

**Curriculum**  
**of**  
**Diploma Programme**  
**in**  
**Library and Information Science**



**State Board of Technical Education (SBTE)**  
**Bihar**

## Semester – IV

### Teaching & Learning Scheme

Board of Study	Course Codes	Course Titles	Teaching & Learning Scheme (Hours/Week)					
			Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
			L	T				
	2441401	Library Personnel Management	02	01	-	02	05	04
	2441402	Book and Information Selection	02	01	04	02	09	06
	2441403	Reference and Information Sources.	02	01	04	02	09	06
	2441404	Library Administration and Management	02	01	04	02	09	06
	2441405	Library Automation and Networking	02	01	04	02	09	06
	2400007	Indian Constitution (Common for all Programmes)	01	-	-	-	01	01
	2400107	Professional Ethics (Non- Exam Course)	01	-	-	-	01	01
<b>Total</b>			<b>12</b>	<b>05</b>	<b>16</b>	<b>10</b>	<b>43</b>	<b>30</b>

**Legend:**

- CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem-based learning etc. to deliver theoretical concepts)
- LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)
- Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.
- TW: Term work (includes assignments, seminars, micro-projects, industrial visits, any other student activities etc.)
- SL: Self Learning, MOOCs, spoken tutorials, online educational resources etc.
- C: Credits = (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

**Note:** TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of the teacher to ensure the outcome of learning.

## Semester - IV Assessment Scheme

Board of Study	Course Codes	Course Titles	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
			Theory Assessment (TA)		Term work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
			Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
	2441401	Library Personnel Management	30	70	20	30	-	-	150
	2441402	Book and Information Selection	30	70	20	30	20	30	200
	2441403	Reference and Information Sources.	30	70	20	30	20	30	200
	2441404	Library Administration and Management	30	70	20	30	20	30	200
	2441405	Library Automation and Networking	30	70	20	30	20	30	200
	2400007	Indian Constitution (Common for all Programmes)	25	-	-	-	-	-	25
	2400107	Professional Ethics (Non- Exam Course)	25	-	-	-	-	-	25
<b>Total</b>			<b>200</b>	<b>350</b>	<b>100</b>	<b>150</b>	<b>80</b>	<b>120</b>	<b>1000</b>

**Legend:**

PTA: Progressive Theory Assessment in class room (includes class test, mid-term test and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)

TWA: Term work &amp; Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro projects, industrial visits, self-learning, any other student activities etc.)

**Note:**

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignment, micro project, seminar and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/ presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

- A) **Course Code** : 2441401 (T2441401/S2441401)  
 B) **Course Title** : Library Personnel Management  
 C) **Pre- requisite Course(s)** :  
 D) **Rationale** :

Library personnel management is increasingly getting integrated with the strategic management of corporate level. At any library sector Library personnel management and development has assumed great importance. Library personnel management has become a driving force in success of an enterprise.

The management of Library personnel is a very complicated and challenging tasks for those who are involved with successful running of an organization. This subject given considerable knowledge

**E) Course Outcomes (COs): After completion of the course, the students will be able to-**

**CO-1** Understand the concept of Human Resource Management along with the benefits and process of manpower planning.

**CO-2** Will be able to explain in detail about MBO

**CO-3** Understand the recruitment and selection Policy

**CO-4** Understand the importance and promotion.

**CO-5** Comprehensive perception to maintain the Library statistics, Accounting and annual report preparation.

**F) Suggested Course Articulation Matrix (CAM):**

Course Outcomes (COs)	Programme Outcomes (POs)							Programme Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Communication Skills	PO-3 Professionalism	PO-4 Problem Solving	PO-5 Digital working skills	PO-6 Awareness about ethical practices	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	3	1	1	1	1	1	1		
CO-2	2	2	1	-	2	-	-		
CO-3	3	2	1	-	1	1	1		
CO-4	2	3	1	1	2	-	-		
CO-5	3	3	2	1	1	-	1		

**Legend:** High(3),Medium (2),Low(1) and No mapping(-)

\* PSOs will be developed by respective programme coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional

## G) Teaching &amp; Learning Scheme:

Board of Study	Course Code	Course Title	Scheme of Study (Hours/Week)					
			Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
			L	T				
SBTE, BIHAR	<b>2441401</b>	Library Personnel management	02	01	-	02	05	04

## Legend:

- CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial(T), Case method, Demonstrations, Video demonstration, Problem-based learning etc. to deliver theoretical concepts)
- LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)
- Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.
- TW: Term Work (includes assignments, seminars, micro-projects, industrial visits, any other student activities etc.)
- SL: Self Learning, MOOCs, Spoken Tutorials, online educational resources etc.
- C: Credits= (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

**Note:** Tw and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome of learning.

## H) Assessment Scheme:

Board of Study	Course Code	Course Title	Assessment Scheme(Marks)						Total Marks(TA+TWA+LA)
			Theory Assessment(TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment(LA)		
			Progressive Theory Assessment	End Theory Assessment	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment	
SBTE, BIHAR	<b>2441401</b>	Library personnel Management	30	70	20	30	-	-	150

## Legend:

- PTA: Progressive Theory Assessment in class room (includes class test, mid-term test and quiz using online/offline modes)
- PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)
- TWA: Termwork & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro projects, industrial visits, self-learning, any other student activities etc.)

## Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignment, micro project, and seminar and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

I) **Course Curriculum Detailing:** This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Classroom Instruction (CI), Laboratory Instruction (LI), Term Work (TW) and Self Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcomes (TSOs) and Lab Session Outcomes (LSOs) leading to attainment of Course Outcomes (COs) upon the completion of the course. While curriculum detailing, NEP 2020 related reforms like Green skills, Sustainability, Multidisciplinary aspects, Society connect, Indian Knowledge System (IKS) and others must be integrated appropriately.

J) **Theory Session Outcomes (TSOs) and Units: T2441401**

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
<p><i>TSO 1a.</i> Write in detail about personnel planning</p> <p><i>TSO 1b.</i> Describe benefits and process of manpower Planning</p> <p><i>TSO 1c.</i> Explain in detail about MBO.</p>	<p><b>Unit-1.0 Library personnel planning</b></p> <p>1.1 Manpower Planning- Benefits, Process, MBO</p> <p>1.2 Process of manpower Planning.</p> <p>1.3 Management by Objective (MBO).</p>	<b>CO1</b>
<p><i>TSO 2a.</i> Explain in brief recruitment and selection process, recruitment policy</p> <p><i>TSO 2b.</i> Describe different media likewise advertisement, internet, etc.</p>	<p><b>Unit-2.0 Recruitment and Training</b></p> <p>2.1 Recruitment – need, Objective and Types</p> <p>2.2 Recruitment Process- Advertisement, Selection.</p> <p>2.3 Training- need, purpose, types.</p> <p>2.4 Orientation, Pre and Post job training, in service training.</p>	<b>CO2</b>
<p><i>TSO 3a.</i> Describe training, promotion and development</p> <p><i>TSO 3b.</i> How dose training relate to employee development</p> <p><i>TSO 3c.</i> Describe training methods techniques</p> <p><i>TSO 3d.</i> Explain the goal of In house training</p> <p><i>TSO 3e.</i> Explain the OJT process</p> <p><i>TSO 3f.</i> Describe the short term training and long term training</p>	<p><b>Unit-3.0 Employee training, promotion and development</b></p> <p>3.1 Three terms: training, Promotion and development</p> <p>3.2 Training methods and techniques, on the Job training , In-house training, short-term training</p>	<b>CO3</b>
<p><i>TSO 4a.</i> Describe Library resource accounting</p> <p><i>TSO 4b.</i> Explain need for personnel accounting</p> <p><i>TSO 4c.</i> Explain the main objective of library resource accounting</p> <p><i>TSO 4d.</i> Explain the practice of HRA</p>	<p><b>Unit-4.0 Library resource accounting</b></p> <p>4.1 Need for personnel resource accounting</p> <p>4.2 Practice and consequence</p> <p>4.3 Objective of LRA ( library resource accounting)</p>	<b>CO4</b>
<p><i>TSO 5a.</i> Explain meaning and objective of library resource audit</p> <p><i>TSO 5b.</i> Give the brief description of Area of Library resource audit.</p> <p><i>TSO 5c.</i> Write in detail about library resource audit – Book, periodicals of library, other material, grants and donation</p>	<p><b>Unit-5.0 Library resource audit</b></p> <p>5.1 Objective-Area of library resource audit- Books, periodicals of Library, other material, grants and donation.</p>	<b>CO5</b>
<p><i>TSO 6a</i> Explain meaning and objective of research</p> <p><i>TSO 6b</i> How can the Library be used as a research</p> <p><i>TSO 6c</i> Explain the various Types of Research.</p>	<p><b>Unit-6.0 Library personnel research</b></p> <p>6.1 Meaning and objective of research</p> <p>6.2 characteristics of research</p> <p>6.3 Types of research</p>	

**Note:** One major TSO may require more than one Theory session/Period.

**K) Suggested Term Work and Self Learning: S2441401**

Some sample suggested assignments, micro-projects and other activities are mentioned here for reference.

**a. Assignments:** Questions/Problems/Numerical/Exercises to be provided by the course teacher in line with the targeted COs.

**b. Micro Projects:**

1. Make a detailed project on the selection process of Library staff.
2. Prepare the Job description for the post of Library Assistant and Library Attendant.
3. Make a report of the staff requirement done by your library last 10 year.
4. Write a Dissertation on Library staff
5. Make a project on the last 5 years audit report of a any Public Library.
6. Make a project on the comparative audit reports of Public Library in your District.
7. Make a report on the post-retirement benefits given to the staff of your Library.

**L) Suggested Course Evaluation Matrix:** The course teacher has to decide and use appropriate assessment strategy and its weightage in theory, laboratory and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate **CO attainment**.

COs	Course Evaluation Matrix						
	Theory Assessment (TA)**		Term Work Assessment (TWA)			Lab Assessment (LA)#	
	Progressive Theory Assessment (PTA) Class/Mid Sem Test	End Theory Assessment (ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)
Assignments			Micro Projects	Other Activities*			
CO-1	15%	15%	15%	20%	15%	-	-
CO-2	25%	25%	25%	20%	25%	-	-
CO-3	10%	10%	10%	20%	10%	-	-
CO-4	20%	20%	20%	20%	20%	-	-
CO-5	30%	30%	30%	20%	30%	-	-
<b>Total Marks</b>	<b>30</b>	<b>70</b>	<b>20</b>	<b>20</b>	<b>10</b>		
			<b>50</b>				

**Legend:**

\*: Other Activities include self- learning, seminar, visits, surveys, product development, software development etc.

\*\* : Mentioned under point- (N)

# : Mentioned under point-(O)

**Note:**

- The percentage given are approximate
- In case of Micro Projects and End Laboratory Assessment (ELA), the achieved marks will be equally divided in all those COs mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exit survey need to be used which comprises of questions related to achievement of each COs.

**Note:** Similar table can also be used to design class/mid-term/ internal question paper for progressive assessment.

**M) Suggested Instructional/Implementation Strategies:** Different Instructional/ Implementation Strategies may be appropriately selected, as per the requirement of the content/outcome. Some of them are Improved Lecture, Tutorial, Case Method, Group Discussion, Industrial visits, Industrial Training, Field Trips, Portfolio Based, Learning, Role Play, Live Demonstrations in Classrooms, Lab, Field Information and Communications Technology (ICT)Based Teaching Learning, Blended or flipped mode, Brainstorming, Expert Session, Video Clippings, Use of Open Educational Resources (OER), MOOCs etc.

**N) Suggested Learning Resources:**

**(a) Books:**

S. No.	Titles	Author(s)	Publisher and Edition with ISBN
1.	Library Personnel management (Professional Librarian)	Herbers S white	Macmillan USA
2.	Personnel Management in College Libraries	S.P. Satarkar	Rawat Publication
3.	Personnel Management	R.K. Satpathi	JBC Press
4.	Human Resources Management	K. Aswathappa & Sadhna Dash	Mc Graw Hill

**(b) Online Educational Resources:**

1. <https://ignou.ac.in/>
2. <https://www.inflibnet.ac.in/>
3. <https://www.engranthalaya.nic.in/>
4. <https://epgp.inflibnet.ac.in/>
5. <https://nptel.ac.in/>
6. <https://www.mooc.org/>
7. <https://www.jstor.org/>
8. <https://ndl.iitkgp.ac.in/>
9. <https://www.nic.in/>
10. <https://egyankosh.ac.in/>

**Note:** Teachers are requested to check the creative commons license status/ financial implications of the suggested, online educational recourses before use by the students.

\*\*\*\*\*

- A) **Course Code** : **2441402 (T2441402/P2441402/S2441402)**  
 B) **Course Title** : Book and Information selection  
 C) **Pre- requisite Course(s)** :  
 D) **Rationale** :

Recognition of the role of information as a vital input for development necessitates an adequate Library and Information infrastructures for the efficient and effective function of National development system. Such a structure require Plants, design, organize, manage and operate a wide range of Library and information centres. It is full task to select appropriate information at appropriate time. This paper is to give suitable knowledge about are.

E) **Course Outcomes (COs): After completion of the course, the students will be able -**

- CO-1** To select appropriate media.  
**CO-2** To recognized each aspects.  
**CO-3** To process the Data/Information.  
**CO-4** To preserve Data/Information.  
**CO-5** To give appropriate and effective Library service.

F) **Suggested Course Articulation Matrix (CAM):**

Course Outcomes (COs)	Programme Outcomes (POs)							Programme Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Communication Skills	PO-3 Professionalism	PO-4 Problem Solving	PO-5 Digital working skills	PO-6 Awareness about ethical practices	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	2	1	1	1	1	1	1		
CO-2	1	2	1	1	1	1	1		
CO-3	2	1	1	1	2	1	1		
CO-4	2	2	1	1	1	2	1		
CO-5	1	2	2	1	1	1	1		

**Legend:** High(3),Medium (2),Low(1) and No mapping(-)

\* PSOs will be developed by respective programme coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional

## G) Teaching &amp; Learning Scheme:

Board of Study	Course Code	Course Title	Scheme of Study (Hours/Week)					
			Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
			L	T				
SBTE PATNA	<b>2441402</b>	Book and Information Selection	02	01	04	02	09	06

## Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem-based learning etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term Work (includes assignments, seminars, micro-projects, industrial visits, any other student activities etc.)

SL: Self Learning, MOOCs, Spoken Tutorials, online educational resources etc.

C: Credits= (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

**Note:** Tw and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome of learning.

## H) Assessment Scheme:

Board of Study	Course Code	Course Title	Assessment Scheme(Marks)						Total Marks(TA+TWA+LA)
			Theory Assessment(TA)		Term Work& Self-Learning Assessment (TWA)		Lab Assessment(LA)		
			Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
SBTE PATNA	<b>2441402</b>	Book and Information Selection	30	70	20	30	20	30	200

## Legend:

PTA: Progressive Theory Assessment in class room (includes class test, mid-term test and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)

TWA: Termwork & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro projects, industrial visits, self-learning, any other student activities etc.

## Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignment, micro project, and seminar and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/ presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment,

the internal faculty should prepare checklist & rubrics for these activities.

- I) **Course Curriculum Detailing:** This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Classroom Instruction (CI), Laboratory Instruction (LI), Term Work (TW) and Self Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcomes (TSOs) and Lab Session Outcomes (LSOs) leading to attainment of Course Outcomes (COs) upon the completion of the course. While curriculum detailing, NEP 2020 related reforms like Green skills, Sustainability, Multidisciplinary aspects, Society connect, Indian Knowledge System (IKS) and others must be integrated appropriately.

J) **Theory Session Outcomes (TSOs) and Units: T2441402**

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
<p><i>TSO 1a.</i> Explain in detail about concept and element of Book selection</p> <p><i>TSO 1b.</i> Describe the aim and utility of Book selection</p>	<p><b>Unit-1.0 Book selection</b></p> <p>1.1 Concept, elements</p> <p>1.2 Aims and elements</p>	<b>CO1</b>
<p><i>TSO 2a.</i> Write in detail about concept and elements of Information selection</p> <p><i>TSO 2b.</i> Describe the aims and utility of Information selection</p>	<p><b>Unit-2.0 Information selection</b></p> <p>2.1 Information selection</p> <p>2.2 Concept, elements</p> <p>2.3 Aims and Utility</p>	<b>CO2</b>
<p><i>TSO 3a.</i> Give the brief description of paper media of source selection</p> <p><i>TSO 3b.</i> Briefly describe the Non-paper media and digital media</p>	<p><b>Unit-3.0 Source selection</b></p> <p>3.1 Paper media</p> <p>3.2 Non-paper and digital media.</p>	<b>CO3</b>
<p><i>TSO 4a.</i> Give the brief description of tools and Technique selection</p> <p><i>TSO 4b.</i> Give the description of various software</p> <p><i>TSO 4c.</i> Describe internet as the main sources of information</p>	<p><b>Unit-4.0 Tools and Technique selection</b></p> <p>4.1 Software, Internet, others</p>	<b>CO4</b>
<p><i>TSO 5a.</i> Explain the source and plan of finance selection</p> <p><i>TSO 5b.</i> Write in detail about budget</p>	<p><b>Unit-5.0 Finance selection</b></p> <p>5.1 Source, plan and Budget</p>	<b>CO5</b>
<p><i>TSO 6a.</i> Describe marking of information in brief.</p>	<p><b>Unit-6.0 Marketing of Information</b></p>	

**Note:** One major TSO may require more than one Theory session/Period.

**K) Suggested Laboratory (Practical) / Tutorials and Outcomes: P2441402**

Outcomes	S. No.	Laboratory (Practical)/ Tutorials Titles	Relevant COs Number(s)
<p><i>LSO 1.1.</i> Student will be acquainted with various selection tools.</p> <p><i>LSO 1.2.</i> Students will be familiar with reference tools.</p> <p><i>LSO 1.3.</i> Understand the activities and function of INB.</p> <p><i>LSO 1.4.</i> Understand the activities and function of BNB.</p>	1.	Unit-1 Introduction to different selection tools: 1.1 Reference tools 1.2 INB 1.3 BNB etc.	<b>CO1</b>
<p><i>LSO 2.1.</i> Understand various preparing technique.</p>	2.	Unit-2 Preparing to Techniques.	<b>CO2</b>
<p><i>LSO 3.1.</i> Prepare and practice of 100 titles selection.</p>	3.	Unit-3 hands on practice: 100 titles selection.	<b>CO3</b>

**L) Suggested Term Work and Self Learning: S2441402**

Cognition of the role of Information as a vital input for research and development each and every aspect of nation depended actual information. It is the best selection of information is basic service. After achieving greater should be able to selected various medias.

1. Prepare a detailed list of use of Library networks.
2. Make a detail project on use of ICT
3. Make a detail project on Networking.
4. Make a detail project on use of CAS.
5. Prepare a project of Reference tools.
6. Prepare a list of various preparing Techniques.
7. Write a dissertation on INB.
8. Write a dissertation on BNB.

**M) Suggested Course Evaluation Matrix:** The course teacher has to decide and use appropriate assessment strategy and its weightage in theory, laboratory and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate **CO attainment**.

COs	Course Evaluation Matrix						
	Theory Assessment (TA)**		Term Work Assessment (TWA)			Lab Assessment (LA)#	
	Progressive Theory Assessment (PTA) Class/Mid Sem Test	End Theory Assessment (ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)
Assignments			Micro Projects	Other Activities*			
<b>CO-1</b>	15%	15%	15%	20%	15%	10%	15%

CO-2	25%	25%	25%	20%	25%	15%	15%
CO-3	10%	10%	10%	20%	10%	20%	20%
CO-4	20%	20%	20%	20%	20%	15%	10%
CO-5	30%	30%	30%	20%	30%	25%	15%
Total Marks	30	70	20	20	10	20	30
			50				

**Legend:**

\*: Other Activities include self- learning, seminar, visits, surveys, product development, software development etc.

\*\* : Mentioned under point- (N)

# : Mentioned under point-(O)

**Note:**

- The percentage given are approximate
- In case of Micro Projects and End Laboratory Assessment (ELA), the achieved marks will be equally divided in all those COs mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exit survey need to be used which comprises of questions related to achievement of each COs.

**N) Suggested Specification Table for End Semester Theory Assessment:** Specification table represents the reflection of sample representation of assessment of cognitive domain of full course.

Unit Title and Number	Total Classroom Instruction (CI) Hours	Relevant COs Number(s)	Total Marks	ETA (Marks)		
				Remember (R)	Understanding (U)	Application & above (A)
Unit-1.0 Book selection	10	CO1	10	3	4	3
Unit-2.0 Information selection	8	CO2	15	3	5	4
Unit-3.0 Source selection	8	CO3	10	3	4	3
Unit-4.0 Tools and Technique selection	8	CO4	12	3	5	2
Unit-5.0 Finance selection	8	CO5	15	4	6	6
Unit-6.0 Marketing of Information	8	CO3	8	4	4	4
<b>Total</b>	<b>50</b>	<b>-</b>	<b>70</b>	<b>20</b>	<b>28</b>	<b>22</b>

**Note:** Similar table can also be used to design class/mid-term/ internal question paper for progressive assessment.

**O) Suggested Instructional/Implementation Strategies:** Different Instructional/ Implementation Strategies may be appropriately selected, as per the requirement of the content/outcome. Some of them are Improved Lecture, Tutorial, Case Method, Group Discussion, Industrial visits, Industrial Training, Field Trips, Portfolio Based, Learning, Role Play, Live Demonstrations in Classrooms, Lab, Field Information and Communications Technology (ICT)Based Teaching Learning, Blended or flipped mode, Brainstorming, Expert Session, Video Clippings, Use of Open Educational Resources (OER), MOOCs etc.

**P) Suggested Learning Resources:****(a) Books:**

SL. No.	Titles	Author(s)	Publisher and Edition with ISBN
1.	Library Book Selection, (Ranganathan Series in Library Science)	S.R. Ranganathan	ESS Publication
2.	A Treatise on Book Selection	Ajit Kumar Chakrabarti	D.K. Publications, 1983

**(b) Online Educational Resources:**

1. <https://ignou.ac.in/>
2. <https://www.inflibnet.ac.in/>
3. <https://www.engranthalaya.nic.in/>
4. <https://epgp.inflibnet.ac.in/>
5. <https://nptel.ac.in/>
6. <https://www.mooc.org/>
7. <https://www.jstor.org/>
8. <https://ndl.iitkgp.ac.in/>
9. <https://www.nic.in/>
10. <https://egyankosh.ac.in/>

**Note:** Teachers are requested to check the creative commons license status/ financial implications of the suggested, online educational recourses before use by the students.

\*\*\*\*\*

- A) **Course Code** : 2441403 (T2441403 /P2441403/S2441403)  
 B) **Course Title** : Reference and Information Sources  
 C) **Pre- requisite Course(s)** :  
 D) **Rationale**

The paper has been specially designed to train the candidate for rendering personnel, expeditions and to the point answer right at the counter. Reference section of a library deals with its clients face to face therefore the man at this section should be always ready to help his clients in his document research. He should act as a guide in the Library and should be able to direct the reader to other sources knowledge beyond the four.

- E) **Course Outcomes (COs):** After the completion of the course, other student will be to:-

- CO-1** Understand how to use a wide variety of Print and Non-print reference sources.  
**CO-2** Create their own annotated bibliography of Major reference sources by examining and taking notes on recommended texts and database.  
**CO-3** Evaluate Information sources and thus asses their suitability for answering individual reference questions.  
**CO-4** Answer simple references/research question on their own by consulting various reference documents.  
**CO-5** Develop an understanding of the basic principle of database and online searching.

- F) **Suggested Course Articulation Matrix (CAM):**

Course Outcomes (COs)	Program Outcomes (POs)							Program Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Communication Skills	PO-3 Professionalism	PO-4 Problem Solving	PO-5 Digital working skills	PO-6 Awareness about ethical practices	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	3	1	1	1	2	2	2		
CO-2	2	2	-	1	1	1	1		
CO-3	3	2	1	-	2	2	2		
CO-4	2	3	1	1	1	1	1		
CO-5	3	3	2	2	2	2	2		

Legend: High(3),Medium (2),Low(1) and No mapping(-)

\* PSOs will be developed by respective programme coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional

## G) Teaching &amp; Learning Scheme:

Board of Study	Course Code	Course Title	Scheme of Study (Hours/Week)					Total Credits (C)
			Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	
			L	T				
SBTE PATNA	2441403	Reference and Information Sources	02	01	04	02	09	06

## Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e.Lecture (L), Tutorial(T), Case method, Demonstrations, Video demonstration, Problem-based learning etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term Work (includes assignments, seminars, micro-projects, industrial visits, any other student activities etc.)

SL: Self Learning, MOOCs, Spoken Tutorials, online educational resources etc.

C: Credits= (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

**Note:** Tw and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome of learning.

## H) Assessment Scheme:

Board of Study	Course Code	Course Title	Assessment Scheme(Marks)						Total Marks(TA+TWA+LA)
			Theory Assessment (TA)		Term Work & Self-Learning Assessment(TWA)		Lab Assessment (LA)		
			Progressive Theory Assessment (PTA)	End Theory Assessment	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
SBTE PATNA	2441403	Reference and Information Sources	30	70	20	30	20	30	200

## Legend:

PTA: Progressive Theory Assessment in class room (includes class test, mid-term test and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)

TWA: Teamwork & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro projects, industrial visits, self-learning, any other student activities etc.)

## Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignment, micro project, and seminar and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

I) **Course Curriculum Detailing:** This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Classroom Instruction (CI), Laboratory Instruction (LI), Term Work (TW) and Self Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcomes (TSOs) and Lab Session Outcomes (LSOs) leading to attainment of Course Outcomes (COs) upon the completion of the course. While curriculum detailing, NEP 2020 related reforms like Green skills, Sustainability, Multidisciplinary aspects, Society connect, Indian Knowledge System (IKS) and others must be integrated appropriately.

J) **Theory Session Outcomes (TSOs) and Units: T2441403**

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
<p><i>TSO 1a.</i> Explain Reference source</p> <p><i>TSO 1b.</i> Explain its purpose and scope in a Library and Information centre</p> <p><i>TSO 1c.</i> Describe primary, secondary and Tertiary sources</p> <p><i>TSO 1d.</i> Write in detail about Non-Paper Media</p>	<p><b>Unit-1.0 Reference source</b></p> <p>1.1 Definition, purpose and scope</p> <p>1.2 Primary, secondary and tertiary sources</p> <p>1.3 Non-paper media.</p>	<b>1&amp;2</b>
<p><i>TSO 2a.</i> Briefly describe the Basic Reference sources</p> <p><i>TSO 2b.</i> Explain the different Kind of Dictionary</p> <p><i>TSO 2c.</i> Explain in detail about encyclopedia</p>	<p><b>Unit-2.0 Basic reference source</b></p> <p>2.1 Dictionary: Subject, Language</p> <p>2.2 Encyclopedia, General subject, Guide, Yearbooks, Almanac and Bibliography</p>	<b>1&amp;3</b>
<p><i>TSO 3a.</i> Briefly describe the Directories</p> <p><i>TSO 3b.</i> Explain in detail about Geographical sources, Bio-graphical sources, current events, New summaries.</p> <p><i>TSO 3c.</i> Briefly describe the contemporary archives, Asian recorder</p>	<p><b>Unit-3.0 Directories</b></p> <p>3.1 Geographical sources, Biographical sources, Current events, News summaries</p> <p>3.2 Contemporary archives, Asian recorder</p>	<b>2&amp;3</b>
<p><i>TSO 4a.</i> Briefly describe the qualities of Reference Librarian</p> <p><i>TSO 4b.</i> Explain the Professional and personnel qualities of a reference Librarian</p>	<p><b>Unit-4.0 Qualities of Reference Librarian</b></p> <p>4.1 Academic and Human qualities</p> <p>4.2 Professional qualities</p> <p>4.3 Reference Librarian</p> <p>4.4 Personnel friend and guide</p>	<b>1,2&amp;3</b>
<p><i>TSO 5a.</i> Preparation service and assimilation are the main stages of Reference service. Describe it with suitable example</p> <p><i>TSO 5b.</i> Describe Long and short range reference service</p> <p><i>TSO 5c.</i> Explain its difference with suitable example</p>	<p><b>Unit-5.0 Dealing with enquiries</b></p> <p>5.1 Long range service.</p> <p>5.2 Short range service.</p> <p>5.3 Anticipatory service.</p>	<b>3&amp;4</b>

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
TSO6a. Explain in detail about Development of Reference and Information service TSO6b. Explain organization TSO6c. Describe reference work and reference service TSO6d. Describe the need and achievement of reference and information services	<b>Unit-6.0 Development of Reference and Information Services</b> 6.1 Organization of reference section 6.2 Reference work and reference services 6.3 Development in India 6.4 Needs and achievements	<b>2,3&amp;4</b>

**Note:** One major TSO may require more than one Theory session/Period.

### K) Suggested Laboratory (Practical) / Tutorials and Outcomes: **P2441403**

Outcomes	S. No.	Laboratory (Practical)/ Tutorials Titles	Relevant COs Number(s)
<p><i>LSO 1.1.</i> Students will be acquainted with various Geographical source.</p> <p><i>LSO 1.2.</i> Students will be familiar with general Maps, Atlases and Globes.</p> <p><i>LSO 1.3.</i> Able to retrieve information form Gazetteer.</p> <p><i>LSO 1.4.</i> Familiarizes with travel guide.</p> <p><i>LSO 1.5.</i> Use the various Tools of selection of Geographical sources.</p>	1.	<ul style="list-style-type: none"> <li>• Geographical Sources (Practice)</li> <li>• Types</li> <li>• Maps, Atlas and Globes</li> <li>• Gazetteer</li> <li>• Travel Guide</li> <li>• Tools of selection of Geographical information Sources.</li> </ul>	<b>1&amp;2</b>
<p><i>LSO 2.1.</i> Understand various Biographical source.</p> <p><i>LSO 2.2.</i> Students will be familiar with current Biography Information sources.</p> <p><i>LSO 2.3.</i> Describe the Retrospective biography Information source.</p> <p><i>LSO 2.4.</i> Explain the various types of Index Biographical Information source.</p> <p><i>LSO 2.5.</i> Use the tools of selection of Biographical Information source.</p>	2.	<ul style="list-style-type: none"> <li>• Biographical source (Practice)</li> <li>• Types</li> <li>• Current Biography Information source</li> <li>• Retrospective Biographic Information source.</li> <li>• Types of Index biographic Information sources.</li> <li>• Tools of selection of biographical Information source.</li> </ul>	<b>1&amp;3</b>
<p><i>LSO 3.1.</i> Student will be acquainted Information sources.</p> <p><i>LSO 3.2.</i> Students will be familiar with National Information sources.</p> <p><i>LSO 3.3.</i> Able to retrieve information from International Area information source.</p> <p><i>LSO 3.4.</i> Familiarizes with serial publication and adhoc publication.</p> <p><i>LSO 3.5.</i> Use the various tools of statistical information source.</p>	3.	<ul style="list-style-type: none"> <li>• Statistical Information sources</li> <li>• Type</li> <li>• International Information source</li> <li>• Serial Publication</li> <li>• Adhoc Publication</li> <li>• International/Area International source.</li> <li>• Tools of selection statistical Information sources.</li> </ul>	<b>2&amp;3</b>

Outcomes	S. No.	Laboratory (Practical)/ Tutorials Titles	Relevant COs Number(s)
<p><i>LSO 4.1.</i> Understand various Information source of current affairs and activities</p> <p><i>LSO 4.2.</i> Able to retrieve Information from Indexes of Newspaper, News abstracts and News Digest</p> <p><i>LSO 4.3.</i> Describe the abstracts of Television and Radio Broad cast/Transmission</p> <p><i>LSO 4.4.</i> Use the various tools of selection of current affairs and activities.</p>	4.	<ul style="list-style-type: none"> <li>• Information source of current affairs and activities.</li> <li>• Types</li> <li>• Indexes of Newspaper</li> <li>• News abstract and news digest.</li> <li>• Abstract of Television and Radios Broadcast/Transmission</li> <li>• Tools of selection of current affairs activities.</li> </ul>	<b>3,4&amp;5</b>
<p><i>LSO 5.1.</i> Student will be familiar with encyclopedia.</p> <p><i>LSO 5.2.</i> Describe the general encyclopedia.</p> <p><i>LSO 5.3.</i> Use different types of specific or subject encyclopedia.</p>	5.	<ul style="list-style-type: none"> <li>• Encyclopedia</li> <li>• Types</li> <li>• General Encyclopedia</li> <li>• Specific or subject encyclopedia.</li> </ul>	<b>4&amp;5</b>
<p><i>LSO 6.1.</i> Explain in brief ready reference service.</p> <p><i>LSO 6.2.</i> Describe the various types of ready reference service.</p> <p><i>LSO 6.3.</i> Explain the Directory, Trade Directory.</p> <p><i>LSO 6.4.</i> Use Handbook and Annual</p> <p><i>LSO 6.5.</i> Familiarize with Almanac</p>		<ul style="list-style-type: none"> <li>• Ready reference service</li> <li>• Types</li> <li>• Directory</li> <li>• Trade Directory</li> <li>• Handbook and Manual</li> <li>• Yearbook and Annuals</li> <li>• Almanac</li> </ul>	<b>3&amp;5</b>

**L) Suggested Term Work and Self Learning: S2441403**

1. Prepare a detail list of reference source
2. Make a detail project on subject and Language Dictionary.
3. Prepare a Project on various types of Gazetteer.
4. Write a Dissertation on development of reference and information service.
5. Prepare a dissertation on quality of reference librarian.
6. Prepare a details list of various geographical sources.
7. Make a detail project on various biographical sources.
8. Make a detail project on current event/news summaries.
9. Prepare a detail list of different types of statistical reference sources.
10. Prepare a list on role of reference librarian in Long and short range and anticipatory enquiries.
11. Prepare a detail project on Almanac.

**M) Suggested Course Evaluation Matrix:** The course teacher has to decide and use appropriate assessment strategy and its weightage in theory, laboratory and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate **CO attainment**.

COs	Course Evaluation Matrix						
	Theory Assessment (TA)**		Term Work Assessment (TWA)			Lab Assessment (LA)#	
	Progressive Theory Assessment (PTA) Class/Mid Sem Test	End Theory Assessment (ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)
			Assignments	Micro Projects	Other Activities*		
CO-1	15%	15%	15%	20%	15%	10%	15%
CO-2	25%	25%	25%	20%	25%	15%	15%
CO-3	10%	10%	10%	20%	10%	10%	20%
CO-4	20%	20%	20%	20%	20%	15%	10%
CO-5	30%	30%	30%	20%	30%	25%	15%
Total Marks	30	70	20	20	10	20	30
			50				

**Legend:**

\* : Other Activities include self- learning, seminar, visits, surveys, product development, software development etc.

\*\* : Mentioned under point- (N)

# : Mentioned under point-(O)

**Note:**

- The percentage given are approximate
- In case of Micro Projects and End Laboratory Assessment (ELA), the achieved marks will be equally divided in all those COs mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exit survey need to be used which comprises of questions related to achievement of each COs.

**N) Suggested Specification Table for End Semester Theory Assessment:** Specification table represents the reflection of sample representation of assessment of cognitive domain of full course.

Unit Title and Number	Total Classroom Instruction (CI) Hours	Relevant COs Number(s)	Total Marks	ETA (Marks)		
				Remember (R)	Understanding (U)	Application & above (A)
Unit-1.0 Reference source	8	1&2	11	3	4	3
Unit-2.0 Basic reference source	10	1&3	14	4	5	5
Unit-3.0 Directories	8	2&3	10	3	4	3
Unit-4.0 Qualities of Reference Librarian	8	1,2&3	12	3	5	3
Unit-5.0 Dealing with enquiries	8	4&5	16	4	6	5
Unit-6.0 Development of Reference and Information Services	8	2,3&4	7	3	4	3
<b>Total</b>	<b>50</b>	<b>-</b>	<b>70</b>	<b>20</b>	<b>28</b>	<b>22</b>

**Note:** Similar table can also be used to design class/mid-term/ internal question paper for progressive assessment.

**O) Suggested Learning Resources:****(a) Books:**

S. No.	Titles	Author(s)	Publisher and Edition with ISBN
1.	Library Book Selection, (Ranganathan Series in Library Science)	S.R. Ranganathan	ESS Publication
2.	A Treatise on Book Selection	Ajit Kumar Chakrabarti	D.K. Publications, 1983
3.	Library Administration	R. L. Mittal	Y.K. Publishe, Agra
4.	पुस्तकालय संगठन एवं प्रशासन	Dr. R.S P. Singh	Janki Prakashan, Patna
5.	Modernization in libraries	C.P. Vasistha	ESS Publications, Delhi

**(b) Online Educational Resources:**

1. <https://ignou.ac.in/>
2. <https://www.inflibnet.ac.in/>
3. <https://www.engranthalaya.nic.in/>
4. <https://epgp.inflibnet.ac.in/>
5. <https://nptel.ac.in/>
6. <https://www.mooc.org/>
7. <https://www.jstor.org/>
8. <https://ndl.iitkgp.ac.in/>
9. <https://www.nic.in/>
10. <https://egyankosh.ac.in/>

**Note:** Teachers are requested to check the creative commons license status/ financial implications of the suggested, online educational recourses before use by the students.

\*\*\*\*\*

- A) **Course Code** :2441404 (T2441404 /P2441404/S2441404)  
 B) **Course Title** : Library Administration and Management  
 C) **Pre- requisite Course(s)** :  
 D) **Rationale**

Like all other Commercial Institutions management is the key work in Library and Information science. It demands a continuous managerial ability of a man at the controlling points. The course structure has been designed to equip the candidate with the basics of administration and management. Management work incorporate planning, directing, organizing, staffing and the ability to coordinate the works of a library at every point.

E) **Course Outcomes (COs): After completion of the course, the students will be able to-**

- CO-1** Understand the concept of planning in the acquisition of materials.  
**CO-2** Negotiate borrowing materials from other Libraries  
**CO-3** Maintain then stock in the library.  
**CO-4** Do Membership management  
**CO-5** Do circulation work  
**CO-6** Prepare simple budget for the library.

F) **Suggested Course Articulation Matrix (CAM):**

Course Outcomes (COs)	Program Outcomes (POs)							Program Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Communication Skills	PO-3 Professionalism	PO-4 Problem Solving	PO-5 Digital working skills	PO-6 Awareness about ethical practices	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	2	1	1	1	1	1	1		
CO-2	3	2	-	-	2	1	-		
CO-3	2	2	1	1	1	1	1		
CO-4	2	3	2	1	2	1	-		
CO-5	3	2	2	2	1	1	1		

Legend: High(3),Medium (2),Low(1) and No mapping(-)

\* PSOs will be developed by respective programme coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional

## G) Teaching &amp; Learning Scheme:

Board of Study	Course Code	Course Title	Scheme of Study (Hours/Week)					Total Credits (C)
			Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	
			L	T				
SBTE, PATNA	<b>2441404</b>	Library Administration and Management	02	01	04	02	09	06

**Note: Prefix will be added to Course Code if applicable (T for theory Paper, P for Practical Paper and S for Term work)**

## Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial(T), Case method, Demonstrations, Video demonstration, Problem based learning etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term Work (includes assignments, seminars, micro projects, industrial visits, any other student activities etc.)

SL: Self Learning, MOOCs, Spoken Tutorials, online educational resources etc.

C: Credits= (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

**Note:** TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome of learning.

## H) Assessment Scheme:

Board of Study	Course Code	Course Title	Assessment Scheme(Marks)						Total Marks(TA+TWA+LA)
			Theory Assessment(TA)		Term Work & Self-Learning Assessment(TWA)		Lab Assessment (LA)		
			Progressive Theory Assessment (PTA)	End Theory Assessment	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
SBTE PATNA	<b>2441404</b>	Library Administration and Management	30	70	20	30	20	30	200

**Note: Prefix will be added to Course Code if applicable (T for theory Paper, P for Practical Paper and S for Term work)**

## Legend:

PTA: Progressive Theory Assessment in class room (includes class test, mid-term test and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)  
 TWA: Teamwork & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro projects, industrial visits, self-learning, another student activities etc.)

**Note:**

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignment, micro project, and seminar and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

**I) Course Curriculum Detailing:** This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Classroom Instruction (CI), Laboratory Instruction (LI), Term Work (TW) and Self Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcomes (TSOs) and Lab Session Outcomes (LSOs) leading to attainment of Course Outcomes (COs) upon the completion of the course. While curriculum detailing, NEP 2020 related reforms like Green skills, Sustainability, Multidisciplinary aspects, Society connect, Indian Knowledge System (IKS) and others must be integrated appropriately.

**J) Theory Session Outcomes (TSOs) and Units: T2441404**

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
<p><i>TSO 1a.</i> Explain meaning and definition of Library administration and management</p> <p><i>TSO 1b.</i> Explain its aim and objective of Library administration and management</p> <p><i>TSO 1c.</i> Describe the function of management</p>	<p><b>Unit-1.0 Library Administration and management</b></p> <p>1.1 Meaning and definition</p> <p>1.2 Aim and objective of library management</p> <p>1.3 Function of library management</p>	<b>CO1</b>
<p><i>TSO 2a.</i> Write in detail about Library Authority and committee</p> <p><i>TSO 2b.</i> Describe its various Types</p> <p><i>TSO 2c.</i> Explain in detail about formation and function of committee</p> <p><i>TSO 2d.</i> Briefly describe the meeting procedure of Library committee</p>	<p><b>Unit-2.0 Library authority and committee</b></p> <p>2.1 Concept</p> <p>2.2 Types, Formation of Committee Function of committee</p> <p>2.3 Meeting procedure of Library committee</p>	<b>CO2</b>
<p><i>TSO 3a.</i> Explain in detail about Library general rules, Hours, enrolment rules</p> <p><i>TSO 3b.</i> Describe borrowing system/Inter library loan system</p> <p><i>TSO 3c.</i> Explain inter library loan system</p>	<p><b>Unit-3.0 Library rules</b></p> <p>3.1 Library general rules</p> <p>3.2 Library hours</p> <p>3.3 Enrolment rules</p> <p>3.4 Borrowing system/inter library loan system</p> <p>3.5 Model rules for academic, public/special libraries</p>	<b>CO3</b>
<p><i>TSO 4a.</i> Explain acquisition policy</p> <p><i>TSO 4b.</i> Briefly describe the routine job for document selection</p> <p><i>TSO 4c.</i> Explain routine job for document selection</p> <p><i>TSO 4d.</i> Describe routine job for acquisition of ordinary periodical</p>	<p><b>Unit-4.0 Book/Document selection policy</b></p> <p>4.1 Acquisition policy</p> <p>4.2 Routine Job for document selection</p> <p>4.3 Routine job for acquisition of ordinary periodicals</p>	<b>CO4</b>

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
TSO 5a. Describe the different type of circulation method TSO 5b. Explain in details about Browne and Newark system	<b>Unit-5.0 Circulation method</b> 5.1 Kinds of circulation 5.2 Browne system, Newark system	<b>CO5</b>
TSO 6a. Explain in detail the sources of Finance TSO 6b. Describe the different kinds of account maintenance	<b>Unit-6.0 Library Finance</b> 6.1 Sources of finance 6.2 Kinds of budget , account maintenance	

**Note:**One major TSO may require more than one Theory session/Period.

**K) Lab Session Outcomes (LSOs) and Units : P2441404**

Majors Labs Session Outcomes(LSOs)	Units/Topics	Relevant Cos Number(s)
LSO 1.1. Write the process of obtaining books suggestion LSO 1.2. Draft a sample book order LSO 1.3. Prepare a reminder letter for non receipt books LSO 1.4. Write the process of order verification LSO 1.5. Write the steps of bill processing.	<b>Unit1.0 Book Acquisition</b> 1.1 Suggestion management. 1.2 Order placing 1.3 Order verification 1.4 Bill processing.	<b>1&amp;2</b>
LSO 2.1. Prepare the format of standard accession register. LSO 2.2. Do the book entry of 20 books in the accession register LSO 2.3. Do the periodicals entry of 10 periodicals in the accession register LSO 2.4. Make the entry of Old books in the accession register (Retro-entry) LSO 2.5. Do the accessioning of multi author, multi volume books.	<b>Unit 2.0- Accessioning Practice</b> 2.1 Introduction to Accessioning. 2.2 Accession register format 2.3 Familiarization with Accessioning register. 2.4 Accessioning of books	<b>1,2&amp;4</b>
LSO 3.1. Do the registration of 10 Users LSO 3.2. Write the main column/ fields of registration register. LSO 3.3. Prepare a standard registration form of users. LSO 3.4. Write the precaution to be taken for making issue/ return in the library. LSO 3.5. Do the book issue to the users. LSO 3.6. Make return entry of the received books. LSO 3.7. Do the Practice of Charging of shelves.	<b>Unit 3.0- Circulation Management</b> 3.1 Member registration 3.2 Charging/Issue of Books 3.3 Book reservation procedure 3.4 Discharging/Return of Books 3.5 Shelf Management	<b>1&amp;2</b>

LSO1- Write various forms of reporting in Library LSO2- List out the centers of Annual Report LSO3- Prepare a model Annual report of a library LSO4- Write the main sources of income in the Library LSO5- Prepare a Model Budget for a Public Library	<b>Unit 4.0- Reporting and Budgeting practice</b> 4.1- Familiarization with Annual Report (Format) 4.2- Preparation of Annul Report 4.3- Identification of Sources of income and Heads of expenditure in Library 4.4- Preparation of Model Budget for a Library	<b>1,2&amp;5</b>
LSO1- Write the procedure to connect with Wi-Fi/Mobile data LSO2- Describe URL, WWW, IP address etc. LSO3- Differentiate between Browser and search engines. LSO4- Write the Procedure to Send Email. LSO5- Write the methods of accessing Website and Browsing WebPages. LSO6- Write the procedure to uploading and downloading of files.	<b>Unit 5.0 – Working with Internet</b> 3.1- Connecting with Net. LAN, WAN etc. 3.2- Familiarization with URL, Browser, Search engines, WWW etc. 3.3- Sending email 3.4- Accessing website 3.5- Uploading/Downloading Files	<b>1&amp;4</b>

L) **Suggested Term Work and Self Learning: S2441404**

**Assignments:** Questions/Problems/Numerical/Exercises to be provided by the course teacher in line with the targeted COs.

1. Briefly write and describe the functions of library management.
2. Write the aim and objectives of library in detail.
3. Write an essay on library authority and committee.
4. Describe the role and functions of various library committee.
5. Make an assignment on library rules in general and various don'ts in particular.
6. Describe the enrolment rules of library.
7. Write an essay on inter library loan as the means of resource sharing.
8. Prepare a list of books purchase during last one year in your library.
9. Describe acquisition policy in details.
10. Explain various circulation methods adopted by the library.
11. Write an essay on kinds of budgeting.

**Micro Projects:**

1. Prepare a standard accession register with at least fifty book entries.
2. Prepare an organization chart of your library and library committee.
3. Make a project on issue/return trends of last one year, of your library.
4. Make a mini project on detailed library rules and Do's and Don'ts of your library.
5. Write a dissertation on book selection policies adopted by libraries.
6. Make a project on various book charging systems.

**Other Activities:**

1. Visits: Visiting following places would provide students an opportunity to see the application of various branches of mathematics in different fields. This will also help students to comprehend the career opportunities available in the field of mathematics.
  - a. Visit to a Public Library.
  - b. Visit to a University Library.
  - c. Visit to a Library of Technical Institute.
  - d. Visit to the National Library of India.
  - e. Visit to a Library of National Importance.
  - f. Visit to a Special Library.
  
1. Self-learning topics:
  - Participate in MOOCs on library authority and committee.
  - Participate in MOOCs on library rules.
  - Refer Ignou notes on library administration and management.
  - Use NDLI database/ site for study material on library rules.
  - Refer E-gyankosh and pg pathsala sites for study materials on library and information science.

**M) Suggested Course Evaluation Matrix:** The course teacher has to decide and use appropriate assessment strategy and its weightage in theory, laboratory and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate **CO attainment**.

COs	Course Evaluation Matrix						
	Theory Assessment (TA)**		Term Work Assessment (TWA)			Lab Assessment (LA)#	
	Progressive Theory Assessment (PTA) Class/Mid Sem Test	End Theory Assessment (ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)
Assignments			Micro Projects	Other Activities*			
CO-1	15%	15%	15%	20%	15%	-	-
CO-2	25%	25%	25%	20%	25%	-	-
CO-3	10%	10%	10%	20%	10%	-	-
CO-4	20%	20%	20%	20%	20%	-	-
CO-5	30%	30%	30%	20%	30%	-	-
Total Marks	30	70	20	20	10	-	-
			50				

**Legend:**

\*: Other Activities include self- learning, seminar, visits, surveys, product development, software development etc.

\*\* : Mentioned under point- (N)

# : Mentioned under point-(O)

**Note:**

- The percentage given are approximate
- In case of Micro Projects and End Laboratory Assessment (ELA), the achieved marks will be equally divided in all those COs mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exit survey need to be used which comprises of questions related to achievement of each COs.

**N) Suggested Specification Table for End Semester Theory Assessment:** Specification table represents the reflection of sample representation of assessment of cognitive domain of full course.

Unit Title and Number	Total Classroom Instruction (CI) Hours	Relevant COs Number(s)	Total Marks	ETA (Marks)		
				Remember (R)	Understanding (U)	Application & above (A)
Unit-1.0 Library Administration and management	8	CO1	11	3	5	3
Unit-2.0 Library authority and committee	10	CO2	12	3	5	6
Unit-3.0 Library rules	8	CO3	10	3	4	3
Unit-4.0 Book/Document selection policy	8	CO4	12	4	4	2
Unit-5.0 Circulation method	8	CO5	16	4	6	4
Unit-6.0 Library Finance	8	CO5	9	3	4	4
<b>Total</b>	<b>50</b>	<b>-</b>	<b>70</b>	<b>20</b>	<b>28</b>	<b>22</b>

**Note:** Similar table can also be used to design class/mid-term/ internal question paper for progressive assessment.

**O) Suggested Assessment Table for Laboratory (Practical): (Not Applicable)**

**P) Suggested Instructional/Implementation Strategies:** Different Instructional/ Implementation Strategies may be appropriately selected, as per the requirement of the content/outcome. Some of them are Improved Lecture, Tutorial, Case Method, Group Discussion, Industrial visits, Industrial Training, Field Trips, Portfolio Based, Learning, Role Play, Live Demonstrations in Classrooms, Lab, Field Information and Communications Technology (ICT)Based Teaching Learning, Blended or flipped mode, Brainstorming, Expert Session, Video Clippings, Use of Open Educational Resources (OER), MOOCs etc.

**R) Suggested Learning Resources:**

(a) Books:

S. No.	Titles	Author(s)	Publisher and Edition with ISBN
1.	Library Administration	R. L. Mittal	Y.K Publishe, Agra
2.	पुस्तकालय संगठन एवं प्रशासन	Dr. R.S P. Singh	Janki Prakashan, Patna
3.	Modernization in libraries	C.P. Vasistha	ESS Publications, Delhi
4.	Library administration and management	Dr. Dr. R.S P. Singh	Janki Prakashan, Patna

**(b) Online Educational Resources:**

1. <https://ignou.ac.in/>
2. <https://www.inflibnet.ac.in/>
3. <https://www.engranthalaya.nic.in/>
4. <https://epgp.inflibnet.ac.in/>
5. <https://nptel.ac.in/>
6. <https://www.mooc.org/>
7. <https://www.jstor.org/>
8. <https://ndl.iitkgp.ac.in/>
9. <https://www.nic.in/>
10. <https://egyankosh.ac.in/>

**Note:** Teachers are requested to check the creative commons license status/ financial implications of the suggested, online educational recourses before use by the students.

\*\*\*\*\*

- A) Course Code : 2441405 (T2441405 /P2441405/S2441405)
- B) Course Title : Library Automation and Networking
- C) Pre- requisite Course(s) :
- D) Rationale :

The course on Library Automation and Networking is intended to equip the LIS student with the latest technical know how to satisfy the user needs in the changed information scenario. Automation of Library ensures automated services to the user and networking facilitates resource sharing among the Libraries. Now a days there are state of art Library management software customized to the user needs. These software make library work easier, faster, and economical as well. It enhances the efficiency and effectiveness of Library services.

E) Course Outcomes (COs) :

After completion of this course, the students will be able to:-

- CO-1 Describe automation, Automation of library system and application of automation to enhance various activities of Library.
- CO-2 Get familiarized with various library automation software (LMS) and their applicability
- CO-3 Describe the features of some of the main LMS like- e-Granthalaya, SOUL, Libsys etc.
- CO-4 Learn to work with various LMS packages
- CO-5 Get acquainted with the Networking, various Library and Information network at National and global level

F) Suggested Course Articulation Matrix (CAM):

Course Outcomes (COs)	Program Outcomes (POs)							Program Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Communication Skills	PO-3 Professionalism	PO-4 Problem Solving	PO-5 Digital working skills	PO-6 Awareness about ethical practices	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	2	3	-	1	-	1	-		
CO-2	3	2	2	1	1	-	-		
CO-3	3	3	1	2	1	1	1		
CO-4	2	2	1	1	-	-	1		
CO-5	2	3	2	-	2	-	2		

Legend: High (3), Medium (2), Low (1) and No mapping (-)

- \* PSOs will be developed by respective program coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional.

## G) Teaching &amp; Learning Scheme:

Board of Study	Course Code	Course Title	Scheme of Study (Hours/Week)					
			Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
			L	T				
SBTE, BIHAR	2441405	Library Automation and networking	02	01	04	02	09	06

## Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e.Lecture (L), Tutorial(T), Case method, Demonstrations, Video demonstration, Problem-based learning etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term Work (includes assignments, seminars, micro-projects, industrial visits, any other student activities etc.)

SL: Self Learning, MOOCs, Spoken Tutorials, online educational resources etc.

C: Credits= (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

**Note:** Tw and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome of learning.

## H) Assessment Scheme:

Board of Study	Course Code	Course Title	Assessment Scheme(Marks)						Total Marks(TA+TWA+LA)
			Theory Assessment (TA)		Term Work& Self-Learning Assessment (TWA)		Lab Assessment (LA)		
			Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
SBTE, BIHAR	2441405	Library Automation and Networking	30	70	20	30	20	30	200

## Legend:

PTA: Progressive Theory Assessment in class room (includes class test, mid-term test and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)

TWA: Term work &Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro projects, industrial visits, self-learning, any other student activities etc.)

## Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignment, micro project, and seminar and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/ presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

I) **Course Curriculum Detailing:** This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Classroom Instruction (CI), Laboratory Instruction (LI), Term Work (TW) and Self Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcomes (TSOs) and Lab Session Outcomes (LSOs) leading to attainment of Course Outcomes (COs) upon the completion of the course. While curriculum detailing, NEP 2020 related reforms like Green skills, Sustainability, Multidisciplinary aspects, Society connect, Indian Knowledge System (IKS) and others must be integrated appropriately.

J) **Theory Session Outcomes (TSOs) and Units: T2441405**

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
<p><i>TSO 1a.</i> Define Automation</p> <p><i>TSO 1b.</i> Give brief description of an automated Library</p> <p><i>TSO 1c.</i> The List out or History of Library automation in Indian</p> <p><i>TSO 1d.</i> Write the various approaches to Library Automation</p> <p><i>TSO 1e.</i> Define Library as a system</p>	<p><b>Unit-1.0 Introduction to library Automation</b></p> <p>1.1 Historical Prospective, need and purpose</p> <p>1.2 Approaches to Library Automation</p> <p>1.3 Library as a system &amp; its subsystem</p> <p>1.4 Characteristics and functions of library system</p>	<b>1&amp;2</b>
<p><i>TSO 2a.</i> Define Computer.</p> <p><i>TSO 2b.</i> Describe the functioning of a computer system in brief.</p> <p><i>TSO 2c.</i> Differentiate between computer hardware and software.</p> <p><i>TSO 2d.</i> Name the main Input devices.</p> <p><i>TSO 2e.</i> List out the Output devices.</p> <p><i>TSO 2f.</i> Describe the functioning of windows OS</p> <p><i>TSO 2g.</i> Differentiate between system software and application software.</p>	<p><b>Unit-2.0 Computer application in library</b></p> <p>2.1 Computer system - introduction, meaning and definition</p> <p>2.2 Computer hardware and software</p> <p>2.3 Input and Output devices</p> <p>2.4 Operating system- Purpose, Types and Popular OS- Windows, LINUX, UNIX</p> <p>2.5 Software- system and application software</p> <p>2.6 Computer uses in Library</p>	<b>1,2&amp;4</b>
<p><i>TSO 3a.</i> Detailed plan for automating your library</p> <p><i>TSO 3b.</i> Write the hardware requirement for library automation</p> <p><i>TSO 3c.</i> Write the software requirement for library automation</p> <p><i>TSO 3d.</i> Briefly describes automated acquisition</p> <p><i>TSO 3e.</i> Write the benefits of automated circulation.</p>	<p><b>Unit-3.0 Automation of Library system</b></p> <p>3.1- Planning and implementation</p> <p>3.2- Automation of housekeeping operations</p> <p>3.3- Automated acquisition</p> <p>3.4- Automated cataloguing</p> <p>3.5- Automated circulation</p> <p>3.6- Automated searching</p>	<b>1,2&amp;3</b>
<p><i>TSO 4a.</i> Define LMS</p> <p><i>TSO 4b.</i> Explain Open source Library software with Example</p> <p><i>TSO 4c.</i> Write the merit and demerit of OS</p> <p><i>TSO 4d.</i> Write the merit and demerit of commercial software</p> <p><i>TSO 4e.</i> Write the salient feature of e-Granthalaya</p> <p><i>TSO 4f.</i> Write the salient feature of Libsys</p>	<p><b>Unit-4.0 Library Automation software</b></p> <p>4.1- Library management software-Concept , definition and types</p> <p>4.2- Open sources and commercial software</p> <p>4.3- Main OS- E-Granthalaya, KOHA, New Genlib, CDS/ISIS.</p> <p>4.4- Paid/ commercial software- Libsys, SOUL, Library World.</p> <p>4.5- Selection criteria for LMS</p>	<b>1,2&amp;5</b>

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
<p><i>TSO 5a.</i> Define networking</p> <p><i>TSO 5b.</i> Networking is essential for resource sharing in library Identify this statement</p> <p><i>TSO 5c.</i> Describe computer network in brief</p> <p><i>TSO 5d.</i> Write a short note on – LAN, MAN &amp; WAN.</p> <p><i>TSO 5e.</i> Describe Network topology</p> <p><i>TSO 5f.</i> Differentiate Between DBMS and BDMS.</p>	<p><b>Unit-5.0 Networking and database services</b></p> <p>5.1- Networking-Concept, definition</p> <p>5.2- Network types - LAN, MAN, WAN</p> <p>5.3- Network topology- RING, BUS,STAR &amp; MESH</p> <p>5.4- Database base management system- concept, definition, types and Advantages</p> <p>5.5- Bibliographic database- WINISIS and BDMS</p>	<b>1,3&amp;4</b>
<p><i>TSO 6a.</i> Write the need and advantages of library networking</p> <p><i>TSO 6b.</i> Write the main activities and services of NICNET</p> <p><i>TSO 6c.</i> Write a short note on ERNET</p> <p><i>TSO 6d.</i> Briefly describe DELNET services</p> <p><i>TSO 6e.</i> Write the main activities and services of INFLIBNET</p> <p><i>TSO 6f.</i> Describe the services of OCLC in brief</p>	<p><b>Unit-6.0 Library and Information network.</b></p> <p>6.1- Library networking- Need, Purpose, advantage .</p> <p>6.2- Important information networks – NICNET, ERNET, INDONET and EURONET</p> <p>6.3- Important library network</p> <p>6.3.1- Library network in India- DELNET,CALIBNET, INFLIBNET</p> <p>6.3.2- Global Library networks-OCLC, BLAISE</p>	<b>1&amp;5</b>

**Note:** One major TSO may require more than one Theory session/Period.

**K) Lab Session Outcomes (LSOs) and Units: P2441405**

Major Lab Session Outcomes (LSOs)	Units/Topics	Relevant COs Number(s)
<p>LSO 1- Describe the compute connection.</p> <p>LSO 2- Write about the functioning of CPU.</p> <p>LSO 3- Explain the data processing by the Computer.</p> <p>LSO 4- List out the main Input devices.</p> <p>LSO 5- List out the main Output devices.</p> <p>LSO 6- Draw a Block diagram of computer Layout.</p> <p>LSO 7- Write the safe procedure to S/W ON and OFF.</p>	<p><b>Unit-1.0 ICT in library</b></p> <p>1.1 Familiarization with computer Procedure to S/W ON and OFF.</p> <p>1.2 Identification of CPU components.</p> <p>1.3 Familiarization with Input and Output devices.</p> <p>1.4 Identification of network devices- Router, Switches , HUB etc.</p> <p>1.5 Familiarization connection layout- Connection –Disconnections.</p>	<b>1&amp;2</b>
<p>LSO1-Write the procedure to Open a new File/Folder.</p> <p>LSO2- Write he function of various keys.</p> <p>LSO3- List out the Shortcut keys.</p> <p>LSO4- Prepare a letter I Word.</p> <p>LSO5- Make a Spared sheet in Excel.</p> <p>LSO6- Make a Presentation on your Library in, PowerPoint.</p> <p>LSO7- Save date in Hard disc/CD/DVD.</p>	<p><b>Unit 2- Working with ICT</b></p> <p>2.1- Opening File and Folder</p> <p>2.2- MS-Word practice</p> <p>2.3- MS-Excel practice</p> <p>2.4- MS- PowerPoint practice</p> <p>2.5- Taking output viz- Printer, speaker</p> <p>2.6- Inputting data from external device</p> <p>2.7- Saving data in internal/external storage</p>	<b>1,2&amp;4</b>

Major Lab Session Outcomes (LSOs)	Units/Topics	Relevant COs Number(s)
	devices.	
LSO1- Write the procedure to connect with Wi-Fi/Mobile data LSO2- Describe URL, WWW, IP address etc. LSO3- Differentiate between Browser and search engines. LSO4- Write the Procedure to Send Email. LSO5- Write the methods of accessing Website and Browsing WebPages. LSO6- Write the procedure to uploading and downloading of files.	<b>Unit3- Working with Internet</b> 3.1- Connecting with Net. LAN, WAN etc. 3.2- Familiarization with URL, Browser, Search engines, WWW etc. 3.3- Sending email 3.4- Accessing website 3.5- Uploading/Downloading Files.	1&2
LSO-1 Describe the main features of SOUL2.0 LSO2- Write the software and Hardware requirement of Libsys. LSO3- Describe the functioning of Modules of e-Granthalaya. LSO4- Write the procedure to Lab practices with Demo site of e-Granthalaya LSO5- Describe ISBN and ISSN LSO6- Explain RFID in brief.	<b>Unit4- Familiarization with Popular LMS and other systems</b> 4.1- SOUL 4.2- Libsys 4.3- e-Granthalaya 4.5- QR and Barcode 4.6- RFID system	1,2&5
LSO1- Write the procedure to Install e-Granthalaya LSO2- Obtain a suggestion list from users online LSO3- prepare a book order and mail it to vendor. LSO4- Do the accessing of 10 new books LSO5- Do the retro conservation of 10 old books from accession register . LSO6- Do registration of students of your class LSO7- Issue/reserve books to 20 users. LSO8- Generate a report for the books issued that day. LSO9- Prepare barcode for Newly accessioned books	<b>Unit5- Hands on practices Libsys, SOUL, e-Granthalaya (any one available)</b> 5.1- Installation 5.2- Book order and Invoice generate 5.3- Accessioning and Cataloguing 5.4- Member registration 5.5- Book Issue/Return/Reservation 5.6- Web searching and OPAC 5.7- Report generation and Barcode Printing	1&4

L) **Suggested Term Work and Self Learning: S2441405**

Some sample suggested assignments, micro-projects and other activities are mentioned here for reference.

a. **Assignments:** Questions/Problems/Numerical/Exercises to be provided by the course teacher in line with the targeted COs.

b. **Micro Projects:**

1. Prepare a detailed project on the functioning of a computer system with neat block diagram.

2. Make a project on various Input and Output devices used with the computer system.
3. Prepare a book order for 100 books with full details and send it to vendor .
4. Prepare an annual report of your library on computer and take print .
5. Prepare a model budget for your library with the helps of e-granthalaya software.
6. Make a project on popular open software for Library.
7. Make a project on main commercial software for Library.
8. Prepare a detail project on SOUL 2.0.
9. Make a project on the functioning of e-Granthalaya modules.
10. Prepare a detail project on the salient features of Libsys software.

**c. Other Activities:**

1. Seminar Topics:

- Traditional library Vs Modern libraries- trend and difference
- Relevance of Library in the changed digital word.
- Changing technologies and the library.
- Limitations and challenges of the modern day libraries

2. Visits:

Visiting following places would provide students an opportunity to see the application of various types of Library. This will also help students to comprehend the career opportunities available in the field of Library and Information Science

- Visit to a Public Library.
- Visit to a University Library.
- Visit to a Library of Technical Institute.
- Visit to the National Library of India.
- Visit to a Library of National Importance.
- Visit to a Special Library.

**M) Suggested Course Evaluation Matrix:** The course teacher has to decide and use appropriate assessment strategy and its weight age in theory, laboratory and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate **CO attainment**.

COs	Course Evaluation Matrix						
	Theory Assessment (TA)**		Term Work Assessment (TWA)			Lab Assessment (LA)#	
	Progressive Theory Assessment (PTA) Class/Mid Sem Test	End Theory Assessment (ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)
Assignments			Micro Projects	Other Activities*			
CO-1	15%	15%	15%	20%	15%	10%	15%
CO-2	25%	25%	25%	20%	25%	15%	15%
CO-3	10%	10%	10%	20%	10%	20%	20%
CO-4	20%	20%	20%	20%	20%	15%	10%
CO-5	30%	30%	30%	20%	30%	25%	15%
Total Marks	30	70	20	20	10	20	30
			50				

Legend:

\*: Other Activities include self- learning, seminar, visits, surveys, product development, software development etc.

\*\* : Mentioned under point- (N)

# : Mentioned under point-(O)

**Note:**

- The percentage given are approximate
- In case of Micro Projects and End Laboratory Assessment (ELA), the achieved marks will be equally divided in all those COs mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exit survey need to be used this comprises of questions related to achievement of each COs.

**N) Suggested Specification Table for End Semester Theory Assessment:** Specification table represents the reflection of sample representation of assessment of cognitive domain of full course.

Unit Title and Number	Total Classroom Instruction (CI) Hours	Relevant COs Number(s)	Total Marks	ETA (Marks)		
				Remember (R)	Understanding (U)	Application & above (A)
Unit-1.0 Introduction to library Automation	6	1&4	8	4	3	3
Unit-2.0 Computer application in library	8	1,2&4	12	4	4	4
Unit-3.0 Automation of Library system	12	1&3	20	7	4	4
Unit-4.0 Library Automation software	8	1&2	10	4	4	2
Unit-5.0 Networking and database services	8	1,3&4	12	5	4	4
Unit-6.0 Library and Information network.	8	1,2&5	8	4	3	3
<b>Total</b>	<b>50</b>	<b>-</b>	<b>70</b>	<b>28</b>	<b>22</b>	<b>20</b>

**Note:** Similar table can also be used to design class/mid-term/ internal question paper for progressive assessment.

**O) Suggested Instructional/Implementation Strategies:** Different Instructional/ Implementation Strategies may be appropriately selected, as per the requirement of the content/outcome. Some of them are Improved Lecture, Tutorial, Case Method, Group Discussion, Industrial visits, Industrial Training, Field Trips, Portfolio Based, Learning, Role Play, Live Demonstrations in Classrooms, Lab, Field Information and Communications Technology (ICT)Based Teaching Learning, Blended or flipped mode, Brainstorming, Expert Session, Video Clippings, Use of Open Educational Resources (OER), MOOCs etc.

**P) Suggested Learning Resources:**

(a) **Books:**

S. No.	Titles	Author(s)	Publisher
1.	Management Information System	S.Sadagopan	Prentice Hall of India New Delhi
2.	Use of MIS Technology in Library Science	M.S. Sodhi	Adhyayan Publishers & Distributors

3.	Management Information System	Gordon B.Davis	McGraw-Hill Publication
4	Library Management and computer	Vijay Singh Rawat	Priya publication New Delhi

**(b) Online Educational Resources:**

1. <https://ignou.ac.in/>
2. <https://www.inflibnet.ac.in/>
3. <https://www.engranthalaya.nic.in/>
4. <https://epgp.inflibnet.ac.in/>
5. <https://nptel.ac.in/>
6. <https://www.mooc.org/>
7. <https://www.jstor.org/>
8. <https://ndl.iitkgp.ac.in/>
9. <https://www.nic.in/>
10. <https://egyankosh.ac.in/>

**Note:** Teachers are requested to check the creative commons license status/ financial implications of the suggested, online educational recourses before use by the students.

\*\*\*\*\*

- A) **Course Code** : **2400007 (T2400007)**  
 B) **Course Title** : Indian Constitution (Common for all Programmes)  
 C) **Pre- requisite Course(s)** :  
 D) **Rationale** :

This course will focus on the basic structure and operative dimensions of Indian Constitution. It will explore various aspects of the Indian political and legal system from a historical perspective highlighting the various events that led to the making of the Indian Constitution. The Constitution of India is the supreme law of India. The document lays down the framework demarcating the fundamental political code, structure, procedures, powers, and sets out fundamental rights, directive principles, and the duties of citizens. The course on constitution of India highlights key features of Indian Constitution that makes the students a responsible citizen. In this online course, we shall make an effort to understand the history of our constitution, the Constituent Assembly, the drafting of the constitution, the preamble of the constitution that defines the destination that we want to reach through our constitution, the fundamental right constitution guarantees through the great rights revolution, the relationship between fundamental rights and fundamental duties, the futurist goals of the constitution as incorporated in directive principles and the relationship between fundamental rights and directive principles.

- E) **Course Outcomes (COs):** After the completion of the course, teachers are expected to ensure the accomplishment of following course out comes by the learners. For this, the learners are expected to perform various activities related to three learning domains (Cognitive, Psychomotor and Affective) in classroom/laboratory/workshop/field/ industry.

**After completion of the course, the students will be able to-**

- CO-1** List salient features and characteristics of the constitution of India.  
**CO-2** Follow fundamental rights and duties as responsible citizen and engineer of the country.  
**CO-3** Analyze major constitutional amendments in the constitution.

- F) **Suggested Course Articulation Matrix (CAM):**

Course Outcomes (COs)	Programme Outcomes (POs)							Programme Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	1	-	-	-	2	-	-		
CO-2	1	-	-	-	2	-	-		
CO-3	1	2	-	-	2	-	1		

**Legend:** High (3), Medium (2), Low (1) and No mapping (-)

\* PSOs will be developed by respective programme coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional

## G) Teaching &amp; Learning Scheme:

Board of Study	Course Code	Course Title	Scheme of Study (Hours/Week)					
			Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
			L	T				
	2400007	Indian Constitution	01	-	-	-	01	01

## Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture(L), Tutorial(T), Case method, Demonstrations, Video demonstration, Problem based learning etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term Work (includes assignments, seminars, micro projects, industrial visits, any other student activities etc.)

SL: Self Learning, MOOCs, spoken tutorials, online educational resources etc.

C: Credits= (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

**Note:** TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome of learning.

## H) Assessment Scheme:

Board of Study	Course Code	Course Title	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
			Theory Assessment (TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
			Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
	2400007	Indian Constitution	25	-	-	-	-	-	25

## Legend:

PTA: Progressive Theory Assessment in class room (includes class test, mid-term test and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)

TWA: Term work & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro projects, industrial visits, self-learning, any other student activities etc.)

## Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignment, micro project, seminar and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/ presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

**I) Course Curriculum Detailing:** This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Classroom Instruction (CI), Laboratory Instruction (LI), Term Work (TW) and Self Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcomes (TSOs) and Lab Session Outcomes (LSOs) leading to attainment of Course Outcomes (COs) upon the completion of the course. While curriculum detailing, NEP 2020 related reforms like Green skills, Sustainability, Multidisciplinary aspects, Society connect, Indian Knowledge System (IKS) and others must be integrated appropriately.

**J) Theory Session Outcomes (TSOs) and Units: T2400007**

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
TSO 1a. Explain the meaning of preamble of the constitution. TSO 1b. List the salient features of constitution. TSO 1c. List the characteristics of constitution.	<b>Unit-1.0 Constitution and Preamble</b> 1.1 Meaning of the constitution of India. 1.2 Historical perspective of the Constitution of India. 1.3 Salient features and characteristics of the Constitution of India. 1.4 Preamble to the Constitution of India.	<b>CO1</b>
TSO 2a. Enlist the fundamental rights. TSO 2b. Identify fundamental duties in general and in particular with engineering field. TSO 2c. identify situations where directive principles prevail over fundamental rights.	<b>Unit-2.0 Fundamental Rights and Directive Principles</b> 2.1 Fundamental Rights under Part-III. 2.2 Fundamental duties and their significance. 2.3 Relevance of Directive Principles of State Policy under part-IV.	<b>CO2</b>
TSO 3a. Enlist the constitutional amendments. TSO 3b. Analyze the purposes of various amendments.	<b>Unit-3.0 Governance and Amendments</b> 3.1 Amendment of the Constitutional Powers and Procedure 3.2 Major Constitutional Amendment procedure - 42nd, 44th, 74th, 76th, 86th and 91 <sup>st</sup>	<b>CO3</b>

**Note:** One major TSO may require more than one Theory session/Period.

**K) Suggested Laboratory (Practical) Session Outcomes (LSOs) and List of Practical: (Not Applicable)**

**L) Suggested Term Work and Self Learning:** Some sample suggested assignments, micro project and other activities are mentioned here for reference.

**a. Assignments:** Questions/Problems/Numerical/Exercises to be provided by the course teacher in line with the targeted COs.

**b. Micro Projects:**

1. Role of Media in Spreading Awareness regarding Fundamental Rights
2. Analysis of Situations where directive principle of State policy has prevailed over Fundamental rights
3. Analyze 42nd and 97th Amendment of Indian Constitution

**c. Other Activities:**

1. Seminar Topics:
  - Democracy and Political Participation in India
  - Situations where directive principles prevail over fundamental rights.
2. Visits:
  - Arrange Mock Parliament.
3. Design games and simulation on emergencies declared in last thirty years.
4. Group discussions on current print articles.

- Adoption of Article 365 in India.
  - Need of amendments in the constitution.
5. Prepare collage/posters on current constitutional issues.
- Emergencies declared in India
  - Seven fundamental rights
6. Cases: Suggestive cases for usage in teaching:

Case	Relevance
A.K. Gopalan Case (1950)	SC contended that there was no violation of Fundamental Rights enshrined in Articles 13, 19, 21 and 22 under the provisions of the Preventive Detention Act, if the detention was as per the procedure established by law. Here, the SC took a narrow view of Article 21.
Shankari Prasad Case (1951)	This case dealt with the amendability of Fundamental Rights (the First Amendment's validity was challenged). The SC contended that the Parliament's power to amend under Article 368 also includes the power to amend the Fundamental Rights guaranteed in Part III of the Constitution.
Minerva Mills case (1980)	This case again strengthens the Basic Structure doctrine. The judgement struck down 2 changes made to the Constitution by the 42nd Amendment Act 1976, declaring them to violate the basic structure. The judgement makes it clear that the Constitution, and not the Parliament is supreme.
Maneka Gandhi case (1978)	A main issue in this case was whether the right to go abroad is a part of the Right to Personal Liberty under Article 21. The SC held that it is included in the Right to Personal Liberty. The SC also ruled that the mere existence of an enabling law was not enough to restrain personal liberty. Such a law must also be "just, fair and reasonable."

#### 7. Self-learning topics:

- Parts of the constitution and a brief discussion of each part.
- Right to education.
- Right to equality.

**M) Suggested Course Evaluation Matrix:** The course teacher has to decide and use appropriate assessment strategy and its weightage in theory, laboratory and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate **CO attainment**.

COs	Course Evaluation Matrix						
	Theory Assessment (TA)**		Term Work Assessment (TWA)			Lab Assessment (LA)#	
	Progressive Theory Assessment (PTA) Class/Mid Sem Test	End Theory Assessment (ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)
			Assignments	Micro Projects	Other Activities*		
CO-1	30%	-	30%	-	-	-	-
CO-2	40%	-	40%	50%	50%	-	-
CO-3	30%	-	30%	50%	50%	-	-
<b>Total Marks</b>	<b>25</b>	<b>-</b>	<b>5</b>	<b>10</b>	<b>10</b>	<b>-</b>	<b>-</b>
			<b>25</b>				

#### Legend:

- \*: Other Activities include self- learning, seminar, visits, surveys, product development, software development etc.  
 \*\*: Mentioned under point- (N)  
 #: Mentioned under point-(O)

**Note:**

- The percentage given are approximate
- In case of Micro Projects and End Laboratory Assessment (ELA), the achieved marks will be equally divided in all those COs mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exit survey need to be used which comprises of questions related to achievement of each COs.

**N) Suggested Specification Table for End Semester Theory Assessment: (Not Applicable)****O) Suggested Assessment Table for Laboratory (Practical): (Not Applicable)**

**P) Suggested Instructional/Implementation Strategies:** Different Instructional/ Implementation Strategies may be appropriately selected, as per the requirement of the content/outcome. Some of them are Improved Lecture, Tutorial, Case Method, Group Discussion, Industrial visits, Industrial Training, Field Trips, Portfolio Based, Learning, Role Play, Live Demonstrations in Classrooms, Lab, Field Information and Communications Technology (ICT)Based Teaching Learning, Blended or flipped mode, Brainstorming, Expert Session, Video Clippings, Use of Open Educational Resources (OER), MOOCs etc.

**Q) List of Major Laboratory Equipment, Tools and Software: (Not Applicable)****R) Suggested Learning Resources:****(a) Books:**

S. No.	Titles	Author(s)	Publisher and Edition with ISBN
1.	The Constitution of India	P.M.Bakshi	Universal Law Publishing, New Delhi 15th edition, 2018, ISBN: 9386515105
2.	Introduction to Indian Constitution	D.D.Basu	Lexis Nexis Publisher, New Delhi, 2015, ISBN:935143446X
3.	Introduction to Constitution of India	B. K. Sharma	PHI, New Delhi, 6th edition, 2011, ISBN:8120344197
4.	The Constitution of India	B.L. Fadia	Sahitya Bhawan, Agra, 2017, ISBN:8193413768
5.	The Constitutional Law of India	Durga Das Basu	LexisNexis Butterworths Wadhwa, Nagpur 978-81-8038-426-4

**(b) Online Educational Resources:**

1. <https://www.coursera.org/learn/principles-of-management>
2. <http://www.legislative.gov.in/constitution-of-india>
3. [https://en.wikipedia.org/wiki/Constitution\\_of\\_India](https://en.wikipedia.org/wiki/Constitution_of_India)
4. <https://www.india.gov.in/my-government/constitution-india>
5. <https://eci.gov.in/about/about-eci/the-setup-r1/>
6. <https://www.toppr.com/guides/civics/the-indian-constitution/the-constitution-of-india/>
7. <https://main.sci.gov.in/constitution>
8. <https://nios.ac.in/media/documents/srsec317newE/317EL8.pdf>
9. <https://legallaffairs.gov.in/sites/default/files/chapter%203.pdf>
10. [https://www.concourt.am/armenian/legal\\_resources/world\\_constitutions/constit/india/india-e.htm](https://www.concourt.am/armenian/legal_resources/world_constitutions/constit/india/india-e.htm)
11. <https://constitutionnet.org/vl/item/basic-structure-indian-constitution>

**Note:** Teachers are requested to check the creative commons license status/ financial implications of the suggested, online educational resources before use by the students.

**(c) Others:**

\*\*\*\*\*

- A) **Course Code** : **2400107(T2400107)**
- B) **Course Title** : **Professional Ethics (Non-Exam Course) (Cisco/KYP/ST)**  
(CE, CSE, ELX, ELX (R), FTS, ME, ME (Auto), AIML, MIE, CHE, CRE, FPP, GT, CT&M)
- C) **Pre- requisite Course(s)** : General awareness about moral values and different workplaces
- D) **Rationale** :

One of the programme outcomes of the diploma course incorporates ethical practices in application of appropriate technology in context of society, sustainability, environment. It is of great importance to distinguish between the terms values and ethics. Ethics are norms of behaviour that are set by authorities at workplace. The persons belonging to that workplace are expected to follow the norms. Ethical behaviour at workplace affects the person's relation to people, creates a positive impact on business processes and environment. It is very important that a person has not only understanding of ethical behavior but also the responsibility to set ethical practices in own area of work.

While values are personal preferences or choices, they may sometimes contradict with ethics at his workplace. The values of a person affect behavior and his decision making.

This course is meant to sensitize the student to ethics in profession and motivate them to demonstrate ethical behavior in day to day activities and be aware of ethics in profession.

- E) **Course Outcomes (COs):** After the completion of the course, teachers are expected to ensure the accomplishment of following course outcomes by the learners. For this, the learners are expected to perform various activities related to three learning domains (Cognitive, Psychomotor and Affective) in classroom/ laboratory/ workshop/ field/ industry.

**After completion of the course, the students will be able to-**

**CO-1** Demonstrate good values and ethics in the day to day activities and at workplace.

**CO-2** Identify a set of values and ethics related to fair professional practice.

- F) **Suggested Course Articulation Matrix (CAM):**

Course Outcomes (Cos)	Programme Outcomes(Pos)							Programme Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	3	3	3	3	3	3	3		
CO-2	3	3	3	3	3	3	3		
CO-3	3	3	3	3	3	3	3		

**Legend:** High (3), Medium (2), Low (1) and No mapping (-)

\* PSOs will be developed by respective programme coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional

## G) Teaching &amp; Learning Scheme:

Course Title	Scheme of Study (Hours/Week)				
	Classroom Instruction (CI)		Notional Hours (TW/ Activities+ SL)	Total Hours (CI+TW/ Activities)	Total Credits (C)
	L	T			
Professional Ethics	01	-	-	01	01

## Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem based learning etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term Work (includes assignments, seminars, micro projects, industrial visits, any other student activities etc.)

SL: Self Learning, MOOCs, spoken tutorials, online educational resources etc.

C: Credits = (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

**Note:** TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome of learning.

**H) Course Curriculum Detailing:** This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Classroom Instruction (CI), Laboratory Instruction (LI), Term Work (TW) and Self Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcomes (TSOs) and Lab Session Outcomes (LSOs) leading to attainment of Course Outcomes (COs) upon the completion of the course. While curriculum detailing, NEP 2020 related reforms like Green skills, Sustainability, Multidisciplinary aspects, Society connect, Indian Knowledge System (IKS) and others must be integrated appropriately.

I) Theory Session Outcomes (TSOs) and Units: **T2400107**

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
<p><i>TSO 1a.</i> Define concepts-values and ethics and attitude, development of attitudes</p> <p><i>TSO 1b.</i> Identify situations depicting values such as humanity, honesty, punctuality, respect, peace, empathy</p> <p><i>TSO 1c.</i> Identify situations depicting ethics, healthy competition, integrity, truthfulness,</p>	<p><b>Unit-1.0 Values and Ethics in Day-to-Day Life</b></p> <p>1.1. Values- Definition and examples, Ethics- definition and examples, Concept of attitude and development of attitude</p> <p>1.2. Importance of values and ethics in day to day activities and at workplace- Ethical ways of communication, environmental considerations in engineering processes, Basic concept of Carbon footprint, ethics at workplace</p> <p>1.3. Examples of situations depicting values- based decisions and ethical behavior in day-to-Day life</p>	CO1
<p><i>TSO 2a.</i> Identify the relevance of profession to society and environment</p> <p><i>TSO 2b.</i> Identify the need of values and ethics in profession related activities</p> <p><i>TSO 2c.</i> Identify Ethical conflicts</p>	<p><b>Unit-2.0 Values and Ethics in Profession</b></p> <p>2.1 Relevance of profession to society</p> <p>2.2 ethical principles such as respecting others and ourselves, respecting the rights of others, keeping promises, avoiding unnecessary problems to others, avoiding cheating and dishonesty, showing gratitude towards others and encouraging them to work</p> <p>2.3 Identification of activities and related ethical and</p>	CO1, CO2

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
	unethical behavior for professional activities in their area of work 2.4 Examples of situations depicting values- based decisions and ethical behavior	

**Note:** One major TSO may require more than one Theory session/Period.

**J) Suggested Activities and Self-Learning:** Reading books related to values and ethics/Epics/ Daily news and discussions in group

a. **Assignments:** Preparation for group discussion, panel discussion, role play, case study, seminar, skits

b. **Micro Projects:** Skits development and performance, poster making,

c. **Activities: Role Play, Case studies, Debates, Group Discussion,**

d. Suggested Seminar/ Debates on Topics such as:

- i. charters of professions
- ii. Importance of Values and ethics in identified profession
- iii. Issues of ethical conflicts- Professional rivalry,
- iv. Identified issues from Chanakya Neeti
- v. Ethics in scriptures such as Kabir ke Dohe etc.
- vi. Lessons on ethics from religious scriptures
- vii. Issues based on Happenings reported in Daily news

**K) Suggested Instructional/Implementation Strategies:** Different Instructional/ Implementation Strategies may be appropriately selected, as per the requirement of the content/outcome. Some of them are Improved Lecture, Case Method, Group Discussion, seminar, Role Play, Live Demonstrations in Classrooms, Lab, Expert Session, Video Clippings, Use of Open Educational Resources (OER), MOOCs etc.

**L) List of Major Laboratory Equipment, Tools and Software: (Not Applicable)**

**M) Suggested Learning Resources:**

(a) **Books:**

S. No.	Titles	Author(s)	Publisher and Edition with ISBN
1.	Professional Ethics and Human Values	D. R. Kiran	McGraw-Hill Education Pvt. Ltd. 2007 ISBN: 9780070633872
2.	A Textbook On Professional Ethics And Human Values	Dr. R S Naagarazan	New Age International (P) Ltd., Publishers, 2017 ISBN: 9789386173768
3.	Ethics, Integrity and Aptitude – <b>Hindi</b> (Paperback) (एथिक्स, सत्यनिष्ठा एवं अभिवृत्ति)	P.D Sharma	Rawat Publications, 2019 ISBN: 978-8131609941
4	Chanakya - Niti (Sutra Sahit) (Hindi)	Chanakya	Maple Press. 2014 ISBN 978-9350335529

**(b) Online Educational Resources:**

1. Free Ethics & Compliance Toolkit - Ethics and Compliance Initiative  
(<https://www.ethics.org/resources/free-toolkit>)
2. Free & open source tools for ethics practitioners (<https://www.cityethics.org/harvard-lab>)
3. Microsoft Word - KPTI XII - Indian Ethics 03-05-13  
([https://cbseacademic.nic.in/web\\_material/doc/ktpi/30\\_KPTI%20XII%20-%20Indian%20Ethics\\_old.pdf](https://cbseacademic.nic.in/web_material/doc/ktpi/30_KPTI%20XII%20-%20Indian%20Ethics_old.pdf))
4. Knowledge Traditions & Practices of India (cbseacademic.nic.in)  
([ps://cbseacademic.nic.in/web\\_material/Circulars/2012/68\\_KTPI/Module\\_5.pdf](https://cbseacademic.nic.in/web_material/Circulars/2012/68_KTPI/Module_5.pdf))

**(c) Others:**

\*\*\*\*\*