

## **West Bengal State University**

### **Department of Anthropology**

Name of the course: Research Methodology

Duration: 60 hours

Credit: 4 credits

ELIGIBILITY: M.Phil, Ph.D. students and interested faculty members.

#### **SYLLABUS IN DETAIL**

Unit-I: Introduction to Research Methodology: Meaning of Research, Objectives of Research, Motivations in Research, types of Research, Research Approaches, Significance of Research, Research Methods v/s Methodology, Research and Scientific Methods, Criteria of Good Research; Defining the Research Problem; deductive and inductive reasoning

Unit-II: fundamental concepts of research: variables, operational definition, measurement, validity, reliability, accuracy, precision, cause and effect, Research Process, Variables and their linkages, theory

Unit-III: Research design: Experiment, Quasi experiment, Thought experiment, Lab and Field experiment, Natural and naturalistic experiments,

Unit-IV: Sampling: Sampling frame, Sampling theory- distributions, Central limit theorem, sample size calculation; Probability Sampling - Simple random sampling, systematic random sampling, Stratified sampling, Cluster sampling, Probability Proportion Sampling (PPS); Non probability sampling- quota sampling, purposive or judgment sampling, convenience or haphazard sampling, chain referral (snowball and respondent-driven) sampling; Choosing informants, Key informants

Unit-V: Data Collection: Primary and secondary Data, Interviewing- unstructured and structured; Questionnaires and Survey Research; Observation-participant and non-participant observation, Direct and Indirect Observation; Case Study, Focus Group Discussion, Cultural Domain Analysis; rating scales; Field notes

Unit-VI: Qualitative data analysis: Text analysis, Discourse analysis, ethnographic decision models, folk taxonomies analysis, componential analysis, and analytic induction.

Unit-VII: Quantitative data analysis: Univariate analysis- coding, frequency distribution, Measures of Central Tendency (Mean, Median, Mode), Measures of dispersion (range, variance, standard deviation, Standard Error of Mean), Graphical representation of Data; Normal curve and its deviations, Student's t distribution, z-score, univariate chi square test

Unit-VIII: Bivariate analysis: t tests (Independent Sample t test and paired sample t test), ANOVA with Post hoc test, ANCOVA; chi square test (2x2 tables), Odds ratio, Fisher's Exact test, Pearson and Spearman correlation, Simple linear regression

Unit-IX: Multivariate analysis: Partial correlation, Multiple Linear and Logistic regressions, Path analysis, Multicollinearity, Factor analysis, Cluster analysis, Discriminant Function Analysis

Unit-X: Writing Research Report: Format, style and steps; Review of related literature its implications at various stages of research. Major findings, Conclusions and suggestions. Bibliography and Reference styles