## **Assignment**

- 1. Derive the pdf of bivariate normal distribution.
- 2. Write the different parameters of bivariate normal distribution with their range.
- 3. What is normal correlation surface?
- 4. Obtain moment generating function of bivariate normal distribution.
- 5. Write moment generating function of BVN(0, 0, 1, 1,  $\rho$ )
- 6. Obtain marginal distribution of X of Bivariate normal distribution.
- 7. Whether the joint pdf of two normal variates is bivariate normal distribution?