1. (4 pts) Identify the type of lipid each of the following molecules belongs.

   a)  
   
   b)  
   
   c)  
   
   d)  

2. (2 pts) Explain why unsaturated fatty acids have lower melting points than saturated fatty acids.
2. (4 pts) Behold the following molecule to answer the following questions.

a) Identify the selected regions on the following molecule as polar or non-polar.

b) Write the classification of lipid for this molecule. ______________________

4. (7 pts) Fill in the following blanks.

a) Bile salts in the liver are synthesized from _________________ and stored in the _________________.

b) What is the steroid hormone that increases the blood glucose and glycogen levels from fatty acids and amino acids? _____________________________

c) The major type of lipid in cellular membranes is ________________.

d) Glycolipids are lipids composed of ________________ , ________________ , ________________.

5. (3 pts)Write the saponification reaction with sodium hydroxide and the following molecule.

\[
\begin{align*}
\text{H}_2\text{C-O-C-}(\text{CH}_2)_{16}\text{CH}_3 \\
\text{H}-\text{C-O-C-}(\text{CH}_2)_{46}\text{CH}_3 \\
\text{H}_2\text{C-O-C-}(\text{CH}_2)_{18}\text{CH}_3
\end{align*}
\]