

2011 Paper 2 Question 3

Operating Systems

- (a) In the context of the protection of computer systems:
- (i) What is meant by *access control*? [1 mark]
 - (ii) What is an *access control list*? [2 marks]
 - (iii) What is a *capability*? [2 marks]
 - (iv) How is access control managed in the UNIX file system? [5 marks]
 - (v) How is access control managed in Windows NT? [5 marks]
- (b) Describe how you can use *page protection* bits to implement a not-recently-used page replacement scheme. [5 marks]