**FOUNDATION COURSE 4**

| **Course Code** | **Course Name** | **L-T-P** | **Credits** |
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| CKV702 | **Research methods** | 1-2-0 | 3 |

**Module 1:**

Fundamentals of Research: Definition of Research –Purpose of research - Scientific Method: Requisites and components of scientific approach to Research. Types and Methods of Research: Classification of Research, Pure and Applied research– Exploratory or Formulative Research – Descriptive research – Diagnostic and Evaluation studies – Action research – Experimental research –– Historical research – Survey- Case study – Field Studies – Steps in Research

Review of literature**:** Literature classification – purpose of review – sources of literature – Planning the review work.

Research Planning: Planning process: Selection of a problem for research – Formulation of the selected problem – Hypotheses: meaning – types (descriptive, relational, causal, working, null, complex and analytical hypotheses) - Sources of hypotheses – theory, observation, analogies, intuitions and personal experience –role of hypotheses. Concepts: definition –types. Research Design: meaning –classification of designs – contents of a Research Plan

**Module 2:**

Sampling: Meaning – characteristics of a good sample – sampling techniques: Probability Sampling techniques (simple random, stratified random, systematic random, cluster, area, random sampling with probability proportional to size. Non- probability sampling techniques (convenience, judgment, quota sampling) – Sample unit, size and procedure. Sampling errors - Method of collection of data – meaning and importance of data – sources of data – use of secondary data.

**Module 3:**

Methods of collecting primary data: observation, experimentation– interviewing, mail survey, projective techniques, sociometry.

Tools for data collection: type of tools – construction of schedules and questionnaires – measurement scales– pilot studies and pre-tests.

Processing of data: introduction – editing – classification and coding –tabulation and graphic representation.

**Module 4:**

Statistical analysis of data: Introduction – measures of central tendency –measures of dispersion – measures of association – bi-variate analysis – multivariate analysis –hypothesis testing – tests of significance.

Report Writing: Introduction types of reports – planning report-writing – research - report format – principles of writing – documentation: footnotes and bibliography.

**References**

1. Methodology of Research in Social Sciences – O.R. Krishnaswamy, Himalaya Publishing house
2. Methodology of Research -C.R. Kothari, Vikas Publication House, New Delhi
3. Research Methodology - Bhattacharya, Excel Books, New Delhi
4. Research Methodology -K.R.Sharma, National Publishers, Jaipur
5. Methodology and Techniques of Social Research -Wilkinson and Bhandarkar
6. Business Research Methods - Donald R Cooper and Pamela S Schindler
7. Quantitative techniques For Managerial Decision Making – Shenoy G.V., Srivastava U.K. and Sharma S.C.
8. Marketing Research – David A Aaker, V.Kumar&amp; George S Day
9. Business Statistics – David R Anderson, Dennis Sweeney &amp; Thomas Williams
10. Tourism Research Policy and Regulation – P.C. Sinha, Anmol Publishers Pvt. Ltd. New Delhi
11. Research Methodology - Shah Jaha Johansson Thomas B Ed, Renewable Energy: Sources for Fuels and Electricity, Earthscan Publishers, London.