Institut for Matematik & Datalogi
Syddansk Universitet

March 7, 2003
JBJ

DM69 — Weekly note 5

Exam date

The oral exam date is now fixed to be June 11, 2003.

Handed out material Friday March 7, 2003

Handwritten notes (in danish) by Bjarne Toft and Jørgen Bang-Jensen on the primal-dual algorithm for the assignment and transportation problems.

Material covered in the lectures on March 6 and March 7, 2003

Non-bipartite matching, Chapter 10 in Papadimitriou and Steiglitz. Sections 3.12 in Bang-Jensen and Gutin, Digraphs.

Exercises March 13, 2003

Bang-Jensen and Gutin: 3.38, 3.46, 3.55, 3.74, 3.76, 3.79, 3.80, 3.83

Lecture on March 14, 2003

Greedy algorithms and matroids, Chapter 16 in Cormen et al, minus section 16.3.

Exam questions

We will start compiling a list of possible exam questions. For the stuff we have covered until now, the following are the possible questions (main questions).

1. Shortest paths in digraphs.
2. The maximum (s,t)-flow problem and the minimum (s,t)-flow problem.
3. Polynomial algorithms for maximum flows.
4. Minimum cost flows.
5. The assignment problem and the transportation problem.
6. Matchings: characterizations and algorithms.