

(3 Hours)

[Total Marks: 80]

- N.B. : (1) Question No 1 is Compulsory.
(2) Attempt any three questions out of the remaining five.
(3) All questions carry equal marks.
(4) Assume suitable data, if required and state it clearly.

- 1 Attempt any FOUR.
- a Write a note on Lightweight Cryptographic algorithms. [5]
 - b Describe the various vulnerabilities and possible attacks on passwords. [5]
 - c Compare WEP, WPA, WPA-2. [5]
 - d Explain the role of steganography in data hiding. [5]
 - e Write a note on account harvesting. [5]
- 2 a Write a note on VPN security. [10]
- b What is ethical hacking? Describe the steps of the ethical hacking process. [10]
- 3 a Explain various stages in penetration testing. [10]
- b A user has received a link on SMS to claim the bonus prize money that he has won in a lottery. What action does the user take on receiving such SMS? Should he claim the amount by clicking on the link, or not? Justify. What are the various attacks that can happen through the SMS and how do we prevent these attacks? [10]
- 4 a Outline the top ten security projects in OWASP with their analysis. [10]
- b What are physical unclonable functions? How are they implemented? Explain with the help of examples. [10]
- 5 a Write a note on session hijacking and management. [10]
- b What is a side-channel attack? Explain various side-channel attacks with suitable examples. [10]
- 6 a Explain protocol vulnerabilities with the help of examples. [10]
- b Explain phishing and pharming in detail. [10]
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