

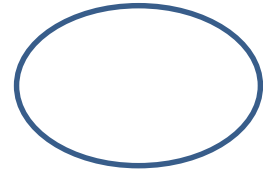
KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
DEPARTMENT OF MATHEMATICS AND STATISTICS
Term 142

STAT 211 BUSINESS STATISTICS I

Please circle your instructor name:

W. Al- Sabah

M. Saleh



Name: _____ ID #: _____

Important Note:

- Show all your work including formulas, intermediate steps and final answer

Question No	Full Marks	Marks Obtained
1	3	
2	3	
3	4	
4	4	
5	6	
6	5	
Total	25	

Q3: Three contractors, A, B and C bid on two projects. The projects manager wants to choose the winning contractors. What is the sample space? (4 pts)

Q4: An article in a business journal listed firms according to whether or not shareholders returns and top executive salaries as in the following table

Shareholders	Top Executive	
	Made More than \$1 million	Made Less than \$1 million
Made Money	3	4
Lost Money	2	1

- a. If a firm is randomly chosen from the list,
- What is the probability that its top executive made more than \$1 million? (1 pt)
 - What is the probability that its shareholders lost money? (1 pt)
 - What is the probability that its top executive made less than \$1 million or its shareholders made money? (1 pt)
- b. If a firm had negative shareholder returns, what is the probability that its top executive made over \$1 million? (1 pt)

Some Useful Formulas

- $P(A \text{ or } B) = P(A \cup B) = P(A) + P(B) - P(A \cap B)$
- $P(A \cap B') = P(A) - P(A \cap B)$
- $P(A|B) = \frac{P(A \cap B)}{P(B)}$, $P(B) > 0$
- $P(A \cap B) = P(A) \times P(B|A) = P(B) \times P(A|B)$