B.Sc. 3rd SEM

(Old Course /Non CBCS)
Backlog Exam'21
Course-301 (Estimation & Testing)
Full Marks – 20

1. Define unbiased estimator. Suppose X and Y are independent random variables with the same unknown mean μ and both x and y have variance 36. Let T = aX+bY be an unbiased estimator of μ , show that T is an unbiased estimator of μ if a+b= 1

   2+4=6

2. Explain the term-
   (i) Null hypothesis (ii) Significant level.
   (ii) Acceptance region (IV) Testing of hypothesis. 2X2=4
3. Describe MLE and discuss its optional properties. 10

   Or

   Discuss about the large samples tests and small sample tests 10