

**FACULTY OF PHARMACY**

**M. Pharmacy (Pharmaceutical Chemistry) I – Semester (PCI) (Suppl.)**  
**Examination, August 2019**

**Subject : Advanced Medicinal Chemistry**

**Time : 3 hrs**

**Max. Marks : 75**

**Note : Answer any FIVE questions. All questions carry equal marks.**

- 1 a) What are leads? Discuss the concept of lead discovery.  
b) Discuss the criteria for the identification of target and its validation in drug discovery. 8+7
- 2 a) Explain the concepts of prodrug design and discuss its applications.  
b) Write a note on resistance to antibiotics and anti cancer drugs. 9+6
- 3 a) Give the classification of antineoplastic drugs with suitable examples.  
b) Write a note on HIV protease inhibitors. 9+6
- 4 Enumerate various classes of enzyme inhibitors with suitable examples and discuss about any one class of enzyme inhibitors. 15
- 5 a) Define and differentiate peptide drugs and peptidomimetics with examples and discuss the concept of peptidomimetic drug design.  
b) Discuss the chemistry of prostaglandin. 8+7
- 6 a) Classify Antihypertensive drugs with suitable examples and give the synthesis of Diltiazem.  
b) Explain how the chirality of the drug influences the biological activity. 9+6
- 7 Write a note on :  
a) Lead optimization  
b) Molecular modifications in analogue design 7+8
- 8 a) Write a note on AChE inhibitors  
b) Write a note on cyclooxygenase inhibitors 8+7

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