

[KV 804]

SEPTEMBER 2009

Sub. Code: 3804

DOCTOR OF PHARMACY (PHARM. D) DEGREE EXAMINATION**(Regulations 2008-2009)****(Candidates admitted from 2008-2009 onwards)****FIRST YEAR****PAPER IV – PHARMACEUTICAL ORGANIC CHEMISTRY*****Q.P. Code: 383804*****Time: Three Hours****Maximum: 70 marks****Answer ALL questions****I. Elaborate on:****(2 x 20 = 40)**

1. a) Explain the nucleophilic substitution reactions with suitable examples.
b) Add a note on mechanisms and kinetics involved in SN^1 and SN^2 reactions.
2. Explain the mechanisms of following name reactions.
 - a) Benzoin condensation.
 - b) Wittig reaction.
 - c) Cannizaro reaction.
 - d) Kolh's reaction.

II. Write notes on:**(6 x 5 = 30)**

1. Preparation, tests for purity, assay and uses of aspirin.
2. Explain the reaction mechanisms of sandmeyer's reduction with suitable examples.
3. Explain the bimolecular displacement mechanism for nucleophilic aromatic substitution with suitable examples.
4. Explain the conversion of acid to acid chloride and acid to esters with suitable examples.
5. Describe the effect of substituent groups on aromatic nucleus.
6. Outline any two methods of preparation of ketones.
