ORGANIC CHEMISTRY (BS-ADP 8th Semester)

Module Code: Chem-461

Module title: Heterocyclic Chemistry
Name of Scheme: BS-ADP 8th Semester
Department: School of Chemistry

Faculty: Science
Module Type: Compulsory
Module Rating: 2 Credits

OBJECTIVES:

To develop basic understanding about methods of preparation, reactions and applications of different types of heterocyclic compounds.

SYLLABUS OUTLINES:

1. <u>Heterocyclic Chemistry</u>

Five and six membered aromatic and aliphatic heterocyclic compounds with one and more identical hetero-atoms, five and six membered heterocycles with two different hetero-atoms. Their syntheses and reactions

RECOMMENDED BOOKS:

- 1. Organic Chemistry, Vol. I (6th Ed.) and II (5th Ed.) by I.L. Finar, Pearson Education (Singapore) Pvt. Ltd. 2008.
- 2. March's Advance Organic Chemistry: Reactions, Mechanisms and Structures. (6th Ed.) by M.B. Smith and J. March, Wiley, 2007.
- 3. Organic Chemistry, (5th Ed.) by S.H. Pine, McGraw Hill, New York, USA, 1987.
- 4. Organic Chemistry, (6th Ed.) by Francis A. Carey, McGraw Hill, USA, 2005.
- 5. Organic Chemistry, (6th Ed.) by R.T. Morrison, R.N. Boyd and R.K. Boyd, Benjamin Cummings, 1992.
- 6. Organic Chemistry, by Jonathan Clayden, Nick Greeves and Stuart Warren, Oxford University Press, 2000.
- 7. Organic Synthesis, The disconnection approach, Stuart Warren, John Willey and Sons 1993; and work book be same 1994.
- 8. Designing Organic Synthesis, A Programmed Introduction to synthon approach, S. Warren, John Willey and Son, 1992.
- 9. Guide book to Organic Syntheses, R. K. Mackie, D. M. Smith, Longman Group Limited, 1982.