## B.Sc. DEGREE EXAMINATION,ODD SEMESTER 2020 II Year III Semester Distribution Theory - II

## Max.marks :25

Answer any **FIVE** questions  $(5 \times 5 = 25)$  Marks

- 1. State and prove the memory less property of the exponential distribution.
- 2. Find variance for Laplace distribution.
- 3. Find the moment generating function of Chi Square distribution.
- 4. List the applications of t distribution.
- 5. Explain the joint distribution of two order statistics.
- 6. Prove that sum of independent Chi square variates also a Chi square variate.
- 7. State and prove the additive property of Gamma distribution.