KFUPM Mathematical Sciences Term 171 STAT 211 Quiz# 2

Date: 22/10/2017 Duration: 15 minutes

Name: ID#: Serial#:

## Show your work in detail and write neatly and eligibly

- 1. File-I has 8 invoices, 3 of which have errors. File-II has 5 invoices, 2 of which have errors.
  - a. If two invoices are drawn from file-I, what is the probability that the first is defective?

b. If two invoices are drawn from file-II, what is the probability that the second has no errors given that the first has an error?

c. If one invoice is drawn from each file, what is the probability that only one of the invoices has an error?

| With My Best Wishes  |
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| An article in "The Wall Street Journal" states that 89% of the entrepreneurs in the United States are entrepreneurs by choice and 11% are entrepreneurs by necessity. Only 2% of entrepreneurs by necessity expect their new business to develop, whereas 14% of entrepreneurs by choice expect their new business to develop. If an entrepreneur is selected a random and that individual expects that his or her new business will develop, what is the probability that this individual is an entrepreneur by choice? |
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