Printed Pages:2   **Sub Code: NMCA 414**

Paper Id: | 2 | 1 | 4 | 2 | 1 | 8 | **Roll No.** | | | | | | | | | |

MCA
(SEM-IV) 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.   What is mobility?
   b.   Mention the various issues in Wireless Networks.
   c.   What is cellular telephone system?
   d.   What do you meant by GPRS?
   e.   What do you mean by mobile station and network switching system?
   f.   What is Wireless MAN?
   g.   What do you mean by Multiple Access Protocol?
   h.   What is IP address?
   i.   Write down the Properties of Mobile Transaction System?
   j.   What is Clustering?

SECTION B

2. **Attempt any *three* of the following:**   **10 x 3 = 30**

   a.   Explain the GSM Architecture with the help of diagram.
   b.   What do you mean by Spread Spectrum? Discuss the various types of Spread Spectrum.
   c.   Write down the advantages of Bluetooth Technology.
   d.   Discuss the various issues in Data Management.
   e.   What is the process of Tunneling and Encapsulation? Explain in detail.

SECTION C

3. **Attempt any *one* part of the following:**   **10 x 1 = 10**

   (a)   Define the Mobile Computing. And Differentiate between Wired and Mobile Networks?

   (b)   Explain the various differences among CDMA, TDMA and SDMA?

4. **Attempt any *one* part of the following:**   **10 x 1 = 10**

   (a)   What is IEEE 820.11 standard? Explain its details?

   (b)   Classify the various Wireless Networks?

5. Attempt any *one* part of the following: $\qquad$ **10 x 1 = 10**

    (a)   What do you mean by Mobile IP and its advantages in Mobile Computing?

    (b)   Discuss the WAP Architecture with the help of diagram?

6. Attempt any *one* part of the following: $\qquad$ **10 x 1 = 10**

    (a)   What is Data Replication and also explain its necessity and role in Mobile Computing?

    (b)   Explain Transaction processing System and its cycle?

7. Attempt any *one* part of the following: $\qquad$ **10 x 1 = 10**

    (a)   Explain Mobile Agent and discuss the various security threats in Mobile Agent System?

    (b)   What is Distributed File System? Explain its various applications in Mobile Computing?