



February 2012

[LA 4252]

Sub. Code: 4252

FIRST B.PHARM. EXAMINATION

Paper II – PHARMACEUTICAL ORGANIC CHEMISTRY

Q.P. Code : 564252

Time: Three Hours

Maximum: 100 marks

Answer ALL questions

I. Elaborate on:

(2 x 20 = 40)

- (a) Give the structure nomenclature, preparation and reaction of Cycloalkanes. (10)
(b) Add a note on addition reactions of conjugated dienes. (5)
(c) Explain the formation of bonding, anti-bonding orbitals. (5)
- (a) What is kekule structure of benzene and write their resonance structure of Benzene. (7)
(b) Explain the S_N2 reaction with the help of a suitable example. (8)
(c) Outline the test for purity, preparation and medicinal uses of saccharin. (5)

II. Write notes on:

(8 x 5 = 40)

- What is the diazonium reaction? Explain the general reaction?
- Write the synthesis and properties of phenanthrene.
- Explain keto-enol tautomerism with examples.
- Write the preparation, test for purity and medicinal uses of benzoic acid
- Explain the Bayer's strain theory and its limitations.
- Give the nomenclature and reactions of alkynes.
- Explain the markovnikov's rule including the mechanism and with an example.
- What are Grignard reagent and explain with one example?

III. Short Answers

(10 x 2 = 20)

- Define intermolecular bonding.
- Write the structure and uses of citric acid
- How will you test the purity of vanillin?
- Define hyper conjugation.
- What is energy of activation?
- Explain the following reactions
(a) Sandmeyer reaction (b) Gattermann reaction.
- What is Diels?
- What are alkyl halides?
- Write the preparation of malonic ester
- Explain bond fission.

