

LIS-203 INFORMATION TECHNOLOGY (THEORY)
(4 credits)

Objective:

- To familiarize with basic concepts and components of Information technology, software tools and database management systems useful for information management.

Method of Instruction: A combination of lectures, group discussions, guest lectures (where possible) and special presentations will form methods of instruction. The module will follow with an *examination* at the end of the semester carrying 80 marks covering all units having three types of questions (long, short and very short) to be solved within 2 1/2hrs. Besides, *internal assessment* of 20 marks will be assessed on attendance, performance in presentations, assignments and symposiums.

UNIT I: Information Technology

- 1.1 Information Technology: Foundation & components.
- 1.2 Computer: Genesis, Components & Functions.
- 1.3 Computer: Development & Generations.
- 1.4 Peripheral Devices:
 - 1.4.1 Memory: Primary and Secondary.
 - 1.4.2 Storage Devices, Communication Devices, Multimedia Devices.

UNIT II: Operating System

- 2.1 Operating System: Genesis, Development and Functions.
 - 2.1.1 MS DOS: Introduction, Structure and Commands.
 - 2.1.2 Windows: Features.
 - 2.1.3 Linux: Features and brief commands.
 - 2.1.4 Windows NT: Components and Features.
- 2.2. SERVER: Functions & Client Server Architecture

UNIT III: Programming Languages

- 3.1 Programming: Fundamentals.
- 3.2 Algorithm and Flowcharts.
- 3.3 Programming Languages: Tools.
- 3.4 Generations of Programming Languages: An Overview

UNIT IV: MS-office and DBMS

- 4.1 MS-Word, MS–Excel, MS-PowerPoint
- 4.2 DBMS and RDBMS: concepts, structure, applications.
- 4.3 MS Access: Features, design and query formulation
- 4.4 Bibliographical Database: ISIS family (CDS/ISIS and WINISIS.)

Suggested Readings:

Aswal, R.S. (2003). *CDS/ISIS for windows: A Handbook for Librarians*.
NewDelhi: Ess Ess Pub.

Clarke, Alan. (2005). *IT Skills for successful Stud* .Newyork: Palgrave
Macmillan.

Date, C.J.(2004). *.An introduction to database systems* (8th ed) Boston: Pearson
Addinson Wesley.

Desai, Bipin C. (2003). *An introduction to database systems*.St.Paul: West Pub.

Dixit, J.B. (2006). *Fundamentals of Computers and Programming in C*.
Banglore: Laxmi Pub.

Fehily, Chris. (2005). *Windows XP*.Berkeley, CA: Peachpit .

Fehily, Chris. (2007). *Microsoft Windows Vista*. Berkeley, Calif: Peachpit.

Horowitz Ellis. (1995). *Fundamentals of Programming Languages*. New Delhi:
Galgotia

Leon, Alexis. Leon Mathews. (1999). *Fundamentals of information technology*.
Chennai: Leon Vikas Pub

Mathews, Martin S .(2003) .*Windows Server 2003: A beginner’s guide*. New
York: Mc Graw-Hill/Osborne.

Mathews, Martin.S.,& Cronan, John. (2005).*Microsoft Office Word 2003*.New York:
Mc Graw Hill.

Mathews, Martin S., & Mathews Carole (2007) *Microsoft Office Word 2007
Quicksteps*. New York: McGraw-Hill.

- Nair, Raman. (1998). *Basics of CDS/ISIS for DOS*. Delhi: D.K. Pub.
- Neelamejhan, A. (2004). *TUTOR+ A learning and teaching package in hypertext link commands in WINISIS*. Bangalore: Sarada Ranganathan Endowment.
- Pogue David. (2006). *Windows XP for starters*. Sebastopol, CA: Pogue.
- Ray Ajay Kumar, Acharya Tinku. (2004). *Information Technology: Principles and applications*. New Delhi: Prentice Hall.
- Ritchie, Colin. (2003). *Operating Systems Incorporating Unix and Windows (3rd ed)*. New Delhi: BPB Pub.
- Rob, Peter. (2007). *Database Systems: design, implementation, and management (7th ed)* Boston, Mass: Thomson/Course Technology.
- Rutkosky, Nita., & Seguin, Denise. (2004). *Microsoft Excel 2003*. St. Paul, MN: EMC/Paradigm.
- Rutkosky, Nita., & Seguin, Denise. (2004). *Microsoft Access 2003*. St. Paul, MN: EMC/Paradigm.
- Rutkosky, Nita., & Seguin, Denise. (2004). *Microsoft PowerPoint 2003*. St. Paul, MN: EMC/Paradigm.
- Senn, James A. (2004). *Information Technology: Principles, Practices, and opportunities (3rd ed)* .N.J: Pearson Prentice Hall.
- Tanenbaum, Andrews .(2001). *Modern Operating Systems (2nd ed)* N.J: Prentice Hall.
- Turban, Efraim .(2005). *Introduction to information technology (3rd ed)* New York: John Willey.
- Ulrich, Laurie Ann. (2003). *How to do everything with Microsoft Office 2003*. Newyork: McGraw Hill

Websites (illustrative):

- UNESCO. (2007). Available at
<http://www.unesco.org/isis/files/winisis/windows/doc/english/WINISIS15rev.pdf>