

No material or calculators are allowed. The maximum points of each question is given in parentheses; the maximum of the whole examination is 18 points. The examination is assessed by prof. Hannu-Matti Järvinen.

1) Define the following terms. 2-4 sentences per term.

- a) Smoke test (1p)
- b) Oracle (in testing) (1p)
- c) Black box testing (1p)
- d) Performance testing (1p)
- e) Load testing (1p)
- f) Stress testing (1p)

2) Coverage meters (6p)

Describe the coverage metrics based on the program code and the relationships between them (can the meter tell you something about the result of another meter). What are the advantages of using meters? What about the downsides?

3) Prioritisation of testing (6p)

What is meant by prioritisation in testing? What are its goals? Describe the prioritisation process using the MoSCoW method. If a fine-grained model of MoSCoW is used, what are the benefits or problems of this?

4) Stubs and drivers (6p)

- a) What are stubs? What kind of testing strategy they are connected to? Are there any situations where they are the best way to test some functionalities? (3p)
- b) What are drivers in testing? What kind of testing strategy they are connected to? What higher-level concepts can be considered as advanced drivers? (3p)