



DR. B. C. ROY COLLEGE OF PHARMACY & AHS, DURGAPUR
(NBA Accredited for UG Pharmacy Program)

TEMPLATE FOR VIDEO & SUPPLEMENTARY MATERIAL POSTING

FACULTY: SOUMYA MITRA

PROGRAM: B. PHARM

Course Name: Pharmacognosy & Phytochemistry II Theory (PT 512)

Suggested Books for the Course (with links):

Sl. No.	Book Name, Ed., Vol	Authors	Weblink(s)
1.	Pharmacognosy	Trease and Evans	PDF
2.	Medicinal Natural Products: A Biosynthetic Approach	Paul M. Dewick	PDF
3.			

Course objective (COB)	Course outcome (CO)
COB.PT 512.1: To understand the concept of secondary metabolites and their biosynthetic pathways and to analyze the biosynthetic pathway by various techniques.	CO.PT 512.1: To discuss, describe, explain and identify different secondary metabolic pathways for alkaloids, glycosides, steroids and flavonoids.
COB.PT 512.2: To analyze and interpret different phytochemical, pharmacological and	CO.PT 512.2: To recognize and relate the phytochemical, pharmacological and



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<p>commercial aspects of secondary metabolites.</p> <p>COB.PT 512.3: To identify and relate different techniques in extraction, isolation and purification of different crude drugs.</p> <p>COB.PT 512.4: To evaluate and implement identification techniques for analysis of phytoconstituents.</p>	<p>commercial aspects of secondary metabolites.</p> <p>CO.PT 512.3: To develop and design extraction, isolation and purification techniques for crude drugs.</p> <p>CO.PT 512.4: To apply and interpret different techniques for identification and analysis of phytoconstituents.</p>
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Supplementary Materials for Reference and Self Study:

Class no.	Date	Module (as per Lesson Plan)	Topic	Live Recording Link	Powerpoint Presentation Link	Supplementary Notes / Resources	Remarks, if any
1	7/9/21	1	Introduction to secondary metabolic pathways	Youtube link	_____	Acetate mevalonate pathway	_____
2	8/9/21	1	Acetate mevalonate pathway	Youtube link	_____	Volatile oils (Monoterpenoids)	_____
3	15/9/21	1	Biosynthesis of sesquiterpenes and steroids by Acetate mevalonate pathway	Youtube link	_____	Sesquiterpene (Page: 191 onwards) Triterpenoids (Page: 219 onwards) Refer Paul M. Dewick	_____
4	21/09/21	1	DXP/MEP pathway for the biosynthesis of Isoprenes	Youtube link	_____	DXP/MEP pathway Paul M. Dewick Page: 180	_____
5	22/09/21	1	Shikimic acid	Youtube link	_____	Shikimic acid	_____



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			pathway			pathway	
6	28/09/21	1	Study of utilization of radioactive isotopes in the investigation of Biosynthetic studies	Youtube link	_____	Trease and Evans: Page 135 onwards	_____
7	29/09/21	1	Study of utilization of radioactive isotopes in the investigation of Biosynthetic studies	Youtube link	_____	Trease and Evans: Page 135 onwards	_____
8	26/10/21	2	Steroids, Triterpenoids and Cardiac glycosides: Dioscorea	Youtube link	_____	Trease and Evans: Page 289 onwards	_____
9	27/10/21	2	Steroids, Triterpenoids and Cardiac glycosides: Dioscorea, Digitalis	Youtube link	_____		_____
10	02/11/21	2	Steroids, Triterpenoids and Cardiac Glycoside: Dioscorea	Youtube link	_____	Paul M. Dewick: Page no. 237 onwards	_____
11	09/11/21	2	Steroids, Triterpenoids and Cardiac Glycoside: Digitalis	Youtube link	_____	Paul M. Dewick: Page 241 onwards Trease and Evans: Page 289 onwards	_____



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12	18/11/21	2	Alkaloids: Atropine	Youtube link	_____	Study material	_____
13	18/11/21	2	Alkaloids: Opium	Youtube link	_____	Study material	Additional notes
14	25/11/21	2	Alkaloids: Vinca	Youtube link	_____	Paul M. Dewick Page 350 onwards Trease and Evans Page 290 onwards	_____
15	25/11/21	2	Alkaloids: Rauwolfia	Youtube link	_____	Paul M. Dewick Page 350 onwards Trease and Evans Page 350 onwards	_____
16	2/12/21	2	Glycoside: Senna	Youtube link	_____	Trease & Evans: Page 231 onwards	Biosynthesis
17	9/12/21	2	Glycoside: Aloe, Bitter almond	Youtube link	_____	NOTES	_____
18	9/12/21	2	Tannins: Catechu, Pterocarpus	Youtube link	_____	NOTES	_____
19	16/12/21	2	Volatile oil: Fennel, Cinnamon	Youtube link	_____	NOTES	_____
20	16/12/21	2	Volatile oil: Coriander, Mentha, Clove	Youtube link	_____	NOTES	_____



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