M 6122

Reg. No. : .....

Name : .....

VI Semester B.A./B.Sc./B.Com./B.B.A./B.B.A.T.T.M./B.B.M./B.C.A./B.S.W./ B.A. Afsal-Ul-Ulama Degree (CCSS – Reg./Supple./Improv.) Examination, May 2014

Open Course

5D05/6D05 STA : SAMPLING TECHNIQUES

Time : 2 Hours Max. Weightage : 20

PART – A

(Answer **all** questions. **Each** bunch of **four** questions carry weight **1**.)

I. 1. Data represents
   a) a single value
   b) only two values in a set
   c) a group of values in a set
   d) none of these

2. A study based on complete enumeration is known as
   a) sample survey
   b) pilot survey
   c) census survey
   d) none of these

3. If the units in a population show destructive nature of data collection, we use
   a) complete enumeration
   b) sampling method
   c) both a) and b)
   d) none of these

4. Sampling error can be reduced by
   a) choosing a proper probability sampling
   b) selecting an appropriate sample
   c) using a suitable formula for estimation
   d) all the above

II. 5. In SRSWR, the same sampling unit may be included in the sample
   a) only once
   b) only twice
   c) more than once
   d) none of these

P.T.O.

6. The most important factor in determining the size of a sample is
   a) the purpose of survey
   b) heterogeneity of population
   c) the availability of resources
   d) none of these

7. With usual notations, the finite population correction is

   a) $\frac{N-1}{N}$ b) $\frac{N-n}{N}$

   c) $\frac{n-1}{N}$ d) $\frac{N-n}{n}$

8. Under proportional allocation, the size of sample from each stratum depends on
   a) total sample size b) size of stratum
   c) population size d) all the above **(2×1=2)**

PART – B

(Answer **any six** questions. Weight **1 each**) :

9. Distinguish between census and sampling.

10. What are the advantages of primary data ?

11. Give the sources of secondary data.

12. State different methods of sampling.

13. What is the significance of sampling errors ?

14. When will you prefer stratified random sampling over simple random sampling.

15. Define random start in systematic sampling.

16. Define cluster sampling.

17. Define multistage sampling.

18. What are the main functions of NSSO ? **(6×1=6)**

PART – C

(Answer **any four** questions. Weight **2 each**) :

19. Explain the need and utility of sampling.

20. Explain the different methods of collecting primary data.

21. What are the characteristics of a good questionnaire ?

22. Explain the lottery method of selecting a simple random sample.

23. Show that in SRSWOR, sample mean is an unbiased estimator of population mean.

24. Explain the procedure of selecting a stratified random sample, using usual notations.

25. Compare systematic sampling with stratified sampling.

26. Explain the role of central statistical organisation and Indian Statistical Institute in the development of nation. **(4×2=8)**

PART – D

(Answer **any one**. Weight **4 each**) :

27. Explain the basic steps in conducting a sample survey.

28. Show that in SRSWOR, with usual notation $V(\bar{y}) = \frac{N-n}{N} \cdot \frac{s^2}{n}$.

29. Prove that, if finite population correction can be ignored, with usual notation. $V(\bar{y}st)_{opt} \leq V(\bar{y}st)_{prop}$. **(1×4=4)**