

Gujarat Technological University

M. Pharm. Syllabus

Semester I

Paper Code 910105

Chemistry of Medicinal Natural Products

Theory

(Four hours per week, 6 Credits)

Course Content:	Hours
1. Study of different biogenetic pathways of therapeutically important Active constituents.	15
2. Classification, Isolation, structure determination stereochemistry, biological activity of following categories of Naturally occurring components:	30
a. Carbohydrates, Mono, di, oligo- and polysaccharides, Glycoproteins, lipoproteins and glycopeptidolipids.	
b. Lipids and autocoids	
c. Alkaloids: Camptothecin, Vincristine.	
d. Glycosides: Calanolides, Glycyrrhetic acid,	
e. Resins: Podophyllotoxin.	
f. Terpenoids: Taxol	
g. Antibiotics: Griesofulvin, Penicillin, Streptomycin	
3. Advanced methods of extraction of plant metabolites.	15
4. Immunoglobins from Natural source specifically from plants.	08

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Practical

(Four hours per week, 6 Credits)

Practical exercises based on the relevant topics mentioned in theory syllabus.