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MCA (SEM IV) THEORY EXAMINATION 2018-19 MOBILE COMPUTING

Time: 3 Hours Total Marks: 70

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

SECTION A

1. Attempt *all* questions in brief.

 $2 \times 7 = 14$

- a. What do you mean by IP address?
- b. Define cluster and reuse distance?
- c. What is file system in Mobile Computing?
- d. What do you mean by roaming in Mobile Computing?
- e. Define static and dynamic routing?
- f. List the various issues concern to transaction management?
- g. Define UDP and SMTP?

SECTION B

2. Attempt any *three* of the following:

 $7 \times 3 = 21$

- a. Explain GSM architecture with proper example?
- b. Discuss the MAC issues?
- c. Explain the various file system in Mobile Computing?
- d. Discuss the various Mobile Agent of Mobile Computing?
- e. Differentiate between wired network and ad-hoc networks?

SECTION C

3. Attempt any *one* part of the following:

 $7 \times 1 = 7$

- (a) Explain the various issues of mobile computing?
- (b) Write short notes: Hand-off and cellular system?

4. Attempt any *one* part of the following:

 $7 \times 1 = 7$

- (a) Explain TCP over wireless networks?
- (b) What do you mean by various wireless applications? Explain data broadcasting in details?

5. Attempt any *one* part of the following:

 $7 \times 1 = 7$

- (a) Explain the disconnected operations in Mobile Computing with the help of example?
- (b) Discuss the adaptive clustering for wireless networks in Mobile Computing?

6. Attempt any *one* part of the following:

 $7 \times 1 = 7$

- (a) Explain the various security issues in Mobile Computing?
- (b) What do you mean by Fault tolerance? Explain transaction processing in Mobile Computing Environment?

7. Attempt any *one* part of the following:

 $7 \times 1 = 7$

- (a) What do you mean by routing protocol? Explain DSDV?
- (b) Explain wireless routing protocols?