

**Dr. Desai's section: Select the choice that best answers/completes/matches the question.
4 questions / 13 points**

1. Identify whether the following statements are true (T) or false (F). 4 pts

- A) Low molecular weight heparins have less number of sulfate groups for every glucosamine and uronic acid disaccharide repeating sequence **TRUE or FALSE**
- B) Heparin pentasaccharide (or fondaparinux) is not effective in leading to inhibition of thrombin **TRUE or FALSE**
- C) Heparins require the presence of antithrombin to exhibit their anticoagulant effect **TRUE or FALSE**
- D) Oral bioavailability of unfractionated heparin is not good because it is a very long polymer **TRUE or FALSE**

2. The oral bioavailability of warfarin is good because 3 pts

- A) warfarin is a small hydrophobic molecule with some hydrophilicity
- B) warfarin is able to bind to inhibit gastric enzymes, thereby preventing its breakdown in the stomach
- C) warfarin is a small highly charged molecule, which helps transport across the GI lining
- D) none of the above

3. Anticoagulants are molecules that prevent the formation of 3 pts

- A) platelet plug
- B) fibrin
- C) antithrombin
- D) none of the above

4. Which of the following chain(s) is/are expected to exhibit normal anticoagulant activity?
[Circle clearly so that TA is not left in doubt.] 3 pts

- A) A heparin chain of ~10 residues containing sequence 1 but lacking sequence 2
- B) A heparin chain of ~10 residues containing sequence 2 but lacking sequence 1
- C) A heparin chain of ~10 residues containing both sequence 1 and 2
- D) A heparin chain of ~10 residues containing neither sequence 1 nor 2
- E) A heparin chain of ~10 residues containing sequence 1 only
- F) A heparin chain of ~10 residues containing sequence 2 only

