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Total No. of Printed Pages: 1

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B.Tech EE (Semester – 6th)
CELLULAR AND MOBILE COMMUNICATION
Subject Code: BECEO1002
Paper ID: 18OE111523

Time: 03 Hours

Maximum Marks: 60

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A

(2 marks each)

Q1. Attempt the following:

- a. Define Cell Sectoring?
- b. What is the Channel sharing & Channel Borrowing in communication system.
- c. What is the Co-channel Interference?
- d. What is the concept of Frequency Reuse?
- e. What are different Handoff Initiation Techniques?
- f. What mobile to mobile propagation?
- g. Compare the Macro & Micro cellular structure.
- h. Compare the Narrowband & Wideband FM.
- i. What are the leaky Feeders?
- j. What is the Forced Handoff?

Section – B

(5 marks each)

- Q2. Describe with neat & clean diagram about Analog & Digital cellular systems.
- Q3. Explain the Concept of Frequency Reuse with the neat & clean diagram.
- Q4. Discuss the dropped call rates & their evaluation.
- Q5. Explain the concept of point to point prediction model.
- Q6. What are the different handoff strategies based on algorithms of handoff? Explain.

Section – C

(10 marks each)

- Q7. What is co-channel interference in cellular systems? Explain the different methods of reducing the co-channel interference.
- Q8. What are the various channel assignment strategies with respect to mobile units? Explain in Detail.
- Q9. Write short not on: 1) Cell Site 2) Antenna Heights 3) Signal coverage cells