

MATERIAL OF EXAM: ADVANCED TOPICS ON NETWORKING

An Introduction to Optimization:

1-5: basic stuff that should be known.
Chapter 6(Unconstr.): ALL
Chapter 7(1-dim search): 7.1, 7.2, 7.3.
Chapter 8 (Gradient): ALL
Chapter 9 (Newton): 9.1, 9.2.
Chapter 10 (Conj. direction): 10.1, 10.2.
Chapter 15 (LP): ALL
Chapter 16 (Simplex): 16.1 – 16.5.
Chapter 17 (Duality): ALL
Chapter 19 (Equality Constr.): ALL
Chapter 20 (Ineq. Const): ALL
Chapter 21 (Convex): ALL

Notes from lectures (very well)!!!

S. Boyd: Convex Optimization

3.1.1-3.1.5 (p.67-74)
3.1.8 (p.77-78)
5.1.1-5.1.3 (p.215-216)
5.2.1-5.2.3 (p.223-227)
5.5.2-5.5.3 (p.242-244) and example 5.2 (waterfilling) p.245-246
9.1.2 (p.459-461)
9.2 (p.463-464)
9.3.1 (p.466-467)