



NETWORK SECURITY
(COMPUTER SCIENCE & ENGINEERING)

Maximum Marks: 70

Duration: 3 hours

- Note:**
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A

All the following questions carry equal marks **(10x2M=20 Marks)**

- 1 What is the purpose of HTTPS?
- 2 What protocols comprise TLS?
- 3 Define an extended service set.
- 4 What is the difference between TKIP and CCMP?
- 5 Define honeypot?
- 6 What is a DDoS?
- 7 What is Bastion host?
- 8 What is meant by IP Spoofing?
- 9 Define proxy
- 10 List types of property.

Part-B

Answer All the following questions. **(10MX 5=50Marks)**

- 11 A. List and briefly define the parameters that define a TLS session connection. 5M
B. With neat diagram explain SSL architecture. 5M
OR
- 12 A. What steps are involved in the TLS Record Protocol Transmission? 5M
B. Explain SSH Transport Layer Protocol Packet Exchange 5M
- 13 A. Briefly describe the four IEEE 802.11i phases of operation. 5M
B. Explain IEEE 802.11i Key Hierarchies 5M
OR
- 14 A. Explain WTLS Protocol Architecture 5M
B. Describe three alternative approaches to providing WAP end-to-end security 5M
- 15 A. Explain UNIX password management? What is salt in this context? 5M
B. Write briefly about the signature based Intrusion Detection Systems. 5M
OR
- 16 A. Describe some worm countermeasures. 5M
B. Briefly explain any five types of malicious softwares. 5M

- 17 A. Explain a packet filtering firewall and a stateful inspection firewall? 5M
B. Explain four techniques used by firewalls to control access and enforce a security policy. 5M
OR
- 18 A. Describe an application-level gateway and a circuit-level gateway. 5M
B. Explain VPN security with an example scenario. 5M
- 19 A. Explain SNMP Message Formats 5M
B. Describe major changes in SNMP V2. 5M
OR
- 20 A. Describe a classification of computer crime based on the role that the computer plays in the criminal activity. 5M
B. Describe the principal categories of users of digital rights managements systems. 5M