COMPETENCY BASED CURRICULUM

DIPLOMA
IN
LIBRARY AND INFORMATION SCIENCE

(Duration 03 Years)
NSQF Level – 5

Under
Haryana State Board of Technical Education

Developed By

Curriculum Development Center

National Institute of Technical Teachers Training & Research

(Ministry of Education, Government of India)

Sector - 26, Chandigarh, UT, India.

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PREFACE

Learning and learning experience are the foundation of any education system. Appropriateness of education and its useful implications stand on the platform of knowledge and skill. But the knowledge and skill cannot be quantified qualitatively without ensuring learning experience. Curriculum is the pathway to select and organise learning experience. It helps the teachers to provide tangible resources, goals and objectives to learners. Curriculum acts as a catalyst to stimulate creativity, innovation, ethics, values, responsibility and many human factors. Curriculum embodies rigour and high standards and creates coherence to empower learner to meet the industrial and societal needs. Curriculum is a central guide for a teacher to plan a standard based sequence for the instructional delivery.

The industrial revolution 4.0 has forced the technical education system to reinvent the curriculum to meet the human resource requirement of the industry. The data driven systems relying on the subjects like machine-learning, Artificial Intelligence, Data Science etc are literally forcing the technical education system to offer different subjects differently to address the emerging challenges. The non-linear way of learning now facilitates students to choose path of knowledge to skill or vice-versa. The bi-directional process requires innovative curriculum design and revision. Diploma programme is now more challenging than ever. The level of skill and knowledge demanded by industry from diploma holders are highly interdisciplinary at the same time address special need. Hence, there is a need to align the curriculum to National Skill Qualification Framework (NSQF).

National Education Policy, NEP-2020 has now opened up diversities for the education system to explore and exploit to make the education relevant. The policy emphasises to inculcate value, ethics, respect to culture and society etc along with industry ready knowledge and skill among the students. The interdisciplinary nature of curriculum, academic bank of credits and integration of technology in teaching-learning envisaged in NEP-2020 make it more challenging for curriculum development. NITTTR, Chandigarh has developed the art of curriculum development over 54 years of its existence. The expertise and experience available in the institute follow time-tested and acclaimed scientific methods to design/revise curriculum. The experienced faculty members entrusted with the curriculum development or revision activities are well-versed with NSQF, NEP and Outcome based education. I am happy to note that **Haryana State Board of Technical Education, Panchkula, Haryana** reposed their confidence on this expertise to develop **AICTE/NSQF/NEP 2020** aligned curriculum for the state. This documented curriculum is an outcome of meticulous planning and discussions among renowned experts of the subject through series of workshops. The effective implementation of this curriculum supported with quality instructional resources will go a long way in infusing the learning experience among learners to make them industry ready.

Director

National Institute of Technical Teachers Training & Research, Chandigarh

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Professor and Head
Curriculum Development Center
National Institute of Technical Teachers Training & Research, Chandigarh

TABLE OF CONTENTS

1. SALIENT FEATURES

1.	Name	:	**Diploma in Library and Information Science**
2.	Duration	:	**03 Years**
3.	Hours per week	:	**35**
4.	Entry Qualification	:	**10th Pass**
5.	Student Intake	:	**As per sanctioned strength**
6.	Programme Pattern	:	**Semester**
7.	Scheme	**:**	**Multipoint Entry and Exit**
8.	NSQF Level	:	**5**
9.	Theory Practical Ratio	:	**23 : 77**
10.	Project Work	:	**Minor and Major Project**
11.	In-house/Industrial Internship	:	**Mandatory after First and Second Year**
12.	Professional Training	**:**	**Six Month internship**

2. NSQF GUIDELINES

National Skill Qualification Framework has defined total Ten Levels. Each level of the NSQF is associated with a set of descriptors made up of five outcome statements, which describe in general terms, the minimum knowledge, skills and attributes that a learner needs to acquire in order to be certified for that level.

Fig.1: NSQF Domains

NSQF LEVEL - 3 COMPLIANCE

The NSQF level - 3 descriptor is as follows:

Process	• Person may carry out a job which may require limited range of activities routine and predictable.
Professional Knowledge	• Basic facts, process and principle applied in trade of employment.
Professional Skill	• Recall and demonstrate practical skill, routine and repetitive in narrow range of application.
Core Skill	• Communication written and oral, with minimum required clarity, skill of basic arithmetic and algebraic principles, personal banking, basic understanding of social and natural environment.
Responsibility	• Under close supervision. Some responsibility for own work within defined limit.

Fig 2: NSQF Level – 3 Descriptor

Work requiring knowledge, skills and aptitudes at level 3 will be routine and predictable. Job holders will be responsible for carrying out a limited range of jobs under close supervision. Their work may require the completion of a number of related tasks. People carrying out these job roles may be described as "Semi skilled workers". Individuals in jobs which require level 3 qualifications will normally be expected to be able to communicate clearly in speech and writing and may be required to use arithmetic and algebraic processes. They will be expected to have previous knowledge and skills in the occupation and should know the basic facts, processes and principles applied in the trade for which they are qualified and be able to apply the basic skills of the trade to a limited range of straightforward jobs in the occupation.

They will be expected to understand what constitutes quality in their job role and more widely in the sector or sub-sector and to distinguish between good and bad quality in the context of the jobs they are given. Job holders at this level will be expected to carry out the jobs they are given safely and securely. They will work hygienically and in ways which show an understanding of environmental issues. This means that they will be expected to take responsibility for their own health and safety and that of fellow workers and, where appropriate, customers and/or clients. In working with others, they will be expected to conduct themselves in ways which show a basic understanding of the social environment. They should be able to make a good contribution to team work.

NSQF LEVEL - 4 COMPLIANCE

The NSQF level-4 descriptor is given below:

Process	• Work in familiar, predictable, routine, situation of clear choice
Professional Knowledge	• Factual knowledge of field of knowledge or study.
Professional Skill	• Recall and demonstrate practical skill, routine and repetitive in narrow range of application, using appropriate rule and tool, using quality concepts.
Core Skill	• Communication written and oral, with required clarity, skill of basic arithmetic and algebraic principles, personal banking, basic understanding of social and natural environment.
Responsibility	• Responsibility for own work and learning.

Fig 3: NSQF Level – 4 Descriptor

Work requiring knowledge, skills and aptitudes at level 4 will be carried out in familiar, predictable and routine situations. Job holders will be responsible for carrying out a range of jobs, some of which will require them to make choices about the approaches they adopt. They will be expected to learn and improve their practice on the job. People carrying out these jobs may be described as "skilled workers". Individuals in jobs which require level 4 qualifications should be able to communicate clearly in speech and writing and may be required to use arithmetic and algebraic processes. They will be expected to have previous knowledge and skills in the occupation in which they are employed, to appreciate the nature of the occupation and to understand and apply the rules which govern good practice. They will be able to make choices about the best way to carry out routine jobs where the choices are clear.

They will be expected to understand what constitutes quality in the occupation and will distinguish between good and bad quality in the context of their job roles. Job holders at this level will be expected to carry out their work safely and securely and take full account of the health and safety on colleagues and customers. They will work hygienically and in ways which show an understanding of environmental issues. In working with others, they will be expected to conduct themselves in ways which show a basic understanding of the social and political environment. They should be able to guide or lead teams on work within their capability.

NSQF LEVEL - 5 COMPLIANCE

The NSQF level-5 description is given below:

Process	• Job that requires well developed skill, with clear choice of procedures in familiar context.
Professional Knowledge	• Knowledge of facts, principles, processes and general concepts, in a field of work or study.
Professional Skill	• A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information.
Core Skill	• Desired mathematical skill; understanding of social, political; and some skill of collecting and organising information, communication.
Responsibility	• Responsibility for own work and learning and some responsibility for others' works and learning

Fig 4: NSQF Level – 5 Descriptor

Work requiring knowledge, skills and aptitudes at level 5 will also be carried out in familiar situations, but also ones where problems may arise. Job holders will be able to make choices about the best procedures to adopt to address problems where the choices are clear. Individuals in jobs which require level 5 qualifications will normally be responsible for the completion of their own work and expected to learn and improve their performance on the job. They will require well developed practical and cognitive skills to complete their work. They may also have some responsibility for others' work and learning. People carrying out these jobs may be described as "fully skilled workers" or "supervisors".

Individuals employed to carry out these jobs will be expected to be able to communicate clearly in speech and writing and may be required to apply mathematical processes. They should also be able to collect and organise information to communicate about the work. They will solve problems by selecting and applying methods, tools, materials and information. They will be expected to have previous knowledge and skills in the occupation, and to know and apply facts, principles, processes and general concepts in the occupation. They will be expected to understand what constitutes quality in the occupation and will distinguish between good and bad quality in the context of their work. They will be expected to operate hygienically and in ways which show an understanding of environmental issues. They will take account of health and safety issues as they affect the work they carry out or supervise.

In working with others, they will be expected to conduct themselves in ways which show an understanding of the social and political environment.

3. NATIONAL EDUCATION POLICY (NEP) - 2020

NEP 2020 aims at a comprehensive holistic education to develop all capacities of human beings - intellectual, aesthetic, social, physical, emotional, and moral - in an integrated manner. A holistic arts education will help develop well-rounded individuals that possess: critical 21st century capacities in fields across the arts, humanities, languages, sciences, social sciences, and professional, technical, and vocational fields; an ethic of social engagement; soft skills, such as communication, discussion and debate; and rigorous specialization in a chosen field or fields. Such a holistic education shall be, in the long term, the approach of all undergraduate programmes, including those in professional, technical, and vocational disciplines.

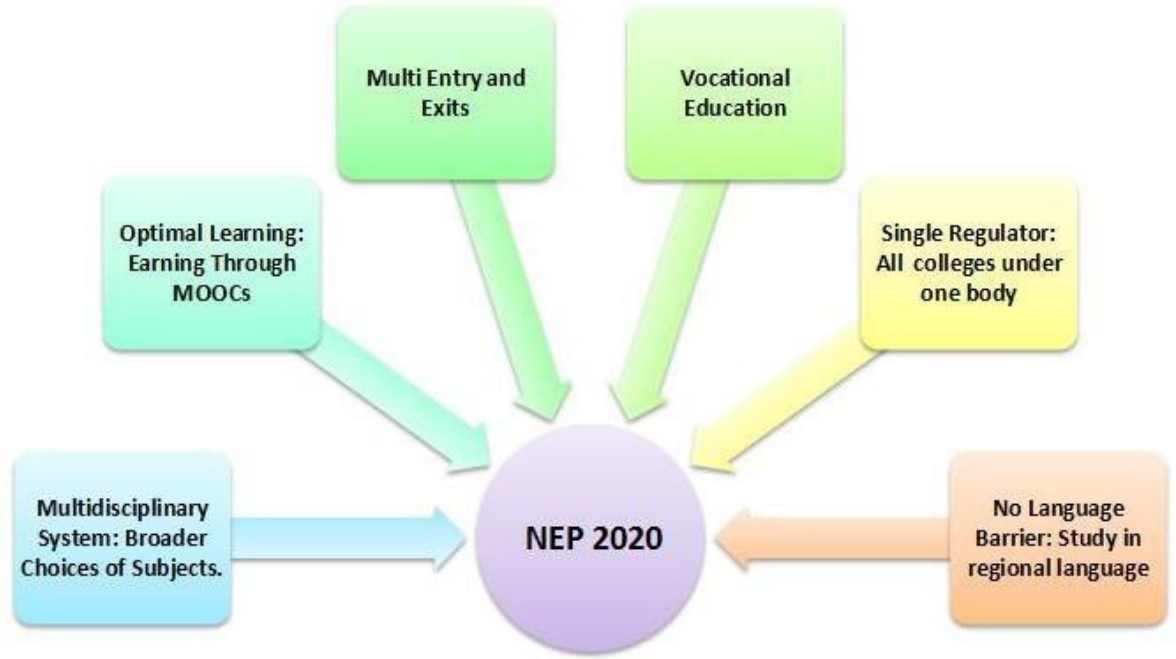

Fig 5: NEP 2020

Flexibility in curriculum and novel and engaging course options will be on offer to students, in addition to rigorous specialisation in a subject or subjects. Pedagogy for courses will strive for significantly less rote learning and an increased emphasis on communication, discussion, debate, research, and opportunities for cross-disciplinary and interdisciplinary thinking. The flexible and innovative curriculum shall emphasize on offering credit-based courses and projects in the areas of community engagement and service, environmental education and value-based education. as part of a holistic education, students will be provided with opportunities for internships with local industry, businesses, artists, crafts persons, villages and local communities, etc., as well as

research internships with faculty and researchers at their own or other HEIs or research institutions, so that students may actively engage with the practical side of their learning and, as a by-product, further improve their employability.

Effective learning requires relevant curriculum, engaging pedagogy, continuous formative assessment and adequate student support. The curriculum must be updated regularly aligning with the latest knowledge requirements and shall meet specified learning outcomes. High-quality pedagogy is then necessary to successfully impart the curricular material to students; pedagogical practices determine the learning experiences that are provided to students - thus directly influencing learning outcomes. The assessment methods have to be scientific and test the application of knowledge. Higher Education Institutes should move to a criterion-based grading system that assesses student achievement based on the learning goals for each programme, making the system fairer and outcomes more comparable. HEIs should also move away from high-stakes examinations towards more continuous and comprehensive evaluation.

4. PROGRAMME OUTCOMES

The program outcomes are derived from five domains of NSQF Level namely Process, Professional Knowledge, Professional Skill, Core Skill, Responsibility. After completing this programme, the student will be able to:

PO1: Outline and appreciate the function and purposes of LISs in the changing social, cultural, technological and economic environment.

PO2: Develop thorough knowledge of various sources of information, their organization and the necessary skills to provide traditional and modern library services.

PO3: Acquire the required skills with quality and creativity and excel themselves in the Library and Information Science field.

PO4: Demonstrate skill of communication, collecting and organizing information along with knowledge of social, political and natural environment.

PO5: Demonstrate library skills including Managerial, conceptual, technical, soft skills, decision making, analytical for ongoing professional development.

PO6: Engage in multidisciplinary fields in the context of Library and Information Sciences for independent and life-long learning activities.

5. DERIVING CURRICULUM AREAS FROM PROGRAMME OUTCOMES

The following curriculum areas have been derived from Programme outcomes:

Sr. No.	Programme Outcomes	Curriculum Subjects / Areas
1.	PO1: Outline and appreciate the function and purposes of LISs in the changing social, cultural, technological and economic environment	● Library & Information Society ● Information Sources & Services ● Library & Information Management – I ● Library Automation ● Library & Information Management - II ● Library Automation and Networking ● Digital Library ● Internet Applications in Library
2.	PO2: Develop thorough knowledge of various sources of information, their organization and the necessary skills to provide traditional and modern library services.	● Library & Information Society ● Library Classification –I ● Library Classification –II ● Library Cataloguing-I ● Library Cataloguing-II ● Advanced Library Classification ● Advanced Library Cataloguing ● Information Storage & Retrieval ● Library & Information Management - II ● Academic Library and Information system ● Information Literacy
3.	PO3: Acquire the required skills with quality and creativity and excel themselves in the Library and Information Science field.	• Library Classification –I • Library Classification –II • Library Cataloguing-I • Library Cataloguing-II • Computer Technology for Library Services • Library Automation • Library & Information Management – I • Library & Information Management - II • Intellectual Property Rights

		• Citation and Reference Management • Library Marketing • Electronic Resource Management
4.	PO4: Demonstrate skill of communication, collecting and organizing information along with knowledge of social, political and natural environment.	• English and Communication Skills - I • Environmental Studies & Disaster Management • Fundamentals of IT • Professional Communication-I • Computer Technology for Library Services • Professional Communication-II • Entrepreneurship Development & Management • English and Communication Skills – II • Humanities & Life Skills
5.	PO5: Demonstrate library skills including Managerial, conceptual, technical, soft skills, decision making, analytical for ongoing professional development	• Library Classification –I • Library Classification –II • Library Cataloguing-I • Library Cataloguing-II • Information Sources & Services • Electronic Resource Management • Internet Applications in Library • Information Literacy • Library Automation and Networking • Library Automation • Industrial/ In-House Training I • Industrial Training - II
6.	PO6: Engage in multidisciplinary fields in the context of Library and Information Sciences for independent and life-long learning activities.	• Multidisciplinary Elective • Open Elective • Library Automation • Internet Applications in Library

FIRST YEAR
NSQF LEVEL - 3

FIRST YEAR
6. STUDY AND EVALUATION SCHEME

FIRST SEMESTER

Sr. No.	SUBJECTS	STUDY SCHEME Periods/Week		Credits (C) (L+P=C)	MARKS IN EVALUATION SCHEME						Total Marks of Internal & External
					INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT			
		L	P		Th	Pr	Tot	Th	Pr	Tot	
1.1	*English & Communication Skills-I	2	2	2+1=3	40	40	80	60	60	120	**200**
1.2	**Library & Information Society	3	4	3+2=5	40	40	80	60	60	120	**200**
1.3	**Library Classification -I	3	4	3+2=5	40	40	80	60	60	120	**200**
1.4	**Library Cataloguing-I	3	4	3+2=5	40	40	80	60	60	120	**200**
1.5	*Fundamentals of IT	2	4	2+2=4	40	40	80	60	60	120	**200**
#Student Centred Activities (SCA)		-	4	-	-	-	-	-	-	-	-
Total		**13**	**22**	**22**	**200**	**200**	**400**	**300**	**300**	**600**	**1000**

* Common with other diploma programmes

** The board will set separate papers for Theory as well as Practice. The hours allotted for the Practice may be counted towards theory for the purpose of calculating the load for the faculty requirement as these are more like the "PRACTICE SESSION" in the classroom unlike conventional practical in other diploma programmes.

Student Centred Activities will comprise of co-curricular activities like extension lectures on Constitution of India, etc, Games, Yoga, Human Values & Ethics, Knowledge of Indian System, Hobby Clubs e.g. Photography etc., Seminars, Declamation Contests, Educational Field Visits, NCC, NSS, Cultural Activities and Self-study etc.

SECOND SEMESTER

Sr. No.	SUBJECTS	STUDY SCHEME Periods/Week		Credits (C) (L+P=C)	MARKS IN EVALUATION SCHEME						Total Marks of Internal & External
					INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT			
		L	P		Th	Pr	Tot	Th	Pr	Tot	
2.1	Professional Communication-I	2	2	2+1=3	40	40	80	60	60	120	**200**
2.2	**Information Sources & Services	3	4	3+2=5	40	40	80	60	60	120	**200**
2.3	**Library Classification -II	3	4	3+2=5	40	40	80	60	60	120	**200**
2.4	**Library Cataloguing-II	3	4	3+2=5	40	40	80	60	60	120	**200**
2.5	Computer Technology for Library Services	2	4	2+2=4	40	40	80	60	60	120	**200**
2.6	* Environmental Studies and Disaster Management	2	-	2+0=2	40	-	40	60	-	60	**100**
#Student Centred Activities (SCA)		-	2	-	-						
Total		**15**	**20**	**24**	**240**	**200**	**440**	**360**	**300**	**660**	**1100**

* Common with other diploma programmes

** The board will set separate papers for Theory as well as Practice. The hours allotted for the Practice may be counted towards theory for the purpose of Calculating the load for the faculty requirement as these are more like the "PRACTICE SESSION" in the classroom unlike conventional practical in other diploma programmes.

Student Centred Activities will comprise of co-curricular activities like extension lectures on Constitution of India, etc, Games, Yoga, Human Values & Ethics, Knowledge of Indian System, Hobby Clubs e.g. Photography etc., Seminars, Declamation Contests, Educational Field Visits, NCC, NSS, Cultural Activities and Self-study etc.

Summer Industrial/In-house Training: After 2nd semester, students shall undergo Summer Training of 4 Weeks.

7. HORIZONTAL AND VERTICAL SUBJECTS ORGANISATION

Sr. No.	Subjects	Hours Per Week	
		First Semester	Second Semester
1.	English and Communication Skills - I	4	-
2.	Library & Information Society	7	-
3.	Library Classification -I	7	-
4.	Library Cataloguing-I	7	-
5.	Fundamentals of IT	6	-
6.	Professional Communication-I	-	4
7.	Information Sources & Services	-	7
8.	Library Classification -II	-	7
9.	Library Cataloguing-II	-	7
10.	Computer Technology for Library Services	-	6
11.	Environmental Studies & Disaster Management	-	2
12.	Student Centered Activities	4	2
Total		**35**	**35**

8. COMPETENCY PROFILE & EMPLOYMENT OPPORTUNITIES

Library and information science (LIS) is a universal academic, intellectual and industrial field with a large international approach. The field has a strong background of teaching, education and research development, standards, networks and distribution throughout the globe. LIS impart elementary knowledge, understand about different aspects of Library Science, concept of library and librarianship and understand the basic principles and laws of library science. The students should be prepared to take up the challenges of the information society in future. The main objective should be to impart elementary knowledge to students about different aspects of Library Science, thus preparing them for jobs of Semi- professional nature in all types of libraries.

The NSQF Level – 3 pass out students are expected to recall and demonstrate practical routine and repetitive skills, in narrow range of Librarian. "Semi Skilled librarians" are required to carry out a limited range of predictable tasks under close supervision. They are normally expected to communicate clearly in speech. The course content should be taught and implemented with the aim to develop different types of skills so that students are able to acquire following competency
After the completion of this programme the student will be in a position to work at lower and middle managerial positions in all types of libraries, viz. academic, public or special. They will have competencies to perform day to day housekeeping operations and provide library services such as circulation, reference and information services to users of a library. Additionally, they will be in a position to design and develop information retrieval systems specific to the needs of a small community of users.

One can find employment opportunities in: Public/Government libraries, Universities/colleges/schools and other academic institutions, News agencies and organizations, Private organizations, Photo/film/radio/television libraries, Information centres/documentation centres, Museums and galleries, which have reading rooms and research facilities, Law library/Special library

Some of the relevant designations related to LIS are Junior Librarian, Library Attendant, Library Assistant, Semi-Professional Assistant, Cataloguer/Technical Assistant/Records Manager, Junior Information Analyst, Indexer

9. PROGRAMME OUTCOMES

The programme outcomes are derived from five domains of NSQF Level – 3 namely Process, Professional Knowledge, Professional Skill, Core Skill, Responsibility. After completing this programme, the student will be able to:

PO1: Manage Library and Information Centers, Knowledge Resource Centers of different Categories.

PO2: Acquire knowledge and learn the skills of organizing information and recorded knowledge.

PO3: Demonstrate the ability to practice or apply the library skills.

PO4: Communicate accurately and appropriately and demonstrate professional behavior and basic understanding of social and natural environment.

PO5: Be responsible to perform librarian task under close supervision with some responsibility withindefined limit.

10. ASSESSMENT OF PROGRAMME AND COURSE OUTCOMES

Programme Outcomes to be assessed	Assessment criteria for the Course Outcomes
PO1: Manage Library and Information Centers, Knowledge Resource Centers of different categories	• Identify classification, its need and purpose. • Differentiate between Knowledge Classification and Book Classification • Acquire knowledge about cataloguing and qualities of a good catalogue classification • Describe the method of maintaining a catalogue and arrangements of catalogue • Identify role of various types of libraries and information centers • Evaluate the various sources • Describe different Reference and Information Services • Identify classified catalogue code and importance of personal name classification • Identify rules of main and edit entry for single and joint author, and collaborators • Describe various steps for Chain Procedures
PO2: Acquire knowledge and learn the skills of organizing information and recorded knowledge.	• Recognize Concept of library in society • Illustrate different types of libraries • Apply Laws of library science and information activities. • Analyze the contribution of national and international professional associations. • Acquire knowledge about Library Legislation • Differentiate between Knowledge Classification and Book Classification. • Illustrate Notation, need and its types. • Apply Dewey Decimal Classification Scheme, structure and parts of scheme. • Apply different section of a main entry and

	different types of entries • Illustrate the rules of cataloguing according to ACCR-II. • Illustrate different Isolates • Apply various Mnemonics. • Identify classified catalogue code and importance of personal name classification • Illustrate Catalogue cards arrangements • Identify rules of main and edit entry for single and joint author, and collaborators • Describe various steps for Chain Procedures
PO3: Demonstrate the ability to practice or apply the library skills.	• Illustrate Notation, need and its types. • Apply Dewey Decimal Classification Scheme, structure and parts of scheme. • Apply different section of a main entry and different types of entries • Illustrate the rules of cataloguing according to ACCR-II. • Describe the steps in Library Classification • Illustrate different Isolates • Apply various Mnemonics. • Illustrate Catalogue cards arrangements • Identify rules of main and edit entry for single and joint author, and collaborators • Apply different types of Cataloguing
PO4: Communicate accurately and appropriately and demonstrate professional behavior and basic understanding of social and natural environment.	• Identify the nuances of Communication, both Oral and Written. • Acquire knowledge of the meaning of communication, communication process and speaking skills. • Acquire enhanced vocabulary and in-depth understanding of Grammatical Structures and their usage in the communication.

	• Communicate effectively with an increased confidence to read, write and speak in English language fluently. • Explain the basic components of Computers, Internet and issues of abuses/ attacks on information and computers • Handle the computer/laptop/mobiles/Internet Utilities and Install/Configure OS • Assemble a PC and connect it to external devices • Manage and Use Office practiced Automation Tools • Develop worksheets and Prepare presentations • Comprehend the importance of sustainable ecosystem. • Clarify interdisciplinary nature of environmental issues. • Describe corrective measures for the abatement of pollution. • Identify the role of non-conventional energy resources in environmental protection. • Recognize various types of disasters. • Acquire basic concepts of computers and other information technologies • Implement software packages for library services • Illustrate skills in using computers for library services and applications • Identify Components of Library Network • Recognize various Electronic Media

PO5: Be responsible to perform librarian task under close supervision with some responsibility within defined limit.	• Apply Dewey Decimal Classification Scheme, structure and parts of scheme. • Acquire knowledge about cataloguing and qualities of a good catalogue classification • Apply different section of a main entry and different types of entries • Illustrate the rules of cataloguing according to ACCR-II. • Describe the steps in Library Classification • Acquire knowledge about PMEST • Illustrate different Isolates • Apply various Mnemonics. • Identify classified catalogue code and importance of personal name classification • CO2: Illustrate Catalogue cards arrangements • CO5: Apply different types of Cataloguing • CO2: Implement software packages for library services • CO3: Illustrate skills in using computers for library services and applications

11. SUBJECTS & CONTENTS (FIRST YEAR)

FIRST SEMESTER

1.1 ENGLISH & COMMUNICATION SKILLS – I

L	P
2	2

RATIONALE

Language as the most commonly used medium of self-expression remains indispensable in all spheres of human life –personal, social and professional. This course is intended to break fresh ground in teaching of Communicative English as per the requirements of National Skill Quality Framework. This course is designed to help students to acquire the concept of communication and develop an ability or skills to use them effectively to communicate with the individuals and community.

COURSE OUTCOMES

After undergoing this course, the students will be able to:

CO1: Identify the nuances of Communication, both Oral and Written.

CO2: Acquire knowledge of the meaning of communication, communication process and speaking skills.

CO3: Acquire enhanced vocabulary and in-depth understanding of Grammatical Structures and their usage in the communication.

CO4: Communicate effectively with an increased confidence to read, write and speak in English language fluently.

DETAILED CONTENTS

UNIT I

Reading

1.1 Techniques of reading: Skimming and Scanning

1.2 Extensive and Intensive Reading: Textual Study

1.3 Homecoming – R.N. Tagore

1.4 Life Sketch of Sir Mokshagundam Visvesvarayya

1.5 Life Sketch of Dr. Abdul Kalam

1.6 Narayan Murthy's speech at LBSNA, Dehradun

UNIT II

Fundamentals of Communication

2.1 Concept and Process of Communication,

2.2 Types of Communication (Verbal Communication)

2.3 Barriers to Communication

2.4 Speaking Skill: Significance and essentials of Spoken Communication
2.5 Listening Skill: Significance and essentials of Listening

UNIT III

Grammar and Usage

3.1 Nouns
3.2 Pronouns
3.3 Articles
3.4 Verbs(Main and Auxiliary)
3.5 Tenses

UNIT IV

Writing Skills

4.1 Significance, essentials and effectiveness of Written Communication
4.2 Notice Writing
4.3 Official Letters and E-mails.
4.4 Frequently-used Abbreviations used in Letter-Writing
4.5 Paragraph Writing
4.6 Netiquettes

PRACTICAL EXERCISES

1. Reading

Reading Practice of lessons in the Lab Activity classes.

i. Comprehension exercises of unseen passages along with the lessons prescribed.
ii. Vocabulary enrichment and grammar exercises based on the selected readings.
iii. Reading aloud Newspaper headlines and important articles.

2. Fundamentals of Communication

i. Introducing oneself, others and leave- taking(talking about yourself)
ii. Just a minute (JAM) sessions: Speaking extempore for one minute on given topics
iii. Situational Conversation: Offering-Responding to offers; Congratulating; Apologizing and Forgiving; Complaining; Talking about likes and dislikes, Self-introduction Mock Interviews

3. Grammar and Usage

i. Written and Oral Drills will be undertaken in the class to facilitate holistic linguistic competency among learners.
ii. Exercises on the prescribed grammar topics.

4. Writing Skills

i. Students should be given Written Practice in groups so as to inculcate team-spirit and collaborative learning .
ii. Group exercises on writing paragraphs on given topics.
iii. Opening an e-mail account, receiving and sending emails

RECOMMENDED BOOKS

1) Alvinder Dhillon and Parmod Kumar Singla, "Text Book of English and Communication Skills Vol – 2", M/S Abhishek Publications, Chandigarh.
2) V Sasikumar & PV Dhamija, "Spoken English", Tata MC Graw Hills, New Delhi, Second Edition.
3) JK Gangal, "A Practical Course in Spoken English", PHI Learning Pvt. Ltd., New Delhi.
4) NK Aggarwal and FT Wood, "English Grammar, Composition and Usage", Macmillan Publishers India Ltd., New Delhi.
5) RC Sharma and Krishna Mohan, "Business Correspondence & Report writing", Tata MC Graw Hills, New Delhi, Fourth Edition.
6) Kavita Tyagi & Padma Misra, "Professional Communication", PHI Learning Pvt. Ltd., New Delhi.
7) Nira Konar, "Communication Skills for professionals", PHI Learning Pvt. Ltd., New Delhi.
8) Krishna Mohan & Meera Banerji, "Developing Communication Skills", Macmillan Publishers India Ltd., New Delhi, Second Edition
9) M. Ashraf Rizwi, "Effective Technical Communication", Tata MC Graw Hills, New Delhi.
10) Andrea J Rutherfoord, "Basic Communication Skills for Technology", Pearson Education, New Delhi.

INSTRUCTIONAL STRATEGY

This is practice based subject and topics taught in the class should be practiced as exercises in the Lab regularly for development of communication skills in the students. The students should be involved in activities to enhance their personality skills. This subject contains four units of equal weightage.

1.2 LIBRARY & INFORMATION SOCIETY

L	P
3	4

RATIONALE

After completing the course the student should be able to understand the role of library in the society, role of various types of libraries and information centers in collection, organization and dissemination of information. To help the students to understand the role of information centers and libraries in society this subject is introduced in the Curriculum.

COURSE OUTCOMES

After completing the course the student should be able to:
CO1: Recognize Concept of library in society
CO2: Illustrate different types of libraries
CO3: Apply Laws of library science and information activities.
CO4: Analyze the contribution of national and international professional associations.
CO5: Acquire knowledge about Library Legislation

DETAILED CONTENTS

UNIT 1

Concept of library in society: Definition, objectives, Role, functions.

UNIT II

Types of libraries: objectives, services and functions

i. Academic Library
ii. Special Library
iii. Public Library
iv. National Library

UNIT III

Laws of library science and their implication in library and information activities.

UNIT IV

Professional Associations
Indian: ILA, IASLIC, RRRLF, DELNET
International: IFLA ALA, UNESCO

UNIT V

Library Legislation: Definition, need, and scope.

The Indian copyright Act, 1957, Delivery of books (Public Libraries) Act1954, Right to information Act: Indian context

LIST OF PRACTICALS

1. Visit to various types of libraries and information centres and preparing the reports (5 visits).
2. Involvement in activities like: Book exhibition and book display (3 activities).
3. Organisational Charts on library related activities.
4. Organising quiz on library related activities.
5. Slogan writing on library related activities.
6. Essay competition on library related activities.
7. Educational TV Programs and Video films on library related activities etc must be arranged to acquaint the student with such activities.
8. Visit to NISCAIR, preparing report on functions of NISCAIR.
9. Visit to NASDOC, preparing report on functions of NASSDOC.

RECOMMENDED BOOKS

1. JK Khanna, “Library and Society”, Ess Ess publishers, New Delhi, 1987.
2. OP Saini, “Library and society (hindi)”, YK Publishers, Agra, 2001.
3. YK Asundi, “MCQ in Library Science”, NA Prakashan, Banglore, 2003.
4. Panday, S.K Sharma, “Libraries and Society”, Ess Ess Publisher, New Delhi.
5. Krishan Kumar, “Library Organization” Vikas Publisher, New Delhi, 1993.

INSTRUCTIONAL STRATEGY

This is hands-on practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in the students. This subject contains five units of equal weightage.

1.3 LIBRARY CLASSIFICATION - I

L	P
3	4

RATIONALE

The basic function of a library is to arrange books, periodicals and other reading materials in helpful sequence to facilitate easy retrieval. Classification is the device by which helpful sequence is obtained. The aim of this paper is to introduce the universe of subjects and to develop skills in subject analysis and proficiency in assigning classification number using DDC Classification.

COURSE OUTCOMES

After completing the course the student should be able to:

CO1: Identify classification, its need and purpose.
CO2: Differentiate between Knowledge Classification and Book Classification.
CO3: Describe the steps in Library Classification
CO4: Illustrate Notation, need and its types.
CO5: Apply Dewey Decimal Classification Scheme, structure and parts of scheme.

DETAILED CONTENTS

UNIT I

1.1 Knowledge: Data, Information, Knowledge, Wisdom, Types of Knowledge
1.2 Knowledge classification and Book classification: definition need & functions.
1.3 Difference between Knowledge classification and Book classification.

UNIT II

Universe of Subject: Definition & purpose, Subjects: Simple, Compound and Complex

UNIT III

Library Classification: Definition, Need, Function, Importance, Need and qualities of subject arrangement. Purpose and functions of library classification.

UNIT IV

Notation System: Definition, importance, Need, digits, qualities of a good notation. Types of Notation, Call Number,

UNIT V

Elements of Library classification: Species of Classification, Detailed study of Standard Classification Scheme: D.D.C Introduction to Dewey Decimal Classification Scheme: its origin, development and structure (Latest Edition), Salient features of the scheme, Introduction to Tables, Schedules and Relative Index.

PRACTICE EXERCISES

Classification of documents representing subject using Dewey Decimal Classification (latest available edition).

1. Classification of Documents for the Categories by using Dewey Decimal Classification Scheme:
   i. Generalities
   ii. Philosophy
   iii. Religion
   iv. Social Sciences
   v. Languages
   vi. Pure Sciences
   vii. Technology (Applied Science)
   viii. Arts
   ix. Literature
   x. General Geography & History
2. Uses of Tables:
   Tables I: Standard Subdivisions,
   Table II: Geographical Area

RECOMMENDED BOOKS

1. CD Balty, “Introduction to Colon Classification”, Bombay, Asia, 1967.
2. GD Bhargava and SP Sood, “Colon Classification, Theory and Practice”, Ujjain, Vijay Prakashan, 1975.
3. SR Ranganathan, “Colon Classification”, Bombay Asis, 1966, Sixth Revised Edition.
4. SM Tripathi and NS Shokeen, “Fundamentals of Library Classification (Hindi)”, YK Publishers, Agra, 1999.
5. UC Sharma, NS Shokeen and others, “Colon Classification Practice (Hindi)”, YK Publishers Agra, 2003.
6. JN Gautam and Niranjan Singh, “Dewey Decimal Classification Practice (Hindi)”, YK Publishers, Agra, 1998.
7. Krishan Kumar, “Theory of Library Classification”, 1998, Second Edition.

8. Raju AAN, "Decimal, Universal Decimal and Colon Classification, Theory and Practice", New Delhi, 1975.
9. Sachdeva and Mohinder Singh, "Colon Classification, Theory and Practice", New Delhi, Sterling, 1975.
10. W Sayers, "Introduction to Library Classification", London Grafton,1958, Ninth Edition.
11. AP Srivastava, "Theory of Knowledge Classification in Libraries", New Delhi, Lakshmi Book Store, 1964.
12 NS Shokeen and others, "Basic Principles of Library Science (Hindi)", YK Publishers, Agra, 1999.
13. BK Sharma and others, "Library & Information Science (Multiple choice questions)", Y.K. Publishers, Agra, 2012.
14. YK Asundi, "M C Q in Library Science", NA Prakashan, Bangalore, 2003.

INSTRUCTIONAL STRATEGY

This is hands-on practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in the students. This subject contains equal units of equal weightage.

Teachers should use demonstration method for teaching this subject, followed by the practice by the students. Students may be taken to various types of libraries for understanding the concept and applications of various contents.

1.4 LIBRARY CATALOGUING – I

L	P
3	4

RATIONALE

Besides classification, cataloguing is the most important techniques, which help quick retrieval of documents. A catalogue is the bridge between the users and the documents in library. Methods of cataloguing various types of book and serials by different cataloguing codes have therefore, to be taught in order to catalogue documents. Topics giving knowledge and skills of various types of catalogues, cataloguing codes and their practices have been included in the subject.

COURSE OUTCOMES

After completing the course the student should be able to:

CO1: Acquire knowledge about cataloguing and qualities of a good catalogue classification
CO2: Describe the method of maintaining a catalogue and arrangements of catalogue
CO3: Apply different section of a main entry and different types of entries
CO4: Illustrate the rules of cataloguing according to ACCR-II.

DETAILED CONTENTS

UNIT I

Library catalogue: Historical Perspective, Definition, need, purpose and functions.

UNIT II

Physical forms of catalogue: Conventional: Book form, Sheaf form, Card form, Non-Conventional forms: Computerized Forms.

UNIT III

Types of library catalogue: Alphabetical catalogue, classified catalogue Dictionary catalogue and their comparative representations

UNIT IV

Introduction to Anglo American catalogue Rules – II.

UNIT V

Kinds of entries and their parts: Main & added entries, Sear's list of subject headings according to AACR-II.

PRACTICE EXERCISES

1. Practice on Cataloguing of books according to AACR–II:
   i. Single Personal author,
   ii. Joint authors
   iii. Collaborators
   iv. Pseudonym

   Relevant theory instruction is to be given to the students during the practical.
2. At least five titles are to be given for each problem, for which students are to keep a complete record.

RECOMMENDED BOOKS

1. SM Tripathi and NS Shokeen, "Fundamentals of Library cataloguing (Hindi)", YK Publishers, Agra, 1999.
2. NS Shokeen and others, "Cataloguing Practice: CCC and AACR-II (Hindi)", YK Publishers Agra, 2000.
3. Girija Kumar and Krishan Kumar, "Theory of Cataloguing", Vikas Publication, New Delhi, 1977, Second Rev. Edition.
4. SR Ranganathan, "Theory of Library catalogue", 1938.
5. SR Ranganathan, "Classified Catalogue Code", Bombay Asia, Fifth Edition.
6. Krisan Kumar; AACR – 2, New Delhi, Vikas, 1990.
7. JN Gautam, Niranjan Singh, "Advanced Cataloguing Practice: CCC and AACR-2", YK Publishers, Agra, 1997.
8. NS Shokeen, and others, "Basic Principles of Library Science (Hindi)", YK Publishers, Agra, 1999.

INSTRUCTIONAL STRATEGY

This is hands-on practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in the students. This subject contains equal units of equal weightage.

Teachers should use demonstration method for teaching this subject, followed by the practice by the students. Students may be taken to various types of libraries for understanding the concept and applications of various contents.

1.5 FUNDAMENTALS OF IT

L	P
2	4

RATIONALE

Information technology has great influence on all aspects of life. Almost all work places and living environment are being computerized. 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 concepts of information technology and its scope, operating a computer: use of various office management tools, using internet and mobile applications etc. This course is intended to make new students comfortable with computing environment - Learning basic computer skills, learning basic application software tools, Understanding Computer Hardware, Cyber security awareness.

COURSE OUTCOMES

At the end of the course student will be able to

CO1: Explain the basic components of Computers, Internet and issues of abuses/ attacks on information and computers
CO2: Handle the computer/laptop/mobiles/Internet Utilities and Install/Configure OS
CO3: Assemble a PC and connect it to external devices
CO4: Manage and Use Office practiced Automation Tools
CO5: Develop worksheets and Prepare presentations

DETAILED CONTENTS

UNIT I

Basics of Computer

Brief history of development of computers, Definition of Computer, Block diagram of a Computer, Hardware, Software, Booting: Cold and Hot Booting, Interaction between the CPU and Memory with Input/Output devices, Function of CPU and major functional parts of CPU.

Memory, Bit, Nibble, Byte, KB, MB, GB, TB, PB, Functions of memory, Use of storage devices in a Computer, List types of memory used in a Computer, Importance of cache memory, CPU speed and CPU word length

UNIT II

Basic Internet Skills

Understanding browser, Introduction to WWW, efficient use of search engines, awareness about Digital India portals (state and national portals) and college portals. Advantages of Email,

Various email service providers, Creation of email id, sending and receiving emails, attaching documents with email and drive.
Effective use of Gmail, G-Drive, Google Calendar, Google Sites, Google Sheets, Online mode of communication using Google Meet & WebEx.

Unit III

Basic Logic building

Introduction to Programming, Steps involved in problem solving, Definition of Algorithm, Definition of Flowchart, Steps involved in algorithm development, differentiate algorithm and flowchart, symbols used in flowcharts, algorithms for simple problems, flowcharts for simple problems, Practice logic building using flowchart/algorithms

Unit IV

Office Tools

Office Tools like LibreOffice/OpenOffice/MSOffice.
OpenOffice Writer – Typesetting Text and Basic Formatting, Inserting Images, Hyperlinks, Bookmarks, Tables and Table Properties in Writer
Introducing LibreOffice/OpenOffice *Calc*, Working with Cells, Sheets, data, tables, using formulae and functions, using charts and graphics.
OpenOffice Impress – Creating and Viewing Presentations, Inserting Pictures and Tables, Slide Master and Slide Design, Custom Animation.

Unit V

Use of Social Media

Introduction to Digital Marketing – Why Digital Marketing, Characteristics of Digital Marketing, Tools for Digital Marketing, , Effective use of Social Media like LinkedIn, Google+, Facebook, Twitter, etc.: Features of Social media, Advantages and Disadvantages of Social Media.

PRACTICE EXERCISES

1. Browser features, browsing, using various search engines, writing search queries
2. Visit various e-governance/Digital India portals, understand their features, services offered
3. Read Wikipedia pages on computer hardware components, look at those components in lab, identify them, recognize various ports/interfaces and related cables, etc.
4. Using Administrative Tools/Control Panel Settings of Operating Systems
5. Connect various peripherals (printer, scanner, etc.) to computer, explore various features of peripheral and their device driver software.
6. Explore features of Open Office tools and MS-Office, create documents, create presentation, create spread sheet, using these features, do it multiple times

7. Working with Conversion Software like pdfToWord, WordToPPT, etc.
8. Working with Mobile Applications – Searching for Authentic Mobile app, Installation and Settings, Govt. of India Mobile Applications
9. Creating email id, sending and receiving mails with attachments.
10. Using Google drive, Google calendar
11. Create Flow chart and Algorithm for the following
    i. Addition of n numbers and display result
    ii. To convert temperature from Celsius to Fahrenheit
    iii. To find Area and Perimeter of Square
    iv. Swap Two Numbers
    v. find the smallest of two numbers
    vi. Find whether given number is Even or Odd
    vii. To print first n even Numbers
    viii. find sum of series 1+2+3+…..+N
    ix. print multiplication Table of a number
    x. generate first n Fibonacci terms 0,1,1,2,3,5…n (n>2)
    xi. sum and average of given series of numbers
    xii. Factorial of number n (n!=1x2x3x…n)
    xiii. Armstrong Number
    xiv. Find whether given number is Prime or not

RECOMMENDED BOOKS

1. R.S. Salaria, “Computer Fundamentals”, Khanna Publishing House.
2. Ramesh Bangia, “PC Software Made Easy – The PC Course Kit”, Khanna Publishing House.
3. Online Resources, Linux man pages, Wikipedia.
4. Mokhtar Ebrahim and Andrew Mallett, “Mastering Linux Shell Scripting: A practical guide to Linux command-line, Bash scripting, and Shell programming”.
5. Vikas Gupta, “Comdex Hardware and Networking Course Kit”, Dream Tech press, New Delhi, 2008.
6. Sumitabha Das, “UNIX concepts and applications” Tata McGraw Hill, New Delhi, 2008, Fourth Edition.

SUGGESTED WEBSITES

1. https://nptel.ac.in/courses/106/106/106106222/ - NPTEL Course on Modern Application Development
2. https://onlinecourses.swayam2.ac.in/aic19_de01/preview -

3. https://spoken-tutorial.org/ - Tutorials on Introduction to Computers, HTML, LibreOffice Tools, etc.
4. NOTEPAD++
5. https://tms-outsource.com/blog/posts/web-development-ide/

INSTRUCTIONAL STRATEGY

This is a skill based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in the students. This subject contains equal units of equal weight age.

SECOND SEMESTER

2.1 PROFESSIONAL COMMUNICATION -I

L	P
2	2

RATIONALE

A diploma holder in Library and Information Science has to communicate with all sections of society and groups effectively. To handle his/her job well, knowledge about techniques of correspondence and communication is a must. In fact he/she has to acquire the skills of effective professional communication as he/she has to manage the library and has to provide help to his/her students, peers, seniors and library users.

COURSE OUTCOMES

After undergoing this course, the learners will be able to:

CO1: Acquire overview of Communication.
CO2: Demonstrate the communication skills required in the workplace via electronic mail, Internet, and other technologies.
CO3: Utilize the correct practices of the strategies of Effective Professional communication.
CO4: Compose a Report, Resume and make a presentations.
CO5: Select appropriate formats used in Government correspondence.

DETAILED CONTENTS

UNIT I

Introduction to Communication

1.1 Meaning and importance
1.2 Process and Uses
1.3 Communication: Various means of communication- Their use, merits and limitations. Selection of means of communication
1.4 Communication Through Internet

UNIT II

Professional Writing

2.1 Correspondence: Enquiry letters, placing orders, complaint letters
2.2 Report Writing: Progress: Formal and Informal
2.3 Memos, Circulars and official notes
2.4 Notices, Agenda and Minutes of Meetings
2.5 Press Release
2.6 Corrigendum writing

2.7 Writing Telephonic messages
2.8 Use of internet and E-Mails

UNIT III

Handling Office Correspondence

3.1 Meaning and importance of correspondence
3.2 Incoming correspondence procedures
3.3 Outgoing correspondence procedures
3.4 Ordinary post, Registered post, Parcel, Registered Parcel, Speed post, Courier, Airmail and e-mail etc.

UNIT IV

Employable Skills

4.1 Presentation Skills: How to prepare and deliver a good presentation
4.2 Telephone Etiquettes
4.3 Tips for developing of employable skills
4.4 Resume Writing: Definition, kinds of Resume as distinguished from Bio-data and Curriculum Vitae and Preparing a Resume for Job/ Internship
4.5 Persuasive Presentations using multi-media aids.

UNIT V

Government Correspondence

5.1 General Govt. Letters
5.2 Demi Official Letters
5.3 Office Memorandum, Circulars, Notifications, Office Orders, Press Release

PRACTICE EXERCISES

1. Presentation Skills: How to prepare and deliver a good presentation.
2. Telephone Etiquettes: Practice of oral conversation on Telephone
3. Use of Internet and E-mails
4. Report Writing: Annual Report of an academic Library
5. Make a presentation on any Topic using audio-visual Aids.
6. Interview Skills:Preparing for an Interview and Guidelines for success on interview.
7. Telephonic Interview and Face to Face Interview
8. Letter Writing Practice:Enquiry letter, placing order, complaint letter, reminder letter.

RECOMMENDED BOOKS

1. P. Rathnaswamy, "Communication Management Theory and Practice", Deep and Deep Publications.
2. Parag Diwan, "Communication Management", Deep and Deep Publications.
3. R.C. Sharma and Krishan Mohan, "Business Correspondence and Report Writing", Tata McGraw Hill.
4. R.K. Sharma, Shashi Kr. Gupta, Sushil and Nayyer, "Office Management and Practices", Kohli Publishers, 34 Industrial Area Phase-II, Chandigarh
5. Kavita Tyagi& Padma Misra Professional Communication by; Published by PHI Learning Pvt. Ltd; New Delhi
6. Nira Konar, "Communication Skills for professionals", PHI Learning Pvt. Ltd. New Delhi.
7. Krishna Mohan & Meera Banerji' "Developing Communication Skills", Macmillan Publishers India Ltd, New Delhi, Second Edition.

INSTRUCTIONAL STRATEGY

As the professional communication is an integral part of any office work, special attention has to be given so that the students attain proficiency in drafting different letters/documents used in the office. For achieving this objective, Students must be made to draft minimum 5 letters on each topic Teacher should identify other appropriate and related assignments. Some sample of good letters/documents may be collected and students should be asked to read them aloud to the whole class.

2.2 INFORMATION SOURCES & SERVICES

L	P
3	4

RATIONALE

In the rimes to come libraries will be the centers for dissemination of information. In order to do so knowledge about sources of information, methods of retrieval and dissemination of information etc need to be given to students. To help the students to understand the role of information centers and libraries in society this subject is introduced in the Curriculum.

COURSE OUTCOMES

After completing the course the student should be able to:

CO1: Identify role of various types of libraries and information centers
CO2: Evaluate the various sources
CO3: Describe different Reference and Information Services
CO4: Apply Indexing and Abstracting Services

DETAILED CONTENTS

UNIT I

Introduction to Information Sources: Concept, Meaning, Need, Importance and Types

1.1 Primary
1.2 Secondary
1.3 Tertiary

UNIT II

Evaluation of Sources

UNIT III

Reference and Information Services: Concepts, Definition, Importance, Purpose and Types

3.1 Ready reference service
3.2 Long reference service

UNIT IV

Information Services

4.1 Current awareness service
4.2 Selective dissemination of information
4.3 Competencies and skills for reference librarian

UNIT V
Indexing and Abstracting Services

PRACTICE EXERCISES

1. Practice in use of various types of reference and information sources
   i. Encyclopedia (General)
   ii. Dictionary
   iii. Bibliographic sources
   iv. Geographical Sources
   v. Current Sources of Information (Newspaper, Internet sources)
2. Practice in answering reference queries from above sources (at least ten queries of different types)
3. Project related to preparation of Current Awareness list and SDI
4. Preparation of Abstracts and Indexes

RECOMMENDED BOOKS

1. B. Guha, "Documentation and its facets".
2. GB Ghosh and BN Banerjee, "Trends of information service in India, Calcutta", The World press Private Ltd, 1974.
3. Krishan Kumar, "Reference Service", Vikas Publishers, New Delhi, 1982.
4. PS Katwatra, "Fundamentals of Documentation", Sterline, New Delhi, 1980.
5. SR Ranganathan, "Reference work and its Tools", the world press private Ltd, Calcutta, 1971, Second Edition.
6. C Lal, "Library And Information Science", VK Publishers, Agra, 2010, First Edition reprints.
7. NS Shokeen, and C Lal, "Basic Principles of library Science", VK Publishers, Agra, 2005, First Edition reprint.

INSTRUCTIONAL STRATEGY

This is hands-on practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in the students. This subject contains five units of equal weightage.

The teachers should tech this subject by demonstration method and visit to various types of libraries should be arranged. A proper recode of practical work is to be maintained by each student

2.3 LIBRARY CLASSIFICATION – II

L	P
3	4

RATIONALE

The basic function of a library is to arrange books, periodicals and other reading materials in helpful sequence to facilitate easy retrieval. Classification is the device by which helpful sequence is obtained. The knowledge of various types of classification Schemes and the methods of classifying book according to Colon is therefore included in the curriculum through this subject.

COURSE OUTCOMES

After completing the course the student should be able to:
CO1: Identify Colon classification, its need and purpose
CO2: Describe the steps in Library Classification
CO3: Acquire knowledge about PMEST
CO4: Illustrate different Isolates
CO5: Apply various Mnemonics.

DETAILED CONTENTS

UNIT I
Detailed study of standard scheme of classification: Colon Classification.

UNIT II
Steps of Library classification

UNIT III
Fundamental Categories: PMEST

UNIT IV
Common Isolates: Definition and Types

UNIT V
Mnemonics: Definition and Types

PRACTICE EXERCISES

Classification of documents representing simple subject using Colon Classification (6^{th} Revised Edition)

1. Classification of Documents by Colon Classification:-
   i. Generalia Bibliography, Library Science, Natural Sciences, Mathematics, Physics.
   ii. Engineering, Chemistry, Technology, Biology, Geology, Mining, Botany, Agriculture, Zoology, Animal Husbandry, Medicines, Pharmacognosy.
   iii. Useful Arts, Fine Arts, Literature, Linguistics, Religion, Philosophy, Psychology, Education.
   iv. Geography, History, Political Science, Economics, Sociology and Law.
2. Use of Space, Time, Language.
3. Common Isolates

RECOMMENDED BOOKS

1. "Introduction to 21st ed. Dewey Decimal Classification", Bombay, Asia.
2. GO Bhargava and SP Sood, "Colon Classification, Theory and Practice", Ujjain Vijay Prakashan, 1975.
3. SM Tripathi, and NS Shokeen, "Fundamentals of I.ibrarcy Classification (Hindi), YK Publishers. Agra, 1999.
4. JN Gautam and Niranjan Singh, "Dewey Decimal Classification Practice (Hindi)", YK Publishers, Agra, 1998.
5. SR Ranganathan, "Elements of Library Classification" Bombav, Asia, 1969.
6. Krishan Kumar, "Theory of Library Classification", 1981, Second Edition.
7. Raju AAN, "Decimal. Universal Decimal and Colon Classification", 1984.
8. Sachdeva, Mohinder Singh, "Colon Classification. Theory and Practice", New Delhi Sterling, 1975.
9. W Sayers, "Introduction to Library Classification", London Grafton, 1958, Ninth Edition.
10. AP Srivastava, "Theory of Knowledge Classification in Libraries", Lakshmi Book Store, New Delhi, 1964.
11. "Dewey Decimal Classification", Latest Edition.
12 NS Shokeen and others, "Basic Principles of Library Science (Hindi)", YK Publishers, Agra, 1999.
13 BK Sharma and others, "Library & Information Science (Multiple choice questions)", Y.K. Publishers, Agra, 2012.
14 YK Asundi, "M C Q in Library Science", NA Prakashan, Bangalore, 2003.

INSTRUCTIONAL STRATEGY

This is hands-on practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in the students. This subject contains equal units of equal weightage.

Teachers should use demonstration method for teaching this subject, followed by the practice by the students. Students may be taken to various types of libraries for understanding the concept and applications of various contents.

2.4 LIBRARY CATALOGUING-II

L	P
3	4

RATIONALE

Along with classification, cataloguing is the most important techniques, which help quick retrieval of documents. A catalogue entry is the bridge between the users and the documents in library. Methods of cataloguing various types of book and serials by different cataloguing codes have therefore, to be taught in order to catalogue documents. Topics giving knowledge and skills of various types of catalogues, cataloguing codes and their practices have been included in the subject

COURSE OUTCOMES

After completing the course the student should be able to:

CO1: Identify classified catalogue code and importance of personal name classification
CO2: Illustrate Catalogue cards arrangements
CO3: Identify rules of main and edit entry for single and joint author, and collaborators
CO3: Describe various steps for Chain Procedures
CO5: Apply different types of Cataloguing

DETAILED CONTENTS

UNIT I

Introduction to Classified Catalogue Code (CCC)

UNIT II

Types of Cataloguing entries: Main and added entries according to CCC, Catalogue cards arrangements

UNIT III

Rules for description choice and rendering of headings for main and added entries according to CCC.

i. Single Authorship
ii. Joint Authorship
iii. Collaborators
iv. Pseudonym works

UNIT IV

Chain procedure

UNIT V

Cooperative, Centralized and Union Catalogue: Basic concepts, need and purpose

PRACTICE EXERCISES

1. Practice on Cataloguing of books According to CCC (Classified Catalogue Code-5 the Revised Edition)
   i. Single Personal Author
   ii. Joint Authors
   iii. Collaborators
   iv. Pseudonym works
2. At least five titles are to be given for each problem for which students are to be keeping a complete record.

RECOMMENDED BOOKS

1. SR Rangnathan, "CCC", Fifth Edition.
2. SM Tripathi and NS Shokeen, "Fundamentals of Library cataloguing (Hindi)", YK Publishers, Agra, 1999.
3. NS Shokeen and others, "Cataloguing Practice: CCC and AACR-II (Hindi)", YK Publishers Agra, 2000.
4. Girija Kumar and Krishan Kumar, "Theory of Cataloguing", New Delhi, Vikas, 1977, Second Revise Edition.
5. SR Ranganathan, "Theory of Library catalogue", 1938.
6. SR Ranganathan, "Classified Catalogue Code", Bombay Asia, Fifth Edition.
7. Krisan Kumar, "AACR – 2", New Delhi, Vikas, 1990.
8. JN Gautam, Niranjan Singh, "Advanced Cataloguing Practice: CCC and AACR-2", YK Publishers, Agra, 1997.
9. NS Shokeen and others, "Basic Principles of Library Science (Hindi)", YK Publishers, Agra, 1999.

INSTRUCTIONAL STRATEGY

This is hands-on practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in the students. This subject contains equal units of equal weightage.

Teachers should use demonstration method for teaching this subject, followed by the practice by the students. Students may be taken to various libraries for understanding the concept and applications of different contents.

2.5 COMPUTER TECHNOLOGY FOR LIBRARY SERVICES

L	P
2	4

RATIONALE

Knowledge of latest office automation software and Library software have now become necessity to get the exposure in accordance with requirements of outside organizations and Industries to place the students. Now-a-days the knowledge of computer hardware and software is required for the students in order to make them compatible with the latest technologies used every where globally in the digital world. The topics covered in this subject are the basic fundamentals of computer hardware and software included in the curriculum along with the use of word processing software (MS-Word) in day-to-day office work.

COURSE OUTCOMES

At the end of this course, the students will be able to:

CO1: Acquire basic concepts of computers and other information technologies
CO2: Implement software packages for library services
CO3: Illustrate skills in using computers for library services and applications
CO4: Identify Components of Library Network
CO5: Recognize various Electronic Media

PRACTICAL EXERCISES

UNIT I

Computer Basics

(i) Introduction to Computer Technology: Definition, Developments and Computer Generations, Block Diagram of Computer
(ii) Classification of Computers - Analogue, Digital and Hybrid; Super, Mainframe, Mini, and Micro, Laptop/notebook and PDA
(iii) Library services where these are applied

UNIT II

Computer Components

(i) Computer Hardware: Components & Functions (CPU, Input, Output, Storage devices)
(ii) Operating Systems: Functions and Applications: Windows and UNIX/Linux and Features
(iii) Types of software – Concepts and Applications (System Software, Application Software; Programming software, Open-Source Software)
(iv) Library services where hardware and software components are used

UNIT III

Application Software Packages

(i) Meaning and purpose: MS Word, MS-Excel, MS PowerPoint & MS Access
(ii) Programming Languages: Concept, Types, Characteristics and their Applications
(iii) Flowcharting
(iv) Library services where application software applied

UNIT IV

Networking

(i) Concept and Definition & Needs of Networking
(ii) Network Types & Topologies
(iii) Components of a Network, Library Network
(iv) The Areas of the Library where Computer Network is applied

UNIT V

Electronic media: Electronic publishing. DTP, Micrographics, Videotext, Tele text and Visual data display systems

PRACTICE EXERCISES

1. Live Demos through Charts, Videos, Posters. Student may prepare charts or posters where these components are applied
2. Hands on Demonstrations on Different Components and Functions of Computer. Student may prepare charts where computer hardware and software is applicable.
3. Live Demo of the Software Packages, use them, and prepare lab files with Commands, Typing, Excel Tables, Basic Formulas, Preparation of Presentations, Creation of Simple Database etc. Charts of Programming Languages etc.
4. Hands on Demo of Networking Concepts, parts, etc. Student may prepare posters and charts depicting library services and application of networking.

RECOMMENDED BOOKS

1. R.S. Salaria, “Computer Fundamentals”, Khanna Publishing House.
2. Ramesh Bangia, “PC Software Made Easy – The PC Course Kit”, Khanna Publishing House.
3. SK Basandara, “Computers Today”, Galgotia publication Pvt Ltd. Daryaganj, New Delhi.
4. Sanjay Saxena, “A First Course in Computer”, Vikas Publishing House Pvt. Ltd., Jungpura, New Delhi.
5. PK Sinha, “Computer Fundamentals”, BPB Publication, New Delhi.

6. Vikas Gupta, “Comdex Hardware and Networking Course Kit”, Dream Tech press, New Delhi, 2008.

INSTRUCTIONAL STRATEGY

This is hands-on practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in the students. This subject contains equal units of equal weightage.

2.6 ENVIRONMENTAL STUDIES AND DISASTER MANAGEMENT

L	P
2	-

RATIONALE

A diploma holder must have knowledge of different types of pollution caused due to industrial and construction activities so that he/she may help in balancing the ecosystem and controlling pollution by various control measures. The course is intended to provide a general concept in the dimensions of environmental pollution and disasters caused by nature beyond the human control as well as the disasters and environmental hazards induced by human activities with emphasis on disaster preparedness, response and recovery.

COURSE OUTCOMES

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

CO1: Comprehend the importance of sustainable ecosystem.
CO2: Clarify interdisciplinary nature of environmental issues.
CO3: Describe corrective measures for the abatement of pollution.
CO4: Identify the role of non-conventional energy resources in environmental protection.
CO5: Recognize various types of disasters.

DETAILED CONTENTS

UNIT I

Introduction

1.1 Basics of ecology, eco system- concept, and sustainable development, Sources, advantages, disadvantages of renewable and nonrenewable energy.
1.2 Rain water harvesting
1.3 Deforestation – its effects & control measures

UNIT II

Air and Noise Pollution

2.1 Air Pollution: Source of air pollution. Effect of air pollution on human health, economy, Air pollution control methods.
2.2 Noise Pollution: Source of noise pollution, Unit of noise, Effect of noise pollution, Acceptable noise level, Different method of minimizing noise pollution.

UNIT III

Water and Soil Pollution

3.1 Water Pollution: Impurities in water, Cause of water pollution, Source of water pollution. Effect of water pollution on human health, Concept of DO, BOD, COD. Prevention of water pollution- Water treatment processes, Sewage treatment. Water quality standard.

3.2 Soil Pollution :Sources of soil pollution, Effects and Control of soil pollution, Types of Solid waste- House hold, Industrial, Agricultural, Biomedical, Disposal of solid waste, Solid waste management E-waste, E – waste management

UNIT IV

Impact of Energy Usage on Environment

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

UNIT V

Disaster Management

A. Different Types of Disaster:

Natural Disaster: such as Flood, Cyclone, Earthquakes and Landslides etc.

Man-made Disaster: such as Fire, Industrial Pollution, Nuclear Disaster, Biological Disasters, Accidents (Air, Sea Rail & Road), Structural failures(Building and Bridge), War & Terrorism etc.

B.Disaster Preparedness:

Disaster Preparedness Plan

Prediction, Early Warnings and Safety Measures of Disaster

Psychological response and Management (Trauma, Stress, Rumour and Panic)

RECOMMENDED BOOKS

1. S.C. Sharma & M.P. Poonia, “Environmental Studies”, Khanna Publishing House, New Delhi.
2. BR Sharma, “Environmental and Pollution Awareness”, Satya Prakashan, New Delhi.
3. Dr. RK Khitoliya, “Environmental Pollution”, S Chand Publishing, New Delhi.
4. Erach Bharucha, “Environmental Studies”, University Press (India) Private Ltd., Hyderabad.
5. Suresh K Dhamija, “Environmental Engineering and Management”, S K Kataria and Sons, New Delhi.
6. E-books/e-tools/relevant software to be used as recommended by AICTE/BTE/NITTTR, Chandigarh.
7. Dr. Mrinalini Pandey, “Disaster Management”, Wiley India Pvt. Ltd.

8. Tushar Bhattacharya, “Disaster Science and Management”, McGraw Hill Education (India) Pvt. Ltd.

INSTRUCTIONAL STRATEGY

In addition to theoretical instructions, different activities pertaining to Environmental Studies and Disaster Management like expert lectures, seminars, visits etc. may also be organized This subject contains five units of equal weightage.

SECOND YEAR

NSQF LEVEL - 4

12. STUDY AND EVALUATION SCHEME

THIRD SEMESTER

Sr. No.	SUBJECTS	STUDY SCHEME Periods/Week		Credits L+P= C	MARKS IN EVALUATION SCHEME						Total Marks of Internal & External
					INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT			
		L	P		Th	Pr	Total	Th	Pr	Total	
3.1	Industrial/In-HouseTraining - I	-	2	**0+1 =1**	-	40	40	-	60	60	100
3.2	Professional Communication-II	2	2	**2+1=3**	40	40	80	60	60	120	200
3.3	**Advanced Library Classification	3	4	**3+2=5**	40	40	80	60	60	120	200
3.4	**Advanced Library Cataloguing	3	4	**3+2=5**	40	40	80	60	60	120	200
3.5	Library & Information Management - I	3	-	**3+0=3**	40	-	40	60	-	60	100
3.6	Open Elective (MOOCs+/Offline)	2	-	**2+0=2**	40	-	40	60	-	60	100
3.7	Library Automation	2	4	**2+2=4**	40	40	80	60	60	120	200
# Student Centered Activities (SCA)		-	4	-	-	-	-	-	-	-	-
Total		**15**	**20**	**23**	**240**	**200**	**440**	**360**	**300**	**660**	**1100**

+ Assessment of Open Elective through MOOCs shall be based on assignments out of 100 marks.

** The board will set separate papers for Theory as well as Practice. The hours allotted for the Practice may be counted towards theory for the purpose of Calculating the load for the faculty requirement as these are more like the "PRACTICE SESSION" in the classroom unlike conventional practical in other diploma programmes.

Student Centred Activities will comprise of co-curricular activities like extension lectures on Constitution of India, Games, Yoga, Human Values & Ethics, Knowledge of Indian System, Hobby Clubs e.g. Photography etc., Seminars, Declamation Contests, Educational Field Visits, NCC, NSS, Cultural Activities and Self-study etc.

FOURTH SEMESTER

Sr. No.	SUBJECTS	STUDY SCHEME Periods/Week		Credits (C) L + P = C	MARKS IN EVALUATION SCHEME						Total Marks of Internal & External
					INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT			
		L	P		Th	Pr	Total	Th	Pr	Total	
4.1	*English and Communication Skills - II	2	2	**2+1=3**	40	40	80	60	60	120	200
4.2	Information Storage & Retrieval	3	-	**3+0=3**	40	-	40	60	-	60	100
4.3	*Entrepreneurship Development & Management	3	-	**3+0=3**	40	-	40	60	-	60	100
4.4	Library Automation and Networking	2	4	**2+2=4**	40	40	80	60	60	120	200
4.5	Library & Information Management - II	2	4	**2+2=4**	40	40	80	60	60	120	200
4.6	Programme Elective-I	3	-	**3+0=3**	40	-	40	60	-	60	100
4.7	Minor Project	-	8	**0+4=4**	-	40	40	-	60	60	100
# Student Centered Activities (SCA)		-	2	**-**	-	-	-	-	-	-	-
Total		**15**	**20**	**24**	**240**	**160**	**400**	**360**	**240**	**600**	**1000**

* Common with other diploma programmes

Programme Elective-I: 4.6.1 Academic Library and Information system 4.6.2 Public Library and Information System 4.6.3 Intellectual Property Rights

Student Centred Activities will comprise of co-curricular activities like extension lectures on Constitution of India, Games, Yoga, Human Values & Ethics, Knowledge of Indian System, Hobby Clubs e.g. Photography etc., Seminars, Declamation Contests, Educational Field Visits, NCC, NSS, Cultural Activities and Self-study etc.

Industrial Training: After 4th Semester, students shall undergo Industrial Training of 4 Weeks.

13. HORIZONTAL AND VERTICAL SUBJECTS ORGANISATION

Sr. No.	Subjects/Areas	Hours Per Week	
		Third Semester	Fourth Semester
1.	Industrial/In-House Training - I	2	-
2.	Professional Communication-II	4	-
3.	Advanced Library Classification	7	-
4.	Advanced Library Cataloguing	7	-
5.	Library & Information Management - I	3	-
6.	Open Elective	2	-
7.	Library Automation	6	-
8.	English and Communication Skills - II	-	4
9.	Information Storage & Retrieval	-	3
10.	Entrepreneurship Development & Management	-	3
11.	Library Automation and Networking	-	6
12.	Library & Information Management - II	-	6
13.	Programme Elective-I	-	3
14.	Minor Project	-	8
15.	Student Centered Activities	4	2
	Total	**35**	**35**

14. COMPETENCY PROFILE & EMPLOYMENT OPPORTUNITIES

Academics and government sector pertaining to **Library and Information Science** (LIS) require **skilled workers** to work in familiar, predictable, routine situations of clear choice. They should be able to communicate in writing and speaking with required clarity and fluency. Library and Information Science is a universal academic, intellectual and industrial field with a large international approach. The field has a strong background of teaching, education and research development, standards, networks and distribution throughout the globe. LIS impart elementary knowledge, understand about different aspects of Library Science, concept of library and librarianship and understand the basic principles and laws of library science. The students should be prepared to take up the challenges of the information society in future.

Skilled workers will be responsible for carrying out a range of jobs, some of which will require them to make choices about the approaches they adopt. They will be expected to learn and improve their practice on the job. They should know what constitutes quality in the occupation and should distinguish between good and bad quality in the context of their job roles. Skilled worker at this level will be expected to carry out their work safely and securely and take full account of the health and safety on colleagues and customers. They should work hygienically and in ways which show an understanding of environmental issues. In working with others, they will be expected to conduct themselves in ways which show a basic understanding of the social and political environment.

NSQF Level – 4 pass out students are expected to recall and demonstrate practical routine and repetitive skills, in range of Librarian. The primary role would be to manage the library and provide access to information resources to the users, and also to manage information resources, organize data, and provide information to the users.

After the completion of this programme the student will be in a position to work at lower and middle managerial positions in all types of libraries, viz. academic, public or special. They will have competencies to perform day to day housekeeping operations and provide library services such as circulation, reference and information services to users of a library. Additionally, they will be in a position to design and develop information retrieval systems specific to the needs of a small community of users.

Overall, the job opportunities for diploma holders as Librarian, Information Officer, Records Manager Digital Archivist, Content Manager Semi-Professional Assistant, Cataloguer/Technical Assistant/Records Manager, Junior Information Analyst, Indexer.

One can find employment opportunities in: Public/Government libraries, Universities/colleges/schools and other academic institutions, News agencies and organizations, Private organizations, Photo/film/radio/television libraries, Information centres/documentation centres, Museums and galleries, which have reading rooms and research facilities, Law library/Special library.

15. PROGRAMME OUTCOMES

The program outcomes are derived from five domains of NSQF Level – 4 namely Process, Professional Knowledge, Professional Skill, Core Skill, Responsibility. After completing this level, the student will be able to:

PO1: Perform out task in familiar, predictable, routine situation in Library and Information Centers.

PO2: Acquire factual knowledge in the field of Library and Information Sciences for employment.

PO3: Demonstrate quality skills in broader range to perform librarian task.

PO4: Communicate in writing and speaking with required clarity and demonstrate Professional behavior.

PO5: Adopt self-study learning and acquire knowledge aiming towards holistic development of learners through MOOCs.

16. ASSESSMENT OF PROGRAMME AND COURSE OUTCOMES

Programme Outcomes to be assessed	Assessment criteria for the Course Outcomes
PO1: Perform out task in familiar, predictable, routine situation in Library and Information Centers.	• Develop required competencies for effective communication and presentation. • Communicate confidently in formal and informal contexts. • Comprehend Characteristics, merits and demerits of different species of Library Classification schemes • Compare trends in library classification • Apply different methods of assigning Book Number • Use catalogue codes and standards. • Prepare catalogue entries for various types of information sources. • Arrange catalogue cards in library and search books from library. • Equip with the skills of managing resources, money, people and time. • Demonstrate skills necessary to manage and work effectively within information organizations. • Apply modules of housekeeping operations • Explore latest developments in the field of interest. • Develop the habit of self-learning through online courses. • Develop familiarity with various bibliographic description standards. • Use vocabulary control tools. • Comprehend management techniques to achieve the organizational effectiveness • Handle effectively the library and information management routines • Comprehend functions and services of academic

	library. • Create an awareness of the role of public Libraries in the society • Recognize the importance and educate basic concepts of Intellectual Property Rights • Get aware of process of acquiring the patent of their work • Comprehend the importance of entrepreneurship and its role in nation's development.
PO2: Acquire factual knowledge in the field of Library and Information Sciences for employment.	• Develop required competencies and skills for relevant industries. • Develop required competencies for effective communication and presentation. • Communicate confidently in formal and informal contexts. • Comprehend Characteristics, merits and demerits of different species of Library Classification schemes • Use catalogue codes and standards. • Prepare catalogue entries for various types of information sources. • Arrange catalogue cards in library and search books from library. • Illustrate the role of Online Public Access Catalogue (OPAC) and importance of Web OPAC in libraries. • Use Library Automation Software • Apply modules of housekeeping operations • Manage the entire collection/operations effectively • State the basic concepts and principles about the subject of interest. • Perform in a better way in the professional world. • Develop familiarity with various bibliographic description standards.

	• Use vocabulary control tools. • Create awareness about the principles and theoretical aspects of thesaurus, abstracting and indexing. • Handle effectively the library and information management routines • Comprehend functions and services of academic library. • Detail the resource and collection development in academic library • Familiarize with different academic library network and consortia • Recognize the importance and educate basic concepts of Intellectual Property Rights • Get aware of process of acquiring the patent of their work • Familiarize with the process to apply for copyright for their innovative works.
PO3: Demonstrate quality skills in broader range to perform librarian task.	• Develop required competencies for effective communication and presentation. • Communicate confidently in formal and informal contexts. • Comprehend Characteristics, merits and demerits of different species of Library Classification schemes • Relate the relevance of the helpful sequence in library classification • Detail contrast of Colon Classification (CC) and Dewey Decimal Classification(DDC) schemes • Compare trends in library classification • Apply different methods of assigning Book Number • Use catalogue codes and standards. • Prepare catalogue entries for various types of information sources. • Arrange catalogue cards in library and search books from library.

	• Illustrate the role of Online Public Access Catalogue (OPAC) and importance of Web OPAC in libraries. • Describe the term management as applied to libraries and information centre. • Demonstrate skills necessary to manage and work effectively within information organizations. • Acquire the technology for library automation and services provided by an automated library • Plan and implement library automation • Use Library Automation Software • Apply modules of housekeeping operations • Manage the entire collection/operations effectively • State the basic concepts and principles about the subject of interest. • Comprehend the components of ISAR system • Develop familiarity with various bibliographic description standards. • Use vocabulary control tools. • Create awareness about the principles and theoretical aspects of thesaurus, abstracting and indexing. • Integrate Popular Library Management Software • Acquire skills for preservation of Library Database • Apply Emerging Tools & Technologies in Library Automation • Illustrate Library Networking and Resource Sharing • Describe and Implement Automated Library Services • Comprehend management techniques to achieve the organizational effectiveness • Achieve efficiency in library and information centres.

	• Handle effectively the library and information management routines • Manage finances and human resource development required for library services. • Comprehend functions and services of academic library. • Detail the resource and collection development in academic library • Familiarize with different academic library network and consortia • Gain the knowledge of library finance, budget and source of finance. • Create an awareness of the role of public Libraries in the society • Role of UNESCO and RRRLF for development of public Library • Understand the resource and collection development of public library. • To educate and train about range of professional challenges associated with public library administration and management • Recognize the importance and educate basic concepts of Intellectual Property Rights • Get aware of process of acquiring the patent of their work • Familiarize with the process to apply for copyright for their innovative works. • Illustrate the knowledge of plagiarism in their innovations which can be questioned legally.

PO4: Communicate in writing and speaking with required clarity and demonstrate Professional behavior.	• Develop required competencies for effective communication and presentation. • Communicate confidently in formal and informal contexts. • Apply the concept of verbal and non-verbal communication • Write a Report, Resume, Make a presentations, Participate in GDs • Develop their confidence and help them attend interviews successfully. • Create professional and technical documents that are clear and adhering to all the necessary conventions. • Identify the fundamental components of management, planning, organizing, staffing, directing and control. • Equip with the skills of managing resources, money, people and time. • State the basic concepts and principles about the subject of interest. • Perform in a better way in the professional world. • Select and learn the subject related to own interest. • Explore latest developments in the field of interest. • Develop the habit of self-learning through online courses. • Use vocabulary control tools. • Apply Emerging Tools & Technologies in Library Automation • Handle effectively the library and information management routines • Recognize the importance and educate basic concepts of Intellectual Property Rights • Get aware of process of acquiring the patent of their work.

PO5: Adopt self-study learning and acquire knowledge aiming towards holistic development of learners through MOOCs.	• Develop required competencies for effective communication and presentation. • Communicate confidently in formal and informal contexts. • Apply the concept of verbal and non-verbal communication • Write a Report, Resume, Make a presentations, Participate in GDs • Develop their confidence and help them attend interviews successfully. • Create professional and technical documents that are clear and adhering to all the necessary conventions. • Perform in a better way in the professional world. • Select and learn the subject related to own interest. • Explore latest developments in the field of interest. • Develop the habit of self-learning through online courses. • Use vocabulary control tools. • Create awareness about the principles and theoretical aspects of thesaurus, abstracting and indexing. • Comprehend functions and services of academic library. • Detail the resource and collection development in academic library • Create an awareness of the role of public Libraries in the society • Role of UNESCO and RRRLF for development of public Library • Recognize the importance and educate basic concepts of Intellectual Property Rights • Get aware of process of acquiring the patent of their work.

	• Familiarize with the process to apply for copyright for their innovative works. • Illustrate the knowledge of plagiarism in their innovations which can be questioned legally. • Comprehend the importance of entrepreneurship and its role in nation's development • Classify the various types of business and business organizations. • Identify the various resources / sources and / or schemes for starting a new venture.

17. SUBJECTS & CONTENTS

(SECOND YEAR)

THIRD SEMESTER

3.1 INDUSTRIAL/IN-HOUSE TRAINING- I

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RATIONALE

Industrial training / In – house training will help the students to understand the working environment of relevant industries. The student will learn to work in team to solve the industrial problems. It will also give exposure about the present and future requirements of the relevant industries. This training is very important for development of required competencies and skills for employment and start– ups.

COURSE OUTCOMES

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

CO1: Understand the working environment of industries
CO2: Take necessary safety precautions and measures.
CO3: Learn about present and future requirement of industries.
CO4: Work in team for solving industrial problems
CO5: Develop competencies and skills required by relevant industries.
CO6: Develop writing, speaking and presentations skills.

PRACTICAL EXERCISES

1. Report writing based on industrial training.
2. Preparation of Power Point Slides based on industrial training and presentation by the candidate.
3. Internal Evaluation based on quality of Report, PPT preparation, PPT presentation and answer to queries.
4. External Evaluation based on quality of Report, PPT preparation, PPT presentation and answer to queries.

GUIDELINES

Students will be evaluated based on Industrial training / In – house training report and their presentation using Power Point about the knowledge and skills gained during the training. The Head of the Department will depute faculty coordinators by assigning a group of students to each. The coordinators will mentor and guide the students in preparing the PPTs for final presentation. The following performance parameters are to be considered for assessment of the students out of 100 marks:

	Parameter	**Weightage**
i	Industrial / In-house assessment of the candidate by the trainer	40%
ii	Report Writing	20%
iii	Power Point Presentation	20%
iv	Viva-voce	20%

3.2 PROFESSIONAL COMMUNICATION-II

L	P
2	2

RATIONALE

Effective communication skills refer to the capability of an individual to use language to convey information relating to a particular subject. This is achieved through appropriate behavior both in body movements and use of communication aids. The main aim is that the information is received and understood. Professional communication is actualized very broadly as the connection that may take different structures and occur in a context that is mainly related to work. It comprises at least one contributor who is involved in some work-related process. Communication plays a fundamental part in most workplaces, and in most duties that people engage in their everyday places of work.

COURSE OUTCOMES

After undergoing the subject, student will be able to:

CO1: Communicate confidently in formal and informal contexts.
CO2: Apply the concept of verbal and non verbal communication
CO3: Write a Report, Resume, Make a presentations, Participate in GDs
CO4: Develop their confidence and help them attend interviews successfully.
CO5: Create professional and technical documents that are clear and adhering to all the necessary conventions.

DETAILED CONTENTS

UNIT I
Fundamentals of Communication skills

1.1 Types and Components of Communication
1.2 Significance of Effective Communication
1.3 Effective Communication Skills: 7 C's of Communication
1.4 Non-verbal Communication – Significance, Types and Techniques for effective communication.

1.5 Barriers and effectiveness in Listening Skills
1.6 Barriers and effectiveness in Speaking Skills

UNIT II

Correspondence

2.1 Types of letters: Official, Demi-Official, Personal, Covering Letters
2.2 Letter Components and Layouts, Planning a letter and Process of Letter writing
2.3 Preparation of Agenda, Minutes of meeting
2.4 Application for Job and Resume writing
2.5 Memo and Memo Reports
2.6 Brochure

UNIT III

Technology based Communication

3.1. Drafting**,** mailing and responding of e- mail
3.2. Video Conferencing
3.3. Webinars
3.4. Teleconferencing

UNIT IV

Report Writing

4.1 Basics of Report Writing
4.2 Annual report writing including stock verification
4.3 Correspondence: Enquiry letters, placing orders, complaint letters
4.4 Writing Abstracts and Summaries
4.5 Press Release
4.6 Inspection Notes
4.7 Circulars

UNIT V

Placement Communication

5.1 Facing an interview
5.2 Pre-Interview Preparation (Mock Interviews)
5.3 Audio Video Aids and Effective Presentation

5.4 Telephone/skype interview
5.5 Post Interview Communication
5.6 Participating in group discussions
5.7 understanding group dynamics — questioning and clarifying
5.8 GD strategies

PRACTICAL EXERCISES

1. Building Spoken: Telephone etiquette, qualities of a good presentation with emphasis on body language and use of visual aids.
2. Listening: Exercises based on audio materials like radio and podcasts. Listening to Song. practice and exercises.
3. Situational Conversation: Requesting and Responding to requests; Expressing sympathy and condolence; Warning; Asking and giving information; Getting and giving permission; Asking for and giving opinions
   - A small formal and informal speech
   - Seminar
   - Debate
   - Group Discussion
4. Interview Skills: Preparing for the Interview and guidelines for success in the Interview and significance of acceptable body-language during the Interview.
5. Developing Public relation skills including Body language, gestures, eye contact Telephonic conversation, voice modulation
6. Using presentación software MS PowerPoint for preparing for interviews
7. Developing technique of group and interpersonal discussion
8. Mock interview and Debate/Group Discussion: concepts, types, Do's and don'ts- intensive practice

RECOMMENDED BOOKS

1. Butterfield, Jeff Soft, Skills for Everyone"", Cengage Learning: New Delhi.
2. Interact English Lab Manual for Undergraduate Students, OrientBalckSwan: Hyderabad.
3. E. Suresh Kumar et al., " Communication for Professional Success" Orient Blackswan: Hyderabad
4. Raman, Meenakshi and Sangeeta Sharma, "Professional Communication", Oxford University Press.
5. 5. S. Hariharan etal, "Soft Skills", MJP Publishers: Chennai.

INSTRUCTIONAL STRATEGY

This is hands-on practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in the students. This subject contains equal units of equal weightage.

Teachers should use demonstration method for teaching this subject, followed by the practice by the students. Students may be taken to various types of libraries for understanding the concept and applications of various contents.

3.3 ADVANCED LIBRARY CLASSIFICATION

L	P
3	4

RATIONALE

In libraries, classification deals with the determination of the primary subject of a work and assigning it a specific notation. The different schemes of classification help in separating the unlike subjects and bringing the like subjects together. It furthers aids in shelving the items in a systematic manner on similar subjects and also for their easy retrieval purposes.

COURSE OUTCOMES

After undergoing the subject, student will be able to:

CO1: Comprehend Characteristics, merits and demerits of different species of Library Classification schemes

CO2: Relate the relevance of the helpful sequence in library classification

CO3: Detail contrast of Colon Classification (CC) and Dewey Decimal Classification (DDC) Schemes

CO4: Compare trends in library classification

CO5: Apply different methods of assigning Book Number

DETAILED CONTENTS

UNIT I

Species of Library Classification

Enumerative and Faceted Classification Schemes: Purely Enumerative scheme, Almost Enumerative scheme, Almost Faceted scheme, Rigidly Faceted scheme, Almost Freely Faceted scheme, Freely Faceted scheme; Features, merits and demerits

UNIT II

Canons of Helpful Sequence

2.1. Evolutionary sequence
2.2. Time sequence
2.3. Spatial sequence
2.4. Quantitative measures sequence
2.5. Complexity sequence
2.6. Traditional or Canonical sequence
2.7. Literary-warrant sequence
2.8. Alphabetical sequence

UNIT III

Comparative Study of CC and DDC

Notation, Mnemonics, Devices

UNIT IV

Current Trends

4.1 Simple Knowledge Organization Systems(SKOS)
4.2 Automatic Classification
4.3 Web Dewey
4.4 Universal Decimal Classification (UDC)online
4.5 Taxonomies
4.6 Ontology
4.7 CC7

UNIT IV

Book Number

5.1 Concept
5.2 Cutter's Author Table
5.3 Ranganathan's Book number formula

PRACTICAL EXERCISES

1. Practice of classification of documents using latest available Edition of Colon Classification and Dewey Decimal Classification by:

- Using the Devices: Phase relation, System and Specials, Mnemonics, Alphabetical, Subject according to CC **(10 titles each)**
- Use of Tables III-VII of DDC **(10 titles from each table)**

2. Classification of periodicals **(10 titles)**
3. Deriving of Book Number by Cutter's Author Table **(10 book numbers)**
4. Construction of Book number by Ranganathan's Book number formula **(10 book numbers)**

RECOMMENDED BOOKS

1. Shukla, Shailja, "Handbook of Library Classification", Wisdom Press, Delhi.
2. Dhiman, Anil K. & Yashoda Rani, "Library Classification", Ess Ess Publications, New Delhi.
3. Ranganthan, S.R., "Prolegomena to library classification", 3rd ed., New Delhi, Ess Ess Publications.
4. Chan, L. M. & Salaba, "Athena Cataloguing and classification: an introduction", 4th ed., Lanham, MD: Rowman & Littlefield Publisher.
5. Batley, S., "Classification in theory and practice", Oxford: Chandos.
6. Satija, M. P., "The theory and practice of the Dewey Decimal Classification system", 2nd Ed., Oxford: Chandos.

INSTRUCTIONAL STRATEGY

This is hands-on practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in the students. This subject contains equal units of equal weightage.

Teachers should use demonstration method for teaching this subject, followed by the practice by the students. Students may be taken to various types of libraries for understanding the concept and applications of various contents.

3.4 ADVANCED LIBRARY CATALOGUING

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RATIONALE

Catalogue holds a key to the holding of any library that helps quick retrieval of documents. Cataloguing is basically the process of preparation of entries for a library catalogue. It provides us material that a library contains on a given subject and its location in library. Method of cataloguing various types of books and serials by different cataloguing codes have therefore, to be taught in order to catalogue documents.

COURSE OUTCOMES

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

CO1: Use catalogue codes and standards.
CO2: Prepare catalogue entries for various types of information sources.
CO3: Arrange catalogue cards in library and search books from library.
CO4: Illustrate the role of Online Public Access Catalogue (OPAC) and importance of Web OPAC in libraries.

DETAILED CONTENTS

UNIT I
Subject Heading

1.1 Meaning, purpose and Functions
1.2 Methods of deriving subject headings as per Sear's List of Subject Heading and Chain procedure Overview of banking and finance

UNIT II
Cataloguing of Uniform Titles and Serials

Choice and rendering of headings of Main and Added entries according to Anglo-American Cataloguing Rules 2nd Edition (AACR-II) and Classified Catalogue Code (CCC)

2.1. Periodical Publications
2.2. Corporate Authorship
2.3. Government publications
2.4. Non Book Material
2.5. Multi-volume publications

UNIT III
Resource Description and Standards

3.1. Metadata: Meaning, Purpose and Use
3.2. RDA (Resource Description and Access)
3.3. Machine-Readable Cataloging (MARC), International Standard Bibliographic Description (ISBD), Common Communication Format (CCF)

UNIT IV
OPAC and Web OPAC
Objective, Features and Characteristics.

UNIT V
Filing of Entries

Arrangement of entries of Dictionary and Classified catalogue.

PRACTICAL EXERCISES

Cataloguing of following documents according to AACR-II and CCC are to be practiced

- Periodical Publications
- Corporate Authorship
- Government publications
- Non Book Material
- Multi-volume publications

Note: At least five titles to be given for each problem for which students are to keep a record.

RECOMMENDED BOOKS

1. Gorman, M., "The concise AACR2," Chicago: American Library Association.
2. Taylor, A. G. & D. P. Miller, "Introduction to cataloging and classification", Westport, Conn: Libraries Unlimited.
3. Bowman, J. H., "Essential cataloguing", London: Facet.
4. Kumar, Girja, & Krishan Kumar, "Theory of cataloguing", 5th ed., Delhi: Vikas Pub. House.
5. Bristow, Barbara, "Sears List of subject headings" 22nd ed., New York: Grey House publishing.
6. Welsh, A. & S. Batley, "Practical cataloguing: AACR, RDA and MARC 21", London: Facet Publishing.

INSTRUCTIONAL STRATEGY

This is hands-on practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in the students. This subject contains equal units of equal weightage.

Teachers should use demonstration method for teaching this subject, followed by the practice by the students. Students may be taken to various types of libraries for understanding the concept and applications of various contents.

3.5 LIBRARY & INFORMATION MANAGEMENT - I

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RATIONALE

Management is the art of managing the organisation by applying principles and techniques of management. Similarly, library management is concerned with managing the resources of libraries i.e. men, machine and money and serving the users with effective products and services. This course introduces selected theories, principles and techniques of contemporary management science, and organizational behavior and their application to libraries and information services.

COURSE OUTCOMES

After undergoing the subject, students will be able to:
CO1: Describe the term management as applied to libraries and information centre.
CO2: Identify the fundamental components of management, planning, organizing, staffing, directing and control.
CO3: Equip with the skills of managing resources, money, people and time.
CO4: Demonstrate skills necessary to manage and work effectively within information organizations.

DETAILED CONTENTS

UNIT I

Management Theory

1.1 Concepts of Management: Definition, Nature and Scope
1.2 Principles of Management
1.3 Schools of Thought in Management
1.4 Contribution by F. W. Taylor and Henry Fayol
1.5 Functions of Management (POSDCORB)

UNIT II

Planning and Decision Making

4.1. Planning: Concept, Nature and Importance
4.2. Process and Techniques
4.3. Barriers to Effective Planning
4.4. Decision Making: Concept and Process
4.5. Co-ordination

UNIT III

Organization

3.1 Concept, Nature and Importance
3.2 Principles and Significance
3.3 Centralization and Decentralization
3.4 Organizational charts with respect to libraries
3.5 Library authority and Library Committee: Need, Objectives and Functions

UNIT IV

Controlling and Direction

4.1. Motivation: Importance, Concept and Characteristics
4.2. Maslow's Hierarchy of Needs
4.3. Leadership: Concept, Nature, Importance and Leadership styles
4.4. Controlling: Meaning, Importance, Concept, Types of Control
4.5. Direction: Concept, Nature, Process and Methods

UNIT V

Personnel Management

5.1 Manpower Planning, Recruitment and Selection in Libraries
5.2 Types, Duties and Responsibilities of Library Staff
5.3 Ethics for a Librarian
5.4 Staff Training, Development and Continuing Education
5.5 Job Analysis, Job Evaluation and Performance Appraisal

RECOMMENDED BOOKS

1. Griffin, R., "Fundamentals of Management", Boston, MA: Houghton Mifflin.
2. Koontz, H. & H. Weihrich, "Essentials of management", McGraw Hill Inc.
3. Kumar, P.S.G., "Management of Library and Information Centres", Delhi, B. R. Publishing corporation.
4. Swain, C., Satpathy, S. K., & B. Rautaray, "Strategic issues in library management", New Delhi, Avon Publications.
5. Tripathi, P.C. & Reddy, P.N., "Principles of management", New Delhi, Tata McGraw Hill.

INSTRUCTIONAL STRATEGY

This is hands-on practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in the students. This subject contains equal units of equal weightage.

Teachers should use demonstration method for teaching this subject, followed by the practice by the students. Students may be taken to various types of libraries for understanding the concept and applications of various contents.

3.6 OPEN ELECTIVE

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RATIONALE

Open electives are very important and play major role in implementation of National Education Policy. These subjects provide greater autonomy to the students in the curriculum, giving them the opportunity to customize it to reflect their passions and interests. The system of open electives also encourages cross learning, as students pick and choose subjects from the differentstreams.

COURSE OUTCOMES

At the end of the open elective, the students will be able to:

CO1: State the basic concepts and principles about the subject of interest.
CO2: Perform in a better way in the professional world.
CO3: Select and learn the subject related to own interest.
CO4: Explore latest developments in the field of interest.
CO5: Develop the habit of self-learning through online courses.

LIST OF OPEN ELECTIVES

(The list is indicative and not exhaustive)

1. Computer Application in Business
2. Introduction to NGO Management
3. Basics of Event Management
4. Event Planning
5. Administrative Law
6. Introduction to Advertising
7. Moodle Learning Management System
8. Linux Operating System
9. E-Commerce Technologies
10. NCC
11. Marketing and Sales
12. Graphics and Animations
13. Digital Marketing
14. Human Resource Management

15. Supply Chain Management
16. TQM

GUIDELINES

Open Elective shall be offered preferably in online mode. Online mode open elective shall preferably be through Massive Open Online Courses (MOOCs) from Swayam, NPTEL, Upgrad, Udemy, Khan Academy or any other online portal to promote self-learning. A flexible basket of large number of open electives is suggested which can be modified depending upon the availability of courses at suggested portals and requirements. For online open electives, department coordinators shall be assigned to monitor and guide the group of students for selection of minimum 20 hours duration online course of their choice. For offline open electives, a suitable relevant subject shall be offered by the respective department to the students with minimum 40% of the total class strength as per present and future requirements.

Assessment of MOOCs open elective shall be based on continuous evaluation by the respective coordinator. The coordinator shall consider the submitted assignments by the students from time to time during the conduct of MOOCs. The MOOCs assessment shall be conducted by the coordinator along with one external expert by considering submitted assignments out of 100 marks.

In case, no suitable open elective is available online, only then the course may be conducted in offline mode. The assessment of offline open elective shall be internal and external. The offline open elective internal assessment of 40 marks shall be based on internal sessional tests; assignments etc. and external assessment of 60 marks shall be based on external examination at institute level.

NOTE

The students enrolled under NCC will compulsorily undertake NCC as an open elective subject.

SUGGESTED WEBSITES

1. https://swayam.gov.in/
2. https://www.udemy.com/
3. https://www.upgrad.com/
4. https://www.khanacademy.org/

3.7 LIBRARY AUTOMATION

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RATIONALE

The libraries in today's world are heading towards automation and as a result libraries have automated their operations and services. To be conversant with the system, sufficient knowledge and skills related to Library Automation is necessary for diploma holders. Planning, implementation and operations of Library Automation is very essential for the students.

COURSE OUTCOMES

After undergoing this course, the student will be able to:

CO1: Acquire the technology for library automation and services provided by an automated library.
CO2: Plan and implement library automation.
CO3: Use Library Automation Software.
CO4: Apply modules of housekeeping operations.
CO5: Manage the entire collection/operations effectively.

DETAILED CONTENTS

UNIT I

Library Automation

1.1 Definition, Objectives, Advantages, Need , Purpose
1.2 Historical Perspective
1.3 Problems and Challenges in Library Automation

UNIT II

Process of Library Automation

2.1 Planning
2.2 Implementation
2.3 Evaluation

UNIT III
Library Automation Software

3.1 Development of Library Automation Software
3.2 Features
3.3 Free, Open source and Proprietary software
3.4 Criteria for selecting a library software

UNIT IV
Housekeeping Operations

Types of Payment System
4.1 Introduction to housekeeping operations: Acquisition, Cataloguing, Circulation, Serial Control, OPAC
4.1.1 Task analysis of housekeeping operations

UNIT V
Automated Library Services

5.1 Bibliographic Services
5.2 Document Delivery Services
5.3 Reference Services
5.4 Information Services
5.5 Alerting Services

PRACTICAL EXERCISES

1 Installation of Library Automation Software
2 Installation of Free and Open Source Software
3 Working on various Automation Software used for housekeeping operations
4 Practicing various library operations with the help of Library Management Software
5 Visit to various libraries (Minimum two) for understanding the functions and working of a library software in a real time work environment.

RECOMMENDED BOOKS

1. Balasubramanian P, & Sherin Yohannan, "Library Automation and Digitization" Ess Ess Publication, New Delhi.
2. Singh, Parmod Kumar, "Library Automation", Shree Publishers & Distributors, New Delhi.
3. Syed, Brown, & Christopher, "Parents of Invention: The Development of Library Automation Systems in the Late 20th Century" ABC-CLIO.
4. Tiwari, Purushotham, "Library Automation", APH Publishing Corporation.
5. Aswal, Rajinder Singh, "Library Automation for 21st Century." Ess Ess Publication, New Delhi.

INSTRUCTIONAL STRATEGY

This is hands-on practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in the students. This subject contains equal units of equal weightage.

Teachers should use demonstration method for teaching this subject, followed by the practice by the students. Students may be taken to various types of libraries for understanding the concept and applications of various contents.

FOURTH SEMESTER

4.1 ENGLISH AND COMMUNICATION SKILL - II

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RATIONALE

Communication II moves a step further from Communication Skills I and is aimed at enhancing the linguistic competency of the students. Language as the most commonly used medium of self-expression remains indispensable in all spheres of human life – personal, social and professional. This course is intended to make fresh ground in teaching of Communicative English as per the requirements of National Skill Quality Framework.

COURSE OUTCOMES

After undergoing this course, the learners will be able to:

CO1: Communicate effectively with an increased confidence; read, write and speak in English language fluently.

CO2: Comprehend special features of format and style of formal communication through various modes.

CO3: Write a Report, Resume, make a Presentation, Participate in GDs and Face Interviews

CO4: Illustrate use of communication to build a positive self-image through self-expression and develop more productive interpersonal relationships.

DETAILED CONTENTS

UNIT I Reading

1.1 Portrait of a Lady - Khushwant Singh

1.2 The Doctor's Word by R K Narayan

1.3 Speech by Dr Kiran Bedi at IIM Indore2007 Leadership Concepts

1.4 The Bet - by Anton Chekov

UNIT II Effective Communication Skills

2.1 Modern means of Communication (Video Conferencing, e- mail, Teleconferencing)

2.2 Effective Communication Skills: 7 C's of Communication

2.3 Non-verbal Communication – Significance, Types and Techniques for Effective Communication

2.4 Barriers and Effectiveness in Listening Skills
2.5 Barriers and Effectiveness in Speaking Skills

Unit III Professional Writing

3.1 Correspondence: Enquiry letters, placing orders, complaint letters
3.2 Report Writing
3.3 Memos
3.4 Circulars
3.5 Press Release
3.6 Inspection Notes and tips for Note-taking
3.7 Corrigendum writing
3.8 Cover Letter

UNIT IV

Grammar and Vocabulary

4.1 Prepositions
4.2 Conjunctions
4.3 Punctuation
4.4 Idioms and Phrases: A bird of ill omen, A bird's eye view, A burning question, A child's play, A cat and dog life, A feather in one's cap, A fish out of water, A shark, A snail's pace, A snake in the grass, A wild goose chase, As busy as a bee, As faithful as dog, Apple of One's eye, Behind one's back, Breath one's last, Below the belt, Beat about the bush, Birds of a feather flock together, Black Sheep, Blue blood, By hook or crook, Chicken hearted, Cut a sorry figure ,Hand in glove, In black and white, In the twinkling, In full swing ,Is blind as a bat, No rose without a thorn, Once in a blue moon, Out of the frying pan in to the fire, know no bounds ,To back out, To bell the cat, To blow one's trumpet, To call a spade a spade, To cut one's coat according to one's cloth, To eat humble pie, To give ear to, To have a thing on one's finger tips, To have one's foot in the grave, To hold one's tongue, To kill two birds with one stone, To make an ass of oneself, To put two and two together, To the back bone, Turn coat, ups and downs.
4.5 Pairs of words commonly misused and confused: Accept-except, Access-excess, Affect-effect, Artificial- artful, Aspire-expire, Bail-bale, Bare-bear, Berth-birth, Beside-besides, Break-brake, Canvas-canvass, Course- coarse, Casual-causal, Council-counsel, Continual-continuous, Coma-comma, Cue- queue, Corpse- corps-core, Dairy-diary, Desert-dessert, Dual-duel, Dew- due, Die-dye, Draft- draught-drought, Device-devise, Doze-dose, Eligible-illegible, Emigrant- immigrant, Envelop-envelope, Farther-further, Gate-gait, Goal-goal, Human-humane, Honorable-honorary, Hail-hale, Hair-heir-hare,

Industrial-industrious, Impossible- impassable, Idle-idol-ideal, Lose-loose, Later-latter, Lesson-lessen, Main-Mane, Mental-mantle, Metal-mettle, Meter-metre, Oar-ore, Pray-prey, Plain-plan, Principal - principle, Personal- personnel, Roll- role, Route-rout- roote, Stationary-stationery, Union- unity, Urban- urbane, Vocation- vacation, Vain- vein-vane, Vary- very.

4.6 Translation of Administrative and Technical Terms in Hindi or Mother tongue: Academy, Abandon, Acting in official capacity, Administrator, Admission, Aforesaid, Affidavit, Agenda, Alma Master, Ambiguous, Appointing Authority, Apprentice, Additional, Advertisement, Assistant, Assumption of charge, Assurance, Attested copy, Bonafide, Bond, Cashier, Chief Minister, Chief Justice Clerical error, Commanding ,Officer, Consent, Contractor, corruption, Craftsman, Compensation, Code, Compensatory allowance, Compile, Confidential letter, Daily Wager, Data, Dearness allowance, Death - Cum Retirement, Dispatch, Dispatch Register, Disciplinary, Disciplinary Action, Disparity Department, Dictionary, Director, Director of Technical Education, Earned Leave, Efficiency Bar, Estate, Exemption, Executive Engineer, Extraordinary, Employment Exchange, Flying Squad, General Body, Head Clerk, Head Office, High Commission, Inconvenience, Income Tax, Indian Assembly Service, Justify, Legislative Assembly, Negligence, Officiating ,Office Record, Office Discipline, On Probation, Part Time, Performance, Polytechnic, Proof Reader Precautionary, Provisional, Qualified, Regret, Responsibility, Self-Sufficient, Senior, Simultaneous ,Staff, Stenography ,Superior, Slate, Takeover, Target Data Technical Approval, Tenure, Temporary, Timely Compliance, Under Investigation, Under Consideration, Verification, Viva-voce, Write off, Working Committee, Warning, Yours Faithfully , Zero Hour.

UNIT V Employability Skills

5.1 Presentation Skills: How to prepare and deliver a good presentation

5.2 Telephone Etiquettes

5.3 Importance of developing employable and soft skills

5.4 Resume Writing: Definition, Kinds of Resume, Difference between Bio-data and Curriculum Vitae and Preparing a Resume for Job/ Internship

5.5 Group discussions: Concept and fundamentals of GD, and learning Group Dynamics.

5.6 Case Studies and Role Plays

PRACTICAL EXERCISES

1. Reading Practice of the above lessons in the Lab Activity classes.
2. Comprehension exercises of unseen passages along with the given lessons.

3. Vocabulary enrichment and grammar exercises based on the above selective readings.
4. Situational Conversation: Requesting and responding to requests; Expressing sympathy and condolence.
5. Warning; Asking and giving information.
6. Getting and giving permission.
7. Asking for and giving opinions.
8. A small formal and informal speech.
9. Seminar.
10. Debate.
11. Interview Skills: Preparing for the Interview and guidelines for success in the Interview and significance of acceptable body-language during the Interview.
12. Written Drills will be undertaken in the class to facilitate a holistic linguistic competency among learners.
13. Participation in a GD, Functional and Non-functional roles in GD, Case Studies and Role Plays
14. Presentations, using audio-visual aids (including power-point).
15. Telephonic interviews, face to face interviews.
16. Presentations as Mode of Communication: Persuasive Presentations using multi-media aids.
17. Practice of idioms and phrases on: Above board , Apple of One's eye , At sea, At random, At large, A burning question, A child's play, A wolf in sheep's clothing, A deal, Breath one's last, Bid fair to, Beat about the bush, Blue Blood, Big Gun, Bring to Book, Cut a sorry figure, Call names, Carry weight, Dark Horse, Eat Humble pie, Feel small, French leave, Grease the palm, Go against the grains, Get One's nerves, Hard and Fast, Hue and Cry, Head and ears, In full swing, Jack of all trades, know no bounds, kiss the dust, Keep an eye on, Lion's share, learn by rote, Null and void, on the cards, Pull a long face, Run amuck, Right and Left, Rain on Shine, Small talk, Take to one's heels, Tooth and nail, to take by storm, , Wet blanket, Yearn for.

RECOMMENDED BOOKS

1. Alvinder Dhillon and Parmod Kumar Singla, "Text Book of English and Communication Skills Vol – 1, 2", M/s Abhishek Publications, Chandigarh.
2. J Sethi, Kamlesh Sadanand & DV Jindal, "Course in English Pronunciation", PHI Learning Pvt. Ltd., New Delhi.
3. Wren and Martin, "High School English Grammar and Composition" .

4. NK Aggarwal and FT Wood, "English Grammar, Composition and Usage", Macmillan Publishers India Ltd., New Delhi.
5. RC Sharma, and Krishna Mohan, "Business Correspondence & Report Writing", (4th Edition), by Tata MC Graw Hills, New Delhi.
6. Varinder Kumar, Bodh Raj & NP Manocha, "Business Communication Skills", Kalyani Publisher, New Delhi.
7. Kavita Tyagi & Padma Misra, "Professional Communication", PHI Learning Pvt. Ltd., New Delhi.
8. Nira Konar, "Communication Skills for Professionals", PHI Learning Pvt. Ltd., New Delhi.
9. Krishna Mohan & Meera Banerji, "Developing Communication Skills", (2nd Edition), Macmillan Publishers India Ltd., New Delhi.
10. M. Ashraf Rizwi, "Effective Technical Communication", Tata MC Graw Hills, New Delhi.
11. Andrea J Rutherford, "Basic Communication Skills for Technology", Pearson Education, New Delhi.

INSTRUCTIONAL STRATEGY

This is practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required communication skills in the students. Emphasis should be given on practicing of communication skills. This subject contains five unit of equal weight age.

4.2 INFORMATION STORAGE & RETRIEVAL

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RATIONALE

To acquaint the students about different types databases, information retrieval process, recent trends and providing theoretical knowledge about the Information storage and retrieval system.

COURSE OUTCOMES

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

CO1: Comprehend the components of ISAR system

CO2: Develop familiarity with various bibliographic description standards.

CO3: Use vocabulary control tools.

CO4: Create awareness about the principles and theoretical aspects of thesaurus, abstracting and indexing.

DETAILED CONTENTS

UNIT I

Introduction of Information Storage and Retrieval System

1.1 Definition, Characteristics, Objectives, Components of ISAR Systems

1.2 Database: Definition, Type and functions, - CD-ROM database, online database

1.3 Information Retrieval Process and Search Strategy

1.4 Evaluation of ISAR System

UNIT II

Bibliographic Description

2.1. Principles and Evolution of Bibliographic Description

2.2. Rules for Bibliographic Description

2.3. Standards for Bibliographic Record Formats

2.4. Metadata Concepts, Metadata Standards: Dublin Core, MARC 21 etc.

UNIT III

Vocabulary Control

3.1. Definition and Purposes

3.2. Tools of Vocabulary Control: Classification Schedules, Subject Heading List and Thesaurus

3.3. Thesaurus- Definition and Types

UNIT IV

Indexing and Abstracting

4.1. Indexing: Definition, characteristics, types of Indexes

4.2. Outlines of Indexing System: Pre-Coordinate Indexing System: Chain Indexing, PRECIS, POPSI

4.3. Post-Coordinate Indexing System: KWIC and KWOC etc

4.4. Abstracting: Definition, purposes, need and types of Abstracting

UNIT V

Trends in Information Retrieval

5.1 Web Information Retrieval – Search Engines: Definition,

5.2 Functions and Components,

5.3 Meta Search Engines, Subject Directories,

5.4 Subject Gateways and

5.5 Institutional Repositories etc.

RECOMMENDED BOOKS

1. B. Guha, "Documentation and Information", World Press, Calcutta.
2. J K Gerald, and T.M. Mark, "Information storage and Retrieval" Boston, Kluwer.
3. G G Chaudhary, "Introduction to modern information retrieval", Facet Publishing London.
4. F W. Lancaster, "Indexing and abstracting theory and practice", Facet Publishing, London.

INSTRUCTIONAL STRATEGY

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4.3 ENTREPRENEURSHIP DEVELOPMENT & MANAGEMENT

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RATIONALE

In the present day scenario, it has become imperative to impart entrepreneurship and management concepts to students so that a significant percentage of them can be directed towards setting up and managing their own small enterprises. This subject focuses on imparting the necessary competencies and skills of enterprise set up and its management.

COURSE OUTCOMES

After undergoing this course, the learners will be able to:

CO1: Comprehend the importance of entrepreneurship and its role in nation's development.
CO2: Classify the various types of business and business organizations.
CO3: Identify the various resources / sources and / or schemes for starting a new venture.
CO4: Explain the principles of management including its functions in an organisation.
CO5: Conduct market survey and prepare project report.

DETAILED CONTENTS

UNIT I

Entrepreneurship: Concept and definitions, classification and types of entrepreneurs, entrepreneurial competencies, Traits / Qualities of entrepreneurs, manager v/s entrepreneur, role of Entrepreneur, barriers in entrepreneurship, Sole proprietorship and partnership forms of business organisations, small business vs startup, critical components for establishing a start-up, Leadership: Definition and Need, Manager vs leader, Types of leadership

UNIT II

Definition of MSME (micro, small and medium enterprises), significant provisions of MSME Act, importance of feasibility studies, technical, marketing and finance related problems faced by new enterprises, major labor issues in MSMEs and its related laws, Obtaining financial assistance through various government schemes like Prime Minister Employment Generation

Program (PMEGP) Pradhan Mantri Mudra Yogna (PMMY) , Make in India, Start up India, Stand up India , National Urban Livelihood Mission (NULM); Schemes of assistance by entrepreneurial support agencies at National, State, District level: NSIC, NRDC, DC:MSME, SIDBI, NABARD, Commercial Banks, SFC's TCO, KVIB, DIC, Technology Business Incubator (TBI) and Science and Technology Entrepreneur Parks (STEP).

UNIT III

NATURE AND FUNCTIONS OF MANAGEMENT: Definition, Nature of Management, Management as a Process, Management as Science and Art, Management Functions, Management and Administration, Managerial Skills, Levels of Management; Leadership.

PLANNING AND DECISION MAKING: Planning and Forecasting - Meaning and definition, Features, Steps in Planning Process, Approaches, Principles, Importance, Advantages and Disadvantages of Planning, Types of Plans, Types of Planning, Management by Objective. Decision Making-Meaning, Characteristics.

UNIT IV

ORGANISING AND ORGANISATION STRUCTURE: Organising Process - Meaning and Definition, Characteristics Process, Need and Importance, Principles, Span of Management, Organisational Chart - Types, Contents, Uses, Limitations, Factors Affecting Organisational Chart.

STAFFING: Meaning, Nature, Importance, Staffing process. Manpower Planning, Recruitment, Selection, Orientation and Placement, Training, Remuneration.

CONTROLLING AND CO-ORDINATION Controlling - Meaning, Features, Importance, Control Process, Characteristics of an effective control system, Types of Control. Co-ordination - characteristics, essentials.

UNIT V

Market Survey and Opportunity Identification, Scanning of business environment, Assessment of demand and supply in potential areas of growth, Project report Preparation, Detailed project report including technical, economic and market feasibility, Common errors in project report preparations, Exercises on preparation of project report.

RECOMMENDED BOOKS

1. BS Rathore and Dr JS Saini, "A Handbook of Entrepreneurship", Aapga Publications, Panchkula (Haryana).

2. Entrepreneurship Development, Tata McGraw Hill Publishing Company Ltd., New Delhi.
3. CB Gupta and P Srinivasan, "Entrepreneurship Development in India", Sultan Chand and Sons, New Delhi.
4. Poornima M Charantimath, "Entrepreneurship Development - Small Business Enterprises", Pearson Education, New Delhi.
5. David H Holt, "Entrepreneurship: New Venture Creation", Prentice Hall of India Pvt. Ltd., New Delhi.
6. PM Bhandari, "Handbook of Small Scale Industry".
7. L M Prasad, "Principles and Practice of Management", Sultan Chand & Sons, New Delhi.

SUGGESTED WEBSITES

1. https://ipindia.gov.in/

INSTRUCTIONAL STRATEGY

Some of the topics may be taught using question/answer, assignment or seminar method. The teacher will discuss stories and case studies with students, which in turn will develop appropriate managerial and entrepreneurial qualities in the students. In addition, expert lecturers may also be arranged from outside experts and students may be taken to nearby industrial organisations on visit. Approach extracted reading and handouts may be provided. In addition, different activities like conduct of entrepreneurship awareness camp extension lecturers by outside experts, interactions sessions with entrepreneurs and industrial visits may also be organised. This subject contains equal units of equal weightage.

4.4 LIBRARY AUTOMATION & NETWORKING

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RATIONALE

The utilization of computer and related techniques make the provision to provide the right information to right reader at the right time in a right form in a right personal way. Automation of library activities provides the services very efficiently, rapidly, effectively, adequately and economically. The modern libraries and information a centre facilitates free communication because access to information has become a fundamental right of the clientel. In this lesson you will learn about the Popular Integrated Library Management Software and Emerging Tools & Technologies in Library Automation.

COURSE OUTCOMES

After undergoing the subject, student will be able to:

CO1: Integrate Popular Library Management Software
CO2: Acquire skills for preservation of Library Database
CO3: Apply Emerging Tools & Technologies in Library Automation
CO4: Illustrate Library Networking and Resource Sharing
CO5: Describe and Implement Automated Library Services

DETAILED CONTENTS

UNIT-1

Popular Integrated Library Management Software

KOHA, SOUL, LIBSYS and Virtua: Introduction and important features

UNIT-II

Preservation of Library Database

Safety and Security of Database
Database Security Threats
Data back up: Ways and Methods

UNIT-III

Emerging Tools & Technologies in Library Automation

Cloud computing and its application in libraries, Barcode and QR Code, RFID Technology Library website and library portal

UNIT-IV

Library Networking and Resource Sharing

Library networking: need and objectives, Resource sharing and its benefits, Library and Information networks with special reference to India: DELNET, INFLIBNET, E ShodhSindhu ICAR-CeRA,

UNIT-V

Automated Library Services

Services: Bibliographic Services, Document Delivery Services, Reference Services,: email, Chat, Instant messaging, Content alert service, RFID,.

PRACTICAL EXERCISES

1. Installation of Library Automation Software
2. Installation of Free and Open Source Software
3. Working on various Automation Software used for housekeeping operations
4. Practicing various library operations with the help of Library Management Software
5. Visit to various libraries (Minimum two) for understanding the functions and working of a library software in a real time work environment.
6. Practice on different modules of Automated Housekeeping Operations:
    - Acquisition (at least 10 entries)
    - Cataloguing (at least 10 entries)
    - Circulation (at least 10 entries)
    - OPAC (at least 10 entries): Search Strategies in OPAC
    - Serial Control: Subscription of Serials, Maintenance of serials
    - Reports (Sample reports may be generated to explain the process)
    - Administration Module and Settings

RECOMMENDED BOOKS

1. Ansari K. Ravindra., "IT for Librarians", IK international Publication House. Pvt. Ltd. New Delhi.
2. Gahale P. D., "Library Network and Digital Llibrary", Garima Prakashan, Kanpur.
3. Gopal Krishna, "Modern Library Automation", Authors press, Delhi
4. Sangita, "Manpower Needs Automation Libraries", Ess Ess Publication, New Delhi.
5. V. K. Iyer, "Library Information Network Management", Commonwealth Publishers, New Delhi.

INSTRUCTIONAL STRATEGY

Some of the topics may be taught using question/answer, assignment or seminar method. The teacher will discuss stories and case studies with students, which in turn will develop appropriate managerial and entrepreneurial qualities in the students. In addition, expert lecturers may also be arranged from outside experts and students may be taken to nearby industrial organisations on visit. Approach extracted reading and handouts may be provided. This subject contains equal units of equal weightage.

4.5 LIBRARY & INFORMATION MANAGEMENT - II

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RATIONALE

Library management is a sub-discipline of institutional management that focuses on specific issues faced by libraries and library management professionals. The main objective of the subject is to introduce students to the basics of management, its functions and its application with regard to library and Information Centres. This subject will introduce the students to the basic library operations which includes - managing library infrastructure, library budgeting, planning, acquisition of materials, stacks maintenance and human resources.

COURSE OUTCOMES

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

CO1: Comprehend management techniques to achieve the organizational effectiveness
CO2: Achieve efficiency in library and information centres
CO3: Handle effectively the library and information management routines
CO4: Manage finances and human resource development required for library services.

DETAILED CONTENTS

UNIT I

Library Planning

1.1 Library Building: Layout, Site Selection, Design, Lighting, Temperature control, Provision of power backup and Spatial analysis for a Good Design
1.2 Library Furniture: Standards and Maintenance
1.3 Library Equipment: Requirement and Maintenance
1.4 Disaster Management
1.5 Insurance in Libraries
1.6 Green Libraries

UNIT II

Library Budgeting and Finance

2.1 Library Budget: Concept, Importance
2.2 Library Budgeting and Techniques
2.3 Library Finance: Sources of Funds and Allocation
2.4 Library Expenditure and Planning
2.5 Library Auditing and Reporting

UNIT III

General Office Functions and Library Extension Services

3.1 Library records and Manuals
3.2 Annual Report and Library Statistics
3.3 Library Extension Services: Objectives, Need, Types
3.4 Resource sharing: Methods, Procedures and Benefits; Inter Library Loan
3.5 Library Marketing and Publicity (Book Displays, Exhibitions, Lectures, Film shows)
3.6 Concept of Mobile Libraries, Branch libraries

UNIT IV

Stock Verification

4.1 Stock Verification and Stock rectification: Definition, need &purpose
4.2 Methods of Stock verification
4.3 Advantages and disadvantages of Stock verification
4.4 Causes and responsibilities of the Loss of Books
4.5 Weeding out of books

UNIT V

Preservation and Conservation

5.1 Preservation of books and non-book material: Need and Methods
5.2 Preservation and Conservation of Rare and Archival Materials
5.3 Threats to Library Resources : Cause and Prevention
5.4 Binding: Need and Types of binding, Binding material and Process

PRACTICAL EXERCISES

1. Preparation of library Annual budget layout
2. Preparation of library Annual Report
3. Stock verification of 50 books randomly

4. Preparation of Library Statistics
5. Preparing of a list of 20 books which are to be Written-off
6. Visit to various libraries and information centres to make the students familiar with all housekeeping operations of a library.

RECOMMENDED BOOKS

1. P.S.G. Kumar, "Management of Library and Information Centres", Delhi, B. R. Publishing Corporation.
2. P. Mahapatra, "Library management", Calcutta, World Press.
3. G.I. Narayana, "Library and Information Management", New Delhi, Prentice- Hall of India.
4. C. K. Sharma, and Kiran Singh, "Library Management", Atlantic Publishers & Distributors.
5. S. Thanuskodi, "Challenges of academic library management in developing countries", Hershey PA: Information Science Reference.
6. D. Velasquez, "Library management 101: a practical guide", Chicago, ALA Editions, an imprint of the American Library Association.

INSTRUCTIONAL STRATEGY

This is hands-on practice based subject and topics taught in the class should be practiced in the Lab regularly for development of required skills in the students. This subject contains equal units of equal weightage.

Teachers should use demonstration method for teaching this subject, followed by the practice by the students. Students may be taken to various types of libraries for understanding the concept and applications of various contents.

4.6 PROGRAMME ELECTIVE - I
4.6.1 ACADEMIC LIBRARY AND INFORMATION SYSTEM

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RATIONALE

Academic libraries are dynamic instruments of education. They support the institutions, to which they belong, in fulfilling the objectives and advances their aims. They support the faculty in teaching and research programmes. The primary objective of these libraries is conservation and preservation of knowledge. After completing the course the student should be able to understand the role of academic library in academic institution.

COURSE OUTCOMES

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

CO1: Comprehend functions and services of academic library.
CO2: Detail the resource and collection development in academic library
CO3: Familiarize with different academic library network and consortia
CO4: Gain the knowledge of library finance, budget and source of finance.

DETAILED CONTENTS

UNIT I
Academic Library

1.1 Definition, Objective, Functions and Types
1.2 Role of Academic library in Higher Education
1.3 Role of UGC and other bodies for Academic Library development

UNIT II
Collection Developments

2.1. Selection , Acquisition of library documents
2.2. Role of library committee in Collection development
2.3. Write off and weeding out policy

UNIT III

Information Services

3.1. Traditional Services, ICT enabled services

3.2. Information Literacy and orientation Programmes

3.3. Documents Delivery Services, Library Bulletin and Newspaper Clipping Services etc

UNIT IV

Library Cooperation

Resource Sharing and Network and Consortia: INFLIBNET, NLIST, DIGITAL LIBRARY CONSORTIUM etc.

UNIT V

Financial Management

5.1 Library Finance , Sources of Finance and various expenditure heads

5.2 Budget: Definition and Types

5.3 Guidelines for preparation of Budget

RECOMMENDED BOOKS

1. S.N. Srivastava and S.C. Verma, "University libraries in India", Vikas Publication, New Delhi.
2. M. Bavakutty, "Libraries in higher education", Ess Ess Publication New Delhi.
3. S. Sahai, "Academic Library System", Ess Ess Publication, New Delhi.
4. S. R. Ranganathan, "Library Manual, for School, College and Public Libraries", Ess Ess Publication, New Delhi.
5. S. S. Waghchoure, "Best Practices in Academic Libraries", Ess Ess Publication, New Delhi.
6. N.B. Gohel, "Role of University's Libraries in the Development of India", Neeraj Publication, New Delhi.
7. K. Shukla, "University Libraries in India", RBSA Publishers, New Delhi.

INSTRUCTIONAL STRATEGY

Teachers should use demonstration method for teaching this subject, followed by the practice by the students. Students may be taken to various types of libraries for understanding the concept and applications of various contents. This subject contains equal units of equal weightage.

4.6.2 PUBLIC LIBRARY AND INFORMATION SYSTEM

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RATIONALE

Public libraries provide free access to a wide range of materials, including books, magazines, newspapers, and digital resources such as e-books, audiobooks, and online databases. This allows people to learn about a variety of subjects and keep up with current events.After completing the course the student should be able to understand the role of public library in the society this paper is introduced in the curriculum.

COURSE OUTCOMES

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

CO 1: Create an awareness of the role of public Libraries in the society.

CO2: Role of UNESCO and RRRLF for development of public Library.

CO3: Understand the resource and collection development of public library.

CO4: To educate and train about range of professional challenges associated with public library administration and management.

DETAILED CONTENTS

UNIT I

Basics

1.1 Public Library: Definition, Objective, Functions

1.2 Public Library Movement in India

1.3 Library Legislation for various states in India

UNIT II

Agencies in the Promotion and Development of Public Library System

2.1. UNESCO Public Library Manifesto

2.2. Raja Rammohan Roy Library Foundation

2.3. National Mission on Libraries (NKC)

UNIT III

Collection Developments and Management (Print and Electronic)

3.1. Printed Information Sources : Selection , Acquisition and Evaluation

3.2. Printed Sources for special categories of users : Children, Adults, Senior Citizens and Differently abled people

3.3. Electronic Information Sources : Selection , Acquisition and Evaluation

3.4. Electronic Resources : Internet Resources, Websites, Subject Portals and Digital Library Resources for different categories of users

UNIT IV

Management of Public Library

4.1. Library Governance: Composition and Functions of Library Authority/ Library Committee in Public Library Acts of States and Union Territories in India

4.2. Financial Management : Sources of Finance, Financial Provision in Public Library Acts

4.3. Resources Sharing and Library Networking

UNIT V

Services

5.1 Traditional and web based services

5.2 Extension Services: Author talk, Book Clubs, Exhibition and lecture etc

5.3 Outreach Activities: Mobile Library Services and Online services

RECOMMENDED BOOKS

1. S. R. Ranganathan, “Library Manual, for School, College and Public Libraries”, Ess Ess Publication New Delhi.
2. C. G. Viswanathan, “Public Library Organization: with special reference to India”, Ess Ess Publication New Delhi.
3. Anne Goulding, “Public libraries in the 21st century: Defining Services and debating the Future”. London: Routhledge.
4. Gopal Rao Ekbote, “Public Library System”, Ekbote Brothers Hyderabad.
5. L. N. Verma, and U.K. Agrawal, “Public Library Services in India”. Himanshu Publication, Udaipur.
6. J. Vijaya Kumari, “Public Library System” Anmol Publication, New Delhi.
7. C. A. Augustine, and G. Devarajan, “Public Library System in India”, Ess Ess Publication, New Delhi.

INSTRUCTIONAL STRATEGY

Teachers should use demonstration method for teaching this subject, followed by the practice by the students. Students may be taken to various types of libraries for understanding the concept and applications of various contents. This subject contains equal units of equal weightage.

4.6.3 INTELLECTUAL PROPERTY RIGHTS

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RATIONALE

The course is designed to provide comprehensive knowledge to the students regarding the general principles of IPR, Concept and Theories, Criticisms of Intellectual Property Rights, International Regime Relating to IPR

COURSE OUTCOMES

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

CO1: Recognize the importance and educate basic concepts of Intellectual Property Rights
CO2: Get aware of process of acquiring the patent of their work
CO3: Familiarize with the process to apply for copyright for their innovative works.
CO4: Illustrate the knowledge of plagiarism in their innovations which can be questioned legally.

DETAILED CONTENTS

UNIT I

Intellectual Property: Introduction, types and importance

Kinds of Intellectual property rights—Copy Right, Patent, Trade Mark, Trade Secret and trade dress, Design, Layout Design, Geographical Indication, Plant Varieties and Traditional Knowledge.

UNIT II

PATENT: Origin, Meaning of Patent, Types and registration procedure
COPY RIGHTS: Origin, Definition &Types of Copy Right, Registration procedure.

UNIT III

TRADE MARKS— Origin, Meaning & Nature of Trade Marks, Types, Registration of Trade Marks

UNIT IV

DESIGN- Meaning, Definition, Object, Registration of Design
Semiconductor Integrated circuits and layout design Act-2000.

UNIT V

INPASS
Introduction to TRIPS and WTO
IT Act – Introduction
Cybercrimes

RECOMMENDED BOOKS

1. Dr. G.B. Reddy, "Intellectual Property Rights and the Law", Gogia Law Agency.
2. Dr. B.L.Wadehra, "Law relating to Intellectual Property", Universal Law Publishing Co".
3. Dr. S.R. Myneni, "Law of Intellectual Property", Asian Law House.
4. W. R Cornish, "Intellectual Property", London: Sweet & Maxwell.
5. Carlos M. Correa, "Intellectual Property Rights, the WTO and Developing Countries: The TRIPS Agreement and Policy Options" Penang: Third World Network.
6. Deborah. E. Bouchoux, "Intellectual Property Right, Cengage learning.
7. Prabuddhaganguli, "Intellectual Property Right – Unleashing the knowledge Economy", Tata McGraw Hill Publishing company ltd.

INSTRUCTIONAL STRATEGY

Some of the topics may be taught using question/answer, assignment or seminar method. The teacher will discuss stories and case studies with students, which in turn will develop appropriate managerial and entrepreneurial qualities in the students. In addition, expert lecturers may also be arranged from outside experts and students may be taken to nearby industrial organisations on visit. Approach extracted reading and handouts may be provided. This subject contains equal units of equal weightage.

4.7 MINOR PROJECT

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RATIONALE

Minor project work will help in developing the relevant skills among the students as per National Skill Qualification Framework. It aims at exposing the students to the present and future needs of various relevant industries. It is expected from the students to get familiar with industrial environment. For this purpose, students are required to be involved in Minor Project Work in different establishments.

COURSE OUTCOMES

After undergoing this course, the students will be able to:

CO1: Define the problem statement of the minor project according to the need of industry.
CO2: Work as a team member for successful completion of minor project.
CO3: Write the minor project report effectively.
CO4: Present the minor project report using PPT.

GUIDELINES

Depending upon the interest of the students, they can develop minor projects as per present and future demand of the industry. The supervisors may guide the students to identify their minor project work and chalk out their plan of action well in advance. As a minor project activity each student is supposed to study the operations at site and prepare a detailed project report of the observations/processes/activities. The supervisor may create a group of 4-5 students as per their interest to work as a team for successful completion of the minor project.

The supervisor shall evaluate the students along with one external expert by considering thefollowing parameters:

	Parameter	Weightage
i	Defining problem statement, focus and approach	20%
ii	Innovation / creativity	20%
iii	Report Writing	20%
iv	Power Point Presentation	20%
v	Viva - voce	20%

THIRD YEAR

NSQF LEVEL - 5

FIFTH SEMESTER

Sr. No.	SUBJECTS	STUDY SCHEME Periods/Week		Credits (C) (L+P=C)	MARKS IN EVALUATION SCHEME						Total Marks of Internal & External
					INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT			
		L	P		Th	Pr	Tot	Th	Pr	Tot	
5.1	Industrial Training - II	-	2	**0+1=1**	-	40	40	-	60	60	100
5.2	*Humanities & Life Skills	3	-	**3+0=3**	40	-	40	60	-	60	100
5.3	Information Literacy	3	-	**3+0=3**	40	-	40	60	-	60	100
5.4	Digital Library	3	6	**3+3=6**	40	40	80	60	60	120	200
5.5	Multi-disciplinary Elective (MOOCs+/Offline)	2	-	**2+0=2**	40	-	40	60	-	60	100
5.6	Programme Elective-II	3	-	**3+0=3**	40	-	40	60	-	60	100
5.7	Internet Applications in Library	-	8	**0+4=4**	-	40	40	-	60	60	100
# Student Centered Activities (SCA)		-	5	-	-	-	-	-	-	-	-
Total		**14**	**21**	**22**	**200**	**120**	**320**	**300**	**180**	**480**	**800**

* Common with other diploma programmes

+ Assessment of Open Elective through MOOCs shall be based on assignments out of 100 marks.

Programme Elective II: 5.6.1 Citation and Reference Management 5.6.2 Library Marketing 5.6.3 Electronic Resource Management

Student Centered Activities will comprise of co-curricular activities like extension lectures on Constitution of India, Electoral Literacy, Motor Vehicles (Driving) Regulations 2017 etc., games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities and self- study etc.

SIXTH SEMESTER

Sr. No.	SUBJECTS	STUDY SCHEME Periods/Week		Credits (C) (L+P=C)	MARKS IN EVALUATION SCHEME						Total Marks of Internal & External
					INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT			
		L	P		Th	Pr	Tot	Th	Pr	Tot	
6.1	Project Oriented Professional Training	-	35	**0+17=17**	-	200	200		300	300	500
	Total	**-**	**35**	**17**	**-**	**200**	**200**	**-**	**300**	**300**	**500**

TOTAL CREDITS - 135

TOTAL MARKS

Theory hours 70 (36% of total contact hours)
Practical hours 125 (64 % of total contact hours)

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19. HORIZONTAL AND VERTICAL SUBJECTS ORGANISATION

Sr. No.	Subjects/Areas	Hours Per Week	
		Fifth Semester	Sixth Semester
1.	Industrial Training - II	2	-
2.	Humanities & Life Skills	3	-
3.	Information Literacy	3	-
4.	Digital Library	9	-
5.	Multi-disciplinary Elective	2	-
6.	Programme Elective-II	3	-
7.	Internet Applications in Library	8	-
8.	Project Oriented Professional Training	-	35
9.	Student Centered Activities	5	-
	Total	**35**	**35**

20. COMPETENCY PROFILE & EMPLOYMENT OPPORTUNITIES

Government and private sectors related to **Library and Information Science (LIS)** require **supervisors** having well developed skills with clear choice of procedures. They are expected to have complete knowledge and practical skills related to their field. They shall be able to communicate clearly with others. Library and Information Science is a universal academic, intellectual and industrial field with a large international approach.

Diploma holders after passing level 5 shall have understanding of desired skills and understanding of social and natural environment. They are expected to collect, organize and communicate information effectively. They are expected to have good exposure of humanities, life skills, entrepreneur development and management to establish small start-ups.

In today's working environment the role of libraries and librarians changed from storehouse of information caretaker to information manager and at the same time the forms and distribution of information also took a new shape in a new way. This is due to the advancement of ICT as well as contemporary societal need. Due to this change, library and information science professionals also need a number of special skills and competencies along with the basic skills and competencies.

Work requiring knowledge, skills and aptitudes at level 5 will also be carried out in familiar situations, but also ones where problems may arise. Job holders will be able to make choices about the best procedures to adopt to address problems where the choices are clear. Individuals in jobs which require level 5 qualifications will normally be responsible for the completion of their own work and expected to learn and improve their performance on the job. They may also have some responsibility for others' work and learning.

In order to successfully deliver library services to their users, LIS professionals must exhibit certain fundamental behaviours and abilities. Overall, the job opportunities for diploma holders as Librarian, Information Officer, Records Manager Digital Archivist, Content Manager. One can find employment opportunities in: Public/Government libraries, Universities/colleges/schools and other academic institutions, News agencies and organizations, Private organizations, Information centers/documentation centers, Museums and galleries, which have reading rooms and research facilities, Law library/Special library.

21. PROGRAMME OUTCOMES

The program outcomes are derived from five domains of NSQF Level – 5 namely Process, Professional Knowledge, Professional Skill, Core Skill, Responsibility. After completing this level, the student will be able to:

PO1: Perform task that require well developed skills of Librarian with clear choice of procedures.

PO2: Acquire knowledge of facts, principles and processes related to Library and Information Sciences.

PO3: Demonstrate cognitive and practical skills of Librarian.

PO4: Develop digital knowledge, skills and competences to collect, organize and communicate information.

PO5: Accomplish works related to Librarian and supervise other's work.

PO6 Select online multidisciplinary electives of own interest to promote self-learning.

22. ASSESSMENT OF PROGRAMME AND COURSE OUTCOMES

Programme Outcomes to be assessed	Assessment criteria for the Course Outcomes
PO1: Perform task that require well developed skills of Librarian with clear choice of procedures.	• Comprehend the concept of information literacy in contemporary knowledge society. • Create knowledge on Information Literacy standards and guidelines, and online resources. • Familiarize with literacy skills required for knowledge exploration, retrieval and dissemination • Comprehend the concept and the process of developing a Digital Library • Develop familiarity with the Software and Hardware requirement to develop digital collection • Comprehend the importance of citation and reference management in academic and professional contexts. • Familiarize with different citation styles commonly used in various disciplines. • Develop skills in organizing and formatting citations and references. • Comprehend the concepts and principles of library marketing • Comprehend the role and importance of electronic resources in modern libraries. • Acquire the fundamentals of acquiring, licensing, and budgeting for electronic resources. • Develop skills in evaluating and selecting electronic resources for library collections. • Use and apply different Internet Tools used in libraries • Identify various Education Resources available over the Internet

PO2: Acquire knowledge of facts, principles and processes related to Library and Information Sciences.	• Comprehend about present and future requirement of industries. • Develop competencies and skills required by relevant industries. • Demonstrate a set of non-cognitive skills such as empathy, teamwork, collaboration, interpersonal skills, and resilience for smooth and efficient functioning at the workplace • Reflect ethical behaviour with a sense of right and wrong leading to practical ethical behaviour. • Identify and analyse different models and frameworks of information literacy. • Create knowledge on Information Literacy standards and guidelines, and online resources. • Develop plan and identify tools and techniques for developing a digital library • Develop familiarity with the Software and Hardware requirement to develop digital collection • Able to manage digital content in the form of Institutional Repository • Comprehend the importance of citation and reference management in academic and professional contexts. • Explore citation management software tools and their functionalities. • Develop skills in organizing and formatting citations and references. • Gain practical experience in integrating citations and references into written works. • Develop effective marketing plans and strategies for libraries • Utilise social media and other digital tools to promote library services and programs • Acquire the fundamentals of acquiring, licensing, and budgeting for electronic resources.

	• Develop skills in evaluating and selecting electronic resources for library collections. • Discuss licensing agreements, and digital rights management in electronic resource management. • Use and apply different Internet Tools used in libraries • Illustrate Internet-based services applied in the libraries • Identify various Education Resources available over the Internet
PO3: Demonstrate cognitive and practical skills of Librarian.	• Create knowledge on Information Literacy standards and guidelines, and online resources. • Develop familiarity with the Software and Hardware requirement to develop digital collection • Able to manage digital content in the form of Institutional Repository • Develop effective marketing plans and strategies for libraries • Conduct market research to identify target audiences and their needs • Develop skills in evaluating and selecting electronic resources for library collections. • Use and apply different Internet Tools used in libraries • Identify various Education Resources available over the Internet.
PO4: Develop digital knowledge, skills and competences to collect, organize and communicate information.	• Develop writing, speaking and presentations skills. • Demonstrate a set of non-cognitive skills such as empathy, teamwork, collaboration, interpersonal skills, and resilience for smooth and efficient functioning at the workplace • Demonstrate the dynamics of individual, interpersonal and group processes that influence behaviour within teams and organizations. • Comprehend the concept of information literacy in contemporary knowledge society.

	• Create knowledge on Information Literacy standards and guidelines, and online resources. • Familiarize with literacy skills required for knowledge exploration, retrieval and dissemination • Able to manage digital content in the form of Institutional Repository • Utilise social media and other digital tools to promote library services and programs • Develop skills in evaluating and selecting electronic resources for library collections. • Use and apply different Internet Tools used in libraries • Illustrate Internet-based services applied in the libraries
PO5: Accomplish works related to Librarian and supervise other's work.	• Familiarize with the working environment of industries • Comprehend about present and future requirement of industries. • Work in team for solving industrial problems • Develop competencies and skills required by relevant industries. • Discover personal competence and techniques of building emotional intelligence. • Demonstrate a set of non-cognitive skills such as empathy, teamwork, collaboration, interpersonal skills, and resilience for smooth and efficient functioning at the workplace • Demonstrate the dynamics of individual, interpersonal and group processes that influence behaviour within teams and organizations. • Reflect ethical behaviour with a sense of right and wrong leading to practical ethical behaviour. • Demonstrate leadership qualities with balance of emotional and social quotient.

	• Develop familiarity with the Software and Hardware requirement to develop digital collection • Able to manage digital content in the form of Institutional Repository • Develop effective marketing plans and strategies for libraries • Conduct market research to identify target audiences and their needs • Utilise social media and other digital tools to promote library services and programs
PO6: Select online multidisciplinary electives of own interest to promote self-learning.	• Apply critical thinking in problem solving. • Demonstrate self and time management. • Display analytical and research abilities. • Integrate multiple knowledge domains. • Enhance the scope and depth of learning.

23. SUBJECTS & CONTENTS (FIRST YEAR)

FIFTH SEMESTER

5.1 INDUSTRIAL TRAINING - II

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RATIONALE

Industrial training will help the students to understand the working environmentof relevant industries. The student will learn to work in team to solve the industrial problems. It willalso give exposure about the present and future requirements of the relevant industries. This trainingis very important for development of required competencies and skills for employment and start– ups.

COURSE OUTCOMES

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

CO1: Familiarize with the working environment of industries

CO2: Apply necessary safety precautions and measures.

CO3: Comprehend about present and future requirement of industries.

CO4: Work in team for solving industrial problems

CO5: Develop competencies and skills required by relevant industries.

CO6: Develop writing, speaking and presentations skills.

PRACTICAL EXERCISES

1. Report writing based on industrial training.
2. Preparation of Power Point Slides based on industrial training and presentation by the candidate.
3. Internal Evaluation based on quality of Report, PPT preparation, PPT presentation and answer to queries.
4. External Evaluation based on quality of Report, PPT preparation, PPT presentation and answer to queries.

UIDELINES

Students will be evaluated based on Industrial training report and their presentation using Power Point about the knowledge and skills gained during the training. The Headof the Department will depute faculty coordinators by assigning a group of students to each. The coordinators will mentor and guide the students in preparing the PPTs for final presentation. The following performance parameters are to be considered for assessment of the students out of 100 marks:

	Parameter	**Weightage**
i	Industrial assessment of the candidate by the trainer	40%
ii	Report Writing	20%
iii	Power Point Presentation	20%
iv	Viva-voce	20%

5.2 HUMANITIES & LIFE SKILLS

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3	-

RATIONALE

It is important to facilitate the development of a holistic perspective among students towards life and profession, as well as towards happiness and prosperity, based on a correct understanding of the human reality and the rest of existence. This course is designed to help students understand the importance of values and ethics in their development as professionals, responsible citizens and understand the significance of emotional intelligence in self-growth and building effective relationships. Understanding the value of harmonious relationship based on trust and respect in their life and profession, they will better be able to ensure harmony in society and nature.

COURSE OUTCOMES

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

CO1: Discover personal competence and techniques of building emotional intelligence.

CO2: Demonstrate a set of non-cognitive skills such as empathy, teamwork, collaboration, interpersonal skills, and resilience for smooth and efficient functioning at the workplace

CO3: Demonstrate the dynamics of individual, interpersonal and group processes that influence behaviour within teams and organizations.

CO4: Reflect ethical behaviour with a sense of right and wrong leading to practical ethical behaviour.

CO5: Demonstrate leadership qualities with balance of emotional and social quotient.

DETAILED CONTENTS

UNIT-I

Personal and Social Competence

Introduction and concept of emotional intelligence, its models and components, understand the significance of emotional intelligence in self-growth and building effective relationships.

Building blocks to develop emotional intelligence: self-awareness, self-management, social awareness, and relationship management.
Self-Awareness: Observing and recognizing one's own feelings, Knowing one's strengths and areas of development. Self-Management: Managing emotions, anxiety, fear, and anger.
Social Awareness: Others' Perspectives, Empathy and Compassion
Relationship Management: Collaboration, Teamwork, and Conflict management

UNIT II

Developing Professional Skills

Process of Career Exploration, Knowing Yourself — Personal Characteristics, Knowledge about the World of Work, Requirements of Jobs Including Self-employment, Sources of Career Information, Preparing for a Career Based on Potentials of Learners and Availability of Opportunities.

Career Skills: Introduction and significance of Résumé and Related Terms, Difference between a CV, Résumé, and Biodata, Essential Components and format of a Good Résumé.

Group discussions Meaning and Importance of Group Discussion Types of Group Discussions, Format of a Group Discussion, Evaluation of Group Discussion, Common Errors and tips to crack Group discussion.

Preparation for interviews, Types of Interviews, STAR Approach for Facing an Interview, Common Errors, tips to crack Interview.

UNIT III

Interpersonal Skills
Variants of Interpersonal Skills
Teamwork: Meaning, Advantages of Using Teams, Factors Contributing to the Success of a Team, Strategies to Deal with Conflict among Team Members,

Collaboration: Meaning, Types of Collaboration, Team collaboration, Network collaboration, Video collaboration, Cloud collaboration, Contextual collaboration, Cross-functional collaboration, Community collaboration, Social collaboration, Virtual collaboration, Process of Collaborative Learning

Introduction to Perseverance, Self-Control, Peer Pressure, Aspects of Social and Cultural Etiquette in Promoting Teamwork, Mannerism and Grooming

UNIT IV
Values and Professional Ethics

Importance of ethics, Code of Ethics- Concept & Significance, Personal and professional moral codes of conduct of an Engineer

Work Ethics: Punctuality, Cleanliness Law abidingness and work place behaviour and professional ethics

Multinational corporations - Environmental ethics - computer ethics - - engineers as managers-moral leadership. Concept of Ethical leadership

UNIT V
Leadership and Management Skills

Leadership and Its Importance, Models of Leadership, Basic Leadership Skills: Motivation, Teamwork, Negotiation, Networking, Innovative Leadership

Basic Managerial and Life Skills: Planning for Effective Management, Time Management, Conflict and Stress Management

Self-Management Skills: Time Management, Stress Management, Developing Self-Awareness with JOHARI Window, Self-examination and Self-regulation, Scope of Leadership in college

RECOMMENDED BOOKS

1. Goleman, D " Emotional Intelligence", New Delhi: Bloomsbury Publishing IndiaPrivate Limited.
2. Robbins, S. P., Coulter M., and Fernandez, " Management (14th edition). Noida,India: Pearson Education.
3. Premvir Kapoor, "Professional Ethics and Human Values", Khanna Book Publishing,New Delhi, 2022.
4. R R Gaur, R Sangal, G P Bagaria, 2009, A Foundation Course in Human Values and Professional Ethics.
5. Mike Martin and Roland Schinzinger, "Ethics in Engineering", McGraw-Hill, NewYork

SUGGESTED WEBSITES

1. https://ipindia.gov.in/
2. Knowledge at Wharton. (2008, April 3). APJ Abdul Kalam:"A Leader should knowhow tomanage failure". https://www.youtube.com/watch?v=laGZaS4sdeU.

INSTRUCTIONAL STRATEGY

Some of the topics may be taught using question/answer, assignment or seminar method. The teacher will discuss stories and case studies with students, which in turn will develop appropriate managerial and entrepreneurial qualities in the students. In addition, expert lecturers may also be arranged from outside experts. In addition, different activities group discussions, mock interviews, resume presentation, role play, extension lecturers by outside experts, may also be organised. This subject contains five units of equal weightage.

5.3 INFORMATION LITERACY

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RATIONALE

Information literacy can play a vital role in educating the users of libraries on various information and documentary resources, where to start searching for information, what, where and how to access them and compare retrieved information and how to communicate their information. Information literacy is important particularly in this age because it allows us to cope by giving us the skills to know when we need information and where to locate it effectively and efficiently.

COURSE OUTCOMES

After completing the course, the students will be able to:

CO1: Comprehend the concept of information literacy in contemporary knowledge society.
CO2: Identify and analyse different models and frameworks of information literacy.
CO3: Create knowledge on Information Literacy standards and guidelines, and online resources.
CO4: Familiarize with literacy skills required for knowledge exploration, retrieval and dissemination.

DETAILED CONTENTS

UNIT I

Introduction

1.1. Meaning, definition, need, objectives

1.2. Importance of Information literacy in digital age

1.3. Bridging the Digital Divide: Information Literacy Skills

1.4. Models of Information literacy –

Overview and Components, EMPOWERING-8 IL Model, Kuhlthau's Information Search Process Model, SCONUL Seven Pillars Information Literacy Model, The Big6 Information Process Model

UNIT II

Information Literacy and User Education

2.1. Scope and Impact of Information literacy (IL)programmes

2.2. Planning and implementation of IL programmes: Online, Offline

2.3. Information Literacy program for Users

2.4. Information Literacy program for Professionals

UNIT III

Information literacy Services and Products

3.1. Information need assessment

3.2. Web-based Services: LibGuide

3.3. Information Literacy Products: Library Brochure, Database Brochure

3.4. Information Bulletin Designing of Information Literacy Programme

UNIT IV
Information literacy policy and guidelines

4.1 ACRL (Association of College and Research Libraries),
4.2 ALA, (American Library Association)
4.3 IFLA Guidelines
4.4 UNESCO Guidelines

UNIT V
Trends in Information Literacy

5.1. Overview of Media Literacy

5.2. Web based Information Literacy System

5.3. OPAC Information Literacy System

5.4. Life Long Learning System

RECOMMENDED BOOKS

1. Lau, J., "Guidelines on Information Literacy for Lifelong Learning". IFLA, Veracruz.
2. Mackey, T. P., & Jacobson, T. E., "Teaching Information Literacy Online".
3. Global standards for media Information Literacy UNESCO
4. Blanchett, Helen, "A Guide to Teach Information Literacy", London, Facet.
5. Godwin, Peter and Parker, Jo. Eds., "Information literacy meets Library 2.0.", London, Facet.
6. Corrall, Sheila. Information literacy through inquiry. London, Facet, 2010
7. Devine, Jane. Going Beyond Google: The invisible web in learning and teaching. London, Facet,2009
8. The Information Literacy User's Guide: An Open, Online Textbook. Ed by Greg Bobish and Trudi Jacobson. SUNY Albany ,2014.Downloadable since Feb. 2015 from site: http://textbooks.opensuny.org/the-information-literacy-users-guide-an-open-onlinetextbook/

SUGGESTED WEBSITES

1. www.swayam.org
2. www.egranthalaya.nic.in
3. www.inflibnet.ac.in

INSTRUCTIONAL STRATEGY

The topics taught in this paper will help students in understand the Information Literacy Programs (ILP) and their importance. It will help students to identify and understand the importance of IL and its impact on education and lifelong learning. Different models of IL will help in gaining comprehensive knowledge on National Forums on IL, Students are required to analyze and appreciate different methods of evaluation of information resources. This subject contains five units of equal weightage.

5.4 DIGITAL LIBRARY

L	P
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RATIONALE

The aim of this subject is to provide students the theoretical and practical knowledge about methods and technology of developing a digital library. The way that modern libraries are set up, run, and managed has dramatically changed as a result of the adoption of information and communications technology (ICT) in the library and information service sectors. These modifications also had an effect on librarians' working conditions. As a result of new challenges, today's library professionals must learn and adopt new technologies, terminology. The students will be able to experiment themselves with few of open source software and use them for developing Digital Library.

LEARNING OUTCOMES

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

CO1: Comprehend the concept and the process of developing a Digital Library
CO2: Develop plan and identify tools and techniques for developing a digital library
CO3: Develop familiarity with the Software and Hardware requirement to develop digital collection
CO4: Able to manage digital content in the form of Institutional Repository
CO5: Apply Hosting and Searching Technology of Digital Libraries

DETAILED CONTENTS

UNIT I
Digital Libraries

1.1 Conceptual framework, definitions
1.2 Features and types of Digital Library: Hybrid, virtual, Electronic, Cyber
1.3 Digital Resources: e-journals, e-books, multimedia resources and online resources
1.4 Role in Education and Research

UNIT II

Digital Library: Planning & Development

2.1 Planning, steps and implementation of Digital Library
2.2 Digital Library Software (DLMS): Selection process and features
2.3 Overview of Greenstone, Dspace and E-prints
2.4 Metadata Formats and Standards - Dublin Core

UNIT III

System Software & Hardware

3.1 System level, Software level requirements- Windows, Linux
3.2 Hardware level requirements: Server Configuration
3.3 Identification of Born Digital and Digitized Content
3.4 Methods and Process of Digitization: Scanning, OCR, Editing and Publishing
3.5 Digital Rights Management (DRM)

UNIT IV

Institutional Repository

4.1 Definition, objectives, purpose & scope
4.2 Institutional Repositories Vs Digital Library: Website of institutions(NDLI, ShodhGanga)
4.3 Open Access Initiatives (OAI)
4.4 Digital Preservation: Needs and purpose

UNIT V

Searching Digital Library

5.1 Searching – Meaning and Purpose
5.2 Search Techniques: Boolean search, Truncation search
5.3 Full text searching, Content Searching, Search Format

PRACTICAL EXERCISES

1. Understanding about Hardware / Software requirements for developing digital library – Listing of software, features, etc

2. Listing of Features of Dspace, E-prints, Greenstone
3. Installation of any of the Digital Library Software
4. Creating Communities and Collection
5. Creating Digital Documents into different formats, Scanning, Photo, pictures, video etc
6. Uploading Few Contents and describing Metadata
7. National level digital repositories: NDL, Shodhganga, Shodhgangotri
8. Visit to a library following these practices and submitting a report on Practices being followed by the library for developing digital library.
9. Demo of Digitization Activities using SCANNERS, PDF Building from Text, Image.

RECOMMENDED BOOKS

1. Singh, Gurdev, "Digital Library and Digitization", Ess Ess Publication, Delhi.
2. K. Rajshekharan, R. Raman Nair, K.M. Nafala. Digital Library Basics: A Practical Manual, New Delhi: Ess Ess Publication
3. Chowdhury, G.G., "Introduction to Digital Libraries", London: Facet publications.
4. Judith, Andrews & Law Derek, "Digital Libraries", Hants: Ashgate.
5. Krishan Gopal, "Intellectual Freedom in Digital Libraries", Authors Press, Delhi.
6. Lakshmi, Vijay & S. C. Jindal, (eds.), "Digital Libraries", Isha Books, Delhi.
7. Art Rhyno, "Using Open Source Systems for Digital Libraries".
8. Clobridge, A. (2010). Building a digital repository program with limited resources. Oxford: Chandos Publishing.

SUGGESTED WEBSITES

1. www.swayam.org
2. www.egranthalaya.nic.in
3. www.inflibnet.ac.in

INSTRUCTIONAL STRATEGY

Some of the topics may be taught using question/answer, assignment or seminar method. In addition, expert lecturers may also be arranged from outside experts. In addition, different activities group discussions, mock interviews, resume presentation, role play, extension lecturers by outside experts, may also be organised. Students should be provided Hands-on practice on digital library software. This subject contains five units of equal weightage.

5.5 MULTIDISCIPLINARY ELECTIVE

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RATIONALE

Multidisciplinary electives are very important and play major role in implementation of National Education Policy. Multidisciplinary is a subject which is useful for two or more disciplines in which students are asked to understand the concept of multidisciplinary or interdisciplinary. It will help the students to gain an arsenal of skills that are easily transferable across work environments.

COURSE OUTCOMES

At the end of the multidisciplinary elective, the students will be able to:

CO1: Apply critical thinking in problem solving.
CO2: Demonstrate self and time management.
CO3: Display analytical and research abilities.
CO4: Integrate multiple knowledge domains.
CO5: Enhance the scope and depth of learning.

LIST OF MULTIDISCIPLINARY ELECTIVES
(The list is indicative and not exhaustive)

1. Introduction to Internet of Things
2. Introduction to Robotics
3. Introduction to Embedded System Design
4. Fundamentals of Artificial Intelligence
5. Introduction to Machine Learning
6. The Joy of Computing Using Python

7. Introduction to Industry 4.0
8. Industrial Internet of Things
9. Object Oriented System Development using UML, Java and Patterns
10. Artificial Intelligence Marketing Professional

GUIDELINES

Multidisciplinary Elective shall be offered preferably in online mode. Online mode multidisciplinary elective shall preferably be through Massive Open Online Courses (MOOCs) from Swayam, NPTEL, Upgrad, Udemy, KhanAcademy or any other online portal to promote self-learning. A flexible basket of large number of multidisciplinary electives is suggested which can be modified depending upon the availability of courses at suggested portals and requirements. For online multidisciplinary electives, department coordinators shall be assigned to monitor and guide the group of students for selection of minimum 20 hours duration online course of their choice. For offline multidisciplinary electives, a suitable relevant subject shall be offered by the respective department to the students with minimum 40% of the total class strength as per present and future requirements.

Assessment of MOOCs multidisciplinary elective shall be based on continuous evaluation by the respective coordinator. The coordinator shall consider the submitted assignments by the students from time to time during the conduct of MOOCs. The MOOCs assessment shall be conducted by the coordinator along with one external expert by considering submitted assignments out of 100 marks.

In case, no suitable multidisciplinary elective is available online, only then the course may be conducted in offline mode. The assessment of offline multidisciplinary elective shall be internal and external. The offline multidisciplinary elective internal assessment of 40 marks shall be based on internal sessional tests, assignments etc. and external assessment of 60 marks shall be based on external examination at institute level.

SUGGESTED WEBSITES

1. https://swayam.gov.in/
2. https://www.udemy.com/
3. https://www.upgrad.com/
4. https://www.khanacademy.org/

5.6 PROGRAMME ELECTIVE - II
5.6.1 CITATION AND REFERENCE MANAGEMENT

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RATIONALE

Teaching citation and reference management to Library and Information Science students is important as it equips them with essential skills for organizing, accessing, and preserving scholarly information. By understanding citation styles, citation software, and best practices in reference management, students can assist library patrons in accurately citing sources, promoting academic integrity, and effectively managing their research endeavors.

COURSE OUTCOMES

At the end of the multidisciplinary elective, the students will be able to:

CO1: Comprehend the importance of citation and reference management in academic and professional contexts.
CO2: Familiarize with different citation styles commonly used in various disciplines.
CO3: Explore citation management software tools and their functionalities.
CO4: Develop skills in organizing and formatting citations and references.
CO5: Gain practical experience in integrating citations and references into written works.

DETAILED CONTENTS

UNIT I
Introduction

1.1 Importance of citation and reference management in academic writing
1.2 Overview of citation styles (APA, MLA, Chicago, etc.)
1.3 Ethics of citation and avoiding plagiarism

UNIT-II
Understanding Citation Styles

2.1 APA style: rules and formatting guidelines
2.2 MLA style: rules and formatting guidelines
2.3 Chicago style: rules and formatting guidelines

UNIT III
Citing Print Sources

3.1 Books: citing books, edited books, and chapters
3.2 Journals: citing journal articles, newspaper articles, and magazine articles
3.3 Other print sources: citing conference proceedings, reports, and dissertations

UNIT IV
Citing Electronic Sources

4.1 Websites: citing webpages, online articles, and blogs
4.2 Online databases: citing articles from academic databases
4.3 Social media: citing posts, tweets, and other social media content

UNIT-V
Citation Management Software

5.1 Overview of popular citation management software tools (e.g., Zotero, Mendeley, EndNote)
5.2 Setting up and organizing references in citation management software
5.3 Using citation management software to generate citations and bibliographies

RECOMMENDED BOOKS

1. American Psychological Association. (2020). Publication manual of the American Psychological Association (7th ed.). American Psychological Association.
2. Modern Language Association of America. (2016). MLA handbook (8th ed.). Modern Language Association of America.
3. Turabian, K. L., Booth, W. C., Colomb, G. G., Williams, J. M., & University of Chicago Press. (2013). A manual for writers of research papers, theses, and dissertations: Chicago style for students and researchers (8th ed.). University of Chicago Press.
4. Pears, R., & Shields, G. (2016). Cite them right: The essential referencing guide (10th ed.). Palgrave.

SUGGESTED WEBSITES

1. www.swayam.org
2. www.egranthalaya.nic.in
3. www.inflibnet.ac.in

INSTRUCTIONAL STRATEGY

Some of the topics may be taught using question/answer, assignment or seminar method. In addition, expert lecturers may also be arranged from outside experts. In addition, different activities group discussions, mock interviews, resume presentation, role play, extension lecturers by outside experts, may also be organised. This subject contains five units of equal weightage.

5.6.2 LIBRARY MARKETING

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RATIONALE

After completing the Information Literacy subject, the student will have comprehensive knowledge and skills to promote library services, resources, and programs to target audiences through effective marketing strategies. The course will cover various aspects of library marketing, including developing marketing plans, conducting market research, creating marketing materials, utilising social media and other digital tools, and measuring the effectiveness of marketing efforts.

COURSE OUTCOMES

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

CO1: Comprehend the concepts and principles of library marketing
CO2: Develop effective marketing plans and strategies for libraries
CO3: Conduct market research to identify target audiences and their needs
CO4: Utilise social media and other digital tools to promote library services and programs

DETAILED CONTENTS

UNIT I
Fundamentals of Library Marketing

1.1 Definition and key concepts of Marketing and Library Marketing
1.2 Need, Objectives and Importance
1.3 Marketing strategies, Marketing Mix, Kotler's Four P's

UNIT II
Marketing of Information Services

2.1 User Demographics and behaviour analysis
2.2 Identifying user needs and preferences

2.3 Information Products and Services as a Marketable Commodity
2.4 Advertising, and Promotion

UNIT III
Developing Marketing Plan & Strategies

3.1 Objectives and goals
3.2 Steps in Developing marketing plan
3.3 Budgeting and resource allocation
3.4 Creating effective print materials : brochures, flyers, posters)
3.5 Creating effective digital materials: social media posts, email newsletters)

UNIT IV
Digital Marketing

4.1 Overview of social media platforms
4.2 Developing a social media strategy
4.3 Creating engaging social media content
4.4 E-Marketing
4.5 Case studies

UNIT V

5.1 Key Performance Indicators for Library Marketing
5.2 Analyzing and interpreting marketing data
5.3 Evaluation of Services of Libraries and Information Centers
5.4 Case studies

RECOMMENDED BOOKS

1. Kotler, P., Bowen, J. T., & Makens, J. C., "Marketing for Hospitality and Tourism", Pearson Education India.
2. Dinesh, D., "Library Marketing: From Theory to Practice", Chandos Publishing.
3. Narayana, G.I., "Library and Information Management", Prentice Hall of India, New Delhi.
4. Ranganathan, S.R., "Library Administration", Sharada Ranganathan Endowment for Library Science, Bangalore.

SUGGESTED WEBSITES

1. www.koha-community.org
2. www.egranthalaya.nic.in
3. www.inflibnet.ac.in
4. www.soul.inflibnet.ac.in

INSTRUCTIONAL STRATEGY

Some of the topics may be taught using question/answer, assignment or seminar method. In addition, expert lecturers may also be arranged from outside experts. In addition, different activities group discussions, mock interviews, resume presentation, role play, extension lecturers by outside experts, may also be organised. This subject contains five units of equal weightage.

5.6.3 ELECTRONIC RESOURCE MANAGEMENT

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RATIONALE

This course provides an overview of electronic resource management principles, practices, and technologies in libraries. Students will learn the essentials of acquiring, organizing, providing access to, and maintaining electronic resources effectively.

COURSE OUTCOMES

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

CO1: Comprehend the role and importance of electronic resources in modern libraries.
CO2: Acquire the fundamentals of acquiring, licensing, and budgeting for electronic resources.
CO3: Gain insights into providing access to electronic resources through library systems.
CO4: Develop skills in evaluating and selecting electronic resources for library collections.
CO5: Discuss licensing agreements, and digital rights management in electronic resource management.

UNIT I

Introduction to Electronic Resource Management

1.1 Definition and types of electronic resources
1.2 Importance and impact of electronic resources in libraries
1.3 Overview of Electronic Resource Management

UNIT II

Acquisition and Budgeting

2.1 Methods of acquiring electronic resources: purchase, subscription, consortial agreements
2.2 Licensing models: subscription-based, perpetual access, open access
2.3 Budgeting considerations for electronic resources

UNIT III

Access Management and User Support

3.1 Access methods and discovery tools
3.2 Authentication and access control
3.3 User assistance and training

UNIT IV

Evaluation and Selection of Electronic Resources

4.1 Criteria for evaluating electronic resources: content, quality, usability, cost-effectiveness
4.2 Selection procedures and decision-making processes
4.3 Deselection and weeding of electronic resources

UNIT V

Maintenance and Preservation

5.1 Archiving and backup procedure of electronic resources
5.2 Usage statistics and assessment
5.3 Legal and ethical considerations in electronic resource management

RECOMMENDED BOOKS:

1. Dhiman, A. K. and Yashoda Rani, " Learn Library and Society" , Ess Ess Publications.
2. Emery, J., and Stone, G., "Techniques for Electronic Resource Management (Library Technology Reports)" Chicago: Amer Library Assn.
3. Yu, H., & Breivold, S., "Electronic resource management in libraries research and practice" Hershey: Information Science Reference
4. Jennings, L., "Electronic resources management for electronic resources librarians: a bibliography" Bath: University of Bath.
5. Pandey, D. K., "Library and Information Science" Atlantic
6. Patra, N. K., " Electronic Resource Management: A Case Study of Management School Libraries In India Sampalpur" Sampalpur University.

SUGGESTED WEBSITES

1. www.swayam.org
2. www.egranthalaya.nic.in
3. www.inflibnet.ac.in

INSTRUCTIONAL STRATEGY

Some of the topics may be taught using question/answer, assignment or seminar method. In addition, expert lecturers may also be arranged from outside experts. In addition, different activities group discussions, mock interviews, resume presentation, role play, extension lecturers by outside experts, may also be organised. This subject contains five units of equal weightage.

5.7 INTERNET APPLICATIONS IN LIBRARY

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RATIONALE

The advent of the Internet has revolutionized the world of libraries and information services, profoundly impacting the way information is accessed, shared, and stored. In the digital age, libraries have transformed from physical repositories of books to dynamic online platforms that provide a vast array of digital resources and services. The Internet has facilitated global connectivity, enabling users to access information from anywhere at any time. It has empowered libraries to expand their reach and serve diverse populations by offering virtual collections, online databases, and digital archives

LEARNING OUTCOMES

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

CO1: Comprehend the concept of Internet Applications in Library
CO2: Use and apply different Internet Tools used in libraries
CO3: Illustrate Internet-based services applied in the libraries
CO4: Identify various Education Resources available over the Internet

PRACTICE EXERCISES

The course is practical-oriented concepts and to be taken as some contents as theory, and thereafter, students shall apply those concepts practically.

Concept of Internet

1. Concept of Internet, World Wide Web, Hypertext, URL, Domain, Functioning of Internet;
2. Web Browsers: Chrome, Mozilla, Edge, Opera
3. Internet Tools: TCP/IP; SMTP; HTTP; FTP; TELNET
4. Communication through the Internet – Messaging Methods, Email Communication.

Communication through Internet

1. Use of Google Based Services: Google Drive, Chat, Doc, Google Meet
2. Internet based Video Conferencing (VC) – Microsoft Teams, Zoom, JIOMeet, Skype.
3. Website & Blog Designing using Joomla, Drupal or WordPress
4. Web 2.0 and Web 3.0 and its application in libraries (Streaming media – YouTube, Vimeo, Podcast, Wikipedia, Wikimedia, Folksonomy, Mashups, Flicker and Social

Networking Sites

1. Content Alerts Methods: RSS; Email Alerts; Subscriptions.
2. Evaluation of Internet-based information resources
3. Demonstration of Various Internet Applications: Internet based Library Catalogues, Database Search, Meta Search Engines, Deep web pages
4. Identification of Various Education Resources available over the Internet, SWAYAM, NPTEL, e-PATHSHALA

Current Trends of Internet Application in Libraries

1. Subject Gateways
2. Databases : with an example of Open Source Database such as PubMed,
3. Current Trends – Cloud Computing; Mobile Applications (mobile apps -with example and case studies)

RECOMMENDED BOOKS

1. R. Raman Nair, Internet for Library & Information Services, New Delhi: Ess Ess Publication
2. Shanker Singh, World Wide Web Handbook For Librarians, New Delhi: Ess Ess Publication
3. Croft, B., Metzler, D., & Strohman, T., "Search Engines: Information Retrieval in Practice" Pearson Higher Ed.
4. Kinyanjui, D., "Application of Web 2.0 Technologies in Libraries", Grin Verlag.
5. Parkes, D., & Walton, G., "Web 2.0 and Libraries: Impacts, Technologies and Trends", Chandos Publishing.
6. Young, M. L., "Internet: The Complete Reference, Millennium Edition", McGraw-Hill, Osborne Media.

7. Sehgal, R. L., "Intranet & Internet Applications for Librarians (Set Of Two Volumes)", ESS.
8. Ramana, P. Venkata, "Application of Information Technology in Libraries", Ess Ess Publication.
9. Brad Hill, Google For Dummies 1st Edition, Wiley Dummy Series

SUGGESTED WEBSITES

1. www.swayam.org
2. www.egranthalaya.nic.in
3. www.inflibnet.ac.in

INSTRUCTIONAL STRATEGY

Some of the topics may be taught using question/answer, assignment or seminar method. In addition, expert lecturers may also be arranged from outside experts. Students should be given enough exposure to the latest techniques and tools of usage of Internet. This subject contains five units of equal weightage.

SIXTH SEMESTER

6.1 PROJECT ORIENTED PROFESSIONAL TRAINING

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RATIONALE

Project Oriented Professional Training is aimed at the application of knowledge and competencies gained in the previous semesters in an integrated manner towards addressing an issue in the industry/field, as per the interest and choice of both the industry and student. It also provide opportunities to the students to work relatively independently over extended and comprehensive periods of time. It is expected from the students to get acquainted with desired attributes for industrial/field environment. For this purpose, students are required to work in different establishments of world of work, and develop competencies.

COURSE OUTCOMES

After undergoing this course, the students will be able to:

CO1: Define the problem statement of the Industrial training as per industry need.
CO2: Develop the problem-solving skills in finding solutions to the problems in the world of work.
CO3: Acquire interpersonal skills and work as a team member.
CO4: Demonstrate the competence to apply knowledge and skills learnt earlier in the context of the project.
CO5: Apply the communication skills in writing and presenting the technical report.

GUIDELINES

The purpose of this project oriented professional training is to expose the students to the world of work and provide professional experience in real life situation. It is suggested that during the training, the student should remain attached with the various sections of industry/field for 3-4 weeks. The student will have to maintain a daily/weekly/monthly diary/work book and submit detailed reports of their activities periodically to their supervisor/teacher. These reports will be certified by the concerned/ authorized officer of the organization where the student is undergoing professional training and doing his/her project.

Each student is required to undergo one Professional Oriented Project according to his/her area of interest and the project report is to be submitted at the end of project. The concerned teacher will guide and supervise the students on work stations (as far as possible) at regular intervals. A systematic plan of action is required to be prepared, well in advance, by the polytechnic in consultation with the organizations where professional training and project is going to be executed. The teacher should clearly specify the expected learning outcomes and schedule on periodic basis, preferably weekly or fortnightly basis, for the whole of the professional project/training period of students. Performa may be developed by the polytechnic Training and Placement Officer in consultation with the teachers and personnel from industry to monitor the progress of the students. The performa should be filled by the students on daily, weekly and monthly basis, and should be duly countersigned by the personnel from industry and concerned teacher/supervisor attached to the particular student. Each teacher is supposed to guide and supervise about 5 – 8 students, depending upon the strength of the students and teachers in the department.

A criteria for assessing student performance by the internal examiner (personnel from industry and supervisor) and external examiner (teachers and experts) are given in table below:

S. No.	**Performance criteria for Internal Assessment**	**Weightage of marks (in %age)**
1.	Punctuality and regularity	10%
2.	Initiatives taken by the student in learning at training workplace	10%
3.	Defining problem statement, approach and schedule (Planning)	20%
4.	Level /proficiency of new practical skills acquired	20%
5.	Preliminary Action Plan and Report	40%
TOTAL		**100**

S. No.	Performance criteria for External Assessment	Weightage of marks (in %age)
1.	Project Report	60%
2.	Presentation & Viva voce	40%
Total marks		**100**

Important Notes:

1. This criteria must be followed by the faculty and they may see the daily, weekly and monthly progress/reports, while awarding awards as per the above criteria.
2. Students may visit websites as their learning tool during industrial training, Search videos, animations, text material on internet for preparation of training report during the training period.
3. The external examiner, preferably, may be the person from different industry/organization/institution, who is well versed with the discipline/branch of project-oriented -professional training of the students, so that she/he can properly evaluate the students on the above criteria.

24. ASSESMENT TOOLS AND CRITERION

The assessment is carried out by conducting:

1. Formative assessments
2. Summative assessments

1. FORMATIVE ASSESSEMENT

The **formative assessment** will be evaluated on the basis of the internal assessments for theory subjects and practical by the concerned teachers for evaluating the knowledge and skill acquired by students and the behavioral transformation of the students. This **internal assessment** is primarily carried out by collecting evidence of competence gained by the students by evaluating them at work based on assessment criteria, asking questions and initiating formative discussions to assess understanding and by evaluating records and reports, and sessional marks are awarded to them.

2. SUMMATIVE ASSESSMENT

The **summative assessment** will include end semester examination for theory part for each candidate and practical examination with viva voice. Each Performance Criteria will be assigned marks proportional to its importance and proportion of marks for Theory and Skills Practical for each subject should be laid down.

The following assessment tools are used for effective student evaluation:

1. Theory Examinations
2. Practical Work
3. Internships
4. Professional Industrial Training
5. Project Work (Minor & Major)
6. Massive Open Online Courses (MOOCs)
7. Viva Voce
8. Case Studies

1. 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

i. Sessional /class-tests,
ii. Quizzes,
iii. Assignments,
iv. Seminars/ Presentations
v. Attendance
vi. Case Studies

For **Summative evaluation** of theory, the question paper may comprise of three sections.

i. It should contain objective type question and multiple choice questions. The objective type items should be used to evaluate students' performance in knowledge, comprehension and at the most application domains only.
ii. It should contain short answer questions.
iii. Descriptive type questions , with some internal choice of the questions set may be given in this section

2. Practical Assessment

Evaluation of students performance in practical work (Laboratory experiments, Workshop practical /field exercises) aims at assessing students ability to apply or practice the concepts, principles and procedures, manipulative skills, ability to observe and record, ability to interpret and draw conclusions and work related attitudes. This will comprise of a creation of mock environment, wherever applicable in the skill lab which is equipped with all required equipment for development of desired skills. Candidate's soft skills, communication, aptitude, safety consciousness, quality consciousness etc. will be ascertained by observation and will be marked in observation checklist along with the assessment of Job carried out in labs and maintenance of Lab Record files.

Formative and summative evaluation may comprise of weightages to performance on task, quality of product, general behavior and it should be followed by viva-voce of the relevant subject. The end product will be measured against the specified dimensions and standards to gauge the level of his skill achievements

3. Internship

The two mandatory internships after I Year and II Year of the programme are to be assessed in 3rd and 5th semester subsequently. The internships should be preferably done in the field/ in the industry, can be in house depending upon the stream and availability of resources in and around the institute.

Every faculty should be assigned the students and made responsible for the evaluation and assessment of the internship. Formative assessment should be taken from the industry/institute/ department on the basis of performance, behavior and learning capabilities. Summative evaluation may comprise of weightages on the basis of report submission/ presentation followed by viva-voce of the relevant subject.

4. Professional Industrial Training

Evaluation of professional industrial training report and viva-voce/ presentation aims at assessing students' understanding of 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. Formative and summative evaluation may comprise of weightages to performance on task, quality of product, general behavior and it should be followed by viva-voce of the relevant subject.

The formative assessment should include the evaluation from the employer where the student is doing his training or Project work in the ratio of 40:60. The final assessment will be the combination of the employer assessment and evaluation by the faculty of the institute which shall include report submission/ presentation/ seminar followed by viva-voce of the relevant subject.

5. Project Work Assessment

The purpose of evaluation of project work is to assess student's ability to apply, in an integrated manner, knowledge and skills in solving real life problems, manipulative skills, ability to observe, record, creativity and communication skills. The project work assigned should be of

relevance to the core skill, state of the art topics and the project areas that are pertaining to enhance job skill and enhance occupational opportunities. For both, minor and major project, Formative and summative evaluation may comprise of weightages to performance on task, quality of product, nature and relevance of project and general behavior.
The formative assessment should include the continuous assessment based on the work allocated and mid semester viva voice or presentation. The final assessment will be the combination of the project undertaken, report submission and should be followed by viva-voce of the relevant subject.

In case of the assessment of this component, the team of examiners should be constituted on 50 – 50 % basis. i.e. half of the examiners in the team should be invited from outside the institute conducting examination.

6. MOOC COURSES (Open Elective and Multi-Disciplinary Elective)

Massive Open Online Courses (MOOCs) platforms promise open, online courses to massive numbers of students as they are free to join, they provide a wide range of courses, they allow for space and time flexibility and their participants can benefit from various online communication tools and access to quality content.

The coordinating Department/Centre/Office shall monitor every student to adopt the courses online of their choice and preference on Swayam portal. The duration of courses will vary depending on the level and credit points. Courses offered in the duration of 4-10 weeks for 2 to 3 credits at diploma level are to be opted. Students, after they have registered, can get a certificate after attending the classes and submitting the assignments/quizzes and qualifying nationwide exam conducted written exam at the institute close to the one where the student is enrolled.

On successful completion of each course, the institution offering the MOOCs course would issue the certificate, along with the number of credits and grades, through which the student can get credits transferred into his marks certificate issued by his parent institution. Guidelines for credit sharing will be issued by concerned Regulators such as UGC, AICTE, etc. for consideration by various Institutes. There may be standard norms for the host Institution to conduct the course that may include continuous evaluation through assignments, online quizzes, case studies, online writing exercises, term examinations, student feedback, online forum management, etc.

The coordinating Department/Centre/Office of the respective department shall monitor every student and submit to the Office of Examinations, a score sheet (marks card) during the last 10 days prior to the close of the even semester.

7. Viva Voce

This tool will be used to assess the conceptual understanding and the behavioral aspects as regards the job role and the specific task at hand. It will also include questions on safety, quality, environment and equipment's etc. Ask questions on non-prescribed tasks to ensure that the learners have complete knowledge on the assessment

Computation of SGPA and CGPA

The UGC recommends the following procedure to compute the Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA):

i. The SGPA is the ratio of sum of the product of the number of credits with the marks scored by a student in all the courses taken by a student and the sum of the number of credits of all the courses undergone by a student, i.e

$$SGPA\ (Si) = \sum(Ci \times Gi) / \sum Ci$$

where Ci is the number of credits of the ith course and Gi is the marks scored by the student in the ith course.

ii. The CGPA is also calculated in the same manner taking into account all the courses undergone by a student over all the semesters of a programme, i.e.

$$CGPA = \sum(Ci \times Si) / \sum Ci$$

where Si is the SGPA of the ith semester and Ci is the total number of credits in that semester.

iii. The SGPA and CGPA shall be rounded off to 2 decimal points and reported in the transcripts.

25. TEACHING LEARNING TOOLS FOR EFFECTIVE IMPLEMENTATION

For effective implementation of curriculum, the faculty and staff of institutions 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 only a proper mix of different teaching methods in all these places of instruction can bring the changes in students behavior as stipulated in the curriculum document. It is important to understand curriculum document holistically and further be aware of intricacies of Teaching-Learning Tools for achieving curriculum objectives. Given below are certain recommendations which may help in carrying out teaching-learning effectively:

PROGRAMME LEVEL RECOMMENDATIONS

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. An academic plan needs to be prepared at institute level. The Head of the institute have a great role to play in its dissemination and percolation up to grass-root level.

3. Head of Department are required to prepare academic plan at department level referring to institutional academic plan.

COURSE LEVEL RECOMMENDATIONS

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. 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 which is made available to them in the academic plan at Board 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 for effective utilization of Teaching Learning Tools to achieve the course objectives:

1. Teachers need to ensure attainment of course outcomes so as to help the students achieve program outcomes and also meet the desired learning outcomes in five domains of NSQF i.e. Process, Professional knowledge, Professional skills, Core skills and Responsibility.

2. Teachers are required to prepare a course plan, taking into account number of weeks available and courses to be taught.

3. Teachers are required to prepare lesson plan for every theory class. This plan may comprise of contents to be covered, learning material for execution of a lesson plan.

4. Teachers are required to plan for expert lectures from field/industry. For this, necessary steps need to be taken such as planning in advance, identifying field experts, making correspondence to invite them, taking necessary budgetary approval etc.

5. Teachers are required to plan for guided library exercises by identification of course specific experience requirement, setting time, assessment, etc. The assignments and seminars can be thought of as terminal outcome of library experiences.

6. Concept based industrial/field visits may be planned and executed for such contents of course which are abstract in nature and no other requisite resources are readily available in institute to impart them effectively.

7. Lot of focus needs to be laid on skill development. There is need for planning practical experiences in right perspective. These slots in a course are the avenues to use problem based learning and experiential learning effectively. The development and use of lab manuals will enable the institutes to provide lab experiences effectively.

8. Emphasis should to lay on developing soft skills like communication skills, personality Development, self-learning, inter personal skills, problem solving, and creativity etc.

9. Where ever possible, it is essential to use activity based learning rather than relying on delivery based conventional teaching all the time. While teaching, the teacher should make extensive use of audio visual aids such as video films, power point presentations and IT tools.

10. Teachers may take initiative in establishing liaison with industries and field organizations for imparting field experiences to their students.

11. Students be made aware about issues related to ecology and environment, safety, concern f for wastage of energy and other resources etc.

12. To enhance digital learning, open electives and multi-disciplinary electives have been provided in the curriculum to be taken up in the form of MOOCs. For Open electives, some courses may be identified out of the prescribed list given in the curriculum keeping in mind the interest of students. Similarly, for multi-disciplinary electives, courses to be o offered may be identified by considering their relevance and utility. Every year SWAYAM is notifying the list of courses which are going to be offered in forthcoming even and odd semester. The institute needs to select the courses that are offered on SWAYAM platform or any other online platform.

13. For effective implementation of Massive Open Online Courses (MOOCs), a faculty member in the department may be identified and given the responsibility to coordinate various activities related to MOOCs. The concerned faculty member will facilitate in registration of students for MOOCs. The faculty member will also be responsible for compiling the result of students on the completion of MOOCs and pass on the information to the concerned authority.

14. Flexibility has been provided in the curriculum for the students to choose a course related to the discipline as per their interest. For effective implementation of discipline-specific electives, the institute should identify some courses from the list of courses prescribed in the curriculum. The courses should be selected and offered keeping in mind the interest of students, infrastructure and expertise available in and around the institute related to the courses. Option for discipline-specific elective may be taken from students through a form and a course, with more than 10 students opting for it, may be run.

15. Where ever possible, it is essential to use activity based learning rather than relying on delivery based conventional teaching all the time. While teaching, the teacher should make extensive use of audio visual aids such as video films, power point presentations and IT tools.

16. Teachers may take initiative in establishing liaison with industries and field organizations for imparting field experiences to their students.

17. Students be made aware about issues related to ecology and environment, safety, concern for wastage of energy and other resources etc.

18. To enhance digital learning, open electives and multi-disciplinary electives have been provided in the curriculum to be taken up in the form of MOOCs. For Open electives, some courses may be identified out of the prescribed list given in the curriculum keeping in mind the interest of students. Similarly, for multi-disciplinary electives, courses to be offered may be identified by considering their relevance and utility. Every year SWAYAM is notifying the list of courses which are going to be offered in forthcoming even and odd semester. The institute needs to select the courses that are offered on SWAYAM platform or any other online platform.

26. LIST OF EXPERTS

1. Controller of Examination, Haryana State Board of Technical Education, Panchkula.
2. Controller of Admn. & Finance, Haryana State Board of Technical Education, Panchkula.
3. Joint Secretary, Haryana State Board of Technical Education, Panchkula.
4. Deputy Secretary, Training & Placement, Haryana State Board of Technical Education, Panchkula.
5. Deputy Secretary, Examination, Haryana State Board of Technical Education, Panchkula.
6. Deputy Secretary, Academic, Haryana State Board of Technical Education, Panchkula.
7. Assistant Secretary, Academic, Haryana State Board of Technical Education, Panchkula.
8. Sh. Babu Ram, Senior Lecturer, Library and Information Science Department, Government Polytechnic for Women, Ambala, Haryana.
9. Smt. Savita, Lecturer, Library and Information Science Department, Government Polytechnic for Women, Ambala, Haryana.
10. Smt. Usha Rani, Lecturer, Library and Information Science Department, Government Polytechnic for Women, Ambala, Haryana.
11. Smt. Kanta Devi Goyal, Lecturer, Library and Information Science Department, Vaish Technical Institute, Rohtak, Haryana.
12. Smt. Sushma Sharma, HOD, Library and Information Science Department, MeeraBai Institute of Technology, New Delhi.
13. Dr. Poonam, Officer In-charge, Department of Library & Information Science, Government Polytechnic for Women, Sector 10, Chandigarh.
14. Dr. Shri Ram, Head Librarian, Central Library Sikkim University, Sikkim.
15. Ms Deepi Ravish, Lecturer, Library and Information Science Department, Government

Polytechnic for Women, Sector 10, Chandigarh.

16. Dr. Neeraj Kumar Singh, Deputy Librarian, Panjab University, Chandigarh.
17. Smt. Pushpa Rani, Senior Lecturer, Applied Science Department, Government Polytechnic, Sonipat, Haryana.
18. Smt. Krishna Bhoria, Lecturer, Applied Science Department, Government Polytechnic, Ambala, Haryana.
19. Smt. Preetpal Kaur, Guest Faculty, Applied Science Department, Government Polytechnic, Ambala, Haryana.
20. Ms. Monika, Lecturer, Applied Science Department, Seth Jai Parkash Polytechnic, Damla, Haryana.
21. Dr. Neena Sharma, English Department, MCM College, Chandigarh.
22. Mr. KG Srinivasa, Professor, Information Management & Emerging Engineering, NITTTR, Chandigarh.
23. Dr. Vidhi Grover, Lecturer, Applied Science Department, Seth Jai Parkash Polytechnic, Damla.
24. Mr. Tavinder Singh, Lecturer, Applied Science Department, Government Polytechnic, Sirsa.
25. Ms. Sunita Rani, Lecturer, Applied Science Department, Government Polytechnic, Ambala.
26. Dr. Rajesh Mehra, Professor and Head, Curriculum Development Centre, NITTTR, Chandigarh.
27. Dr. AB Gupta, Professor and Head, Education & Educational Management Department, NITTTR, Chandigarh.
28. Sh. PK Singla, Associate Professor, Curriculum Development Centre, NITTTR, Chandigarh.
29. Dr. SK Gupta, Associate Professor, Curriculum Development Centre, NITTTR, Chandigarh.
30. Dr. Meenakshi Sood, Associate Professor, Curriculum Development Centre, NITTTR, Chandigarh.

Coordinator

27. APPENDIX

Sr. No	LIST OF EQUIPMENT
1.	Printer/Scanner/ Photocopier with advanced features
2.	Internet Facility with Router and Wi-Fi system
3.	Computer System (updated configuration) Core i3/i5/i7, 8 GB/16GB of RAM 512GB or larger Hard Disk, SSD drive, USB Port, TFT Screen
4.	White Board
5.	Display board
6.	Projector / Electronic board
7.	Modern filing system
8.	Furniture for labs
9.	Lecture stand
10.	Fire / security alarms
11.	CCTV
12.	Envelope Sealing Machine
13.	Binding machine
14.	Lamination machine
15.	Cheque writing machine
16.	Bio Metric Machine
17.	Public address system
18.	Visitor counting machine
19.	Metal/gas/smoke detector
20.	Relevant and latest Accounting software


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