

21/4/2016



DOON UNIVERSITY, DEHRADUN
Mid Semester Examination, 2016
School of Environment & Natural Resources
M.Tech 2nd Semester (Environmental Technology)
Course: ETC- 552: Environmental Quality and Pollution Monitoring Techniques

Time Allowed: 2 Hours

Maximum Marks: 30

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

Remember: A Notable point wise answer will earn you more marks.

SECTION: A (Short Answer Type Questions) max 50 words

Attempt all questions.

(Marks: 1 x 10 = 10)

1. What is the range of $[H^+]$ concentration for carbonated hard water?
2. Which filters are used for air sampling?
3. Define critical path and critical group?
4. What is the use of EDTA?
5. Define sedimentation?
6. What is Electrical Conductivity?
7. Define BOD?
8. Name the methods for carbon dioxide measurement?
9. What is an aerobic decay?
10. What is a representative sample?

SECTION: B (Short Answer Type Questions to be answered in about 150 words).

Attempt any FOUR questions.

(Marks: 2.5 x 4=10)

1. Describe water sampling.
2. Discuss the ways of pH, acidity and alkalinity monitoring in water samples.
3. Explain Winkler method.
4. Discuss air sampling.
5. Describe the method for CO monitoring.

SECTION: C (Medium Answer Type Questions to be answered in about 250 words). (Marks: 5 x 2 =20)

Attempt any two questions

1. Give the use of following techniques in analysis of major water contaminants;
 - a. UV and Visible Spectrophotometry
 - b. Electrical Conductivity
2. What is COD? Describe the methods to measure it?
3. How the gases like CO, NO_x are monitored in air?