Duration: 3hrs   **[Max 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**	**[20]**
	a	Explain concept of frequency reuse with clustering.	5
	b	Explain in short wireless LAN security threats.	5
	c	What is spread spectrum?	5
	d	Describe use of Cellular IP.	5
	e	Explain in short voice over LTE.	5
2	a	Explain in short different algorithm used for authentication and privacy in GSM.	**[10]**
	b	What is the use of different interfaces used in global system for mobile communication (GSM) with diagram?	**[10]**
3	a	Explain hidden station and exposed station problem with solution in WLAN.	**[10]**
	b	How is packet delivery achieved to and from mobile node?	**[10]**
4	a	Explain snooping TCP and mobile TCP with their merits and demerits.	**[10]**
	b	Explain the process of registration in Mobile IP.	**[10]**
5	a	Explain protocol architecture of IEEE 802.11 with diagram.	**[10]**
	b	How IP mobility is achieved in wireless network.	**[10]**
6	a	Explain different components used in LTE architecture with diagram.	**[10]**
	b	Which components are new in GPRS as compared to GSM? What is there purpose?	**[10]**

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