Problem 1. (100 points)

For the CMOS circuit layout shown below:

a) (60 points) Specify layer stack for the three points in this layout: X, Y, and Z.

Draw cross-sections along the following lines shown in the layout: A-B, and C-D.

Note that there are two metal layers used in this layout.

Please neglect the channel stop implant regions shown in Lecture 16.

b) (40 points) Extract and draw circuit diagram for this layout.

Specify Boolean function implemented in this layout.

I1 and I2 are input pins.

O1 and O2 are output pins.