

17P125

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Name:

Reg. No.....

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, DECEMBER 2017

(Regular/Supplementary/Improvement)

(CUCSS-PG)

CC15P ES1 C04 – ENVIRONMENTAL POLLUTION AND POLLUTION ABATEMENT

(Environmental Science)

(2015 Admission onwards)

Time: Three Hours

Maximum:36 Weightage

PART A

Answer *all* questions. Each question carries 1 weightage

1. Bag filters.
2. Point and Non point sources of pollution.
3. PoPs
4. Hazardous Wastes.
5. Wind roses.
6. SAR
7. Explain potential hazards of tannery effluents.
8. Trans-boundary air pollution.
9. Define PM. Mention the organic and inorganic species in PM.
10. Differentiate transparency and turbidity.
11. Activated Sludge Process.
12. Heavy metal pollution.
13. Differentiate ELR and DALR.
14. Fumigation.

(14 x 1 = 14 weightage)

PART B

Answer any *seven* questions. Each question carries 2 weightage.

15. Differentiate pollution and contamination.
16. Write a short note on ozone layer depletion.
17. Comment on anaerobic stabilization units in wastewater treatment.
18. Explain the sources and classification of air pollutants.
19. Describe the determination of Ca^{2+} and Mg^{2+} hardness in water.
20. Write a short note on pre-concentration techniques of water samples.
21. Comment on heavy metal pollution in soils.
22. Write a short note on major air pollution disasters.
23. Describe the causes and impacts of global warming in developing countries.

24. Explain photochemical smog formation and its effects.

(7 x 2 = 14 weightage)

PART C

Answer any *two* questions. Each question carries 4 weightage.

25. Write an essay on noise pollution and its impacts on human beings and animals.

26. How meteorological factors affect the dispersion of air pollutants? Explain plume behaviour with illustration.

27. Comment on prospects and problems in solid waste management in India.

28. Describe the industrial process and their pollution potentials of any two of the following industries in India.

- a) Paper and Pulp Industry.
- b) Tannery.
- c) Petroleum refining.
- d) Thermal power plants.

(2 x 4 = 8 weightage)

PART B

Answer any *seven* questions. Each question carries 2 weightage.

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- 17. Comment on anaerobic stabilization units in wastewater treatment.
- 18. Explain the sources and classification of air pollutants.
- 19. Describe the determination of Ca^{2+} and Mg^{2+} hardness in water.
- 20. Write a short note on pre-concentration techniques of water samples.
- 21. Comment on heavy metal pollution in soils.
- 22. Write a short note on major air pollution disasters.
- 23. Describe the causes and impacts of global warming in developing countries.

(14 x 1 = 14 weightage)