

Total No. of Questions : 09

Total No. of Pages : 02

WIRELESS COMMUNICATION SYSTEM

Subject Code : BTEC-602

Paper ID : [A2316]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

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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 has to attempt any **FOUR** questions.
 3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students has to attempt any **TWO** questions.

SECTION-A

1. Write briefly :
 - a) List out the similarities and differences between Cordless systems and cellular systems.
 - b) What is the impact of inaccurate power control on CDMA system?
 - c) What is cell splitting?
 - d) What are the most popular frequency reuse factors for AMPS, GSM and IS-95?
 - e) How does GSM convert 260 (20 ms) bits of the speech packet into 456 bits of speech packet?
 - f) List the advantages of digital cellular system standards.
 - g) List the functions of MSC.
 - h) Define Co-Channel.
 - i) What is co-channel reuse ratio?
 - j) Define diversity.

SECTION-B

2. Compare the features of FDMA, TDMA and CDMA.
3. Explain in detail about the Factors influencing fading.
4. With neat diagram explain frequency reuse concept. Justify system capacity increases by frequency reuse with necessary mathematical equations.
5. Write in detail about :
 - a) Bluetooth
 - b) Zigbee
6. Explain in detail the frame structure for GSM

SECTION-C

7. With suitable diagrams and explanation differentiate between the forward and the reverse link in IS-95 standard.
8. Explain in detail about the 4G Technologies.
9. Explain various diversity methods in detail.