MCA – 54 B

V Semester M.C.A. Examination, Feb./March 2010
MOBILE COMPUTING AND COMMUNICATION

Time : 3 Hours Max. Marks : 100

Instructions : *1) Answer **all** questions in Part **A, 5** out of **8** questions in Part **B** and **4** out of **6** questions in Part **C**.*
*2) Part **A** : Questions from **1** to **8** carry **1** mark **each** and **9** to **14** carry **2** marks **each**.*
*3) Part **B** : **Each** question carries **8** marks.*
*4) Part **C** : **Each** question carries **10** marks.*

PART – A

1. Define Intermediate and End systems.
2. What is 1-persistence CSMA ?
3. What are Near Terminals ?
4. What is a Piconet ?
5. Define Asynchronous Connectionless Link.
6. What is Mobile IP ?
7. What is a Mobile Node ?
8. What is Direct Sequence Spread Spectrum (DSSS)?
9. Explain polling.
10. What is CSMA/CD ? How does it work ?
11. What are parked and stand-by devices in Bluetooth ?
12. What is meant by Agent Administration ?
13. What is the need for Protocol Architecture ?
14. What is a Beacon Frame ?

P.T.O.

PART – B

1. Explain Cellular System.
2. Discuss the advantages and disadvantages of WLAN.
3. Explain FDMA and TDMA.
4. Explain the components of Bluetooth in the base band layer
5. Briefly discuss I-TCP.
6. Discuss Fast Retransmission Concept.
7. Briefly explain Slotted Aloha.
8. What is Congestion Control?

PART – C

1. Explain the simplified reference model.
2. Explain how protocols can be configured for communication.
3. With a neat diagram explain TCP header format.
4. Explain the architecture of Infrastructure based on IEEE 802.11
5. Explain L2CAP.
6. How slow start decreases the efficiency of TCP if used with mobile senders and receivers?

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