

16/12/2015



DOON UNIVERSITY, DEHRADUN

Semester Final Examination, 2015

School of Environment & Natural Resources

M.Sc. (Environmental Studies)

Course: EES – 515: Environmental Pollution

Time Allowed: 3Hours

Maximum Marks: 30+20

Note: Attempt Questions from All Sections: A, B, C

Section : A (Questions to be answered in about 50 words (Marks:2x 10=20) Attempt any TEN Questions

1. Write 5 organic and inorganic pollutants each of air, and water environment.
2. What are modified criteria pollutants for air quality monitoring?
3. Differentiate the thermal NO_x and fuel NO_x emissions from vehicles.
4. Define RSPM? What is annual ambient air quality standard for it?
5. Calculate 50 ppb Ozone in to microgram/ m³ at the 25° C & 1 Atm.
6. Exemplify some pollutants accident in India and abroad.
7. What do you understand by the term “effective height of stakes”?
8. Which environmental act/ regulation control the plastic pollution in India?
9. Define BOD, COD, Flocculation, Grab sampling & composite sampling?
10. Describe the chemical composition of sewage water for treatment process?
11. What are unusual properties of water which makes it suitable for human life?
12. Discuss plastic pollution and their effects on environment in brief.

Section : B (Questions to be answered in about 250 words (Marks:4x 5=20) Attempt any 5 Questions.

1. Give brief notes on physico-chemical & biological characteristics of Water pollution?
2. Define sound pressure level? What L10, Leq and L90 stand for?
3. Discuss Gaussian plume model with Equation for concentration at ground level?
4. Discuss various methods of sampling air pollutants (gaseous, inorganic and organic) in air.
5. Discuss sources and impacts of Noise pollution? What are various control measures for noise pollution?
6. Define trickling filters, UASB, water stabilisation pond and Facultative aerated lagoons

Section : C (Questions to be answered in about 750 words (Marks:5x 2=10) Attempt any 2 Question.

1. What are the sources of soil pollution? Give detailed account on Remediation of polluted soil.
2. Draw the labelled waste water treatment plant? Give detail account (including benefits and drawback) on 5 technologies for waste water treatment plant.
3. What is the role of meteorology in pollutants dispersion? Discuss the role of stable, unstable & neutral atmospheric conditions on different plume form.