

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.E. SEMESTER : VII**  
**CHEMICAL TECHNOLOGY**

**Subject Name: Medicinal Chemistry - II & Technology of Sterile Products**

**Subject Code: 173606**

Teaching Scheme				Evaluation Scheme			
Theory	Tutorial	Practical	Total	University Exam(E)	University Exam(P)	Mid Sem Exam(Theory) (M)	Practical (Internal)
4	0	3	7	70	30	30	20

Sr. No	Course contents
1.	Bioorganic chemistry of vitamins, Peptide & protein drugs, Carbohydrate drugs
2.	Drugs acting on hormonal system a) Ant diabetic agents b) Steroid hormones-adrenocorticoids. c) Sex steroids & antagonists, oral contraceptives d) Thyroid & ant thyroid agents. e) Drugs acting on calcium homeostatic, iron reparations Prostaglin's & related compounds
3.	Preformulation, Formulation, Evolution, Large scale manufacture & packing with focus on equipment with reference Parenterals & ophthalmic
4.	Layout design & Unit operations related to above dosage forms
5.	Blood products, Glanular products, medical sutures, ligatures
6.	Stability evaluation of pharmaceutical dosage forms

**Reference Books:**

1. Dispensing of Pharmaceutical Students, Cooper & Gunn, London, Pitman Medical Pubs. Co. 1965
2. Therapeutic Systems: Pattern-Specific Drug Delivery, Hellmann,Struttgart, G. Thiense Pub. 1978.
3. Bricyclopedia of Pharmaceutical Technology, J.Swarbrick, New York, Marcel Dekker, 1993.
4. Remington's Pharmaceutical Sciences, A.R.Gennaro Mac Pub. Co. Easton, Pennsylvania 1990
5. Strategies for Organic Drug Synthesis & Design, & Daniel Led nicer, John Willey & Sons Inc. New York., 2<sup>nd</sup> Ed, 1998.
6. Organic Chemistry of Drug Synthesis: Vol.1 to 6, Daniel Lednicer, John Wiley & Sons Inc.
7. Burger's Medicinal Chemistry & Drug Discovery: Vol. 1 to 6, A. Burger & M.E.Wolff, John Wiley & Sons – New Jersey,6<sup>th</sup> Ed, 2003
8. Foye's Principles of Medicinal Chemistry, W.O. Foye, Lippincott Williams & Wilkins- Philadelphia, Oxford, 6<sup>th</sup> Ed, 2008.
9. Text book of Medicinal & Pharmaceutical Chemistry, Charles Owens Wilson Lippincott Williams & Wilkins – Philadelphia. 1962

10. Organic Synthesis – The Disconnection Approach, Warren S., John Wiley & Sons – Chichester., 1<sup>st</sup> Ed., 2005
11. Pharmaceutical Substances: Synthesis, Patents, Applications (N-Z), A. Kleemann, Georg Thieme Verlag, Stuttgart. 4<sup>th</sup> Ed, 2001
12. Textbook of Medicinal & Pharmaceutical Chemistry, Wilson & Gisvold ., Williams & Wilkins, 1<sup>st</sup> Ed, 2004.