II SEMESTER M.TECH. (COMPUTER SCIENCE AND INFORMATION SECURITY) MAKE UP EXAMINATIONS, JUNE 2024

SUBJECT: ETHICAL HACKING [CSE 5216]

(19/06/2024)

Time: 3 Hours   MAX. MARKS: 50

Instructions to Candidates:
- ❖ Answer **ALL** the questions.
- ❖ Missing data may be suitably assumed.

1.A	Differentiate between Local Access and Remote access with reference to an Unix operating system. Explain the various methods by which an attacker can gain remote access and local access into an Unix system.	**5M**
1.B	Prepare a set of countermeasures to be taken by the employees to counteract the social networking attacks.	**3M**
1.C	Compare Stored and Reflected XSS attacks.	**2M**
2.A	Consider an organization which has a web server connected to a back-end database. The organization registers the customers through the forms available on the organization's web site. Analyze the kind of attack that is possible to be launched against the database to compromise the passwords stored in the database. List out the effects of SQL injection and propose countermeasures for the same.	**5M**
2.B	Explain the various messages exchanged during the client and server authentication and key exchange phases of handshake protocol of TLS.	**3M**
2.C	Distinguish between IP Spoofing and DNS Spoofing.	**2M**
3.A	Discuss the various types of attacks that can be launched on wireless networks.	**5M**
3.B	Illustrate the DDoS attack.	**3M**
3.C	Differentiate between credentialed scanning and non credentialed scanning.	**2M**
4.A	Illustrate the usage of Distributed Systems to defend against malware attacks.	**5M**
4.B	List out the attacks on mobile device operating systems and explain the same.	**3M**
4.C	Explain Windows OS vulnerabilities.	**2M**
5.A	Outline the steps in penetration testing of mobile devices and propose the countermeasures to protect these devices.	**5M**
5.B	Differentiate between TCP/IP Session hijacking and UDP Session hijacking	**3M**
5.C	Propose two mitigation techniques for session hijacking.	**2M**