

Roll No.....

P. G. Diploma in Chemo-informatics
Annual Examination – 2010
Medicinal Chemistry-Receptor Legend Interaction
PGDC – 102

Time allowed : 2½ Hours

Max Marks:70

Note: This paper is divided into three sections. Attempt questions from each section as per the instructions.

Attempt all the objective type questions:

Section – A

1. Write Structure & role of Clavulanic acid.
2. What do you mean by double prodrug?
3. Define the role of apozyme.
4. What is antisense therapy?
5. Name two lead compounds isolated from marine recourses.
6. Explain the process of pinocytosis.
7. What is High Throughput Screening?
8. Explain phase IV of clinical trial.
9. Define absolute configuration.
10. Define Diastereomers & Epimers.

[1 x 10]

Section – B

Write short notes on any **six** questions.

1. What are prodrugs? Classify them with suitable example and explain their advantages.
2. Write a note on enzyme inhibition.
3. Explain the process of distribution of a drug in body and explain various distribution factors.
4. What is conjugation? Explain various kind of conjugation.
5. Write a note on convergent synthesis.
6. Define Patent. What is role of patent protection in drug development?
7. Explain molecular modeling with its role in Drug Discovery.
8. Define Drugs? Explain various ways of Drug classification.

[6 x 5 = 30]

Section – C

Attempt any **THREE** questions.

1. Explain the effect of Ph, polarity & pKa on solubility of a drug in water & lipids.
2. What id ADME? Explain Phase I & Phase II metabolism reactions with the process of elimination of a drug from the body.
3. Explain the process & role of *in vitro* & *in vivo* methods of biological testing in drug design.
4. Enumerate various types of synthesis & explain general method of asymmetric synthesis.
5. What is complexing agent? Explain their therapeutic uses in metal poisoning anticancer & arthritis therapy.

[3 x 10 = 30]