

**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. 4 questions / 15 points**

1. The specific pentasaccharide sequence critical for high anticoagulant activity has a composition **4 pts**
  - 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→4) glucosamine (1→4) glucosamine (1→4) uronic acid (1→4) uronic acid
  - D) glucosamine (1→4) uronic acid (1→4) uronic acid (1→4) glucosamine (1→4) uronic acid
  
2. Heparin is **4 pts**
  - 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 **4 pts**
  - A) inhibit enzymes involved in the antithrombin-dependent conversion of certain glutamate residues in prothrombin to  $\gamma$ -carboxyl glutamate residues
  - B) inhibit enzymes involved in the Vitamin K-dependent conversion of certain glutamate residues in prothrombin to  $\gamma$ -carboxyl glutamate residues
  - C) inhibit enzymes involved in the Vitamin K-dependent conversion of certain  $\gamma$ -carboxyl glutamate residues in prothrombin to glutamate residues
  - D) none of the above
  
4. Nitrovasodilators **3 pts**
  - A) probably release nitric oxide in the blood stream
  - B) dilate coronary arteries
  - C) are fast diffusing molecules
  - D) all of the above