

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

(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 x 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 x 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 penicillins and write the advantages of semisynthetic penicillins over natural penicillins.
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 x 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-peptidic agents.
10. Write a short note on benzimidazole anthelmintics.
