



**SAVITRIBAI PHULE PUNE UNIVERSITY  
TULJARAM CHATURCHAND COLLEGE OF ARTS, SCIENCE  
AND COMMERECE, BARAMATI  
(AUTONOMOUS)**

**DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE**

**REVISED SYLLABUS**

**Choice Based Credits Systems (CBCS) Semester Pattern**

**Master of Library and Information Science**

**(SEMESTER I and II)**

**With Effect from: June, 2022 -2023**

| <b>Semester</b> | <b>Paper code</b> | <b>Title of Paper</b>                            | <b>No of Credits</b> |
|-----------------|-------------------|--|----------------------|
| <b>I</b>        | <b>PMLIS 111</b>  | Information, Communication & Society             | 4                    |
|                 | <b>PMLIS 112</b>  | Introduction to Research Methodology             | 4                    |
|                 | <b>PMLIS 113</b>  | Information Retrieval                            | 4                    |
|                 | <b>PMLIS 114</b>  | Management of Libraries & Information Centers -A | 4                    |
|                 | <b>PMLIS 115</b>  | Information Technology: (Theory)                 | 4                    |
|                 |                   | Certificate Course                               | 2                    |
|                 |                   | <b>Sem -I Total Credits</b>                      | <b>22</b>            |
| <b>II</b>       | <b>PMLIS 121</b>  | Management of Libraries & Information Centers -B | 4                    |
|                 | <b>PMLIS 122</b>  | Statistical Techniques of Research Bibliometrics | 4                    |
|                 | <b>PMLIS 123</b>  | Bibliographic Control & Information Systems      | 4                    |
| <b>Annual</b>   | <b>PMLIS 124</b>  | Project  | 4                    |
|                 | <b>PMLIS 125</b>  | Information Technology Applications : Practical  | 4                    |
|                 |                   | Certificate Course                               | 2                    |
|                 |                   | <b>Sem - II Credits</b>                          | <b>22</b>            |
|                 |                   | <b>Total Credits</b>                             | <b>44</b>            |

**Anekant Education Society's**  
**Tuljaram Chaturchand College of Arts, Science and Commerce, Baramati**  
**(AUTONOMOUS)**

### **Course Structure for M.Lib.I.Sc.**

Anekant Education Society's  
**Tuljaram Chaturchand College of Arts, Science and  
 Commerce, Baramati**  
 AUTONOMOUS

**Course and Credit Structure M.Lib.I.Sc. 2022 Pattern**

| Class             | Pattern | Semester | Course Code | Course Title                                     | Course Type | No. of Credits |
|-------------------|---------|----------|-------------|--|-------------|----------------|
| <b>Semester I</b> |         |          |             |  |             |                |
| M.Lib.I.Sc.       | 2022    | I        | PMLIS 111   | Information, Communication & Society             | Theory      | 04             |
| M.Lib.I.Sc.       | 2022    | I        | PMLIS 112   | Introduction to Research Methodology             | Theory      | 04             |
| M.Lib.I.Sc.       | 2022    | I        | PMLIS 113   | Information Retrieval                            | Theory      | 04             |
| M.Lib.I.Sc.       | 2022    | I        | PMLIS 114   | Management of Libraries & Information Centers -A | Theory      | 04             |
| M.Lib.I.Sc.       | 2022    | I        | PMLIS 115   | Information Technology: (Theory)                 | Theory      | 04             |
|                   |         |          |             | Certificate Course                               |             | 02             |
|                   |         |          |             | <b>Sem-I Total Credits</b>                       |             | 22             |
| M.Lib.I.Sc.       | 2022    | II       | PMLIS 121   | Management of Libraries & Information Centers -B | Theory      | 04             |
| M.Lib.I.Sc.       | 2022    | II       | PMLIS 122   | Statistical Techniques of Research Bibliometrics | Theory      | 04             |
| M.Lib.I.Sc.       | 2022    | II       | PMLIS 123   | Bibliographic Control & Information Systems      | Theory      | 04             |
| M.Lib.I.Sc.       | 2022    | II       | PMLIS 124   | Project  | Project     | 04             |
| M.Lib.I.Sc.       | 2022    | II       | PMLIS 125   | Information Technology Applications : Practical  | Practical   | 04             |
|                   |         |          |             | Certificate Course                               |             | 02             |
|                   |         |          |             |  |             | 22             |
|                   |         |          |             | <b>Sem II Total Credits</b>                      |             | 44             |

## **Programme Specific Outcomes (POs)**

On completing Master of Library and Information Science Programme, students shall be able to realize following outcomes:

### **PO1 Research-Related Skills and Scientific temper:**

Infer scientific literature, build a sense of enquiry and be able to formulate, test, analyse, interpret and establish hypothesis and research questions; and to identify and consult relevant sources to find answers. Able to plan and write a research paper/project while emphasizing on academics and research ethics, scientific conduct and creating awareness about intellectual property rights and issues of plagiarism.

### **PO2 Effective Citizenship and Ethics:**

Demonstrate empathetic social concern and equity centred national development and act with an informed awareness of moral and ethical issues and commit to professional ethics and responsibility

**PO3 Social competence and communication skills:**

Demonstrate ability to accommodate the views of others and present their own opinions and complex ideas, in written or oral form, in a clear and concise manner in group settings. Exhibit thoughts and ideas effectively in writing and orally; communicate with others using appropriate media, build effective interactive and presenting skills to meet global competencies. Elicit views of others, present complex information in a clear and concise and help reach conclusion in group settings.

**PO4 Disciplinary Knowledge:** Demonstrate comprehensive knowledge and a strong theoretical grounding in their area of work.

**PO5 Personal and professional competence:**

Perform independently and also collaboratively as a part of a team to meet defined objectives and carry out work across interdisciplinary fields. Execute interpersonal relationships, self-motivation and adaptability skills and commit to professional ethics.

**PO6 Self-directed and Life-long learning:**

Demonstrate attitudes of being a life-long learner who passionately pursues self determined goals in the broadest context of socio-technological changes. Acquire the ability to engage in independent and life-long learning in the broadest context of socio technological changes.

**PO7 Environment and Sustainability:**

Understand the impact of the scientific solutions in societal and environmental contexts and demonstrate the knowledge of and need for sustainable development.

**PO8 Critical Thinking and Problem solving:**

Identify problems by closely examining the situations around them and think holistically about the phenomena and generate viable solutions to these problems. Exhibit the skill of critical thinking and understand scientific texts and place scientific statements and themes in contexts and also evaluate them in terms of generic conventions. Identify the problem by observing the situation closely, take actions and apply lateral thinking and analytical skills to design the solutions

**SYLLABUS CBCS FOR M.Lib.I.Sc. (w. e. From June, 2022)**  
**Academic Year 2022 -2023**  
**Semester - I**

**Paper Code:** PMLIS 111    **Title of Paper :** Information, Communication and Society

**Credits**        : 4                      **No. of Lectures**    : 60

**Course Objectives (COs):**

1. To introduce to the students the concept of Information & its Communication in Knowledge Society.
2. To familiarize the students with professionalism & LIS Education
3. Understand the theories, model and components of communication.
4. Comprehend the significance and means of Open Access.
5. Know crisis in scholarly communication.
6. Gain knowledge of generators, providers and intermediaries of Information industry.
7. Understand the features of knowledge society.

**Course Outcomes (COs):**

- CO1. Can manage information resources and the information life-cycle through the processes of collection development, organization, preservation, conservation, access, and dissemination in accordance with physical, virtual, and technical infrastructure and needs
- CO2. About the information and r elated concept;
- CO3. How freedom of information prevails in an advanced society to uphold a democracy;
- CO4. About information science as a discipline;
- CO5. About different acts, commissions and policies related to information activities in India.
- CO6. Understand the methods and techniques of digital preservation.
- CO7. Understand the concept and frameworks of information literacy.

**TOPICS / CONTENTS:**

| <b>Total No Of Credits = 04</b> |  |
|---------------------------------|--|
| <b>UNIT 1</b>                   | <p><b>Information , Communication &amp; Knowledge Society ( 15L)</b></p> <p>1.1 Information: Characteristics &amp; Properties of Information, Use of Information in R &amp; D, Business and Industry, Planning &amp; Policy making, Management and Decision Making</p> <p>1.2 Information &amp; its communication: formal and Informal communication, models of communication, Scholarly communication process, scientific communication, barriers of communication.</p> |

|               |  |
|---------------|--|
|               | 1.3 Knowledge Society and the Library : Knowledge Society: Genesis, Characteristics and Implication & Changing Role of LIC & professionals in Knowledge Society.   |
| <b>UNIT2</b>  | <b>Library and Information Science Education &amp; Professionalism (15L)</b><br>2.1 Library and Information Science Education: definition of professional education, components of professional education, LIS as a discipline, levels & curriculum of LIS Education in India, methods of teaching and evaluation in LIS Education, Accreditation of LIS Education in India.<br>2.2 Professionalism: definition of profession & its characteristics, definition of Librarianship & changing role of library profession, role of professional associations in promoting librarianship, professional ethics ( definition, concept, need & purpose) |
| <b>UNIT 3</b> | <b>Information and Knowledge Management (15L)</b><br>3.1 Information Management : concept & methods<br>3.2 Knowledge Management : definition, objectives, methods & tools  |
| <b>UNIT 4</b> | <b>Economics of Information (15L)</b><br>4.1 Concept, and Substance of Economics, Economics of information<br>4.2 Economic Characteristics of Information as a commodity<br>4.3 Information & Knowledge Industry -definition & kinds of knowledge industry (to be listed only) Information Industry Components: Generators, providers & intermediaries of Information.   |

### Mapping of Program Outcomes with Course Outcomes

**Class** : M.Lib.I.Sc.

**Subject** : Library and Information Science

**Course** : Information, Communication and Society **Course Code** : PMLIS-111

**Weight age** : 1= weak or relation, 2= moderate or partial relation, 3= strong or direct relation

| Programme Outcomes (POs) |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|
| Course Outcomes          | PO 1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 |
| CO 1                     | 3    | 2    |      |      |      |      |      |      |
| CO 2                     |      |      | 3    |      |      |      |      |      |
| CO 3                     |      |      | 2    |      |      |      |      |      |

|      |   |   |  |   |   |   |  |  |
|------|---|---|--|---|---|---|--|--|
| CO 4 | 3 | 2 |  |   | 2 |   |  |  |
| CO 5 | 3 |   |  | 2 | 2 | 2 |  |  |
| CO 6 | 3 | 2 |  |   |   | 2 |  |  |

**PO1 Research-Related Skills and Scientific temper:**

**CO1. Research Skills Justification:** For effective research collaboration, understanding how data communication benefits and networking applications work is essential. This skill enables researchers to leverage technological tools for collaborative projects.

**CO2** Research often involves the use of data communication and networks for data exchange and collaboration. Understanding these concepts is crucial for conducting research in a digitally connected world.

**PO2 Effective Citizenship and Ethics:**

**CO2** In the digital age, understanding data communication and networks is essential for effective participation in an interconnected world. Citizens need to comprehend how information flows, is transmitted, and is secured in various networked environments.

**CO3** Communication ethics are critical in ensuring that information is conveyed truthfully, respectfully, and without harm. Understanding communication models also helps individuals recognize and navigate potential ethical challenges in communication.

**PO3 Social competence and communication skills:**

**CO3** Information professionals need to communicate effectively to provide services and facilitate knowledge sharing. This involves interpersonal skills, active listening, and the ability to convey information in a clear and understandable manner. Social competence is crucial in understanding the information needs of users and tailoring services accordingly.

**PO4 Disciplinary Knowledge:**

**CO6** Open Access is a critical aspect of scholarly communication. Professionals need to comprehend its significance in fostering accessibility to scholarly information. This PO ensures awareness and understanding of the means to promote Open Access.

**PO5 Personal and professional competence:**

**CO4.**Understanding the benefits of data communication and networking applications within organizations demonstrates a proactive approach to leveraging technology for professional growth. This competence allows individuals to identify and implement innovative solutions, contributing to the efficiency and effectiveness of organizational processes.

**PO6 Self-directed and Life-long learning:**



**CO5.** Communication theories and models evolve, and staying informed about these changes is essential for effective communication. This aligns with the self-directed learning aspect as individuals need to update their knowledge to communicate effectively in different contexts.

**CO6.** The concept of Open Access is dynamic, and understanding its significance requires ongoing learning. This skill promotes self-directed learning by encouraging individuals to stay informed about the evolving landscape of scholarly communication.

**Paper Code :** PMLIS 112      **Title of Paper :** Introduction to Research Methodology

**Credits :** 4      **No. of Lectures :** 60

**Course Objectives (COs)**

1. To introduce application of Research Methodology in LIS and inculcate research skills among the Students.
2. To familiarize the students with various research methods
3. To give exposure to current trends of Research in LIS.
4. To give an advanced exposure to the students about research.
5. To develop acquaintance with intensive techniques and skills of the research process.

6. To familiarize the art and style of writing a research report.
7. About how to prepare research report.

**Course Outcomes (COs):**

- CO1. Students will be able to learning the library and information science research  
Introduce application of Research Methodology in LIS and inculcate research skills among the students.
- CO2. Understand the use of various data collection tools & statistical techniques for Research.
- CO3. Give exposure to current trends of Research in LIS.
- CO4. The different methods and techniques of research;
- CO5. The use of data collection tools, organization and representation of data;
- CO6. Different data analysis techniques

**TOPICS/CONTENTS:**

| <b>Total No. Of Credits = 04</b> |   |
|----------------------------------|---|
| <b>UNIT 1</b>                    | <p><b>Research ( 15L)</b></p> <p>1.1 Research: Meaning, definition, Need and Process of Research<br/>1.2 Types of Research: Pure, Applied and Action Research<br/>1.3 Spiral of Scientific Method<br/>1.4 Ethical aspect of Research, Literature Search.</p>  |
| <b>UNIT 2</b>                    | <p><b>Research Design ( 15L)</b></p> <p>2.1 Research Design: Definition, Steps in Research Design<br/>2.2 Synopsis: Concept and essential Components<br/>2.3 Identification and formulation of Problem<br/>2.4 Hypothesis: Meaning, Definitions, Type</p>   |
| <b>UNIT 3</b>                    | <p><b>Research Methods ( 16L)</b></p> <p>3.1 Research Methods :<br/>Historical Method, Descriptive Method, Experimental Method, Case Study Method, Future Research Method.<br/>3.2 Content analysis: Concept, Definition, Need.<br/>Introduction to Metrics Studies : Webometrics, Librametrics, Scientometrics Informatics, Altmetric.</p> |
| <b>UNIT 4</b>                    | <p><b>Research Databases ( 14L)</b></p> <p>4.1 Web of Science, Scopus, emerald, Springer.<br/>4.2 Google Scholars<br/>4.3 Science Citation Index</p>  |

**Class** : M.Lib.I.Sc.

**Subject** : Library and Information Science

**Course** : Introduction To Research Methodology **Course Code** : PMLIS-112

**Weight age** : 1= weak or relation, 2= moderate or partial relation, 3= strong or direct relation

| <b>Programme Outcomes (POs)</b> |      |      |      |      |      |      |      |      |
|---------------------------------|------|------|------|------|------|------|------|------|
| <b>Course Outcomes</b>          | PO 1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 |

|      |   |   |  |  |   |   |  |  |
|------|---|---|--|--|---|---|--|--|
| CO 1 | 2 |   |  |  | 2 |   |  |  |
| CO 2 | 2 | 3 |  |  |   |   |  |  |
| CO 3 |   | 2 |  |  |   |   |  |  |
| CO 4 |   | 2 |  |  |   |   |  |  |
| CO 5 | 2 |   |  |  |   |   |  |  |
| CO 6 | 3 |   |  |  | 3 |   |  |  |
| CO 7 | 2 |   |  |  | 2 |   |  |  |
| CO8  |   |   |  |  |   | 3 |  |  |

### **Justification for the Mapping**

#### **PO1 Research-Related Skills and Scientific temper:**

All of the course outcomes (COs) contribute to the development of students' Research-Related Skills and Scientific temper. For example, CO2, CO5, and CO6 require students to TQM, Management of Libraries and Information Centers and develop skills in Marketing of Library. CO1 and CO5 require students to understand the various sections in library. CO7 community building in library marketing.

#### **PO2 Effective Citizenship and Ethics:**

All of the COs also contributes to Effective Citizenship and Ethics. For example, CO2, and CO3 The students will be understand TQM, Management, change management ethics CO4 students to use their Effective management system in library.

#### **PO5 Personal and professional competence:**

CO1, CO6, CO7 contribute to the development of students' Personal and professional competence. For example, CO5 requires students to understand the various section in Library.

#### **PO6 Self-directed and Life-long learning:**

CO8, also contributes Self-directed and Life-long learning For example, main approaches to the study of the management of an organization.

**Paper Code:** PMLIS 113

**Title of Paper :** Information Retrieval

**Credits :** 4

**No. of Lectures :** 60

#### **Course Objectives (COs):**

1. To understand use of indexing techniques, vocabulary control & search strategies for Information Storage & Retrieval.
2. To familiarize students with Information retrieval models and develop skills in designing thesaurus.

3. To introduce Consolidation & Repackaging of Information into Information Products.
4. To introduce the concept of ISR including indexing languages, vocabulary control, search strategies etc.
5. To familiarize students with Information retrieval models and develop skills in designing thesaurus.
6. To familiarize the students about the principles and practices of information
7. Consolidation, subject indexing, abstracting and information retrieval sys

### Course Outcomes (COs):

CO1. Students will be able to construct a keyword search statement in order to find relevant information

CO2. Understand the concept of information analysis, consolidation and repackaging.

CO3. Understand the Indexing systems and techniques.

CO4. Understand the quality of good abstracts and process of abstracting.

CO5. Understand the techniques and strategies of online searching.

CO6. Understand the various information retrieval models.

CO7. Analyze and evaluate ISAR tools and systems.

### TOPICS/CONTENTS

| <b>Total No Of Credits = 04</b> |   |
|---------------------------------|---|
| <b>UNIT 1</b>                   | <b>Information Storage and Retrieval (16L)</b><br>1.1 definition, purpose, components and types of information retrieval system<br>1.2 Role of Indexing in Information Retrieval Types of Indexing- pre-coordinate (Chain indexing, POPSI, PRECIS, SLIC), Post coordinate (UNITERM) and Automatic Indexing (KWIC, KWAC, KWOC)<br>1.3 Indexing languages and vocabulary control: definition, purpose & tools Thesaurus Structure, thesaurus relationships & construction |
| <b>UNIT 2</b>                   | <b>Retrieval of Information (15L)</b>   |

|               |   |
|---------------|---|
|               | 2.1 Models for information retrieval: Input- Output Models and Theoretical Models.<br>2.2 Information search and search strategy : type of search- keyword search, Phrase search, keyword and subject search, truncation search, range search , Boolean logic and Venn Diagram.<br>2.3 Searching the web  |
| <b>UNIT 3</b> | <b>Evaluation of Information Storage and retrieval system. (12L)</b><br>3.1 Evaluation- need, types and criteria with example e.g. Canfield Study and MEDLARS Test.<br>3.2 Current Trends in Information Retrieval: searching the web, open access repository and its creation, Portal- Vortal, Data mining.  |
| <b>UNIT 4</b> | <b>Information Repackaging and Products. (17L)</b><br>4.1 Information analysis, repackaging and consolidation: Concept, definition, packaging and repackaging. Information consolidation activities, need, steps in information consolidation and repackaging process and advantages.<br>4.2 Information Products: concept , types, design and development of information products.<br>4.3 Marketing of information products and services: concept, need, market research, price, Marketing mix: Seven P's, Kotler's Four C's , factors influencing the market. |

**Class** : M.Lib.I.Sc.

**Subject** : Library and Information Science

**Course** : Information Retrieval

**Course Code** : PMLIS-113

**Weight age** : 1= weak or relation, 2= moderate or partial relation, 3= strong or direct relation

| <b>Programme Outcomes (POs)</b> |      |      |      |      |      |      |      |      |
|---------------------------------|------|------|------|------|------|------|------|------|
| <b>Course Outcomes</b>          | PO 1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 |
| CO 1                            |      | 2    |      |      |      |      |      |      |
| CO 2                            |      | 3    |      |      |      |      |      |      |
| CO 3                            |      | 2    |      |      |      |      |      |      |
| CO 4                            | 3    |      |      |      | 2    |      |      |      |
| CO 5                            |      |      |      |      | 2    |      |      |      |
| CO 6                            |      |      |      |      |      |      |      |      |
| CO 7                            |      |      |      |      | 2    |      |      |      |
| CO 8                            |      |      |      |      |      | 3    |      |      |

### **Justification for the Mapping**

#### **PO1 Research-Related Skills and Scientific temper:**

All of the course outcomes (COs) contribute to the development of students' Research-Related Skills and Scientific temper. For example, CO4 require students to TQM, Management of Libraries and Information Centers and develop skills in Marketing of Library.CO4 and CO5 require students to understand the various sections in library. CO6 community building in library marketing.

#### **PO2 Effective Citizenship and Ethics:**

The entire COs also contributes to Effective Citizenship and Ethics. For example, CO1, CO2, and CO3 The students will be understand TQM, Management, change management ethics

**PO5 Personal and professional competence:**

CO4, CO5, CO7 contribute to the development of students' Personal and professional competence. For example, CO5 requires students to understand the various section in Library.

**PO6 Self-directed and Life-long learning:**

CO8, also contributes Self-directed and Life-long learning For example, main approaches to the study of the management of an organization.

**Paper Code : PMLIS 114      Title of Paper : Management Of Libraries and Information  
Centres – A**

**Credits : 4                      No. of Lectures : 60**

**Course Objectives (COs):**

1. To study the functions of management & their application to librarianship.
2. To familiarize students with the concept HRD, planning and systems of financial

- Management and control.
3. To introduce students with the concept, history, approaches and functions of Management
  4. To familiarize students with the concept of Change Management, TQM, and Marketing of library and information services.
  5. Determine the resource sharing and automation procedure in public library system.
  6. Provide services to special groups of clientele.

### Course Outcomes (COs):

- CO1. The students are able to identify & describe the characteristic of library management systems.
- CO2. Study the functions of management & their application to librarianship.
- CO3. Familiarize students with the concept of System Analysis, Management of Change TQM & Marketing of LIS services.
- CO4. Understand the public library system and its functions.
- CO5. Critically assess the nature, organization and governance of public libraries.
- CO6. Know the clientele and the services required in public libraries.
- CO7. Examine the need for library legislation and policies for public libraries.

### TOPICS/CONTENTS

| <b>Total No. of Credits = 04</b> |   |
|----------------------------------|---|
| <b>UNIT 1</b>                    | <p><b>Management (15L)</b></p> <p>1.1 Concept, Definitions, Functions and Scope</p> <p>1.2 Styles, Approaches</p> <p>1.3 Schools of Management Thoughts</p> <p>1.4 Concept of Scientific Management</p> |
|                                  | <p><b>Planning (14L)</b></p>  |

|               |  |
|---------------|--|
| <b>UNIT 2</b> | 2.1 Planning : Meaning, Definition, Need<br>2.2 Types of Planning, Steps<br>2.3 Policies & Procedures, MBO, Decision Making<br>2.4 Building and Space management in LICs, Risk & Contingency Management  |
| <b>UNIT 3</b> | <b>Human Resource Management (16L)</b><br>3.1 Human Resource Management : Concept, Definition, Job analysis, Job description<br>3.2 Organization Structures of the Library   |
| <b>UNIT 4</b> | <b>Financial Management (15L)</b><br>4.1 Budgeting : Concept Definitions, Techniques & Methods<br>4.2 Budgetary Control Systems: Cost-Effectiveness & Cost- Benefit Analysis<br>4.3 Outsourcing: Concept, Need, Benefits, Limitations, Library services to be outsourced |

**Class** : M.Lib.I.Sc.

**Subject** : Library and Information Science

**Course** : Management of Libraries & Information Centres –B **Course Code** : PMLIS-114

**Weight age** : 1= weak or relation, 2= moderate or partial relation, 3= strong or direct relation

| Programme Outcomes (POs) |      |      |      |      |      |      |      |      |
|--------------------------|------|------|------|------|------|------|------|------|
| Course Outcomes          | PO 1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 |
| CO 1                     | 3    | 2    |      |      |      |      |      |      |
| CO 2                     |      | 3    |      |      |      |      |      |      |
| CO 3                     |      | 2    |      |      |      |      |      |      |
| CO 4                     | 3    | 2    |      |      | 2    |      |      |      |
| CO 5                     | 3    |      |      |      | 2    |      |      |      |
| CO 6                     | 3    | 2    |      |      |      |      |      |      |
| CO 7                     |      |      |      |      | 2    |      |      |      |
| CO8                      |      |      |      |      |      | 3    |      |      |

### Justification for the Mapping

#### PO1 Research-Related Skills and Scientific temper:

All of the course outcomes (COs) contribute to the development of students' Research-Related Skills and Scientific temper. For example, CO1, and CO4 require students to Schools of management CO4 and CO5 require students to understand the various sections in library. CO6 Human Resource Management

#### PO2 Effective Citizenship and Ethics:



All of the COs also contributes to Effective Citizenship and Ethics. For example, CO1, CO2, and CO3 The students will be understand TQM, Management, change management ethics CO4 students to use their Effective management system in library.

**PO5 Personal and professional competence:**

CO4, CO5, CO7 contribute to the development of students' Personal and professional competence. For example, CO5 requires students to understand the various section in Library.

**PO6 Self-directed and Life-long learning:**

CO8, also contributes Self-directed and Life-long learning For example, main approaches to the study of the management of an organization.

**Paper Code : PMLIS 115      Title of Paper : Information Technology: (Theory)**  
**Credits : 4      No. of Lectures : 60**  
**Course Objectives (COs):**

1. To introduce the concept & use of ICT and its application in Libraries and Information Centers.
2. Development of skills in planning and implementation of library automation
3. Study of digital library, use of e-documents & current trends in the use of ICT
4. To introduce concepts such as networks, their types and uses in libraries, digital library
5. To familiarize students with library software and their evaluation
6. To develop skills to plan and implement library automation
7. To learn hands-on practice about library management software

**Course Outcomes (COs):**

- CO1. Will be trained in Information Communication Technologies knowledge and Library automation Skills.
- CO2. Students will be able to choose appropriate database in order to search for scholarly articles on Their topics
- CO3. Development of skills in planning and implementation of library automation.
- CO4. Familiarize with the features of Web 2.0 & 3.0 & its application in libraries.
- CO 5. Study of digital library, use of e-documents & current trends in the use of ICT.
- CO6. Provide thorough understanding of e-security.
- CO7. To explore the basic ICTs tools in a practical manner
- CO8. To learn the usages of system and application software

**TOPICS/CONTENTS:**

| <b>Total No Of Credits = 04</b> |  |
|---------------------------------|--|
| <b>UNIT 1</b>                   | <b>Information &amp; Communication Technology: Basics &amp; Library Automation and Library Software ( 14L)</b><br>1.1 Information & Communication Technology : Basics of Communication Technology, Components, Transmission Media ,Transmission Mode , Bandwidth   |
| <b>UNIT 2</b>                   | <b>Networks &amp; Internet ( 16L)</b><br>2.1 Networks : Definition, media ,Switching techniques , networks architecture, OSI model<br>2.2 Internet : Brief History, Components ,Connectivity , Internet Protocols, browsers & Search Engines : Concept, Types, examples, network based information services, Internet Security ,Intranet, Extranet   |
| <b>UNIT 3</b>                   | <b>Digital Library &amp; Electronic Documents ( 17L)</b><br>3.1 Digital Library: genesis, definition, characteristics, objectives ,digitization devices software,<br>3.1.1 Data Warehousing & data mining : concept, application in libraries<br>3.1.2 Metadata - Brief history, Standards : Dublin Core<br>3.1.3 Virtual Library : Concept, Hybrid library, Electronic library<br>3.1.4 DOAJ :Concept Institutional repository - concept<br>3.1.5 Content Management : concept<br>3.2 Electronic Documents ,Multimedia - concept<br>3.3 Databases : Definition, Types<br>3.4 Databanks : Concept , Evaluation criteria. |
| <b>UNIT 4</b>                   | <b>Current Trends in ICT ( 13L)</b><br>4.1 Subject Gateways, Blogs, Portals, RSS Feeds, Twitter, Face book, Web 2.0, Web 3.0, , Folksonomy, Forums , Mobile based library Services   |

**Class** : M.Lib.I.Sc.

**Subject** : Library and Information Science

**Course** : Information Technology: Theory

**Course Code** : PMLIS-115

**Weight age** : 1= weak or relation, 2= moderate or partial relation, 3= strong or direct relation

| <b>Programme Outcomes (POs)</b> |      |      |      |      |      |      |      |      |
|---------------------------------|------|------|------|------|------|------|------|------|
| <b>Course Outcomes</b>          | PO 1 | PO 2 | PO 3 | PO 4 | PO 5 | PO 6 | PO 7 | PO 8 |
| CO 1                            | 3    |      |      | 3    |      |      |      |      |
| CO 2                            | 3    | 3    |      | 3    |      |      |      |      |
| CO 3                            |      |      | 2    | 3    |      |      |      |      |
| CO 4                            |      | 3    | 2    |      |      |      |      |      |

|      |   |   |   |   |  |  |  |   |
|------|---|---|---|---|--|--|--|---|
| CO 5 | 2 |   | 3 | 2 |  |  |  |   |
| CO 6 |   | 2 |   |   |  |  |  | 2 |
| CO 7 | 2 |   |   | 3 |  |  |  |   |

### **Justification for the Mapping**

#### **PO1 Research-Related Skills and Scientific temper:**

All of the course outcomes (COs) contribute to the development of students' Research-Related Skills and Scientific temper. For example, CO1, CO2 require students to learning Information Communication technology skills and automation Skills CO4 and CO5 students understanding the library automation software and networking technologies to gain disciplinary knowledge. and CO7 understanding the critical thinking and problem solving skills in data structure and databases.

#### **PO2 Effective Citizenship and Ethics:**

The entire COs also contributes to Effective Citizenship and Ethics. For example CO2 and CO4 students will be understand implementation of library automation software. CO6 students to use their knowledge about the database management.

#### **PO3 Social competence and communication skills:**

CO3, CO4, CO5 also contributes to Social competence and communication skills For example CO3, CO4, CO5 students will be use to communication technology.

**PO4 Disciplinary Knowledge:** All of the course outcomes (COs) contribute to the development of students' Research-Related Skills and Scientific temper. For example, CO1, CO2, and CO3 require students understand the research databases, awareness in ICT and presenting skills. CO5 and CO7 students comprehensive knowledge and strongly work in information technology

#### **PO8 Critical Thinking and Problem solving:**

The entire COs also contributes to the development of students' critical thinking and problem-solving skills. For example, CO6 require students to about the knowledge management system.