B.A. (Honours) Examination, 2019

Semester–IV (CBCS)

Economics

Skill Enhancing Compulsory Course – SECC-2

(Statistical Methods II)

Time: Two Hours **Full Marks: 25**

Questions are of value as indicated in the margin.

Answer ***any two***questions.

1. When do you say that random variable X has poission distribution with parameterλ? Also show that the mean and variance of such variate are thesame. 3½+4+5

2. Consider two discrete random variables X and Y.
   (a) How one represents the joint distribution of X and Y?
   (b) Given the joint distribution of X and Y, explain how to find out the marginal ones.
   (c) Explain under what condition given the marginal distributions one can find the joint one. 2½+6+4

3. Define the concepts, with examples: (***any five***)
   (i) Population
   (ii) Population size
   (iii) Population value
   (iv) Parameter
   (v) Complete enumeration
   (vi) Sample
   (vii) Sample size
   (viii) Sampling
   (ix) Sample value
   (x) Statistic 12½

4. (a) What is meant by a Best Linear unbiased Estimator (BLUE) of some parameter?
   (b) In the context of SRSWR
      (i) Write down a BLUE of population mean
      (ii) Using the result in (i) show that the sample proportion is a BLUE of the population proportion. 3½+3+6=12½
