Unit	Topic Name	Content	Hrs.	Marks	Credit
<u>No.</u> 1.	Basic of Statistical	<ul> <li>Meaning and definition of statistics</li> <li>Development of statistics as a discipline.</li> <li>Use of statistics in various subject research and other activities.</li> <li>Statistics as a interdisciplinary subject.</li> <li>Type of data- primary and secondary. Sources of primary and secondary data</li> <li>Data collection</li> <li>Frequency distribution and tabulation</li> <li>Representation of data in a</li> </ul>			
2.	Descriptive statistics	<ul> <li>various formats.</li> <li>Measurement of central tendency mean, mode and median and its use.</li> <li>Measurement of Dispersion, standard deviation, quarter deviation and its use.</li> <li>Ratio analysis.</li> <li>Sampling method</li> <li>Population mean and sample mean</li> <li>Index number</li> <li>Scaling methods</li> </ul>			
3.	Statistical methods	<ul> <li>Correlation liner and nonlinear, Correlation Coefficient- Karl Pearson and Ranking Correlation of two variables regarding Library, Users and statistics. Examples</li> <li>Regression liner and nonlinear, Regression Coefficient of two regression line. Regression line of two variables regarding Library, Users and statistics. Examples</li> <li>Time series – trend line with different method.</li> <li>Probabilities with examples.</li> <li>Probability distribution with examples.</li> </ul>			

## **Paper No – 16 Statistical Application in Libraries**

4.	Various testing method	Hypothesis testing and various
		testing methods.
		Parametric and non parametric
		testing.
		• 'T' test, 'F' test, 'chi-square'
		test,
		Scaling method and testing,
		• SLI and its testing,
		• 'Z <sup>2</sup> ' testing etc.

## **Reference Books**

- 1. Research And Statistical Techniques in Library And Information Science-M.S. Negi
- 2. Statistical methods by Guptra C. B. Pub. By S. Chand and Co., New Delhi
- 3.. Statistical methods by Guptra C. B. Pub. By S. Chand and Co., New Delhi
- 4. Statistical methods by Guptra S. C. Pub. By Himalaya pub. House, Mumbai
- 5. Encyclopedia Libraries Information Management-Dr. Sunil Kumar
- 6. Stactical Methods for Library And Information Center by S.R.Sarda And Shri Nivasan

## **Gujarati Reference Books**

- ૧. સંશોધન પધ્ધતિ (વાર્તાનીક વિજ્ઞાનમાં) પ્રા. ર્ડા. એલ આર યાજ્ઞિક
- ર. સંશોધન પધ્ધતિઓ અને પ્રવિધીઓ દેસાઈ હરિભાઈ અને દેસાઈ કૃષ્ણકાંત
- ૩. સંશોધન પધ્ધતિઓ શાહ એન્ડ દવે જે.કે.
- ૪. સામાજીક સંશોધન પધ્ધતિઓ દેસાઈ અરવિંદભાઈ
- પ. સંશોધન અને આંકડાશાસ્ત્રીય પધ્ધતિઓ સી, જમનાદાસની કંપની, અમદાવાદ
- *દ.* અપ્રાચલિય આંકડાશાસ્ત્રીય પરીક્ષણો સુરેશ પારેખ, પ્રકાશક–લેખક, જુનાગઢ
- ૭. વાર્તનીક વિજ્ઞાનો માં મનોવૈજ્ઞાનીક પરિક્ષણો સુરેશ પારેખ, પ્રકાશક–લેખક, જુનાગઢ
- ૮. ઉચ્ચત્તર આંકડાશાસ્ત્ર–ર , બી.એસ.શાહ પ્રકાશન, અમદાવાદ