## M.E. Second Semester (Computer Science & Information Technology) (New-CGS)

## 13194 : Elective-II : Mobile Computing : 2 RNME 5

AW - 3611 P. Pages: 2 Max. Marks: 80 Time: Three Hours Notes: 1. Due credit will be given to neatness and adequate dimensions. Assume suitable data wherever necessary. 2. Illustrate your answer necessary with the help of neat sketches. 3. Use of pen Blue/Black ink/refill only for writing the answer book. 4. 8 What are the unconventional application of wireless networks and also list out prospective 1. a) application areas for sensor network. List out the various propagation effects occur when radio waves reach close to an obstacle 6 b) and explain each in brief. OR 5 What are the household application that use wireless schemes? 2. a) 4 How do you compare a cell phone with a stateline phone? b) 5 What is fading rate and depth of fading? Explain. c) What are the advantages of cell sectoring? How do you compare this with SDMA. 6 3. What are the differences between adjacent channel interference and co-channel 7 b) interference? Explain with suitable diagram. OR How do you compare hybrid with flexible channel allocation? Which one would you prefer 6 4. a) and why? What is meant by handoff interval and handoff region? Explain their usefulness with 7 b) appropriate diagrams. 4 Explain the following term 5. a) multicasting Hard handoff ii) What is GSM system? List out the identity numbers associated with it and explain each in 9 b) brief. OR What is meant by bidirectional tunneling? Why do you need HA-FA in addition to HLR-7 6. a) VLR pair? Explain. 6

b)

Explain IS-41 with appropriate diagram.

7.	a)	What are the salient characteristics of adhoc network? Explain each in brief.	8
	b)	What do you understand by table-driven routing protocol? Explain in detail.	4
	٠	OR	
8.	a)	What do you understand by hybrid protocol? List out the names of some hybrid protocol and explain each in brief.	8
	b)	Explain the following terms i) DSR protocol. ii) Fixed wireless sensor network.	5
9.	a)	What do you mean by HiperLAN/2? Explain with appropriate diagram.	6
	b)	Explain the following term  i) ZigBee ii) Roofnet  iii) HomeRF iv) Radio-Link control.	8
		OR	
10.	a)	Explain bluetooth core protocols with appropriate diagram.	6
	b)	What is meant by topology? Explain wireless personal area network in detail.	8
11.	a)	What do you understand by multicast for mobility protocol? Explain in detail.	6
	b)	Explain the characteristics and limitation of bluetooth.	7
		OR	
12.	a)	List out the names of reliable wireless multicast protocol which are specifically designed for reliable delivery of messages and explain each in detail.	8
	b)	Differentiate between HTML and XML.	5

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