

CE 213-A

ASSIGNMENT- 5 (Water Pollution - Indicators)

Q1. A Standard 5-day BOD test is run using a mix consisting of four parts distilled water and one part waste water (no seed).the Initial DO of the mix is 9.0 mg/L and the DO after 5 days is determined to be 1.0 mg/L ,what is BOD5?

Q2. In a 5 day standard BOD test,

- a) Why it is necessary to dilute the sample?
- b) Why is ultimate BOD not measured?

Q3. A BOD test is to be run on a sample of waste water that has a 5-day BOD of 230.0 mg/L. if the Initial DO of a mix of distilled water and waste water is 8.0 mg/L and the test requires a decrease in DO of at least 2.0 mg/L with at least 2.0 mg/L of DO remaining at the end of 5 days. What range of dilution factors (P) would produce acceptable results? In 300 ml bottles, what range of wastewater volumes could be used?

Q4. What is the pH of 10^{-8} M HCl solution?

Q5. Differentiate between the followings:

- a. BOD, COD and TOC
- b. Total, dissolved, and suspended solids
- c. SPM, RSPM, PM10 and PM2.5