

Department of Mathematics and Statistics, King Fahd University of Petroleum and Minerals

Dr. Raja Latif. Math-131-02-Term-102-Quiz-5(Marks: 20)-Ch-8:8.5 – 8.6. May 18, 2011.

NAME: _____, **I.D#** _____

NOTE – Show complete work for full credit. The questions are not in any order of difficulty at all. (You may use reverse side of the paper if required). You may use nonprogrammable calculators.

Question – I. (392T8.5B26). (Marks: 8). Coin and Die. Suppose that a fair coin and a fair die are thrown.

- (a) Find the probability that the coin shows tails, given that the number on the die is odd.

- (b) Find the probability that the coin shows heads, given that the number on the die is greater than 2.

Question – II. (402T8.6B23). (Marks: 12). Exam Grades. In a Mathematics course, the probability that Bill gets an A on the final exam is 0.70, and for Jim and Linda, the probabilities are 0.60 and 0.80, respectively. Assume independence and find each of the following.

- (a) The probability that all three of them get an A on the exam.

- (b) The probability that none of them get an A on the exam.

- (c) The probability that, of the three, only Linda gets an A.

- (d) The probability that exactly one of the three get an A on the exam.