Reg. No. : | | | | | | | | | | | | |

Question Paper Code : 71140

B.E. / B.Tech DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2023.

Seventh Semester

Civil Engineering

OTT 752 – TEXTILE EFFLUENT TREATMENTS

(Common to : Environmental Engineering)

(Regulations 2017)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. State the different constituents present in water
2. Enlist the quality requirements of water for cotton processing ?
3. How will you reduce the pollution load in wet processing?
4. Enumerate the factors influencing the sedimentation process
5. Outline the significance of Activated Sludge Process (ASP).
6. Distinguish between coagulation and flocculation treatments.
7. State the purpose of aeration in wastewater treatment
8. Elucidate the quality parameters at entry and exit of RO
9. Classify the air pollutants according to nature of their sources.
10. Mention the different types of noise pollution.

PART B — (5 × 13 = 65 marks)

11. (a) Discuss the effect of poor water quality in textile processing mills.

Or

(b) Examine the effluent discharge standards for inland surface water on land for irrigation and marine coastal areas.

12. (a) Formulate the conditions and factors influencing the equalization and neutralization process.

Or

(b) Analyse the wastewater characteristics and treatment methods for treating and wool processing effluents.

13. (a) Explain the secondary sedimentation process and tricking filtration techniques.

Or

(b) Demonstrate the use of aerated lagoons in wastewater treatment.

14. (a) Elaborate the different membrane technologies available for treating effluents.

Or

(b) Sketch the layout of advanced effluent treatment plant used for wet processing.

15. (a) Analyse the ambient air quality standards used in textile processing mills.

Or

(b) Examine the effect of noise pollution on human health and various control measures.

PART C — (1 × 15 = 15 marks)

16. (a) Critically evaluate the ion exchange and activated carbon tertiary treatment used for treating effluents.

Or

(b) Analyse the factors influencing the air pollution control equipment and control of air pollutants generated in wet processing industry.

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