

Class Test – 04

CSE 401 – Mathematics for Computer Science

Time : (20 + 10) Minutes

Q1. A self-service store employs one cashier at its counter. Nine customers arrive on an average every 5 minutes while the cashier can serve 10 customers in 5 minutes. Assuming Poisson distribution for the arrival rate, determine average waiting time in the queue in the system and queue, and average number of customers in the system and the queue for—

- i. (M/M/1) model if your ID is odd.
- ii. (M/D/1) model if your ID is even.