

## **SYLLABUS FOR SPECIAL TEST IN SANITATION SCIENCE, TECHNOLOGY AND MANAGEMENT**

<b>Environmental Pollution</b>
Cause, effects and control measures of:-Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution, Nuclear hazards, Solid waste Management: Causes, effects and control measures of urban and industrial wastes, Role of an individual in prevention of pollution.
<b>Reference books:</b>  Erach Bharucha, Text book for Environmental Studies, University Grants Commission, New Delhi, India, 2004
<b>Water and Wastewater Treatment</b>
Water and wastewater characteristics; Basic unit processes and operations for water treatment; Drinking water standards; Distribution of water; Sewage and sewerage treatment; Primary, secondary and tertiary treatment of wastewater, effluent discharge standards; Sludge disposal.
<b>Reference books:</b>  Water Supply Engineering and Wastewater Engineering by B. C. Punmia. Laxmi Publications (P) Ltd., New Delhi. Water Supply Engineering and Sewage & Wastewater Disposal Engineering by S. K. Garg. Khanna Publishers, Delhi, Environmental Engineering by H.S. Peavy. McGraw Hill International editions.
<b>Measurement of Water Quality</b>
Sampling, Dissolved Oxygen, Biochemical Oxygen Demand, Chemical Oxygen Demand, Total Organic Carbon, Turbidity, Color, Taste, and Odor, Alkalinity, Solids, Nitrogen and Phosphorus, Pathogens, Heavy Metals, Other Organic Compounds
<b>Reference books</b>  Ruth F Weiner and Robin A Matthews., Environmental Engineering, Fourth Edition, 2003. Butterworth and Heinemann
<b>Sludge Treatment and Disposal</b>
Sources of Sludge, Characteristics of Sludges, Sludge Treatment, Ultimate Disposal
<b>Reference books:</b>  Ruth F Weiner and Robin A Matthews., Environmental Engineering, Fourth Edition, 2003. Butterworth and Heinemann
<b>Solid Waste Management</b>
Quantities and Characteristics of Municipal Solid Waste, Collection, Disposal Options
<b>Reference books:</b>  Ruth F Weiner and Robin A Matthews., Environmental Engineering, Fourth Edition, 2003. Butterworth and Heinemann

## **SYLLABUS FOR SPECIAL TEST IN SOFTWARE SYSTEMS**