

CBCS SCHEME

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18IC61

Sixth Semester B.E. Degree Examination, June/July 2023 Cyber Security

Time: 3 hrs.

Max. Marks: 100

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

Module-1

- 1 a. Define computer security. What is a threat? List and explain different types of threats. (10 Marks)
b. List and explain different types of attacks in cyber security. (10 Marks)

OR

- 2 a. Briefly explain the terms: (i) Confidentiality (ii) Integrity (iii) Availability (iv) Authentication (v) Accountability (10 Marks)
b. What is control? List and explain the different ways you can deal with harm. (10 Marks)

Module-2

- 3 a. Define Buffer Over Flow. Briefly explain the various harms from an overflow. (10 Marks)
b. Write notes on: (i) Time-of-check to Time-of-use (ii) OFF-by-one error (10 Marks)

OR

- 4 a. Define Malware. Briefly explain the terms (i) Viruses (ii) Worms. (10 Marks)
b. Define Countermeasure. Explain different countermeasure for users and developers. (10 Marks)

Module-3

- 5 a. Define Browser Attacks. Briefly explain different types of Browser Attack. (10 Marks)
b. Write notes on: (i) SQL Injection (ii) Phishing (10 Marks)

OR

- 6 a. Write notes on: (i) Key stroke logger Attacks (ii) User in the middle attacks (10 Marks)
b. What is an Email Attack? Briefly explain two different cryptography technique to protect against email attacks. (10 Marks)

Module-4

- 7 a. With the help of a neat diagram, explain the functionality of an operating system. (10 Marks)
b. Write notes on: (i) Hypervisor (ii) Sandbox (10 Marks)

OR

- 8 a. What is an operating system? Explain different layered of an operating system. (10 Marks)
b. Define RootKit. Briefly explain Rootkit Evades Detection and TDSS RootKits. (10 Marks)

Module-5

- 9 a. Explain different types of threats to network communication. (10 Marks)
b. With the help of a diagram, explain format of a WiFi Frame in wireless communication. (10 Marks)

OR

- 10 a. Briefly explain different vulnerabilities in wireless network. (10 Marks)
b. Write notes on : (i) DNS spoofing (ii) DNS Cache Poisoning (10 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.