

**M.E. DEGREE EXAMINATIONS: NOVEMBER 2009**

Third Semester

**COMPUTER SCIENCE AND ENGINEERING**

P07CSE03 Mobile Computing

**Time: Three Hours**

**Maximum Marks: 100**

**Answer ALL Questions:-**

**PART A (10 x 2 = 20 Marks)**

1. What are the two salient features of GMSK?
2. What do you mean by hidden and exposed terminal problem in MAC?
3. List out any four design issues in IEEE 802.11?
4. What is scatternet? Where it is used?
5. What do you mean by COA and co-located COA in mobile IP?
6. What is GRE? What is the use of it..
7. Why Indirect TCP is used. State reasons.
8. What is the mechanism behind TCP slow start?
9. What is WDP and WCMP ?
10. What are the basic features of WML?

**PART B (5 x 16 = 80 Marks)**

11. (a) (i) Explain about TDMA and FDMA concepts and its advantages over CDMA mechanisms (8)  
(ii) Explain the significance of IMT 2000. Also with neat diagram explain the UMTS architecture. (8)
- (OR)**
- (b) (i) Explain about GSM architecture. Also state its advantages in the present mobile scenario. (8)  
(ii) Explain the mechanism of DVB with neat diagram. (8)

12. (a) (i) Explain the MAC design principle of IEEE 802.11 with respect to Power Management. (8)

(ii) Explain the various phases in HIPERLAN. (8)

**(OR)**

(b) (i) Explain the Bluetooth Protocol Stack with neat diagram. (12)

(ii) What are the various WATM handovers. Explain it. (4)

13. (a) (i) Explain the need for Mobile IP. Also discuss the significance of IP packet delivery (8)

(ii) Explain the need of Minimal encapsulation and discuss its features. (8)

**(OR)**

(b) Write short notes on following: (8+8)

(i) DSR

(ii) DHCP.

14. (a) (i) What is Snooping TCP. Explain the mechanism of it. (8)

(ii) Explain the mechanisms of traditional TCP. Also discuss its impact in mobile environment. (8)

**(OR)**

(b) (i) Where Indirect TCP is used? Also discuss its advantages. (8)

(ii) What are the features of Transaction oriented TCP and discuss its advantages. (8)

15. (a) (i) Explain the logical architecture of WTA. (8)

(ii) Write short notes on following: (8)

a. WTP classes    b. WSP

**(OR)**

(b) Explain the WAP Architecture with various components and interfaces. (16)

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