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**B.TECH. DEGREE EXAMINATIONS: APRIL/MAY 2012**

Sixth Semester

**INFORMATION TECHNOLOGY**

ITY107: Mobile Communications

**Time: Three Hours**

**Maximum Marks: 100**

**Answer All Questions:-**

**PART A (10 x 1 = 10 Marks)**

1. Channels that are assigned to the same frequency at all times
  - a) Pure CDMA
  - b) Pure FDMA
  - c) FDMA combined with TDMA
  - d) CDMA combined with FDMA
2. The carrier sense multiple access cannot detect
  - a) Hidden terminals or Exposed terminals
  - b) Hidden terminals
  - c) Exposed terminals
  - d) Exposed terminals and Hidden terminals
3. The distance of almost 36000km to earth is
  - a) LEO
  - b) GEO
  - c) MEO
  - d) HEO
4. The cyclical repetition of data blocks sent via broadcast is often called a
  - a) flat disk
  - b) multi-disks
  - c) Broadcast – disk
  - d) skewed disks
5. The contending nodes are resolved during
  - a) Prioritization phase
  - b) Elimination phase
  - c) Yield phase
  - d) Transmission phase
6. All the devices using the same hopping sequence with same phase form a
  - a) Adhoc piconet
  - b) Bluetooth piconet
  - c) Beacon
  - d) None
7. COA defines
  - a) The current location of MN
  - b) IP address of MN
  - c) Address of HA
  - d) None of these
8. The enhancement of distance vector routing for ad-hoc network is
  - a) DSDV
  - b) DSR
  - c) MAODV
  - d) OLSR
9. Mechanism of taking a packet consisting of packet header and data and putting it into data part of new packet
  - a) Encapsulation
  - b) Decapsulation
  - c) Tunnelling
  - d) Packaging
10. Wireless transport layer security (WTLS) can be integrated into the \_\_\_\_\_ Architecture on top of WDP.
  - a) WAP
  - b) WDP
  - c) WTP
  - d) WAP Forum

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

11. Define CDMA.
12. What is FDD?
13. List out the four types of handover available in GSM.
14. What are the logical channels in GSM?
15. List the three phases in EY-NPMA.
16. Define SIFS in WLAN.
17. List out the possibilities for the location of care-of-address (COA).
18. What is Dynamic source Routing?
19. List the Disadvantages of I-TCP.
20. What is WAP?

**PART C (5 x 14 =70 Marks)**

21. a) Explain the different TDMA schemes in detail.

**(OR)**

- b) Write short notes on

- (i) CDMA Scheme (7)
- (ii) Signal propagation effects. (7)

22. a) Discuss the concept of UMTS and IMT – 2000 in detail.

**(OR)**

- b) Explain the system architecture and radio interface of GSM systems in detail.

23. a) Explain in detail the protocol architecture of WLAN and blue tooth.

**(OR)**

- b) Write short notes on WLAN MAC management.

24. a) Explain the concept of DHCP configuration and client initialization

**(OR)**

- b) Explain the route discovery and maintenance in DSDV and DSR.

25. a) Discuss the various classical enhancements in TCP for mobility.

**(OR)**

- b) Write short notes on

- (i) WAP Architecture (7)
- (ii) WTLS (7)

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