KUMARAGURU
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B.E / B.TECH. DEGREE EXAMINATIONS: NOV/DEC 2023

(Regulation 2018)

Fifth Semester

COMMON TO ALL BRANCHES

U18CSR5213**:** Ethical Hacking and Network Defense

COURSE OUTCOMES

CO1: Describe the legal and ethical requirements related to ethical hacking.

CO2: Understand the vulnerabilities, mechanisms to identify vulnerabilities/threats/attacks.

CO3: Perform penetration & security testing.

CO4: Examine the different tools and techniques that ethical hackers employ.

Time: Three Hours   **Maximum Marks: 100**

Answer all the Questions: -
PART A (10 x 2 = 20 Marks)
(Answer not more than 40 words)

1.	Define attack and its types.	CO1	[K$_1$]
2.	Compare White Hat hackers with Black Hat hackers.	CO1	[K$_2$]
3.	Explain what a "whois domain lookup" is and how it contributes to internet management.	CO1	[K$_2$]
4.	List the different port scanning techniques.	CO2	[K$_1$]
5.	Explain "Man-in-the-Middle (MitM) attack", outlining its potential impact on communication and data security.	CO2	[K$_2$]
6.	Define what an "IP sniffer" is and how it can be utilized to capture and analyze network traffic.	CO2	[K$_1$]
7.	Show how a web server works?	CO3	[K$_2$]
8.	Explain Cross-site scripting.	CO3	[K$_2$]
9.	List the type of DNS spoofing.	CO4	[K$_2$]
10.	Mention any four wireless hacking techniques.	CO4	[K$_2$]

Answer any FIVE Questions: -
PART B (5 x 16 = 80 Marks)
(Answer not more than 400 words)

11.	a)	Illustrate the five phases of ethical hacking and explain each phases in detail.	8	CO1	[K$_2$]
	b)	Summarize the different types of hacker's profile with their role.	8	CO1	[K$_2$]

12.	a)	Identify the skill required for an ethical hacker.	8	CO2	[K$_2$]
	b)	Describe any four tools used in Reconnaissance or Foot printing process with its syntax.	8	CO2	[K$_2$]
13.	a)	Summarize the steps involved in information gathering process.	8	CO2	[K2]
	b)	Identify the objective of scanning and summarize the various type of scanning available.	8	CO2	[K$_2$]
14.	a)	Explain HTTP tunneling technique and IP Spoofing technique.	8	CO2	[K$_2$]
	b)	Identify various options available in Nmap switches with its description.	8	CO2	[K$_2$]
15.	a)	Infer the purpose of SQL injection attack.	8	CO3	[K$_2$]
	b)	Explain the working process of ARP and identify the countermeasures for ARP spoofing and poisoning.	8	CO3	[K$_2$]
16.	a)	Outline the different phases of session hijacking and how to prevent session hijacking?	8	CO4	[K$_2$]
	b)	Explain the various wireless hacking techniques.	8	CO4	[K$_2$]

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