

COURSE TITLE: NETWORKING LAB**COURSE OBJECTIVES:**

- This practical subject introduces the student actual implementation of various types of networks using simulating software
- The objective of this subject is to give hands on experiment of hardware establishment of networks using simulating software

LEARNING OUTCOMES:

- The students will be able to configure various types of networks
- Students will implement various networks using simulating software

Code	Course	Teaching Period / Week		Credit			Duration of Theory Exam (in Hrs.)
		L	Pr./Tu	Int.	Ext.	Total	
MCSL105	Networking Lab	-	2	1	1	2	1

Module No.	Objective	Content	Evaluation
1	To introduce students to IDE of simulating software	Study of simulating software interface Basic Configuration of router, assigning ipv4 and ipv6 addresses to the interfaces of the routers	Lab manual for 05 marks
2	To elaborate the configuration of VLANs and PPP	Configure VLANs on the router, Spanning tree, Configuration of PPP	Online test of 10 marks
3	To demonstrate the configuration of RIPv2, EIGRP and OSPF	Configure RIPv2, Configure EIGRP, Configure OSPF	
4	To implement configuration of switch	Access List Configuration, Configuration of NAT, Configuration of DHCP, Configuration of switch	Practical test of 10 marks
Practical's to be done Packet Tracer (or other simulating software)			

EVALUATION:

Evaluation	Details (* please give details of assessment in terms of Unit test/ Project/ quiz /or other assignments and marks allotted for it)	Marks
Internal	<ul style="list-style-type: none"> • Lab Manuals • Online Test • Practical Test 	25 Marks
External	Final Examination (Practical)	25 Marks
Total marks		50 Marks

TEXT BOOKS:

- 1) Forouzan B A., "Data Communication and Networking", Third Edition, 2004, McGraw Hill. Andrew Tenenbaum, Computer Networks, PHI
- 2) Jorgensen, P. C. (2002). Software Testing: A Craftsman's Approach. USA: CRC Press.
- 3) Kshirasagar Naik, P. T. (2010). SOFTWARE TESTING AND QUALITY ASSURANCE: THEORY AND PRACTICE. INDIA: John Wiley & Sons.

REFERENCE BOOKS:

- 1) Kurose, J.F. and Ross K.W., "Computer Networking: A Top-Down Approach Featuring the Internet", Third Edition, 2005, Addison-Wesley.
 - 2) An Engineering Approach to Computer Networking, (2018) S. Keshav, Addison-Wesley.
-