

19P120

(Page: 1)

Name:

Reg. No.....

FIRST SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2019

(CUCSS PG)

CC19P ESC1 C04 – ENVIRONMENTAL POLLUTION AND WASTE MANAGEMENT

(Environmental Science)

(2019 Admission Regular)

Time: Three Hours

Maximum: 30 Weightage

I. Answer any **four** questions. Each question carries 2 weightage.

1. Write a short note on Electromagnetic radiations.
2. Explain photochemical smog and its impact.
3. Explain Gibbs energy and chemical potential.
4. Write a short note on Green-house gases.
5. Discuss ozone depletion.
6. Explain redox reactions and redox potential.
7. Explain biomedical wastes.

(4 x 2 = 8 Weightage)

II. Write a short essay on any **four** of the following. Each question carries 3 weightage.

8. Comment on environmental impacts of nuclear wastes.
9. Explain the advantages and disadvantages of vermicomposting.
10. Discuss the factors affecting soil formation.
11. Enumerate the impacts of agricultural chemicals in India.
12. Explain the different types of soil in India.
13. What are the different types of waste water treatment methods in India?
14. Explain the different quality criteria for drinking water.

(4 x 3 = 12 Weightage)

III. Write a long essay on any **two** of the following. Each question carries 5weightage.

15. Discuss water pollution, pollution monitoring methods and pollution abatement.
16. Give an account of ambient air quality standards, air quality monitoring techniques - high volume air samplers, stack samplers, measurement of PM and gaseous pollutants.
17. Explain the meteorological factors affecting air pollutants, diffusion, turbulence and transportation, plume rise and stability conditions with suitable diagrams.
18. Explain the role of chemical constituents such as CO_x, NO_x, SO_x, O₂ and ozone in atmospheric processes.

(2 x 5 = 10 Weightage)
