

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

Time: 3 hrs.

Max. Marks: 80

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

Module-1

- 1 a. Explain parameters of SSL connection and SSL session in detail. (08 Marks)
b. Describe SSL Record protocol with suitable diagram. (08 Marks)

OR

- 2 a. Explain four phases of SSL handshake protocol action with neat diagram. (08 Marks)
b. What is port forwarding? Explain local and remote forwarding supported by Secure Shell (SSH). (08 Marks)

Module-2

- 3 a. Explain PGP (Pretty Good Privacy) message generation and reception techniques. (08 Marks)
b. Explain MIME (Multipurpose Internet Mail Extensions) content types. (08 Marks)

OR

- 4 a. Explain Domain Keys Identified Mail (DKIM) function flow. (08 Marks)
b. With a help of function modules and standardized protocol, explain Internet mail architecture. (08 Marks)

Module-3

- 5 a. Discuss Internet Key Exchange (IKE) header format. (08 Marks)
b. Draw IPsec Architecture and explain Security Association Database (SAD) parameters. (08 Marks)

OR

- 6 a. Describe processing model for outbound and inbound packet followed in IP traffic. (08 Marks)
b. Explain basic combinations of security associations using a suitable diagram. (08 Marks)

Module-4

- 7 a. Explain following Antipattern – Catalogs. (05 Marks)
 i) Never Read the Logs (05 Marks)
 ii) Webify Everthing (05 Marks)
b. Explain the document – driven certification and Accreditation. (06 Marks)

OR

- 8 a. Explain full cyber antipattern template in detail. (10 Marks)
b. Explain forces in cyber antipatterns. (06 Marks)

Module-5

- 9 a. Describe Zachman framework for enterprise architecture. (10 Marks)
b. Explain architectural problem solving patterns in detail. (06 Marks)

OR

- 10 a. Explain Host based security technologies. (06 Marks)
b. Write a note on the following : (05 Marks)
 i) Enterprise Workshop (05 Marks)
 ii) Matrix Mining. (05 Marks)