

Code: 9R01601

B.Pharm III Year II Semester (R09) Supplementary Examinations May/June 2017

MEDICINAL CHEMISTRY – I

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 How are the following physicochemical properties influence the biological activity of the drugs, explain with suitable examples:
 - (a) Solubility.
 - (b) Redox potential.
 - (c) Hydrogen bonding.
 - (d) Protein binding.
- 2 Write briefly on the general pathways of drug metabolism. Explain in detail Phase-I biotransformation with suitable examples.
- 3
 - (a) Classify Barbiturates with examples, discuss in brief the metabolism of barbiturates and outline the synthesis of phenobarbital and meprobamate.
 - (b) Discuss the structural activity relation of Benzodiazepines.
- 4
 - (a) Define and classify local anesthetics on the basis of their chemical features giving examples and outline the synthesis of Procaine.
 - (b) Discuss the mechanism of action of local anesthetics.
- 5
 - (a) Explain the mechanism and structure activity relationship of adrenergic agonists.
 - (b) Outline the synthesis and specific uses of any one adrenergic agent.
- 6
 - (a) What are cholinergic blocking agents? Give their classification.
 - (b) Explain the structure activity relation of acetylcholine with examples.
 - (c) Outline the synthesis of Dicyclomine.
- 7
 - (a) What are sympatholytic agents, classify them in detail with structural examples?
 - (b) Give the synthesis and mechanism of action of phenoxybenzamines.
- 8
 - (a) What are anticholinergic agents, add a note on their structure activity relationship?
 - (b) Outline the synthesis and specific uses of propantheline.
