

Paper ID [CS503]

(Please fill this Paper ID in OMR Sheet)

M.Tech.

NETWORK SECURITY (CS - 503)

Time : 03 Hours

Maximum Marks : 100

Instruction to Candidates:

- 1) Attempt any **Five** questions.
- 2) **All** questions carry equal marks.

- Q1)** (a) Which of OSI layers are network support layers?
(b) How do the layers of TCP/IP protocol suite correlate to layers of OSI model?
- Q2)** (a) How is IP addressing done IPv6?
(b) What is the difference between fixed length and variable length subnet masking?
- Q3)** (a) How does IPv6 provide a better support for QoS?
(b) Discuss the protocols that are used in high speed MANs.
- Q4)** (a) What is multicasting? Discuss the routing for mobile hosts.
(b) What is session discovery?
- Q5)** What is IP multicasting? How it different from unicasting and broadcasting? Is it feasible to implement it at both data link and network layers?
- Q6)** (a) What is difference between MAC addressing and IP addressing? How are IP addresses converted into MAC addresses?
(b) Discuss TCP extension for high speed networks.

- Q7) (a) What are major functional components of FDDI?
(b) How is security handled at application layer level?

- Q8) Write short notes on :
(a) Gigabit Ethernet
(b) Digital certificates