Printed Pages: 01   **Sub Code: CS/IT 212**

Paper Id: | 900278 | Roll No. | | | | | | | | | |

M. TECH.
(SEM-II) THEORY EXAMINATION 2018-19
MOBILE COMPUTING

Time: 3 Hours   *Total Marks: 100*

Note: Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1.   Attempt *all* questions in brief.   2 x 10 = 20
   a.   Define Mobile IP.
   b.   Explain CDMA
   c.   Define GSM.
   d.   Explain Hand off in Mobile computing.
   e.   Define OFDM.
   f.   Define Short messaging service in GSM.
   g.   What do you understand by Cellular System?
   h.   What do you mean by GPRS?
   i.   Explain Frequency Reuse.
   j.   What is WLAN?

SECTION B

2.   Attempt any *three* of the following: 10 x 3 = 30
   a.   What are the main reasons for using cellular system? Also describe the dynamic channel allocation in cellular system.
   b.   What are the main advantages of cellular systems with small cells? How SDM is typically realized and combined with FDM.
   c.   Discuss the advantages of using the hexagonal cell shape over the square and triangle cell shape.
   d.   How does prioritization of hand-off calls over originating calls help for reducing blocking and drop calls?
   e.   What is mobility management? Describe two important aspects of mobility management.

SECTION C

3.   Attempt any *one* part of the following: 10 x 1 = 10
   (a)   Write short Note on (i) Cell Splitting (ii) Wireless ATM (iii) Dropped Call Rate
   (b)   Give a brief note on Mobile Agents with its role in Mobile Communication.

4.   Attempt any *one* part of the following: 10 x 1 = 10
   (a)   How data transmission is done from source to destination in secure manner? Give nay example of general authentication and privacy procedure for D-AMPS (Digital Advanced Mobile Phone System)
   (b)   Draw the physical layer diagram of Bluetooth and explain.

5.   Attempt any *one* part of the following: 10 x 1 = 10
   (a)   State the properties of MANET. How encapsulation is done in mobile IP.
   (b)

6.   Attempt any *one* part of the following: 10 x 1 = 10
   (a)   (i)
          Application of Mobile computing (iv) WAP.
   (b)

7.   Attempt any *one* part of the following: 10 x 1 = 10
   (a)
   (b)
          of Wireless AD Hoc Networks.