

SARDAR PATEL UNIVERSITY
Programme & Subject: M.Sc (Organic Chemistry)
Semester: III
Syllabus with Effect from: June - 2013

Paper Code: PS03CORC03	Total Credit: 4
Title Of Paper: Heterocyclic Chemistry	

Unit	Description in detail	Weightage (%)
I	Nomenclature of fused heterocycles: Hantzsch-Widman Nomenclature System, Reactions and Synthesis of Indoles, Benzo[<i>b</i>]thiophenes and Benzo[<i>b</i>]furans and Related compounds, Review of 1, 3 and 1, 2-azoles.	25%
II	Reactions and Synthesis of Bicyclic heterocycles: Quinolines and Isoquinolines, Reactions and Synthesis of Bicyclic heterocyclic systems containing two or more nitrogen atoms: Cinnolines, quinazolines, quinoxalines, phthalazines and pteridines.	25%
III	Reactions and Synthesis of Six membered heterocycles containing nitrogen: Pyridines, Diazines, triazines and tetrazines.	25%
IV	Reactions and Synthesis of Oxygen containing heterocycles: Pyriliums, 2-and 4-pyrones, Benzopyryliums and benzopyrones and Advance molecules.	25%

Basic Text & Reference Books:-

- Heterocyclic Chemistry, 4th Edition by J. A. Joule & K. Mills, Published by Chapman & Hall (1995)
- Principles of modern heterocyclic chemistry, Edited by Leo A. Paquette, Published by Pearson Benjamin Cummings (1968)
- Heterocyclic Chemistry, 3rd Edition by Thomas L. Gilchrist, Published by Prentice Hall (1997)
- The Structure & Reactions of Heterocyclic Compounds, Edited by Michael Henry Palmer, Published by Edward Arnold (1967)
- Heterocyclic Chemistry, Edited by Adrian Albert, Published by The Athlone Press (1959)

