

Lab Practice - III (404213)

Computer Networks and Process Automation

Teaching Scheme:
Practical: 4 Hrs/week

Examination Scheme: OR: 50Marks
TW:50Marks

Computer Networks

1. Study of network commands & IP address configurations.
2. Study of Cable tester for fault detection of UTP-CAT5 Cross / Straight LAN cable.
3. Implementation of LAN using star topology and connectivity between two computers using cross over UTP CAT5 cable. (Cisco Packet Tracer)
4. Installation and configuration of Web Server and hosting web page using HTML programming. (Cisco Packet Tracer)
5. Installation and configuration of Proxy Server.
6. Installation and configuration of FTP server for FTP communication.
7. Installation and configuration of Telnet server for Telnet Communication. (Teamviewer)
8. Write a program in 'C' for Encryption and Decryption (RSA Algorithm).
9. Write a program in 'C' for Shortest Path algorithm.
10. Connectivity of LAN computers to Internet using Dial-Up modem/leased line Modem /Mobile Handset. (Installation and configuration).
11. Installation of Suitable Protocol Analyzing software and Analysis of Intranet activities. (Wireshark)

Process Automation

1. Calibration of Electro pneumatic Converter.
2. Tuning of PID controllers for Different Control Actions.
3. To plot the control valve characteristics.
4. Study of Recorders.
5. Communication with smart Transmitter.
6. Microcontroller Based Instrumentation System.
7. & 8. Any two Experiments based on simulation of Instrumentation system/Process control.