

*Note:* Attempt any five questions. All questions carry equal marks.

1. a) Differentiate between cardiac glycosides and cardiac stimulants. Enlist the various sources of the cardiac glycosides.  
b) Classify antiarrhythmic drugs. Give the mechanism of action of Quinidine.
2. a) What do you understand by angina pectoris? Discuss various forms of angina pectoris.  
b) Discuss the clinical drugs used in the treatment of hypertension. Discuss the mechanism of action, uses and toxicities of Nifedipine.
3. Write short note on any three of the following:
  - a) Ferrous fumarate
  - b) Role of vitamin K in blood coagulation
  - c) Plasma expanders
  - d) HMG-COA reductase inhibitors.

4. a) Give classification of anti-thyroid drugs.  
b) Explain the pharmacological effects of  $T_4$  on human being.
5. a) Give the biosynthesis and mechanism of insulin. What do you understand by insulin resistance?  
b) Discuss various biological actions of Glucocorticoid.
6. a) Explain regulation of secretion and importance of Testosterone.  
b) Discuss various methods used as contraceptives.
7. a) Explain various drugs used as oxytocics. Enlist various effects of Prostaglandins on the uterine muscles.  
b) What is the role of Diethylstilbestrol in hormonal replacement therapy?
8. a) Highlight the importance of renin-angiotensin system in the maintenance of Homeostasis.  
b) Give the mechanism of action, uses and toxicities of any one ACE inhibitor.