

[LC 4258]

FEBRUARY 2013

Sub. Code: 4258

**SECOND YEAR B.PHARM. EXAM**

**Paper III – ADVANCED PHARMACEUTICAL ORGANIC CHEMISTRY**

**Q.P. Code : 564258**

**Time : Three hours**

**Maximum: 100 Marks**

**(180 Min)**

**I. ELABORATE ON:**

**(2x20=40)**

1. a) Write in detail about asymmetric synthesis(10)  
b) Describe the stereochemistry of cyclic compounds(10)
2. a) Describe the chemistry and constitutions of ephedrine(15)  
b) Give the structure and five reactions of atropine(5)

**II. SHORT NOTES**

**(8x5=40)**

1. Write the synthesis of furan
2. Describe the Clemmenson's reduction with suitable reaction
3. Classify heterocyclic compounds with example
4. Explain the Beckmann rearrangement with mechanism
5. Classify flavonoids with example
6. Describe the chemistry of digitoxin
7. Give the chemical reactions of papaverine
8. Describe the chemistry and uses of vitamin-E

**III. SHORT ANSWERS**

**(10x2=20)**

1. Add a note on sequence rule
2. Write any two reactions given by pyridine
3. Give two examples for the oxidative reactions of periodic acid
4. Describe the reactions of thiazole
5. Give the uses of metal hydride
6. Write the preparation of citral
7. Discuss the chemistry of uric acid
8. Write the chemistry of folic acid
9. Sketch the structures of caffeine and theobromine
10. Draw the structure and chemical name of thiamine

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