

**Final Year B.Pharm Degree Examinations May 2017**  
**PHARMACEUTICAL CHEMISTRY - V**  
**(Medicinal Chemistry)**  
**(2012 scheme)**

Time: 3 Hours

Total Marks: 100

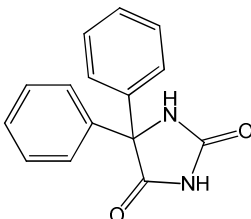
- Answer all Questions.
- Draw chemical structure wherever necessary.

**Essay****(3x10=30)**

1. Classify local anesthetics giving one example from each class with structure. Discuss about first line anti tubercular agents.
2. Explain the significance of optical isomerism and ionization of drugs in relation to biological action. Describe in detail about molecular modeling in drug design.
3. Explain the mechanism of action and use of methotrexate and chlorambucil with structure. Give the synthesis of 5-fluorouracil and methotrexate

**Short Notes:****(14x5=70)**

4. Identify the drug given below and give its synthesis, mechanism of action and use.



5. Discuss the mechanism of action of general anesthetics and give the synthesis of any one local anesthetic.
6. Give the synthesis and uses of chlorpromazine.
7. Classify beta adrenergic antagonists and mention their uses.
8. Give the synthesis of one drug belonging to the class of cholinergic agent and cholinergic antagonist.
9. Give the synthesis of pethidine and indomethacin.
10. Classify antihistaminic agents giving one example from each class with structure.
11. Give the structure of hydralazine, niacin, ethacrynic acid, aspirin and triamterene.
12. Discuss the SAR and mechanism of action of sulfonyl ureas used as hypoglycemic agents
13. Classify antifungal agents with example. Give the synthesis of dapsons.
14. Classify antimalarial agents with example. Give the synthesis of DEC.
15. Applications of quantum mechanics.
16. Antiviral agents.
17. Chemistry of tetracyclines

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