

STATISTICAL THEORY AND APPLICATIONS

Course Contents :

The Regular Course will be conducted in four phases, which are outlined below:

Phase -I (September to December) This phase consisting of four months will primarily be preparatory in nature and review background material and essential topics. It will be divided into three modules of uneven length. They will be as follows:

Module A:(First Two Weeks of September): The following papers will be covered:

- 1) Mathematics,
- 2) Descriptive Statistics,
- 3) Data Processing I

Module B: (From 3rd week of September to October end)

- 1) Mathematics
- 2) Descriptive Statistics
- 3) Data Processing I
- 4) Probability
- 5) Economic Statistics I
- 6) Sample Survey I

Module C: (November to December)

- 1) Mathematics
- 2) Descriptive Statistics
- 3) Data Processing I
- 4) Probability
- 5) Economic Statistics I
- 6) Sample Survey I
- 7) Statistical Methods I

Phase II (January) This involves training in Official Statistics conducted by the CSO and other Government organizations, part of which may be in New Delhi.

This part of the course offers the participants an opportunity to become acquainted with the basic concepts, definitions and classifications of all principal subjects of official statistics. The methods of data collection are also discussed, with particular reference to the conditions prevailing in developing countries. Conceptual problems are covered using the international standards recommended by the United Nations and other international agencies, as a basis. Emphasis is placed upon the development of an integrated system of economic and social statistics.

The curriculum will normally cover the following subjects, but the course may be modified depending upon the specific needs of the trainees:

1. Agricultural statistics.
2. Capital formation statistics.
3. Index numbers of prices.
4. Social statistics.
5. Balance of payments statistics.
6. Public finance statistics.
7. National income statistics & related studies.

8. Transport statistics. 9. Money and banking statistics. 10. Wholesale and retail sales statistics. 11. Population and vital statistics. 12. Education and cultural statistics. 13. Foreign trade statistics. 14. Industrial statistics.

Phase III (from February to early-April) The following subjects will be taught:

- 1) Demography
- 2) Statistical Method II
- 3) Sample Survey II
- 4) Data Processing II
- 5) Economic Statistics II

Phase IV (Mid-April to Mid-June) One of the following specializations is to be chosen. All the specialization may not be offered in a particular year.

- 1) Statistical Data Analysis
- 2) Applied Sample Surveys
- 3) Price Statistics
- 4) System of National Accounts
- 5) Economic Development
- 6) Time Series Analysis
- 7) Vital Statistics & Demography