of the following
- Activated sludge process
 - Desulphurization of fuel oil
 - Water treatment methods

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Roll No.

**6th Sem./Chemical Engineering , P & P, Found & Forg.,
Chemical Engg P&P**

**Subject:- Pollution Control in Chemical Process Industry /
Env. Engg & Safety**

Time : 3Hrs.

M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

- Q.1 Which of the following is the cause of industrial pollution
- Modern technology
 - Efficient water disposal
 - Efficient govt policies
 - Unplanned industrial growth
- Q.2 Which of the following devices of particulate collection is least efficient
- Bag filters
 - Cyclone separator
 - Scrubber
 - ESP
- Q.3 COD stands for
- Carbon oxygen demand
 - Chemical oxygen deficiency
 - Chemical oxygen demand
 - Chemical on demand

- Q.4 The collection efficiency of ESP
- Increase with increase in the electrode area
 - Increase with increase in the particle drift Velocity
 - Increase with increase in the gas flow rate
 - All of the above
- Q.5 Which of the following is not a manmade source of air pollution
- Forest fire
 - Industries
 - Automobile exhaust
 - All of the above
- Q.6 Percentage of oxygen in atmospheric air is
- 79%
 - 21%
 - 0.5%
 - 100%
- Q.7 Expansion of ESP is
- Electrostatic Precipitator
 - Electric Power
 - Electron Power
 - None
- Q.8 Which of these is a water treatment method
- Natural
 - Advanced
 - Batch
 - Long
- Q.9 Which of the following is the main cause of water pollution
- Pesticides
 - Fertilizers
 - Industries
 - automobile exhaust

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- Q.10 Which of the following is the mechanical means of treating industrial effluents?
- Oxidation
 - Chlorination
 - Recycling of wastes
 - Sedimentation

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Expand BOD
- Q.12 What do you understand by land filling
- Q.13 Name any one method of collection of gaseous air pollutant
- Q.14 Define air pollution
- Q.15 Write the full form of TDS
- Q.16 What do you mean by stack sampling
- Q.17 Define smog
- Q.18 What is desulphurization
- Q.19 Write about adsorption
- Q.20 Write two sources of air pollution

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 Classify air pollutants on the basis of state of matter
- Q.22 Discuss the effects of air pollution on human health and climate
- Q.23 Write five health hazards of water pollution
- Q.24 Discuss in detail any two methods of solid waste disposal

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