Code No: N0523 **R07** **Set No. 1**

IV B.Tech I Semester Supplementary Examinations, March 2013

MOBILE COMPUTING

(Common to computer science & engineering, information technology and electronics & computer engineering)

Time : 3 hours **Max. Marks :80**

Answer any Five Questions
All Questions carry equal marks
*****

1. Explain the functional architecture of GSM system with schematic block diagram.

2. a) Brief the cache invalidation mechanism
   b) Explain about database Hoarding.

3. Explain the classical TCP improvements and Snooping TCP.

4. Explain about a) Push – based mechanism b) pull – based mechanism.

5. Differentiate SDMA, TDMA, FDMA and CDMA.

6. Explain how optimization is achieved in Mobile IP. Explain tunneling and encapsulation in Mobile IP.

7. Discuss about blue tooth networks in details.

8. Explain how dynamic source routing protocols handles routing with an example.

Code No: N0523 **R07** **Set No. 2**

IV B.Tech I Semester Supplementary Examinations, March 2013

MOBILE COMPUTING

(Common to computer science & engineering, information technology and electronics & computer engineering)

Time : 3 hours **Max. Marks :80**

Answer any Five Questions
All Questions carry equal marks
*****

1. Discuss the following terms related to GSM.
   a) Localization b) Calling

2. a) Why do MAC scheme in wired network fail in wireless networks and how does the multiple access with collision avoidance (MACA) works.
   b) Explain the countermeasures for interference in SDMA, TDMA, FDMA and CDMA systems.

3. a) Discuss the packet delivery and registration of mobile IP.
   b) Explain the features of tunneling and encapsulation.

4. Discuss Database Transactional model in detail.

5. What is classical TCP ? What are the improvements made in Indirect TCP and Snooping TCP? Explain their mechanism and features.

6. Explain about MANETs. Discuss Infrastructure architecture.

7. Discuss in details architecture and protocol layers in Bluetooth Technology.

8. Discuss data delivery mechanisms in detail.

Code No: N0523 **R07** **Set No. 3**

IV B.Tech I Semester Supplementary Examinations, March 2013

MOBILE COMPUTING

(Common to computer science & engineering, information technology and electronics & computer engineering)

Time : 3 hours **Max. Marks :80**

Answer any Five Questions
All Questions carry equal marks
*****

1. Describe elaborately the various multiplexing techniques.

2. How is Synchronization achieved in GSM and why it is important? How system security is maintained in GSM?

3. a) Explain Database query Processing.
   b) Brief the Client Server computing.

4. a) Compare Snooping TCP with mobile TCP with example network scenario.
   b) Discuss fast-retransmit and fast-recovery mechanisms for mobile TCP in detail.

5. a) Differentiate MANETs and Cellular systems.
   b) What are all the essential features of MANET.

6. Discuss the configuration and profile of J2ME.

7. a) Discuss about IP Packet Delivery
   b) Explain the basic configuration of DHCP.

8. Discuss about selective tuning and indexing techniques.

Code No: N0523 **R07** **Set No. 4**

IV B.Tech I Semester Supplementary Examinations, March 2013

MOBILE COMPUTING

(Common to computer science & engineering, information technology and electronics & computer engineering)

Time : 3 hours **Max. Marks :80**

Answer any Five Questions
All Questions carry equal marks
*****

1. What is Handover? Brief the Handover Mechanisms in GSM.

2. Explain the term interference in the space, time, frequency, and code domain. What are the countermeasures in SDMA, TDMA, FDMA, and CDMA systems?

3. Discuss about a) Directory method b) Hash based methode

4. a) Discuss about data recovery process
   b) Explain client server computing architecture.

5. Explain the architecture and security of WAP.

6. Explain various methods used for congestion control in mobile transport layer.

7. Explain about encapsulation in Mobile IP.

8. Explain the various routing algorithms in MANETs.