

B PHARM
(SEM-IV) THEORY EXAMINATION 2019-20
MEDICINAL CHEMISTRY – I

Time: 3 Hours

Total Marks: 75

- Note:** 1. Attempt all Sections. If require any missing data; then choose suitably.
2. Any special paper specific instruction.

SECTION A

- 1. Attempt *all* questions in brief. **10 x 2 = 20****
- a. Define solubility.
 - b. What is ring equivalent bioisosterism.
 - c. Write the mode of action of methyldopa.
 - d. Write the synthetic route of Phenylephrine.
 - e. Define parasympatholytic agents.
 - f. Classify cholinesterase inhibitors.
 - g. What are the ideal characteristic of sedatives and hypnotics.
 - h. Draw the chemical structure of Clonazepam and write mode of action
 - i. Write the synthetic route of halothane.
 - j. Write the mode of action of Ultra short acting barbiturates.

SECTION B

- 2. Attempt any *two* parts of the following: **2 x 10 = 20****
- a. Explain in detail about isosterism and bioisosterism with suitable examples.
 - b. Discuss the SAR beta blocker and write the mode of action synthesis of propranolol.
 - c. Write the chemical structure, mode of action, synthesis and use of carbachol and procyclidine.

SECTION C

- 3. Attempt any *five* parts of the following: **7 x 5 = 35****
- a. Discuss the SAR of barbiturate with suitable examples.
 - b. Classify anti-inflammatory agents. Discuss the chemical structure mode of action and synthesis of ibuprofen.
 - c. Describe geometrical isomerism in relation to affect biological activity.
 - d. Discuss in detail about indirect acting sympathomimetic agents.
 - e. Classify anticonvulsant drugs and Explain SAR of succinimide. Write the mechanism of action and synthesis of ethosuccimide.
 - f. Discuss the SAR of morphine analogues. Write the mechanism of action and synthesis of fentanyl.
 - g. Write a short note on dissociative anaesthetics.