

Devang Patel Institute of Advance Technology and Research

Subject Name: Data Communication and Networking
(CE/CSE)
Subject Code: CE253

Semester: 3rd

Academic Year: June 2019 - Dec 2019

Practical List

Sr. No.	Practical Aim	Hrs												
1.	Configuration, Management and Administration of various networking and Internetworking Devices. <ul style="list-style-type: none"> NIC Hub Switch Router Gateway Repeater Bridge Cables 	2												
2.	Illustration of various networking commands: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>• ping {hostname}</td><td>• netstat -nt</td><td>• netstat -a</td></tr> <tr> <td>• traceroute {hostname}</td><td>• telnet {hostname} {port}</td><td>• arp</td></tr> <tr> <td>• ipconfig</td><td>• host</td><td>• ftp</td></tr> <tr> <td colspan="3">• nslookup {hostname}</td></tr> </table>	• ping {hostname}	• netstat -nt	• netstat -a	• traceroute {hostname}	• telnet {hostname} {port}	• arp	• ipconfig	• host	• ftp	• nslookup {hostname}			2
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• traceroute {hostname}	• telnet {hostname} {port}	• arp												
• ipconfig	• host	• ftp												
• nslookup {hostname}														
3.	To implement straight through and cross over cable using cat 5 cable and RJ-45 connector.	2												
4.	Understand basic networking concept using Wireshark.	2												
5.	Analyzing packet captured using CHARUSAT intranet using Wireshark. Use of different Wireshark Display Filters.	2												
6.	Capture ARP & ICMP Protocol Traffic using Wireshark.	2												
7.	Understand basic networking concept using Packet Tracer.	2												
8.	Configuration of different topologies in Cisco Packet Tracer to understand decision taken at each 4 layers of TCP/IP protocol stack.	2												
9.	To demonstrate CHARUSAT campus network setup.	2												
10.	Configure DHCP, DNS and HTTP Servers using Cisco packet tracer.	2												
11.	Write a program to find the Checksum and Cyclic Redundancy Check of two binary strings.	2												
12.	Demonstrate Network Simulator.	2												