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Sub Code: NMCA 414

Roll No.

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MCA
(SEM-IV) THEORY EXAMINATION 2017-18
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:** **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:** **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:** **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?