

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

**B.PHARM. DEGREE EXAMINATION – JULY 2019
Fourth Semester**

MEDICINAL CHEMISTRY - I

Time : Three hours

Maximum: 75 marks

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

1. Explain the importance of Phase I and II reactions in drug metabolism with suitable examples.
2. What are cholinergic blocking agents? Classify them with examples. Explain the SAR of cholinolytic agents. Write the synthesis of dicyclomine.
3. Classify sedative and hypnotics with examples. Explain the mechanism of action of benzodiazepines. Write the synthesis of diazepam.

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

4. Hydrogen bonding and biological action of the drug.
5. Biosynthesis of catecholamine.
6. Structure activity relationship of phenothiazines.
7. Synthesis and uses chlorpromazine.
8. Synthesis and SAR of barbiturates.
9. Synthesis and uses of ketamine hydrochloride.
10. Classify anti-inflammatory drug with suitable example and write the synthesis of Fentanyl.
11. Structure activity relationship of Beta blockers.
12. Structure activity relationship of Morphine.

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

13. Biological properties of isomers.
14. State about any three factors influencing drug metabolism with example.
15. Write the structure and uses of ethotoin.
16. Mechanism of anti-convulsant drugs.
17. Mechanism of anti-inflammatory drugs.
18. Write the uses of the following : procyclidine, thiopental sodium.
19. Write the structure and uses of propranolol.
20. Name any two alpha adrenergic blockers with structure.
21. Write the structure and uses of Phenylbutazone.
22. Write the structure for the following : a) Indomethacine b) Halothane.