

Name of the Faculty	:	Mr. Ankit Sharma
Discipline	:	Civil Engineering
Semester	:	6 TH
Subject	:	WWT PEC-CEEL-302-G
Lesson Plan Duration	:	15 Weeks (From May 2021 to July 2021)
Work load (Lectures/Practical)		
Per week (in hours)	:	Lectures-03

LECTURE PLAN

WEEK	LECTURE	TOPIC
1 st	1 st	Importance and Necessity of Sanitation
	2 nd	Terms used in sanitation- Sullage, Sewage, Sewer and Sewerage
	3 rd	Sewerage Systems and their Suitability
2 nd	1 st	Dry Weather Flow, Factors Affecting Dry Weather Flow
	2 nd	Flow Variations and their Effects on Design of Sewerage System
	3 rd	Types of Sewers and their Hydraulic Design
3 rd	1 st	Hydraulic Design of Sewers
	2 nd	Hydraulic Design of Sewers
	3 rd	Numerical Problems
4 th	1 st	Numerical Problems
	2 nd	Material used for Sewer Construction
	3 rd	Joints and Sewer Appurtenances
5 th	1 st	Layout, Construction and Testing of Sewer Lines
	2 nd	Velocity in Sewers, Storm Water Sewers
	3 rd	Principles of House Drainage
6 th	1 st	Types of Pipes used for Drainage
	2 nd	Classification and Functions of Traps
	3 rd	Sanitary Fitting, System of Plumbing
7 th	1 st	House Drainage Plan and Ventilation of House Drainage
	2 nd	Quality Parameters- Physical, Chemical and Biological Characteristics
	3 rd	Quality Parameters- Physical, Chemical and Biological Characteristics
8 th	1 st	Oxygen Demand
	2 nd	Indian Standards for Disposal of Effluents into Inland Surface

		Sources and on Land
	3 rd	Guidelines for Reuse of Treated Wastewater
9 th	1 st	Numerical Problems on BOD & COD
	2 nd	Numerical Problems on BOD & COD
	3 rd	Objectives, Flow chart of Conventional Treatment Units and their Efficiencies Preliminary Treatment, Screening and Grit Removal Units
10 th	1 st	Principle, Types and Design of Primary Sedimentation Tank
	2 nd	Coagulation Aided Sedimentation Tank, Flocculation
	3 rd	Concept of Organic Matter Removal, Aerobic and Anaerobic Treatment Processes
11 th	1 st	Activated Sludge Process
	2 nd	Conventional and Extended Aeration Systems
	3 rd	Trickling Filters, Aerated Lagoons, septic tank
12 th	1 st	Waste Stabilization Ponds, Oxidation Ditches
	2 nd	Up-Flow Anaerobic Sludge Blanket Process
	3 rd	Objectives, Sludge Digestion
13 th	1 st	Digestion and Disposal of Primary and Secondary Sludge
	2 nd	Factors Affecting Sludge Digestion, Thickening of Sludge
	3 rd	Anaerobic Digestion of Sludge, Sludge Digestion Tank
14 th	1 st	Sludge Conditioning and Dewatering, Sludge Drying Bed
	2 nd	Standards of Wastewater Disposal
	3 rd	Modes of Disposal of Treated Sludge
15 th	1 st	Self-Purification of Streams
	2 nd	Oxygen Sag Curve, Sewage Farming
	3 rd	Sodium Hazards, Soil Dispersion System