

II B. Pharmacy II Semester Supplementary Examinations, April/May - 2019
MEDICINAL CHEMISTRY-I

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
2. Answering the question in **Part-A** is Compulsory
3. Answer any **FOUR** Questions from **Part-B**
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PART -A

1. a) Write any two synthetic methods of furan. (2M)
- b) Write a very short note on neuromuscular blockers. (2M)
- c) Explain prodrug and soft drug with examples. (2M)
- d) Write the structures and therapeutic uses of carbachol and bethanichol. (2M)
- e) Draw the structures of diclofenac and paracetamol. Mention their therapeutic uses. (2M)
- f) What are adrenergic drugs? Draw the structures of salbutamol and dopamine. (2M)
- g) Write the mode of action of ranitidine. (2M)

PART -B

2. a) Outline the synthesis of quinoline with mechanism. Write the electrophilic and nucleophilic substitution reactions of quinoline. (7M)
- b) Write any two synthetic methods of pyrrole and add note on electrophilic and nucleophilic substitution reactions. (7M)
3. a) Discuss the chemical and structural parameters affecting drug activity. (7M)
- b) Define drug metabolism. Explain phase-II reactions. (7M)
4. a) Define and classify antiepileptics. Write the synthesis of phenytoin. (7M)
- b) Write the synthesis, mode of action, SAR and therapeutic uses of Phenobarbital. (7M)
5. a) Write the synthesis, mode of action, SAR and therapeutic uses of Ephedrine. (7M)
- b) Give an account on cholinergic drugs. (7M)
6. a) Classify NSAIDs. Give the synthesis and mode of action of Indomethacin. (7M)
- b) Give the classification of local anaesthetics. Outline the synthetic scheme for procaine (7M)
7. a) Define and classify antithyroid drugs. Sketch one structure from each class. Outline the synthesis of methimazole. (7M)
- b) Classify Oral antihyperglycemic agents. Outline the synthesis and uses of glibenclamide. (7M)