

FACULTY OF PHARMACY
Pharm. D (6 YDC) I-Year (Instant) Examination, March 2018

Subject : Pharmaceutical Organic Chemistry

Time : 3 Hours**Max. Marks: 70**

Note: Answer all questions from Part – A, answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

- 1 Define electrophile with examples.
- 2 Write the structural formula for the following:
(a) 2-ethyl -1-methyl butane
(b) 2 – hydroxyl-4-pentanone
- 3 Define Baye's strain theory.
- 4 Why chlorobenzene undergoes electrophonic?
- 5 Why acetic acid is stronger than ethanol?
- 6 Write the structure and medicinal uses of the following:
(a) Dimercaprol (b) Lactic acid
- 7 Why phenols are much more acidic than alcohols?
- 8 Write about Wittig Reaction.
- 9 Describe the various rules governing Resonance.
- 10 Define free radicals with examples.

PART – B (5 x 10 = 50 Marks)

- 11 Define free radical substitution reaction. Explain the mechanism of halogenations of alkanes.
- 12 Explain a note on E₁ and E₂ mechanism.
- 13 Explain the following:
(a) Markovnikov's addition
(b) Free radical addition
- 14 Explain in detail about acyl substitution reaction with four examples.
- 15 Describe the mechanism and stereochemistry of S_N¹ reaction.
- 16 Write the reaction and mechanism of
(a) Cannizaro reaction
(b) Reformatsky reaction
- 17 Write the structure, preparation, assay and uses of the following:
(a) Asprin
(b) Saccharin sodium
- 18 Explain the following:
(a) Basicity of amines
(b) Benzoin condensation
