CBCS SCHEME

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18BT751

Seventh Semester B.E. Degree Examination, June/July 2025
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 in detail drinking water quality and consumption standards. **(10 Marks)**
b. Explain the different indicators require for measuring water quality. **(10 Marks)**

OR

2 a. Explain physical and chemical characteristics of waste water. **(10 Marks)**
b. Discuss in detail the Biotechnological approach for water purification. **(10 Marks)**

Module-2

3 a. Discuss in detail the process involved in secondary waste water treatment. **(10 Marks)**
b. Discuss the different process and instruments for sludge treatment and its disposal. **(10 Marks)**

OR

4 a. Explain the mechanism of reverse osmosis and ion exchange methods in treatment of waste water. **(08 Marks)**
b. Give a detailed note on treatment method involved in treating waste water discharged by leather and food processing industries. **(12 Marks)**

Module-3

5 a. Explain the general properties of primary air pollutants. **(08 Marks)**
b. Discuss the air sampling based on particulate pollutants and gaseous pollutants. **(12 Marks)**

OR

6 a. Discuss the different method involved in control of noise pollution. **(10 Marks)**
b. Explain the effect of noise pollution on human health. **(10 Marks)**

Module-4

7 a. With suitable example, explain renewable non-renewable energy resources. **(08 Marks)**
b. Write the biotechnological inputs in producing good quality natural fibres. **(12 Marks)**

OR

8 a. Explain energy recovery systems from urban waste. **(10 Marks)**
b. Write the method for producing methanol from organic waste. **(10 Marks)**

Module-5

9 a. Write the characteristics and properties of solid waste. **(10 Marks)**
b. Discuss solid waste management through biotechnological processes. **(10 Marks)**

OR

10 a. Discuss the process involved in biomedical waste management. **(10 Marks)**
b. Explain the process involved reuse of materials and energy recovery from solid waste. **(10 Marks)**

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