Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 01

Total No. of Questions : 08

M.Tech.(IT) / (CSE Engg.) / (E-Security)   (Sem.–1)
NETWORK SECURITY
Subject Code : CS-503
Paper ID : [E0683]

Time : 3 Hrs.   Max. Marks : 100

INSTRUCTION TO CANDIDATES :
1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carry TWENTY marks.

1. a) Compare TCP/IP reference model with OSI reference model.

    b) Explain the architecture of TCP for extending it to transaction-oriented applications.

2. a) Compare a host-to-host protocol such as IP to a port-to-port protocol such as TCP.

    b) Consider building a supercomputer interconnect using the HIPPI approach, but modern technology. The data path is now 64 bits wide, and can be sent every 10 nsec. What is the bandwidth of the channel?

3. a) Differentiate between Digital signatures and digital certificates. How are digital certificates generated?

    b) Discuss the security related issues in Mobile IPs.

4. Why do you think Ipv6 is considered as next generation of TCP/IP Protocol suite? Discuss the Application programming Interface for Ipv6.

5. Describe the following in context with Multicast routing protocols :

    a) Address Assignments.

    b) Session Discovery.

6. What could be the security breaches at various layers of Networks? Also discuss the effective remedial solutions for the same.

7. What is the significance of various key distribution protocols? Write in brief about the various key distribution protocols.

8. Write notes on the following :

    a) ADSL

    b) Mobile IP