

**Fundamentals Of  
LIBRARY RESOURCES,  
INFORMATION SYSTEM  
AND TECHNOLOGY  
(A Comprehensive Text Book)**

**AUTHOR  
APARAJITA SHARMA  
M.LIB., NET, M.Sc. (IT)  
LIBRARIAN  
Govt. Girls P.G. College  
DURG, C.G.**

**Fundamentals  
of  
Library Resources, Information  
System and Technology**  
(A Comprehensive Text Book)

**Author**

**Aparajita Shrama**

M. LIB., NET, M.Sc. (IT)

Librarian

Govt. Girls P.G. College

Durg, Chhattisgarh, India



Aditi Publication

Publisher :

**Aditi Publication, Raipur, Chhattisgarh, India**

Ph.: +91 9425210308

**Fundamentals of Library Resources, Information  
System and Technology**  
(A Comprehensive Text Book)

Year: **2025**  
Edition - **II**

**Author**  
**Aparajita Shrama**  
Durg, Chhattisgarh, INDIA

ISBN : **978-81-973939-9-0**

**Copyright© All Rights Reserved**

No parts of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, mechanical, photocopying, recording or otherwise, without prior written permission of original author.

Price : **Rs. 2200/-**

Publisher & Printed by:

**Aditi Publication,**

Opp. New Panchajanya vidya Mandir, Near Tiranga Chowk,  
Kushalpur, Raipur, Chhattisgarh, INDIA

+91 9425210308

**Dedicated  
To  
VAGDEVI HANVAHINI**



## FOREWORD



### PRINCIPAL

Head, Department of Economics  
Dr. W.W. Patankar Girls P.G. College  
Durg, Chhattisgarh

Library being an integrated part of Education Institutions Systems, it performs as a centre of Intellectual knowledge and Information resources. It utilizes both the physical objects in form of Books/Prints and digital storage in virtual mode, which is available to Library Users, readers on demand / requisition. The author has written the book in a comprehensive manner for students of Undergraduate and Postgraduate Courses of Library and Information Science. In Seven Chapters the main themes of Library Resources, Information Systems, Digital Library, AI in Library and Green Library Infrastructures have been included which deals basic concepts of Library Science and Information Technology disciplines. The efforts have been made by the writer to cover core subjective matters related to Library Resources in Traditional (Physical) and Virtual (Digital) modes.

I am sure that the book will be useful to the students of Library Science, Information Technology and related fields and also in various competitive examinations to built fundamental knowledge in composite way.

Edition , 2025



[Prof. (Dr.) D.C. Agrawal]



## **CONTENTS**

	<b>PREFACE</b>	
	<b>CHAPTERS</b>	
I	INTRODUCTION	01
II	LIBRARY E-RESOURCES	22
III	LIBRARY INFORMATION SYSTEM AND TECHNOLOGY	75
IV	DIGITAL LIBRARY	117
V	LIBRARY SOFTWARES	134
VI	AI IN LIBRARY	188
VII	SUSTAINABLE GREEN LIBRARY	208
	REFERENCES	i-iii





## **PREFACE**

In the present scenerio, the Traditional Libraries have been modified their activities, functions, services, and management etc. in a accelerated way with the adoption of Information and Communication Technology (ICT) to utilize optimum Library Resources. Considering the changing pattern of Role of Library & Knowledge Centres, in this book, the basic and integral aspects of the LIS (Library and Information Science) have been included and elaborated in a concise manner. The efforts have been made to present a comprehensive and cogent description of varied sections and techniques employed in Library functions, services and management. The suitable illustrations, Tables, and Diagrams have been provided for easy learning and grasping the subject matters by students and scholars of Library and Information Science and allied fields. I owe my grateful Thanks to Teachers and students whose ideas and themes help in writing of this Text Book in present form. I hope that the book is likely to be helpful to the students of Undergraduate and Post Graduate Studies.

Edition, 2025

**- AUTHOR**



## Author Profile

# Aparajita Sharma



Aparajita Sharma is Gold Medalist (PtRSU) M.Lib., NET, M.Sc.(IT) CIG, CES (IGNOU), The author is an eminent Researcher. She carried out Research works on Library & Information Science, Green Library Architecture Plan and Management. She has teaching experiences to UG and PG classes at S.O.S. in Library and Information Science, Pt. RSU, Raipur in the subjects - Information Retrieval, Library Management, ICT, Reference Services etc. She achieved meritorious Positions & Gold Medal recipient at UG and PG Level Degree Courses of Pt. RSU. Her interests Span Library Science, Environmental Sciences, Heritages, Architecture of Green Library and participated in many conferences, attended various International / National Level Workshops on Library Management, Softwares, ICT & LMS Softwares programmes. She published more than 15 Research Articles in Peer Reviewed International / National Journals and about 20 Articles published in News Papers of National Level. She is still actively participating in Research and Academic Activities. At present, she is Librarian in Govt. Girls P.G. College, Durg, C.G.



### Aditi Publication

Opp. New Panchjanya Vidya Mandir, Near Tiranga Chowk,  
Kushalpur, Dist.- Raipur-492001, Chhattisgarh  
shodhsamagam1@gmail.com, +91 94252 10308

ISBN : 978-81-973939-9-0



₹ 2200