

2002 Paper 2 Question 8

Software Engineering II

- (a) Briefly describe top-down refinement, listing both advantages and drawbacks. [4 marks]
- (b) How can we achieve efficiency without sacrificing reliability or programmer productivity? [3 marks]
- (c) How can we minimise the hazards associated with memory management? [3 marks]
- (d) In the Z specification language, what are Δ and Ξ schemas? [5 marks]
- (e) Contrast a loop invariant with the Z concept of invariant. [5 marks]