

B.A/B. Sc-II Semester-III

Paper-II (ST-302)

Time: 3 Hours

M.M.:B. Sc: 40+10*

B.A: 28+7*

* Internal Assessment

Sample Surveys

Note : There will be nine questions in all. Question No.1 will be compulsory covering whole of the syllabus and comprising 5 to 8 short answer type questions. Rest of the eight questions will be set from the four units uniformly i.e. two from each unit. The candidate will be required to attempt five questions in all selecting one question from each unit and the compulsory one. All the questions will carry equal marks except the compulsory question, the distribution of marks for which will be as follows:-

B.Sc.8 marks and B.A. 6 marks.

UNIT-I

Concepts of census and sample survey, basic concepts in sampling. Sampling and Non-sampling errors. Principal steps involved in a sample survey; bias, precision and accuracy, advantages of sampling over complete census, limitations of sampling, different methods of data collection.

UNIT-II

Basic sampling methods: Simple random sampling (SRS) with and without replacement, use of random number tables, estimation of mean and variance in case of SRS. Simple random sampling of attributes, size of simple random sample.

UNIT-III

Stratified random sampling, estimation of population mean, variance of the estimate of population mean in stratified random sampling, allocation of sample size, proportional allocation, optimum allocation. Comparison of Stratified random sampling with SRS.

UNIT-IV

Systematic random sampling, estimation of mean and variance. Comparison of Systematic random sampling with SRS and Stratified random sampling.

Books recommended

S. No.	Title of Book	Name of author	Publisher
1.	Sampling Techniques	Cochran W.G.	Wiley Publishers
2.	Sampling Theory	Des Raj and Chandok	Narosa

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|----|--------------------------------------------|------------------------------|-----------------------------|
| 3. | Sample Theory of Surveys with Applications | Sukhatme et. all | Low State Uni. Press & IARS |
| 4. | Survey Sampling | Mukhopadhyay P. | Narosa Publishing Society |
| 5. | Sampling Techniques | Daroga Singh & Chaudhry, F.S | New age International |