Note: Attempt all questions. All questions are of equal value.

1. Answer any two of the following: 10x2
   (a) What is direct and indirect drug design? Discuss their limitation of any.
   (b) Discuss the different factors which are taken into consideration for drug design.
   (c) What do you understand by the term geometric optimisation?

2. Answer any two of the following: 10x2
   (a) Explain the importance of drug metabolism.
   (b) Give the structures chemical name and the mode of action of frusemide and triamterene.
   (c) Classify diuretics with examples. Narrate the importance of diuretics.

3. Answer any four questions: 5x4
   (a) Write a short note on antianginals.
   (b) What is use of tolbutamide? Give its structure and synthesis.

[Contd...]
(c) Give the structure mode of action and synthesis of clofibrate.
(d) Write a note on importance of warfarin.
(e) Classify antihypertensive with examples.

4. Answer any **four** questions: 5x4
(a) Discuss the mode of action of carbianazole with importance.
(b) Give the structure, mode of action and synthesis of amantadine.
(c) Write a note on importance of prostaglandius.
(d) Discuss the importance of zalcitabine with its mechanism of action.
(e) Write a note on insulin.