



Program: BS (CS)
Semester: Spring-2021
Course: MT205-Probability & Statistics

Examination: Assignment # 03
Total Marks: 10, Weightage: 2.5
Date of Submission: 18 / 06 / 2021

Problem

The joint probability density function of X and Y is given by

$$f(x, y) = \frac{6}{7} \left(x^2 + \frac{xy}{2} \right), \quad 0 < x < 1, \quad 0 < y < 2$$

- (a) Verify that this is indeed a joint density function.
- (b) Compute the density function of X .
- (c) Find $P\{X > Y\}$.

The End