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Roll No.

Vth & VIIth - SEMESTER

B.Tech.(Env. Engg.)

MID-TERM EXAMINATION

September-2023

ENE-301 Waste Water Engineering: Design and Applications

Duration: 1:30 Hours

Maximum Marks: 20

Note: All questions are compulsory. Assume suitable missing data, if any.		Marks	CO
Q1	Design a suitable grit chamber for a sewage treatment plant getting a dry weather flow from a separate sewerage system @ 430l/s.	3	2
Q2	Explain the following terms: - (i) Screening. (ii) Coagulation in Sewage Treatment.	4	1
Q3	Design a suitable circular settling tank for a primary treatment of sewage @ 15 million litres per day from a city. The detention period for the tank is 2hr.	4	2
Q4	Compare the advantages & disadvantages of High Rate Trickling Filter over the Conventional Filter.	4	2
Q5	The design flow of sewage is 4.2 million litres per day & BOD of the raw sewage is 290mg/l. Design a single stage Bio filter to produce an effluent having a BOD of 40mg/l or less. 30% of BOD is remove in the primary sedimentation tank.	5	4