



Malla Reddy Engineering College

(An UGC Autonomous Institution, Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad). Accredited 2nd time by NAAC with 'A' Grade, Maisammaguda, Medchal - Malkajgiri District, Secunderabad, Telangana State - 500100, www.mrec.ac.in

DEPARTMENT OF INFORMATION TECHNOLOGY

Date: 19.10.2021

CIRCULAR

All the Students are hereby informed that Value Added Course on "NETWORKING" from 25.10.2021 to 30.10.2021 is being organized by the Department of Information Technology. The Resource Person for the course is Ms. JYOTHIRMAI, Trainer in Skilltimate Technologies. Students are advised to register names to the programme coordinator Ms.P.Swapna on or before 22-10-21.

The detailed schedule of the programme will be displayed in the notice board.


HOD-IT

Dept. of Information Technology
Malla Reddy Engg. College (A)
Maisammaguda-500 100,

Copy to:

- 1) Circulation in Students classroom
- 2) All HOD'S
- 3) Notice Boards
- 4) PA to Principal for filling


PRINCIPAL
Malla Reddy Engineering College
(Autonomous)
Maisammaguda, Dhulapally,
(Post Via Kompally), Sec'bad-500 100

About the Institution

Malla Reddy Engineering College (Autonomous) is one of the reputed engineering colleges in Hyderabad, Telangana. MREC (A) is part of Malla Reddy Group of Institutions (MRGI), founded by Sri. Ch. Malla Reddy, currently Hon'ble Minister, Labor and Employment, Factories, Women and Child Welfare and Skill Development, Govt. of Telangana State. The college is situated in a serene, lush green environment in Maisammaguda, Gundlupochampally, Medchal (M), Medchal-Malkajgiri District Telangana - 500100.

The college was established in 2002 and is an autonomous institution approved by UGC and affiliated to JNTUH. The college is re-accredited by NAAC with 'A' Grade (II Cycle) and was conferred autonomous status by JNTUH in 2011 and by UGC in 2014 for a period of 6 years. Our eligible UG and PG programs received NBA accreditation and some of them received reaccreditation too. The college caters to wide ranging aspirations and goals of student communities by offering new courses in UG- Cyber Security, Artificial Intelligence and Machine Learning, Data Science and IOT along with programs in various streams of Engineering & Technology and Management. It boasts of world-class infrastructure and well-equipped laboratories in all departments and is skillfully and smartly guided by **Dr. A. Ravendra, Principal, MREC (A)** who have a rich teaching and industrial experience.

Advisory Committee:

Chief Patrons: Sri. Ch. Malla Reddy, Minister-Telangana State-India.

Founder Chairman

Patrons: Malla Reddy Group of Institutions
Sri. Ch. Mahender Reddy, Secretary, MRGI

Co-Patrons: Dr. Ch. Bhadra Reddy
President, MRGI
Dr. A. Ravendera
Principal, MREC(A)

Convener: Dr. M. Deena Babu
HOD IT

Coordinator: Ms. P. Swapna
Assistant Professor, IT

Organizing Committee:

Mr. A. Venkatrami Reddy, Assistant Professor, IT
Mr. Sheshanna, Assistant Professor, IT
Ms. T. Swapna, Assistant Professor, IT
Mr. E. Srinath, Assistant Professor, IT
Ms. P. Swapna, Assistant Professor, IT
Mr. G. Srinivas, Assistant Professor, IT

About the Department:

The Department of Information Technology was established in 2007 with intake of 60 Students and with specific Vision, Mission and Goals. From the day college was affiliated to Jawaharlal Nehru Technological University, Hyderabad (JNTUH) and recognized by AICTE, New Delhi the Department works under the Rules and Regulations JNTUH and AICTE. The course curriculum proposed by the JNTUH will be implemented strictly. However, if required the Department proposes modifications or inclusions of new courses in the curriculum to the JNTUH for consideration.

Malla Reddy Engineering College (A)
Maisammaguda-500 100.



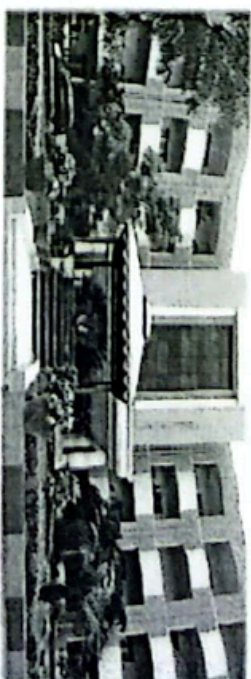
A One-Week Training program

(Value added Course)

On

"Networking"

(25th to 30th Oct, 2021)



Organized by
Department of

Information Technology

MALLA REDDY ENGINEERING COLLEGE

(AUTONOMOUS) MAIN CAMPUS

An UGC Autonomous Institution, Approved by AICTE & Affiliated to JNTUH-Hyderabad
Reaccredited by NAAC with 'A' Grade (II Cycle)
Maisammaguda (H), Gundlupochampally (V), Medchal (M), Medchal - Malkajgiri District
Telangana - 500100, India.

Malla Reddy Engineering College
(Autonomous)

Maisammaguda, Dhulapally,
West Via Korumally, Sec'bad-500 100



Malla Reddy Engineering College

An UGC Autonomous Institution, Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad, Accredited by NAAC with 'A' Grade (2nd Cycle), Maisammaguda (H), Medchal-Malkajgiri, Secunderabad Telangana-500100 www.mrec.ac.in


Department of Information Technology


"Value-Added Course on Networking"

Schedule

Day & Date	10:00-11:15AM	11:15-11:30AM	11:30AM-1:00PM	1:00-2:00PM	2:00-3:00PM
25/10/2021	Inauguration	Tea Break	Introduction	Lunch Break	Addressing
26/10/2021	Data Transmission		Types of Networks		Interconnection
27/10/2021	Network Topology Diagram		Protocols		Protocol Layers
28/10/2021	TCP/IP Model		Networks Interconnection/Internet		Hands On Experience
29/10/2021	Internet Protocol(IP)		Transmission Control Protocol		Hands On Experience
30/10/2021	User Datagram Protocol		Internet Application Protocol		Hands On Experience


Coordinator


HOD
Dept. of Information Technology
Malla Reddy Engg. College (A)
Maisammaguda-500 100.


Principal
Malla Reddy Engineering College
(Autonomous)
Maisammaguda, Dhulapally,
(Post: Maisammaguda), Sec'bad-500 100

NETWORKING

Basic Networking Concepts

1. Introduction
2. Protocols
3. Protocol Layers
4. Network Interconnection/Internet

1. Introduction

-A network can be defined as a group of computers and other devices connected in some ways so as to be able to exchange data.

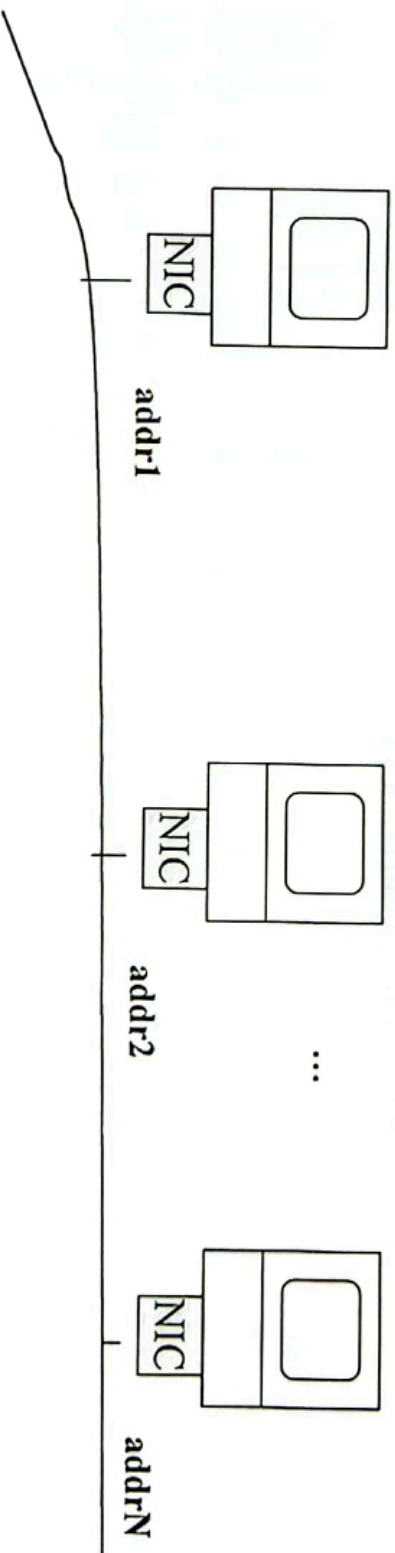
-Each of the devices on the network can be thought of as a node; each node has a unique address.

-Addresses are numeric quantities that are easy for computers to work with, but not for humans to remember.

Example: 204.160.241.98

-Some networks also provide names that humans can more easily remember than numbers.

Example: www.javasoft.com, corresponding to the above numeric address.



Addressing

Internet address

Consists of 4 bytes separated by periods

Example: 136.102.233.49

- The R first bytes (R= 1,2,3) correspond to the network address;
- The remaining H bytes (H = 3,2,1) are used for the host machine.
- InterNIC Register:** organization in charge of the allocation of the address ranges corresponding to networks.
- Criteria considered:

☐ Geographical area (country)

☐ Organization, enterprise

☐ Department

☐ Host

Domain Name System (DNS)

- Mnemonic textual addresses are provided to facilitate the manipulation of internet addresses.
- DNS servers are responsible for translating mnemonic textual Internet addresses into hard numeric Internet addresses.

Ports

An IP address identifies a host machine on the Internet.

An IP port will identify a specific application running on an Internet host machine.

A port is identified by a number, the *port number*.

The number of ports is not functionally limited, in contrast to serial communications where only 4 ports are allowed. There are some port numbers which are dedicated for specific applications.

Applications	Port numbers
HTTP	80
FTP	20 and 21
Gopher	70
SMTP (e-mail)	25
POP3 (e-mail)	110
Telnet	23
Finger	79

Internet Protocol (IP)

Overview

- The IP protocol provides two main functionality:
 - ☐ Decomposition of the initial information flow into packets of standardized size, and reassembling at the destination.
 - ☐ Routing of a packet through successive networks, from the source machine to the destination identified by its IP address.
- Transmitted packets are not guaranteed to be delivered (*datagram protocol*).
- The IP protocol does not request for connection (*connectionless*) before sending data and does not make any error detection.

Functions

- Decompose the initial data (to be sent) into datagrams.
- Each datagram will have a header including, the IP address and the port number of the destination.
- Datagrams are then sent to selected gateways, e.g IP routers, connected at the same time to the local network and to an IP service provider network.

-TCP provides support for sending and receiving arbitrary amounts of data as one big stream of byte data (IP is limited to 64Kb).

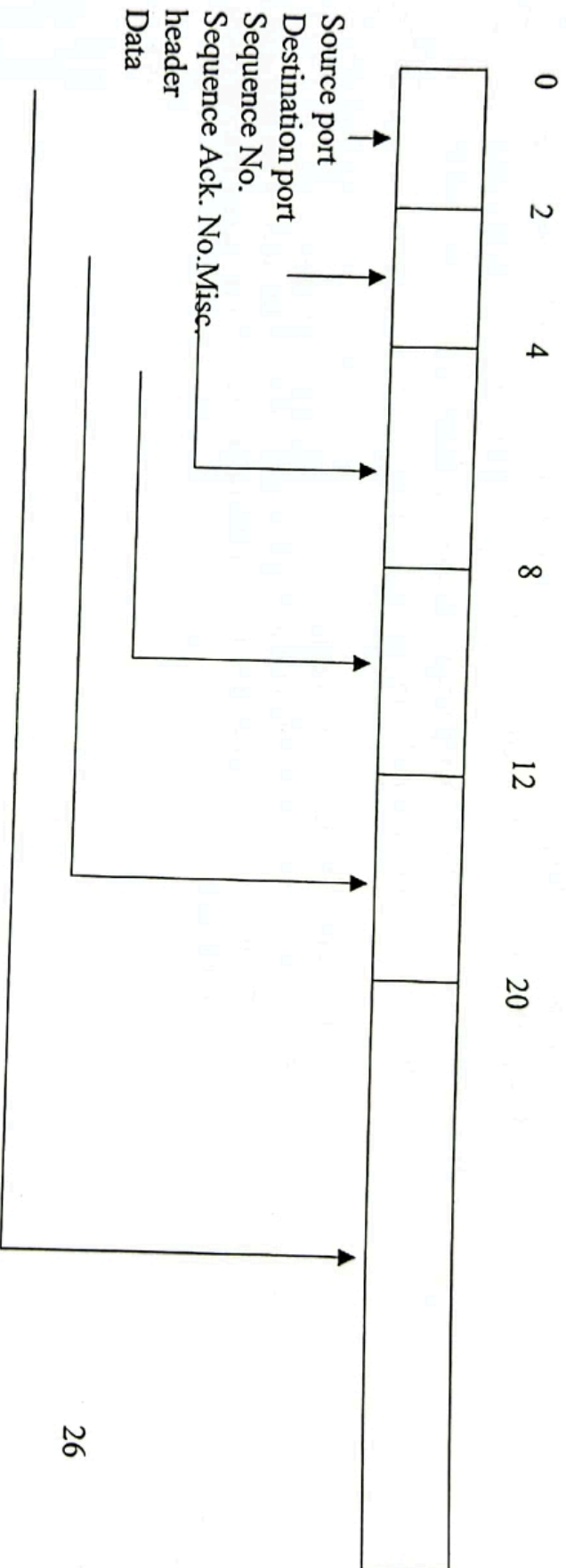
-TCP does so by breaking up the data stream into separate IP packets.

-Packets are numbered, and reassembled on arrival, using sequence and sequence acknowledge numbers.

-TCP also improves the capability of IP by specifying port numbers.

□ There are 65,536 different TCP ports (sockets) through which every TCP/IP machine can talk.

Structure of a TCP packet



Types of Networks

There are two principle kinds of networks: Wide Area Networks (WANs) and Local Area Networks (LANs).

WANs

- Cover cities, countries, and continents.
- Based on *packet switching* technology
- Examples of WAN technology: Asynchronous Transfer Mode (ATM),

Integrated Services Digital Network (ISDN)

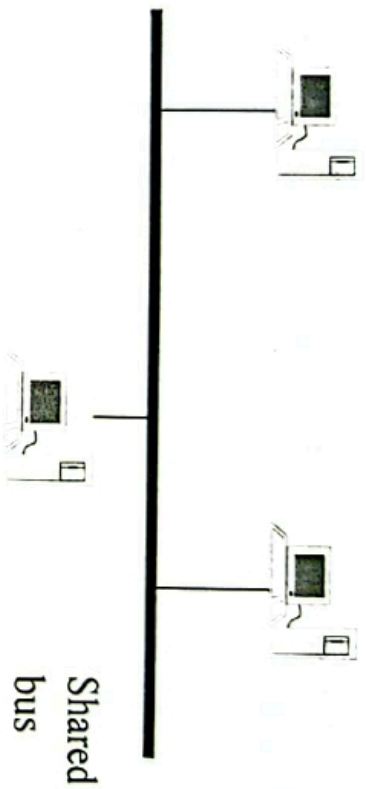
LANs

- Cover buildings or a set of closely related buildings.
- Examples of LAN technology: Ethernet, Token Ring, and Fiber Distributed Data Interconnect (FDDI).

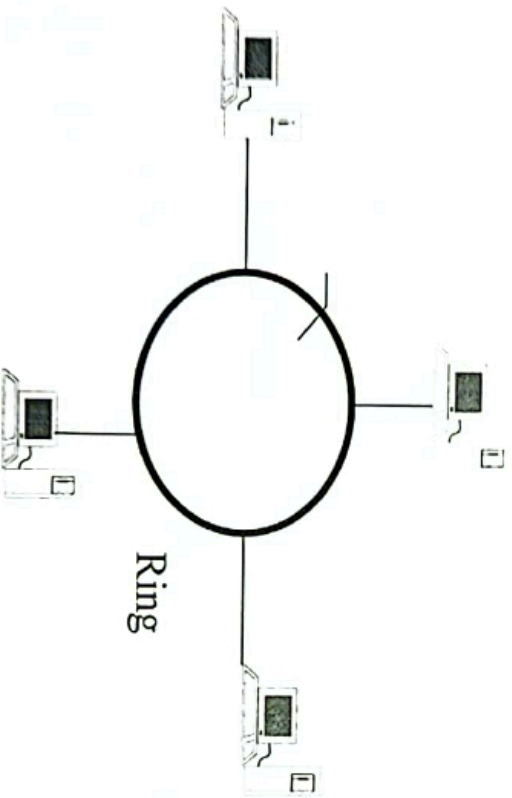
Ethernet LANs: based on a bus topology and broadcast communication

Token ring LANs: based on ring topology

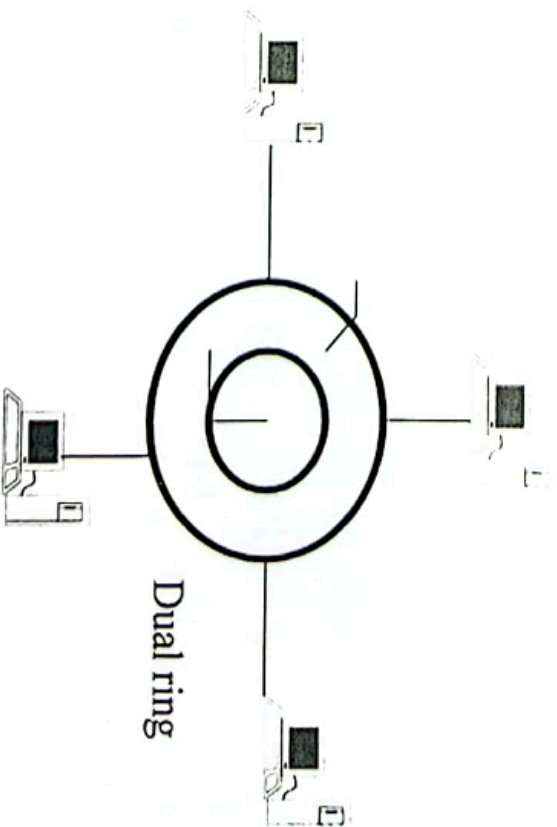
FDDI LANs: use optical fibers and an improved token ring mechanism based on two rings flowing in opposite directions.



(a) Ethernet LAN



(b) Token Ring LAN



(c) FDDI LAN

Network connectivity type	Speed	Transmission time for 10 Mbytes
(Telephone) dial-up modem	14.4 Kbps	90 min
ISDN modem	56/128 Kbps	45/12min
T1 connection	1.54 Mbps	50s
Ethernet	10 Mbps	9s
Token ring	4/16 Mbps	
Fast Ethernet	100 Mbps	
FDDI	100 Mbps	
Gigabit Ethernet	1 Gbps	
ATM	25Mbps/2.4Gbs	

Interconnection

-Networks of low capacity may be connected together via a *backbone* network which is a network of high capacity such as a FDDI network, a WAN network etc.

-LANs and WANs can be interconnected via T1 or T3 digital leasedlines

-According to the protocols involved, networks interconnection is achieved using one or several of the following devices:

- ☐ *Bridge*: a computer or device that links two similar LANs based on the same protocol.
- ☐ *Router*: a communication computer that connects different types of networks using different protocols.
- ☐ *B-router or Bridge/Router*: a single device that combines both the functions of bridge and router.
- ☐ *Gateway*: a network device that connects two different systems, using direct and systematic translation between protocol

Toronto branch

Vancouver bran

Ethernet LAN

Router

NY headquaters

Frame
Relay
ATM

Bridge/Route

Gateway

Token Ring LAN

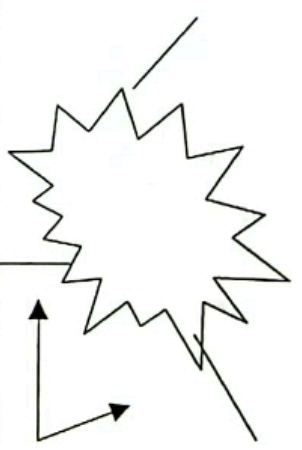
T1 line



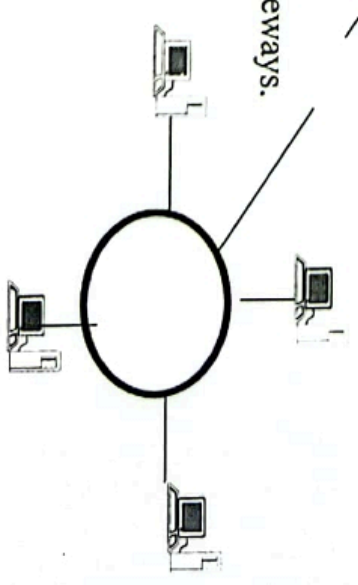
Network Topology Diagram

The specification of the network topology diagram requires the definition of the characteristics and entities underlying the network:

- Geographical locations of the different components or subnets involved in the network.
- Description of the LAN topology
- Description of the WAN topology
- Description of the network connectors such as routers, bridges, repeaters, and gateways.



Token Ring LAN



2. Protocols

-Define the rules that govern the communications between two computers connected to the network.

-Roles: addressing and routing of messages, error detection and recovery, sequence and flow controls etc.

-A protocol specification consists of the *syntax*, which defines the kinds and formats of the messages exchanged, and the *semantic*, which specifies the action taken by each entity when specific events occur.

Example: HTTP protocol for communication between web browsers and servers.

Request For Comments (RFC): specifications of the protocols involved in Internet Communications.

-Example: sample of RFC 821 describing communications between SMTP server and client.

S: MAIL FROM: Paul@Alpha.ARPAR: 250 OK

S: RCPT TO: Jack@Beta.ARPAR: 250 OK

S: DATA

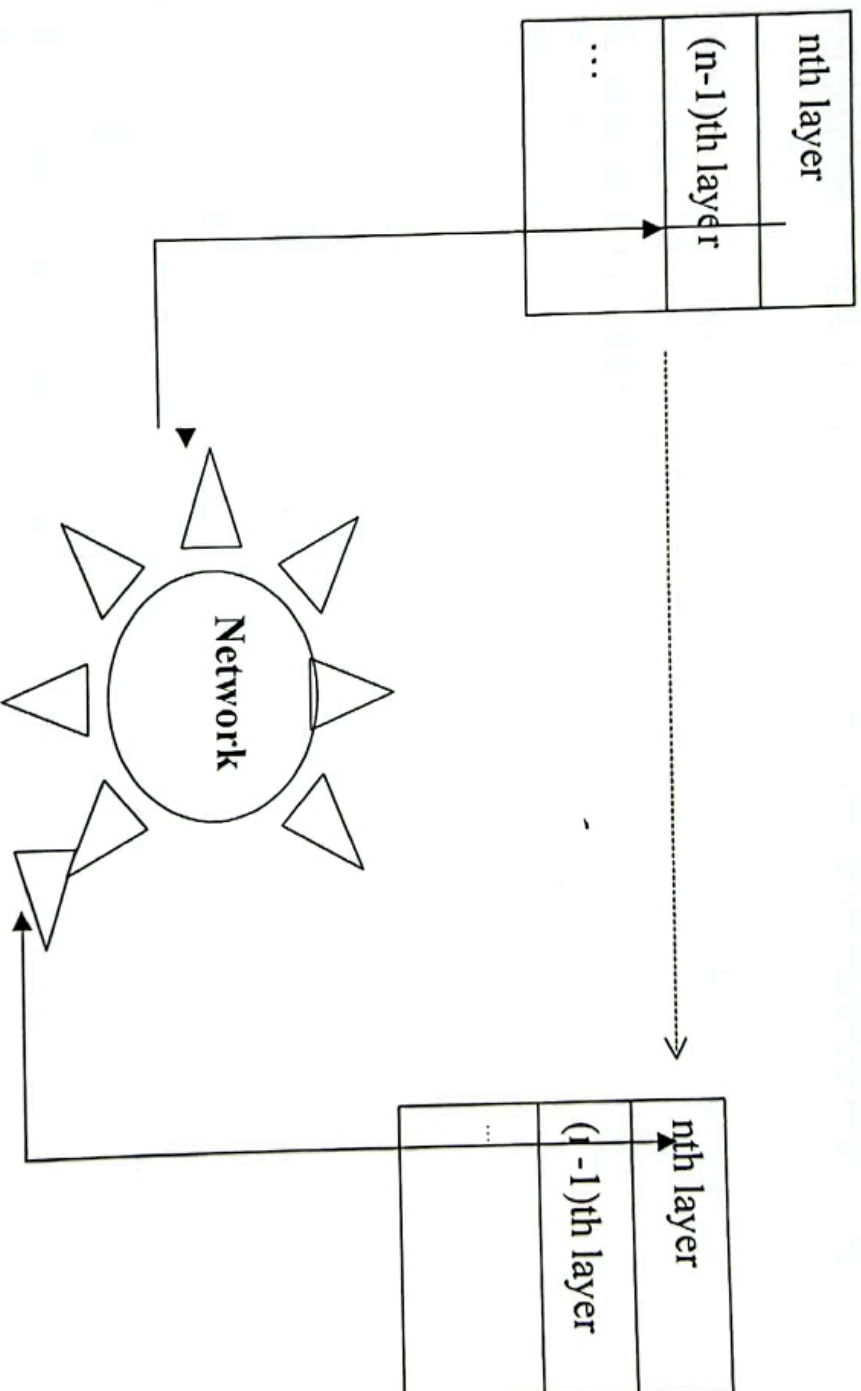
R: 354 Beginning of mail; ending by <CRLF>.<CRLF>

S: Blah blah blahS:

...etc.

**S: <CRLF>.<CRLF>R: 250
OK**

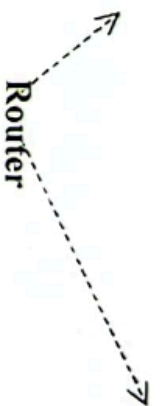
- Protocols are designed based on a layered architecture such as the OSI reference model.
- Each entity at a layer n communicates only with entities at layer $n-1$.
- The data exchanged, known as Protocol Data Unit (PDU), goes back and forth through the layers, each layer adds or removes its own header and vice-versa. Therefore a layer n PDU may become a layer $n-1$ data.



3. Protocol Layers

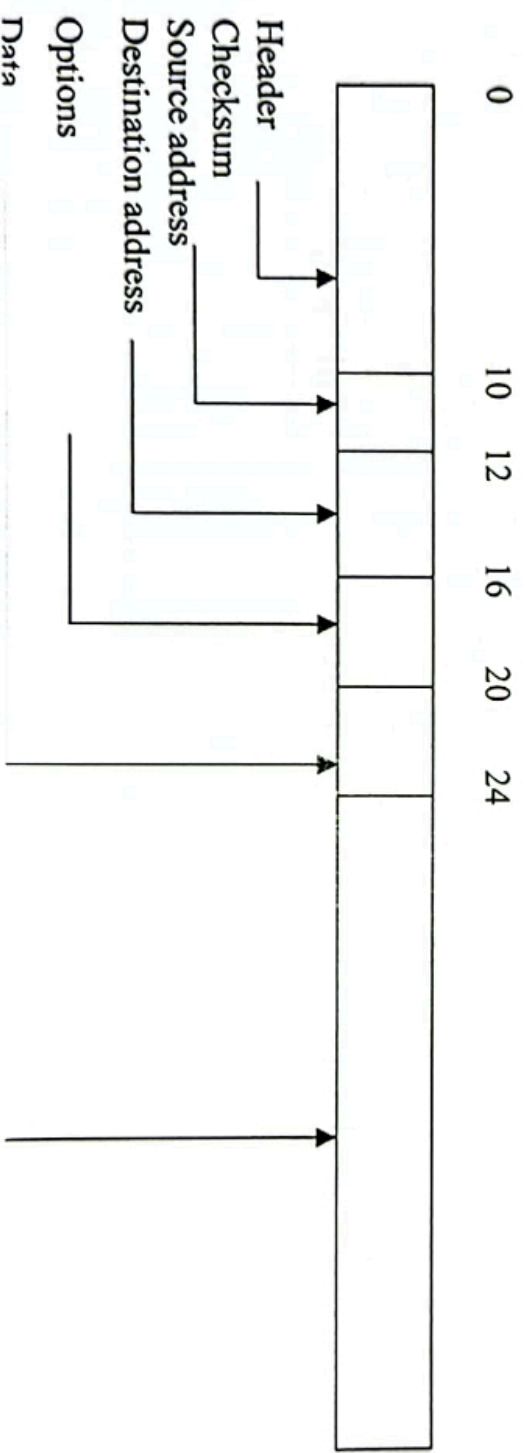
The OSI (Open Systems Interconnection) Data Model

- ISO standard for computer networks design and functioning.
- Involves at least 7 layers, each playing a specific role when applications are communicating over the net.
- During the sending process, each layer (from top to down) will add a specific header to the raw data.
- At the reception, headers are eliminated conversely until the data arrived to the receiving application.



Structure of an IP packet

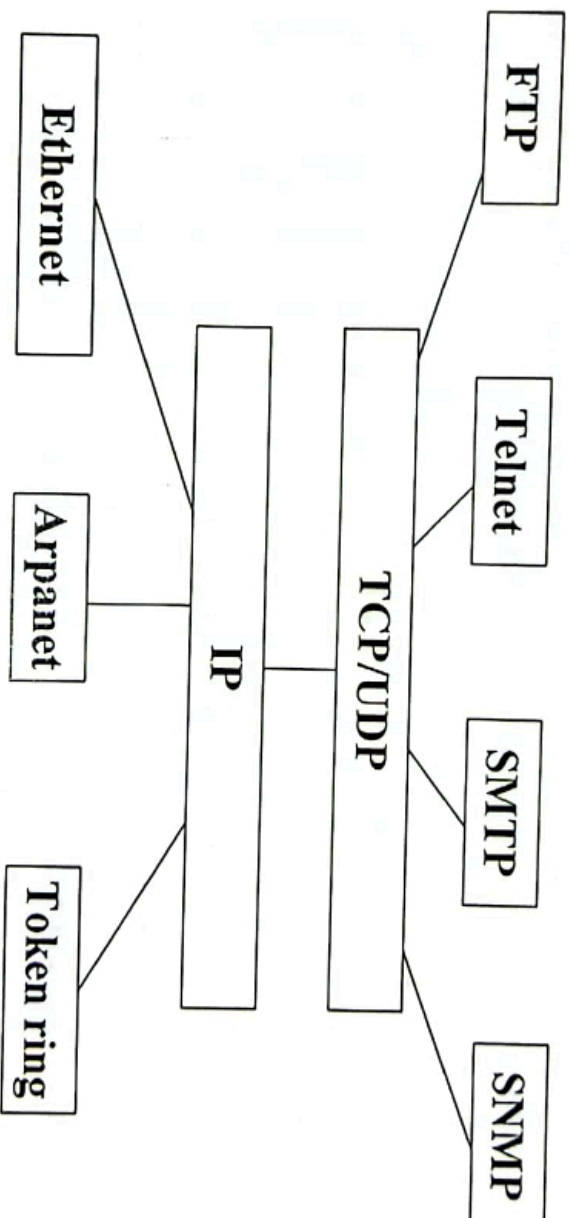
- The fields at the beginning of the packet, called the frame header, define the IP protocol's functionality and limitations.
- 32 bits are allocated for encoding source and destination addresses (32 bits for each of these address fields).
- The remainder of the header (16 bits) encodes various information such as the total packet length in bytes.
- Hence an IP packet can be a maximum of 64Kb long.



4. Networks Interconnection/Internet

Concept of Network Interconnection

- First implemented in the Defense Advanced Research Project Agency Network (Arpanet), in 1966 in USA.
- Consists of connecting several computer networks based on different protocols
- Requires the definition of a common interconnection protocol on top of the local protocols.
- The *Internet Protocol (IP)* plays this role, by defining unique addresses for a network and a host machine.





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Telangana State – 500100, www.mrec.ac.in

Value Added Course Enrolled List

"Networking"

(25.10.2021 to 30.10.2021)

Sl.No	Roll No	Name
1	19J41A1201	A MANASA
2	19J41A1202	A RUSHI
3	19J41A1204	ALIMI ADITYA
4	19J41A1205	ALLURI ROHITH REDDY
5	19J41A1206	AMARANENI MAHITHA
6	19J41A1207	ANEM AKSHAY KUMAR
7	19J41A1208	ARGULA AKASH DAS
8	19J41A1209	BANAM YASHASWINI
9	19J41A1210	BASHAKARLA SUDHEEP
10	19J41A1211	BIJJALA LIKITHA
11	19J41A1212	BOGOJU AKASH
12	19J41A1213	BUDDINENI SAI RUTHVIK
13	19J41A1214	CHERLA SAI BHASKAR
14	19J41A1215	CHITUMALLA SREEJA
15	19J41A1216	D V SAI KUMAR


16	19J41A1217	DACHA RAHUL SIDDHARTH
17	19J41A1218	DEVANSHI POKALKAR
18	19J41A1219	DHANNAMANENI SUSHANTH
19	19J41A1220	G VARUN SAI
20	19J41A1221	GADE SRILEKHA
21	19J41A1222	GAJULA ADHARSH
22	19J41A1223	GARIPELLE SAI KIRAN
23	19J41A1224	GATTIKOPPULA SAI PAVAN
24	19J41A1225	GUBBA SAI SHARAN
25	19J41A1226	GUNDAGANI YASHWANTH
26	19J41A1227	GUNGI VAISHNAVI
27	19J41A1228	JUVVISETTY MEGHANA
28	19J41A1229	K SRIKANTH
29	19J41A1230	KARNE RAKESH KUMAR
30	19J41A1231	KARNI DILEEPKUMAR
31	19J41A1232	KAVALI SAVITCHANDRA
32	19J41A1233	KOMREDDY RUTHVIK
33	19J41A1234	KUMBAM SIDDARTHA REDDY
34	19J41A1235	KUNTLA PANDARI
35	19J41A1236	KURUVELLA HARSHAVARDHAN
36	19J41A1237	M. AKHIL CHANDRA SHEKAR GOUD
37	19J41A1238	MANULU NISHVITHA
38	19J41A1239	MARAPAKULA KRISHNA SRI
39	19J41A1240	MEDISHETTI AKASH

40	19J41A1241	MERUGU SHRUTHI
41	19J41A1242	MIRZA MASROOR BAIG
42	19J41A1243	MOHAMMED BILAL
43	19J41A1244	MOHD ANSARUDDIN
44	19J41A1245	PALLAKONDA PRIYANKA
45	19J41A1246	PARIMKAYALA SOWMYA SRI
46	19J41A1247	PODDUTURI AKANKSHA
47	19J41A1248	POTTA GANESH
48	19J41A1249	PRAVEEN KUMAR KASAGALLA
49	19J41A1250	S KAILASH
50	19J41A1251	SAMALLA RAMTEJA
51	19J41A1252	SARASANI NAKUL REDDY
52	19J41A1253	SIRIGADA RAJITHA
53	19J41A1254	THIPPANI BHAVANI
54	19J41A1255	THOTA PRAVALLIKA
55	19J41A1256	VALLAPU HIMA BINDHU
56	19J41A1257	VARSHIT CHINTHA
57	19J41A1258	VEMULA SRUJAN KUMAR
58	19J41A1259	VISHNU PRIYA PUPPALA
59	19J41A1260	VIVEK SAI THOTA
60	20J45A1201	BATHINI ROSHAN GOUD
61	20J45A1202	DODDI SHASHANK
62	20J45A1203	K NAVEEN
63	20J45A1204	KARNATI AKHIL
64	20J45A1205	MOTHI AKHIL

65	20J45A1206	SENIGARAPU SAI KRISHNA
66	18J41A1250	SALLA RITHVIK
67	18J41A1211	DEVARAPALLY VENKATESH


HOD

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Malla Reddy Engg. College (A)
Maisammaguda-500 100.


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Maisammaguda, Devarapally,
(Post Vinayakampally) Sec-500 100



MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)

(UGC Autonomous Institution, Affiliated to JNTUH)

Maisammaguda (H), Medchal-Malkajgiri District, Telangana State - 500100

Department of Information Technology

Networking Attendance Sheet

SLNo	Roll No	Name	25-10-2021	26-10-2021	27-10-2021	28-10-2021	29-10-2021	30-10-2021
1	19141A1201	A MANASA	A. Manasa	A. Manasa	A. Manasa	A. Manasa	A. Manasa	A. Manasa
2	19141A1202	A RUSHI	A. Rushi	A. Rushi	A. Rushi	A. Rushi	A. Rushi	A. Rushi
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5	19141A1206	AMARANENI MAHITHA	A. Mahitha	A. Mahitha	A. Mahitha	A. Mahitha	A. Mahitha	A. Mahitha
6	19141A1207	ANEM AKSHAY KUMAR	A. Akshay	A. Akshay	A. Akshay	A. Akshay	A. Akshay	A. Akshay
7	19141A1208	ARGULA AKASH DAS	A. Akash	A. Akash	A. Akash	A. Akash	A. Akash	A. Akash
8	19141A1209	BANAM YASHASWINI	B. Yashaswini	B. Yashaswini	B. Yashaswini	B. Yashaswini	B. Yashaswini	B. Yashaswini
9	19141A1210	BASHAKARLA SUDHEEP	B. Sudheep	B. Sudheep	B. Sudheep	B. Sudheep	B. Sudheep	B. Sudheep
10	19141A1211	BIJALA LKITHA	B. Lkitha	B. Lkitha	B. Lkitha	B. Lkitha	B. Lkitha	B. Lkitha
11	19141A1212	BOGOTU AKASH	B. Akash	B. Akash	B. Akash	B. Akash	B. Akash	B. Akash
12	19141A1213	BUDDINENI SAI RUTHVIK	B. Ruthvik	B. Ruthvik	B. Ruthvik	B. Ruthvik	B. Ruthvik	B. Ruthvik
13	19141A1214	CHERLA SAI BHASKAR	C. Bhaskar	C. Bhaskar	C. Bhaskar	C. Bhaskar	C. Bhaskar	C. Bhaskar
14	19141A1215	CHITUMALLA SREEJA	C. Sreeja	C. Sreeja	C. Sreeja	C. Sreeja	C. Sreeja	C. Sreeja
15	19141A1216	D V SAI KUMAR	D. Sai Kumar	D. Sai Kumar	D. Sai Kumar	D. Sai Kumar	D. Sai Kumar	D. Sai Kumar
16	19141A1217	DACHA RAHUL SIDDHARTH	D. Siddharth	D. Siddharth	D. Siddharth	D. Siddharth	D. Siddharth	D. Siddharth
17	19141A1218	DEVANSHI POKALKAR	D. Pokalkar	D. Pokalkar	D. Pokalkar	D. Pokalkar	D. Pokalkar	D. Pokalkar
18	19141A1219	DHANNAMANENI SUSHANTH	D. Sushanth	D. Sushanth	D. Sushanth	D. Sushanth	D. Sushanth	D. Sushanth
19	19141A1220	G VARUN SAI	G. Varun Sai	G. Varun Sai	G. Varun Sai	G. Varun Sai	G. Varun Sai	G. Varun Sai
20	19141A1221	GADE SRILEKHA	G. Srilekha	G. Srilekha	G. Srilekha	G. Srilekha	G. Srilekha	G. Srilekha
21	19141A1222	GATULA ADHARSH	G. Adharsh	G. Adharsh	G. Adharsh	G. Adharsh	G. Adharsh	G. Adharsh
22	19141A1223	GARPELLE SAI KIRAN	G. Kiran	G. Kiran	G. Kiran	G. Kiran	G. Kiran	G. Kiran
23	19141A1224	GATTIKOPULA SAI PAVAN	G. Pavan	G. Pavan	G. Pavan	G. Pavan	G. Pavan	G. Pavan
24	19141A1225	GUBBA SAI SHARAN	G. Sharan	G. Sharan	G. Sharan	G. Sharan	G. Sharan	G. Sharan
25	19141A1226	GUNDAGANI YASHWANTH	G. Yashwanth	G. Yashwanth	G. Yashwanth	G. Yashwanth	G. Yashwanth	G. Yashwanth
26	19141A1227	GUNGI VAISHNAVI	G. Vaishnavi	G. Vaishnavi	G. Vaishnavi	G. Vaishnavi	G. Vaishnavi	G. Vaishnavi
27	19141A1228	JUVVISETTY MEGHANA	J. Meghana	J. Meghana	J. Meghana	J. Meghana	J. Meghana	J. Meghana
28	19141A1229	K SRIKANTH	K. Srikanth	K. Srikanth	K. Srikanth	K. Srikanth	K. Srikanth	K. Srikanth
29	19141A1230	KARNE RAKESH KUMAR	K. Rakesh Kumar	K. Rakesh Kumar	K. Rakesh Kumar	K. Rakesh Kumar	K. Rakesh Kumar	K. Rakesh Kumar
30	19141A1231	KARNI DILEEPKUMAR	K. Dileep Kumar	K. Dileep Kumar	K. Dileep Kumar	K. Dileep Kumar	K. Dileep Kumar	K. Dileep Kumar
31	19141A1232	KAVALI SAVITCHANDRA	K. Savithandra	K. Savithandra	K. Savithandra	K. Savithandra	K. Savithandra	K. Savithandra
32	19141A1233	KOMREDDY RUTHVIK	K. Ruthvik	K. Ruthvik	K. Ruthvik	K. Ruthvik	K. Ruthvik	K. Ruthvik

33	19141A1234	KUMBAM SIDDARTHA REDDY	K.S.R.	K.S.R.	K.S.R.	K.S.R.	K.S.R.	K.S.R.	K.S.R.
34	19141A1235	KUNTALA PANDARI	P. Pandari	P. Pandari	P. Pandari	P. Pandari	P. Pandari	P. Pandari	P. Pandari
35	19141A1236	KURUVELLA HARSHAVARDHAN	H. Harshavardhan	H. Harshavardhan	H. Harshavardhan	H. Harshavardhan	H. Harshavardhan	H. Harshavardhan	H. Harshavardhan
36	19141A1237	M. AKHIL CHANDRA SHEKAR GOUD	M. Akhil	M. Akhil	M. Akhil	M. Akhil	M. Akhil	M. Akhil	M. Akhil
37	19141A1238	MANULU NISHYITTHA	N. Nishyittha	N. Nishyittha	N. Nishyittha	N. Nishyittha	N. Nishyittha	N. Nishyittha	N. Nishyittha
38	19141A1239	MARAPAKULA KRISHNA SRI	M. Krishna	M. Krishna	M. Krishna	M. Krishna	M. Krishna	M. Krishna	M. Krishna
39	19141A1240	MEDISHETTI AKASH	M. Akash	M. Akash	M. Akash	M. Akash	M. Akash	M. Akash	M. Akash
40	19141A1241	MERUGU SHRUTHI	M. Shruthi	M. Shruthi	M. Shruthi	M. Shruthi	M. Shruthi	M. Shruthi	M. Shruthi
41	19141A1242	MIRZA MASROOR BAIG	M. Baig	M. Baig	M. Baig	M. Baig	M. Baig	M. Baig	M. Baig
42	19141A1243	MOHAMMED BILAL	M. Bilal	M. Bilal	M. Bilal	M. Bilal	M. Bilal	M. Bilal	M. Bilal
43	19141A1244	MOHD ANSARUDDIN	M. Ansaruddin	M. Ansaruddin	M. Ansaruddin	M. Ansaruddin	M. Ansaruddin	M. Ansaruddin	M. Ansaruddin
44	19141A1245	PALLAKONDA PRIYANKA	P. Priyanka	P. Priyanka	P. Priyanka	P. Priyanka	P. Priyanka	P. Priyanka	P. Priyanka
45	19141A1246	PARIMKAYALA SOWMYA SRI	P. Sowmya	P. Sowmya	P. Sowmya	P. Sowmya	P. Sowmya	P. Sowmya	P. Sowmya
46	19141A1247	PODDUTURI AKANKSHA	P. Akanksha	P. Akanksha	P. Akanksha	P. Akanksha	P. Akanksha	P. Akanksha	P. Akanksha
47	19141A1248	POTTA GANESH	P. Ganesh	P. Ganesh	P. Ganesh	P. Ganesh	P. Ganesh	P. Ganesh	P. Ganesh
48	19141A1249	PRAVEEN KUMAR KASAGALLA	P. Kasagalla	P. Kasagalla	P. Kasagalla	P. Kasagalla	P. Kasagalla	P. Kasagalla	P. Kasagalla
49	19141A1250	S KAILASH	S. Kailash	S. Kailash	S. Kailash	S. Kailash	S. Kailash	S. Kailash	S. Kailash
50	19141A1251	SAMALLA RAMTEJA	S. Ramteja	S. Ramteja	S. Ramteja	S. Ramteja	S. Ramteja	S. Ramteja	S. Ramteja
51	19141A1252	SARASANI NAKUL REDDY	S. Nakul	S. Nakul	S. Nakul	S. Nakul	S. Nakul	S. Nakul	S. Nakul
52	19141A1253	SIRIGADA RAJITHA	S. Rajitha	S. Rajitha	S. Rajitha	S. Rajitha	S. Rajitha	S. Rajitha	S. Rajitha
53	19141A1254	THIPPANI BHAVANI	T. Bhavani	T. Bhavani	T. Bhavani	T. Bhavani	T. Bhavani	T. Bhavani	T. Bhavani
54	19141A1255	THOTA PRAVALLIKA	T. Pravallika	T. Pravallika	T. Pravallika	T. Pravallika	T. Pravallika	T. Pravallika	T. Pravallika
55	19141A1256	VALLAPU HIMA BINDHU	V. Himabindu	V. Himabindu	V. Himabindu	V. Himabindu	V. Himabindu	V. Himabindu	V. Himabindu
56	19141A1257	VARSHIT CHINTHA	V. Chintu	V. Chintu	V. Chintu	V. Chintu	V. Chintu	V. Chintu	V. Chintu
57	19141A1258	VEMULA SRUJAN KUMAR	V. Srijan	V. Srijan	V. Srijan	V. Srijan	V. Srijan	V. Srijan	V. Srijan
58	19141A1259	VISHNU PRIYA PUPPALA	V. Priya	V. Priya	V. Priya	V. Priya	V. Priya	V. Priya	V. Priya
59	19141A1260	VIVEK SAI THOTA	V. Sai	V. Sai	V. Sai	V. Sai	V. Sai	V. Sai	V. Sai
60	20145A1201	BATHINI ROSHAN GOUD	B. Roshan	B. Roshan	B. Roshan	B. Roshan	B. Roshan	B. Roshan	B. Roshan
61	20145A1202	DODDI SHASHANK	D. Shashank	D. Shashank	D. Shashank	D. Shashank	D. Shashank	D. Shashank	D. Shashank
62	20145A1203	K NAVEEN	K. Naveen	K. Naveen	K. Naveen	K. Naveen	K. Naveen	K. Naveen	K. Naveen
63	20145A1204	KARNATI AKHIL	K. Akhil	K. Akhil	K. Akhil	K. Akhil	K. Akhil	K. Akhil	K. Akhil
64	20145A1205	MOTHI AKHIL	M. Akhil	M. Akhil	M. Akhil	M. Akhil	M. Akhil	M. Akhil	M. Akhil
65	20145A1206	SENIGARAPU SAI KRISHNA	S. Krishna	S. Krishna	S. Krishna	S. Krishna	S. Krishna	S. Krishna	S. Krishna
66	18141A1250	SALLA RITHVIK	S. Rithvik	S. Rithvik	S. Rithvik	S. Rithvik	S. Rithvik	S. Rithvik	S. Rithvik
67	18141A1211	DEVARAPALLY VENKATESH	D. Venkatesh	D. Venkatesh	D. Venkatesh	D. Venkatesh	D. Venkatesh	D. Venkatesh	D. Venkatesh

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Department of Information Technology

Value Added Course On “Networking”

Date: 30/10/2021

Examination Question Paper

1. Which of the following is the actual IP address? []
 - (a) Inside local address
 - (b) Inside global address
 - (c) Outside local address
 - (d) WAN
 - (e) None of these
2. Which of the following (is a Network address translation) can be used to have one IP address that allows many users the browsing? []
 - (a) Intranet
 - (b) NAT
 - (c) PAT
 - (d) Mesh
 - (e) Dynamic
3. Which of the following WLAN specification at 2.4 GHz allows up to 54 Mbps? []
 - (a) A
 - (b) F
 - (c) G
 - (d) B
4. For the IOS backup which command we shall use? []
 - (a) IOS Disk backup
 - (b) IOS TFTP copy
 - (c) Copy Flash TFTP
 - (d) Any of the above
 - (e) None of these
5. IP address 192.168.168.188.255.255.255.192 has there a place on which of the following valid IP host ranges? []
 - (a) 192.168.168.129-190
 - (b) 192.168.168.129-152
 - (c) 192.168.168.129-192

- (d) 192.168.152.129-151
- (e) None of these

6. Which of the following is the protocol used by ping?

[]

- (a) ICMP
- (b) SNMP
- (c) SDP
- (d) TCP

7. How many types of controlled access methods are there?

[]

- (a) 3
- (b) 4
- (c) 5
- (d) 6

8. What is framing in a data link layer?

[]

- (a) Framing is done manually
- (b) Framing is done digitally
- (c) In parts manually and digitally
- (d) Not transmitted digitally
- (e) None of the above

9. The network structure is divided into how many parts?

[]

- (a) 1
- (b) 3
- (c) 5
- (d) 6
- (e) 2

10. What is done by VLANs?

[]

- (a) More than one collision domain are provided on one switch.
- (b) It is the quickest port to all servers.
- (c) It is broken into the broadcast domain of the layer 2 switch network.
- (d) Any of the above
- (e) None of the above

11. Class of IP address which has the most number of hosts available?

[]

- (a) A and B
- (b) A
- (c) B and C
- (d) D
- (e) None of these

12. Which version field of IPv4 header, when the machine is using some other version of IPv4 then datagram_____.

[]

- (a) Accepted
- (b) Discarded
- (c) Interpreted incorrectly
- (d) Interpreted

13. What is header of datagram in IPv4 _____

[]

- (a) 20 to 60 bytes
- (b) 20 to 80 bytes
- (c) 20 to 40 bytes
- (d) 0 to 20 bytes

14. What is the responsibility of the internetwork, the network layer is _____

[]

- (a) Host to Server communication
- (b) Host to User Link
- (c) User to Host IP
- (d) Host to Host Delivery

15. In IPv4, a When machine drops header and trailer when it receives a

[]

- (a) Frame
- (b) Signal
- (c) Request
- (d) Service

16. How physical and data link layers of a network operate...

[]

- (a) Unjointly
- (b) Separately
- (c) Locally
- (d) Independently

17. Find out the OSI layer, which performs token management.

[]

- (a) Network Layer
- (b) Transport Layer
- (c) Session Layer
- (d) Presentation Layer

18. The layer one of the OSI model is

[]

- (a) Physical layer
- (b) Link layer
- (c) Router layer
- (d) Broadcast layer


19. Which of the following TCP/IP protocols is used for transferring files form one machine to another.

[]

- (a) FTP
- (b) SNMP
- (c) SMTP
- (d) RPC

20. The standard suit of protocols used by the Internet, Intranets, extranets and some other networks . []

- (a) TCP/IP
- (b) Protocol
- (c) Open system
- (d) Internet work processor


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Value Added Course Certified Students List

"NETWORKING"

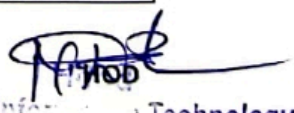
(25.10.2021 to 30.10.2021)

SLNo	Roll No	Name
1	19J41A1201	A MANASA
2	19J41A1202	A RUSHI
3	19J41A1204	ALIMI ADITYA
4	19J41A1205	ALLURI ROHITH REDDY
5	19J41A1206	AMARANENI MAHITHA
6	19J41A1207	ANEM AKSHAY KUMAR
7	19J41A1208	ARGULA AKASH DAS
8	19J41A1209	BANAM YASHASWINI
9	19J41A1210	BASHAKARLA SUDHEEP
10	19J41A1211	BIJJALA LIKITHA
11	19J41A1212	BOGOJU AKASH
12	19J41A1213	BUDDINENI SAI RUTHVIK
13	19J41A1214	CHERLA SAI BHASKAR
14	19J41A1215	CHITUMALLA SREEJA
15	19J41A1216	D V SAI KUMAR
16	19J41A1217	DACHA RAHUL SIDDHARTH

17	19J41A1218	DEVANSHI POKALKAR
18	19J41A1219	DHANNAMANENI SUSHANTH
19	19J41A1220	G VARUN SAI
20	19J41A1221	GADE SRILEKHA
21	19J41A1222	GAJULA ADHARSH
22	19J41A1223	GARIPELLY SAI KIRAN
23	19J41A1224	GATTIKOPPULA SAI PAVAN
24	19J41A1225	GUBBA SAI SHARAN
25	19J41A1226	GUNDAGANI YASHWANTH
26	19J41A1227	GUNGI VAISHNAVI
27	19J41A1228	JUVVISETTY MEGHANA
28	19J41A1229	K SRIKANTH
29	19J41A1230	KARNE RAKESH KUMAR
30	19J41A1231	KARNI DILEEPKUMAR
31	19J41A1232	KAVALI SAVITCHANDRA
32	19J41A1233	KOMREDDY RUTHVIK
33	19J41A1234	KUMBAM SIDDARTHA REDDY
34	19J41A1235	KUNTALA PANDARI
35	19J41A1236	KURUVELLA HARSHAVARDHAN
36	19J41A1237	M. AKHIL CHANDRA SHEKAR GOUD
37	19J41A1238	MANULU NISHVITHA
38	19J41A1239	MARAPAKULA KRISHNA SRI
39	19J41A1240	MEDISHETTI AKASH
40	19J41A1241	MERUGU SHRUTHI
41	19J41A1242	MIRZA MASROOR BAIG
42	19J41A1243	MOHAMMED BILAL

43	19J41A1244	MOHD ANSARUDDIN
44	19J41A1245	PALLAKONDA PRIYANKA
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46	19J41A1247	PODDUTURI AKANKSHA
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48	19J41A1249	PRAVEEN KUMAR KASAGALLA
49	19J41A1250	S KAILASH
50	19J41A1251	SAMALLA RAMTEJA
51	19J41A1252	SARASANI NAKUL REDDY
52	19J41A1253	SIRIGADA RAJITHA
53	19J41A1254	THIPPANI BHAVANI
54	19J41A1255	THOTA PRAVALLIKA
55	19J41A1256	VALLAPU HIMA BINDHU
56	19J41A1257	VARSHIT CHINTHA
57	19J41A1258	VEMULA SRUJAN KUMAR
58	19J41A1259	VISHNU PRIYA PUPPALA
59	19J41A1260	VIVEK SAI THOTA
60	20J45A1201	BATHINI ROSHAN GOUD
61	19J41A1201	A MANASA
62	20J45A1204	KARNATI AKHIL
63	20J45A1205	MOTHI AKHIL
64	20J45A1206	SENIGARAPU SAI KRISHNA


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Certificate Of Completion

This is to certify that Mr. /Ms. A RUSHI bearing Roll No 19J41A1202 has successfully completed Certificate / Value Added Course / Workshop on "NETWORKING" conducted by the Department of Information Technology, from 25-10-2021 to 30-10-2021.

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This is to certify that Mr. /Ms. ALIMI ADITYA bearing

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Certificate Of Completion

This is to certify that Mr. /Ms. A. MAHITHA bearing

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With the collaboration of "Skilltimate Technologies".

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DEPARTMENT OF INFORMATION TECHNOLOGY

Date: 30.10.2021

Report of Value Added Course on Networking

A six days program on Networking was organized by the department of Information Technology for III years. The resource person of the programme is Ms. Jyothirmai. The course involves the Introduction, Protocols and Layers of Networking. The event was coordinated by Ms.P.Swapna, Asst.Professor, IT Department from 25.10.2021 to 30.10.2021 and 67 students.

After the training programme, the students learned the following,

- The Different layers of Networking and their importance.
- The applications of different protocols.
- Addressing modes.


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DEPARTMENT OF INFORMATION TECHNOLOGY.

Title of the Session: *Networking*

Department & Designation: *IT*

Date of the Session: *25/10/21 - 30/10/21*

Time: *10:00 am to 3:00 pm*

S.No		Excellent	Very Good	Good	Average
1	The Session Objective were stated clearly and met		✓		
2.	The Workshop was well Organized	✓			
3.	The information and / or skills presented were relevant and useful for Career		✓		
4	The presenter responded to questions effectively?			✓	
5	The overall assessment of the Session	✓			
6	The session content met your Expectations		✓		

Excellent:4 Very Good:3 Good:2 Average:1

Suggestions If any: *—*



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DEPARTMENT OF INFORMATION TECHNOLOGY.

Title of the Session: Networking

Department & Designation: IT

Date of the Session: 25/10/21 - 30/10/21

Time: 10:00am to 3:00pm

S.No		Excellent	Very Good	Good	Average
1	The Session Objective were stated clearly and met			✓	
2.	The Workshop was well Organized		✓		
3.	The information and / or skills presented were relevant and useful for Career			✓	
4	The presenter responded to questions effectively?		✓		
5	The overall assessment of the Session	✓			
6	The session content met your Expectations			✓	

Excellent:4 Very Good:3 Good:2 Average:1

Suggestions If any:



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DEPARTMENT OF INFORMATION TECHNOLOGY.

Title of the Session: Networking

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1	The Session Objective were stated clearly and met		✓		
2.	The Workshop was well Organized		✓		
3.	The information and / or skills presented were relevant and useful for Career	✓			
4	The presenter responded to questions effectively?		✓		
5	The overall assessment of the Session			✓	
6	The session content met your Expectations		✓		

Excellent:4 Very Good:3 Good:2 Average:1

Suggestions If any: