

Roll No. 

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

Total No. of Pages : 02

Total No. of Questions : 09

**B.Tech.(ECE) (2012 to 2017) (Sem.-6)**  
**WIRELESS COMMUNICATION SYSTEM**  
Subject Code : BTEC-602  
M.Code : 71122

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) Answer briefly :**

- a) What is the difference between Long term and Short term fading?
- b) What is real time Co-channel interference?
- c) What are the limitations of conventional mobile telephone system?
- d) What are the interfaces used in GSM?
- e) What is frequency reuse?
- f) Mention the various multiple access schemes used in wireless communication?
- g) What is base station?
- h) What is the function of control channel? What are the types?
- i) What is flat fading?
- j) What do you mean by forward and reverse channel?

### SECTION-B

2. What are the channel types of GSM system? Explain.
3. Explain the space diversity methods.
4. Explain the performance criteria and operation of cellular systems.
5. Write short note on LTE- Advance systems.
6. Explain Pure ALOHA and Slotted ALOHA in detail.

### SECTION-C

7. Differentiate the analog & digital cellular systems with their operating capacities.
8. Mention the two frequency reuse schemes and explain N-cell reuse pattern in detail for four & seven cell reuse with illustrative diagrams.
9. Discuss the salient features of FDMA and TDMA techniques.

**NOTE : Disclosure of identity by writing mobile number or making passing request on any page of Answer sheet will lead to UMC case against the Student.**