



DDD-003-007407 **Seat No. _____**
M. C. A. (Sem. - IV) (CBCS) Examination
May / June - 2015
ECA4035 : Mobile Computing

Faculty Code : 003
Subject Code : 007407

Time : $2\frac{1}{2}$ Hours] [Total Marks : 70

1 Answer the Following Multiple Choice Questions : 15

(1) In radio transmission, LOS is not needed. this statement is

(A) true (B) false
(C) cant say (D) none

(2) In _____ nodes within two different networks cannot communicate with each other.

(A) ad-hoc network
(B) infrastructure based network
(C) peer to peer network
(D) (A) and (C) both

(3) IBSS stands for _____ .

(A) Internet Basic Service Set
(B) Interconnected Basic Service Set
(C) Independent Basic Service Set
(D) International Basic Service Set

(4) Which standard uses OFDM process?

(A) IEEE 802.11 (B) IEEE 802.11 a

(C) IEEE 802.11 b (D) none of these

(5) piconet have _____.

(A) one master server and 8 slave server

(B) one master server and 7 slave server

(C) one master server and 6 slave server

(D) none of these

(6) The signal coverage over a large area in all directions is referred to :

(A) Directional Antenna

(B) Omni Directional Antenna

(C) Beam Antenna

(D) None

(7) The frequency from base station to mobile station is called

(A) Down-Link (B) Up-Link

(C) Shared-Link (D) None

(8) PLL stands for _____

(A) Phase Leak Loop (B) Phase Link Loop

(C) Phase Lake Loop (D) none of these

(9) Mostly Hybrid Spread Spectrum is the combination of _____

(A) DSSS +FHSS (B) FHSS+DSSS

(C) FHSS + THSS (D) none

2 Attempt **any Five** of the Following: **15**

- (1) What is GSM?
- (2) What is the maximum data rate supported by a GSM system?
- (3) What is time division multiple access?
- (4) Explain the different coding schemes used in GPRS and their importance.
- (5) What is base station?
- (6) Explain path loss?

3 Attempt **any Three** of the Following: **15**

- (1) What are the multiple access techniques?
- (2) Explain the term 'Airport' in Bluetooth.
- (3) What is ad-hoc network?
- (4) What is Piconet?

4 Attempt **any Two** of the Following: **15**

- (1) Explain in detail the evolution of wireless communication?
 - Mobile radio system standards
- (2) Explain the different hand off strategies used in wireless communication
- (3) Explain in detail the CDMA multiple access technique.

5 Attempt **any One** of the Following: **10**

- (1) Write Principles of TDMA ,FDMA, CDMA ,SDMA
- (2) What are the advantages and disadvantages of 3G?