



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. 3 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 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 **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