

EXERCISES CHAPTER 4



QUESTION 1

A BOD analysis was started on Monday. Sample of wastewater was collected, 30 mL with a DO zero and mixed with 270 mL of dilution water with a DO of 10 mg/L. The sample was incubated at 30 °C. Since the fifth day falls on Saturday and lab personnel do not work on Saturday, the final DO does not measured until Monday (the seventh day). The final DO was measured at 4.0 mg/L. Assume K_1 at 20 °C = 0.2 and $K_T = K_{20} \times (1.05)^{T-20}$. Determine the 5 day, 20 °C BOD of the sample.