# SARDAR PATEL UNIVERSITY VALLABH VIDYANAGAR



### SYLLABUS EFFECTIVE FROM: 2017-18 M. PHIL IN LIBRARY & INFORMATION SCIENCE

#### **SEMESTER: II**

#### PAPER - III RESEARCH METHODOLOGY AND STATISCAL TECHNIQUES

#### UNIT-I CHARACTERISTIC OF SOCIAL SCIENCE RESEARCH

- Nature of Social Science Research
- Recent trends in Social Science research with special reference to India.
- Objectivity in Social Science Research
- Social Science Res. in digital era.
- Characteristics of Research
- Basic types of Research, Research for Ph. D.
- The craft of doing Research
- Self-help and peer support group.

#### UNIT-II SAMPLING DESIGN:

- Need for sampling, Fundamental Definitions, Important Sampling Distributions
- Steps in Sampling Design, Census and Sample survey,
- Criteria for Selecting a Sampling Procedure, Characteristics of a good Sample Design.
- Statistical Approach to Sampling: Central limit Theorem, Sadler's A-test
- Concept of Standard Error, Sample size and its Determination
- Determination of Sample size through the Approach Based on Bayesian Statistics.

#### UNIT-III DATA ANALYSIS AND INTERPRETATION:

- Inferential Statistics Skew ness
- Z-T Test Correlation
- Regression Linear & Non-Linear
- Chi Square Test Time Series analysis
- Sociometry
- Statistical Packages SPSS
- Statistical Graphics Etc.

### UNIT-IV BIBLIOMETRICS, SCIENTOMETRICS & INFORMATICS:

- Bibliographic Coupling

- Obsolescence
- Citation Analysis
- Webometrics
- Citation Studies
- Info metrics
- Scientometrics

#### **SELECTED READING LIST:**

- 1. BUSHA (Charles H) and HARTER (Stephen P).Research Methods in Librarianship: Techiques and Interpretation.New York: Acadamic Press, 1980.
- 2. BUSHA (Charles H): ResearchMethods.Ill Encyclopedia of Library and Information Science.V01.25 254-293; Kent, Allen and Harold ed. New York:Marcel Dekker.
- 3. GOPAL (M.H.): An IntroductiontoResearchProcedure in Social Science. Bombay: Asia, 1964.
- 4. GROGAN (D.T.): Science and Technology and Information Literature.
- 5. GOODE (William) and HAIT (Paul K): Methods in Social Research. New York:Macgraw Hill, 1952.
- 6. KUMAR (Krishna): Research Methods in Library and Information Science.New Delhi: Vikas, 1992.
- 7. MAURICE (B.Line): Library Surveys: An Introduction to the use, planning, procedure and presentation of surveys. 2<sup>nd</sup>ed. London: Bingley, 1982.
- 8. RAVICHANDRA RAO (I.K.): Qualitative Methods forLibrary and InformationScience.NewDelhi:Wiley Eastorn, 1985.
- 9. SEETARA. CurrentResearch in library and information science.Y.K.Publishers.
- 10. Solomon (I.L.) BasicResearch Methods in Social Sciences, 1989
- 11.Basic Statisticsfor Librarians, 1988.
- 12.STEVENS (Ronald E): Rersearch methods in LibrarianshipLondon: Bingley, 1971
- 13.WARD (Patricia Layzell):IntroductoryGuide to Research in Library and information studies in the UK London Library Associations, 1975.
- 14. YOUNG (Pauline V): ScientificSocialSurvey and Research.New Delhi: Prentice Hall, 1984.
- 15.SEHGAL (R.L.): Applied StatisticsforLibraryScience ResearchVol.1& 2, EssEss publication.
  - 16. RAVICHANDRA RAO: Quantitative Methods forlibrary and Information Science, Wiley eastern Ltd.
- 17. GUPTA (S.P.): Statistical Methods.
- 18. RAO (I.K.) Workshop on Informatics & Scientometrics, ISI, Banglore.
- 19. Nick Moore &Martin Hesp. The Basics of writing reports etc.London: Bingley, 1985.
- 20. Simpson, J.L. Basicresearch methods in social sciences. New Delhi. 1969.
- Powell, Ronald R. Basicresearch methods for librarians. Nor-Wood: Ablex, 1985.
  Mary Lee, Bundi. Reader in Research methods for librarianship: Greenwood Press.

## **SARDARPATELUNIVERSITY**

## M. PHIL IN LIBRARY & INFORMATION SCIENCE

[EFFECT FROM: 2017-2018] SEMESTER: II

PAPER – IV

• Dissertation / Project