

## TIE-21306 Software architectures

5.5.2017

Examination is made and graded by Hannu-Matti Järvinen.

During the exam you may not use written materials, calculators or computers. You may answer either in English or in Finnish.

- 1) Describe shortly the following concepts (one or two sentences per point)
  - a) Software architecture? (2p)
  - b) Software component (2p)
  - c) Framework (2p)
- 2) Architecture description (6p)

How should the architecture be described? Give some ideas, examples or analogies how to describe and on what level the description should be.
- 3) Layer / tier architectures (6p)

Describe the idea of layer or tier architecture. What are the potential problems with this architectural style? How about its strengths? How does it work as a distributed architecture? Give an (typical) example of a tier architecture.
- 4) Architectural evaluation (6p)

What is evaluation of a software architecture and what are the benefits obtained? Give some ideas why in practice full architectural evaluation is not common.