

## CE1.5-R4 : MOBILE COMPUTING

**NOTE :**

1. Answer question 1 and any FOUR questions from 2 to 7.
2. Parts of the same question should be answered together and in the same sequence.

Total Time : 3 Hours

Total Marks : 100

1. (a) Bring out the limitations of mobile devices.  
(b) Describe cell in detail.  
(c) What are the different services provided by GSM ?  
(d) Difference Between Proactive & Reactive protocols.  
(e) Define Mobile agents.  
(f) State the Characteristics of a MANET.  
(g) Define Snooping TCP. (7x4)
2. (a) Discuss the protocol architecture of GSM.  
(b) Explain Handoff and situations in which Handoff is triggered. What are the different types of Handoff techniques ?  
(c) Discuss about the features of IMT2000 vision. (6+6+6)
3. (a) Discuss the layered architecture supported by Bluetooth technology.  
(b) What are the different types of handovers in GSM ?  
(c) Explain in detail hidden and exposed terminals. (6+6+6)
4. Explain the following in detail :  
(a) J2ME  
(b) Palm OS  
(c) Information Security  
(d) ZigBee (4+4+4+6)
5. (a) Discuss in detail about communication asymmetry.  
(b) Explain in detail about Code division multiple access (CDMA). (10+8)
6. (a) Explain about Dynamic source routing protocol in MANETs.  
(b) Explain the registration, discovery, tunnelling and encapsulation in mobile IP in detail. (8+10)
7. (a) Draw a neat diagram of WAP architecture and explain in detail.  
(b) Explain the concept of push based data dissemination mechanism and focus on its advantages and disadvantages. (9+9)

- o O o -