

COURSE TITLE : COMPUTER HARDWARE AND NETWORKING LAB
COURSE CODE : 6049
COURSE CATEGORY : A
PERIODS/WEEK : 5
PERIODS/SEMESTER : 75/6
CREDITS : 3

LIST OF EXPERIMENTS

On completion of this course the students will be able :

1. To study the different parts of computer system.
2. To study different parts of mother board – ATX.
3. To study various types of connectors.
4. To draw the pin details of various connectors.
5. To assemble the computer systems.
6. To study CMOS setup.
7. To partition and format the hard disc.
8. To install optical drive.
9. To install the OS and application softwares (office automation, anti-virus, etc.).
10. To apply PC diagnostic tools.
11. To install scanner.
12. To install network card.
13. To connect systems in network using switch.
14. To connect the systems in peer to peer network.
15. To install modem and connect to Internet.
16. To prepare the UTP cable for cross and direct connections using crimping tool.
17. To install domain controller OS.
18. To install remote administration.
19. To configure web server.
20. To configure e-mail server.
21. To configure e-mail client.
22. To download and upload files using relevant protocol.
23. To install and configure proxy server.
24. To configure browser for Internet access using proxy server.
25. To configure Virtual Private Network (VPN).

Troubleshooting

1. To trouble shoot computer crashes.
2. To trouble shoot computer operation is slow.
3. To trouble shoot start up issues.
4. To trouble shoot Blue Screen Of Death(BSOD).
5. To trouble shoot chipset problems.
6. To trouble shoot display related problems.
7. To trouble shoot CMOS check sum errors.
8. To trouble shoot registry problems.
9. To trouble shoot optical drive related problems.
10. To trouble shoot disk boot failure - hard disc related problems.
11. To trouble shoot driver software problems.
12. To trouble shoot sound card problems.
13. To trouble shoot fatal error problems.
14. To trouble shoot script error problems.
15. To trouble shoot typomatic errors - keyboard problems.
16. To trouble shoot mouse problems.
17. To trouble shoot printer related problems.
18. To trouble shoot scanner related problems.
19. To trouble shoot system hanging after 5 minutes due to SMPS.
20. To trouble shoot IDE port problem in mother board.
21. To trouble shoot PCI slot problems.
22. To trouble shoot network card errors.
23. To trouble shoot network connectivity issues.
24. To use network diagnostic software.
25. To access network resources using net at command prompt.