



SARASWATI Education Society's
SARASWATI Institute of Technology

Learn Live Achieve and Contribute

Kharghar, Navi Mumbai - 410 210.

Department of Computer Engineering

Vision: “To contribute to society through excellence in scientific knowledge based education of computer science professionals”.

Mission:

- To transform students into technically competent, socially responsible & ethical computer science professional
- To promote creative teaching learning process that strive for academic excellence in the field of computer engineering..
- To enhance the technical expertise of students through workshops and industry institute interaction.

Subject Name: Advanced Computer Network- 22520 (V-Sem)

Date : 05/08/2024

Assignment No : 01

Topic Name :- Network Layer and Protocols

Course Outcome: a) Implement Network Layer Protocols

(2 Marks Questions)

- 1. Define address space. Give address space for IPV4.**
- 2. Define Home agent and foreign agent in Mobile IP.**
- 3. State the concept of fragmentation in IPV4.**
- 4. Explain Supernetting and Subnetting.**
- 5. List and explain types of ICMPv4 messages.**

(3 Marks Questions)

- 1. What is Mobile IP. List and Explain components of Mobile IP.**
- 2. Describe packet format of Ipv4. And state the need of Ipv4.**

(4 Marks Questions)

- 1. Explain NAT.**
- 2. Explain ICMP.**
- 3. Find out the class of each address.**
 - a. 00000001 00001011 11111011 11101111**
 - b. 11000001 10000011 00011011 11111111**
 - c. 14.23.120.8**
 - d. 252.5.15.111**

Date of Submission :- 7/08/2024

Assign By :- Ms. Diksha Naik



Department of Computer Engineering

Vision:“To contribute to society through excellence in scientific knowledge based education of computer science professionals”.

Mission:

- To transform students into technically components, socially responsible & ethical computer science professional
- To promote creative teaching learning process that strive for academic excellence in the field of computer engineering..
- To enhance the technical expertise of students through workshops and industry institute interaction.

Subject Name: Advanced Computer Network- 22520

Date : 16/08/2024

Assignment No :02

Topic Name :- Next Generation IP

Course Outcome: b) Configure IPv6 Network.

(2 Marks Questions)

- 1. Differentiate between IPV4 and IPV6.**
- 2. State the need of IPV6.**
- 3. State the importance of IPV6 over IPV4.**

(4 Marks Questions)

- 1. Draw and Explain IPV6 packet format.(explain with dig.)**
- 2. Define address space. Give address space for IPV6.**

3. Explain extension header of IPV6.

(6 Marks Questions)

1. Explain the transition process of transition from IPV4 to IPV6.

2. Explain following address types of IPV6:

a. Unicast address

b. Multicast Address

c. Anycast address

Date of Submission :- 16/08/2024

Assign By :- Ms. Diksha Naik