

MCA
(SEM IV) THEORY EXAMINATION 2017-18
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 x 7 = 14**
- a. What is Bandwidth?
 - b. Write down the formulae for data rate for noisy channel.
 - c. Define the Wireless Media.
 - d. What do you mean by Wi-Fi?
 - e. What do you mean by Wireless Body Area Network?
 - f. What do you mean by Wireless Ad-Hoc Network?
 - g. What is Wireless Sensor Network?

SECTION B

- 2. Attempt any *three* of the following: 7 x 3 = 21**
- a. Explain the various features of CDMA.
 - b. Explain the Wireless Communication Problems.
 - c. Differentiate fix channel allocation scheme and dynamic allocation scheme.
 - d. Explain the MAC protocols in details.
 - e. Explain the Dynamic Source Routing (DSR) protocols.

SECTION C

- 3. Attempt any *one* part of the following: 7 x 1 = 7**
- (a) What is Mobile Computing? Explain the various application of Mobile Computing?
 - (b) Explain Space Division Multiple Access technique in Wireless Telephony.
- 4. Attempt any *one* part of the following: 7 x 1 = 7**
- (a) Explain CODA file System and its various features.
 - (b) Explain Adaptive Clustering and its working for mobile wireless network.
- 5. Attempt any *one* part of the following: 7 x 1 = 7**
- (a) Explain the Transaction Processing in Mobile Computing.
 - (b) What do you mean by Data Replication? Classify the Data Replication?
- 6. Attempt any *one* part of the following: 7 x 1 = 7**
- (a) Explain Security Threats in Mobile Agent Computing.
 - (b) Explain the various Mobile Agent security issues in Mobile Computing.
- 7. Attempt any *one* part of the following: 7 x 1 = 7**
- (a) Explain Destination Sequence Distance Vector Routing (DSDV) algorithm.
 - (b) Explain the various layers of WAP Architecture.