

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

**B.Tech.(ECE/ETE) (2011 Onwards) (Sem.-6)**  
**WIRELESS COMMUNICATION SYSTEM**  
Subject Code : BTEC-602  
Paper ID : [A2316]

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

**SECTION-A**

1. Write briefly :
  - a) What is the need guard period (space)?
  - b) Write types of TCH channels of GSM.
  - c) What are the features of FDMA?
  - d) Define forward channel interference.
  - e) What is multiple access?
  - f) What are the two types of linear predictive coders?
  - g) Define spatial diversity.
  - h) What is the need of Gaussian filter?
  - i) What is Flat Fading?
  - j) What is Sectoring?

## SECTION-B

2. Write short notes on frequency reuse & channel assignment.
3. Explain in detail the small scale fading.
4. Explain speech processing in GSM.
5. Explain in detail equal gain combining.
6. Explain in detail packet radio protocols.

## SECTION-C

7. Explain in detail the different techniques used to improve coverage & capacity of cellular system.
8. Explain in detail the TDMA & FDMA multiple access techniques.
9. Explain 4G mobile techniques.