



10BT841

Eighth Semester B.E. Degree Examination, June/July 2019

Environmental BT

Time: 3 hrs.

Max. Marks:100

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

PART – A

- 1 a. The role of microorganisms are crucial in biogeochemical cycle. Justify your answer. (10 Marks)
b. What are Xenobiotics? Discuss their characteristics that aid in bioaccumulation. (10 Marks)
- 2 a. With a neat sketch, explain conventional activated sludge process. (05 Marks)
b. Discuss any two waste treatment processes involved in the removal of nitrogen. (10 Marks)
c. Outline the processes involved in the treatment of effluent from sugar industries. (05 Marks)
- 3 Write short notes on:
a. Treatment of hazardous wastes
b. Composting
c. Reverse osmosis in waste water treatment
d. Phostrip (20 Marks)
- 4 a. What is biogas? With a neat diagram, explain the production of biogas highlighting the role of microorganisms. (10 Marks)
b. What are biomedical wastes? Discuss the various processes involved in the treatment of biomedical wastes. (10 Marks)

PART – B

- 5 a. What are conventional fuels? Discuss the impact of conventional fuels on the environment. (10 Marks)
b. Waste is an energy core. Substantiate your answer. (10 Marks)
- 6 a. What is bioleaching? Explain the leaching of copper from its ores. (10 Marks)
b. Write short notes on:
i) Gasification of wastes
ii) Methanol production from organic waste (10 Marks)
- 7 a. Discuss the role of micro organisms in bioremediation process. (10 Marks)
b. Write short notes on:
i) Significance of bioindicators
ii) Biofilms (10 Marks)
- 8 a. Briefly discuss the role of biotechnology in ex-situ conservation of biodiversity. (10 Marks)
b. What are the various threats to biodiversity? Add a note of biodiversity hot spots. (10 Marks)

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.