

SARDAR PATEL UNIVERSITY
Programme: B.Sc (Industrial Chemistry-Vocational)
Semester: V
Syllabus with effect from: June-2013

Paper Code: US05CICV05	Total Credit: 3
Title of Paper: Pharmaceutical - I	

Unit	Description in detail	Weightage (%)
I	Historical background and development of pharmaceutical industry in India in brief. Pharmacopeas - I.P. , B.P., U.S.P., Brief idea of Pharmaceutical Legislation, Drugs & Cosmetics Act-1940 Introduction to various types of formulation and routes of administration.	25%
II	Pharmaceutical Packaging: Introduction, package selection, packaging materials, packaging machinery, quality control of packaging materials. Surgical dressings: Gauzes, bandages, sutures, ligatures. Detailed study of cat-gut with respect to manufacturing process, Sterilization, Quality control and uses. Brief study of sterilizations. Pharmaceutical quality control: Aseptic condition, sterility testing, pyrogenic testing, glass testing. Flow properties of powders: Bulk density, tape density, true density, Porosity, Husanar's ratio, Carr's index, Angle of repose.	25%
III	Study of various types of pharmaceutical excipients: Glidants, lubricants, diluents, binders, coating agents, antioxidants, emulsifying agents, suspending agents, preservatives, colouring agents, flavouring agents, sweetening agents.	25%
IV	Phytopharmaceuticals: Introduction and Plant Classification. Crude drugs: cultivation, collection, storage of medicinal plants and brief idea about marketed preparations/formulations. Evaluation of crude drugs: moisture content, extractive value, volatile oil content, foreign organic matter.	25%

Basic Text & Reference Books:

- Martin's Physical Pharmacy and Pharmaceutical science, Fifth edition, By Patricle J Sinko, Indian edition, B.I. Publication.
- Remington – The science and Practice of Pharmacy, 21st edition Vol. I and II, Indian Edition.
- A Text book Pharmacognocoy by S H Lachake, ATUL Prakashan.
- Pharmaceutical packaging technology, by U K Jain, & D C Goopale. Pharma Med Press
- Pharmaceutics – I by P V Kasture & S. A. Hasan, Nirali Prakashan.
- Pharmaceutical Jurisprudence, by Girish K Jani, Atul Prakashan.
- Physical Pharmaceuticals (Part I) by Girish Jain, (page 358) Atul Prakashan.
- Text Book of Physical Pharmaceutics by CVS subrahmanyam. Vallbh Prakashan, Delhi.
- Text Book of Pharmaceutical Formulation by B M Mithal, Vallabh Prakashan. Delhi. (Chapter 10,11)

