

ORISSA SCHOOL OF ENGINEERING & POLYTECHNIC, BERHAMPUR

Th4. WATER SUPPLY AND WASTE WATER ENGINEERING

SEMESTER-5TH

FACULTY NAME:- JYOTIRMAYEE MUNI

Week	Date Range	Topics	Subtopics
1	1/8 - 5/8	Introduction to Water Supply	Necessity of treated water supply, per capita demand, factors affecting demand
2	7/8 - 12/8	Water Quantity and Quality	Population forecasting methods, impurities in water, water quality standards, analysis
3	14/8 - 19/8	Sources of Water	Surface and underground sources, yield from wells, intakes (types and description)
4	21/8 - 26/8	Conveyance of Water	Pumps for conveyance, pipe materials, joints, laying of pipes
5	28/8 - 2/9	Water Treatment Processes	Flow diagram, aeration, sedimentation (plain and with coagulation)
6	4/9 - 9/9	Water Treatment Processes (cont.)	Filtration, disinfection, chlorination, softening of water (lime soda process, ion exchange)
7	11/9 - 16/9	Distribution System	Types of distribution systems, supply methods, layouts, valves, fire hydrants, water meters
8	18/9 - 23/9	Plumbing in Buildings	Connection from mains, plumbing layouts for single and multi-storied buildings
9	25/9 - 30/9	Introduction to Wastewater Engineering	Aims and objectives, terminologies, collection systems (conservancy and water carriage)
10	2/10 - 7/10	Quantity and Quality of Sewage	Sanitary sewage, variation in flow, computation using formulas, sewage characteristics
11	9/10 - 14/10	Sewerage System	Types of sewerage systems, shapes of sewers, sewer alignment and laying
12	16/10 - 21/10	Sewer Appurtenances	Manholes, lamp holes, inlets, grease & oil traps, storm regulators, inverted siphons
13	23/10 - 28/10	Sewage Disposal	Disposal on land (farming, dosing), sewage sickness, disposal by dilution, self-purification
14	30/10 - 4/11	Sewage Treatment	Principles, flow diagram, primary treatment processes
15	6/11 - 11/11	Sewage Treatment (cont.)	Secondary treatment processes
16	13/11 - 18/11	Sanitary Plumbing for Buildings	Requirements, layout of lavatory blocks, building drainage, sanitary fixtures
17	20/11 - 25/11	Field Applications and Case Studies	Field applications, case studies, visits to treatment plants
18	27/11 - 30/11	Buffer Week	Addressing pending topics, advanced discussions, or student queries

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