Two hours

UNIVERSITY OF MANCHESTER
SCHOOL OF COMPUTER SCIENCE

M.Sc. in Advanced Computer Science

System Construction Using B

Date: Monday 8th June 2009
Time: 09:45 – 11:45

This is an OPEN book examination

The use of electronic calculators is NOT permitted
1. A house consists of various rooms, such as: hall, kitchen, living room, toilet, etc. A burglar alarm system consists of various devices (one per room), each connected via a cable to a controller in the hall. Write an Event-B model to describe the installation of a burglar alarm system in a house. Your development should contain at least one refinement. However, you need not write out each machine in the development in detail. It is sufficient to write out the final machine, and to indicate clearly which parts come from earlier machines. (20 marks)