

B.Pharm III Year II Semester (R09) Supplementary Examinations December 2017

MEDICINAL CHEMISTRY – I

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Define partition co-efficient and solubility. Discuss how partition co-efficient and pKa influences the biological activity.
(b) Write a detail note on pro-drug approach in drug design.
- 2 (a) Define enzyme inhibition. Explain various types of enzyme inhibitions with examples.
(b) Explain the term biotransformation. Write various factors affecting the drug metabolism with examples.
- 3 (a) Classify antiepileptic drugs. Write the synthesis and mechanism of action of ethosuximide.
(b) Discuss the SAR of barbiturates.
- 4 (a) Classify local anesthetics. Outline the mechanism of action and synthesis of lidocaine.
(b) Discuss the mechanism of action and SAR of ester type of local anesthetics.
- 5 (a) Write a brief note on adrenergic receptors.
(b) Discuss the mechanism of action and SAR of sympathomimetics drugs.
- 6 (a) Write a short note on anticholinesterases with its mechanism of action.
(b) Explain SAR and mechanism of action of cholinergic blockers.
(c) Write the synthesis of PAM.
- 7 (a) Enumerate α -receptors.
(b) Write the structures of α -blockers and give the synthesis of prazosin.
- 8 (a) Discuss the SAR of anti-cholinergic drugs with their structures.
(b) Outline the synthesis and uses of propantheline and dicyclomine.
