$\qquad$ .

Show all work clearly and in order. Justify your answers whenever possible; You have 30 minutes to take this 10 point quiz.

1. (5 points) Given two strings $A=C T T G G C A$ and $B=C G G T T G C C$. Find the longest common subsequence of $A$ and $B$ using dynamic programming.
2. What is the length of the longest common subsequence of $A$ and $B$ ?
3. What is the longest common subsequence of $A$ and $B$ ?
(problem \#2 is on the back of the sheet)
4. (5 points) Two simple assembly lines are given. Find the optimal scheduling using dynamic programming.

5. What is the cost of the optimal schedule?
6. What is the optimal schedule?
