

Manipal Academy of Higher Education, Dubai School of Engineering and IT

CSE 3162: COMPUTER NETWORKS LAB

Lab Manual

Semester - 5

B. Tech Computer Science and Engineering (Regulation 2018)

Name: Russel Adrian Saldanha

Registration No: 200101008

CONTENTS

LAB NO.	TITLE	PAGE NO.	REMARKS
1	Physical connection of Devices and Usage of Putty Tool.	3	
2	Setup of Static and Dynamic IP Address.	8	
3	Setup of Web Server and DNS Server.	10	
4	Setup of DHCP.	16	
5	HTTP and FTP with analysis of traffic using Wireshark.	18	
6	Switch Learning Process using Packet Tracer.	22	
7	Single Router Topology.	23	
8	Two Routers Topology.	25	
9	Three Routers Topology using Static Routing.	27	
10	Three Routers Topology using Dynamic Routing.	33	
11	Analysis of TCP and UDP Traffic using Wireshark.	39	
12	Analysis of DHCP process using Wireshark.	40	
13	Importance of IP Address and MAC Address using Two Router Topology.	46	
14	Design of a Small Network using Subnets.	48	



SCHOOL OF ENGINEERING AND INFORMATION TECHNOLOGY

Certificate

This is to certify that Mr. <u>Russel Adrian Saldanha</u> of Reg No. <u>200101008</u> and <u>Section A</u> has satisfactorily completed the lab exercises prescribed for Computer Networks Lab [CSE 3162] of Third Year B. Tech in Computer Science and Engineering at MAHE, Dubai Campus, in the academic year 2022-2023.

Date:		
Signature	(Faculty	in-charge