

Paper No – 7 Research Methodology & Statistical techniques

Unit No.	Topic Name	Content	Hrs.	Marks	Credit
1.	Research Method	<ul style="list-style-type: none"> • Foundation of research, nature, definition & objectives. • Type of research: Basic concepts of research, scientific method, ethical consideration of research. • Library & info. Science as a interdisciplinary subject, significance of research in LIS : area of research in LIS 			
2.	Research Design	<ul style="list-style-type: none"> • Planning of research, planning process, review of literature, selection of problem, process of identification, criteria of selection, formulation of research problem. • Hypothesis – meaning, type, sources, function and hypothesis conceptualization. • Essential of good research design, it's importance, preparation of research design / writing the research proposal. • Literature search, print, non- print and e-resources, web resources. 			
3.	Research Methods	<ul style="list-style-type: none"> • Scientific method, historical method, descriptive method, survey method, case study method, experimental method and Delphi method. • Research techniques and tools – questionnaire, interview, observation, schedule, sampling scale and checklist, library record and reports. 			
4.	Data analysis & interpretation	<ul style="list-style-type: none"> • Data analysis and descriptive statistics, measures of central tendency – Mean, mode and median. measures of dispersion – normal distribution, standard deviation, absolute deviation and variance. • Presentation of data – different type of graphical and tabulation of data. • Co-relation, regression – Linear and non linear. • Testing of hypothesis and statistical inference – Z Test, T Test, Chi-Square Test. • Statistical packages : MS Excel, 			

		SPSS, and web based statistical tools. • Bibliometric, Centometrics, Infometrics, webometrics • Organization and structure of research report. • Steps in writing research reports. • Writing style.			
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Reference Books

1. Research And Statistical Techniques in Library And Information Science- M.S. Negi
2. Research Methodology for Library Science-B.D.Pandya
3. Research Methodology in Library Science-Intder Mohan Goswami
4. Research Methodology in Library School And India Universities-Nirajan
5. Information Handling in Libraries in 21st Centurey-Sharama R.K.
6. Human Resource Management in Libraries-Mahapatra
7. User's Aproach to Information in Libraries-Devrajan
8. Encyclopedia Libraries Information Management-Dr. Sunil Kumar
9. Stactical Methods for Library And Information Center by S.R.Sarda And Shri Nivasan

Gujarati Reference Books

૧. સંશોધન પધ્ધતિ (વાર્તાનીક વિજ્ઞાનમાં) – પ્રા. ડૉ. એલ આર યાજ્ઞિક
૨. સંશોધન પધ્ધતિઓ અને પ્રવિધીઓ – દેસાઈ હરિભાઈ અને દેસાઈ કૃષ્ણકાંત
૩. સંશોધન પધ્ધતિઓ – શાહ એન્ડ દવે જે.કે.
૪. સામાજીક સંશોધન પધ્ધતિઓ – દેસાઈ અરવિંદભાઈ
૫. સંશોધન અને આંકડાશાસ્ત્રીય પધ્ધતિઓ – સી, જમનાદાસની કંપની, અમદાવાદ