



INSTITUTE OF AERONAUTICAL ENGINEERING (Autonomous)

B.Tech VI Semester End Examinations (Regular), November – 2020

Regulation: IARE–R16

INDUSTRIAL WASTE WATER TREATMENT

Time: 2 Hours

(CE)

Max Marks: 70

Answer any Four Questions from Part A

Answer any Five Questions from Part B

PART – A

1. How will you classify the industries on the basis of characteristic strength of wastewaters? [5M]
2. Write short notes on aerobic and anaerobic digestion. [5M]
3. Differentiate between nitrification and denitrification processes. [5M]
4. Explain the sources of oil refinery waste and the recommended process for their treatment. [5M]
5. Explain treatment of textile mill's raw effluent. [5M]
6. Briefly discuss the effect of industrial wastes on streams. [5M]
7. Explain about the terms equalisation and neutralisation. [5M]
8. Describe process of electro dialysis. [5M]

PART – B

9. What are the chemical and biological characteristics of industrial waste? [10M]
10. Explain the difference between industrial waste & municipal waste water. [10M]
11. Explain the process of proportioning in industrial wastewater treatment. [10M]
12. Describe how strength reduction of waste can be achieved in industries. [10M]
13. Explain the advanced wastewater treatment for removal of heavy metals. [10M]
14. List the different settling zones of sedimentation with neat sketches. [10M]
15. Explain the sources of steel industry waste and the recommended process for their treatment. [10M]
16. What are the major chemical constituents in wastewater obtained from sugar industry? Enlist the treatment technologies to remove the contaminants. [10M]
17. What are the advantages of combined treatment of industrial waste water with domestic waste water? [10M]
18. Draw a typical tannery effluent treatment process flow sheet and briefly describe the treatment process. [10M]