Specification and Verification I

(a) Describe the difference between deep and shallow semantic embedding. [4 marks]

(b) Describe two advantages of using deep embedding and two disadvantages. [4 + 4 marks]

(c) Outline how partial and total correctness specifications can be translated into higher order logic. [4 marks]

(d) Give one advantage and one disadvantage of regarding Hoare Logic as a theory in higher order logic. [2 + 2 marks]