# MATHEMATICAL LOGIC — ASSIGNMENT THREE

(1) Let $A$ be an infinite set: show that the cardinality of the set of functions from $A$ to 2 is the same of $\wp(A)$.

(2) State and prove Cantor's theorem.

(3) Show a non-strongly normalising formal type system.

Each question is worth 12 points. The points in all the four assignments will be added together and the result will be divided by 4, and this will be the final result. Remember to mark your answer sheet with your name.