

Modern Operating Environment and Operating system

Semester I

Subject Code: BC11501

Lectures: 48

Objectives:

The syllabus aims in equipping students with

- An ability to identify computer hardware and peripheral devices.
- The knowledge of creating basic documents, worksheets, presentations and database.
- The Basics of Computer and Operating Systems.
- The usage of software packages daily.

Unit 1: Introduction to computer Basics

10
Lects.

• Computer Characteristics	1 2 2 3 2
• Hardware, Software	
• Evolution of computer and Generations	
• Types of computer – Analog & Digital computers, Hybrid computers, General purpose & Special Purpose Computer,	
• Advantages, disadvantages and applications of Computer in Various fields	
• Functional Block diagram of Computer. CPU, ALU, Memory Unit.	

Name	Sign
Prof. Gautam Kudale	<i>Gautam Kudale</i>
Prof. Mahesh Pawar	<i>Mahesh Pawar</i>
Mr. Suraj Agarwal	<i>Suraj Agarwal</i>
Ms. Netra Jadhav	<i>Netra Jadhav</i>
Mrs. Smita Borkar	<i>Smita Borkar</i>
Mrs. Divya Chitre	<i>Divya Chitre</i>
Mrs. Monika Rajguru	<i>Monika Rajguru</i>
Ms. Deepali Agarwal	<i>Deepali Agarwal</i>
Mrs. Shubhangi Jagtap	<i>Shubhangi Jagtap</i>



Unit 2: Input /Output Devices	10 Lects.
<ul style="list-style-type: none"> Input device – Keyboard, Mouse, Scanner, Card Reader(MICR, OMR) Output devices – Monitor (LED, LCD), Printers – Dot Matrix, Inkjet, Laser, Plotters. 	5 5

Unit 3: Computer Memory	6 Lects.
<ul style="list-style-type: none"> Memory Concept, Memory organization Semiconductor memory- RAM(SRAM,DRAM) ROM(PROM, EPROM) Secondary Storage devices - Magnetic Disk (Hard disk.), Compact Disk/DVD, Pen Drive, Memory Card 	1 2 3

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Unit 4: Computer Language and Introduction to Number System	8 Lects.
• Software - System and application software	1
• Machine language, Assembly language, High Level language, Characteristics of good Language	2
• Assembler, Compiler, Interpreter	1
• Number System(decimal, binary, octal, hexadecimal conversions), ASCII	4

Unit 5: Operating System	4 Lects.
• Introduction and Evolution of operating system	1
• Functions of operating system	1
• Types of operating system	2

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Unit 6: Introduction to windows and Linux operating system	10 Lects.
• Architecture of windows (Basic structure of window)	1
• Desktop (Start button, Task bar, Folder, Icon), control panel	3
• Architecture of Linux O.S	1
• Linux Commands date, cal, cat, ls, chmod, mkdir, cd, rmdir, cp, mv, rm, pwd, wc, grep, man, passwd, echo, who, tail, head, who am I	4
• Difference between Linux and Windows Operating system	1

Reference Books:

- *Computer Fundamentals* by P.K. Sinha & Priti Sinha, 6th edition, BPB publication 2003.
- *Computers Today* by S. Basandra Galgotia Pub 2008.
- *Fundamental of computers* by V.Rajaraman Prentice Hall of India 4th edition 2007.
- *UNIX Concepts and Application* by Sumitabha Das Tata McGraw Hill 3rd edition 2003.

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