

3306

B. Tech. (Civil) (Elective-I) 6th Semester (G Scheme)
Examination, July-2022

WASTE WATER TREATMENT

Paper-PEC-CEEL-302-G

Time allowed : 3 hours]

[Maximum marks : 75

Before answering the questions, candidate should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt five questions in all, selecting one question from each section. Question No. 1 is compulsory. All questions carry equal marks.

1. Describe the following : 15
- (a) Sludge
 - (b) Velocity in sewer
 - (c) Sanitary Fitting
 - (d) Oxygen Demand
 - (e) Flocculation
 - (f) Oxygen sag curve

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[P. T. O.]

Section-A

- 2. (a) What are the importance and necessity of sanitation? 7
- (b) What are the factor affecting the dry weather flow? 8

- 3. (a) Explain in detail joints and sewer appurtenances. 8
- (b) Explain the testing of sewer lines. 7

Section-B

- 4. (a) Explain the types of pipes used in drainage. 7
- (b) Explain in details system of plumbing. 8

- 5. (a) What are the physical, chemical and biological characteristics? 8
- (b) Explain the oxygen demand in detail. 7

Section-C

- 6. (a) Explain the primary treatment of sewage. 8
- (b) Explain the design of primary sedimentation tank. 7

- 7. (a) Difference between Aerobic and Anaerobic Treatment Process. 7
- (b) Explain the Aerated lagoon and septic tank functions. 8

Section-D

- 8. (a) What is the objective of sludge treatment? 7
- (b) Explain the working of sludge drying bed. 8
- 9. (a) What are the standards of waste water disposal? 7
- (b) Explain in detail sewage farming and soil dispersion system. 8