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Seventh Semester B.E. Degree Examination, Feb./Mar. 2022
BT for Sustainable Environment

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. Discuss various types of Water pollutants and its sources. (10 Marks)
b. Write State and Central Waste Water quality and its various discharge standards. (10 Marks)

OR

- 2 a. Explain physical and chemical characteristics of Waste Water. (10 Marks)
b. Write characteristics and estimation of Waste Water flow rate. (10 Marks)

Module-2

- 3 a. Explain process involved in Secondary Water Treatment. (10 Marks)
b. Discuss the different methods involved in Sludge treatment and its disposal. (10 Marks)

OR

- 4 a. Explain the mechanism of Ion- Exchange and Reverse Osmosis process in Waste Water Treatment. (08 Marks)
b. Describe the methods involved in treatment of Waste Water released by Paper and Pulp Industry. (12 Marks)

Module-3

- 5 a. Write the classification and properties of Air Pollutants. (10 Marks)
b. Discuss Ambient and Stack Sampling method. (10 Marks)

OR

- 6 a. Discuss the Control method and equipments for treating particulate and gaseous pollutants. (10 Marks)
b. Give a detailed note on Equipment and different approaches for Noise control. (10 Marks)

Module-4

- 7 a. Explain Conventional Fuels and their Environmental impacts. (10 Marks)
b. Discuss Biotechnology inputs in producing good quality natural fibers. (10 Marks)

OR

- 8 a. Discuss the process involved in recovery of Energy from Urban Waste. (10 Marks)
b. Write the method for producing Fuels and Chemical from Crops. (10 Marks)

Module-5

- 9 a. Discuss the characteristics and types of Solid Waste. (08 Marks)
b. Explain how Biotechnological process involved in Solid Waste Management. (12 Marks)

OR

- 10 a. Explain Biotechnological process involved in treatment of Biomedical and Dairy Waste. (12 Marks)
b. Describe the process involved in Petroleum Waste treatment. (08 Marks)

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