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10CV835

Eighth Semester B.E. Degree Examination, Aug./Sept. 2020
Industrial Waste Water Treatment

Time: 3 hrs.

Max. Marks:100

Note: Answer FIVE full questions, selecting at least TWO questions from each part.

PART - A

- 1 a. Explain briefly summary of significant US federal regulations that affect wastewater management. (10 Marks)
b. Explain the effect of waste water disposal on streams and municipal sewage treatment plants. (10 Marks)
- 2 a. Explain effluent and stream standards and legislations to control water pollution. (10 Marks)
b. Explain Dissolved Oxygen Sag curve in streams. (10 Marks)
- 3 a. Explain volume reduction, strength reduction, Neutralisation, Equalisation and proportioning. (10 Marks)
b. Explain the removal of inorganic and organic suspended solids. (10 Marks)
- 4 a. Write a note on treatment and disposal of sludge solids. (10 Marks)
b. Explain the feasibility of combined treatment of industrial raw waste with domestic waste water. (10 Marks)

PART - B

- 5 a. Write a note on discharge of raw, partially treated and completely treated wastes to streams. (10 Marks)
b. Explain the process flow sheet showing origin (source) of wastewater. (10 Marks)
- 6 a. What are the effects of disposal on water bodies? (10 Marks)
b. Explain the characteristics of cotton textile industry. (10 Marks)
- 7 a. Explain the characteristics and treatment of dairy industry. (10 Marks)
b. Explain the treatment process of Fertilizer industry. (10 Marks)
- 8 a. Explain the characterization and treatment of paper and pulp industry. (10 Marks)
b. Explain the characteristics of pharmaceutical industry waste water. (10 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.