

2006 Paper 7 Question 3

Security

- (a) What is meant by *Mandatory Access Control*? Give an example. [5 marks]
- (b) How might you use mandatory access control to protect the safety-critical systems in a car (engine control unit, ABS, stability control, etc.) from user-programmable systems (telephone, entertainment, navigation, etc.)? [5 marks]
- (c) What problems would you anticipate in keeping the implementation clean as these systems evolve? [5 marks]
- (d) What architecture might you therefore propose a car maker adopt for its next-generation networking? [5 marks]