

2004 Paper 2 Question 8

Software Engineering II

Explain what impact each of the following can have on reliability, development costs, programmer productivity and software efficiency:

(a) top-down refinement; [4 marks]

(b) the Z specification language; [4 marks]

(c) loop invariants; [4 marks]

(d) structural induction; [4 marks]

(e) the choice of programming language for use in a project. [4 marks]

You may wish to explain what the alternatives or opposites to the concept discussed are, or give brief examples.