

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Seventh Semester B.Tech (Hons.) Degree Examination December 2024 (2021 Admission)

**Course Code: CET499****Course Name: ENVIRONMENTAL POLLUTION CONTROL TECHNIQUES****Max. Marks: 100****Duration: 3 Hours****PART A***Answer all questions, each carries 3 marks.*

Marks

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|----|---|-----|
| 1 | Explain different types of environmental pollution. | (3) |
| 2 | What are wet collectors or scrubbers? | (3) |
| 3 | Write short note on Bioremediation of Wastewater. | (3) |
| 4 | Give a general layout of a waste treatment plant. | (3) |
| 5 | Explain volume reduction method for pretreatment of industrial waste. | (3) |
| 6 | List out the elements in Environmental Management System. | (3) |
| 7 | List out physical treatment methods for hazardous waste. | (3) |
| 8 | What are the drawbacks of incineration? | (3) |
| 9 | What are the objectives of Environmental Management Plan (EMP)? | (3) |
| 10 | List out any three key contributions of impact assessment and mitigation to a good EIA. | (3) |

PART B*Answer any one full question from each module, each carries 14 marks.***Module I**

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| 11 | a) Explain different causes of air pollution. | (7) |
| | b) What are the various approaches to minimize exhaust emissions from automobiles? | (7) |

OR

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| 12 | a) Explain different air pollution mitigation measures. | (7) |
| | b) Explain principle and working of Electrostatic precipitators. | (7) |

Module II

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| 13 | a) Explain with a neat sketch, the working of an activated sludge process. State the merits and demerits of the process as well. | (14) |
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OR

- 14 a) Explain skimming tank in waste water treatment and differentiate passive (14)
skimming and active skimming.

Module III

- 15 a) Explain high rate anaerobic method for the treatment of industrial waste. (7)
b) Explain equalization and proportioning methods for pretreatment of industrial (7)
waste.

OR

- 16 a) Explain any three physical characteristics of Industrial wastes. (8)
b) Explain Reversing Anaerobic Upflow System (RAUS). (6)

Module IV

- 17 a) Explain(a)Sedimentation (b)Carbon Adsorption (c) Distillation (9)
b) Explain thermal treatment of hazardous waste. (5)

OR

- 18 a) Explain (a)Reverse osmosis (b)Flocculation (c)Filtration (6)
b) Explain any two chemical treatment methods for hazardous waste. (8)

Module V

- 19 a) List out different Environmental protection laws and acts in India with respect to (5)
pollution.
b) Explain different methods for the identification of environmental impacts of a (9)
project.

OR

- 20 a) List out the important legislations for environmental protection. (5)
b) Explain impact assessment and mitigation of environmental impacts. (9)
