

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
B.Tech Degree S7 (Hons.) Examination November 2025 (2022 Admn)

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

- | | | |
|----|---|-----|
| 1 | Explain criteria pollutants with example | (3) |
| 2 | Explain methods for the control of gaseous pollutants | (3) |
| 3 | Write a short note on skimming tanks | (3) |
| 4 | List out the merits and demerits of activated sludge treatment. | (3) |
| 5 | Write short note on equalization & proportioning methods for pretreatment of industrial waste | (3) |
| 6 | Explain the physical characteristics of industrial waste. | (3) |
| 7 | List out different waste minimization techniques in solid waste management? | (3) |
| 8 | Write short note on hazardous waste treatment | (3) |
| 9 | Write short note on National Environmental Legislation | (3) |
| 10 | Write short note on Environmental protection act. | (3) |

PART B

Answer any one full question from each module, each carries 14 marks.

Module I

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|----|---|-----|
| 11 | a) List out important particulate collection devices. | (7) |
| | b) Explain principle and working of Gravity settling chamber. | (7) |

OR

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| 12 | a) Explain cyclone (centrifugal) separators. | (7) |
| | b) Explain principle and working of Electrostatic precipitators. | (7) |

Module II

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|----|---|-----|
| 13 | a) Explain working of Trickling Filters for waste water treatment | (9) |
| | b) Explain the term Anaerobic digesters | (5) |

OR

- 14 a) Explain oxidation ponds used in waste water treatment. (7)
- b) Explain the process of sedimentation in waste water treatment . (7)

Module III

- 15 a) Explain the various pollution control measures available. (7)
- b) Explain waste strength reduction method for pretreatment of industrial waste. (7)

OR

- 16 a) Explain waste volume reduction in the treatment of industrial waste. (9)
- b) Explain Reversing Anaerobic Upflow System (RAUS) in industrial waste treatment (5)

Module IV

- 17 Explain in detail waste minimization techniques in solid waste management. (14)

OR

- 18 a) Explain the terms (a) sanitary land fill (b) incineration (c) Pyrolysis (6)
- b) Explain various methods of waste disposal in solid waste management. (8)

Module V

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

OR

- 20 a) Explain identification and mitigation of environmental impacts. (9)
- b) Explain Environmental Management Plan (5)
