**Assignment**

1. **Discuss the role of Vitamin K in blood coagulation.**
Explain the mechanism by which Vitamin K and its analogs (e.g., Menadione, Acetomenadione) promote blood coagulation, including the synthesis of clotting factors.
2. **Compare and contrast the mechanisms of Warfarin and Clopidogrel.**
Highlight how these two anticoagulants work at different stages of the clotting process, emphasizing their clinical uses and the need for monitoring.
3. **Explain the clinical significance of anticoagulants in preventing thromboembolic events.**
Discuss how drugs like Warfarin, Anisindione, and Clopidogrel are used in conditions such as deep vein thrombosis (DVT), pulmonary embolism, and stroke prevention.
4. **What are the risks associated with anticoagulant therapy?**
Elaborate on the common side effects, interactions, and risks of bleeding associated with anticoagulants, and discuss strategies for managing these risks.
5. **Describe the classification of anticoagulants based on their mechanism of action.**
Include examples of each class and their therapeutic applications.