

MAY 2014

**Wireless Communication System
(BTEC-602)**

Roll No _____

Time : 03 Hours

Maximum Marks : 60

Instruction to Candidates:

- 1) Section - A is Compulsory.
- 2) Attempt any Four questions from Section - B.
- 3) Attempt any Two questions from Section - C.

Section – A

(2x10=20)

- Q1. What is handoff?
- Q2. Differentiate between fast fading and slow fading?
- Q3. Describe the concept of ciphering.
- Q4. List the GSM services.
- Q5. Describe buffer-and-burst method.
- Q6. What is the cause of self-jamming problem in CDMA?
- Q7. Define co-channel reuse ratio.
- Q8. What is ISI?
- Q9. Why do paging systems need to provide low data rates.
- Q10. What is frequency planning?

Section B

(5x4=20)

- Q1. Why handoff is necessary for cellular systems? Determine the two types of handoffs based on signal strength and C/I ratio.
- Q2. Explain TDMA frame structure. Describe the efficiency of TDMA.
- Q3. Differentiate between flat fading and frequency selective fading.
- Q4. Explain paging system

Q5. Describe reverse IS-95 channel modulation process for a single user.

Section-C

(10x2=20)

Q1. What are various spread spectrum multiple access techniques. Explain in detail.

Q2. Explain GSM system architecture & frame structure for GSM.

Q3. Explain co-channel Interference and system capacity.

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