SRM INSTITUTE OF SCIENCE & TECHNOLOGY: VADAPALANI CAMPUS

Department of Computer Science and engineering

**18CSC302J/ Computer Networks**

**Question Bank**

UNIT- 4

**Part-B ( 4 Marks)**

1. List out the IPv6 Features.
2. What is IPv6 Zero Suppression?
3. Show the unabbreviated colon hex notation for the following IPv6 addresses:
   1. An address with 64 0s followed by 64 1s.
   2. An address with 128 0s.
   3. An address with 128 1s.
   4. An address with 128 alternative 1s and 0s.
4. Decompress the following addresses and show the complete unabbreviated IPv6 address:
   1. 1111::2222
   2. ::
   3. 0:1::
   4. AAAA:A:AA::1234
5. List out the Categories of IPv6 Address and explain briefly.
6. What is Auto Configuration in IPV6
7. Draw IPV6 Packet format and explain the various fields in the format.
8. What are the Protocols Changed to Support IPV6.
9. Explain the translation techniques of IPV4 to IPV6
10. What is NAT?

**PART –C (12 marks)**

1. Explain the addressing modes of IPV6 in detail.
2. Write the procedure to convert the physical address to IV6 link local.
3. Explain Tunneling Concepts in detail.
4. Discuss in detail about IPV6 routing protocols.
5. Explain Unique local unicast address format in detail.
6. List the steps of Mapping for Ethernet MAC