Dr. Desai’s section: Choose one answer from among the available A, B, C, or D answers that best matches or completes the preceding statement. 5 questions / 14 points

1. The specific pentasaccharide sequence critical for high anticoagulant activity has a composition
   A) uronic acid (1→4) glucosamine (1→4) uronic acid (1→4) glucosamine (1→4) uronic acid
   B) glucosamine (1→4) uronic acid (1→4) glucosamine (1→4) uronic acid (1→4) glucosamine
   C) uronic acid (1→5) glucosamine (1→5) uronic acid (1→5) glucosamine (1→5) uronic acid
   D) glucosamine (1→5) uronic acid (1→5) glucosamine (1→5) uronic acid (1→5) glucosamine

2. Heparin is
   A) an activator of factor Xa and thrombin
   B) an inhibitor of antithrombin
   C) an activator of antithrombin
   D) none of the above

3. Anticoagulant coumarins
   A) inhibit enzymes involved in the antithrombin-dependent conversion of certain glutamate residues in prothrombin to γ-carboxyl glutamate residues
   B) inhibit enzymes involved in the vitamin K-dependent conversion of certain glutamate residues in prothrombin to γ-carboxyl glutamate residues
   C) inhibit enzymes involved in the vitamin K-dependent conversion of certain γ-carboxyl glutamate residues in prothrombin to glutamate residues
   D) none of the above

4. Nitrovasodilators
   A) probably release nitric oxide in the blood stream
   B) probably inhibit the release of nitric oxide in the blood stream.
   C) probably block calcium channels
   D) none of the above

5. Draw the structure of either amyl nitrite or glycercyl trinitrate