

5th Semester	REV5D003	Urban and Rural Sanitation	L-T-P 3-0-0	3 Credits
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Module-1:

Hydraulics of treatment plant; flow measurement and hydraulic control points, hydraulic analysis of unit operations, hydraulic profile through the treatment plant.

Module-2:

Water distribution systems: Types of aqueducts, Hydraulics of conduits, capacity and sizes including economical sizes of rising main, structural requirement for aqueducts. Appurtenances and valves, Materials for water pipes. Storage tanks; Network design; Computer packages for the design of water distribution and wastewater collection system.

Module-3:

Sanitation: Municipal wastewater collection; Systems of sanitation and systems for water carriage sewage; Estimation of wastewater flows and variation in waste water flow; Estimation of storm water runoff by rational formula; Choosing Waste Disposal Techniques, Options for Excreta Disposal and Techniques for Reusing, Waste Disposal and Reuse, on Site collection and Disposal, pit latrines, Compositing privy, Septic Tanks and Aqua privy, Collection and off Site Treatment, Cartage, waterborne ponds, Composting, Aquatic weeds, Reuse, Irrigation, Aquaculture, Algae, Fertilization and Biogas.

Module-4:

Municipal Rules: Regulations & Acts, Agencies involved, General sanitation of schools, Hospitals, Bathing places and houses etc.