King Fahd University of Petroleum & Minerals Department of Mathematics & Statistics STAT-211-Term172 Quiz #4 ID:

Serial:

Q1: In a large shipment of automobile tires, 10% have a flaw.

Name:

- 1. If we select 6 tires at random *without replacement* from a lot of 60 tires, what is the probability that the first two tires will have flaws but the others will be good?
- 2. If we select 6 tires at random *without replacement* from a lot of 60 tires, what is the probability that any two tires will have flaws?
- 3. If we select 3 tires at random *with replacement* from a lot of 60 tires, what is the probability that any two tires will have flaws?

Q2: A computer time-sharing system receives telephone inquiries at an average rate of 0.1 per minute. Find the probability that the number of inquiries in a particular 30-second stretch will be less than 2.