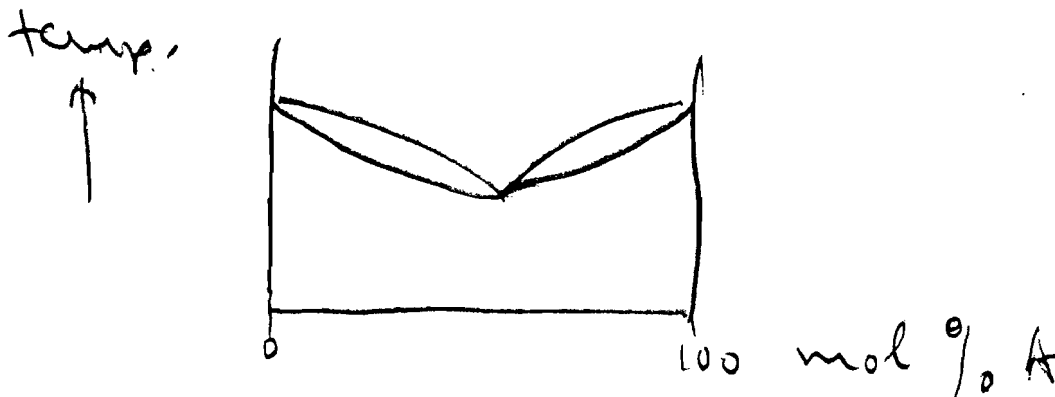
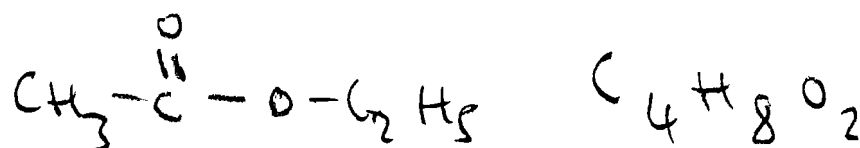


1. Sketch the boiling point-composition curve for a minimum boiling azeotrope. Label both axes! (5 pts).



2. Show valid structural and molecular formulas for ethyl acetate (4 pts).



3. Mountain climbers have found that they have to cook food longer on a mountain than in the valley. What is the reason for that? (2 pts)

Lower air pressure, so
water boils at $< 100^\circ\text{C}$,

4. Indicate which statements are correct: A When I double the temperature of a fluid (e.g., from 10 to 20° C), its vapor pressure will also double. B Maximum boiling azeotropes can be separated into their components by repeated distillation. B Minimum boiling azeotropes can be separated into their components by repeated distillation. D Fractional distillation is poorly suited to separate very small (< 1 mL) volumes of liquid. (4 pts)