Printed Pages—2 **ECS087**

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 2873 **Roll No.** | | | | | | | | | | |

B. Tech.

(SEM. VIII) THEORY EXAMINATION 2011-12

MOBILE COMPUTING

Time : 3 Hours *Total Marks : 100*

Note : Attempt **all** questions.

1. Attempt any ***two*** parts of the following : **(10×2=20)**
   (a) What do you understand by mobile computing ? Discuss issues and challenges facing mobile computing today.
   (b) Discuss the architecture of GSM. Also explain the security issues to implement GSM.
   (c) Discuss the following in brief :
      (i) Code division multiple access (CDMA)
      (ii) GPRS.

2. Attempt any ***two*** parts of the following : **(10×2=20)**
   (a) Discuss the advantages and limitations of Bluetooth.
   (b) What is mobile IP ? Discuss the goals of mobile IP. Also discuss the features of IPv4.
   (c) Discuss the following :
      (i) IEEE 802.11
      (ii) WAP applications.

3. Attempt any ***two*** parts of the following : **(10×2=20)**
   (a) Discuss the different data management issues with respect to mobile computing environments.

(b) What was the motivation for designing the CODA system ? Discuss CODA file system in detail.

(c) What do you understand by clustering ? How clustering is used for mobile wireless networks ? Discuss.

4. Attempt any ***two*** parts of the following : **(10×2=20)**

(a) Why security concerns in traditional systems are simple than those in mobile systems ? Discuss.

(b) Discuss the requirements for the design of mobile agent systems.

(c) Discuss various issues which are related to transaction processing in mobile computing.

5. Write short notes on any ***two*** : **(10×2=20)**

(a) Destination sequenced distance vector routing (DSDV)

(b) Temporary ordered routing algorithm (TORA)

(c) Issues and Challenges in Ad hoc Networks.