

Indian Institute of Technology Bombay

Department of Electrical Engineering

Handout 6

EE 706 Communication Networks

Quiz 4 : **10 points**

January 28, 2010

1. When are two events A and B in a sample space S said to be mutually exclusive? Give an example. [2 points]
2. When are two events A and B in a sample space S said to be independent? Give an example. [2 points]
3. Give an example of two events A and B in a sample space S which are mutually exclusive and independent at the same time. [2 points]
4. A course has four BTech boys, six BTech girls, and six MTech boys. How many MTech girls need to be there in the course to make gender and program (BTech or MTech) to be independent when a student is selected at random? [4 points]