PVP 12

Code: EC6T5

III B.Tech - II Semester – Regular Examinations – April 2016

CELLULAR AND MOBILE COMMUNICATIONS
(ELECTRONICS & COMMUNICATION ENGINEERING)

Duration: 3 hours Max. Marks: 70

Answer any FIVE questions. All questions carry equal marks

1. a) Draw & Explain the operation of basic cellular system. 7 M

   b) What are the limitations of conventional mobile systems & how are they overcome by cellular mobile system? 7 M

2. a) Distinguish between the permanent splitting and dynamic splitting. 7 M

   b) Derive the C/I for normal case in an omnidirectional antenna system. 7 M

3. a) Write about the phase difference between the direct path & the ground reflected path. 7 M

   b) Explain about foliage loss. 7 M

4. a) Explain how co-channel interference is measured in real-time mobile radio transceiver? 7 M

b) What is near-end-far-end interference ratio and explain its effects. 7 M

5. Explain the following.
   a) Roof mounted antennas 4 M
   b) Glass mounted antennas 5 M
   c) Mobile high gain antennas 5 M

6. a) Define channel assignment. Explain the concept sectorization and overlaid cells. 7 M

   b) Explain about paging channel. 7 M

7. a) Explain the MAHO & Intersystem handoff. 7 M

   b) What are the two decision making parameters of handoff? Explain. 7 M

8. a) How can guard spaces realized between users in CDMA? 7 M

   b) What is the basic prerequisite for applying FDMA? How does this factor increase complexity compared to TDMA system? 7 M