



BENGAL SCHOOL OF TECHNOLOGY

AUTONOMOUS

Estd. by Supreme Educational Development and Charitable Organization (SEDCO)

Recognised by UGC & included u/s 2(f) of UGC Act 1956

Approved by Pharmacy Council of India, New Delhi

Affiliated to: Maulana Abul Kalam Azad University of Technology (MAKAUT) &

West Bengal State Council of Technical and Vocational Education and Skill Development (WBST&VE&SD)

Accredited by NAAC with "A" Grade, NBA for B. Pharm & QCI

Lesson Plan

Class: B. Pharm. 5 Sem

Session: 2026-2027

Date of Commencement of Session: 30.07.26

Subject Name: PHARMACOGNOSY & PHYTOCHEMISTRY II

Subject code: PT – 512 & 592s

Faculty In charge: Mr. Gouranga Sundar Roy

Schedule of allotted class work (w.e.f): 30.07.26

Days	Monday	Tuesday	Wednesday	Thursday	Friday
Time/period Section A	---	---	---	12:40 to 01:40 PM	04:25 to 05:25 PM
Section B	---	---	---	03:25 to 04:25 PM	02:25 to 03:25 PM

Available Periods/week 2 (Two) Available periods in the total semester 52 Extra Classes_ No _

Guest Lectures planned if any with justification_ No _

Scope & Objective of the course:

Scope: The main purpose of subject is to impart the students the knowledge of how the secondary metabolites are produced in the crude drugs, how to isolate and identify and produce them industrially. Also this subject involves the study of producing the plants and photochemical through plant tissue culture, drug interactions and Basic principles of traditional system of medicine.

Objectives: Upon completion of the course, the student shall be able

1. to know the modern extraction techniques, characterization and identification of the herbal drugs and Phytoconstituent
2. to understand the preparation and development of herbal formulation.
3. to understand the herbal drug interactions
4. to carry out isolation and identification of Phytoconstituent

Reading materials:

A. Text Books

Sl. No.	Name of the Text Book(s)	Author	Edition	Publisher	Accession No.	Rack No
1.	Trease and Evans Pharmacognosy,	W C Evans	9 th / Latest	W.B. Saunders & Co., London,		
2.	Pharmacognosy and Phytochemistry	Mohammad Ali	Latest	CBS Publishers & Distribution, New Delhi		
3.	Text book of Pharmacognosy	C.K. Kokate, Purohit, Gokhlae	(2007), 37 th Edition/ Latest	Nirali Prakashan, New Delhi		
4.	Herbal drug industry	R.D. Choudhary	(1996), 1 st Edn, /Latest	Eastern Publisher, New Delhi.		

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B. Reference Books

Sl. No.	Name of the Text Book(s)	Author	Edition	Publisher	Accession No.	Rack No
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1.	Essentials of Pharmacognosy	Dr.SH.Ansari	(2007) II nd edition / Latest	Birla publications, New Delhi		
2.	Herbal Cosmetics	H. Pande	Latest	Asia Pacific Business press, Inc, New Delhi		
3.	Textbook of Industrial Pharmacognosy	A.N. Kalia	2005/ Latest	CBS Publishers, New Delhi		

C. Journals / Website/Any other resources

Sl. No.	Name of the journal (s)/website/others	Source	Vol. no.	Month & Year

Daily Teaching Schedule for UNIT-I . Mr. Siddheswar Maity

Sl. No.	Date	Day	Title to be covered	Teaching Pedagogy / T.L.P.	Suggested Knowledge Resources

Daily Teaching Schedule for UNIT-II. Mr. Siddheswar Maity

Sl. No.	Date	Day	Title to be covered	Teaching Pedagogy / T.L.P.	Suggested Knowledge Resources

Daily Teaching Schedule for UNIT-III. Mr. Gouranga Sundar Roy

Sl. No.	Date	Day	Title to be covered	Teaching Pedagogy / T.L.P.	Suggested Knowledge Resources
					Books
1	30.07.26	Thursday	Isolation, Identification and Analysis of Phytoconstituents	Chalk & Board	Text book of Pharmacognosy
2	31.07.26	Friday	Terpenoids: Menthol, Citral, Artemisin	Chalk & Board	Text book of Pharmacognosy
3	06.08.26	Thursday	Glycosides: Glycyrrhetic acid & Rutin	Chalk & Board	Text book of Pharmacognosy
4	07.08.26	Friday	Alkaloids: Atropine, Quinine, Reserpine, Caffeine	Chalk & Board	Text book of Pharmacognosy
5	13.08.26	Thursday	Resins: Podophyllotoxin, Curcumin	Chalk & Board	Text book of Pharmacognosy

Daily Teaching Schedule for UNIT-IV. Mr. Gouranga Sundar Roy

Sl. No.	Date	Day	Title to be covered	Teaching Pedagogy / T.L.P.	Suggested Knowledge Resources
					Books
1	14.08.26	Friday	Basics of Phytochemistry Modern methods of extraction, application of latest techniques like Spectroscopy, chromatography and electrophoresis in the isolation, purification and identification of crude drugs.	Chalk & Board	Text book of Pharmacognosy
Grand total number of classes planned for the semester					

Daily Teaching Schedule for Practical. Mr. Siddheswar Maity and Mr. Gouranga Sundar Roy

Sl. No.	Date	Day	Title to be covered
1			Morphology, histology and powder characteristics & extraction & detection of: Cinchona, Cinnamon, Senna, Clove, Ephedra, Fennel and Coriander
2			Exercise involving isolation & detection of active principles a.Caffeine - from tea dust. b.Starch from Potato c.Atropine from Belladonna

			d.Sennosides from Senna
3			Separation of sugars by Paper chromatography
4			TLC of herbal extract
5			Analysis of crude drugs by chemical tests: (i) Asafoetida (ii) Benzoin (iii) Colophony (iv) Aloes (v) Myrrh