JHARKHAND Rai University
UGC RECOGNISED UNIVERSITY
ACCREDITED BY NAAC

Lesson Plan & Tracking

Program: B.Pharm	Session : 2020-2024	Year : THIRD	Sem: Fifth

Course: Pharmacognosy and Phytochemisty - II(Theory)

Name of the Faculty: Prof.SUMANA DAS	Commencement Date:	Date of Closure:

Lecture No.	Week	Unit	Topics to be Covered	Blended Mode			Date	Duration	Tracking of Lectures	Related Course Outcome	Signature of Faculty	Signature of HoD	Remarks (if any)
				ICT Tool/Platform/ LMS	Resources	Activity							
1	1	UNIT 1	Introduction										
2			metabolic pathways- Shikimic acid pathway,										
3			metabolic pathways- Shikimic acid pathway,										
4			metabolic pathways Acetate pathways										
5	2	UNIT 1	metabolic pathways Acetate pathways										
6			metabolic pathways- Amino acid pathway.										
7			metabolic pathways- Amino acid pathway.										
8			Study of utilization of radioactive isotopes in the investigation of Biogenetic studies										
9			Alkaloids: Vinca, Rauwolfia,										

10	3	**UNIT 2**	Alkaloids: Belladonna, Opium										
11			Phenylpropanoids and Flavonoids: Lignans, Tea, Ruta										
12			Steroids, Cardiac Glycosides & Triterpenoids: Liquorice, Dioscorea,										
13	4	**UNIT 2**	Steroids, Cardiac Glycosides & Triterpenoids: , Digitalis										
14			Volatile oils: Mentha, Clove, Cinnamon,										
15			Volatile oils: Fennel, Coriander,										
16			Tannins: Catechu, Pterocarpus										
17	5	**UNIT 2**	Resins: Benzoin, Guggul, Ginger,										
18			Resins: , Asafoetida, Myrrh, Colophony										
19			Glycosides: Senna, Aloes, Bitter Almond										
20			Iridoids, Other terpenoids & Naphthaquinones: Gentian, Artemisia, taxus,										
21	6	**UNIT 2**	carotenoids										
22		**UNIT 3**	Terpenoids: Menthol, Citral, Artemisin										
23			Glycosides: Glycyrhetinic acid & Rutin										

24			Alkaloids: Atropine,Quinine,										
25	7	UNIT 3	Alkaloids: Reserpine,Caffeine										
26			Resins: Podophyllotoxin, Curcumin										
27		UNIT 4	Industrial production, estimation and utilization of Forskolin,										
28			Industrial production, estimation and utilization of Sennoside,										
29	9	UNIT 4	Industrial production, estimation and utilization of Artemisinin										
30			Industrial production, estimation and utilization of Diosgenin										
31			Industrial production, estimation and utilization of , Digoxin										
32			Industrial production, estimation and utilization of , Atropine,										
33	10	UNIT 4	Industrial production, estimation and utilization of Podophyllotoxin,										
34			Industrial production, estimation and utilization of Caffeine										
35			Industrial production, estimation and utilization of ,Taxol,										

36			Industrial production, estimation and utilization of Vincristine										
37	11	**UNIT 4**	Industrial production, estimation and utilization of Vinblastine										
38		**UNIT 5**	Modern methods of extraction, application of latest techniques like Spectroscopy,										
39			Modern methods of extraction, application of latest techniques like Spectroscopy,										
40			Modern methods of extraction, application of latest techniques like Spectroscopy,										
41	12	**UNIT 5**	Modern methods of extraction, application of latest techniques like chromatography										
42			Modern methods of extraction, application of latest techniques like chromatography										
43			Modern methods of extraction, application of latest techniques like chromatography										
44	13	**UNIT 5**	Modern methods of extraction, application of latest techniques electrophoresis										
45			Modern methods of extraction, application of latest techniques like electrophoresis										