

Code: 9R01103

R09

B.Pharm I Year (R09) Supplementary Examinations June 2018

PHARMACEUTICAL ORGANIC CHEMISTRY – I

(For 2009 (LC), 2010, 2011, 2012 regular & 2011 (LC), 2012, 2013 lateral admitted batches only)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Discuss hyper conjugation with example and define bond dissociation energy.
(b) Explain concept of resonance with examples.
- 2 (a) Explain the mechanism of Anti-Markovnikov's rule with suitable example.
(b) Write the stability of alkenes and give the reaction of 1,4 addition reaction.
- 3 (a) Explain theory of reactivity and orientation in mono-substituted benzenes.
(b) Define Huckel's $4n+2$ rule and write the criteria for aromatic compounds.
- 4 (a) Write the stereochemistry of S_N1 mechanism and define Walden inversion.
(b) Explain the concept of benzyne ion.
- 5 (a) Write any two method of preparation of ethers.
(b) Explain Kolbe's Schmidt reaction with mechanism.
- 6 (a) Outline the mechanism of Perkin's condensation.
(b) Explain the mechanism of Aldol condensation.
- 7 (a) Explain ionization of carboxylic acid and write the structure of carboxylate anion.
(b) Write the reaction mechanism involved in Hoffmann's degradation reaction.
- 8 (a) Write any two methods of preparation for nitriles.
(b) Arrange the order of basicity of aniline, trimethyl amine & methyl amine. Give the reason.
