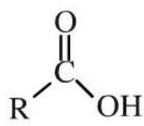
Carbon quiz

1. Identify the following biological functional groups and state in which macromolecule they would be found. (6 marks)

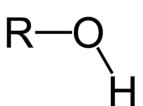
a)



Functional group: _____

Macromolecule found in: _____

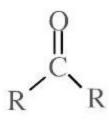
b)



Functional group:

Macromolecule found in:

c)



Functional group: _____

Macromolecule found in: _____

2. Show the anabolic reaction between glycerol and 3 saturated fatty acids that are 5 carbons long. Be sure to include the full structure of each component and all byproducts or additions of the reaction. (4 marks)

3. Show the catabolic reaction of breaking a tripeptide into individual amino acids. Be sure to include the full structure of each component and the by-products or additions to the reaction. (4 marks)

4. Explain the concept of bonding capacity and how it relates to the building up of macromolecules. Use specific reference to carbon in saturated fatty acids verse unsaturated fatty acids. (3 marks)