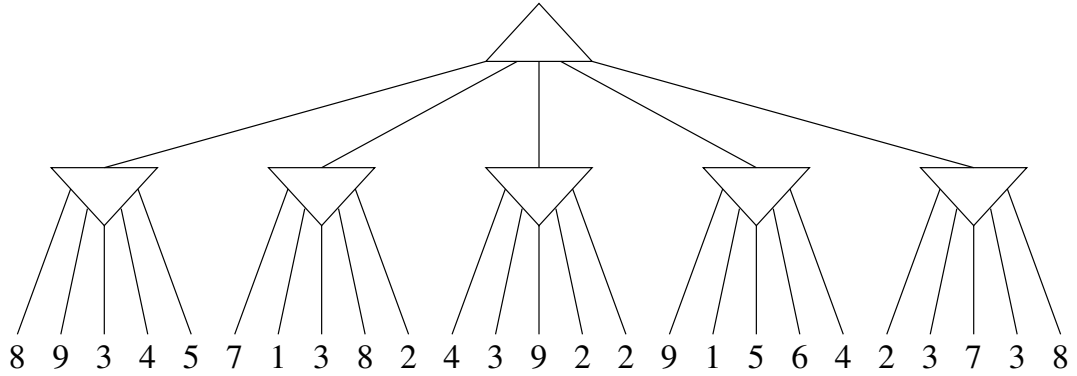# 2006 Paper 3 Question 3

Artificial Intelligence I

(a) Give a detailed description of the *minimax algorithm* for two-player games, illustrating your answer using the following game tree.

[10 marks]

(b) Describe the modifications required to the minimax algorithm in order to apply it to realistic games. [5 marks]

(c) Give a detailed description of the technique of $\alpha - \beta$ pruning, again illustrating your answer using the game tree above. [5 marks]