

**College Name:** .....

**Lesson Plan**

**Program - D. Pharm**

**Year – First**

**Subject: Pharmaceutics**

**Session – 2022- 2023**

S. No.	Date	Day	Subject	L	T	P	Total
1.		D Day					
2.		D+1	History of the profession of Pharmacy in India.	1	0	0	1
3.		D+2	Pharmacy as a career	1	0	0	1
4.		D+3	Introduction to IP, USP, BP, NF and the Extra Pharmacopoeia.	1	0	0	1
5.		D+4	Salient features of Indian Pharmacopoeia	1	0	0	1
6.		D+5	<b>REVISION</b>	0	1	0	1
7.		D+6	Study of Glass as materials for containers	1	0	0	1
8.		D+7	Study of Plastic as materials for containers	1	0	0	1
9.		D+8	Study of Rubber as materials for containers	1	0	0	1
10.		D+9	Aerosol Container	1	0	0	1
11.		D+10	Tutorial (Problem solving session/ class test)	0	1	0	1
			<b>TOTAL</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>10</b>
12.		D+11	Pharmaceutical Aids	1	0	0	1
13.		D+12	Colouring agents used in Pharmaceutical	1	0	0	1
14.		D+13	Flavouring agents used in Pharmaceutical	1	0	0	1
15.		D+14	Sweetening agents used in Pharmaceutical	1	0	0	1
16.		D+15	<b>REVISION</b>	0	1	0	1
17.		D+16	Preservative	1	0	0	1
18.		D+17	Size Reduction	1	0	0	1

19.		D+18	Explanation of Hammer and Ball mill	1	0	0	1
20.		D+19	Size Separation	1	0	0	1
21.		D+20	Tutorial (Problem solving session/ class test)	0	1	0	1
			<b>TOTAL</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>10</b>
22.		D+21	Cyclone separator and Air Separator	1	0	0	
23.		D+22	Mixing and Homogenization	1	0	0	1
24.		D+23	Double cone mixer	1	0	0	1
25.		D+24	Powder mixing	1	0	0	1
26.		D+25	<b>REVISION</b>	0	1	0	1
27.		D+26	Filtration	1	0	0	1
28.		D+27	Membrane filter	1	0	0	1
29.		D+28	Sintered glass filter	1	0	0	1
30.		D+29	Fluidized bed dryer	0	1	0	1
31.		D+30	Tutorial (Problem solving session/ class test)	1	0	0	
			<b>TOTAL</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>10</b>
32.		D+31	Freeze drying	1	0	0	1
33.		D+32	Drying	1	0	0	1
34.		D+33	Tablet and type of tablets	1	0	0	1
35.		D+34	Excipients used in Tablet manufacturing	1	0	0	1
36.		D+35	<b>REVISION</b>	0	1	0	1
37.		D+36	Methods of tablet manufacturing	1	0	0	1
38.		D+37	Sugar coating of tablet	1	0	0	1
39.		D+38	In Process Quality Control System (IPQC) for Tablets	1	0	0	1
40.		D+39	Evaluation of Tablets	1	0	0	1
41.		D+40	Tutorial (Problem solving session/ class test)	0	1	0	1
			<b>TOTAL</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>10</b>
42.		D+41	Hard gelatin Capsule	1	0	0	1
43.		D+42	Soft gelatin Capsule	1	0	0	1

44.		D+43	Capsule and type of Capsules	1	0	0	1
45.		D+44	Capsule shell Manufacturing	1	0	0	1
46.		D+45	<b>REVISION</b>	0	1	0	1
47.		D+46	Evaluation of tablets	1	0	0	1
48.		D+47	Liquid oral preparations	1	0	0	1
49.		D+48	Solution	1	0	0	1
50.		D+49	Syrup	1	0	0	1
51.		D+50	Tutorial (Problem solving session/ class test)	0	1	0	1
			<b>TOTAL</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>10</b>
52.		D+51	Elixir	1	0	0	1
53.		D+52	Emulsion	1	0	0	1
54.		D+53	Suspension	1	0	0	1
55.		D+54	Dry powder for reconstitution	1	0	0	1
56.		D+55	<b>REVISION</b>	0	1	0	1
57.		D+56	Topical preparations	1	0	0	1
58.		D+57	Ointments	1	0	0	1
59.		D+58	Creams	1	0	0	1
60.		D+59	Pastes	1	0	0	1
61.		D+60	Tutorial (Problem solving session/ class test)	0	1	0	1
			<b>TOTAL</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>10</b>
62.		D+61	Gels	1	0	0	1
63.		D+62	Liniments	1	0	0	1
64.		D+63	Lotions	1	0	0	1
65.		D+64	Suppositories	1	0	0	1
66.		D+65	<b>REVISION</b>	0	1	0	1
67.		D+66	Pessaries	1	0	0	1
68.		D+67	Nasal preparations	1	0	0	1
69.		D+68	Ear preparations	1	0	0	1
70.		D+69	Powders and granules	1	0	0	1

71.		D+70	Tutorial (Problem solving session/ class test)	0	1	0	1
			<b>TOTAL</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>10</b>
72.		D+71	Insufflations	1	0	0	
73.		D+72	Dusting powders	1	0	0	1
74.		D+73	Effervescent powders	1	0	0	1
75.		D+74	Effervescent granules	1	0	0	1
76.		D+75	<b>REVISION</b>	0	1	0	1
77.		D+76	Sterile formulations	1	0	0	1
78.		D+77	Injectables	1	0	0	1
79.		D+78	Eye drops	1	0	0	1
80.		D+79	Eye ointments	0	1	0	1
81.		D+80	Tutorial (Problem solving session/ class test)	1	0	0	
			<b>TOTAL</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>10</b>
82.		D+81	Immunological products	1	0	0	
83.		D+82	Sera	1	0	0	1
84.		D+83	Vaccines	1	0	0	1
85.		D+84	Toxoids	1	0	0	1
86.		D+85	<b>REVISION</b>	0	1	0	1
87.		D+86	Quality control and quality assurance of Tablet	1	0	0	1
88.		D+87	Quality control and quality assurance of Capsule	1	0	0	1
89.		D+88	Quality control and quality assurance of Solution	1	0	0	1
90.		D+89	Quality control and quality assurance of Emulsion	0	1	0	1
91.		D+90	Tutorial (Problem solving session/ class test)	1	0	0	
			<b>TOTAL</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>10</b>
92.		D+91	Quality control and quality assurance of Suspension	1	0	0	
93.		D+92	Quality control and quality assurance of Eye drop	1	0	0	1
94.		D+93	Current good manufacturing practice (cGMP)	1	0	0	1
95.		D+94	Calibration and validation	1	0	0	1
96.		D+95	Novel drug delivery systems	0	1	0	1

<b>97.</b>		D+96	<b>REVISION</b>	1	0	0	1
<b>98.</b>		D+97	<b>REVISION</b>	1	0	0	1
<b>99.</b>		D+98	<b>REVISION</b>	1	0	0	1
<b>100.</b>		D+99	<b>REVISION</b>	0	1	0	1
<b>101.</b>		D+100	Tutorial (Problem solving session/ class test)	1	0	0	
			<b>TOTAL</b>	<b>8</b>	<b>2</b>	<b>0</b>	<b>10</b>