The University of Queensland
School of Information Technology and Electrical Engineering

Semester 2, 2017

COMS3000/7003 – Tutorial 6, Answers

Q1) What's the main difference between Discretionary Access Control (DAC) and Mandatory Access Control (MAC)?

In DAC, the owner of objects (files) has control over the assignment of access rights. In MAC, there exists a system wide policy that assigns access rights, which cannot be overruled by the owner of the resources.

Q2) What is the difference between a "classification" and a "clearance"?

The classification is a level that describe how sensitive a particular object is. The clearance is a level of "trustedness" of a subject, that describes the maximum level that the subject is allowed to read.

Q3) What is the main goal of the Bell-LaPadula model?

Confidentiality. The model tries to prevent information from a high level of sensitivity to flow to a lower level.

Q4) What is a *covert channel*? Give an example.

An unintended and/or unauthorized communications channel that can be used to transfer information in a manner that violates an information system security policy.

Example: Storage based covert channel, timing covert channel etc.