FACULTY OF SCIENCE AND HUMANITIES
B.Sc (SEM-II)
In Effect from Academic Year 2021-22

Subject Code: 2SC1000223	Subject Title: Medicinal Chemistry
Course Type: Subject Elective	

Course Objective:
Generally, awareness with the following areas in chemistry: analysis of Medicinal Chemistry. Opportunities for student and faculty to interact with Pharmaceutical industry. The fundamental medicinal chemistry skills to work effectively in the different fields of chemistry.

Teaching scheme (hours) per week		Credit			Theory Marks		Practical Marks		Total
Theory	Practical	Theory	Practical	Total	Uni. Assessment	Cont. Assessment	Uni. Assessment	Cont. Assessment	
2	--	2	--	2	35	15	--	--	50

Subject Contents			
Sr. No	Topic	Total Hours	Weight (%)
1	**INTRODUCTION:** Introduction of Drugs, History of medicinal chemistry, Classification of Drugs, General Importance of Drugs, Drug Design, Concepts of Quantitative structure–activity relationship models (QSAR models), Concepts of pharmacokinetics and pharmacodynamics.	18	50
2	**ANTI-MALARIAL DRUGS:**Introduction and History, life cycle of Plasmodium, Natural anti-malarial drugs: Role of activity side in quinine structure, Classification of anti-malarial drugs, Synthesis of Quinoline derivative: 8-Amino quinoline derivative (Plasmoquine&Pamaquine). **ANTITUBERCULOUS DRUGS:** An overview of antituberculous drugs; Isoniazid, Rifampicin, Ethambutol, pyrazinamide **THERAPEUTIC OVERVIEW OF CANCER TREATMENT**	12	50

Course Outcome:
- ❖ Have solid foundations in the fundamentals and purpose of current chemical and scientific concepts.
- ❖ To develop the concept of Concepts of Quantitative structure–activity relationship models (QSAR models)
- ❖ To develop the concept of mechanism of action of drugs.

List of References:

1 SanshleshitAuoshadho nu Rasayan by Dr. Anamik Shah.
2 SanshleshitAuoshadho nu Rasayan by Dr. J.P. Trivedi & Dr. K.A.Thakar.3 Chemistry of Synthetic Drugs b Dyson & May.

e-Resource:
1. www.google.com
2. http://onlinelibrary.wiley.com/
3. https://en.wikipedia.org/wiki