

**VINAYAKA MISSION'S RESEARCH FOUNDATION  
(DEEMED TO BE UNIVERSITY), SALEM**

**B.PHARM. DEGREE EXAMINATION – July 2021  
Sixth Semester**

**MEDICINAL CHEMISTRY - III**

Time : Three hours

Maximum: 75 marks

I. Write essays on any **TWO** questions: (2 x 10 = 20)

1. Classify antibiotics with examples. Explain in detail the SAR of Penicillins.
2. List out the drugs used in the treatment of urinary tract infections. Write the SAR quinolones. Engrave the synthesis of Ciprofloxacin.
3. Explain about the concept, advantages and disadvantages of combinatorial chemistry. Add a note on the solid phase synthesis.

II. Write short answers on any **SEVEN** questions: (7 x 5 = 35)

4. Classification and SAR of Sulfonamides.
5. Classify Penicillins with examples and the mechanism of action of penicillins.
6. SAR of Quinolines.
7. Concept and applications of prodrug design.
8. Write the structure, mechanism of action and uses of Tetracycline.
9. Mechanism of action and synthesis of Nitrofurantoin.
10. Synthesis, mechanism of action and uses of Metronidazole.
11. Write the synthesis and uses of Diethylcarbamazine citrate and Mebendazole.
12. Discuss on pharmacophore based docking. Enumerate its advantages and disadvantages.

III. Write short notes on : (10 x 2 = 20)

13. Write the structure of Clavulanic acid and Sulbactam.
14. Draw the structure for INH and PAS.
15. Classification of anti-tubercular agents with examples.
16. Structure and uses of Dapsone.
17. Structure and uses of Nitrofurantoin.
18. Mention some anti fungal antibiotics.
19. Mechanism of action and structure of Albendazole.
20. Define binding affinity.
21. Importance of QSAR in drug design.

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