GUJARAT TECHNOLOGICAL UNIVERSITY

BE 6 SEMESTER – OLD PAPER – S22 TO S26 – QUESTION BANK

Subject Name & Code: Environmental Engineering - 3160611

Chapter 1: Water Supply scheme/System

Repeated Questions:

1. Water Demand and Population Forecasting:

- **Q.** Explain how can you come to a final quantity of water required to be supplied to a town or city? / Explain different types of water demand which has to be considered for the design of a water supply scheme for a city. / Explain different factors affecting the water demand. **(WINTER 2023, 7 Marks; SUMMER 2025, 7 Marks; WINTER 2025, 7 Marks)**
- **Q.** Explain population forecasting by geometrical increase method. / Explain in brief Arithmetic increase method of population forecasting. **(SUMMER 2022, 3 Marks; WINTER 2025, 3 Marks)**

2. Intake Structures:

- **Q.** What is an intake structure? Sketch and explain construction and working of a river intake. / Define Intake. Enlist different types of intakes used in the water supply scheme. / Explain any one in detail. [Diagram required – refer to the original question paper] **(SUMMER 2022, 7 Marks OR; WINTER 2022, 7 Marks OR; SUMMER 2023, 3 Marks; WINTER 2024, 7 Marks)**

3. Water Quality and Waterborne Diseases:

- **Q.** What control measures should be taken to prevent the outbreak of waterborne diseases? / Discuss various control measures for water borne diseases. **(SUMMER 2022, 4 Marks; WINTER 2023, 4 Marks)**
- **Q.** Give sanitary significance of color and turbidity in water. / What is turbidity and enlist various methods to determine turbidity. **(WINTER 2024, 3 Marks; WINTER 2025, 4 Marks)**
- **Q.** Enlist different chemical characteristics of water and discuss about acidity / Total Dissolved Solids with their environmental significance. / Enlist different physical and chemical characteristics of water and discuss their environmental significance. **(SUMMER 2022, 7 Marks; WINTER 2022, 4 Marks; SUMMER 2024, 4 Marks)**
- **Q.** Differentiate between temporary hardness and permanent hardness. **(WINTER 2022, 3 Marks; SUMMER 2024, 3 Marks)**

4. Coagulation and Sedimentation:

- **Q.** What do you understand by sedimentation with coagulation? / What is necessity of using coagulants in sedimentation? Explain the principle of coagulation. / What is coagulation? When it is required? Explain how to find the optimum dose of the coagulant required for water treatment. **(WINTER 2022, 3 Marks; WINTER 2022, 4 Marks; SUMMER 2023, 7 Marks; SUMMER 2024, 3 Marks)**

5. Filtration:

- **Q.** Differentiate between Rapid sand filter and Slow sand filter. **(SUMMER 2022, 7 Marks; WINTER 2022, 7 Marks; WINTER 2023, 7 Marks; SUMMER 2024, 7 Marks; SUMMER 2026, 7 Marks OR)**
- **Q.** Explain the working of rapid sand filter with a neat sketch. Also highlight the importance of backwashing for efficient working of the filter / Write a short note on "Rapid sand filter." **(SUMMER 2023, 7 Marks OR; SUMMER 2025, 7 Marks; WINTER 2025, 7 Marks OR)**

6. Disinfection:

- **Q.** Make a list of various forms of chlorination and explain break point chlorination with graph. **(WINTER 2023, 7 Marks; SUMMER 2024, 4 Marks)**

7. Water Distribution System:

- **Q.** Explain different types of networks/layouts used for water distribution. **(SUMMER 2022, 4 Marks; WINTER 2022, 7 Marks; SUMMER 2025, 7 Marks)**

Other Important Questions:

1. Water Supply Scheme – Sources, Components and Standards:

- **Q.** Give the classification of different sources of water. **(WINTER 2025, 3 Marks)**
- **Q.** Which are the sources of water? Mention the factors affecting selection of water source. **(SUMMER 2024, 4 Marks)**
- **Q.** Enlist components of water supply scheme. **(WINTER 2024, 3 Marks)**
- **Q.** What is the necessity of water supply scheme? Draw a complete flow diagram of water treatment plant. **(SUMMER 2022, 3 Marks)**
- **Q.** Draw layout of water treatment plant and briefly explain the different treatment unit. **(WINTER 2024, 7 Marks)**
- **Q.** Give IS standards for drinking water in India. **(WINTER 2025, 7 Marks)**

2. Water Demand and Design Period:

- **Q.** Write down the empirical formula of fire demand. **(SUMMER 2026, 3 Marks)**
- **Q.** Define seasonal fluctuation and design period in water supply scheme. **(WINTER 2024, 4 Marks)**

3. Population Forecasting (Numerical):

- **Q.** For a city population record for past decades were found as follows. Estimate 1) saturation population for this city. 2) Expected population in 2030. [Diagram required – refer to the original question paper] **(SUMMER 2026, 4 Marks)**

4. Intake Structures (Theory):

- **Q.** What are intake towers? Differentiate between ‘dry’ and ‘wet’ intake towers. **(WINTER 2025, 4 Marks)**
- **Q.** Write site selection criteria for an intake structure. **(WINTER 2023, 4 Marks)**
- **Q.** Enlist the factor affecting site selection of an intake. **(SUMMER 2025, 4 Marks)**

5. Intake Design (Numerical):

- **Q.** Design an intake well for handling 0.18 m^3/sec of water. **(SUMMER 2023, 4 Marks)**
- **Q.** Design an intake well for handling 0.25 m^3/sec of water. **(SUMMER 2025, 3 Marks)**

6. Water Quality – Characteristics and Significance (Theory):

- **Q.** What causes alkalinity in water. **(SUMMER 2022, 3 Marks)**
- **Q.** Explain following chemical characteristics of water in detail: 1. Hardness 2. Alkalinity 3. Solids. **(SUMMER 2023, 7 Marks)**
- **Q.** Give sanitary significance of: Nitrate, Iron and fluoride with reference to drinking water. **(SUMMER 2025, 3 Marks)**

7. pH Calculations (Numerical):

- **Q.** Compute pH and pOH values of freshly distilled water at 21°C. **(SUMMER 2024, 3 Marks)**
- **Q.** Find out how much acidic is sample pH 3.0 compared to pH 6.0. **(WINTER 2022, 3 Marks)**
- **Q.** The pH of influent and effluent of an Industry is 5.3 and 8.4 respectively. Find average pH of waste water. **(WINTER 2023, 3 Marks)**
- **Q.** Find average of pH 2 and pH 6. Calculate how much acidic is pH 4 compared to pH 6. **(SUMMER 2022, 4 Marks)**

8. Sedimentation and Coagulation (Theory):

- **Q.** Differentiate between plain sedimentation and sedimentation aided with coagulation. **(SUMMER 2025, 3 Marks)**
- **Q.** Derive the equation for settling velocity for a discrete particle. **(SUMMER 2025, 4 Marks)**
- **Q.** Enlist the classification of Settling tanks. **(SUMMER 2026, 3 Marks OR)**

9. Sedimentation Tank and Flash Mixer Design (Numerical):

- **Q.** Design a plain sedimentation tank for a water supply scheme having capacity 10 MLD having Detention time 5 hours, Velocity of flow 0.20 m/min, Water depth 3.5m and Free board 0.5m. Assume suitable data if necessary. **(SUMMER 2026, 7 Marks)**
- **Q.** Design a Plain sedimentation tank for treating 7 MLD of water. **(SUMMER 2023, 7 Marks)**
- **Q.** Design a PST for handling 8 MLD of water. **(SUMMER 2025, 7 Marks)**
- **Q.** Design a sedimentation tank for a water works, which supplies 1.4×10^6 liter/day water to the town. The sedimentation period is 5 hours, the velocity of flow is 12 cm/minute, depth of water in the tank is 4.0m. Assuming an allowance for sludge is to be made as 80cm. **(SUMMER 2022, 7 Marks OR)**
- **Q.** Design a flash mixer for a design flow of 240 m^3/hr. **(SUMMER 2023, 7 Marks)**
- **Q.** Find the settling velocity of a discrete particles in water, having particle diameter 7×10^{-3} cm and specific gravity 2.65. Assume Reynolds's number less than 0.5. Water temperature is 20°C and kinematic viscosity of water at 20°C is 1.01×10^{-2} cm^2/sec. **(WINTER 2023, 4 Marks)**

10. Filtration (Numerical):

- **Q.** Find the area of the rapid sand filter as well as number of beds required for treating 11 MLD of water. Also find the size of each filter bed. **(SUMMER 2023, 4 Marks)**
- **Q.** Find the area required for a rapid sand filter for a city with the population of 60000 with an average rate of demand of 180 lpd. Also find the number of beds required. **(SUMMER 2025, 4 Marks)**

11. Disinfection and Softening:

- **Q.** Explain types of chlorination. **(SUMMER 2026, 4 Marks)**
- **Q.** Explain break point chlorination. **(WINTER 2022, 4 Marks)**
- **Q.** What are various methods of disinfection? What are the chemicals used as disinfectants? **(SUMMER 2022, 7 Marks)**
- **Q.** Explain zeolite process. **(SUMMER 2026, 4 Marks OR)**

12. Water Distribution System (Theory):

- **Q.** Explain methods of water distribution system. **(SUMMER 2026, 7 Marks)**
- **Q.** Explain different layout of distribution system. **(SUMMER 2026, 7 Marks OR)**
- **Q.** What are the requirements of good distribution system? **(WINTER 2023, 3 Marks)**
- **Q.** State the advantages and disadvantages of grid iron system used for distribution of the water. **(SUMMER 2023, 3 Marks)**

13. Pipes, Valves and Pumps:

- **Q.** What are the different types of pipes used for water supply? Discuss Asbestos cement (A.C.) pipes and Steel pipes in detail. **(SUMMER 2024, 7 Marks)**
- **Q.** What are the different types of pipes used for water supply? Discuss cast iron pipes and concrete pipes in detail. **(WINTER 2022, 7 Marks)**
- **Q.** Give advantages and disadvantages of RCC pipe. **(SUMMER 2022, 4 Marks)**
- **Q.** Explain reflux valve with neat sketch. **(SUMMER 2022, 3 Marks OR)**
- **Q.** Define spigot and socket joint and Reflux valve. **(WINTER 2024, 4 Marks)**

- **Q.** Explain working of centrifugal pump with neat sketch. [Diagram required – refer to the original question paper] **(WINTER 2023, 7 Marks)**

14. Rising Main Design (Numerical):

- **Q.** Find the most economical diameter of rising main to carry a discharge of 0.15 m^3/sec. **(SUMMER 2025, 3 Marks)**

Chapter 2: Sewage: Characteristics, Treatment and Disposal

Repeated Questions:

1. Wastewater Treatment Plant – Layout and Units:

- **Q.** Draw a complete flow diagram of wastewater treatment plant / Domestic Wastewater Treatment Plant and describe the function of each unit. **(WINTER 2022, 7 Marks; WINTER 2023, 7 Marks; SUMMER 2024, 7 Marks; WINTER 2025, 7 Marks)**

2. Biological Treatment Processes:

- **Q.** Sketch and explain construction and working of trickling filter. / What is a trickling filter? Explain its working principle, components, and applications in wastewater treatment. [Diagram required – refer to the original question paper] **(SUMMER 2022, 7 Marks OR; WINTER 2022, 7 Marks; SUMMER 2023, 7 Marks; SUMMER 2024, 7 Marks; WINTER 2024, 7 Marks; SUMMER 2025, 7 Marks OR; SUMMER 2026, 7 Marks)**
- **Q.** Describe activated sludge process with sketch. / Write a short note on "Activated sludge process." **(WINTER 2022, 4 Marks; SUMMER 2024, 4 Marks; WINTER 2025, 7 Marks; SUMMER 2026, 7 Marks OR)**
- **Q.** Explain aerobic decomposition and anaerobic decomposition of sewage. / Explain in brief Aerobic and Anaerobic process. **(SUMMER 2022, 3 Marks; WINTER 2022, 3 Marks; SUMMER 2024, 3 Marks; WINTER 2025, 3 Marks)**
- **Q.** Differentiate between suspended growth and attached growth biological treatment process. **(WINTER 2023, 4 Marks OR; SUMMER 2025, 4 Marks)**

3. BOD and COD (Theory):

- **Q.** Differentiate between BOD and COD. **(SUMMER 2022, 3 Marks; SUMMER 2023, 3 Marks; WINTER 2024, 3 Marks; WINTER 2025, 3 Marks)**
- **Q.** Explain 1st stage BOD and derive its formula with usual notations $L_t = L_o [1 - 10^{-Kt}]$. **(WINTER 2022, 7 Marks; SUMMER 2024, 7 Marks OR)**

4. Self-Purification of Streams:

- **Q.** What do you mean by self-purification? Explain with the sketch the oxygen sag curve / Explain Oxygen sag curve with diagram / Explain DO sag curve with sketch. **(SUMMER 2022, 7 Marks; WINTER 2022, 4 Marks; SUMMER 2024, 4 Marks; WINTER 2024, 4 Marks)**

5. Septic Tank:

- **Q.** Explain design procedure of septic tank. / Write a short note on septic tank. **(SUMMER 2022, 4 Marks; WINTER 2022, 4 Marks; SUMMER 2023, 4 Marks; SUMMER 2026, 4 Marks)**

6. Sewage Sickness and Sewage Disposal:

- **Q.** Explain in brief "Sewage sickness". **(WINTER 2023, 3 Marks OR; WINTER 2024, 3 Marks)**
- **Q.** Discuss the different methods of sewage disposal. **(SUMMER 2022, 4 Marks OR; WINTER 2022, 7 Marks)**

Other Important Questions:

1. Definitions and Basic Terms (Theory):

- **Q.** Define: Relative stability, population equivalent. **(WINTER 2025, 4 Marks)**
- **Q.** Define the terms: 1) BOD 2) Sewerage system 3) Trap. **(SUMMER 2026, 3 Marks)**
- **Q.** Define: 1) COD 2) Sullage 3) Anti-siphon pipe. **(SUMMER 2026, 3 Marks OR)**
- **Q.** Define COD, BOD and TOC. **(SUMMER 2025, 3 Marks)**
- **Q.** Define BOD. Give the significance of BOD test for wastewater. **(WINTER 2022, 4 Marks)**
- **Q.** Define sewage and sulfate. **(WINTER 2024, 3 Marks OR)**

2. Characteristics of Wastewater (Theory):

- **Q.** Write a brief note on various physical properties of waste water. **(WINTER 2025, 4 Marks)**
- **Q.** Enlist different chemical characteristics of wastewater and explain any five of them in detail. **(SUMMER 2025, 7 Marks)**
- **Q.** Enlist different unit processes and units operations used for wastewater treatment. **(SUMMER 2023, 3 Marks)**
- **Q.** Enlist different biological processes. **(WINTER 2023, 4 Marks OR)**

3. Zones of Pollution and Self-Purification (Theory):

- **Q.** Explain the zones of pollution of a polluted stream. **(SUMMER 2026, 7 Marks)**
- **Q.** Explain the factors affecting self-purification capacity of a river. **(SUMMER 2025, 7 Marks)**

4. Treatment Units (Theory):

- **Q.** Draw a layout of a typical sewage treatment plant having an activated sludge unit as secondary treatment unit. [Diagram required – refer to the original question paper] **(SUMMER 2023, 4 Marks)**
- **Q.** Write short note on screening in waste water treatment. **(WINTER 2024, 4 Marks)**
- **Q.** Explain the process of sludge digestion and discuss the factors that affect its efficiency in wastewater treatment. **(WINTER 2024, 7 Marks)**

5. BOD Calculations (Numerical):

- **Q.** An industrial waste water enters a stream having a BOD concentration of 10 mg/l and flow of 20 m^3/s. if the flow of waste water is 1.5 m^3/s and its BOD concentration is 250 mg/l then the BOD concentration in the stream at a point of confluence of wastewater with the stream will be. Assume suitable data if necessary. **(SUMMER 2026, 4 Marks)**
- **Q.** A sample of sewage is estimated to have a 5 day 20°C BOD of 250 mg/l if the test temperature be 30°C in how many days will be the same value of BOD be obtained? **(SUMMER 2026, 4 Marks OR)**
- **Q.** If 4 day BOD of a sample at 25°C is 200 mg/lit, find its 5 day BOD at 35°C. **(SUMMER 2023, 3 Marks OR)**
- **Q.** If 4 day BOD of a sample at 30°C is 250 mg/lit find its 5 day BOD at 35°C. **(SUMMER 2025, 3 Marks)**
- **Q.** If the 5 day BOD at 20°C temperature of a waste water sample is found to be 180 mg/lit, find 3 day BOD at 30°C temperature of the sample. Assume $K_{D(20)}$ = 0.1/day. **(WINTER 2023, 4 Marks)**
- **Q.** Determine BOD_8 at 15°C if BOD_5 at 20°C is 150 mg/l. $K_{D(20)}$ = ... [Data truncated in source – refer to the original question paper] **(SUMMER 2022, 7 Marks OR)**

6. Treatment Unit Design (Numerical):

- **Q.** Design a primary settling tank of rectangular shape for a town having population of 40000 with water supply of 135 l/c/day. Assume 80% of water supplied to the town is converted to wastewater and detention period 2 hr, SOR is 30 m^3/m^2/day take L/B = 4. Assume suitable data if necessary. **(SUMMER 2026, 7 Marks OR)**
- **Q.** A single stage trickling filter is required to treat 5 MLD of sewage having BOD of 200 mg/lit. Take Organic loading rate = 11000 kg/ha-m/day and recirculation ratio = 1. Find the effluent BOD of the filter. Assume BOD removal by PST = 30%. **(SUMMER 2023, 7 Marks)**
- **Q.** Design a septic tank for a colony of 140 persons. Assume rate of water supply as 135 lpc. **(SUMMER 2023, 4 Marks)**
- **Q.** Design a bar screen for a peak average flow of 65 million liters per day. **(WINTER 2023, 7 Marks OR)**

Chapter 3: Collection of sewage

Repeated Questions:

1. Sewers and Sewer Appurtenances:

- **Q.** Why circular sewers are more preferred for the sewerage system? / Enumerate different shapes of sewers and describe circular sewer section. **(WINTER 2023, 3 Marks OR; SUMMER 2024, 4 Marks OR)**
- **Q.** Enlist Sewer Appurtenances. **(SUMMER 2025, 3 Marks OR; SUMMER 2026, 3 Marks)**

Other Important Questions:

1. Sewerage Systems and Collection of Sewage (Theory):

- **Q.** Define sewer and explain different type of sewer. **(WINTER 2024, 7 Marks)**
- **Q.** Explain methods of collection of sewage with their merits and demerits. **(WINTER 2024, 7 Marks OR)**
- **Q.** Give comparison between conservancy and water carriage system of sewage disposal. **(WINTER 2025, 7 Marks)**
- **Q.** Discuss different factors governing choice of combined system. **(WINTER 2025, 4 Marks)**
- **Q.** Explain Soak pits. **(SUMMER 2026, 4 Marks OR)**

2. Sewer Design and Construction (Theory):

- **Q.** Write down the Assumption of sewer design. **(SUMMER 2026, 3 Marks)**
- **Q.** Define the terms Self cleansing velocity and Non scouring velocity. **(SUMMER 2026, 3 Marks OR)**
- **Q.** State the requirements of good sewer joint. Enlist common types of joints used in sewer. **(WINTER 2023, 4 Marks)**
- **Q.** Differentiate between shallow and deep man hole. **(SUMMER 2025, 3 Marks)**

3. Sewer Design (Numerical):

- **Q.** A Sewer has a diameter of 300 mm and slope in 1 in 400. While running full it has mean velocity of 0.7 m/s. If both the diameter and slope are 600 mm and 1 in 200. What will be the changed mean velocity when running half full? Assume suitable data if necessary. **(SUMMER 2026, 4 Marks)**
- **Q.** A combined sewer is to be designed to serve an area of 15 km^2 with a population density of 300 person/hectare. The average rate of sewage flow is 320 lpcd. The maximum flow is 60% in excess of average together with the rainfall equivalent of 14 mm in 24 hour, all of which appears as runoff. Determine the size of the circular sewer required. Assume maximum velocity of flow as 2.0 m/s. **(SUMMER 2023, 7 Marks)**
- **Q.** Calculate the diameter and discharge of a circular sewer laid at a slope of 1 in 350 when it is running half full, and with a velocity of 1.1 m/s. Take Manning's N = 0.013. **(SUMMER 2025, 4 Marks)**

Chapter 4: House Drainage

Repeated Questions:

1. House Drainage Principles and Plumbing Systems:

- **Q.** State the principles of house drainage system. **(SUMMER 2023, 4 Marks OR; WINTER 2025, 4 Marks)**
- **Q.** Describe different system of plumbing with neat sketch. / Write a short note on "one pipe plumbing system". [Diagram required – refer to the original question paper] **(WINTER 2023, 7 Marks OR; WINTER 2025, 7 Marks)**

Other Important Questions:

1. Definitions (Theory):

- **Q.** Define: Trap, anti-siphonage pipe, Sewer. **(WINTER 2025, 3 Marks)**
- **Q.** Define: Vent pipe, Rain water pipe, anti-siphonage pipe. **(SUMMER 2024, 3 Marks OR)**
- **Q.** Define following. (1) Sullage (2) Rubbish (3) Soil pipe. **(WINTER 2023, 3 Marks)**
- **Q.** Define soil pipe and vent pipe. **(WINTER 2024, 3 Marks)**

2. Traps and Plumbing Systems:

- **Q.** Explain in brief Nanhi trap. **(WINTER 2025, 3 Marks)**
- **Q.** Explain different types of traps used in the house drainage system. **(SUMMER 2023, 4 Marks)**
- **Q.** Classify the traps according to shape and describe with sketch the same. [Diagram required – refer to the original question paper] **(WINTER 2023, 4 Marks OR)**
- **Q.** Write short note on Intercepting trap and catch basin. **(WINTER 2024, 4 Marks OR)**
- **Q.** Differentiate between one pipe system and two pipe system. **(WINTER 2024, 4 Marks)**

3. House Drainage Plan:

- **Q.** Draw a house drainage plan for a 3BHK detached bungalow. **(WINTER 2022, 3 Marks)**

Chapter 5: Solid Waste Management

Repeated Questions:

1. Solid Waste Terminology:

- **Q.** Define: Garbage, Rubbish and Sewage / Define: Garbage, Rubbish, Leachate / Define: Garbage, Leachate, putrefaction, refuse. **(WINTER 2022, 3 Marks; SUMMER 2023, 3 Marks; SUMMER 2024, 3 Marks; WINTER 2025, 4 Marks)**

2. Disposal of Solid Waste:

- **Q.** What is sanitary land filling? Describe the different factors to be considered for the site selection of sanitary land filling. / Write a short note on "Sanitary land filling". **(WINTER 2022, 7 Marks OR; WINTER 2023, 7 Marks; SUMMER 2024, 7 Marks OR; SUMMER 2026, 7 Marks)**
- **Q.** Write a short note on composting. **(SUMMER 2022, 4 Marks OR; WINTER 2022, 3 Marks)**

Other Important Questions:

1. Solid Waste Management – Fundamentals (Theory):

- **Q.** What is solid waste management? Enlist its objectives. **(WINTER 2023, 3 Marks)**
- **Q.** What is solid waste management? State the composition and characteristics of the municipal solid waste. **(SUMMER 2022, 7 Marks)**
- **Q.** Give classification of solid waste. **(WINTER 2025, 4 Marks OR)**
- **Q.** Draw the flow chart showing all the functional elements of solid waste management system. [Diagram required – refer to the original question paper] **(SUMMER 2023, 4 Marks)**
- **Q.** Define Bio medical waste and enlist the sources of Biomedical waste. **(WINTER 2024, 4 Marks)**

2. Collection and Disposal Methods:

- **Q.** Explain in brief "curb service" as a method of solid waste collection. **(WINTER 2025, 3 Marks OR)**
- **Q.** Enlist different methods of solid waste disposal and explain any one in detail. **(WINTER 2024, 7 Marks)**
- **Q.** Explain different types of landfilling techniques used for disposal of solid waste. **(SUMMER 2025, 7 Marks)**

Chapter 6: Air and noise pollution

Repeated Questions:

1. Effects of Air Pollution:

- **Q.** Explain the effect of air pollution on plants, building material and human health. / Describe effect of Air pollution on man and material. / Explain effects of air pollution on men, material and animals. / Explain effects of air pollutant on human health. **(SUMMER 2022, 3 Marks OR; WINTER 2022, 4 Marks OR; SUMMER 2023, 7 Marks OR; WINTER 2023, 4 Marks; WINTER 2024, 4 Marks OR; WINTER 2025, 7 Marks)**

2. Air Pollutants – Classification and Sources:

- **Q.** Give the classification of air pollutants. / Explain primary and secondary air pollutants. / Give classification of air pollutants and explain in brief various sources of air pollutants. **(SUMMER 2023, 3 Marks; WINTER 2023, 7 Marks OR; SUMMER 2024, 4 Marks OR; SUMMER 2025, 4 Marks OR; SUMMER 2026, 3 Marks)**

3. Noise Pollution Control:

- **Q.** Explain the different control measure for noise pollution. / Explain different measures for control of noise pollution. **(SUMMER 2023, 7 Marks; SUMMER 2024, 3 Marks OR; SUMMER 2025, 7 Marks)**

Other Important Questions:

1. Air Pollutants (Theory):

- **Q.** Enlist different air pollutants and explain any two in detail. **(WINTER 2024, 7 Marks OR)**

2. Noise Pollution (Theory):

- **Q.** Differentiate between “Sound and Noise”. **(WINTER 2025, 3 Marks)**
- **Q.** How is Noise measured? Describe the methods of controlling Noise pollution. **(SUMMER 2024, 3 Marks OR)**
- **Q.** What is noise pollution? State the sources of it. **(WINTER 2022, 3 Marks OR)**
- **Q.** What is dB? Explain the effects of noise pollution. **(SUMMER 2022, 3 Marks OR)**
- **Q.** Explain how Noise pollution affect working efficiency of human being. **(WINTER 2024, 3 Marks OR)**

Chapter 7: Environment Impact Assessment (EIA)

Repeated Questions:

1. Environment Impact Assessment:

- **Q.** Explain with flow chart, the steps used for Environment Impact Assessment. / Discuss in brief "EIA". / Write short note on EIA. **(SUMMER 2023, 4 Marks; WINTER 2023, 4 Marks OR; WINTER 2024, 3 Marks)**

Other Important Questions:

1. Environmental Legislation:

- **Q.** Write a short note on Environment (protection) Act. **(WINTER 2025, 7 Marks OR)**
- **Q.** What are the objectives of Environmental protection Act, 1986. Explain power of central government. **(SUMMER 2024, 7 Marks)**

2. EIA and Sustainable Development:

- **Q.** Explain the role of EIA in achieving the goal of sustainable development. **(SUMMER 2025, 4 Marks)**

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