A) Cofactors

Complete the following reactions and name the participating cofactor.

$$H_2N$$
 H_2N
 H_2N
 H_2N
 H_3N
 H_4
 H_5
 H_5

$$\begin{array}{c|cccc}
O & & & & & & & \\
HN & & & & & & & \\
O & & & & & & & \\
N & & & & & & \\
N & & & & & & \\
Ribose & & & & & \\
\end{array}$$

$$R \stackrel{+}{=} N$$
 $S + \stackrel{COO}{=} O$
 CH_3

Lipids: True or False

- 1) All lipids possess at least one carbonyl group?
- 2) Phosphatidylserine is a complex lipid found in cell membranes?
- 3) Vitamin E is antioxidant that protects cell membranes from oxidative damage?
- 4) Monounsaturated fatty acids are important nutrients because they serve as precursors for arachidonic acid, from which prostaglandins can be synthesized?
- 5) Testosterone is a steroid hormone that stimulates muscle growth and social competition in animals?