

THAPAR INSTITUTE OF ENGINEERING AND TECHNOLOGY, PATIALA

Department of Electronics and Communication Engineering

UEC310 - Information and Communication Theory

TUTORIAL - 4

Q1 A pair of dice rolled n times.

- a) If event “seven” is defined as the sum of the face value of both dice in a single rolling then find the probability that “seven” will not show at all.
- b) Find the probability of obtaining double six at least once.

Q2 Two players A and B agrees to play a series of games on a condition that A wins the series if he succeeds in winning m games before player B wins n games. The probability of winning a single game is p for A and $q = 1 - p$ for B . Find the probability that player A will win the series.