

**Department of Library & Information Science**  
**Saurashtra University, Rajkot**  
**Course Content for Ph D Course Work**  
**In**  
**Library & Information Science**  
**One Semester 4 Credit Course**

Sr No	Components	Weightage in %
1	Research Methodology	30
2	Computer Application	30
3	Review of Literature	40

## **[1] Research Methodology**

### **Unit – 1 Basics of Research**

Research: meaning, need, process and Types of Research  
Identification & formulation of Research Problem  
Hypothesis: Formulation and Testing  
Research Design  
Review of Literature & its importance  
Research Ethics

### **Unit – 2 Research Methods**

Historical Research  
Descriptive Research – Survey Research  
Experimental Research  
Delphi method  
Case Study  
Scientific Research & its Components

### **Unit – 3 Data Collection**

Sampling & Types of Samples  
Questionnaire  
Interview  
Observation  
Content & Citation analysis  
Scientometrics  
Qualitative & Quantitative Techniques

### **Unit – 4 Analysis Interpretations and Presentation of Data**

Data Analysis: Primary data analysis and Secondary data analysis  
Presentation of data  
Use of Statistical Packages: SPSS

### **Unit – 5 Research Reporting**

Structure, style and contents  
Style manuals: (Chicago, APA, and MLA)  
Evaluation of research  
Current trends in LIS research

## **[2] Computer Application**

### **Unit – 1 Computer Application for Research**

Understanding Data processing  
MS Office Package [Word, Excel, Access, PowerPoint]  
Graphical Presentation of Data  
Understanding Multimedia Tools

### **Unit – 2 Information & Communication Technology [ICT]**

Origin and Growth  
Information Technology and its components  
Communication Technology and its components

### **Unit – 3 INTERNET**

Introduction to Internet  
Types of Internet Connectivity  
Web Browsers: [i.e. Internet Explorer, Mozilla Firefox, and Google Chrome]  
Web Servers and Web Tools  
Search Engines [General, Metasearch engines, and Subject specific search engines]  
Information Searching Models  
Internet based Information Resources and Services  
Review of Research Oriented Databases  
Use of Internet in LIS Research  
Evaluation of Internet sites useful for LIS Research  
Internet Security

### **Unit – 4 Digital Libraries**

Digital libraries: Basic Concepts  
Digital Collection (e-books, e-journals etc)  
Hardware and Software for Digital Library  
Open Access resources and Institutional repositories  
Content creation for Digital Libraries  
Important Digital Library projects in the world and India  
Intellectual Property Right (IPR) Issues

### **Unit – 5 Current Trends in ICT**

Web 2.0: concepts, evolution and components  
Difference between Web 1.0 & Web 2.0 Applications  
Use of Web 2.0 tools for LIS research  
Web 3.0 (Semantic Web)

## **[3] Review of Literature**

Review of literature should be relevant to the research area of each candidate individually