

Roll No.

Total No. of Pages : 01

Total No. of Questions : 08

Ph.D in Faculty of Pharmacy
PHARMACEUTICAL CHEMISTRY
M.Code : 77383

Time : 3 Hrs.

Max. Marks : 70

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE questions out of EIGHT question.
2. Each question carry FOURTEEN marks.

1. Describe the various techniques used for resolution of racemic mixtures with citing suitable examples.
2. a) Compare D/L and R/S systems for assigning configuration in optically active compounds. Comment on their merits and demerits..
b) Discuss conformational analysis of *n*-alkanes.
3. a) Describe the structural components of cell membrane.
b) Discuss the analogue design by the concept of bioisosterism.
4. What do you mean by random screening approach of drug design? How does the rational drug designing approach overcome the limitations of this approach?
5. What is QSAR? Briefly describe various general steps involved in the QSAR modeling.
6. Describe structures of lead molecules obtained from the plant origin.
7. Describe the semisynthetic opioid analgesics derived from chemical modification of morphine.
8. Write short notes on :
 - a) Antimalarial from natural origin.
 - b) Combinatorial chemistry.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.