Class Test-1
Reaction Engineering (Part-I) Date: 21-09-2020
Max Marks :10; Time: 60 minutes
(Through online mode)

Q1. After 8 minutes in a batch reactor, reactant (C_{A0} = 1 mol/liter) is 80% converted; after 18 minutes, conversion is 90%. Find a rate equation to represent this reaction. (4)

Q2. The gas reaction $2A \rightarrow R + 2S$ is approximately second order with respect to A. When pure A is introduced at 1 atm into a constant volume batch reactor, the pressure rises 40% in 3 min. For a constant-pressure batch reactor, find (a) the time required for the same conversion and (b) the fractional increase in volume at that time. (6)