

**Final Year B.Pharm Degree Supplementary Examinations May 2019**  
**Pharmaceutical Chemistry - V**  
**(Medicinal Chemistry)**  
**(2010 scheme)**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Draw chemical structure wherever necessary.

**Essays**

**(3x10=30)**

1. Explain the importance of ionization, protein binding and chelation properties of drugs in relation to its biological activity with suitable examples
2. Define and classify sympathomimetic agents. Explain the SAR of sympathomimetic agents.
3. Discuss on local anesthetics. Mention the structure and synthesis of lignocaine.

**Short notes**

**(14x5=70)**

4. Define and explain iso-sterism.
5. Outline the synthesis of any two adrenergic antagonists.
6. The structure and uses of the following drugs: pethidine and chloroquine
7. The applications of quantum mechanics in drug designing.
8. What are anti-hypertensives. Give the structure of enalapril and nifedipine.
9. Classify general anesthetics with example and outline the synthesis of halothane.
10. Explain structural activity relationship of morphine analogues.
11. Outline the synthesis of methotrexate and 5-fluorouracil.
12. The chemistry of cephalosporins.
13. What are oral hypoglycemic agents. Describe the synthesis of tolbutamide.
14. The structure, mechanism of action and uses of frusemide and phenytoin.
15. Computer aided drug designing.
16. Explain about parasympathomimetic agents with suitable examples.
17. The synthesis of sulfacetamide and dapsone.

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