

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

**B.PHARM. DEGREE EXAMINATION – JANUARY 2020  
Fifth Semester**

**MEDICAL CHEMISTRY - II**

Time : Three hours

Maximum: 75 marks

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

1. a) Classify antihistaminic agents with suitable examples. (4)
- b) Outline the synthesis of diphenhydramine and promethazine. (6)
2. a) Enumerate in detail about the SAR of progesterones. (5)
- b) Write short notes on oral contraceptives. (5)
3. a) What are diuretics? Classify them with examples. (6)
- b) Outline the synthesis of furosemide. (4)

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

4. Classify anticancer agents with examples.
5. Short notes on anti thyroid drugs.
6. Outline the synthesis of acetazolamide and mercaptopurine.
7. Write short notes on ACE inhibitors.
8. Write a note on insulin and its preparations.
9. Classify local anesthetics with examples. Give the synthesis of benzocaine.
10. Write the chemical structure and use of  
    a) Methimazole b) Prednisolone c) Levonorgestrol
11. Describe the structure activity relationship (SAR) and toxicity of cardiac glycosides.
12. Classify antidiabetics and write the mechanism of action of pioglitazone

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

13. Draw any two the structures of statins.
14. Write the structure and use of sildenafil.
15. Any two structure of non-steroidal oestrogens.
16. Write the synthesis of warfarin.
17. What are high ceiling diuretics?
18. Note on doxorubicin.
19. Any two plant product used as anticancer agents.
20. Classify anti arrhythmic agents.
21. Synthesis of acetazolamide.
22. Mechanism of action of chlorambucil.

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