

[LN 804] AUGUST 2018 Sub. Code: 3804

## PHARM. D DEGREE EXAMINATION (2009-2010 Regulation) FIRST YEAR PAPER IV – PHARMACEUTICAL ORGANIC CHEMISTRY

Q.P. Code: 383804

Time: Three hours Maximum: 70 Marks

I. Elaborate on:  $(4 \times 10 = 40)$ 

1. Define elimination reaction. Explain about its Kinetic, mechanism and isotopic effect of E1 and E2 reactions.

- 2. Write a note on Markownikoff's rule and Peroxide effect.
- 3. Explain the following reactions:
  - i) Aldol condensation. ii) Michael addition.
- 4. Explain Bayer's Strain Theory and discuss its limitations.

II. Write notes on:  $(6 \times 5 = 30)$ 

- 1. Write a note on activating and deactivating O, P, and M directing groups.
- 2. Explain Cannizaro reaction.
- 3. Add a note on Structural Isomerism.
- 4. Add a note on Free Radical substitution reaction of alkanes.
- 5. Preparation, test for purity, assay and uses of Vanillin.
- 6. What is dipole moment? Explain with suitable example.

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