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## MCA DEGREE THIRD SEMESTER EXAMINATION, JANUARY 2022

## 20-382-0313 NETWORK SECURITY AND WIRELESS SECURITY

## (REGULAR)

Time : 3 Hours

Maximum Marks:50

(Answer ANY FIVE questions)

(All questions carry EQUAL marks)

NO	QUESTIONS	Marks	CO	BL	PL
1.	(a) Consider your mobile hotspot as wifi network which allows maximum 8 connected devices. When opening the wifi settings of the connected device a user can notice two different identifiers 'Bob's SAMSUNG S21' and 4C:64:CF:CE:54:55. Mention the type of wifi network and identify SSID and BSSID of the network. Identify the vulnerability that leads to privacy theft	4	CO4	L2	1.6.1
	(b) Explain the working of RC4 encryption algorithm and compare the working of WEP and WPA with RC4.	6	CO5	L4	
2	(a) Explain how Server certificate verification happens on the client side in SSL.	5	CO1	L2	2.5.3
	(b) Cite examples from real life, where the following security objectives are needed: i. Confidentiality ii. Integrity iii. Non-repudiation Suggest suitable security mechanisms to achieve them.	5			
3.	(a) When using a Security Protocol to protect IPSEC traffic, packets can often grow to be larger than the Maximum Transmission Unit ("MTU"). What are the reasons for the growth in the packet size?	2	CO1	L2	2.6.3
	(b) What are the services provided by PGP	4	CO2	L2	
	(c) Discuss the reason for using PGP.	4		L3	

4.	(a)	Session hijacker performs a step-by-step procedure to launch session hijacking. Identify the vulnerabilities in the network that are utilized by the attackers with supporting tools in each step. Explain steps in session hijacking with TCP scenario. Also differentiate TCP session Hijacking and UDP session hijacking.	10	CO3	L2 and L3	2.5.2
5	(a)	Compare WPA Personal and WPA Enterprise modes for WPA2 and WPA3	10	CO5	L4	2.6.4
6.	(b)	Can WEP be cracked? If yes point out the reasons and vulnerabilities and explain cracking procedure else justify your claim	10	CO6	L4	2.6.5
7.	(a)	What are different components of RFID?	5	CO7	L2	1.6.1
	(b)	Describe the purpose of each one in one or two sentence. Explain the working of RFID by considering FasTag as a use case.	5		L3	

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