

Course Plan					
B. Tech.		Semester- VII		Session 2023-24	
Branch :		Civil Engineering		Date : 24/07/2023	
Subject :		Environmental Engineering -II		Subject Code	CE-1873
Name of Teacher-		Deepak Sharma			
No of Contact Hours /Week		42	L/3	T/0	P/0
			42	0	0
L.No	Lecture Date	Topic /Sub Topic	Method Of Teaching	CO Mapped	Bloom's Level
L-1		Introduction	Classroom Teaching	1	1
L-2		Introduction to wastewater treatment Subject--Need for the study ,Objectives,	White Board	1	1&2
L-3		Sewerage schemes and their importance, collection & conveyance of sewage	White Board	1	1&2
L-4		Physical,Chemical and biological parameters of waste water and its determination	White Board	1	3
L-5		BOD Problems,1st stage BOD equation and problem	White Board	1&2	3
L-6		Recycles of decomposition	White Board	2	3
L-7		Fluctuation in sewage flow	White Board	2	3
L-8		Quantity of sewage	White Board	2	2
T-1		Tutorial session			
L-9		Storm Water	White Board	2	2
L-10		Design of Sewer	White Board	2&5	5
L-11		sewer appurtenances,construction & maintenance of sewer	White Board	3	3

L-12		Laying of Sewers,Testing of Sewers	White Board	3	3
L-13		pumps & pumping stations,Pumping of sewage	White Board	4	2
L-14		House Drainage system,System of plumbing & Typical layout plan showing house drainage	White Board	3	3
L-15		Unit operations -Overview on various treatment facilities available,generalized flow diagram of typical wwt plant	White Board	4	2
L-16		Sewage treatment- Design period,location of treatment plant and classification of sewage treatment, Unit operations	White Board	4	5
L-17		Screening -purpose and Types	White Board	5	2
L-18		Chemicals used for coagulation,feeding devices	White Board	4	3
L-19		Cmmunitors,Grit chamber-purpose	White Board	4	3
L-20		Methods of Biological Treatment (Theory & Design) - Activated Sludge process	White Board	4	3
L-21		Oxidation ditch, stabilization ponds, aerated lagoon, anaerobic lagoons	White Board	4	3
L-22		Sluge digestion process and its moisture content	White Board	4	3
L-23		Screen chamber design	White Board	2	5
L-24		Design of Grit Chamber	White Board	2	5
L-25		Sedimentation tank Design ,Rectungular And Circular	White Board	2	5
L-26		Sedimentation design problem	White Board	2	3
L-27		Secondary Sedimentation tank	White Board	2	2

L-28		Trickling filter design problem	White Board	4	3
L-29		RBC Design Problem	White Board	2	4
L-30		Septic tank Design Aspects	White Board	2	2
L-31		Stage in sludge digestion process, Factors affecting sludge digestion and control	White Board	5	3
T-2		Tutorial session			
L-32		Aerobic and Anaerobic Digester Design and working	White Board	2	2
L-33		Sludge digestion Disposal of digested sludge	White Board	5	2
L-34		Advanced Waste Water treatment - Diatomaceous earth filters, ultrafiltration	White Board	5	6
L-35		Advanced Waste Water treatment - Adsorption by activated carbon, Phosphorus removal, Nitrogen removal,	White Board	5	6
L-36		Solid waste disposal -classification, composition, collection,	White Board	5	2
L-37		Solid waste disposal -disposal methods	White Board	5	3
L-38		Rural sanitation - collection & disposal of refuse, sullage & night soil	White Board	5	6
T-3		Tutorial session	White Board		
L-39					
L-40					
L-41					
L-42					