

DSC 3

Basics of Information Technology Applications in Libraries: Theory

60 Hours
(45hrs Lect. & + 15hrs Tut.)

Course Title & Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Pre- Requisite of the Course (if any)
		Lecture	Tutorial	Practical/ Practice		
DSC 3: Basics of Information Technology Applications in Libraries: Theory	4	3	1	0	-	-

Course Objectives

The course aims to develop a comprehensive understanding of library automation, including its concepts, planning, and implementation in modern library environments. It equips students with knowledge of Integrated Library Management Software (ILMS), its functional modules, and strategies for effective software selection and maintenance. The course also familiarizes learners with standards, technologies, and interoperability practices essential for efficient information management and resource sharing.

Learning Outcomes

After completing this course, students will be able to:

- ☞ Explain the principles and significance of library automation in the digital era
- ☞ Identify and describe key modules and standards used in automated library systems
- ☞ Apply knowledge of tools, software, and protocols to design automation plans

- ☞ Evaluate and implement library automation software in real-world settings

UNIT I: Foundation of Library Automation

10 Hours

- ☞ Library Automation: Definition, Objectives, Scope
- ☞ Merits and Barriers of Automation in Libraries
- ☞ Planning and Implementation of Library Automation

UNIT II: Software Applications and Implementation Strategies

10 Hours

- ☞ Integrated Library Management Software (ILMS)
- ☞ Criteria for Software Selection and Evaluation
- ☞ Housekeeping Operations
- ☞ Maintenance, Troubleshooting, and User Feedback

UNIT III: Functional Modules of Integrated Library Management Software

10 Hours

- ☞ Administration Module
- ☞ Acquisition Module
- ☞ Cataloguing Module
- ☞ Circulation Module
- ☞ Serials Control Module
- ☞ OPAC/Web OPAC

UNIT IV: Standards, Technologies and Interoperability

15 Hours

- ☞ Library and Metadata Standards (MARC, Dublin Core, etc.)
- ☞ Information Exchange Standards/ Protocols (Z39.50, OAI-PMH)
- ☞ Communication and Networking Standards in Libraries
- ☞ Content Representation Standards (RDA, AACR2)
- ☞ Metadata Harvesting and Data Migration
- ☞ Introduction to Digital Libraries and Institutional Repositories

Essential Readings

- ☞ BALASUBRAMANIAN (P), AND YOHANNAN (S). Library Automation and Digitization. New Delhi: Ess Ess Publications, 2021.

- ☞ INFLIBNET CENTRE. Software for university libraries: User manual. Gandhinagar: INFLIBNET Centre. n.d.
- ☞ JOHANSON (EB). Library automation. Oryson Press. 2023.
- ☞ ZENG (ML) and QIN (J). Metadata. London: Facet Publishing. 2022.

Suggested Readings

- ☞ BILAL (D). Library automation: Core concepts and practical systems analysis. Santa Barbara: Libraries Unlimited. 2014.
- ☞ EVANS (GE) and others. Introduction to technical services. Santa Barbara: Libraries Unlimited. 2021.
- ☞ HANEEFA (KM). Library automation: Theory and practice. New Delhi: Ess Ess Publications. 2020.
- ☞ HARAVU (LJ). Library automation: Design, principles and practice. New Delhi: Allied Publishers. 2004.
- ☞ TRAMULLAS (J) and GARRIDO (P), eds. Library automation and OPAC 2.0: Information access and services in the 2.0 landscape. Hershey: IGI Global. 2013.