## **DEPARTMENT OF LIBRARY SCIENCE**

# **COURSE CURRICULUM & MARKING SCHEME**

# PG Diploma in Library Automation & Networking

**SESSION: 2022-23** 



ESTD: 1958

# GOVT. V.Y.T. PG AUTONOMOUS COLLEGE, DURG, 491001 (C.G.)

(Former Name - Govt. Arts & Science College, Durg)

NAAC Accredited Grade A<sup>+</sup>, College with CPE - Phase III (UGC), STAR COLLEGE (DBT)

Phone: 0788-2212030

Website - www.govtsciencecollegedurg.ac.in, Email - autonomousdurg2013@gmail.com

# PG Diploma In Library Automation and Networking (PGDLAN)

# **SYLLABUS**

2022-2023

LIBRARY AND INFORMATION SCIENCE DEPARTMENT

**GOVT. V Y T PG AUTONOMOUS COLLEGE** 

**DURG** 

**CHHATTISGARH** 

# Govt. V Y T PG Autonomous College Durg Department of Library And Information Science

PG Diploma In Library Automation and Networking (PGDLAN )

### Syllabus

#### **PROGRAMM STRUTURE**

| Course Code | Course Title                                 | Marks Allotted in<br>Theory |      | Practical Marks |      |
|-------------|----------------------------------------------|-----------------------------|------|-----------------|------|
|             |                                              | Max.                        | Min. | Max             | Min. |
| LAN 01      | ICT Fundamentals Practical                   | 80                          | 29   | 20              | 07   |
| LAN 02      | Library Automation Practical                 | 80                          | 29   | 20              | 07   |
| LAN 03      | Information Systems Management Practical     | 80                          | 29   | 20              | 07   |
| LAN 04      | Networking and Internet Technology Practical | 80                          | 29   | 20              | 07   |
| LAN 05      | Internet Resource Practical                  | 80                          | 29   | 20              | 07   |
| LAN 06      | Content Development Practical                | 80                          | 29   | 20              | 07   |
| LAN 07      | Programming Practical                        | 80                          | 29   | 20              | 07   |

#### **PROJECT**

| Course Code | Course Title | Project / Dissertation |           | Viva-Voice |           |
|-------------|--------------|------------------------|-----------|------------|-----------|
|             |              | Max Mar.               | Mini Mar. | Max Mar.   | Mini Mar. |
| LAN08       | Project      | 80                     | 29        | 20         | 07        |

2 July 1202 PS

#### TARGET PARTICIPANTS AND ADMISSION CRITERIA

- The PGDLAN is a post-graduate professional Programme, This programm is one year duration.
- Any person who has passed BLISc or MLISc can join the course. but not having professional degrees also may join the course. Similarly, any graduate (BA, B.Sc. and B. Com).

Fdug 26171021

0

#### LAN01: ICT Fundamental

Unit-1

Basics of computers : History of Computer, Generation of Computer, Use of Compute, Types of Computers,

Unit-2

Computers and their components – Element of data communication- storage media- Need for Computerization of Library

Unit-3

 $Software: System\ and\ application\ software-\ operating\ systems-\ Windows-\ Windows, Unix\ and\ Linux$ 

Unit-4

Computer and Society : Information Society- National Information Infrastructure (NII )-Technology convergence.

#### References

- 1- Balagurusamy, E (2010). Fundamental of computers. New Delhi: Tata McGraw Hill education Pvt. Limited.
- 2- Karumanchi, Narsimba (2010) *Data Structure and Algorithms Made Easy: Data Struture and Algorithmics Puzzules*. 2<sup>nd</sup> Edition.Career Monk Publication

EUS D

#### LAN02: Library Automation

#### Unit-1

Introduction to Library Automation: Historical perspective, need and purpose- Approaches to Library Automation

Unit-2

Management of Library Automation : Planning – Forms and Standard – retrospective conversion, Implementation and Evaluation.

Unit-3

House Keeping Operation: Automation of Acquisition – Automation of serials control-Automation of Cataloguing and Circulation

Unit-4

Computerization Information Service: Alerting service – Bibliographic service- Documents Delivery service- reference service-

#### References

- 1- Cooper, M.D. (1996). Design of Library automation systems: File structures, data structures and tools. New York: John Wiley.
- 2- Dhiman, A.K.(2003). Basics of Information Technology for Librarians and Information Scientists. Ess Ess Publication.
- **3-** Haravu, L.J. (2004). *Library automation: design, principles and practice*. Delhi: Allied Hayss, Robert M. (2001). *Models for Library Management, Decision-Making and Planning*. New York: Academic Press
- **4-** Jeanne, F.M. (2006). A librarian's guide to the Internet: A guide to searching and evaluating Information. Oxford: Chandos Publishing.

I del

LAN03: Information System and Management

Unit-1

System Analysis and Design: General system theory – Information System Design and Development

Unit-2

Types of Information Systems: Information Retrieval Systems -Database Management Systems (DBMS)- Management Information Systems and Decision Support Systems -Knowledge Based Retrieval System

Unit-3

Data Models and Database Design: Data Structures and File Organization – Data Models—Database Architecture - Database Systems

Unit-4

Query Language and Query Processing: Query Language –Structured Query Formulation – Boolean operators.

#### References

- 1- Bansal, S.K. (2005). *Information Technology and Globalization*. New Delhi: A.P.H. Publishing Corporation
- 2- . Kashyap, M.M. (2003). Database systems. New Delhi: Vikas
- 3- Marakas, G. M. (2003). *Decision support systems in the 21st century* (Vol. 134). Upper Saddle River, NJ: Prentice Hall.
- 4- O'Brien, J.A., & Marakas, G.M. (2011). *Management Information Systems*. 10e. McGraw-Hill Irwin.
- 5- Sprague, R. H., & Watson, H. J. (Eds.). (1986). *Decision support systems: putting theory into practice*. Englewood Cliffs, NJ: Prentice-Hall.
- 6- Turban, E. (1988). Decision support and expert systems: Managerial perspectives. New York: Macmillan.

I wil

#### LAN04: Networking and Internet Technology

#### Unit-1

Introduction to Networks: Types of Networks- Network Technology - Data Networks - Network Software

#### Unit-2

Library and Information Networks: Resource Sharing Technology – Library and Information Network - Overview and Management - Network-based Information Services

#### Unit-3

Internet Technology- What is Internet, Internet Technology

#### Unit-4

Internet service, Internet, Extranet Intranet

- 1- Comer, Douglas E.(2013). *Internetworking with TCP/IP, Volume-I*, 6th ed. New Delhi: Prentice Hall, India.
- 2- Gmob, W. A. (2014). Database Management System-Simple n easy Book.
- 3- Janczewski, Lech (2000). *Internet and intranet security management: risks and solutions*. Idea: Hershey.
- 4- Rajaraman, V. (2007). *Introduction to Information Technology*. New Delhi: Prentice-Hall of India.

#### **LAN04: Internet Resources**

#### Unit-1

Internet Resources - Types of Resources , Meta Resources, Internet Information Resources. Evaluation of Internet Information Resources . Digital Library an overview.

#### Unit-2

Type of Resources- Science and Technology -Social Sciences- Humanities

#### Unit-3

Institutional Repository - Need, Purpose, Requirements,

#### Unit-4

Software for Digitization of library - Need , Purpose, Requirements

- 1- Comer, Douglas E.(2013). *Internetworking with TCP/IP, Volume-I*, 6th ed. New Delhi: Prentice Hall, India.
- 2- Gmob, W. A. (2014). Database Management System-Simple n easy Book.
- 3- Janczewski, Lech (2000). *Internet and intranet security management: risks and solutions*. Idea: Hershey.
- 4- Rajaraman, V. (2007). *Introduction to Information Technology*. New Delhi: Prentice-Hall of India.

**LAN05**: Content Development

#### Unit-1

Content Analysis: Content Analysis - Concept and Scope- Content Analysis - Quantitative and Qualitative Aspects

#### Unit- 2

Content Organization- Content Analysis - Applications (Generation of Information Services and Products)-Knowledge Management – Introduction.

#### Unit-3

Content Development: Content Development - Context Setting - Norms and Guidelines for Content Development- HTML and XML - Introduction

#### Unit-4

Web-based Content Development-Intellectual Property Rights - Legal and Ethical Issues

- 1- Arthur, M.H. (2006). Expanding a digital content management system for the growing digital media enterprise. Boston: Elsevier Focal Press.
- 2- Barrie, M. N. (2009). *Joomla! 1.5: a user's guide: building a successful Joomla! Powered website.* Upper Saddle River, NJ: Prentice Hall
- 3- Bradford, L. E. (2008). Content management systems in libraries: case studies. Lanham, MD: Scarecrow Press.
- 4- Hal Stern, Brad Williams & David Damstra. (2010). Professional

#### **LAN06: Programming**

#### Unit-1

Theoretical Aspects of Programming: Systems Analysis - Algorithm and Flow Charting-Programming and Programming Languages - Introduction

#### Unit-2

Programming in Specific Languages: Java – Introduction- Data Types, Operators and Arrays - Classes and Objects in Java -Packages and Interfaces

#### Unit-3

Programming in Specific Languages: C++-Overview of C++ - Classes and Objects - Operator Overloading - Inheritance Extending-Classes - Streams and Templates.

#### Unit-4

Programming in Specific Languages: Visual Basic-Introduction - Variables and Functions - Building a Project and Customizing Forms -Controls - Functions and Procedures - Accessing Database – Creating Form with Data Controls - Object Linking and Embedding-Introduction to Windows Programming using Visual Basic 6.0-Advanced Features of Visual Basic 6.0 - Activex and Windows API.

- 1- Arnold, K., Gosling, J., Holmes, D., & Holmes, D. (2000). *The Java programming language* (Vol. 2). Reading: Addison-wesley
- 2- Balagurusamy, E. (2008). *Object Oriented Programming With C++*. Delhi: Tata McGraw-Hill Education. [ISBN0070669074, 9780070669079].
- 3- Bradley, J. C., & Millspaugh, A. (2001). *Programming in Visual Basic 6.0 Update Edition with CD*. McGraw-Hill, Inc..
- 4- Dahl, O. J., Dijkstra, E. W., & Hoare, C. A. R. (Eds.). (1972). Structured programming. Academic Press Ltd..

#### LAN08: Project Work

The Project Report should be typed in double space in A4 size paper and submitted in a bound form. This should include a certificate from the guide stating the fact that the work has been carried out under her/ his supervision/guidance. Generally, the report should be in the following format:

As report is an outcome of a project, due care should be taken while organizing the contents of the project report for which the following structure is recommended:

- 1) Title of the Project
- 2) Original Performa of Approval of Project Proposal/ Synopsis and Proposal/ Synopsis duly approved by the PGDLAN Programme Coordinators.
- 3) Certificate of Originality
- 4) Acknowledgements
- 5) Contents
- 6) Introduction
- 7) Objectives and Scope
- 8) Methodology
- 9) Limitations
- 10) Data Analysis
- 11) Conclusion
- 12) Bibliography
- 13) Index
- 14) Appendices, if any

325

P