

SARDAR PATEL UNIVERSITY
Programme: MSC (Pharmaceutical Chemistry)
Semester: IV
Syllabus with effect from: June 2010

Paper Code: PS04CPCH04 - 05	Total Credits: 8
Title Of Paper: Practical's or Dissertation	

Unit	Description in detail	Weightage (%)
1	Group – A: To carry out the synthesis of some drugs and its intermediates (3 - 4 steps) (viz. Anthrone, Acridone, p-bromochlorobenzene, p-nitrochlorobenzene, p-chlorobenzoic acid, sulphanilamide, benzanilide, benzillic acid, anthranillic acid, chalcones, Butacaine, Benzocain, Phenecetin, Antipyrine, prilocaine, procaine, dibucaine, etc.) using basic unit processes, unit operations and analytical techniques viz. TLC., IR, NMR and Mass. Antimicrobial evaluation of above synthesized derivatives or/and few commercial 3rd / 4 th generations of antibiotics.	34 %
2	Group – B: To demonstrate microencapsulation of various drugs, particle size characterization and release profile. Demonstration of GC, HPLC and various separation techniques. Antimicrobial evaluation of above synthesized derivatives or/and few commercial drugs.	33 %
3	Group – C: Effect of pH / particle size on dissolution studies. To determine percentage purity of commercial soda ash, calcium carbonate. To determine percentage purity of alcohol by iodometric titration. To determine oxidizing power of hydrogen peroxide solution. Microbial limit test of starch, acacia , gelatine as per Pharmacopoeia. Testing of various parameters in different packaging materials. Estimation and analysis of various commercial drugs and drug intermediates using conventional and instrumental techniques viz: Vanillin, Riboflavin, Acebutolol hydrochloride, Ibuprofen, Alluplurinol, Aspirin, Codeine phosphate syrup etc. Amount of silver by Volhard method. Extraction and Isolation of Natural product viz. Nicotine dipicrate, Caffeine, Quinine, etc.	33 %

Basic Text & Reference Books:

- A Text book of Practical Organic Chemistry by Vogel's, Longman; ISBN-13: 9780582442504; ISBN: 0582442508.
- Elementary Practical Organic Chemistry by Vogel's, Part I, II, & III (ELBS); ISBN: 81-239- 1033-9.
- Practical Organic Chemistry by Mann and Saunders; Orient Logmann Publisher; OLBN: 0-00209-058-9.
- Comprehensive Practical Organic Chemistry: Volume – I & II by V. K. Ahluwalia, Universities Press (India) Pvt. Ltd; ISBN-13: 9788173712739; ISBN: 8173712735.
- Indian Pharmacopoeia 1996: Volume I (A-O) and Volume II (P-Z), Addendum 2000 and Addendum 2002 (Set of 4 Vols.) Publisher: Controller of Publications, Delhi, New Delhi, India; ISBN-13: 9788190065801; ISBN: 8190065807.
- The Theory and practice of Industrial pharmacy, by Lachman, Leon; Lieberman, Herbert A.; Kanig, Joseph L; Publisher: Lea & Febiger, Philadelphia, ISBN-13: 9780812109771; ISBN: 0812109775.
- Introduction to pharmaceutical dosage forms, Howard C. Ansel; Publisher: Lippincott Williams and Wilkins; ISBN-13: 9780812109566; ISBN: 0812109562.

