CBCS SCHEME

USN | | | | | | | | | | **18EC821**

Eighth Semester B.E. Degree Examination, July/August 2022
Network Security

Time: 3 hrs.   Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

1 a. Discuss the four principles of security in detail, each with an example.   **(10 Marks)**
   b. List the examples of application level attacks or network level attacks each of which has arisen in a real world (student can explain any real time example).   **(10 Marks)**

OR

2 a. Discuss the active attacks and passive attack in detail.   **(10 Marks)**
   b. Explain the specific attacks sniffing, spoofing, phishing.   **(05 Marks)**
   c. Describe the terms virus, worms and cookies.   **(05 Marks)**

Module-2

3 a. Draw the secure socket layer protocol stack and describe the working in details.   **(10 Marks)**
   b. Discuss the four stage handshake protocol with neat diagram.   **(10 Marks)**

OR

4 a. Draw the Secure Shell (SSH) Protocol and describe the working in detail.   **(10 Marks)**
   b. What is the importance of HTTPS? Explain the connection initiation and Cloure of HTTP in detail.   **(10 Marks)**

Module-3

5 a. Draw the flow chart of processing for outbound packets and processing model inbound packets.   **(10 Marks)**
   b. What are the IPSec services and explain.   **(05 Marks)**
   c. Explain about the IPSec documents.   **(05 Marks)**

OR

6 a. With neat diagram explain the scope of ESP encryption in Tunnel mode and Transport mode.   **(10 Marks)**
   b. Explain the Internet Key Exchange Process using Diffie-Hellman algorithm with an example.   **(10 Marks)**

Module-4

7 a. Name the three classes of intruders. Describe the Intruder behaviour patterns.   **(10 Marks)**
   b. Explain the Rule Based intrusion techniques, intrusion detection.   **(10 Marks)**

OR

8 a. Explain types of malicious software in detail.   **(10 Marks)**
   b. Brief about the multiple threat Malware.   **(05 Marks)**
   c. Describe the four phase of virus.   **(05 Marks)**

Module-5

9 a. List out firewall characteristics and explain in brief.　(10 Marks)
   b. What are the limitations of firewalls?　(05 Marks)
   c. What are the firewall attacks and counter measures?　(05 Marks)

OR

10 a. Name the types of firewalls and explain in detail.　(10 Marks)
   b. Discuss the firewall configuration with neat diagram and example.　(10 Marks)

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