1/4 B.Tech FIRST SEMESTER

IT1L4   **IT WORKSHOP**   **Credits: 1**

Lecture: --   **Internal assessment: 25 marks**
Lab   : 2 periods/week   **Semester end examination: 50 marks**

Objectives:
- To attain knowledge on PC hardware and software.
- Assembling and Disassembling a PC.
- Installation of system software like MS Windows, Linux and the device drivers.

Outcomes:
- Able to Identification of Basic Computer Peripherals.
- Able to Installation of System Software like Ms Windows, Linux.
- Attain basic knowledge on hardware (I/O devices, Mother board, processor etc...).

Exercises:

PC Hardware:

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 and submit the assignment to your instructor

Tasks 2 A practice on disassemble the components of a PC and assembling them to working condition.

Task 3 a) Basic DOS commands

b) Installation of MS windows on a PC.lab instructor should verify the installation process

Task 4

a) Introduction to LINUX

b) System requirements

c) Installation procedure

Task 5

Exposure to Basic commands and system administration in Linux including Basic Linux commands in bash, Create hard and symbolic links.

Task 6

Hardware Troubleshooting (Demonstration)

Students have to be given a PC which does not boot due to improper assembly or defective peripherals. Identification of a problem and fixing it for getting to working condition.

Software Troubleshooting (Demonstration) Students have to be given a malfunctioning CPU due to system software problems. Identification of a problem and fixing it for getting to working condition.

Reference Books:

1. Basic concepts of information technology workshop, 3rd edition, G.P Raven Babu, M.V.Narayana, B.S Publications

2.Scott Mueller's Upgrading and Repairing PCs, 18/e, Scott. Mueller, QUE, Pearson,2008.

3.The Complete Computer upgrade and repair book,3/e,Cheryl A Schmidt, Dreamtech