

**Final Year B.Pharm Degree Examinations May 2019**  
**Pharmaceutical Chemistry - V**  
**(Medicinal Chemistry)**  
**(2012 scheme)**

**Time: 3 Hours****Total Marks: 100**

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

**Essays****(3x10=30)**

1. Classify antiviral agents. Discuss the chemistry, mechanism of action and uses of any two drugs. Add a note on synthesis of acyclovir.
2. Elaborate on the chemistry, mechanism of action and uses of sulphonamides. Add a note on synthesis of sulphacetamide.
3. Classify antihistaminic agents with suitable examples. Add a note on synthesis of diphenhydramine and promethazine.

**Short notes****(14x5=70)**

4. Differentiate between NSAIDS and narcotic analgesics with examples.
5. Trimethoprim.
6. Local anti-infective agents.
7. Discuss the SAR of phenothiazine derivatives used as antipsychotics.
8. Explain the chemistry and uses of cholinergic blockers.
9. Classify antihypertensive agents with suitable examples.
10. Differentiate between traditional drug design and mechanism based drug design.
11. Explain the basic concepts of prodrug design.
12. Explain the chemistry and uses of thiazide diuretics.
13. Synthesis and uses of pethidine.
14. Give the chemical structure for aspirin, morphine, methyl dopa, ethionamide and cyclopentolate
15. Chemistry, uses and mechanism of action of tetracyclines.
16. Chemistry and synthesis of sodium valproate.
17. Anti-thyroid agents.

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