B. A. Part - II - SOCIOLOGY
Paper - III (Method of Social Research)

Topic : Types of Sampling
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TYPES OF SAMPLING

- **Concept**

A sample is a smaller representation of a larger whole. As it is often impossible, impractical, and costly to conduct research on an entire population, choosing a sample becomes an essential part of scientific research. A good sample is required to adequately and faithfully represent the totality that it is a sample of .

Sampling means selecting a particular group or sample to represent the entire population.

There are two types of sampling methods :

Type of Sampling

Probablity
- (1) Simple Random Sampling
- (2) Systematic Sampling
- (3) Clustered Sampling
- (4) Multistage Sampling
- (5) Stratified Sampleing

Non - Probability
- (1) Convenience Sampleing
- (2) Quota Sampling
- (3) Judgement or Pruposive sampling
- (4) Snow ball sampling

- **Probability Sampling or Random Sampling :**

Probability sampling involves random selection, allowing you to make statistical inferences about the whole group. Probability sampling means that every Member of the population has a chance of being selected.

DEFINITION

A/C to Selltiz, Jahoda and others : "The essential characteristic of probability sampling is that one can specify for each element of the probability that it will be included in the sample".

- **There are many types of Probability Sample :**

(1) **Simple Random Sampling :** The most common and basic sample is the simple random sample in which each person or item on the sampling frame has an equal chance of being selected.

Example : You want to select a simple random sample of 50 employees of company X. You assign a number to every employee in the company database from 1 to 500, and use a random number generator to select 50 numbers.

(2) Systematic Sampling : Systematic sampling is a variation of simple random sampling. In systematic sampling, a list of population is made and then every n^{th} element from the list is chosen as a sample. This sampling has the potential to biased if the list has been arranged in any type of order .

Example :

1	11	21	31
2	12	22	32
3	13	23	33
4	14	24	34
(5)	(15)	(25)	(35)
6	16	26	36
7	17	27	37
8	18	28	38
9	19	29	39
(10)	(20)	(30)	(40)

$K = N/n$

Size of population N = 40

Size of sample – n = 8

$K = N/n$

$= \frac{40}{8} = 5$ (value)

Item selected as a sample –

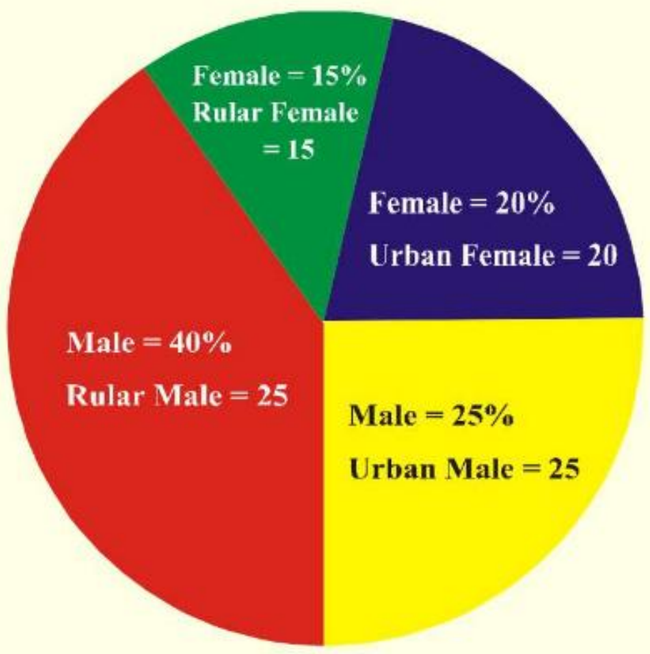
5, 10, 15, 20, 25, 30, 35, 40

(3) Stratified Sampling : This sampling method is appropriate when the population has mixed characteristics, and you want to ensure that every characteristic is proportionally represented in the sample. You divide the population into subgroups (called strata) based on the relevant characteristic.

e.g – Gender, age, income. etc.

From the overall proportions of the population, you calculate how many people should be sampled from each subgroup. Use random or systematic sampling to select a sample from each subgroup.

Example :



Total Population = 1000
Select as a sample = 100
(20 + 15 + 25 + 40 = 100)

(4) Clustered sampling : Cluster sampling also involves dividing the population into subgroups, but each subgroup should have similar characteristics to the whole sample. Instead of sampling individuals from each subgroup, you randomly select entire subgroups.

It it is practically possible, you might include every individual from each sample cluster. It the clusters themselves are large, you can also sample individuals from within each cluster using one of the techniques above. It's are really representative of the whole population.

Example :

Child welfare office in 10 cities across the country (Suppose your research topic is "Impact of Welfare programme on Indian Child"). You don't have the capacity to travel to every office to collect your data, so you use random sampling to select 3 offices – these are your clusters .

(5) Multi – stage Sampling : When we do selection on so many stages then it is called multistage sampling . Multistage sampling is the taking of samples in stages using smaller and smaller sampling units as each stage.

Example :

For example to do a national survey of college students in India. First stage might be regions of the India (North, East, West, South). Randomly select a few regions at this first stage. Then from this list of selected regions. List the states and randomly select states. At the next step or stage, list the colleges and universities with in the selected states and a list of students attending these selected colleges and in this final stage randomly select the students to send your questionnaire.

At each stage you could use any of the probability sampling methods – simple random, stratified, systematic random. The key point of probability sampling is the randomness of selection to each stage each unit has an equal chance of being chosen for the sample.

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