

13/12/2012



**DOON UNIVERSITY, DEHRADUN**  
**Semester Final Examination, First Semester, 2012**  
**School of Environment & Natural Resources**

**M.Sc. (Environmental Studies)**  
**Course: EES – 515: Environmental Pollution**

*Time Allowed: 3Hours*

*Maximum Marks: 50*

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

**SECTION: A (Questions to be answered in about 100 words) Attempt any FIVE Questions. (Marks: 2 x 5=10)**

1. Discuss the role of Ozone in Troposphere and Stratosphere.
2. What are various criteria pollutants for ambient air quality monitoring?
3. What do you understand by the term “effective height of stacks”? How stack height can help in pollutants dispersion?
4. Discuss acid rain phenomenon? How acid rain affects nutrient cycling and environment?
5. Define aerosol? What are the various constituents of aerosols and their source?
6. Discuss in detail about effects of various air pollutants on human health?

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

1. Give brief notes on physico-chemical & biological characteristics of Water pollution?
2. What are the sources of water pollution? Give detailed account on Remediation of pollutants by biological intervention?
3. Define sound pressure level? What L10, Leq and L90 stand for?
4. Discuss Gaussian plume model with Equation for concentration at ground?
5. Define SPM? Describe various control measures for SPM emissions?
6. Discuss various methods of sampling and analysis of pollutants in air.

**SECTION: C (Questions to be answered in about 750 words) Attempt any TWO Questions. (Marks: 10x 2=20)**

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 on various available technologies for waste water treatment.
3. Discuss sources and impacts of Noise pollution? What are various control measures for noise pollution?
4. What is the role of meteorology in pollutants dispersion? Discuss the role of stable, unstable & neutral atmospheric conditions on different plume form.