



B.Ed(4 Years) Elementary Education

Code	Subject Title	Cr. Hrs	Semester
EDE- 186	Computer Science IV (Operating Systems and Networks)	3	
Year	Discipline		
	Elementary Education		

Aims

This course acts as a foundation for the following semesters. The course aims to help the students increase their proficiency in computer by enhancing their knowledge in the subject.

Objectives

Upon the successful completion of this course the students will be able to:

- Understand and explain the foundations of Computer
- Apply their knowledge in different situations
- Develop a sense of understanding the trends and issues of Computer

Syllabus

Theory

Introduction to operating system: types of operating system, operating system modes. Process management: process scheduling criteria, process supervisor calls, inter process Communication and synchronization: inter process, communication, deadlock presentation, deadlock avoidance, deadlock detection, recovery from deadlock. Memory Management: simple absolute partition, single relocate able partition, multiprogramming multi partition, simple paging, simple segmentation, segmentation with paging, page and segment tables, swapping, overlapping. Virtual memory: demand paging segmentation. File system management: directories and names, types of file systems objects, file system function, information types, file system architecture, device management: hardware I/O organization, software organization, program threats

Networking basic concepts: line configuration, topology, transmission, modes category of network, internetwork. The OSI model: layered architecture, function of the layers. TCP IP protocols suite. Transmission media: twisted pair, coaxial cables, and optical fiber.

Practical

1. Installation of window 2000 professional : installation from CD, installation from network
2. Configuring the windows 2000 Environment control panel, Management Console Installing New Hardware.
3. Managing the Desktop: desktop sitting, Accessibility Features, Local settings.
4. Managing user :Creating User, Creating Disabling user account ,Deleting user account, Renaming user ,Changing password, Managing user properties
5. Managing Groups: Creating Groups ,Group Membership ,Renaming Group, Deleting Group, Local Group Policies
6. User profiles and Hardware profiles: Local user profiles, Roaming profiles Mandatory Profiles, Managing Hardware profiles.
7. Managing disk: file system, file system conservation, disk storage, disk management utilities.
8. Files and printing management: file and folder basic management , creating shares, share permissions, managing printer properties, sharing printer, printer permissions

9. Managing network connection: network dataflow, OSI model layer, installation and configuration of network adapter, installing and configuring network protocols
10. Dialup networking and internet connectivity: configuring general modem properties, running modem diagnostics, configuring advanced modem properties
11. Managing system recovery function: recovery and backup, using backup utility, using restore wizards.

Text Books

- Donald, L., &Chellis, J. (2001). *MCSA/MCSE: Windows 2000 Professional Study Guide: Exam 70-210*: Wiley.

Reference Material

- Donald, L., &Chellis, J. (2001). *MCSA/MCSE: Windows 2000 Professional Study Guide: Exam 70-210*: Wiley