

**STATE BOARD OF TECHNICAL EDUCATION, BIHAR**  
 Scheme of Teaching and Examinations for  
**III<sup>RD</sup> SEMESTER DIPLOMA IN LIBRARY & INFORMATION SCIENCE**  
 (Effective from Session 2020-21 Batch)

**THEORY**

Sr. No.	SUBJECTS	SUBJECT CODE	TEACHING SCHEME	EXAMINATION – SCHEME							Credits
				Periods per Week	Hours of Exam.	Teacher's Assessment (TA) Marks (A)	Class Test (CT) Marks (B)	End Semester Exam. (ESE) Marks (C)	Total Marks (A+B+C)	Pass Marks ESE	
1.	Foundation of Library and Information Science	2041301	03	03	10	20	70	100	28	40	03
2.	Computer Programming Through 'C'	2000302	03	03	10	20	70	100	28	40	03
3.	Knowledge Organization Library Classification & Cataloguing	2041303	03	03	10	20	70	100	28	40	03
4.	Management Information System in Libraries	2041304	03	03	10	20	70	100	28	40	03
5.	Library House Keeping Operation	2041305	03	03	10	20	70	100	28	40	03
			<b>Total: -</b>	<b>15</b>			<b>350</b>	<b>500</b>			<b>15</b>

**PRACTICAL**

Sr. No.	SUBJECTS	SUBJECT CODE	TEACHING SCHEME	EXAMINATION – SCHEME					Credits	
				Periods per Week	Hours of Exam.	Practical (ESE)		Total Marks (A+B)		Pass Marks in the Subject
						Internal (A)	External (B)			
6.	Computer Programming Through 'C' Lab.	2000306	06 50% Physical 50% Virtual	03	15	35	50	20	03	
7.	Knowledge Organization Classification Lab.	2041307	04 50% Physical 50% Virtual	03	15	35	50	20	02	
8.	Knowledge Organization Cataloguing Lab.	2041308	02 50% Physical 50% Virtual	03	07	18	25	10	01	
			<b>Total: -</b>	<b>12</b>			<b>125</b>		<b>06</b>	

**TERM WORK**

Sr. No.	SUBJECTS	SUBJECT CODE	TEACHING SCHEME	EXAMINATION – SCHEME				Credits	
				Periods per week	Marks of Internal Examiner (X)	Marks of External Examiner (Y)	Total Marks (X+Y)		Pass Marks in the Subject
9.	Knowledge Organization Classification (TW)	2041309	02	15	35	50	20	01	
10.	Python / Others (TW)	2000310	02	07	18	25	10	01	
11.	Knowledge Organization Cataloguing (TW)	2041311	02	15	35	50	20	01	
			<b>Total: -</b>	<b>06</b>		<b>125</b>		<b>03</b>	
Total Periods per week Each of duration one Hours =							<b>33</b>	<b>Total Marks =</b>	<b>24</b>
								<b>750</b>	

# FOUNDATION OF LIBRARY AND INFORMATION SCIENCE

<b>Subject Code 2041301</b>	<b>Theory</b>			<b>No of Period in one session:</b>			<b>Credits  03</b>
	<b>No. of Periods Per Week</b>			<b>Full Marks</b>			
	<b>L</b>	<b>T</b>	<b>P/S</b>	<b>ESE</b>	<b>:</b>	<b>100</b>	
	<b>03</b>	—	—	<b>TA</b>	<b>:</b>	<b>10</b>	
	—	—	—	<b>CT</b>	<b>:</b>	<b>20</b>	

**Course Objective:**

- To make students appreciate the basic philosophy and ethics of Librarianship.
- To understand the role and evolution of Library as a social Institution.
- To Know about Various Type of Libraries, their nature. Objective and service.
- To Create awareness about the role of professional Library Associations.
- To understand the concept of Resource sharing and extension activation in libraries.
- To generate awareness about legal, political and ethical aspects of information and its use.

**Course Contents:**

1. Introduction of Library and Information science
2. Five laws of Library Science: Implications
3. Type of Libraries.
4. Library Associations and Organisation
5. Library organization
6. Resource sharing
7. Library Rules and Regulations

Contents: Theory		Hrs.	Marks
<b>Units-1</b>	<b>Introduction of Library &amp; Information science:</b> <ul style="list-style-type: none"> <li>• Social and Historical Foundations of Library.</li> <li>• Philosophy and ethics of Librarianship</li> <li>• Library as a social institution: objective and function of the library.</li> <li>• Role of Library in formal and Informal educating</li> </ul>		
<b>Units-2</b>	<b>Five laws of Library Science: Implication</b> <ul style="list-style-type: none"> <li>• Implication of five laws in Library and Inf. Activities.</li> <li>• Relevance of Five laws in present Technology oriented environment.</li> </ul>		
<b>Units-3</b>	<b>Types of Libraries:</b> <ul style="list-style-type: none"> <li>• National Library: Features, objective, function, role and service.</li> <li>• Public Library: Feature, objective, function, role and service.</li> <li>• Academic Libraries: Feature, objective, function role and service.</li> <li>• Special Libraries: Feature, objective, function role and services.</li> <li>• UNESCO PUBLIC LIBRARY Manifesto.</li> </ul>		
<b>Units-4</b>	<b>Library Association and Organization:</b> <ul style="list-style-type: none"> <li>• Professional organization: objectives, function and professional Activities.</li> <li>• Library Association of India: ILA, IASLIC, IATLIS, UPLA.</li> <li>• International Association: IFLA, ALA</li> <li>• NAPLIS</li> </ul>		

<b>Units-5</b>	<b>Library Organization:</b> <ul style="list-style-type: none"> <li>• Library building and design.</li> <li>• Cost and benefits.</li> <li>• Collective protection</li> <li>• Fire protection</li> <li>• Furniture and Equipment's.</li> </ul>		
<b>Units-6</b>	<b>Resource sharing:</b> <ul style="list-style-type: none"> <li>• Concept, Need, Purpose, Area of Resource sharing.</li> <li>• Resource sharing Programmers: Impact of IT on Resource sharing.</li> <li>• Intellectual property Rights.</li> <li>• Copy Right- copy right Act in India, censorship.</li> <li>• Library Rule and Regulation</li> <li>• Concept</li> <li>• Types.</li> </ul>		
<b>Units-7</b>	<b>Library Rule and Regulation</b> <ul style="list-style-type: none"> <li>• Concept</li> <li>• Types.</li> </ul>		
<b>Total</b>			

# COMPUTER PROGRAMMING THROUGH 'C'

<b>Subject Code 2000302</b>	<b>Theory</b>			<b>No of Period in one session :50</b>			<b>Credits</b>	
	<b>No. of Periods Per Week</b>			<b>Full Marks</b>				<b>03</b>
	<b>L</b>	<b>T</b>	<b>P/S</b>	<b>ESE</b>	<b>:</b>	<b>100</b>		
	<b>03</b>	—	—	<b>TA</b>	<b>:</b>	<b>10</b>		
				<b>CT</b>	<b>:</b>	<b>20</b>		

## Course Learning Objective:

Computers play a vital role in present day life, more so, in the professional life of technician engineers. In order to enable the students, use the computers effectively in problem solving, this course offers the modern programming language C along with exposition to various engineering applications of computers.

## Objective:

The objectives of this course are to make the students able to:

- Develop efficient algorithms for solving a problem.
- Use the various constructs of a programming language viz. conditional, iteration and recursion.
- Implement the algorithms in “C” language.
- Use simple data structures like array, stacks and linked list solving problems.
- Handling File in “C”.

Contents: Theory		Hrs	Marks
<b><u>Unit -1</u></b>	<p><b><u>Introduction to computer software:</u></b></p> <ul style="list-style-type: none"> <li>➤ Classification of computer software.                             <ul style="list-style-type: none"> <li>• System software.</li> <li>• Application software.</li> </ul> </li> <li>➤ Programming languages.                             <ul style="list-style-type: none"> <li>• Machine languages.</li> <li>• Assembly languages.</li> <li>• High level programming languages.</li> </ul> </li> <li>➤ Algorithms and flowchart.</li> </ul>	[03]	
<b><u>Unit -2</u></b>	<p><b><u>Fundamental of C languages.</u></b></p> <ul style="list-style-type: none"> <li>➤ Introduction.                             <ul style="list-style-type: none"> <li>• Background.</li> <li>• Characteristics of C.</li> <li>• Uses of C.</li> </ul> </li> <li>➤ Structure of a C program.</li> <li>➤ Writing the first C program.</li> <li>➤ Files used in a C program.                             <ul style="list-style-type: none"> <li>• Source code files.</li> <li>• Header files.</li> <li>• Object files.</li> <li>• Binary executable files.</li> </ul> </li> </ul>	[08]	

	<ul style="list-style-type: none"> <li>➤ Compiling and Executing C programs.</li> <li>➤ Using comments.</li> <li>➤ Characters used in C.</li> <li>➤ Identifier.</li> <li>➤ Keyword or Reserved words.</li> <li>➤ Tokens.</li> <li>➤ Constants. <ul style="list-style-type: none"> <li>• Numeric constant.</li> <li>• String Character constant.</li> </ul> </li> <li>➤ Variables.</li> <li>➤ Variable Declaration.</li> <li>➤ Basic Data Types.</li> <li>➤ Additional Data types.</li> <li>➤ Operators and Expressions.</li> <li>➤ Operator Precedence and Associativity.</li> <li>➤ Type conversion and Type casting.</li> <li>➤ Input/ Output statements in C.</li> </ul>		
<p style="text-align: center;"><b><u>Unit -3</u></b></p>	<p style="text-align: center;"><b><u>Decision Control and Looping Statements:</u></b></p> <ul style="list-style-type: none"> <li>➤ Introduction to Decision control statements.</li> <li>➤ Conditional Branching statements. <ul style="list-style-type: none"> <li>• If statement.</li> <li>• If-else statement.</li> <li>• If-else-if statement.</li> <li>• Switch case.</li> </ul> </li> <li>➤ Iterative statements. <ul style="list-style-type: none"> <li>• While loop.</li> <li>• Do-while loop.</li> <li>• For loop.</li> </ul> </li> <li>➤ Nested loops.</li> <li>➤ Break and continue statements. <ul style="list-style-type: none"> <li>• Break statement.</li> <li>• Continue statement.</li> </ul> </li> <li>➤ Goto statement.</li> </ul>		
<p style="text-align: center;"><b><u>Unit -4</u></b></p>	<p style="text-align: center;"><b><u>Functions in 'C'.</u></b></p> <ul style="list-style-type: none"> <li>➤ Uses of functions.</li> <li>➤ User defined functions.</li> <li>➤ Function Declaration.</li> </ul>	[07]	

	<ul style="list-style-type: none"> <li>➤ Calling a function.</li> <li>➤ Actual and formal Arguments.</li> <li>➤ Rules to call a function.</li> <li>➤ Function props type.</li> <li>➤ Recursion.</li> <li>• Use of Recursive function.</li> <li>➤ Local or Internal variables.</li> <li>➤ Global or External variables.</li> <li>➤ Void function.</li> <li>➤ Storage classes in C.</li> <li>• Auto or Automatic Storage class.</li> <li>• Static Storage class.</li> <li>• Extern Storage class.</li> <li>• Register Storage class.</li> </ul>		
<p style="text-align: center;"><b><u>Unit -5</u></b></p>	<p><b><u>Arrays.</u></b></p> <ul style="list-style-type: none"> <li>➤ Introduction.</li> <li>➤ Declaration of Arrays.</li> <li>➤ Accessing the Elements of an Array.</li> <li>• Calculating the address of Array elements.</li> <li>• Calculating the length of an Array.</li> <li>➤ Storing values in Arrays.</li> <li>• Initializing Arrays during Declaration.</li> <li>• Inputting values from the keyboard.</li> <li>• Assigning values to Individual Elements.</li> <li>➤ Operations on Arrays.</li> <li>• Traversing an Array.</li> <li>• Inserting an Element in an Array.</li> <li>• Deleting an Element from an Array.</li> <li>• Merging Two Arrays.</li> <li>• Searching for a value in an Array.</li> <li>➤ Passing Arrays to functions.</li> <li>➤ Two dimensional Arrays.</li> <li>• Declaring Two-dimensional Arrays.</li> <li>• Initializing Two-dimensional Arrays.</li> <li>• Accessing the Elements of two dimensional Arrays.</li> <li>➤ Operations on Two-dimensional Arrays.</li> </ul>	[07]	

<p style="text-align: center;"><b><u>Unit -6</u></b></p>	<p><b><u>Pointers.</u></b></p> <ul style="list-style-type: none"> <li>➤ Understanding the Computer's Memory.</li> <li>➤ Introduction to pointers.</li> <li>➤ Declaring pointer variables.</li> <li>➤ Pointer Expressions and pointer Arithmetic.</li> <li>➤ Null pointers.</li> <li>➤ Passing Arguments to function using pointer.</li> <li>➤ Pointers and Arrays.</li> <li>➤ Passing an Array to a Function.</li> <li>➤ Dynamic Memory Allocation.</li> <li>• Malloc ( ) function.</li> <li>• Calloc ( ) function.</li> <li>• Realloc ( ) function.</li> <li>• Free ( ) function.</li> </ul>	<p>[07]</p>	
<p style="text-align: center;"><b><u>Unit -7</u></b></p>	<p><b><u>Structures and Unions.</u></b></p> <ul style="list-style-type: none"> <li>➤ Structures.</li> <li>➤ Structure variables and Arrays.</li> <li>• Initialization of structure variable and Array.</li> <li>• Dot (•) Operator.</li> <li>• Assigning value of a structure to Another structure.</li> <li>➤ Structure within structures.</li> <li>➤ Site of ( ) of a structure.</li> <li>➤ Unions.</li> <li>➤ Site of ( ) unions.</li> <li>➤ Difference between a structure and an union.</li> <li>➤ Enum Data Type.</li> <li>➤ Typedef Declaration.</li> </ul>	<p>[04]</p>	

**Text / Reference Books -**

1. Programming with C. Second Edition. Tata McGraw-Hill, 2000 - Byron Gottfried
2. How to solve by Computer, Seventh Edition, 2001, Prentice hall of India. - R.G. Dromey
3. Programming with ANSI-C, First Edition, 1996, Tata McGraw hill. - E. Balaguruswami
4. Programming with ANSI & Turbo C. First Edition, Pearson Education. - A. Kamthane
5. Programming with C. First Edition, 1997, Tara McGraw hill. - Venugopla and Prasad
6. The C Programming Language, Second Edition, 2001, Prentice Hall of India. - B. W. Kernighan & D.M. Ritchie
7. Programming in C, Vikash Publishing House Pvt. Ltd., Jungpura, New Delhi. - R. Subburaj

8. Programming with C Language, Tara McGraw Hill, New Delhi. - C. Balagurwami
9. Programming in C, Galgotia Publications Pvt. Ltd. Dariyaganj, New Delhi. - Kris A. Jamsa
10. The Art of C Programming, Narosa Publishing House, New Delhi. - Jones, Robin & Stewart
11. Problem Solving and Programming. Prentice Hall International. - A.C. Kenneth
12. C made easy, McGraw Hill Book Company, 1987. - H. Schildt
13. Software Engineering, McGraw Hill, 1992. - R.S. Pressman
14. Pointers in C, BPB publication, New Delhi. - Yashwant Kanetkar



# KNOWLEDGE ORGANISATION OF LIBRARY CLASSIFICATION & CATALOGUING

<b>Subject Code 2041303</b>	<b>Theory</b>			<b>No of Period in one session:</b>			<b>Credits  03</b>
	<b>No. of Periods Per Week</b>			<b>Full Marks</b>			
	<b>L</b>	<b>T</b>	<b>P/S</b>	<b>ESE</b>	<b>:</b>	<b>100</b>	
	<b>03</b>	—	—	<b>TA</b>	<b>:</b>	<b>10</b>	
				<b>CT</b>	<b>:</b>	<b>20</b>	

## Course Objective / Rationale and Objectives

To identify a book or a bit of information from a huge store of knowledge, a professional needs to find out and make

available the right book (information) of the right reader (seeker) at the right moment.

For this purpose a student is trained to search out the common subjects are put under one heading. The process of classification is important and three such internationally accepted classification schemes have been discussed with special stress of Dewey Decimal Classification 19th edition.

Training to project the holdings of a library/information centre according to accepted universal codes of cataloguing with special stress on **AACR-II** has been discussed.

### **SL Topics**

1. Basic of classification
2. Theoretical of Foundation
3. Basic of Cataloguing
4. Normative Principles and Subject Cataloguing
5. Bibliographical Formats and other Aspects.

Contents: Theory		Hrs	Marks
Unit -1	<p><b>Basic of Classification</b></p> <p>1.1 Definition, Need and purpose of classification.</p> <p>1.2 Concept of call Number, class Number and Basic number.</p> <p>1.3 Species of classification scheme.</p> <p>1.4 Salient features of DDC, CC and UDC.</p> <p>1.5 Notation: Definition, Kinds, Function.</p>		
Unit -2	<p>2 <b>Theoretical Foundation of Classification</b></p> <p>2.1 Canons of classification</p> <p>2.2 Phase relation, Common isolates and other Auxiliary Table of DDC, CC and UDC.</p> <p>2.3 Postulational Approach to classification and five fundamental categories and Facet sequence.</p> <p>2.4 Devices, Indicator digits.</p> <p>2.5 Recent developments in classification.</p>		
Unit -3	<p>3 <b>Basic of Cataloguing</b></p> <p>3.1 Library Catalogue: Definition, Function, type and Physical Forms.</p> <p>3.2 Kinds of entries and their function.</p> <p>3.3 History of Catalogue Cod.</p> <p>3.4 Salient Feature of AACR-II and CCC</p>		

Unit -4	4	<b>Normative Principle and subject cataloguing</b>		
	4.1	Normative principle and canons of Cataloguing		
	4.2	Subject cataloguing: Chain Procedure, Subject Heading lists.		
	4.3	Filling of Catalogue entire and Alphabetization.		
Unit -5	5	<b>Bibliographical Formals and other aspects</b>		
	5.1	Standards of bibliographic description and Record Formats: ISBD, MARC, CCF, ISO-2709/Z39.2, Dublin core.		
	5.2	Centralized and Co-operative cataloguing, Simplified Cataloguing.		
	5.3	Cataloguing of Non-Book Material: Cartographic Materials, Electrons Documents, Audio-Visual Materials and Continuing documents.		
Total				

#### Recommended Books

#### Author

1. पुस्तकालय वर्गीकरण के सिद्धांत
2. सूचीकरण के सिद्धांत

S. S. Agarwal

- 6.
- 7.
- 8.

# MANAGEMENT INFORMATION SYSTEM IN LIBRARIES

Subject Code <b>2041304</b>	Theory			No of Period in one session:			Credits <b>03</b>
	No. of Periods Per Week			Full Marks	:	100	
	L	T	P/S	ESE	:	70	
	<b>03</b>	—	—	TA	:	10	
			CT	:	20		

## Rationale and Objectives

This subject gives a unified picture of what Management is? And how it is applicable to various forms of Library and information center in our Country. It gives a basic knowledge about information officers function in the most useful and organized way.

A Student must be sensitive to the Environment of the place where may be operating. So he may to make decision and plan, organize and control activity in the environment prospective of his own service.

## Objective.

- To Familiar with Management information System.
- History of MIS.
- To able to make appropriate decision.
- To Familiar with its Techniques
- Evaluate its utility.

## Topics

- Management: Definition, Types and functions.
- Principles of Management.
- Concept and control in Library and information Centre.
- Management information system: Concept, Level, Planning in Libraries.
- Reporting System.
- Budgeting system
- Establishing Role of MIS in any types of Libraries.

Contents: Theory		
<b>Unit-1</b>	<b>Management:</b> Concept, Definition, types and function (POSDCORB).	
<b>Unit-2</b>	<b>Principles of Management</b> <ul style="list-style-type: none"> <li>• Division of work, Authority and Responsibility. Discipline, unity of command, unity at Direction, Remuneration, Devotation, Centralization, Order, Equality, Stability in tenure of personnel's, Initiative, Esprit de Corpe</li> <li>• Software package: General and Special.</li> </ul>	
<b>Unit-3</b>	<ul style="list-style-type: none"> <li>• Concept of Control in library and Information science.</li> </ul>	
<b>Unit-4</b>	<b>Management Information System</b> <ul style="list-style-type: none"> <li>• Management Planning: Librarian control, Librarian as leader, qualification, training and role.</li> <li>• Management Information system: Concept, Level, planning in libraries.</li> </ul>	
<b>Unit-5</b>	<ul style="list-style-type: none"> <li>• Reporting System: Concept types and utility.</li> </ul>	

<b>Unit-6</b>	• Budgeting system: Concept types and utility.	
<b>Unit-7</b>	• Establishing role of MIS in any types of Library: Public Library academic Library and special Library. (Manual and digital).	
		<b>Total</b>

**Recommended Books**

<b>SL</b>	<b>Title/Publisher</b>	<b>Author</b>
1.	Library administration	R L Mitlal
2.	Modernization in Libraries.	C P Vasisth.
3.	पुस्तकालय विज्ञान एवं सूचना प्रावैधिकी	डॉ० बी० के० शर्मा
4.	Library Automation	

# LIBRARY HOUSE KEEPING OPERATION

Subject Code <b>2041305</b>	Theory			No of Period in one session:			Credits  <b>03</b>
	No. of Periods Per Week			Full Marks			
	L	T	P/S	ESE	:	100	
	<b>03</b>	—	—	<b>TA</b>	:	<b>10</b>	
			<b>CT</b>	:	<b>20</b>		

## Rationale

The normative principle of Library and Information Science is to stress on the basic concept of the subject - "Books (and information) are for use and books (and information) are for all."

The chapter 'Library House Keeping Operation' has been designed with an aim to fulfill the above objective and in this process effort has been made to acquaint the student with each section of an information centre and the functions undertaken therein.

<b>SL</b>	<b>Topics</b>	<b>Periods</b>
1.	Library House-Keeping (Information)	-
2.	Different Department of a Library	-
3.	Acquisition: Book Selection, Ordering, Allotment	-
4.	Manuscript	-
5.	Rules of Library	-
6.	Library Planning	-
	<b>Total</b>	<b>50</b>

Contents : Theory		Hrs/week	Marks
<b>Unit -1</b>	<b>Content</b> 1 Library House-Keeping (Information) 1.1 Definition 1.2 Scope and Utility 1.3 Purpose and Need 1.4 Characteristics of Library House Keeping		
<b>Unit -2</b>	2 <b>Different Departments of Library</b> 2.1 Reception 2.2 Reading Room 2.3 Lending Section 2.4 Reference Section		

Unit -3	3	<b>Acquisition: Book Selection, Ordering and Allotment</b>		
	3.1	Technical Section (Classification & Cataloguing)		
	3.2	Maintenance of Binding/Material-Print & Non-Print Work		
	3.3	Reprography (Xeroxing/Photostat)		
	3.4	Microform Unit		
Unit -4	4	<b>Manuscript</b>		
	4.1	Kinds of Manuscript		
	4.2	Maintenance of Manuscript		
	4.3	Duplication of Manuscript		
	4.4	Preservation and Conversion of Manuscript		
Unit -5	5	<b>Rules of Library</b>		
	5.1	Membership		
	5.2	Lending		
	5.3	Circulation		
	5.4	Serial		
Unit -6	6	<b>Library Planning</b>		
	6.1	Building Plan		
	6.2	Furniture		
	6.3	Fixtures		
	6.4	Equipments		
Total				

### Recommended Books

#### SL Title/Publisher

#### Author

1. Basic of Library & Information Series, Vikas Publishing House, New Delhi.  
K.T.Dilli
2. सूचना प्रौद्योगिकी के नये आयाम, साम्बर पब्लिकेशन्स, नई दिल्ली  
शंकर सिंह
- 3- ग्रन्थालय विज्ञान  
श्री दिनेश सिंह

## COMPUTER PROGRAMMING THROUGH 'C' LAB

<b>Subject Code 2000306</b>	<b>Practical</b>			<b>No. of Period in one session: 50</b>			<b>Credits  03</b>
	<b>No. of Periods Per Week</b>			<b>Full Marks</b>			
	<b>L</b>	<b>T</b>	<b>P/S</b>	<b>ESE</b>	<b>:</b>	<b>50</b>	
	—	—	<b>06</b>	<b>Internal</b>	<b>:</b>	<b>15</b>	
				<b>External</b>	<b>:</b>	<b>35</b>	

### Course Learning Objectives:

This Lab course is intended to practice what is taught in theory class of ‘Computer Programming’ and become proficient in computer programming. Computer programming is all about regular practice. Students should work on solved and unsolved problems listed in the text books, and the problems given by the teacher. Some of the topics that should necessary be covered in lab are listed below.

### Course outcomes:

Student should be able to write code snippets, and then compile, debug and execute them. The language of choice will be C. This is a skill course. More you practice, better it will be.

<b>Content: Practical</b>		<b>Hrs</b>	<b>Marks</b>
<b><u>Unit – 1</u></b>	Familiarization with programming environment (Editor, Compiler, etc.)		
<b><u>Unit – 2</u></b>	Programs using, I/O statements and various operators		
<b><u>Unit – 3</u></b>	Programs using expression evaluation and precedence		
<b><u>Unit – 4</u></b>	Programs using decision making statements and branching statements		
<b><u>Unit – 5</u></b>	Programs using loop statements		
<b><u>Unit – 6</u></b>	Programs to demonstrate applications of n dimensional arrays		
<b><u>Unit – 7</u></b>	Programs to demonstrate use of string manipulation functions		
<b><u>Unit – 8</u></b>	Programs to demonstrate parameter passing mechanism		
<b><u>Unit – 9</u></b>	Programs to demonstrate recursion		
<b><u>Unit – 10</u></b>	Programs to demonstrate use of pointers		
<b><u>Unit – 11</u></b>	Programs to demonstrate command line arguments		
<b><u>Unit – 12</u></b>	Programs to demonstrate dynamic memory allocation		
<b><u>Unit – 13</u></b>	Programs to demonstrate file operations		

### Reference Books:

1. Let Us C, Yashavant Kanetkar
2. Problem Solving and Programming in C, R.S. Salaria, Khanna Publishing House
3. C Programming Absolute Beginner’s Guide, Dean Miller and Greg Perry
4. The C Programming Language, Kernighan and Ritchie, Prentice Hall of India
5. Programming in ANSI C, E. Balagurusamy, Tata McGraw-Hill
6. C Programming & Data Structures, B. A. Fouruzan and R. F. Gilberg, CENGAGE Learning.

# KNOWLEDGE ORGANIZATION CLASSIFICATION LAB

<b>Subject Code 2041307</b>	<b>Practical</b>			<b>No of Period in one session: 50</b>			<b>Credits  02</b>
	<b>No. of Periods Per Week</b>			<b>Full Marks</b>			
	<b>L</b>	<b>T</b>	<b>P/S</b>	<b>ESE</b>	<b>:</b>	<b>50</b>	
	—	—	<b>04</b>	<b>Internal</b>	<b>:</b>	<b>15</b>	
				<b>External</b>	<b>:</b>	<b>35</b>	

## Rationale and Objectives

Arrangement of book and non-book materials according to subject, author, time, place etc. It is the basic need of Library; hence classification of reading materials according to recognized devices have been incorporated in the classification theory papers. The said methods have been put into practice in this chapter. The tools in use are D.D.C. 19th edition and Sear's list of subject heading.

<b>SL</b>	<b>Topics</b>	<b>Pero</b>
1.	Introduction to D.D.C., 19th Edition	10
2.	Construction of Members for Simple Titles	20
3.	Classification Work According to D.D.C., 19th edition	<u>20</u>
<b>Total-</b>		<b>50</b>

Contents: Practical		Hrs	Marks
<b>Unit -1</b>	<b>Content</b>	[10]	
	<b>1 Introduction to D.D.C., 19th Edition</b>		
	1.1 Terminologies		
	1.2 Summaries		
<b>Unit -2</b>	<b>2 Construction of Members for Simple Titles</b>	[20]	
	2.1 Construction of Members - Methods - Means.		
	2.2 Titles		
<b>Unit -3</b>	<b>03 Classification Work According to D.D.C., 19th Edition</b>	[20]	
	03.01 Classification of at least 250 titles		
<b>Total</b>		<b>50</b>	



## KNOWLEDGE ORGANIZATION CATALOGUING LAB

<b>Subject Code 2041308</b>	<b>Practical</b>			<b>No of Period in one session:</b>			<b>Credits  01</b>
	<b>No. of Periods Per Week</b>			<b>Full Marks</b>			
	<b>L</b>	<b>T</b>	<b>P/S</b>	<b>ESE</b>	<b>:</b>	<b>25</b>	
	—	—	<b>02</b>	<b>Internal</b>	<b>:</b>	<b>07</b>	
				<b>External</b>	<b>:</b>	<b>18</b>	

### Rationale and Objectives

- To develop Skills of Cataloguing.
- To understand the ruler and practices of documents description of print and Non-print Materials according to Anglo- American Cataloguing rules-II
- Preparing Catalogue Entries (Main, Added and Reference Entries) for print and Non-Print Materials including electronic resources using Anglo-American Cataloguing Rules-Second revised edition.

<b>SL</b>	<b>Topics</b>	<b>Periods</b>
1.	Cataloguing with AACR-II (Revised)	10
2.	Different Types of Entries	10
3.	Choice of Heading	10
4.	Cataloguing of at least 100 titles with AACR-II	<u>10</u>
<b>Total</b>		<b>40</b>

Contents:		Hrs	Marks
Unit -1	<b>04 Cataloguing with AACR-II (Revised)</b> 04.01 Introduction to 04.02 AACR-II Salient Features of AACR-II	[10]	
Unit -2	<b>05 Different Types of Entries</b> 05.01 Entries in 05.02 AACR-II Main 05.03 Entry 05.04 Added Entry Reference Entry	[10]	

Unit -3	<b>06 Choice of Headings</b> 06.01 Choice and Rendering of 06.02 Heading Personal names, 06.03 Western/Indian names 06.04 Corporate Authors Pseudonymous, Anonymous Works and Uniform Titles	[10]	
Unit -4	<b>07 Cataloguing of at least 100 Titles with AACR-II</b> 07.01 Personal authors, Single and Joint 07.02 Authors - 20 each Pseudonymous 07.03 Authors - 20 each Anonymous Author - 20 each	[10]	
<b>Total</b>		<b>40</b>	

## **KNOWLEDGE ORGANIZATION CLASSIFICATION -TW**

<b>Subject Code 2041309</b>	<b>Term Work</b>			<b>No of Period in one session:</b>			<b>Credits  01</b>
	<b>No. of Periods Per Week</b>			<b>Full Marks</b>			
	<b>L</b>	<b>T</b>	<b>P/S</b>	<b>Internal</b>	<b>:</b>	<b>15</b>	
	—	—	<b>02</b>	<b>External</b>	<b>:</b>	<b>35</b>	

### **Rationale and Objectives**

- To develop Skills of Classification.
- To develop skill in subject analysis and synthesis of different facets.
- To develop Proficiency in using Dewey Decimal Classification to Construction class Numbers for documents of different discipline/Subject.

Contents: Term Work		Hrs	Marks
Unit -1	Classification of Books and periodical according to DDC 19 <sup>th</sup> Ed.		
Unit -2	Classification of 50 Title of one's own institute Library.		
Total			

## PYTHON / OTHERS (TW)

<b>Subject Code 2000310</b>	<b>Term Work</b>			<b>No of Period in one session:</b>			<b>Credits  01</b>
	<b>No. of Periods Per Week</b>			<b>Full Marks</b>	<b>:</b>	<b>25</b>	
	<b>L</b>	<b>T</b>	<b>P/S</b>	<b>Internal</b>	<b>:</b>	<b>07</b>	
	—	—	<b>02</b>	<b>External</b>	<b>:</b>	<b>18</b>	

<b>CONTENTS</b>		<b>Hrs.</b>	<b>Marks</b>
<b>UNIT – 01</b>	Write a program to demonstrate basic data type in python.		
<b>UNIT – 02</b>	Write a program to compute distance between two points taking input from the user (Pythagorean Theorem)		
<b>UNIT – 03</b>	Write a python program Using for loop, write a program that prints out the decimal equivalent of $1+\frac{1}{2}+\frac{1}{3}+\dots+\frac{1}{n}$		
<b>UNIT – 04</b>	Write a Python program to find first n prime numbers. Write a program to demonstrate list and tuple in python.		
<b>UNIT – 05</b>	Write a program using a for loop that loops over a sequence. Write a program using a while loop that asks the user for a number and prints a countdown from that number to zero.		
<b>UNIT – 06</b>	Write a Python Program to add matrices. Write a Python program to multiply matrices.		
<b>UNIT – 07</b>	Write a Python program to check if a string is palindrome or not.		
<b>UNIT – 08</b>	Write a Python program to Extract Unique values dictionary values		
<b>UNIT – 09</b>	Write a Python program to read file word by word Write a Python program to Get number of characters, words.		
<b>UNIT – 10</b>	Write a Python program for Linear Search		

## KNOWLEDGE ORGANIZATION CATALOGUING -TW

Subject Code <b>2041311</b>	Term Work			No of Period in one session:			Credits <b>01</b>
	No. of Periods Per Week			Full Marks			
	L	T	P/S	Internal	:	15	
	—	—	02	External	:	35	

### Rationale and Objectives

Preparation of catalogue entries in a Library is a main function of this course. Stress given more on card form of Catalogue entry in the III<sup>rd</sup> semester Course design, AACCP-II has been taken in to Consideration.

Contents: Term		Hrs	Marks
Unit -1	Arranging institutional library according to the subject.		
Unit -2	Preparation of temporary collection of given subject i.e., local history/Primary		
Unit -3	Cataloguing with 25 titles according to AACR.		
<b>Total</b>			