

*NSQF Aligned Curriculum for*

*Diploma Programme in*

**LIBRARY AND INFORMATION  
SCIENCE**

*Two Year (Four Semester)*

For the State of Uttar Pradesh  
(Effective From Session 2023-24)



**Prepared by:**  
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## PREFACE

An important issue generally debated amongst the planners and educator's world over is how technical education can contribute to sustainable development of the societies struggling hard to come in the same bracket as that of the developed nations. The rapid industrialization and globalization have created an environment for free flow of information and technology through fast and efficient means. This has led to shrinking of the world, bringing people from different culture and environment together and giving rise to the concept of world turning into a global village. In India, a shift has taken place from the forgettable years of closed economy to knowledge based and open economy in the last few decades. In order to cope with the challenges of handling new technologies, materials and methods, we have to develop human resources having appropriate professional knowledge, skills and attitude. Technical education system is one of the significant components of the human resource development and has grown phenomenally during all these years. Now it is time to consolidate and infuse quality aspect through developing human resources, in the delivery system. Polytechnics play an important role in meeting the requirements of trained technical manpower for industries and field organizations. The initiatives being taken by the Technical Education, UP to revise the existing curricula of diploma programmes as per the needs of the industry and making them NSQF compliant, are laudable.

In order to meet the requirements of future technical manpower, we will have to revamp our existing technical education system and one of the most important requirements is to develop outcome-based curricula of diploma programmes. The curricula for diploma programmes have been revised by adopting time-tested and nationally acclaimed scientific method, laying emphasis on the identification of learning outcomes of diploma programme.

The real success of the diploma programme depends upon its effective implementation. However best the curriculum document is designed, if that is not implemented properly, the output will not be as expected. In addition to acquisition of appropriate physical resources, the availability of motivated, competent and qualified faculty is essential for effective implementation of the curricula.

It is expected of the polytechnics to carry out job market research on a continuous basis to identify the new skill requirements, reduce or remove outdated and redundant courses, develop innovative methods of course offering and thereby infuse the much-needed dynamism in the system

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## **1. SALIENT FEATURES OF DIPLOMA PROGRAMME IN LIBRARY AND INFORMATION SCIENCE**

- 1) Name of the Programme : Diploma Programme in Library and Information Science
- 2) Duration of the Programme : Two years (Four Semesters)
- 3) Entry Qualification : 10+2 with English NSQF Level as Prescribed by State Board of Technical Education, UP
- 4) Intake : As prescribed by the Board
- 5) Pattern of the Programme : Semester Pattern
- 6) NSQF Level : Level - 5
- 7) Ratio between theory and Practice : 1:1 (Approx.)
- 8) Industrial Training:  
Four weeks of Professional training is included after II semester during summer vacation. Total marks allotted to industrial training will be 80.
- 9) Ecology and Environment :  
As per Govt. of India directives, a subject on Environmental Studies has been incorporated in the curriculum.
- 10) Student Centered Activities:  
A provision of 3-6 hrs per week has been made for organizing Student Centered Activities for overall personality development of students. Such activities will comprise of co-curricular activities such as expert lectures, self study, games, hobby classes like photography, painting, singing etc. seminars, declamation contests, educational field visits, NCC, NSS and other cultural activities, disaster management and safety etc.
- 11) Project work  
A project work has been included in the curriculum to enable the student get familiarize with the practices and procedures being followed in the field of Library and Information Science and provide an opportunity to work on some live projects (as well as Case studies) in the Library and Information Science world.

## **2. EMPLOYMENT OPPORTUNITIES FOR DIPLOMA HOLDERS IN LIBRARY AND INFORMATION SCIENCE**

Keeping in view, the present scenario of activities in the field of Library and Information Science following employment opportunities are visualized for diploma holders in Library and Information Science:

### 1. Librarians in :

- Schools
- ITIs
- Polytechnics
- Small Public Libraries
- Departmental Libraries, libraries maintained by public and private sector.
- Industries/Small Computer Centers

2. Assistant Librarians in the institutions mentioned under 1 and colleges.

3. Library Assistants : Semi-Professionals in Universities, ITIs, Regional Engineering Colleges and Degree Colleges, Institutions and Special Libraries.

4. Technical Assistants/ Junior Programmers/Information Assistants in Computers/Industries, Special Libraries.

5. As data analyst cum operators.

6. Cataloguer cum computer operator.

### 3. LEARNIG OUTCOME OF THE PROGRAMME DIPLOMA HOLDERS IN LIBRARY AND INFORMATION SCIENCE

Keeping in view the employment opportunities given above, following are the important activities (priority-wise) of diploma holders in Library and Information Science.

1.	Understand the importance of effective communication
2.	Describe the process of communication
3.	Communicate effectively in different contexts
4.	Explain Modern concept of library
5.	Describe Types of libraries organization and function describe.
6.	Explain Five law of library science
7.	Explain the Theory of classification, common isolate
8.	Demonstrate Colon classification (C.C)
9.	Demonstrate Dewey Decimal Classification (D.D.C.)
10.	Explain the concept of library catalogue
11.	Describe the types of catalogue
12.	Differentiate among Physical Form, AACR-2, CCC
13.	Explain the main entry and Added Entry
14.	Demonstrate the Subject cataloguing
15.	Search and retrieve Information of an object from digital library software
16.	Catalogue the simple tittles.
17.	Invite quotation for supply rates and discount, playing orders, follow up, cancellation of orders.
18.	Draft Notice/for inviting of meeting, Agenda and recording of proceeding (minutes)
19.	Understand the concept and role of library management.
20.	Comprehend the functions and responsibilities of library managers.
21.	Familiarize oneself with the guiding principles and best practices in library management
22.	To analyses their problems the will learn to access how information technology can be used to achieve a competitive advantage and excellence in service student will learn to implement technology.
23.	Develop strong oral and written comm skills.
24.	Understand the concept of library software packages and their significance in library management.
25.	Acquire practical skills in using online search engines and OPAC.
26.	Acquire practical skills in using DBMS software for library operations.
27.	Comprehend the concept and process of digitizing library resources.



#### 4. DERIVING CURRICULUM AREAS FROM LEARNING OUTCOME / COMPETENCY PROFILE

Sr	Competency Profile	Curriculum Areas
1.	Understand the importance of effective communication	Communication Skills
2.	Describe the process of communication	Communication Skills
3.	Communicate effectively in different contexts	Communication Skills
4.	Explain Modern concept of library	Library And Society
5.	Describe Types of libraries organization and function describe.	Library And Society
6.	Explain Five law of library science	Library And Society
7.	Theory of classification, common isolate	Knowledge Organization
8.	Colon classification (C.C)	Knowledge Organization
9.	Dewey Decimal Classification (D.D.C.)	Knowledge Organization
10.	Explain the concept of library catalogue	Information Processing And Retrieval
11.	Describe the types of catalogues	Information Processing And Retrieval
12.	Differentiate among Physical Form, AACR-2, CCC	Information Processing And Retrieval
13.	Explain the main entry and Added Entry	Information Processing And Retrieval
14.	Demonstrate the Subject cataloguing	Information Processing And Retrieval
15.	Development of basic knowledge and skills in applications of computers in Library and Information Science	Basics Of Information Technology
16.	Development of basic knowledge of climatology, environment, Energy conservation and ecology	Environmental Studies
17.	Development of communication and Soft skills	Communication Skills Student Centred Activities
18.	Demonstrate appropriate values and attitude.	Student Centred Activities
19.	Search and retrieve Information of an object from digital library software	Information Processing And Retrieval Practice
20.	Catalogue the simple titles.	Information Processing And Retrieval Practice
21.	Invite quotation for supply rates and discount, playing orders, follow up, cancellation of orders.	Library Correspondance
22.	Draft Notice/for inviting of meeting, Agenda and recording of proceeding (minutes)	Library Correspondance
23.	Understand the concept and role of library management.	Management Of Library And Information Centres
24.	Comprehend the functions and responsibilities of library managers.	Management Of Library And Information Centres

25.	Familiarize oneself with the guiding principles and best practices in library management	Management Of Library And Information Centres
26.	To analyses their problems the will learn to access how information technology can be used to achieve a competitive advantage and excellence in service student will learn to implement technology.	Information System And Services
27.	Develop strong oral and written comm skills.	Information System And Services
28.	Understand the concept of library software packages and their significance in library management.	Information Technology In Libraries
29.	Acquire practical skills in using online search engines and OPAC.	Information Technology In Libraries
30.	Acquire practical skills in using DBMS software for library operations.	Information Technology In Libraries
31.	Comprehend the concept and process of digitizing library resources.	Information Technology In Libraries
32.	Gain familiarity with different operating systems used in library environments.	Information Technology In Libraries

## **5. ABSTRACT OF THE CURRICULUM AREAS**

### **a) General Studies**

1. Communication Skills-1 and II
2. Basics of Information Technology
3. Environmental Studies

### **b) Basic Courses in Library and Information Science**

4. Library and Society

### **c) Applied Courses in Library and Information Science**

5. Knowledge Organization I and II
6. Information Processing and Retrieval Practice-I and II
7. Knowledge Organization Practices- I and II
8. Information Processing and Retrieval – I and II
9. Reference source and service
10. Library Correspondence
11. Management of Library and Information centers
12. Information system and Service
13. Information Technology and Libraries
14. Library Automation and Information Technology(Basics)
15. Project

## 6. HORIZONTAL AND VERTICAL ORGANISATION OF THE SUBJECTS

Sr. No.	Subject	Distribution of Periods / week in various semesters			
		I	II	III	IV
1.	Communication Skills	6	-	6	-
2.	Library and Society	12	-	-	-
3.	Knowledge Organization	20	-	12	-
4.	Information Processing and Retrieval Practice	8	-	-	19
5.	Knowledge Organization Practices	-	16	-	12
6.	Information Processing and Retrieval	-	8	6	-
7.	Reference sources of Services	-	10	-	-
8.	Basics of Information Technology	-	6	-	-
9.	Library correspondence	-	6	-	-
10.	Management of Library and Information Centers	-	-	6	-
11.	Information system and services	-	-	8	-
12.	Information Technology and Libraries	-	-	8	-
13.	Library Automation and Information Technology(Basic)	-	-	-	10
14.	Environmental Studies	-	-	-	5
15.	Student Centered Activities	2	2	2	2
	<b>TOTAL</b>	<b>48</b>	<b>48</b>	<b>48</b>	<b>48</b>

**7- STUDY AND EVALUATION SCHEME FOR DIPLOMA IN LIBRARY AND INFORMATION SCIENCE**

**FIRST SEMESTER**

Sr. No.	SUBJECTS	STUDY SCHEME			Credits	MARKS IN EVALUATION SCHEME					Total Marks of Internal & External			
		Periods/Week				INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT					
		L	T	P		Th	Pr	Tot	Th	Hrs		Pr	Hrs	Tot
1.1	*Communication Skills-I	4	-	2	4	20	10	30	50	2 ½	20	3	70	100
1.2	Library and Society	8	2	-	4	20	-	20	50	2 ½	-	-	50	70
1.3	Knowledge Organization-I	6	2	10	5	20	10	30	50	2 ½	30	3	80	110
1.4	Information Processing and Retrieval Practice-I	-	-	10	5	-	10	10	-	-	30	3	30	40
#Student Centered Activities (SCA)		-	-	4	1	-	30	30	-	-	-	-	-	30
Total		18	4	26	19	60	60	120	150	-	80	-	230	350

\*Common with other diploma Programs

- Student Centred Activities will comprise of co-curricular activities like extension lectures, self study, games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, disaster management and safety etc.

## SECOND SEMESTER

Sr. No.	SUBJECTS	STUDY SCHEME			Credits	MARKS IN EVALUATION SCHEME										Total Marks of Internal & External
		Periods/Week				INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT							
		L	T	P		Th	Pr	Tot	Th	Hrs	Pr	Hrs	Tot			
2.1	Knowledge Organization Practices-I	-	-	8	4	-	10	10	-	-	30	3	30	40		
2.2	Information Processing and Retrieval-I	6	2	8	5	20	10	30	50	2 ½	30	3	80	110		
2.3	Reference Sources and Services	8	2	-	4	20	-	20	50	2 ½	-	-	50	70		
2.4	*Basics of Information Technology	-	-	6	2	-	40	40	-	-	60	3	60	100		
2.5	Library Correspondence	4	2	-	4	20	-	20	50	2 ½	-	-	50	70		
#Student Centered Activities (SCA)		-	-	2	1	-	30	30	-	-	-	-	-	30		
<b>Total</b>		<b>18</b>	<b>6</b>	<b>24</b>	<b>20</b>	<b>60</b>	<b>90</b>	<b>150</b>	<b>150</b>	<b>-</b>	<b>120</b>	<b>-</b>	<b>270</b>	<b>420</b>		

\*Common with other diploma Programs

- Student Centred Activities will comprise of co-curricular activities like extension lectures, self study, games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, disaster management and safety etc.

- 4 weeks structured and supervised, branch specify, task oriented industrial/field exposure to be organized after II semester. Student will submit a report. There will be 80 marks for this exposure. These marks will be awarded by the project examiner in the IV semester. (Examination marks : 50 Sessional Marks 30)

### THIRD SEMESTER

Sr. No.	SUBJECTS	STUDY SCHEME			Credits	MARKS IN EVALUATION SCHEME									Total Marks of Internal & External
		Periods/Week				INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT						
		L	T	P		Th	Pr	Tot	Th	Hrs	Pr	Hrs	Tot		
3.1	Field Exposure (4 Weeks)	-	-	-	2	-	30	30	-	-	50	-	50	80	
3.2	*Communication Skill-II	4	-	2	4	20	10	30	50	2 ½	20	3	70	100	
3.3	Management of Library and Information Centre's	6	-	-	3	20	-	20	50	2 ½	-	-	50	70	
3.4	Knowledge Organization-II	6	-	6	6	20	15	35	50	2 ½	30	3	80	115	
3.5	Information Processing and Retrieval Practices-II	-	-	6	5	-	15	15	-	-	30	3	30	45	
3.6	Information System and Services	6	2	-	4	20	-	20	50	2 ½	-	-	50	70	
3.7	Information Technology and Libraries	2	-	6	3	-	30	30	-	-	50	3	50	80	
#Student Centered Activities (SCA)		-	-	2	1	-	30	30	-	-	-	-	-	30	
Total		<b>24</b>	<b>2</b>	<b>22</b>	<b>28</b>	<b>80</b>	<b>130</b>	<b>210</b>	<b>200</b>	<b>-</b>	<b>180</b>	<b>-</b>	<b>380</b>	<b>590</b>	

#### \*Common with other diploma Programs

- Student Centred Activities will comprise of co-curricular activities like extension lectures, self study, games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, disaster management and safety etc.

#### FOURTH SEMESTER

Sr. No.	SUBJECTS	STUDY SCHEME			Credits	MARKS IN EVALUATION SCHEME									Total Marks of Internal & External
		Periods/Week				INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT						
		L	T	P		Th	Pr	Tot	Th	Hrs	Pr	Hrs	Tot		
4.1	Knowledge Organization Practices-II	-	-	12	4	-	15	15	-	-	30	3	30	45	
4.2	Information Processing and Retrieval-II	8	2	9	5	20	15	35	50	2 ½	30	3	80	115	
4.3	Library Automation and Information Technology :Basics	8	2	-	4	20	-	20	50	2 ½	-	-	50	70	
4.4	*Environmental Studies	3	-	2	3	20	10	30	50	2 ½	20	3	70	100	
4.5	Project And Study Tour	-	-	-	6	-	50	50	-	-	100	Viva	100	150	
#Student Centered Activities (SCA)		-	-	2	1	-	30	30	-	-	-	-	-	30	
Total		<b>19</b>	<b>4</b>	<b>25</b>	<b>23</b>	<b>60</b>	<b>120</b>	<b>180</b>	<b>150</b>	<b>-</b>	<b>180</b>	<b>-</b>	<b>330</b>	<b>510</b>	

\*Common with other diploma Programs

- Student Centred Activities will comprise of co-curricular activities like extension lectures, self study, games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, disaster management and safety etc.



## **8. GUIDELINES FOR ASSESSMENT OF STUDENT-CENTERED ACTIVITIES (SCA)**

It was discussed and decided that the maximum marks for SCA should be 30 as it involves a lot of subjectivity in the evaluation. The marks may be distributed as follows:

- A) i. 10 Marks for general behavior and discipline  
(by HODs in consultation with all the teachers of the department)
- ii. 5 Marks for attendance as per following:  
(by HODs in consultation with all the teachers of the department)
  - a) 75 - 80% 2 Marks
  - b) 80 - 85% 4 Marks
  - c) Above 85% 5 Marks
- iii. 15 Marks maximum for Sports/NCC/Cultural/Co-curricular/ NSS activities as per following:  
(by In-charge Sports/NCC/Cultural/Co-curricular/NSS)
  - a) 15 - State/National Level participation
  - b) 10 - Participation in two of above activities
  - c) 5 - Inter-Polytechnic level participation

Note: There should be no marks for attendance in the internal sessional of different subjects.

## 1.1 COMMUNICATION SKILLS – I

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### RATIONALE

Knowledge of English Language plays an important role in career development. This subject aims at introducing basic concepts of communication besides laying emphasis on developing listening, speaking, reading and writing skills as parts of Communication Skill.

### LEARNING OUTCOMES

After undergoing the subject, the students will be able to:

- Understand the importance of effective communication
- Describe the process of communication
- Communicate effectively in different contexts
- Identify parts of speech
- Write correct sentences using appropriate vocabulary
- Reproduce and match words and sentences in a paragraph
- Write various types of paragraphs, notices for different purposes and composition on picture with appropriate format
- Read unseen texts with comprehension

### DETAILED CONTENTS

- 1 Basics of Communication
  - 1.1 Definition and process of communication
  - 1.2 Types of communication - formal and informal, oral and written, verbal and non-verbal
  - 1.3 Communications barriers and how to overcome them
  - 1.4 Barriers to Communication, Tools of Communication
  
- 2 Application of Grammar
  - 2.1 Parts of Speech (Noun, verb, adjective, adverb) and modals
  - 2.2 Sentences and its types
  - 2.3 Tenses
  - 2.4 Active and Passive Voice
  
  - 2.5 Punctuation
  - 2.6 Direct and Indirect Speech
  
- 3 Reading Skill  
Unseen passage for comprehension (one word substitution, prefixes, suffixes, antonyms, synonyms etc. based upon the passage to be covered under this topic)

- 4 Writing Skill
  - 4.1 Picture composition
  - 4.2 Writing paragraph
  - 4.3 Notice writing

## **LIST OF PRACTICALS**

**Note:** Teaching Learning Process should be focused on the use of the language in writing reports and making presentations.

Topics such as Effective listening, effective note taking, group discussions and regular presentations by the students need to be taught in a project oriented manner where the learning happens as a byproduct.

### **Listening and Speaking Exercises**

1. Self and peer introduction
2. Newspaper reading
3. Just a minute session-Extempore
4. Greeting and starting a conversation
5. Leave taking
6. Thanking
7. Wishing well
8. Talking about likes and dislikes
9. Group Discussion
10. Listening Exercises.

### **INSTRUCTIONAL STRATEGY**

Student should be encouraged to participate in role play and other student centred activities inclass room and actively participate in listening exercises

### **MEANS OF ASSESSMENT**

- Assignments and quiz/class tests, mid-semester and end-semester written tests
- Actual practical work, exercises and viva-voce
- Presentation and viva-voce

### **RECOMMENDED BOOKS**

1. Communicating Effectively in English, Book-I by RevathiSrinivas; AbhishekPublications, Chandigarh.
2. Communication Techniques and Skills by R. K. Chadha; DhanpatRai Publications,New Delhi.

3. High School English Grammar and Composition by Wren & Martin; S. Chand & Company Ltd., Delhi.
4. Excellent General English-R.B.Varshnay, R.K. Bansal, Mittal Book Depot, Malhotra
5. The Functional aspects of Communication Skills – Dr. P. Prasad, S.K. Katria & Sons, New Delhi
6. Q. Skills for success – Level & Margaret Books, Oxford University Press.
7. E-books/e-tools/relevant software to be used as recommended by AICTE/UPBTE/NITTTR.

### Websites for Reference:

1. <http://www.mindtools.com/page8.html> – 99k
2. <http://www.letstalk.com.in>
3. <http://www.englishlearning.com>
4. <http://learnenglish.britishcouncil.org/en/>
5. <http://swayam.gov.in>

### SUGGESTED DISTRIBUTION OF MARKS

Topic No.	Time Allotted (Periods)	Marks Allotted (%)
1	13	24
2	18	32
3	10	16
4	15	28
<b>Total</b>	<b>56</b>	<b>100</b>

## 1.2 LIBRARY AND SOCIETY

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8 4 -

### RATIONALE

This course will enable students to use basics of library science and their functions.

### LEARNING OUTCOMES

After undergoing the subject, the students will be able to:

- Explain Modern concept of library
- Describe Types of libraries organization and function describe.
- Explain Five law of library science
- Describe Library Building- Planning, Building, Committee future
- Describe Library legislation- Need and history

### DETAILED CONTENTS

1. Modern concept of a library : Role in education, culture and communication.
2. Types of libraries their organization and functions : Public, Academic, Special.
3. Five laws of library science, their implications.
4. Library Building : Basic factors in planning, building committee, Fittings, Furniture, Lighting & Ventilation.
5. Library legislation : Need and purpose and its history in India.
6. Library Association : Functions of ILA,IASLIC,UPLA.
7. Extension Services : Arranging exhibition of books, subjects, film shows, lectures, Mobile library.
8. Copy Rights and Books Delivery Act in India.

### INSTRUCTIONAL STRATEGY

Teacher may various technique to use in teaching like Models, Charts, Use of demonstration and Animations can make the subject interesting.

### MEANS OF ASSESSMENT

- Assignment
- Tests
- Model Making
- Viva Voce

## RECOMMENDED BOOKS

1. पुस्तकालय एवं समाज – ओम प्रकाश सैनी |
2. ग्रंथालय एवं समाज – एस एम त्रिपाठी, सी०लाल एवं के कुमार |
3. Libraries and Society : Pandey S. K. Sharma
4. Library and Information Science By C. Lal, K. Kumar and B. K. Sharma
5. Library and society By J. K. Khanna
6. पुस्तकालय विज्ञान परिचय -द्वारका प्रसाद शास्त्री
7. The Five Law of Library Science : S. R. Rangnathan
8. Library and Society : Anil K. Dhiman

### Websites for Reference:

1. <http://www.urise.gov.in>
2. <http://swayam.gov.in>

## SUGGESTED DISTRIBUTION OF MARKS

Topic No.	Time Allotted (Periods)	Marks Allotted (%)
1	15	15
2	15	15
3	10	6
4	12	8
5	15	15
6	15	15
8	15	12
9	15	12
<b>TOTAL</b>	<b>112</b>	<b>100</b>

## 1.3 KNOWLEDGE ORGANIZATION-1

L T P  
6 4 10

### RATIONALE

To organize and arrange the resources of Library Systematically.

### LEARNING OUTCOMES

After undergoing the subject, the students will be able to:

- Explain the Theory of classification, common isolate
- Perform Colon classification (C.C)
- Perform Dewey Decimal Classification (D.D.C.)
- Access the materials by Call Number.

### DETAILED CONTENTS

1. Universe of Knowledge : An introduction, diff. b/w, knowledge classification of lib classification
2. General theory of classification : Definition, need purpose and functions.
3. Common Isolate : Definition, Kinds and need
4. Features of classification scheme : Colon classification and Dewey Decimal classification.
5. Notation : definition, need, types and functions.
6. Fundamental Categories :Facet analysis, Facet sequence.
7. Call number: Class number, Book number and Collection number.
8. Development theory of library classification : Descriptions theory and dynamic theory

### List of Practical's

Classification of simple types, documents using Dewey Decimal Classification 19th edition.

### INSTRUCTIONAL STRATEGY

The Teacher should explain about field –

- Classification – CC and DDC
- Repairing shelf list

### MEANS OF ASSESSMENT

- Lecture Method
- Practical Method
- Assignment
- Ist and IInd Term Written Test
- Practical File

- Class test

## RECOMMENDED BOOKS

- Library Classification by Dr. Devendra Kumar Sharma
- Fundamentals of Library Classification by SM Tripathi and NS Shaukeen
- Theoretical Library Classification by BD Sharma
- Theory of Classification by Krishna Kumar
- Practical Colon Classification by MP Satija
- Granthalay evam suchna vugyan addhyan mala by C Laal and K Kumar
- Colon Classification: Practical by SM Tripathi, Dr BK Sharma and C. Laal
- Pustkalaya Vargikaran By Dr Ajay Kumar Singh
- Library Classification by S. P. Sood
- Dewey Decimal Classification (Ed 19 & 20) by JN Gautam and Niranjana Singh
- An Introduction to Dewey Decimal Classification By RK Sehgal
- Dewey Decimal Classification: An Introduction by SP Sood and MR Rawatani

## Websites for Reference:

1. <http://www.urise.gov.in>
2. <http://swayam.gov.in>

## SUGGESTED DISTRIBUTION OF MARKS

Topic No.	Time Allotted (Periods)	Marks Allotted (%)
1	12	16
2	12	15
3	12	15
4	9	10
5	9	10
6	9	10
7	9	12
8	9	12
<b>TOTAL</b>	<b>84</b>	<b>100</b>



## 1.4 INFORMATION PROCESSING AND RETRIEVAL PRACTICE-I

L T P  
- - 8

**RATIONALE:** Retrieval practice is the strategy of recalling facts, concepts or events from memory in order to enhance learning. The act of retrieving information from memory.

### LEARNING OUTCOMES

After undergoing the subject, the students will be able to:

- Search and retrieve Information of an object from digital library software
- Catalogue the simple titles.

### DETAILED CONTENTS

Cataloguing of simple titles of personal authors using Anglo American cataloguing rules 2nd edition (AACR-2).

1. Personal authors : Single and shared responsibility.
2. Works produced under editorial directions.
3. Pseudonymous work
4. Multivolume

### INSTRUCTIONAL STRATEGY

Teacher may various technique to use in teaching like Models, Charts, Use of demonstration and Animations can make the subject interesting.

### MEANS OF ASSESSMENT

- Practical Method
- Assignment
- Class test

### RECOMMENDED BOOKS

- Classified Catalogue code with additional rules for Dictionary Catalogue code by SR Ranganathan
- Anglo American Cataloguing Rules Second edition edited by Michael Gorman and Paul W. Winkler American Library association-Chicago, Canadian Library Association /Ottawa
- Cataloguing Manual AACR-II by SN Singh and H.N. Prasad, 1985
- Introduction to AACR-2: Anglo American Cataloguing Rules-Second Edition by Krishna Kumar
- Cataloguing by Dr. CK Sharma
- Fundamentals of Cataloguing Theory by S.M. Tripathi and NS Shaukeen

CORRECTED AND APPROVED BY BOARD OF TECHNICAL EDUCATION U.P., LUCKNOW  
IN CDC MEETING HELD ON 19.08.2023

- Cataloguing: Theory and Practice by TNK Gandhi
- Classified Catalogue Code: A Practical Study by BD Sharma
- Advanced Cataloguing: CCC and AACR-2 (Theory and Practice) by JN Gautam
- Practical AACR-2 by SP Sood

**Websites for Reference:**

1. <http://www.urise.gov.in>
2. <http://swayam.gov.in>

## 2.1 KNOWLEDGE ORGANIZATION PRACTICE-I

L T P  
- - 8

**RATIONALE :** Knowledge organization is about activities such as documents description indexing and classification performed in libraries, databases, archives etc. Therefore, this subject has a crucial role for diploma holder.

### LEARNING OUTCOMES

- After undergoing the subject, the students will be able to:
- Organize materials for the purpose of retrieval
- Manage a collection

### DETAILED CONTENTS

Classification of simple types, documents using Colon .Classification. 6th revised edition.

### INSTRUCTIONAL STRATEGY

Teacher may various technique to use in teaching like Models, Charts, Use of demonstration and Animations can make the subject interesting.

### MEANS OF ASSESSMENT

- Practical Method
- Assignment
- Class test

### RECOMMENDED BOOKS

- Library Classification by Dr. Devendra Kumar Sharma
- Fundamentals of Library Classification by SM Tripathi and NS Shaukeen
- Theoretical Library Classification by BD Sharma
- Theory of Classification by Krishna Kumar
- Practical colon Classification by MP Satija
- Granthalay evam suchna vugyan addhyan mala by C Laal and K Kumar
- Colon Classification: Practical by SM Tripathi, Dr BK Sharma an C. Laal
- Pustkalaya Vargikaran By Dr Ajay Kumar Singh
- Library Classification by S. P. Sood
- Dewey Decimal Classification (Ed 19 & 20) by JN Gautam and Niranjana Singh
- An Introduction to Dewey Decimal Classification By RK Sehgal
- Dewey Decimal Classification: An Introduction by SP Sood and MR Rawatani

**Websites for Reference:**

1. <http://www.urise.gov.in>
2. <http://swayam.gov.in>

## 2.2 INFORMATION PROCESSING AND RETRIEVAL-I

L T P  
6 2 8

### RATIONALE

The diploma holder in Library Science can handle the responsibilities assigned to him in efficient manner if he/she is equipped with modern techniques of organizing calculating and services

### LEARNING OUTCOMES

After undergoing the subject, the students will be able to:

- Explain the concept of library catalogue
- Describe the types of catalogues
- Differentiate among Physical Form, AACR-2, CCC
- Explain the main entry and Added Entry
- Demonstrate the Subject cataloguing
- Show the Chain Procedure and Sews list

### DETAILED CONTENTS

1. Definition, Need ,Purpose, Functions of library catalogue.
2. Types of catalogue (Internal Form) : Alphabetical and Classified catalogue.
3. Physical forms (External Form) of library catalogue : Card Form ,MARC, OPAC (Online Public Access Catalogue).
4. Choice and rendering of personal authors including single and shared (joint) authorship especially Indic and Western names as per AACR-2 and CCC.
5. Types of entries and their functions (AACR-2 and CCC) : Main entry, added entries, references.
6. Subject Cataloguing : Sears list and chain procedure.

### List of Practical's

Cataloguing of simple titles of personal authors using classified catalogue code 5th edition (CCC).

1. Personal authors : Single and shared responsibility.
2. Works produced under editorial directions.
3. Pseudonymous work
4. Multi volumes

## **INSTRUCTIONAL STRATEGY**

- Practice with simple exercise
- AACR-2 and CCC
- Subject cataloguing : Colon, Sears list and chain procedure
- Show different form of library cataloguing

## **MEANS OF ASSESSMENT**

- Practical Method
- Viva Voce
- Practical file
- Assessment
- I and II term written test
- Class Test

## **RECOMMENDED BOOKS**

- Classified Catalogue code with additional rules for Dictionary Catalogue code by SR Ranganathan
- Anglo American Cataloguing Rules Second edition edited by Michael Gorman and Paul W. Winkler
- American Library association-Chicago, Canadian Library Association /Ottawa
- Cataloguing Manual AACR-II by SN Singh and H.N. Prasad, 1985
- Introduction to AACR-2: Anglo American Cataloguing Rules-Second Edition by Krishna Kumar
- Cataloguing by Dr. CK Sharma
- Fundamentals of Cataloguing Theory by S.M. Tripathi and NS Shaukeen
- Cataloguing: Theory and Practice by TNK Gandhi
- Classified Catalogue Code: A Practical Study by BD Sharma
- Advanced Cataloguing: CCC and AACR-2 (Theory and Practice) by JN Gautam
- Practical AACR-2 by SP Sood

## **Websites for Reference:**

1. <http://www.urise.gov.in>
2. <http://swayam.gov.in>

## SUGGESTED DISTRIBUTION OF MARKS

<b>Topic No.</b>	<b>Time Allotted (Periods)</b>	<b>Marks Allotted (%)</b>
1	12	15
2	16	20
3	16	20
4	12	15
5	16	20
6	12	10
<b>TOTAL</b>	<b>84</b>	<b>100</b>

## 2.3 REFERENCE SOURCES AND SERVICE

L T P  
8 2 -

### RATIONALE

Content of this course provide different types of sources of books and knowledgeable for student.

### LEARNING OUTCOMES

After undergoing the subject, the students will be able to:

- Reference services : Definition, need, purpose and its function
- Types of Reference Service : Ready and Long range reference services
- Library orientation
- Categories of reference sources : Primary, Secondary and tritory
- Brief introduction to the following types of reference sources, Bibliographical sources, Geographical sources, Biographical sources, Dictionaries, Statistical sources, encyclopedias, Year book, Almanacs directories, CARS (Computer Aided reference Services).

### DETAILED CONTENTS

1. Reference Services ;Definition, Need, Purpose & Its Function
2. Types of reference services - Ready and Long range reference service.
3. Library Orientation
4. Categories of reference sources ; Primary, Secondary and Tertiary.
5. Brief introduction to the following types of reference sources -
  - Bibliographical Sources
  - Geographical Sources.
  - Biographical Sources.
  - Dictionaries
  - Statistical Sources.
  - Encyclopedias.
  - Year book & Almanacs.
  - Directories.
  - CARS (Computer Aided Reference Services)



## INSTRUCTIONAL STRATEGY

To effectively teach the subject of Reference Sources and Service, teacher can consider the following instructional strategies:

**Lecture-based Instruction:** Begin with lectures to provide students with foundational knowledge of reference sources, their types, and their significance in providing information services. Use multimedia aids such as PowerPoint presentations, videos, and real-life examples to enhance understanding.

**Interactive Discussions:** Encourage student participation through discussions on various aspects of reference sources and services. Use open-ended questions to promote critical thinking and engage students in analyzing and evaluating different types of reference sources

## MEANS OF ASSESSMENT

- Assignment
- Test
- Model Making
- Viva voice
- 

## RECOMMENDED BOOKS

- Documentation and Information Services by S.M. Traipathi
- ग्रंथालय एवं सूचना विज्ञान अध्ययन माला- सी लाल एवं के० कुमार
- Basi Information and reference sources by SM Tripathi and J.N. Gautam
- Introduction to reference work by William A. Katz (Vol-1)
- New Dimension of reference and information services by SM Tripathi
- Introduction to Reference Work by William A kats (Vol-2)
- Reference Service –5<sup>th</sup> Revised Edition by Krishna Kumar
- Reference Service -by SR Ranganathan
- Reference Service and source of information by Grover Sharma

## Websites for Reference:

1. <http://www.urise.gov.in>
2. <http://swayam.gov.in>

## SUGGESTED DISTRIBUTION OF MARKS

Topic No.	Time Allotted (Periods)	Marks Allotted (%)
1	22	15
2	22	20
3	22	20
4	21	15
5	25	30
<b>TOTAL</b>	<b>112</b>	<b>100</b>

**RATIONALE**

Information technology has great influence on all aspects of life. Primary purpose of using computer is to make the life easier. Almost all work places and living environment are being computerized. The subject introduces the fundamentals of computer system for using various hardware and software components. In order to prepare diploma holders to work in these environments, it is essential that they are exposed to various aspects of information technology such as understanding the concept of information technology and its scope; operating a computer; use of various tools using MS Office/Open Office/Libre Office using internet etc., form the broad competency profile of diploma holders. This exposure will enable the students to enter their professions with confidence, live in a harmonious way and contribute to the productivity.

**Note:**

**Explanation of Introductory part should be demonstrated with practical work. Following topics may be explained in the laboratory along with the practical exercises. There will not be any theory examination.**

**LEARNING OUTCOMES**

After undergoing the subject, the students will be able to:

- Identify Computer Hardware Components, Network Components and Peripherals.
- Explain the role of an Operating System.
- Install System and Application Software.
- Explain the function of the system components including Processor, Motherboard and Input-output devices.
- Use Word Processing Software to prepare document.
- Use Spreadsheet Software to create workbooks and automate calculation.
- Use Presentation Software to create interactive presentation.
- Perform fundamental tasks common to most application software including print, scan, save, edit, cut, copy, paste, format, spell and grammar check.
- Find and evaluate information on the Web.
- Install Antivirus.
- Safeguard against Online Frauds, threats and crimes.
- Use online office tools(Google suits)

**TOPICS TO BE EXPLAINED THROUGH DEMONSTRATION**

1. Introduction to Computers and Peripherals.

Components of Computer, Types of Computer, CPU, RAM, ROM, Hard disk, USB, Flash drive, CD, DVD, Blue ray, Keyboard, Mouse, Monitor, LCD, Printer, Plotter, Scanner, Modem, Sound Cards, Speakers, CMOS battery, Sharing of Printers.

2. Operation System and Application Software

System Software, Application Software, Virtualization Software, Utility Software, MS Office/Open Office/Libreoffice, Working with window, Desktop components, Menu bars, creating shortcut of program. Installation of Application softwares, Antivirus and Drivers.

3. Word Processing, Spreadsheet and Presentation

Usage and creation of word document, spreadsheets and presentation, Google Suits (Google drive, google sheet, google doc. Google presentation)

4. Internet

Basics of Networking – LAN, WAN, Wi-Fi technologies, Concept of IP Addrsses, DNS, Search Engines, e-mail, Browsing and cyber laws.

### LIST OF PRACTICAL EXERCISES

1. Identify various components, peripherals of computer and list their functions.
2. Installation of various application software and peripheral drivers
3. Installation of operating system (windows/linux/others)
4. Creation and Management (Rename, delete, search of file and folders)
5. Installation of Antivirus and remove viruses
6. Scanning and printing documents
7. Browsing, Downloading, Information using Internet
8. E-Mail ID creation, comparing, sending and receiving e-mail. Attaching a file with e-mail message.
9. Word Processing (MS Office/Open Office)
  - a) File Management:
    - Opening, creating and saving a document, locating files, copying contents in some different file(s), protecting files, giving password protection for a file
  - b) Page set up:
    - Setting margins, tab setting, ruler, indenting
  - c) Editing a document:
    - Entering text, cut, copy, paste using tool- bars
  - d) Formatting a document:
    - Using different fonts, changing font size and colour, changing the appearance through bold/italic/underlined, highlighting a text, changing case, using subscript and superscript, using different underline methods
    - Aligning of text in a document, justification of document, inserting bullets and numbering
    - Formatting paragraph, inserting page breaks and column breaks, line spacing
    - Use of headers, footers: Inserting footnote, end note, use of comments, autotext
    - Inserting date, time, special symbols, importing graphic images, drawing tools
  - e) Tables and Borders:
    - Creating a table, formatting cells, use of different border styles, shading in tables, merging of cells, partition of cells, inserting and deleting a row in a table
    - Print preview, zoom, page set up, printing options
    - Using find, replace options
  - f) Using Tools like:
    - Spell checker, help, use of macros, mail merge, thesaurus word content and statistics, printing envelops and lables
    - Using shapes and drawing toolbar,

- Working with more than one window .

#### 10. Spread Sheet Processing (MS Office/Open Office/Libre Office)

- a) Starting excel, open worksheet, enter, edit, data, formulae to calculate values, format data, save worksheet, switching between different spread sheets
- b) Menu commands:  
Create, format charts, organise, manage data, solving problem by analyzing data. Programming with Excel Work Sheet, getting information while working
- c) Work books:  
Managing workbooks (create, open, close, save), working in work books, selecting the cells, choosing commands, data entry techniques, formula creation and links, controlling calculations  
Editing a worksheet, copying, moving cells, pasting, inserting, deletion cells, rows, columns, find and replace text, numbers of cells, formatting worksheet, conditional formatting
- d) Creating a chart:  
Working with chart types, changing data in chart, formatting a chart, use chart to analyze data  
Using a list to organize data, sorting and filtering data in list
- e) Retrieve data with query:  
Create a pivot table, customizing a pivot table. Statistical analysis of data
- f) Exchange data with other application:  
Embedding objects, linking to other applications, import, export document.

#### 11. PowerPoint Presentation (MS Office/Open Office/Libre office)

- a) Introduction to PowerPoint
  - How to start PowerPoint
  - Working environment: concept of toolbars, slide layout & templates.
  - Opening a new/existing presentation
  - Different views for viewing slides in a presentation: normal, slide sorter.
- b) Addition, deletion and saving of slides
- c) Insertion of multimedia elements
  - Adding text boxes
  - Adding/importing pictures
  - Adding movies and sound
  - Adding tables and charts etc.
  - Adding organizational chart
  - Editing objects
  - Working with Clip Art
- d) Formatting slides
  - Using slide master
  - Text formatting
  - Changing slide layout
  - Changing slide colour scheme
  - Changing background
  - Applying design template

#### 12. Google Suits

Using Google drive, Google shut, Google docs, Google slides.

## **INSTRUCTIONAL STRATEGY**

Since this subject is practice oriented, the teacher should demonstrate the capabilities of computers to students while doing practical exercises. The students should be made familiar with computer parts, peripherals, connections and proficient in making use of MS Office/Open Office/Libre office/Google Suit in addition to working on internet. The student should be made capable of working on computers independently.

## **MEANS OF ASSESSMENT**

- Class Tests/Quiz
- Software Installation and Use
- Viva-Voce
- Presentation

## **RECOMMENDED BOOKS**

1. Fundamentals of Computer by V Rajaraman; Prentice Hall of India Pvt. Ltd., New Delhi
2. Information Technology for Management by Henery Lucas, Tata McGraw Hills, New Delhi
3. Computers Fundamentals Architecture and Organisation by B Ram, revised Edition, New Age International Publishers, New Delhi
4. Computers Today by SK Basandara, Galgotia publication Pvt Ltd. Daryaganj, New Delhi.
5. Internet for Every One by Alexis Leon and Mathews Leon; Vikas Publishing House Pvt. Ltd., Jungpura, New Delhi
6. A First Course in Computer by Sanjay Saxena; Vikas Publishing House Pvt. Ltd., Jungpura, New Delhi
7. Computer Fundamentals by PK Sinha; BPB Publication, New Delhi
8. Fundamentals of Information Technology by Leon and Leon; Vikas Publishing House Pvt. Ltd., Jungpura, New Delhi
9. On Your Marks - Net...Set...Go... Surviving in an e-world by Anushka Wirasinha, Prentice Hall of India Pvt. Ltd., New Delhi
10. Fundamentals of Information Technology by Vipin Arora, Eagle Parkashan, Jalandhar

## **Online Resources**

1. [www.tutorialspoint.com](http://www.tutorialspoint.com)
2. [www.sf.net](http://www.sf.net)
3. [Gsuite.google.com](http://Gsuite.google.com)
4. [Spoken-tutorial.org](http://Spoken-tutorial.org)
5. [Swayam.gov.in](http://Swayam.gov.in)

## 2.5 LIBRARY CORRESPONDANCE

L T P  
4 2 -

### RATIONALE

This subject provide to students, how to correspondence between book letter etc. In advance time used e-mail correspondence for supply, rate, discount etc.

### LEARNING OUTCOMES

After undergoing the subject, the students will be able to:

- Invite quotation for supply rates and discount, playing orders, follow up, cancellation of orders.
- Draft Notice/for inviting of meeting, Agenda and recording of proceeding (minutes)
- Inquire regarding subscriptions of journals. Placing subscriptions orders, renewed of subscriptions, payment of subscriptions and follow-up. Reminder for missing issues
- Draft tenders invite, invitation for supply of library material, equipment's, article.

### DETAILED CONTENTS

#### Library correspondence regarding :

1. Acquisition : Inviting quotations for supply rates and discount, Placing of orders, follow-up, cancellation of orders.
2. Library Meeting : Notice/for inviting of meeting, Agenda and Recording of proceedings (Minutes)
3. Inter Library Loan.
4. Periodicals : Inquiries regarding subscription of journals, Placing subscription order, Renewal of subscription, Payment of subscription and follow-up, Reminders for missing issues.
5. Quotations/Tenders invitation for supply of library material, equipment, machines/ tools, furniture, stationery, disposal of waste papers, binding of books and journals.
6. Correspondence of various sections of the library to the users.
7. Introduction and Basics : e-Mail for correspondence

### INSTRUCTIONAL STRATEGY

Teacher used many types of correspondence method manual and e-Mail.

### MEANS OF ASSESSMENT

- Assignment
- Tests
- Model Making
- Viva voice

### **RECOMMENDED BOOKS**

1. Business Communication by N. Gupta, P. Mahajan
2. Office and Business Correspondence in English , RK Tyagi, Shiksha Tyagi

### **Websites for Reference:**

1. <http://www.urise.gov.in>
2. <http://swayam.gov.in>

### **SUGGESTED DISTRIBUTION OF MARKS**

<b>Topic No.</b>	<b>Time Allotted (Periods)</b>	<b>Marks Allotted (%)</b>
1	8	18
2	8	15
3	8	15
4	8	18
5	8	18
6	8	16
7	8	16
<b>TOTAL</b>	<b>56</b>	<b>100</b>

### **3.1 FIELD EXPOSURE(Four Weeks)**

4 weeks structured and supervised, branch specify, task oriented industrial/field exposure to be organized after II semester. Student will submit a report.

There will be 80 marks for this exposure.

These marks will be awarded by the project examiner in the IV semester. (Examination marks : 50  
Sessional Marks 30)



## 3.2 COMMUNICATION SKILLS – II

**L T P**  
**4 - 2**

### RATIONALE

Knowledge of English Language plays an important role in career development. This subject aims at introducing basic concepts of communication besides laying emphasis on developing listening, speaking, reading and writing skills as parts of Communication Skill.

### LEARNING OUTCOMES

After undergoing the subject, the students will be able to:

- Frame correct sentences with illustrations
- Comprehend the language correctly
- Interpret the language correctly
- Use given material in new situations.
- Correspond effectively using various types of writings like letters, memos etc.
- Communicate effectively in English with appropriate body language making use of correct and appropriate vocabulary and grammar in an organised set up and social context.

### DETAILED CONTENTS

1. Functional Grammar (16 periods)
  - 1.1 Prepositions
  - 1.2 Framing Questions
  - 1.3 Conjunctions
  - 1.4 Tenses
- 2 Reading (16 periods)
  - 2.1 Unseen Passage for Comprehension (Vocabulary enhancement - Prefixes, Suffixes, one word substitution, Synonym and Antonym) based upon the passage should be covered under this topic.
- 3 Writing Skill (24 periods)
  - 3.1. Correspondence
    - a) Business Letters- Floating Quotations, Placing Orders, Complaint Letters.
    - b) Official Letters- Letters to Government and other Offices
  - 3.2. Memos, Circular, Office Orders
  - 3.3. Agenda & Minutes of Meeting
  - 3.4. Report Writing

## LIST OF PRACTICALS

**Note:** Teaching Learning Process should be focused on the use of the language in writing reports and making presentations.

Topics such as Effective listening, effective note taking, group discussions and regular presentations by the students need to be taught in a project oriented manner where the learning happens as a byproduct.

### Speaking and Listening Skills

1. Debate
2. Telephonic Conversation: general etiquette for making and receiving calls
3. Offering- Responding to offers.
4. Requesting – Responding to requests
5. Congratulating
6. Exploring sympathy and condolences
7. Asking Questions- Polite Responses
8. Apologizing, forgiving
9. Complaining
10. Warning
11. Asking and giving information
12. Getting and giving permission
13. Asking for and giving opinions

## INSTRUCTIONAL STRATEGY

Students should be encouraged to participate in role play and other student-centered activities in class rooms and actively participate in listening exercises

## MEANS OF ASSESSMENT

- Assignments and quiz/class tests
- Mid-semester and end-semester written tests
- Actual practical work, exercises and viva-voce
- Presentation and viva-voce

## RECOMMENDED BOOKS

1. Communicating Effectively in English, Book-I by RevathiSrinivas; Abhishek Publications, Chandigarh.
2. Communication Techniques and Skills by R. K. Chadha; Dhanpat Rai Publications, New Delhi.
3. High School English Grammar and Composition by Wren & Martin; S. Chand & Company Ltd., Delhi.
4. e-books/e-tools/relevant software to be used as recommended by AICTE/ BTE

### Websites for Reference:

1. [http://www.mindtools.com/ page 8.html](http://www.mindtools.com/page 8.html) – 99k
2. <http://www.letstalk.com.in>
3. <http://www.englishlearning.com>
4. <http://learnenglish.britishcouncil.org/en/>
5. <http://swayam.gov.in>

### SUGGESTED DISTRIBUTION OF MARKS

<b>Topic No.</b>	<b>Time Allotted (Periods)</b>	<b>Marks Allotted (%)</b>
1	16	28
2	16	28
3	24	44
<b>Total</b>	<b>56</b>	<b>100</b>

### **3.3 MANAGEMENT OF LIBRARY AND INFORMATION CENTRES**

**L T P**

**6 - -**

#### **RATIONALE**

On account of increasing literacy the number of libraries have also increased. Small and Medium size libraries having managed by idle level man power. Management of different libraries – school, college, special library, university, public etc.

#### **LEARNING OUTCOMES**

After undergoing the subject, the students will be able to:

- Understand the concept and role of library management.
- Comprehend the functions and responsibilities of library managers.
- Familiarize oneself with the guiding principles and best practices in library management.

#### **DETAILED CONTENTS**

1. Definition, function and principles of library management.
2. Principles of scientific management and financial management
3. Library Committee : Kinds, composition and functions.
4. Routines, Forms, Procedures of various sections of the library: Circulation, Periodicals, reference, Acquisition, Processing and Maintenance.
5. Principles and procedure of Book Selection : Different types of selection tools and their importance.
6. Library finance : Budgeting and Accounting .
7. Stock verification :Methods and procedures, writing off and Weeding, Loss of Books :Causes and responsibility.
8. Library statistics and report.
9. Binding and preservation of library material : Books, Periodicals and Manuscripts

#### **INSTRUCTIONAL STRATEGY**

Making an information literacy program work school or university. Planning and careful implementation and evaluation. Learner centered, Assessment.

#### **MEANS OF ASSESSMENT**

- Ist Term and IInd term written test
- Class test
- Assignment
- Viva voce

## RECOMMENDED BOOKS

- Library Administration by SR Ranganathan
- Library Administration Theory and Practice by RL Mittal
- Planning Budget in Libraries by Khalid K. Faruqi
- Manual of Library economy By Brown
- Library Book Selections By Ranganathan
- Library Administration by Mittal
- ग्रंथालय प्रबन्ध (Library Management) by SM Tripathi, BK Sharma, K. Kumar
- ग्रंथालय प्रबंधन के मूल तत्व-श्याम सुन्दर अग्रवाल
- ग्रंथालय विज्ञान के मूल सिद्धांत-नरेन्द्र सिंह शौक्रीन, सी० लाल, वाई० के० पब्लिशर्स
- पुस्तकालय विज्ञान परिचय-द्वारका प्रसाद शास्त्री

## Websites for Reference:

1. <http://www.urise.gov.in>
2. <http://swayam.gov.in>

## SUGGESTED DISTRIBUTION OF MARKS

Topic No.	Time Allotted (Periods)	Marks Allotted (%)
1	9	10
2	9	10
3	9	10
4	10	15
5	9	10
6	9	10
7	10	15
8	9	10
9	10	10
<b>TOTAL</b>	<b>84</b>	<b>100</b>

### 3.4 KNOWLEDGE ORGANIZATION-II

L T P

6 - 6

#### RATIONALE

This topic teacher provide to students a no. of rules to make title and their use.

#### LEARNING OUTCOMES

After undergoing the subject, the students will be able to:

- Mnemonics - Definition, need and use. Kinds and Mnemonics
- Canon of Lib clarification- Canon for work in idea plane, verbal, plane and notational plane
- Universe of subject – Basic Subject, Compound subject, Complex subject, Mode of formation of subject
- Phase Relation
- Hospitality in array and chain- various device viz. geographical, chorological subject, Alphabetical super imposition
- Principles of helpful sequence- List of Pr. – Classified of compound titles/documents using colon, 6<sup>th</sup> Revised edition
- 

#### DETAILED CONTENTS

1. Mnemonics : Definition, need and use. Kinds and mnemonics.
2. Canons : Canon of Lib – Classification , canon for work, in idea plane, verbal plane and notational plane, Array, Chain and Filiatory sequence.
3. Universe of Subject – Basic Subject, Compound Subject, Complex Subject, Mode of formation of subject.
4. Phase Relations.
5. Hospitality in Array and Chain : Various devices viz. Geographical, Chronological, Subject, Alphabetical, Super imposition.
6. Principles of helpful sequence.

#### List of Practical's

- Classification of compound titles/documents using Colon
- Classification 6th revised edition.

#### INSTRUCTIONAL STRATEGY

Teach basic rules of knowledge org. part and practice more between students

## MEANS OF ASSESSMENT

- Class Test
- Assignment
- Model Chart
- Viva voice

## RECOMMENDED BOOKS

- Theory of Classification By Krishna Kumar
- Organizing Knowledge of Libraries By C. D. Needhun
- Colon classification 6<sup>th</sup> reprint By S.R. Rayarth

## Websites for Reference:

1. <http://www.urise.gov.in>
2. <http://swayam.gov.in>

## SUGGESTED DISTRIBUTION OF MARKS

Topic No.	Time Allotted (Periods)	Marks Allotted (%)
1	12	15
2	15	15
3	15	20
4	12	25
5	15	15
6	15	10
<b>TOTAL</b>	<b>84</b>	<b>100</b>

### **3.5 INFORMATION PROCESSING AND RETRIEVAL PRACTICES -II**

**L T P**

**- - 6**

**RATIONALE:** Retrieval practice is the strategy of recalling facts, concepts or events from memory in order to enhance learning. The act of retrieving information from memory.

#### **LEARNING OUTCOMES**

After undergoing the subject, the students will be able to:

- Search and retrieve Information of an object from digital library software
- Catalogue the simple titles.

#### **DETAILED CONTENTS**

1. Cataloguing of documents using CCC 5th edition.
2. Cataloguing of publications of corporate authorship: Institution, Government and Conferences.
3. Uniform titles.

#### **INSTRUCTIONAL STRATEGY**

Teacher should give more emphasis on practice exercises.

#### **MEANS OF ASSESSMENT**

- Practical Method
- Assignment
- Class test

#### **RECOMMENDED BOOKS**

- Classified Catalogue code with additional rules for Dictionary Catalogue code by SR Ranganathan
- Anglo American Cataloguing Rules Second edition edited by Michael Gorman and Paul W. Winkler
- American Library association-Chicago, Canadian Library Association /Ottawa
- Cataloguing Manual AACR-II by SN Singh and H.N. Prasad, 1985
- Introduction to AACR-2: Anglo American Cataloguing Rules-Second Edition by Krishna Kumar
- Cataloguing by Dr. CK Sharma
- Fundamentals of Cataloguing Theory by S.M. Tripathi and NS Shaukeen
- Cataloguing: Theory and Practice by TNK Gandhi
- Classified Catalogue Code: A Practical Study by BD Sharma



- Advanced Cataloguing: CCC and AACR-2 (Theory and Practice) by JN Gautam
- Practical AACR-2 by SP Sood

**Websites for Reference:**

1. <http://www.urise.gov.in>
2. <http://swayam.gov.in>

## 3.6 INFORMATION SYSTEM AND SERVICES

L T P

6 2 -

### RATIONALE

Information system helps decision making process with in information delivering all the important information is earlier to make better decisions. Information allows to communicate effectively information system tools that organization use to collect manage and analyses data.

### LEARNING OUTCOMES

After undergoing the subject, the students will be able to:

- To analyses their problems the will learn to access how information technology can be used to achieve a competitive advantage and excellence in service student will learn to implement technology.
- Develop strong oral and written comm skills.

### DETAILED CONTENTS

1. Information: Definition, need, purpose & importance.
2. Qualities and qualification of a reference librarian and information officer .
3. Search Strategies.
4. Methods of dissemination of Information:
5. Current awareness services(CAS).
6. Selective dissemination of information(SDI).
7. Information systems : NISSAT
8. Index : Definition, Needs and Kinds of Indexing Services.
9. Abstract & Abstracting services : Definition, Types & Uses
10. Organization and services : UNESCO, IFLA, NISCAIR, NASSDOC, DESIDOC, VINITI.

### INSTRUCTIONAL STRATEGY

- Teaching information system subject present different challenges.
- Information system refers to the tools and strategies that organization use to collect and manage data.
- Collaborative learning can be a powerful strategy in the class room

## MEANS OF ASSESSMENT

- Assignment
- Term Test
- 

## RECOMMENDED BOOKS

- Information sources and services by Gurudev Singh
- Documentation and information services techniques and system by B. Guha
- Fundamentals of documentation : Special Reference to India by P. S. Kwater

## Websites for Reference:

1. <http://www.urise.gov.in>
2. <http://swayam.gov.in>

## SUGGESTED DISTRIBUTION OF MARKS

Topic No.	Time Allotted (Periods)	Marks Allotted (%)
1	8	10
2	8	8
3	8	10
4	8	10
5	8	8
6	12	15
7	8	9
8	12	15
9	12	15
<b>TOTAL</b>	<b>84</b>	<b>100</b>

### 3.7 INFORMATION TECHNOLOGY IN LIBRARIES

L T P

2 - 6

#### RATIONALE

In this era modern libraries are also leading towards automation and digitalization. This exam provide to students a platform for uses of internet and networking

#### LEARNING OUTCOMES

After undergoing the subject, the students will be able to:

- Understand the concept of library software packages and their significance in library management.
- Acquire practical skills in using online search engines and OPAC.
- Acquire practical skills in using DBMS software for library operations.
- Comprehend the concept and process of digitizing library resources.
- Gain familiarity with different operating systems used in library environments.

#### DETAILED CONTENTS

##### 1. UNIT I :

Library Software Package : Brief introduction of softwares, their utility, commands and application. (A) Granthalaya (B) KOHA (C) Libsys (D) SOUL. At least 3 practical should be given, based on the above mentioned software application.

##### 2. UNIT II :

Different Software for Libraries :

- A. On line Search Engine, OPAC
- B. DBMS
- C. Digitalization of Libraries.

At least 3 practicals should be given, based on the above mentioned software applicaiton.

##### 3. UNIT III:

- A. Use of Operating Systems.
- B. Data Base Creation : Using at least one DBMS Software.
- C. Data Base Search and Retrieval.

#### INSTRUCTIONAL STRATEGY

These Techniques used with contribution of internet and ITC technique.

#### MEANS OF ASSESSMENT

- Assignment
- Practical Test
- Viva voce

## **RECOMMENDED BOOKS**

- Information sources and services by Gurudev Singh
- Documentation and information services techniques and system by B. Guha
- Fundamentals of documentation : Special Reference to India by P. S. Kwateer

## **Websites for Reference:**

1. <http://www.urise.gov.in>
2. <http://swayam.gov.in>

## **SUGGESTED DISTRIBUTION OF MARKS**

<b>Topic No.</b>	<b>Time Allotted (Periods)</b>	<b>Marks Allotted (%)</b>
1	10	35
2	10	35
3	8	30
<b>TOTAL</b>	<b>28</b>	<b>100</b>

## 4.1 KNOWLEDGE ORGANIZATION PRACTICE-II

L T P

- - 12

**RATIONALE :** Knowledge organization is about activities such as documents description indexing and classification performed in libraries, databases, archives etc. Therefore, this subject has a crucial role for diploma holder.

### LEARNING OUTCOMES

After undergoing the subject, the students will be able to:

- Organize materials for the purpose of retrieval
- Manage a collection.

### DETAILED CONTENTS

Classification of compound titles/documents using DDC 19th edition.

### INSTRUCTIONAL STRATEGY

Begin with lectures to introduce students to the fundamental concepts and principles of knowledge organization. Cover topics such as classification, cataloging, indexing, controlled vocabularies, and metadata. Use visual aids, examples, and case studies to illustrate the concepts and facilitate understanding.

### MEANS OF ASSESSMENT

- Practical Method
- Assignment
- Class test

### RECOMMENDED BOOKS

- Colon Classification 6<sup>th</sup> reprint edition by DR. S.R. Ranganathan
- Dewey Decimal Classification 19<sup>th</sup> Edition in 3 Volume.
- Library Classification by Dr. Devendra Kumar Sharma
- Fundamentals of Library Classification by SM Tripathi and NS Shaukeen
- Theoretical Library Classification by BD Sharma
- Theory of Classification by Krishna Kumar
- Practical colon Classification by MP Satija
- Granthalay evam suchna vugyan addhyan mala by C Laal and K Kumar
- Colon Classification: Practical by SM Tripathi, Dr BK Sharma an C. Laal
- Pustkalaya Vargikaran By Dr Ajay Kumar Singh
- Library Classification by S. P. Sood
- Dewey Decimal Classification (Ed 19 & 20) by JN Gautam and Niranjan Singh

- An Introduction to Dewey Decimal Classification By RK Sehgal
- Dewey Decimal Classification: An Introduction by SP Sood and MR Rawatani

**Websites for Reference:**

1. <http://www.urise.gov.in>
2. <http://swayam.gov.in>

## 4.2 INFORMATION PROCESSING AND RETRIEVAL-II

L T P

8 2 9

### RATIONALE

Cataloging provides information such as authors name titles and subject forms that describe resources, typically through the creation of bibliographic records. The record serve as surrogate for the stored information resource

### LEARNING OUTCOMES

After undergoing the subject, the students will be able to:

- Development of cataloguing code
- Explain the Canons of cataloguing
- Differentiate Centralized and cooperative cataloguing
- Performed Simplified and selective cataloguing

### DETAILED CONTENTS

1. Development of cataloguing code after middle of 19th century.
2. Choice and rendering of corporate authorship: Institutions, Government and Conferences as per AACR-2 and CCC.
3. Comparative study of CCC and AACR-2.
4. Canons of cataloguing.
5. Centralized and co-operative cataloguing.
6. Simplified and Selective cataloguing, Union Catalogue.
7. Rules of filing of catalogue cards/entries; Alphabetical and classified; Filing problems and their solutions.

### List of Practical's

- Cataloguing of documents using AACR-2.
- Cataloguing of publications of corporate authorship:  
Institution, Government and Conferences.
- Periodical publications (AACR-2).
- Uniform titles.



## **INSTRUCTIONAL STRATEGY**

Cataloguing is an essential process in any library or information center in order to provide information access to all learning resources to library patrons.

## **MEANS OF ASSESSMENT**

- Class Test
- Ist and IInd term test
- Models Chart
- Viva voice
- Practical File

## **RECOMMENDED BOOKS**

- Theory of cataloguing by Girja Kumar and Krishan Kumar
- Cataloguing Ist theory and practice By Sengupta (B)
- Classification catalogue code with additional dictionary catalogue 5<sup>th</sup> edition by Rangnathan

## **Websites for Reference:**

1. <http://www.urise.gov.in>
2. <http://swayam.gov.in>

## **SUGGESTED DISTRIBUTION OF MARKS**

<b>Topic No.</b>	<b>Time Allotted (Periods)</b>	<b>Marks Allotted (%)</b>
1	18	15
2	15	14
3	18	15
4	15	12
5	16	16
6	15	13
7	15	15
<b>TOTAL</b>	<b>112</b>	<b>100</b>

### **4.3 LIBRARY AUTOMATION AND INFORMATION TECHNOLOGY(BASICS)**

**L T P**

**8 2 -**

#### **RATIONALE**

To give better accessibility for remote users and other to satisfy library and pattern needs that can not met by manual methods to provide easy access to other network and system resources including the internet to provide the management of their physical and digital resources

#### **LEARNING OUTCOMES**

After undergoing the subject, the students will be able to:

- To improve control over collection
- To improve the existing services
- To avoid duplication of work
- To use the service of the existing staff effectively earlier access to system
- Systemize data collection

#### **DETAILED CONTENTS**

1. Information Technology : Definition, need, scope and objectives.
2. Communication Technology : Fundamentals, Modern channels of communication and barriers.  
Social Networking Site : Your Tube, Facebook, Twitter
3. Computer application in library and information science: Brief history, need and purpose
4. Computerization of library house-keeping operation and services : Acquisition, classification, cataloguing and indexing, circulation control, serial (periodical) control, information retrieval system.
5. Library Networking : Need, utility and type : LAN, MAN and WAN.
6. Library networking in India : Brief history, National library networks : NICNET, INDONET, INFLIBNET, CALIBNET, DELNET.
7. Concept of Digital Library and RFID technology with bar code

#### **INSTRUCTIONAL STRATEGY**

- Library automation and networking, digital technologies and teaching strategies/ instructional strategies.

#### **MEANS OF ASSESSMENT**

- Assignment
- Practical work
- Viva Voce
- Term Test

## RECOMMENDED BOOKS

- Library Automation By Md. Riyaz
- Library Automation and digitalization by P. Balasubrioman
- Automation of Library ad information centers By R. K. Shukla
- Granthalay evam Aadhunik Praudiki by C. Laal
- E-Granthalay evam Suchna Seva By Sanjay Singh
- Knowledge Management & Information Communication Technology by Dr. Satyaprakash Singh & Dr Rama Malviya
- Fundamentals of Library Automation by Pandey , Sk Sharma

## Websites for Reference:

1. <http://www.urise.gov.in>
2. <http://swayam.gov.in>

## SUGGESTED DISTRIBUTION OF MARKS

Topic No.	Time Allotted (Periods)	Marks Allotted (%)
1	18	15
2	15	14
3	18	15
4	15	12
5	16	16
6	15	13
7	15	15
<b>TOTAL</b>	<b>112</b>	<b>100</b>

## 4.4 ENVIRONMENTAL STUDIES

L T P  
3 - 2

### RATIONALE

A diploma holder must have knowledge of different types of pollution caused due to industries and constructional activities so that he may help in balancing the ecosystem and controlling pollution by various control measures. He should also be aware of environmental laws related to the control of pollution. He should know how to manage the waste. Energy conservation is the need of hour. He should know the concept of energy management and its conservation.

### LEARNING OUTCOMES

After undergoing the subject, the student will be able to:

- Comprehend the importance of ecosystem and sustainable
- Demonstrate interdisciplinary nature of environmental issues
- Identify different types of environmental pollution and control measures.
- Take corrective measures for the abatement of pollution.
- Explain environmental legislation acts.
- Define energy management, energy conservation and energy efficiency
- Demonstrate positive attitude towards judicious use of energy and environmental protection
- Practice energy efficient techniques in day-to-day life and industrial processes.
- Adopt cleaner productive technologies
- Identify the role of non-conventional energy resources in environmental protection.
- Analyze the impact of human activities on the environment

### DETAILED CONTENTS

1. Introduction (04 Periods)
  - 1.1 Basics of ecology, eco system- concept, and sustainable development, Resources renewable and non renewable.
2. Air Pollution (04 Periods)
  - 2.1 Source of air pollution. Effect of air pollution on human health, economy, plant, animals. Air pollution control methods.
3. Water Pollution (08 Periods)
  - 3.1 Impurities in water, Cause of water pollution, Source of water pollution. Effect of water pollution on human health, Concept of dissolved O<sub>2</sub>, BOD, COD. Prevention of water pollution- Water treatment processes, Sewage treatment. Water quality standard.
4. Soil Pollution (06 Periods)
  - 4.1 Sources of soil pollution
  - 4.2 Types of Solid waste- House hold, Hospital, From Agriculture, Biomedical, Animal and human, excreta, sediments and E-waste
  - 4.3 Effect of Solid waste
  - 4.4 Disposal of Solid Waste- Solid Waste Management
5. Noise pollution (06 Periods)

Source of noise pollution, Unit of noise, Effect of noise pollution, Acceptable noise level, Different method of minimize noise pollution.

6. Environmental Legislation (08 Periods)

Introduction to Water (Prevention and Control of Pollution) Act 1974, Introduction to Air (Prevention and Control of Pollution) Act 1981 and Environmental Protection Act 1986, Role and Function of State Pollution Control Board and National Green Tribunal (NGT), Environmental Impact Assessment (EIA).

7. Impact of Energy Usage on Environment (06 Periods)

Global Warming, Green House Effect, Depletion of Ozone Layer, Acid Rain. Eco-friendly Material, Recycling of Material, Concept of Green Buildings.

### LIST OF PRACTICALS

1. Determination of pH of drinking water
2. Determination of TDS in drinking water
3. Determination of TSS in drinking water
4. Determination of hardness in drinking water
5. Determination of oil & grease in drinking water
6. Determination of alkalinity in drinking water
7. Determination of acidity in drinking water
8. Determination of organic/inorganic solid in drinking water
9. Determination of pH of soil
10. Determination of N&P (Nitrogen & Phosphorus) of soil
11. To measure the noise level in classroom and industry.
12. To segregate the various types of solid waste in a locality.
13. To study the waste management plan of different solid waste
14. To study the effect of melting of floating ice in water due to global warming

### INSTRUCTIONAL STRATEGY

In addition to theoretical instructions, different activities pertaining to Environmental Studies like expert lectures, seminars, visits to green house, effluent treatment plant of any industry, rain water harvesting plant etc. may also be organized.

### MEANS OF ASSESSMENT

- Assignments and quiz/class tests,
- Mid-term and end-term written tests

### RECOMMENDED BOOKS

1. Environmental and Pollution Awareness by Sharma BR; Satya Prakashan, New Delhi.
2. Environmental Protection Law and Policy in India by Thakur Kailash; Deep and Deep Publications, New Delhi.
3. Environmental Pollution by Dr. RK Khitoliya; S Chand Publishing, New Delhi
4. Environmental Science by Deswal and Deswal; Dhanpat Rai and Co. (P) Ltd. Delhi.
5. Engineering Chemistry by Jain and Jain; Dhanpat Rai and Co. (P) Ltd. Delhi.

CORRECTED AND APPROVED BY BOARD OF TECHNICAL EDUCATION U.P., LUCKNOW  
IN CDC MEETING HELD ON 19.08.2023

6. Environmental Studies by Erach Bharucha; University Press (India) Private Ltd., Hyderabad.
7. Environmental Engineering and Management by Suresh K Dhamija; S K Kataria and Sons, New Delhi.
8. E-books/e-tools/relevant software to be used as recommended by AICTE/UBTE/NITTTR, Chandigarh.

**Websites for Reference:**

<http://swayam.gov.in>

**SUGGESTED DISTRIBUTION OF MARKS**

<b>Topic No.</b>	<b>Time Allotted (Periods)</b>	<b>Marks Allotted (%)</b>
1	04	10
2	04	10
3	08	20
4	06	14
5	06	14
6	08	20
<b>7</b>	<b>06</b>	<b>12</b>
<b>Total</b>	<b>42</b>	<b>100</b>

## RATIONALE

Major Project Work aims at developing innovative skills in the students whereby they apply in totality the knowledge and skills gained through the course work in the solution of particular problem or by undertaking a project. In addition, the project work is intended to place students for project oriented practical training in actual work situation for the stipulated period.

## LEARNING OUTCOMES

After undergoing the project work, students will be able to:

Apply in totality the knowledge and skills gained through the course work in the solution of particular problem or by undertaking a project. In addition, the project work is intended to place the learner for project oriented practical training in actual work situation for the stipulated period with a view to:

- Develop understanding regarding the size and scale of operations and nature of field-work in which students are going to play their role after completing the courses of study
- Develop understanding of subject based knowledge given in the classroom in the context of its application at work places.
- Develop firsthand experience and confidence amongst the students to enable them to use and apply polytechnic/institute based knowledge and skills to solve practical problems related to the world of work.
- Develop abilities like interpersonal skills, communication skills, positive attitudes and values etc.

### General Guidelines

The individual students have different aptitudes and strengths. Project work, therefore, should match the strengths of students. For this purpose, students should be asked to identify the type of project work, they would like to execute. The activity of problem identification should begin well in advance (say at the end of second year). Students should be allotted a problem of interest to him/her as a major project work. It is also essential that the faculty of the respective department may have a brainstorming session to identify suitable project assignments for their students. The project assignment can be individual assignment or a group assignment. There should not be more than 3 students if the project work is given to a group. The project work identified in collaboration with industry should be preferred.

This practical training cum project work **should not be considered** as merely conventional industrial training in which students are sent at work places with either minimal or no supervision. This experience is required to be planned in advance and supervised on regular basis by the polytechnic faculty. For the fulfillment of above objectives, polytechnics may establish close linkage with 8-10 relevant organization for providing such an experience to students. It is necessary that each organization is visited well in advance and activities to be performed by students are well defined. The chosen activities should be such that it matches with the curricular interest to students and of professional value to industrial/ field organizations. Each teacher is expected to supervise and guide 5-6 students.

The projects given to students should be such for which someone is waiting for solution. Some of the suggested project activities are given below:

At the end of the project student will submit a written report of his/ their accomplishment and face a viva voce examination individually.

**NOTE:** Each student has to take one project individually and one to be shared with a group of four-five students depending upon cost and time involved. There is no binding to take up the above projects as it is only a suggestive list of projects.

A suggestive criterion for assessing student performance by the external (person from industry) and internal (teacher) examiner is given in table below:

Sr. No.	Performance Criteria	Max.** Marks	Rating Scale				
			Excellent	Very Good	Good	Fair	Poor
1.	Selection of project assignment	10%	10	8	6	4	2
2.	Planning and execution of considerations	10%	10	8	6	4	2
3.	Quality of performance	20%	20	16	12	8	4
4.	Providing solution of the problems or production of final product	20%	20	16	12	8	4
5.	Sense of responsibility	10%	10	8	6	4	2
6.	Self expression/ communication skills	5%	5	4	3	2	1
7.	Interpersonal skills/human relations	5%	5	4	3	2	1
8.	Report writing skills	10%	10	8	6	4	2
9	Viva voce	10%	10	8	6	4	2
<b>Total marks</b>		<b>100</b>	<b>100</b>	<b>80</b>	<b>60</b>	<b>40</b>	<b>20</b>

The overall grading of the practical training shall be made as per following table.

In order to qualify for the diploma, students must get “Overall Good grade” failing which the students may be given one more chance to improve and re-evaluate before being disqualified and declared “not eligible to receive diploma”. It is also important to note that the students must get more than six “goods” or above “good” grade in different performance criteria items in order to get “Overall Good” grade.

	Range of maximum marks	Overall grade
i)	More than 80	<i>Excellent</i>
ii)	79 < 65	Very good
iii)	64 < 50	Good
iv)	49 < 40	Fair
v)	Less than 40	Poor

### Important Notes

- This criteria must be followed by the internal and external examiner and they should see the daily, weekly and monthly reports while awarding marks as per the above criteria.**



2. **The criteria for evaluation of the students have been worked out for 200 maximum marks. The internal and external examiners will evaluate students separately and give marks as per the study and evaluation scheme of examination.**
3. **The external examiner, preferably, a person from industry/organization, who has been associated with the project-oriented professional training of the students, should evaluate the students performance as per the above criteria.**
4. **It is also proposed that two students or two projects which are rated best be given merit certificate at the time of annual day of the institute. It would be better if specific nearby industries are approached for instituting such awards.**

Any one of the following.

- i. Comparative study of different library systems/services.

OR

Case study of library of repute.

- ii. Plans and proposals for establishing a library/documentation centre.

- iii. Users Survey.

OR

Any other related topic/subject covered in the syllabus.

### **STUDY TOUR**

Visiting of Libraries of National Repute and Submission of Report

## 10. RESOURCE REQUIREMENT

### 10.1 PHYSICAL RESOURCES

#### (A) Space requirement

Norms and standards laid down by All India Council for Technical Education (AICTE) are to be followed to work out space requirement in respect of class rooms, tutorial rooms, drawing halls, laboratories, space required for faculty, student amenities and residential area for staff and students.

#### (B) Equipment requirement:

Following Laboratories are required for Diploma Programme in Library and Information Science:

- Communication Laboratory
- Basics of Information Technology/Computer Laboratory
- Environmental Engineering Lab
- Knowledge Organization Lab
- Information Processing and Retrieval Lab
- Information Technology and Libraries Lab

**EQUIPMENT REQUIREMENT FOR LIBRARY AND INFORMATION  
SCIENCE**

<b>Sr. No.</b>	<b>Description</b>	<b>Qty</b>	<b>Total Price (Rs)</b>
<b>COMMUNICATION LABORATORY</b>			
1.	Stools	40	10,000
2.	Display Board/Screen	2	6,000
3.	Sound recording and playing system	1	6,000
4.	Audio cassettes	60	2,000
5.	Overhead Projector	1	5,000
6.	Transparencies slides	100	500
7.	TV, VCR and camera for video recording	1 each	20,000
8.	English spoken course	1	2,000
9.	A Quiz room equipped with two way audio system, back projection system and slide projector	1	30,000
10.	<i>Miscellaneous</i>	<i>LS</i>	<i>1,500</i>

<b>ENVIRONMENT ENGINEERING LABORATORY</b>		
pH Meter	01	500
Turbidity Meter	01	5000
Oven with Temperature Controller and Forced Air Circulation Type	01	20000
B.O.D. Incubator	01	25000
Water Analysis Kit	01	5000
High Volume Sampler	01	40000
Electrical Balance for weighing upto 1/10 of milligram (capacity)	01	1000

<b>BASICS OF IT LABORATORY/COMPUTER LABORATORY</b>		
Computer System with latest configuration	30	8,00,000
Printer (MFP)	1	25,000
Printer (Laser)	1	35,000
Plotter	1	75,000
Digitiser	1	50,000
Antivirus Software	LS	10,000
Internet Facility on Computers	LS	2,00,000

**NOTE : Equipment for different shop and lab of latest version should be purchased.**

### **General Lab Items:**

<b>Sr No</b>	<b>Item</b>	<b>QTY</b>
1	Catalogue Cabinets	2 Nos.
2	Bookshelves as per stock	4 Units.
3	Periodical Racks	1 "
4	Filing cabinet	1 No.
5	Pamphlet Box	20 Nos.
6	Issue Trays	5 Nos.
7	Projector	1 No.
9	Filing Trays	6 Nos.
10	Photo Copier	1 No.
12	e-Granthalay	1 No.
13	Any other open source library management software	1 No.

### **Books:**

- A. Number of sets of Dewey Decimal Classification and Colon Classification schedules in the ration of 1 set for 2 student and 1 set for staff.
- B. Sears list of subject heading in the ratio of one book for 5 student and 1 for staff.
- C. A.A.C.R. 2 and C.C.C Vth edition in the ratio of 1 code for 2 students.
- D. Cuter tables at the rate of 1 set for 10 students.

### **Digital Library Cum e-Resources Library:**

PC Latest Configuration with Computer Table & Chair	10 No.
Laser Printer with Scanner For Bar Code Purpose	1 No.
UPS	10 No.
AC	2 No.
Broadband Connectivity/WIFI	1 No
Hand Scanner	2 No
CD Box (Wooden)	1 No.

### **Membership of professional societies.**

- A. I.L.A.
- B. I.A.S.L.I.C.
- C. U.P.L.A.

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IN CDC MEETING HELD ON 19.08.2023

**Journals (Subject to availability of funds)**

- Library science with slant to documentation.
- Annals of library science and documentation.
- Library Herald.
- Lucknow Librarian.
- Herald of library science.
- Journal of library and Information Science.
- LIBRA
- Library resources and technical services.
- IASLIC Bulletin
- ILA Bulletin

**National Digital Library Integration/e-Library Integration**

## **LIBRARY CLASSIFICATION (Subject to availability of funds)**

1. MANN (Margaret) Introduction to cataloguing and classification books.
2. MILLS(J) Modern outline of library classification.
3. PALMER(Bernard I) Fundamentals of library &WELLS(Arthur James) classification
4. PARKHI (R S) Decimal classification and colon classification in perspective.
5. RANGANATHAN (S R) Descriptive account of colon classification in perspective.
6. RANGANATHAN (S R) Prolegomena to library classification. 3rd edition.
7. KRISHAN KUMAR. Theory of classification.
8. C.D. Needhum Organising knowledge of libraries.
9. DEWEY (Melvil). Decimal classification and relative index. 20th edition New York Lake Plecid Club, 1979.
10. RANGANATHAN (S R) Colon Classification. 6th reprint edition. Bombay Asia, 1964.
11. Lewis Chan Library cataloguing and classification.
12. Dr. B. D. Sharma Theoretical Library Classification Y. K. Publication, Agra

## **LIBRARY CATALOGUING**

1. GIRJA KUMAR AND KRISHAN KUMAR Theory of cataloguing.
2. SENGUPTA (B) Cataloguing : its theory and practice.
3. RANGANATHAN (S R ) Classified Catalogue Code with additional rules for dictionary catalogue 5th edition.
4. ERIC HUNTER Cataloguing
5. C. G. VISHWANATHAN Cataloguing Theory and Practice 6th editon.
6. Anglo - American Cataloguing Rules IInd edition 1978.
7. Sear's list of subject headings. Latest edition available.
8. BOLL (John J). Introduction to cataloguing 3 volumes.
- 9.. S.N.SINGH & H.N. PRASAD Manual of AACR.
10. ERIC HUNTER Examples illustrating AACR.
11. C. D. SHARMA Classified catalogue.
12. Dr. B. D. Sharma Classified Catalogue Code:A Practical Study Y. K. Publication, Agra

## **LIBRARY ORGANISATION**

1. MARSHAL (D N) History of Libraries.
2. ORR (J M). Designing library buildings for activity.
3. RANGANATHAN (S R) Five Laws of library science 4nd ed.
4. SADHU (S N) and SARAF (B N) Library legislation in India.
5. Report of the Advisory Committee for Libraries, 1958.
6. INGEBORG (Haintze) Organisation of the small public library system.
7. KAULA (P N) National Library of India : Critical study.
8. RANGANATHAN (S R) & NEELAMEGHAN (A). Public library system : India, Sri lanka, ULKA, U.S.A., comparative Library legislation.
9. C. G. VISHWANATHAN An Introduction to Library Organisation
10. J. K. KHANNA Library & Society.
11. S. N. MUKHERJEE Library organisation and administration.

## **LIBRARY ADMINISTRATION**

1. BROWN (James Duff) Manual of library economy.
2. HAINES (Helen E) Living with books the art of book selection.
3. CARTER (M D) and Building library collection.  
BONK (W J)
4. RANGANATHAN (S R) library book selections.
5. -do- Library manual.
6. -do- Library Administration.
7. MITTAL (R L) Library Administration.
8. EDMOND Library Organisation & Administration.
9. KRISHNA KUMAR Library Administration.
10. C. G. VISHWANATHAN Public Libraries Services & Operations  
Legislation (UNESCO)

## **REFERENCE SOURCE SERVICE**

1. CHENEY (F N) Fundamental reference sources.
2. HUTCHINS (Margaret). Introduction to reference work.
3. KATZ (Willaim A). Introduction to reference work.
4. MUKHEREJEE (A K) Reference work and its tools.
5. RANGANATHAN (S R) Reference services 2nd ed.
6. WALFORD (A J) Guide to reference material.
7. WINGHELL(Constance M) Guide to reference books 8th ed.
8. KENT & OTHERS Encyclopedia of Library & Information Service.
9. B. M. GUPTA Hand Book of Libraries, Archives and Information centres in India.
10. KRISHNA KUMAR Reference Service
11. CHARABORTY (M L) Bibliography in theory and practice 2nd ed.
12. ESDAILE (A) Student manual of bibliography 3rd ed.
13. GIRJA KUMAR AND KRISHAN KUMAR Bibliography 2nd ed.

## **Documentation & Information Services**

1. BRADFORD (S C) Documentation 2nd ed.
2. FRANK (O) ed. Modern documentation and information practice.
3. SHERA (Jesse H) Documentation in action.
4. GUHA B. Documentation & Information Services, techniques & systems
5. ASHWORTH Hand Book of special Librarianship.
6. KWATRA(PS) Fundamentals of documentation: with special reference to India.
7. MUKHARJEE(AK) Fundamental of special librarianship & Documentation.
8. SOOD(SP) Pralekhan(Hindi),Delhi:Metropolitan
9. SOOD (SP) SUCHANA SEVA (HINDI). JAIPUR:RBSA.1995
10. TRIPATHI (SM) NEW DIMENSIONS IN INFORMATION SERVICE (HINDI),AGRA:YK PUB.,1994
11. RAJAN (TN) INDEXING & ITS TECHNIQUES.



## **ANNEXURE : SUMMER TRAINING SCHEDULE**

4 weeks structured, supervised, branch specific, task oriented industrial/field exposure to be organized during summer vacation after second year annual examination.

The student during the vocational training must undertake training in the topics given in the format below.

The students will work and Focus their attention on the following points which will be incorporated by them in their reports.

1. Name of The Library
2. Year of Establishment
3. Annual Budget Details
4. Library Building
5. Library Staff Details
6. Details of collection
7. Classification scheme used.
8. Catalogue Code used
9. Information Services rendered by the library.
10. Circulation system.
11. Users of the library.
12. Equipment used in the library
  - (a) Photo copier
  - (b) Computer
  - (c) Audiovisual
  - (d) Electronic Type Writer

## **11.. EVALUATION STRATEGY**

### **11.1 INTRODUCTION**

Evaluation plays an important role in the teaching-learning process. The major objective of any teaching-learning endeavor is to ensure the quality of the product which can be accessed through learner's evaluation.

The purpose of student evaluation is to determine the extent to which the general and the specific objectives of curriculum have been achieved. Student evaluation is also important from the point of view of ascertaining the quality of instructional processes and to get feedback for curriculum improvement. It helps the teachers in determining the level of appropriateness of teaching experiences provided to learners to meet their individual and professional needs. Evaluation also helps in diagnosing learning difficulties of the students. Evaluation is of two types: Formative and Summative (Internal and External Evaluation)

#### **Formative Evaluation**

It is an on-going evaluation process. Its purpose is to provide continuous and comprehensive feedback to students and teachers concerning teaching-learning process. It provides correctivesteps to be taken to account for curricular as well as co-curricular aspects.

#### **Summative Evaluation**

It is carried out at the end of a unit of instruction like topic, subject, semester or year. The main purpose of summative evaluation is to measure achievement for assigning course grades, certification of students and ascertaining accountability of instructional process. The student evaluation has to be done in a comprehensive and systematic manner since any mistake or lacuna is likely to affect the future of students.

In the present educational scenario in India, where summative evaluation plays an important role in educational process, there is a need to improve the standard of summative evaluation with a view to bring validity and reliability in the end-term examination system for achieving objectivity and efficiency in evaluation.

### **11.2 STUDENTS' EVALUATION AREAS**

The student evaluation is carried out for the following areas:

Theory  
Practical Work (Laboratory, Workshop, Field Exercises)  
Project Work  
Professional Industrial Training

## A. Theory

Evaluation in theory aims at assessing students' understanding of concepts, principles and procedures related to a course/subject, and their ability to apply learnt principles and solve problems. The formative evaluation for theory subjects may be caused through sessional /class-tests, home-assignments, tutorial-work, seminars, and group discussions etc. For end-term evaluation of theory, the question paper may comprise of three sections.

### Section-I

It should contain objective type items e.g. multiple choice, matching and completion type. Total weightage to Section-1 should be of the order of 20 percent of the total marks and no choice should be given in this section. The objective type items should be used to evaluate students' performance in knowledge, comprehension and at the most application domains only.

### Section-II

It should contain short answer/completion items. The weightage to this section should be of the order of 40 percent of the total marks. Again, no choice should be given in section-II

### Section-III

It may contain two to three essay type questions. Total weightage to this section should be of the order of 40 percent of the total marks. Some built-in, internal choice of about 50 percent of the questions set, can be given in this section

Table II : Suggested Weightage to be given to different ability levels

Abilities	Weightage to be assigned
Knowledge	10-30 percent
Comprehension	40-60 percent
Application	20-30 percent
Higher than application i.e. Analysis, Synthesis and Evaluation	Upto 10 percent

## B. Practical Work

Evaluation of students performance in practical work (Laboratory experiments, Workshop practicals/field exercises) aims at assessing students ability to apply or practice learnt concepts, principles and procedures, manipulative skills, ability to observe and record, ability to interpret and draw conclusions and work related attitudes. Formative and summative evaluation may comprise of weightages to performance on task, quality of product, general behaviour and it should be followed by viva-voce.

### C. Project Work

The purpose of evaluation of project work is to assess students ability to apply, in an integrated manner, learnt knowledge and skills in solving real life problems, manipulative skills, ability to observe, record, creativity and communication skills. The formative and summative evaluation may comprise of weightage to nature of project, quality of product, quality of report and quality of presentation followed by viva-voce.

### D. Professional Industrial Training

Evaluation of professional industrial training report and viva-voce/ presentation aims at assessing students' understanding of materials, industrial processes, practices in the industry/field and their ability to engage in activities related to problem-solving in industrial setting as well as understanding of application of learnt knowledge and skills in real life situation. The formative and summative evaluation may comprise of weightages to performance in testing, general behaviour, quality of report and presentation during viva-voce.

## 10.3 ASPECTS OF QUESTION PAPER SETTING

Validity and reliability are the most important considerations in the selection and construction of evaluation procedures. First and foremost are the evaluation tools to measure the specific outcomes for which they are intended to measure. Next in importance is reliability, and following that is a host of practical features that can be classified under the heading of usability.

For weightage of marks assigned to formative (internal) and summative (external) evaluation and duration of evaluation has been given in the study and evaluation scheme of the curriculum document. Teachers/Paper-setters/Examiners may use Manual for Students' Evaluation developed by IRDT U.P. Kanpur to bring objectivity in the evaluation system. The working group found it very difficult to detail out precisely the contents of subject on languages and therefore teachers may send guidelines to respective examiners for paper setting to maintain objectivity in evaluation.

## **12. RECOMMENDATIONS FOR EFFECTIVE CURRICULUM IMPLEMENTATION**

This curriculum document is a Plan of Action (POA) and has been prepared based on exhaustive exercise of curriculum planning and design. The representative sample comprising selected senior personnel (lecturers and HODs) from various institutions and experts from industry/field have been involved in curriculum design process.

The document so prepared is now ready for its implementation. It is the faculty of polytechnics who have to play a vital role in planning instructional experiences for the courses in four different environments viz. class-room, laboratory, library and field and execute them in right perspective. It is emphasized that a proper mix of different teaching methods in all these places of instruction only can bring the changes in stipulated students behaviour as in the curriculum document. It is important for the teachers to understand curriculum document holistically and further be aware of intricacies of teaching-learning process (T-L) for achieving curriculum objectives. Given below are certain suggestions which may help the teachers in planning and designing learning experiences effectively. These are indicative in nature and teachers using their creativity can further develop/refine them. The designers of the programme suggest every course teacher to read them carefully, comprehend and start using them.

### **(A) Broad Suggestions:**

1. Curriculum implementation takes place at programme, course and class-room level respectively and synchronization among them is required for its success. The first step towards achieving synchronization is to read curriculum document holistically and understand its rationale and philosophy.
2. State Board of Technical Education (BTE) may make the academic plan available to all polytechnics well in advance. The Principals have a great role to play in its dissemination and, percolation upto grass-root level. Polytechnics in turn are supposed to prepare institutional academic plan by referring state level BTE plan.
3. HOD of every Programme Department along with HODs and in charges of other departments viz. English, Maths, Physics, Chemistry etc. are required to prepare academic plan at department level referring institutional academic plan.
4. All lecturers/Senior lecturers are required to prepare course level and class level lesson plans referring departmental academic plan.

### **(B) Course Level Suggestions**

Teachers are educational managers at class room level and their success in achieving course level objectives lies in using course plan and their judicious execution which is very important for the success of programme by achieving its objectives.

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Polytechnic teachers are required to plan various instructional experiences viz. theory lecture, expert lectures, lab/workshop practicals, guided library exercises, field visits, study tours, camps etc. In addition, they have to carry out progressive assessment of theory, assignments, library, practicals and field experiences. Teachers are also required to do all these activities within a stipulated period of 16 weeks which is made available to them in the academic plan at BTE level. With the amount of time to their credit, it is essential for them to use it judiciously by planning all above activities properly and ensure execution of the plan effectively.

Following is the gist of suggestions for subject teachers to carry out T-L process effectively:

1. Teachers are required to prepare a course plan, taking into account departmental academic plan, number of weeks available, course to be taught, different learning experiences required to be developed etc.
2. Teachers are required to prepare lesson plan for every theory class. This plan may comprise of content to be covered, learning material (transparencies, VCDs, Models etc.) for execution of a lesson plan. They may follow steps for preparing lesson plan e.g. drawing attention, state instructional objectives, help in recalling pre-requisite knowledge, deliver planned subject content, check desired learning outcome and reinforce learning etc.
3. Teachers are required to plan for expert lectures from field/industry. Necessary steps are to plan in advance, identify field experts, make correspondence to invite them, take necessary budgetary approval etc.
4. Teachers are required to plan for guided library exercises by identification of course specific experience requirement, setting time, assessment, etc. The tutorial, assignment and seminar can be thought of as terminal outcome of library experiences.
5. Concept and content-based field visits with appropriate releases (day-block) may be planned and executed for such content of course which otherwise is abstract in nature and no other requisite resources are readily available in institute to impart them effectively.
6. There is a dire need for planning practical experiences in right perspective. These slots in a course are the avenues to use problem-based learning/activity learning/ experiential learning approach effectively. The development of lab instruction sheets for the course is a good beginning to provide lab experiences effectively.
7. Planning of progressive assessment encompasses periodical assessment in semester, preparation of proper quality question paper, assessment of answer sheets immediately and giving constructive explicit feedback to every student. It has to be planned properly; otherwise very purpose of the same is lost.
8. The co-curricular activities like camp, social gathering, study tour, hobby club etc. may be used to develop generic skills like task management, problem solving, managing self, collaborating with others etc.

9. Where ever possible, it is essential to use activity based learning rather than relying on delivery based conventional teaching all the time.
10. While imparting instructions, emphasis may be laid on the development of cognitive, psychomotor, reactive and interactive skills in the students.
11. Teachers may take working drawings from the industry/field and provide practices inreading these drawings.
12. Considerable emphasis should be laid in discipline specific contracting and repair andmaintenance of machines, tools and installations.
13. Teachers may take initiative in establishing liaison with industries and field organizations for imparting field experiences to their students.
14. Case studies and assignments may be given to students for understanding of EnterpriseResource Management (ERM).
15. Students be made aware about issues related to ecology and environment, safety, concernfor wastage of energy and other resources etc.
16. Students may be given relevant and well thought out minor and major project assignments,which are purposeful and develop practical skills. This will help students in developing creativity and confidence for their gainful employment (wage and self).
17. A Project bank may be developed by the concerned department of the polytechnics in consultation with related Industry, Research Institutes and other relevant field organizations in thestate.

### **13. List of Participants (Experts)**

The following experts have participated in workshop for Developing the Curricula Structure and Contents of Two-year Diploma Programme in Library and Information Science for UP State ,workshop held on 14<sup>th</sup> March 2023 and 22<sup>nd</sup> June 2023 at IRDT U.P. Kanpur:

- Smt. Mamta Avasthi, Head of Department, Library and Information Science, Sri Ram Devi Ram Dayal Mahila polytechnic Kanpur
- Smt. Neetu Kanaujia, Lecturer, Library and Information Science, Sri Ram Devi Ram Dayal Mahila polytechnic Kanpur
- Shri Rajesh Kumar, Lecturer, Library and Information Science, Anar Devi Khandelwal Mahila Polytechnic, Mathura
- Smt. Gayatri Yadav, Librarian, Government Polytechnic Kanpur
- Smt. Sonia Verma, Librarian, Government Polytechnic Lucknow
- Shri Gaurav Kishor Kanaujiya, Assistant Professor/Coordinator, IRDT Kanpur