D-C-190193

B. Tech. EXAMINATION, 2019

Semester VII (CBS)

WIRELESS AND MOBILE COMPUTING

CS-702

Time : 3 Hours   *Maximum Marks : 60*

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt *Five* questions in all, selecting *one* question from each Section A, B, C and D. Q. No. **9** is compulsory.

Section A

1. What is Mobile Computing ? Draw architecture of mobile computing with various applications of mobile computing.   **10**

2. Draw and explain GSM Protocol's stack. Also discuss GSM services.   **10**

Section B

3. What are the design constraints for applications targeted for handheld devices ?   **10**

4. How does the Mobile IP work ? Explain its architecture and tunnelling with neat diagram.   **10**

Section C

5. What are the Wireless LAN standards ? Explain WMAN Network architecture.   **10**

6. Discuss IEEE 802.11 protocol architecture. Explain in detail its features and applications with diagrams.   **10**

Section D

7. State the challenges of a MANET. List and explain the applications of Ad Hoc networks.   **10**

8. Explain in detail DSDV routing algorithm for MANETS with an example.   **10**

Section E

(Compulsory Question)

9. Explain the following :

   (a) Write the entities of mobile networks layer.

   (b) What is Snooping TCP and Mobile TCP ?

   (c) Write about time-out freezing concept.

   (d) Write about the Mesh Networks.

   (e) Define HLR and VLR.

   (f) What are the logical channels in GSM ?

   (g) Draw the WAP Architecture.

   (h) Explain about the selective retransmission.

   (i) What is Walsh function ?

   (j) Define the handover concept.   **2×10=20**