S-72.3260 Radio Resource Management Methods 3 cr

Exam 11.12.2012

Part A: Closed book tasks (2 tasks)

The examination consists of two parts. When you have done the tasks in Part A (closed book) you should give the answers to the exam supervisor, and then you will get Part B (open book) including 4 problems, out of which 3 best will be graded. You are allowed to use any literature that you feel useful in part B.

You can decide yourself the time you spend with each part, but the total exam duration is 3 h. You can leave the exam room 1 hour after the exam start.

Problem A.1

Answer shortly the following two questions:

- a) How does the channel characteristics coherence time and bandwidth impact the design of radio resource allocations schemes? (5 p)
- b) Describe the different interference situations that arise in cellular systems and how they should be taken into account in the design of radio resource control schemes. (5 p)

Problem A.2

Describe the technical challenges in the secondary usage of TV band from the primary system protection perspective. (10 p)