

MPY-204 (Pch)
M. Pharm. (Pharmaceutical Chemistry)
(Second Semester) EXAMINATION, June, 2012
(Grading/Non-Grading)
DRUG DESIGN
MPY-204(Pch))
Time : Three Hours
Maximum Marks : GS :70 NGS: 75

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

1. Scientific and rational methods are adopted for the design and synthesis of newer drugs." Justify the above statement with suitable examples.
2. (a) Once the lead molecule is identified, the process to exploit it is rather Straightforward." Elaborate the above statement with reference to optimization of the lead.
(b) Explain the significance of stereochemistry in drug design.
3. Discuss various QSAR approaches in drug design and give detailed account of 3 D OSAR approach.
4. Compare the traditional approaches of drug design with rational approaches. Give the advantages and disadvantages of QSAR.
5. What do you understand by Solvation effects ? Discuss the pharmacophore based design and explain the 3 D pharmacophore models with their use.
6. (a) Define the term "Prodrug". Elaborate the various types of prodrug design with suitable examples.
(b) Discuss the importance of bioisosteric and steric features in drug design.
7. (a) How do biological, biochemical and physiological informations show a path for development of a new reliable drug ?
(b) Role of molecular make up in governance of physicochemical properties.
8. Write short notes on any three of the following :
 - (a) Topographical descriptor of a receptor
 - (b) Drug-nucleic acid interaction.
 - (c) Co-operativity and thumb rules
 - (d) Generation of 3 D co-ordinates

