

## 2008 Paper 1 Question 1

### Foundations of Computer Science

- (a) Write brief notes on the type-checking of polymorphic functions that involve equality tests. What is the type of the equality function itself? [3 marks]
- (b) The list  $l_2$  is a *sublist* of  $l$  provided there exist lists  $l_1$  and  $l_3$  such that  $l = l_1 @ l_2 @ l_3$ . Write an ML function `sublist` to test whether one list is a sublist of another one. Include a clear explanation of how your code works. [7 marks]