Department of Mathematics and Statistics KFUPM
STAT 301-01 Quiz#1, Time: 40 mins

Student's Name: _____ ID: _____

Q.No.1:- A president, treasurer, and secretary, all different, are to be chosen from a club of 10 people. How many different choices of the officers are possible if
(a) there is no restriction?

(b) A and B will not serve together?

(c) C and D will serve together or not at all?

(d) E must be an officer?

(e) F will serve only if he is president?

Q.No.2:- A student is to answer 7 out of 10 questions in an examination.
(a) How many choices has she?

(b) How many if she must answer at least 3 of the first 5 questions?

Q.No.3:- Box A contains 3 red and 3 black balls, whereas box B contains 4 red and 6 black balls. If a ball is randomly selected from each box, what is the probability that the balls will be the same color?

Q.No.4:- 3 balls are randomly selected, without replacement, from a box that contains 5 red and 6 white balls. Find the probability that at least one ball of each color is chosen.