

TE Sem V Winter 2025 R-19 C-Scheme (ExTE)

Duration: 3hrs

[Max Marks: 80]

21/11/25

- 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.

Q.1) Solve any Four questions. Each question carries five marks. [20 M]

- A) Identify the key challenges encountered in managing modern IT infrastructure.
B) Differentiate between RADIUS, TACACS, and TACACS+
C) Summarize the concept and mechanism of an SQL Injection attack.
D) Contrast the security mechanisms and effectiveness of the WEP and WPA wireless protocols.
E) Define the concept of a Threat Model and its role in system security.

Q.2 Solve the following

A) Outline the System Design Process and analyze the critical design issues facing IT organizations and infrastructure. [10 M]

B) Discuss in detail the various defense strategies used to avoid cyber-attacks. [10 M]

Q.3 Answer the following

A) Describe Cross-Site Scripting (XSS) and illustrate its mode of operation. [10 M]

B) List out various types of Malware and explain how it gets activated in the system. [10 M]

Q.4 Solve the following

A) Elaborate the steps required in systems security planning. [10 M]

B) Prepare the steps to maintain reliability and Integrity of sensitive database. [10 M]

Q.5 Answer the following

A) Explain in detail Mobile IP and VPN [10 M]

B) Classify the various types of wireless network attacks and prescribe methods for their protection. [10 M]

Q.6 Solve the following

A) Define Cookie Poisoning and describe it's working [10 M]

B) Explain in detail JavaScript Hijacking. [10 M]