Hall Ticket Number :										

R-17

Code: 7G384

IV B.Tech. II Semester Advanced Supplementary Examinations August 2021

Wireless Communications & Networks

(Electronics and Communication Engineering)

Max. Marks: 70 Time: 3 Hours

Answer *any five full questions* by choosing one question from each unit (5x14 = 70 Marks)

****

			Marks	CO	Blooms Level
		UNIT–I			
1.	a)	Describe the principle of Operation of cellular mobile system and explain the cellular Concept with neat diagram.	8M		
	b)	What is the access technique used by Wi Fi, Justify.	6M		
		OR			
2.	a)	What are the various components in a cellular system? Explain. Why do you think bandwidth is the major limitation for capacity expansion in cellular systems?	7M		
	b)	How reservation protocol can be used to provide QoS? Explain the working of Resource Reservation Protocol.	7M		
		UNIT–II			
3.	a)	When you say wireless networks, is the network completely wireless or does it depend on a wired connectivity also which aids in providing communication? If so, explain.	7M		
	b)	With block diagram, explain the CCS network architecture showing the various components.	7M		
		OR			
4.	a)	Explain circuit switching and packet switching in wireless networks.	7M		
	b)	Explain the ATM cell format designed to handle voice and data users.	7M		
		UNIT–III			
5.	a)	How is the problem of dynamic IP addresses dealt in Mobile IP? What are the sequence of operations when IP datagrams are exchanged over a connection between the mobile node and another host?	7M		
	b)	Explain the WAP Protocol Stack in detail.	7M		
		OR			
6.	a)	Explain the process of tunnelling in detail.	7M		
	b)	Describe the three WTP Transaction Classes that may be invoked by WSP.	7M		
		UNIT–IV			
7.	a)	Compare wireless LANs to wired LANs and mobile data networks using Kiviat graphs.	7M		
	b)	Which is the layer that is concerned with the transmission of a link-level PDU between two stations in a WLAN. Explain the layer in detail.	7M		
		OR			
8.	a)	Which are the categories in which WLAN can be operated. Explain any one technique in detail.	7M		
	b)	With figure, explain the IEEE 802 architecture.	7M		
		UNIT–V			
9.	a)	What do you understand by the term Mobile data? How are they classified? Explain with examples.	7M		
	b)	Explain the Ad hoc network architecture in HIPERLAN-1.	7M		
		OR			
10.	a)	What is the functionality of transport plane in GPRS? Elaborate.	9M		
	b)	What is the meaning of Short messaging service? What is the maximum number of data elements and alphanumeric characters that can be sent?	5M		

****