QP CODE:201006 (OLD SCHEME) **Reg.No: ……..**

Second Year B.Pharm Degree Supplementary Examinations - March 2015

PHARMACEUTICAL CHEMISTRY III *(2010 SCHEME)*

(Advanced Organic Chemistry)

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

- Answer all Questions.
- Write equations wherever necessary.

Essay **(3x10=30)**

1. Explain the sequence rules relating the R and S configuration. Draw and specify as R and S the enantiomers if any for : ● 1, 2 - dibromo-2 methyl butane ● 3 - bromo hexane ● 3 - chloro - 3 methyl pentane
2. Mention the synthesis and chemical reactions of phenanthrene and naphthalene
3. Discuss the following reaction as synthetic tools : ● Oxidation with lead tetra acetate ● Dehydrogenation

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

4. Explain the terms: ● Chiral ● Enantiomers ● Diastereomers ● Optical isomers ● Epimerisation
5. Explain Walden inversion with a suitable example
6. 'Pyrrole is more reactive than furan'- Explain the reasons
7. Explain why pyridine undergoes, nucleophilic substitution at 2- position.
8. Explain Beckmann rearrangement and Schmidt rearrangement
9. Explain asymmetric synthesis and its significance
10. Explain the nomenclature and synthesis of acridine
11. Define oxidation and discuss the oxidation with perchloric acid.
12. Define and explain Darzein reaction
13. Important chemical reactions of anthracene by giving the relevant structures
14. Explain why electrophilic substitution in furan occurs preferentially at the alpha position
15. Basicity of pyridine with special reference to aliphatic and aromatic amines
16. What is conformational analysis and explain with an example
17. Explain the elements of symmetry.

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