

2732

B. E. 8th Sem. (E.C.E)

Examination – December, 2013

MOBILE COMMUNICATION

'E' Scheme

Paper : EE-432-E

Time : Three hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complain in this regard, will be entertained after examination.

Note : Attempt any *five* questions. All question carry equal marks.

1. (a) What is the need of modulation in mobile communication system. Enumerate various modulation techniques in use. 10

- (b) Explain various types of antennas used for mobile communication with the help of suitable diagram of radiation pattern. 10

2. (a) Describe Doppler spread in details with suitable diagram. 10

- (b) Explain various diversity techniques used in mobile communication. 10
3. Write short notes on:
- (a) Hata Model. 10
- (b) Microcell model. 10
4. (a) Explain wireless data services implemented in IS-95. 10
- (b) Explain various signaling and call control process in GSM. 10
5. (a) Enumerate differences and common features of wireless WANs and WLANs. 10
- (b) Explain IEEE standards and their features for wireless data networking. 10
6. (a) What do you understand by tunneling and encapsulation, explain in details. 10
- (b) What advantages does the use of IPv6 offer for mobility? Where are the entities of mobile IP now? 10
7. (a) Give out the advantages of classical TCP improvement over tradition TCP. 10
- (b) Explain in brief TCP over 2.5/3G wireless networks. 10

8. Write short notes on :

(i) IP packet delivery.

(ii) Reverse tunneling.