CS347 FS2004 Quiz 5

This is a closed-book quiz. The only items not supplied that you are allowed to use are writing implements. Mark every sheet of paper you use with your name and the string “cs347fs2004 quiz5” (omittance, even if it is partial, will be penalized at 1 point per sheet). If you are caught cheating, you will receive a zero grade for this quiz. The max number of points per question is indicated in square brackets after each question. The sum of the max points is 55. You have up to 50 minutes to complete this quiz. Good luck!

All the following questions are about the following adversarial search tree. State evaluation heuristic values for the max player are provided in the form of numbers following the letter labels of the states (e.g., B5 indicates that the heuristic value of state B for the max player is 5). The order in which successors are generated is from left to right. Example: A generates first B, then C, and finally D.

1. Give the execution trace of HTQSABIDM(A,3,2,−∞,∞). [40]
2. What is the PV found by HTQSABIDM(A,3,2,−∞,∞)? [5]
3. For each iteration, indicate which nodes (if any) are pruned by HTQSABIDM(A,3,2,−∞,∞). [10]