

[LG 804]

APRIL 2015

Sub. Code: 3804

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION
(2009-2010 Regulation)

FIRST YEAR

PAPER IV – PHARMACEUTICAL ORGANIC CHEMISTRY

Q.P. Code: 383804

Time: Three Hours

Maximum: 70 marks

Answer All questions

I. Elaborate on:

(4 x 10 = 40)

1. Discuss the electrophilic substitution reaction in aromatic system.
Explain Mechanism of their reaction.
2. Briefly discuss Markownikoff's rule and Peroxide effect with an example.
3. Discuss about Dehydro halogenation of alkyl halides.
Explain about its Kinetic and mechanism of E1 and E2 reactions.
4. Explain the following reaction with mechanism:
 - a) Michael addition.
 - b) Reimer tieman's reactions.

II. Write notes on:

(6 x 5 = 30)

1. Write short notes on Baeyr's strain theory.
2. Mention the structure and name them according to IUPAC
 - i) Formic acid.
 - ii) Acetaldehyde.
 - iii) Acetamide.
 - iv) Neopentane.
3. Write the structure, preparation, Assay & chemical uses of Ethylene diamine dihydrate.
4. Explain stereochemistry of SN1 and SN2 reactions.
5. Explain the method of preparation of esters and anhydride.
6. Explain the Wittig reaction with mechanisms.
