

# 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 Closure 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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