

# Devang Patel Institute of Advance Technology and Research

Subject Name: Data Communication and Networking

Subject Code: CE253

Semester: 3<sup>rd</sup> (CSE)

Academic Year: June 2019 - Dec 2019

## Index

Sr. No	Practical Aim	Date	Sign												
1.	Configuration, Management and Administration of various networking and Internetworking Devices. <ul style="list-style-type: none"><li>NIC</li><li>Hub</li><li>Switch</li><li>Router</li><li>Gateway</li><li>Repeater</li><li>Bridge</li><li>Cables</li></ul>	24/06/19													
2.	Illustration of various networking commands: <table><tr><td><ul style="list-style-type: none"><li>ping {hostname}</li></ul></td><td><ul style="list-style-type: none"><li>netstat -nt</li></ul></td><td><ul style="list-style-type: none"><li>netstat -a</li></ul></td></tr><tr><td><ul style="list-style-type: none"><li>tracert {hostname}</li></ul></td><td><ul style="list-style-type: none"><li>telnet {hostname} {port}</li></ul></td><td><ul style="list-style-type: none"><li>arp</li></ul></td></tr><tr><td><ul style="list-style-type: none"><li>ipconfig</li></ul></td><td><ul style="list-style-type: none"><li>host</li></ul></td><td><ul style="list-style-type: none"><li>ftp</li></ul></td></tr><tr><td colspan="3"><ul style="list-style-type: none"><li>nslookup {hostname}</li></ul></td></tr></table>	<ul style="list-style-type: none"><li>ping {hostname}</li></ul>	<ul style="list-style-type: none"><li>netstat -nt</li></ul>	<ul style="list-style-type: none"><li>netstat -a</li></ul>	<ul style="list-style-type: none"><li>tracert {hostname}</li></ul>	<ul style="list-style-type: none"><li>telnet {hostname} {port}</li></ul>	<ul style="list-style-type: none"><li>arp</li></ul>	<ul style="list-style-type: none"><li>ipconfig</li></ul>	<ul style="list-style-type: none"><li>host</li></ul>	<ul style="list-style-type: none"><li>ftp</li></ul>	<ul style="list-style-type: none"><li>nslookup {hostname}</li></ul>			01/07/19	
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3.	To implement straight through and cross over cable using cat 5 cable and RJ-45 connector.	08/07/19													
4.	Understand basic networking concept using Wireshark.	15/07/19													
5.	Analyzing packet captured using CHARUSAT intranet using Wireshark. Use of different Wireshark Display Filters.	22/07/19													
6.	Capture ARP & ICMP Protocol Traffic using Wireshark.	29/07/19													
7.	Understand basic networking concept using Packet Tracer.	05/08/19													
8.	Configuration of different topologies in Cisco Packet Tracer to understand decision taken at each 4 layers of TCP/IP protocol stack.	19/08/19													
9.	To demonstrate CHARUSAT campus network setup.	26/08/19													
10.	Configure DHCP, DNS and HTTP Servers using Cisco packet tracer.	02/09/19													
11.	Write a program to find the Checksum and Cyclic Redundancy Check of two binary strings.	16/09/19													
12.	Demonstrate Network Simulator.	23/09/19													