NMSA413 Optimization Theory
Tasks that can appear in written part of the exam:

- A theoretical question from geometry:
  Application of separation theorems and Farkas' lemma.

- Convexity, differentiability of functions:
  Verification of convexity (concavity) for a given function. Verification of convexity for a given set using convexity of functions.

- Formulation of a dual program to a given LP.

- Solving a given LP by means of graphical solution of its dual program.

- To find solutions of a given convex program.

- To find solutions of a given NLP program using KKT conditions.

- Verification of a given constraint qualification for a given set.

- Verification of (NLP-SOSC) constraint for a given NLP program.

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       Doc.RNDr. Petr Lachout, CSc.