M.E. First Semester (Computer Engineering) (Full Time) (C.G.S.)
13126 : Mobile Computing : 1 KMEF 5

P. Pages : 2

Time : Three Hours

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Max. Marks : 80

Notes : 1. Due credit will be given to neatness and adequate dimensions.
2. Assume suitable data wherever necessary.
3. Illustrate your answer necessary with the help of neat sketches.
4. Use of pen Blue/Black ink/refill only for writing the answer book.

1. a) Explain the structure of cellular system in detail. **8**

   b) Explain path loss in land propagation. **5**

OR

2. a) What are the steps for a call set up from MS to BS and vice versa? Enlist and explain them in brief. **7**

   b) Explain in brief: **6**

   i) ISI

   ii) Doppler effect

   iii) Diversity reception

3. a) List the advantages and disadvantages of fixed channel allocation and dynamic channel allocation scheme. **6**

   b) What is cochannel interference? What is the significance of CIR? **7**

OR

4. a) What are the advantages of cell sectoring? Explain with suitable diagram. **7**

   b) What is ISI? How it affect transmission rate of channel. **6**

5. a) What is meant by bidirectional tunneling? Why do you need HA-FA in addition to the HLR-VLR pair? Explain clearly. **7**

   b) In the RSA algorithm the public key is transmitted to all MS through the air by the BS. How is its security ascertained. Explain clearly. **7**

OR

6. a) What are the steps involved in registration of MS. Describe with suitable diagram. **7**

   b) Explain the parameters influencing Handoff. **7**

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| 7. | a) | Explain routing? What are the goals for selecting routing protocol. | 7 |
| | b) | What is source initiated on demand routing? Explain Dynamic source routing in detail. | 7 |

OR

8.	a)	Explain location Aided Routing scheme with examples of expected zone.	7
	b)	What are the advantages of wireless sensor networks over wired sensor networks. Hence explain in brief fixed wireless sensor network with suitable architecture.	7
9.	a)	What are the advantages and disadvantages of WLAN compared to wired LAN?	7
	b)	State the advantages and disadvantages of Infrared LANS.	6

OR

10.	a)	What are the important requirements of wire less LAN.	6
	b)	Explain in brief the bluetooth core protocols with block diagram.	7
11.	a)	How radio resources are managed efficiently for high speed multimedia communications.	7
	b)	Explain in brief the basic functions of smart antenna with neat sketch.	6

OR

| 12. | a) | What are the challenges in the actual design of sensor networks? | 6 |
| | b) | Explain in brief intrusion detection models for MANET. | 7 |

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