

BE Semester- VIII (civil) Question Bank

(Environmental Pollution & Control EP-II)

All questions carry equal marks(10 marks)

Q.1	Explain various criteria used for aeration tank of activated sludge process.
Q.2	What do you understand by aerosols? Describe different types of aerosols along with their characteristics.
Q.3	Explain the sources and effects of the following air pollutants: (i) CO, (ii) SO ₂ .
Q.4	Write short note on Electrostatic precipitators.
Q.5	Write short note on Anaerobic ponds.
Q.6	Write short note on Primary and secondary air pollutants.
Q.7	Explain the term stabilization pond with neat sketch.
Q.8	Write short note on Oxygen requirements in an activated sludge process.
Q.9	Write short note on Operational difficulties of activated sludge plants.
Q.10	With the help of flow diagrams describe bio filters.
Q.11	Explain the importance of recirculation in trickling filters.
Q.12	Explain various filter troubles giving remedial measures for each.
Q.13	Explain various operations of working of contact bed. List the advantages and disadvantages of contact bed.
Q.14	Explain the working of an anaerobic pond.
Q.15	Write a note on sludge thickening.
Q.16	What is sustainable development? Describe the conflicts of interests that you face in your own life.
Q.17	Explain: (i) Mixed liquor (ii) Mixed liquor solids concentration
Q.18	Explain various criteria used for aeration tank of activated sludge process.
Q.19	Write a short note on sources of air pollution.
Q.20	Write short note on "Gravity settling chamber."
Q.21	Describe in detail the principle of dispersion of air pollutants and draw sketches of variety of plumes..
Q.22	Enumerate various types of equipments used for the control of emission of gaseous pollutants. Describe any one in detail.
Q.23	Enumerate various types of equipments used for the control of emission of particular pollutants. Describe with neat sketch the cyclone separators.
Q.24	Justify the need of legislation for environmental protection.
Q.25	Discuss the silent feature of the Environmental Protection Act -1986.
Q.26	Design a conventional activated sludge treatment plant from the following data. 1.wastewater flow=40000m ³ /day 2.aeration period=6hours 3.influent BOD=200mg/lit 4.MLSS=3000mg/lit 5.F/M ratio=0.3
Q.27	What is environmental impact assessment? Discuss the importance of precautionary principle and show how it is related to EIA?
Q.28	State limitations of the environmental impact assessment.
Q.29	What functions are performed by the central and state boards?

Q.30	What are the powers of the state boards?
Q.31	Write a note on drawbacks of water quality legislation in India.
Q.32	Write short note on Attached growth processes and suspended growth process.
Q.33	Write short note on Solid wasted management.
Q.34	Write short note on Aero filters.
Q.35	Write short note on High rate filtration.
Q.36	Write short note on Stages of Anaerobic digesters.
Q.37	Determine the size of high rate trickling filter for the following data. 1.sewage flow=5.0MLD 2.recirculation ratio=1.2 3.BOD of raw sewage=260mg/lit 4.BOD removal in primary clarifier=30% 5.final effluent desire=4.mg/lit
Q.38	Why trickling filters are provided in wastewater treatment plants? Sketch a typical flow sheet for municipal wastewater plant with trickling filter in it.
Q.39	Write short note on water Act, 1974
Q.40	Define shock loading ?what are the effects of shock loading.