



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA
KAKINADA – 533 003, Andhra Pradesh, India

MCA I Semester
IT Workshop (Lab)

Course Objectives:

- Students learn and understand why computers are essential components in business, education and society.
- To learn the fundamentals of computing devices and use of computer hardware and software, the Internet, networking.
- To learn different applications like Microsoft Office Word, Excel, Access and PowerPoint.

Course Outcomes (COs): At the end of the course, student will be able to

- Apply knowledge for computer assembling and software installation.
- Solve hardware, software trouble shooting problems.
- Develop Documents using Word processors
- Connect computer using wired and wireless connections
- Develop presentations using the presentation tool and Perform computations using spreadsheet tool

List of Exercises:

Note: Faculty to consolidate the workshop manuals using the textbook and references.

Experiment 1: Identification of the peripherals of a computer - Prepare a report containing the block diagram of the computer along with the configuration of each component and its functionality. Describe about various I/O Devices and its usage.

Experiment 2: Practicing disassembling and assembling components of a PC.

Experiment 3: Installation of Device Drivers, MS windows, Linux Operating systems and Disk Partitioning.

Experiment 4: Introduction to Memory and Storage Devices, I/O Port, Assemblers, Compilers, Interpreters, Linkers and Loaders.

Experiment 5: Demonstration of Hardware and Software Troubleshooting.

Experiment 6: Demonstrating Importance of Networking, Transmission Media, Networking Devices- Gateway, Routers, Hub, Bridge, NIC, Bluetooth Technology, Wireless Technology, Modem, DSL, and Dialup Connection.

Experiment 7: Awareness of various threats on the Internet and its solutions.

Experiment 8: Demonstration and Practice on Microsoft Word.

Experiment 9: Demonstration and Practice on Microsoft Excel.

Experiment 10: Demonstration and Practice on Microsoft Power Point.



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Experiment 11: Demonstration and Practice on LaTeX.

Text Books:

- 1 Computer Fundamentals, Anita Goel, Pearson India Education, 2017
- 2 PC Hardware Trouble Shooting Made Easy, TMH

Reference Books:

1. Upgrading and Repairing PCs, 18th Edition, Scott Mueller, QUE, Pearson, 2008
2. Comdex Information Technology, Vikas Gupta, Dreamtech
3. Essential Computer and IT Fundamentals for Engineering and Science Students, Dr. N. B. Venkateswarlu, S. Chand Publishers
4. Information Technology Workshop, 3rd Edition, G Praveen Babu, M V Narayana, BS Publications