



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 +THSS (B) FHSS+DSSS
 (C) FHSS + THSS (D) none

- (10) If the user want to change frequency according to a certain period, which of the following is used?
- (A) FDMA + SDMA (B) SDMA + TDMA
(C) TDMA + CDMA (D) FDMA + TDMA
- (11) Which of the following does not prevent end-to-end TCP connection?
- (A) I-TCP (B) Snooping TCP
(C) M-TCP (D) None
- (12) Which of the following is GPRS Protocol?
- (A) SGSN (B) GSN
(C) SNDCP (D) None
- (13) Which of the following is not the operation of PAP?
- (A) Push Submission (B) Push Delay
(C) Push Cancellation (D) None
- (14) Listening to many channels separated by certain interval at same frequency -- is the characteristic of which of the following?
- (A) FDMA (B) SDMA
(C) TDMA (D) CDMA
- (15) Which technology is also called Adhoc Piconet?
- (A) Wi-fi (B) Scatternet
(C) Bluetooth (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?