

Total No. of Questions : 12]

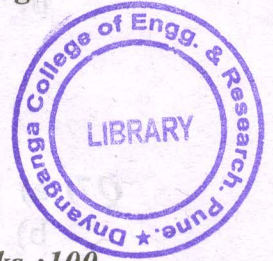
Nov-Dec-2012  
SEAT No. :

P1202

[Total No. of Pages : 2

[4264] - 699

**B.E. (Computer Engineering)**  
**MOBILE COMPUTING**  
**(2008 Pattern) (Elective - II) (Semester - I)**



Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:-

- 1) Answer **THREE** questions from each section.
- 2) Answers to the **TWO** sections should be written in **SEPARATE** answer books.
- 3) Figures to the right indicate full marks.
- 4) Assume suitable data, if necessary.

**SECTION - I**

- Q1)** a) Explain the cell layout and frequency planning for the GSM system. [8]  
b) What are Home Location Register (HLR) and Visitor Location Register (VLR)? [6]  
c) Enlist the functions of a mobile station (MS). [4]

OR

- Q2)** a) With suitable diagram explain configuration of a BTS - BSC combination with reasoning for rural, urban and suburban areas. State its advantages and disadvantages of it. [10]  
b) State the main functions of NMC and its relationship with respect to OMC. [8]

- Q3)** a) What are the various logical channels in GSM? Describe them in brief. [8]  
b) What are the various reasons for choosing frequency hopping in GSM. [8]

OR

- Q4)** a) Explain the sequence of operations that the mobile has to take within a system. [8]  
b) Describe the time organization of full rate and half rate traffic channel. [8]

- Q5)** a) Name three distinct states of the mobile. What functions must mobile perform in these states? Why initialization is necessary for mobile after the power is turned on? [8]  
b) With the help of a suitable diagram explain the necessary steps for the establishment of PSTN-MS CALL. [8]

P.T.O.

