

(Following Paper ID and Roll No. to be filled in your
Answer Books)

Paper ID : 150217

Roll No.

B. PHARM.

Theory Examination (Semester-IV) 2015-16

PHARMACEUTICAL CHEMISTRY-II

Time : 3 Hours

Max. Marks : 100

Attempt all the 3 section.

Section-A

1. Attempt all the parts. (2×10=20)

- (a) What is the difference between atomic orbital and molecular orbital.
- (b) What do you mean by hybridization?
- (c) Write about Sp^3 , Sp^2 and Sp -hybridizations.
- (d) What is difference between Inductive effect and Mesmeric effect?
- (e) Give full abrivation of IUPAC.

- (f) Write about Free Radical Reaction of alkanes.
- (g) Write Huckel's rule for benzene.
- (h) Why Phenols on prolong exposure to air turns pink in colour?
- (i) Describe the behaviour of Carbon as observed in organometallic compounds.
- (j) Give types of chemical bonding.

Section-B

2. Attempt any five parts of the following. (10×5=50)

- (a) What are alkanes? Write about their structure and hybridization. Write about chemical properties of alkanes.
- (b) Write about methods of preparation of primary and tertiary alcohols.
- (c) Explain Resonance in benzene in details.
- (d) Explain Perkin Reaction and Aldol condensation with mechanism.
- (e) Describe the difference between conformations and configurational analysis in detail.

- (f) What do you mean by optical activity? Write the essential conditions for optical activity. How is it measured?
- (g) "Phenols are acidic in nature inspite of having OH group in it" why?

Section-C

Note: Attempt any two parts of the following. (15×2=30)

3. Describe Markonikoff's addition for alkenes. What happens if peroxide is present in the reaction?
4. Explain Orientation of Aromatic substitution in benzene with mechanism.
5. Write in detail about Freidel crafts, Alkylation and Acylation reaction.