CHEM106 Quiz 2

Please show all equations and all work to receive any credit

1. Showing the complete Lewis structure for all reactants and products, draw the reaction that occurs between choline and acetic acid.

2. Showing the complete Lewis structure of all reactants and products, draw the reaction that occurs between glycerol and the hydrogen phosphate ion (HPO_4^{2-}).

3. Ethanol has a log P value of -0.235.

    a. Define what P is and calculate the value of P for ethanol.

    b. Using ethanol's molecular properties, clearly explain why it has this magnitude of P.

    c. For an ethanol concentration of 1 mM in the water phase, calculate the concentration of ethanol in the 1-octanol phase.

4. Compare the melting points of unsaturated and saturated triglycerides; fully support your answer.