

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.