

(LO 4271) **FEBRUARY 2019** Sub. Code: 4271

B.PHARM. EXAMINATION FOURTH YEAR PAPER V – MEDICINAL CHEMISTRY - II

Q.P. Code: 564271

Time: Three hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Define antineoplastic agents. Elaborate the classification, mechanism of action and structures of various alkylating agents and antimetabolites. Also write the synthesis of any three.

- 2. a) Write a detailed note on combinatorial chemistry.
 - b) Describe various techniques utilized in computer aided drug design.

II. Write notes on: $(8 \times 5 = 40)$

- 1. Enumerate the synthesis of chloroquine.
- 2. Write a detailed note on cardiotonics.
- 3. Write in detail about the SAR of azole anti-fungals.
- 4. Classify semisynthetic pencillins and write the advantages of semisynthetic pencillins over natural pencillins.
- 5. Brief out a note on glucocorticoids.
- 6. Enumerate the synthesis and mechanism of action of amantadine.
- 7. Write a note on insulin and its preparations.
- 8. Write a note on lipophilic parameters and its application in drug design.

III. Short answers on: $(10 \times 2 = 20)$

- 1. What is crystalluria and give the methods used to reduce crystalluria?
- 2. Write the synthesis of phenytoin.
- 3. Brief a note on the mechanism of action of ethionamide.
- 4. Write on angiotensin receptor antagonist.
- 5. Write the structure of ciprofloxacin and nitrofurantoin.
- 6. Write a short note on antithyroid drugs.
- 7. Write the medicinal importance of dihydropyridines.
- 8. Explain the structure and use of trimethoprim.
- 9. Define anti-pedicular agents.
- 10. Write a short note on benzimidazole anthelmintics.
