

[PHARMD 0321]

MARCH 2021 Sub. Code: 3804

(OCTOBER 2020 EXAM SESSION) PHARM. 'D' DEGREE EXAMINATION

FIRST YEAR (2009-2010 Regulation)

PAPER IV – PHARMACEUTICAL ORGANIC CHEMISTRY Q.P. Code: 383804

Time: Three hours Maximum: 70 Marks

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

1. Explain the mechanism and reaction involved in

- a) Sandmeyer's reaction.
- b) Hofmann rearrangement.
- 2. Explain the mechanism, kinetics and orientation of E1 and E2 reactions.
- 3. Describe briefly about Baeyer strain theory by depicting the orbital picture of angle strain of various cyclo alkanes.
- 4. Enumerate the mechanism involved the peroxide initiated addition of hydrogen bromide to alkenes.

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

1. Define oxidation. Write a note on the types of oxidizing agents with examples.

2. Add a note on the acidity of Phenols.

- 3. Write the preparation, tests for purity, assay and uses of Mephenesin.
- 4. Enumerate briefly on the conversion of carboxylic acid into its various derivatives.
- 5. Write a note on activating and deactivating ortho, para and meta directing groups.
- 6. Write a note on Walden inversion.
