Physiology 115	
Spring 2015	

Name	

QUIZ #2

For the multiple choice questions, there is *one* and *only one* <u>best</u> answer. Use the back of the sheet if you need to complete answers.

- 1. Triglycerides are composed of three fatty acids esterified (covalently bound as an ester) to:
 - a. phospholipids
 - b. LDL
 - c. cholesterol
 - d. glycerol
 - e. glucose
- 2. Which of these receptor types has the ability to phosphorylate itself (autophosphorylation)?
 - a. G-protein coupled receptor
 - b. gap junction receptor
 - c. receptor tyrosine kinase
 - d. steroid hormone receptor
 - e. claudin receptor
- 3. Which of these is an unsaturated fatty acid?
 - a. C18:0
 - b. C16:1
 - c. C16:0
 - d. both (a) and (c)
 - e. none of the above
- 4. (a) Draw or briefly describe the lipoprotein as a layered spherical structure, showing the relative layering from center to surface of the following components: (i) apolipoprotein, (ii) phospholipid, (iii) triglyceride, (iv) cholesterol? (names of apolipoproteins are not important: just show the general positions of these components in a lipoprotein: keep in mind lipophilic & hydrophilic chemistry!) (b) How is the density of a lipoprotein changed relative to the amount of lipid within it?