

II B.Sc STATISTICS Semester-4

Sampling Techniques (MAJOR PAPER - I)

Question Bank

S.NO	Short Questions	BT	PO'S	CO'S
1	Write the difference between sampling versus census.	BT1	PO2	C01
2	Explain about limitations of sampling.	BT1	PO2	CO3
3	Define (i)parameter (ii) statistic (iii) Sampling distribution.	BT3	PO5	CO2
4	Define simple random sampling	BT3	PO3	CO3
5	Illustrate the types of SRS.	BT2	PO1	C04
6	Explain about Random number method.	BT2	PO2	C04
7	Explain about Lottery method.	BT1	PO3	CO5
8	Describe about Determination of sample size.	BT3	PO1	CO5
9	Write about advantages and disadvantages of stratified random sampling.	BT1	PO2	CO3
10	Explain stratified random sampling.	BT3	PO5	CO2
11	Define Proportional and Optimum allocation.	BT3	PO3	CO3
12	Write about Merits and Demerits of systematic sampling.	BT2	PO1	C04
13	Explain about Systematic Sampling.	BT2	PO2	C04
14	Define Multistage sampling and Quota sampling.	BT1	PO3	CO5
15	Explain the concept of Cluster sampling	BT3	PO1	CO5
16	Describe the vision and mission of N.S.O	BT2	PO3	CO3
17	Define NSSO and CSO.	BT1	PO2	CO3

S.NO	Long Questions	BT	PO'S	CO'S
1	Explain principal steps in sample survey.	BT2	PO2	CO3
2	Explain about types of sampling.	BT2	PO3	CO3
3	Describe about sampling and non sampling errors.	BT1	PO2	CO3
4	Distinguish between SRSWR and SRSWOR.	BT3	PO4	CO3
5	Show that $E(s^2)=S^2$ in SRSWOR.	BT4	PO5	CO4
6	Show that sample mean is unbiased estimator of population mean in SRSWOR.	BT3	PO3	CO3
7	Explain stratified random sampling with proportional and optimum allocation.	BT2	PO2	CO3
8	Show that sample mean is unbiased estimator of population mean in Stratified random sampling.	BT2	PO3	CO3
9	Define stratified random sampling and write about mean and variance.	BT1	PO2	CO3
10	Show that $V(\bar{y}_{opt}) \leq V(\bar{y}_{prop}) \leq V(\bar{y}_{srswor})$	BT3	PO4	CO3
11	Define Systematic sampling and write it's advantages and disadvantages.	BT4	PO5	CO4
12	Explain the comparison of systematic sampling with Stratified and SRSWOR.	BT3	PO3	CO3
13	Describe the concept of when $N=nk$ in systematic sampling.	BT2	PO1	C04
14	Explain the functions of N.S.C	BT2	PO2	C04
15	Explain the roles and responsibilities of N.S.O	BT1	PO2	C01

