

PANJAB UNIVERSITY, CHANDIGARH

(Estd. under the Panjab University Act VII of 1947- enacted by the Govt. of India)

FACULTY OF ARTS

SYLLABI

FOR

**ADVANCE DIPLOMA IN LIBRARY
AUTOMATION AND NETWORKING
w.e.f. session 2021-22 (only USOL)**

SYLLABUS
ADVANCE DIPLOMA IN LIBRARY AUTOMATION AND NETWORKING (ADLAN)



Paper Code: LAN-02

Paper Title: Library Automation

Instructions for the Paper-Setters / Examiners:

The Paper carries 40 marks. Duration of the paper is 2 hours. There should be 10 questions in all, out of which the candidate is allowed to attempt 8 questions, selecting one question from each unit. The first question shall be short answer type, containing 15 short questions spread over the whole syllabus to be answered in about 25 words each. The candidate is required to attempt only 1 short answer type questions. It shall carry 2 marks. 2 marks for each short

Essential Readings:

- Aswal, R. S. (2006). *Library automation for 21st Century*. Delhi: Ess Ess.
- Balasubramanian, P. (2011). *Library automation & networking*. New Delhi: Deep & Deep.
- Devarajan, G. (2008). *Library computerization in India*. New Delhi: Ess Ess.
- Duval, B. K., & Main, L. (1992). *Automated library systems: a librarian's guide and teaching manual*. Meckler Corporation.
- Kumar, P. S. G. (2003). *Computerization of Indian libraries*. Delhi: B.R. Publishing House.
- Nagia, R. (2012). *Making of software packages for library automation*. New Delhi: Cyber Tech. Pub.
- Riaz, M. (1995). *Library automation*. New Delhi: Atlantic
- Sharma Pandey, S. K. (1995). *Fundamentals of library automation*. New Delhi: Ess Ess Publications

Further Readings:

- Salemon, S. Library Automation. In *Encyclopedia of Library and Information Science* (Vol. 14). New York: Marcel Dekker.
- Singh, P. K. (2005). *Library automation*. New Delhi: Shree.
- Theresa T R Ratna K C & Rai R A (2011). *Information technology and library automation*. New Delhi: Commonw2(D)2(Tf 2-2(i)-2(on)38-4(ubl)-2(i)-2(s)-1(hi)-e)-68.F

Unit-1

MS- Windows & MS- Office:

MS WINDOWS File Management

MS OFFICE MS WORD, MS EXCEL and MS POWERPOINT.

2nd Semester

Paper Code: LAN-04

Paper Title: Information Systems

Instructions for the Paper-Setters / Examiners:

The Paper carries 60 marks. Duration of the paper is 3 hours. There should be 10 questions in all, out of which the candidate is allowed to attempt 8 questions, selecting one question from each unit. The first question shall be short answer type, containing 15 short questions spread over the whole syllabus to be answered in about 200 words each. The candidate is required to attempt only 1 short answer type questions. It shall carry 2 marks. 2 marks for each short question and shall be compulsory question. Rest of the paper shall contain 9 units. Each unit shall have 2 questions and the candidates shall be given internal choice i.e. the candidate shall attempt one question from each unit. The questions should be evenly distributed within the units. In no case a question should be asked from outside the syllabus. The question paper should be strictly according to the instructions mentioned above.

Objectives:

To provide basic knowledge of information storage, processing and retrieval.

Unit-1

System Analysis and Design

History and developments in general systems theory
Information Systems Components
Information Systems in industries
Information Systems Analysis, design and development methodology
Systems Development Life Cycle SDLC
System implementation, evaluation and documentation
System description techniques

Unit-II

Type of Information Systems:

Information Retrieval Systems Architectures, categories, purpose, components, functions, modes and evaluation of information retrieval systems
Expert system Need, components, operation and construction of expert system
Management Information Systems: Concept and definition, need, structures, design and development, implementation, evaluation and maintenance MIS and library and information centers
Decision Support System DSS Concept, definition and structure

Unit-IV

Query Language and Query Processing:

Query Language Structured query language, features of SQL, SQL commands
Boolean Logic Search strategy, developing effective search strategy, Boolean search
Structured Query For mutation Query optimization, cost based optimizers

Essential Readings

Christopher, D. M., Prabhakar, R., & Hinrich, S. (2008). *Introduction to information retrieval*.

should be strictly according to the instructions mentioned above

Unit-IV

Networking and Resource Sharing:

Networking File, folder, printer sharing Networking tools and services
Federated Searching Tools, Techniques and Services
Scientific Networking Mendeley

Essential Readings

Gurvinder Singh, & Rachhpal Singh. (2007). *A text book of windows based computer courses* (9th ed.). Ludhiana: Kalyani Publishers.

Norton, P. (2005). *Introduction to computers* (6th ed.). New Delhi: Tata McGraw Hill.