JHARKHAND Rai University
UGC RECOGNISED UNIVERSITY
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Lesson Plan & Tracking

Programe : Diploma in Pharmacy | **Session :2022-2023** | **Year :1st year**

Course: Pharmaceutics (Theory)

Name of the Faculty: Sourav Khawas | **Commencement Date: 01 September 2022** | **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	Week 1		Syllabus , Course objective and outcome										
2			History of the profession of Pharmacy in India in relation to Pharmacy education, industry,										
3			pharmacy practice										
4			various professional associations.										
5	Week 2		Pharmacy as a career										
6			Pharmacopoeia: Introduction to IP, BP										
7			USP, NF and Extra Pharmacopoeia.										

8			Salient features of Indian Pharmacopoeia										
9			Packaging materials: Types, selection criteria,										
10	**Week 3**		dvantages and disadvantages of glass,										
11			plastic,										
12			metal,										
13			rubber as packaging materials										
14			Pharmaceutical aids: Organoleptic										
15	**Week 4**		(Colouring, flavoring										
16			and sweetening) agents										
17			Preservatives: Definition,										
18			types with examples and uses										
19	**Week 5**		Revisions										

20			Unit operations: Definition, objectives										
21	Week 6		applications,principles, construction, and workings										
22			Size reduction: hammer mill										
23			ball mill										
24			Size separation: Classification of powders according to IP,										
25	Week 7		Cyclone separator,										
26			Sieves and standards of sieves										
27			Mixing: Double cone blender, Turbine mixer										
28			Triple roller mill										
29	Week 8		Silverson mixer homogenizer										
30			Filtration: Theory of filtration										
31			membrane filter and sintered glass filter										
32			Drying: working of fluidized bed dryer										
33			process of freeze drying										

34	**Week 9**		Extraction: Definition, Classification										
35			method, and applications										
36			Qize										
37	**Week 10**		Tablets –										
38			Classification of tablet										
39			coated and uncoated, various modified tablets (sustained release,										
40			extended-release, fast dissolving, multi-Layered, etc										
41	**Week 11**		Manufacturing of tablets										
42			Defact of tablets										
43			Test of tablets and packing										
44			Revisions										
45	**Week 12**		Capsules -										
46			hard and soft gelatine capsules										
47			Manufacturing of capsules										

48			Liquid oral preparations - solution										
49	**Week 13**		syrup, elixir,										
50			emulsion,										
51			suspension,										
52			dry powder for reconstitution										
53	**Week 14**		Topical preparations - ointments,										
54			creams, pastes										
55			gels,liniments and lotions,										
56			suppositories, and pessaries										
57	**Week 15**		Nasal preparations										
58			Ear preparations										
59			Powders and granules - Insufflations										
60			dusting powders,										
61	**Week**		effervescent powders, and effervescent granules										
62			Sterile formulations – Injectables										

63	**16**		eye drops										
64			eye ointments										
65			class test										
66			Immunological products: Sera,										
67	**Week 17**		vaccines,										
68			toxoids,										
69			manufacturing methods										
70			Basic structure, layout, sections, and activities of pharmaceutical manufacturing plants										
71	**Week 18**		Quality control and quality assurance: Definition and concepts of quality control and quality assurance,										
72			current good manufacturing practice (cGMP), Introduction to the concept of calibration and validation										
73			Novel drug delivery systems: Introduction										

74	**Week 19**		Classification with examples,										
75			advantages, and challenges										