

Department of Mathematics and Statistics KFUPM  
STAT 301-01 Quiz#4, Time: 15 mins

Student's Name: \_\_\_\_\_ ID: \_\_\_\_\_

Q.No.1: - Let  $X$  and  $Y$  are jointly continuous with a joint pdf  $f(x, y) = \begin{cases} 8xy & \text{if } 0 < y \leq x \leq 1 \\ 0 & \text{otherwise} \end{cases}$

Find the *pdf* of  $Z = X + Y$ .

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*Best of Luck*