

1/4 B.Tech - FIRST SEMESTER

IT WORKSHOP

(Common to CE, ME, CSE, IT during I B.Tech., I Sem)

(Common to AE, ECE during I B.Tech., II Sem)

Course Code(s): CE1L2, ME1L2, CS1L2, IT1L2, AE2L3, EC2L1

Credits: 2**Internal assessment: 25 marks****Semester end examination: 50marks****Lab: 3 Periods /week****Objectives:**

To provide students with hands-on experience in basic hardware, productivity tools and basic operating system installations.

Outcomes:

Students will be able to

- Identify the basic computer peripherals.
- Gain sufficient knowledge on assembling and disassembling a PC.
- Learn the installation procedure of Windows and Linux OS.
- Acquire knowledge on basic networking infrastructure.
- Learn productivity tools like Word, Excel and Power point.
- Acquire knowledge on basics of internet and worldwide web.

Task 1:

Identification of the peripherals of a computer: To prepare a report containing the block diagram of the CPU along with the configuration of each peripheral and its functions. Description of various I/O Devices

Task 2:

A practice on disassembling the components of a PC and assembling them.

Task 3:

Basic DOS commands, Installation of MS windows.

Task 4:

Introduction to Linux- Installation Procedure, Basic Linux Commands.

Task 5:

Hardware Troubleshooting (Demonstration): Identification of a problem and fixing the solution (improper assembly or defective peripherals).

Software Troubleshooting (Demonstration): Identification of a problem and fixing the PC for any software issues.

Task 6:

Demonstrating Importance of Networking, Transmission Media, Networking Devices Gateway, Routers, Hub, Bridge, NIC, Bluetooth Technology, Wireless Technology, Modem, DSL, Dialup Connection.

Task 7:

MS Word Orientation: Accessing, overview of toolbars, saving files, Using help and resources, rulers, formatting ,Drop Cap , Applying Text effects, Using Character Spacing, OLE in Word, using templates, Borders and Colors, Inserting Header and Footer, Using Date and Time option, security features in word, converting documents while saving

Task 8:

Creating project : Abstract Features to be covered:-Formatting Styles, Inserting table, Bullets and Numbering, Changing Text Direction, Cell alignment, Footnote, Hyperlink, Symbols, Spell Check , Track Changes, Images from files and clipart, Drawing toolbar and Word Art, Formatting Images, Textboxes and Paragraphs.

Task 9:

Using spread sheet features of EXCEL including the macros, formulae, pivot tables, graphical representations Creating a Scheduler - Features to be covered:-Gridlines, Format Cells, Summation, auto fill, Formatting Text LOOKUP/VLOOKUP

Task 10:

Performance Analysis - Features to be covered:- Split cells, freeze panes, group and outline, Sorting, Boolean and logical operators, Conditional formatting

Task 11:

Students will be working on basic power point utilities and tools which help them create basic power point presentation. Topic covered during this week includes :-PPT Orientation, Slide Layouts, Inserting Text, Word Art, Formatting Text, Bullets and Numbering, Auto Shapes, Lines and Arrows, Hyperlinks, Inserting –Images, Clip Art, Tables and Charts in PowerPoint.

Focusing on the power and potential of Microsoft power point. Helps them learn best practices in designing and preparing power point presentation. Topic covered during this week includes: - Master Layouts (slide, template, and notes), Types of views (basic, presentation, slide slotter, notes etc), Inserting – Background, textures, Design Templates, Hidden slides, OLE in PPT.

Task 12:

Students should get connected to their Local Area Network and access the Internet. In the process they should configure the TCP/IP setting and demonstrate how to access the websites and email, Customizing web browsers using bookmarks, search toolbars and pop up blockers, Search engines and their usage.

Reference Books:

1. Computer Fundamentals, Anita Goel, Pearson
2. Information Technology Workshop, 3rd Edition, G Praveen Babu, M V Narayana BS Publications.
3. Introduction to Information Technology-ITL Education Solution Limited- Pearson.
4. Fundamentals of Information Technology, 2nd Edition, Alexis Leon, Mathews Leon, (Leon Vikas).