

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

**Lesson Plan**

**Program - B. Pharm**

**Year – First Semester: First**

**Subject: Pharmaceutical Analysis – I**

**Session – 2022- 2023**

S. No.	Date	Day	Subject	L	T	P	Total
1.		D Day					
2.		D+1	Different techniques of analysis	1	0	0	1
3.		D+2	Methods of expressing concentration	1	0	0	1
4.		D+3	Primary and secondary standards.	1	0	0	1
5.		D+4	Preparation and standardization of various molar and normal solutions - Oxalic acid	1	0	0	1
6.		D+5	<b>REVISION</b>	0	1	0	1
7.		D+6	Preparation and standardization of various molar and normal solutions - Sodium hydroxide	1	0	0	1
8.		D+7	Preparation and standardization of various molar and normal solutions - Hydrochloric acid	1	0	0	1
9.		D+8	Preparation and standardization of various molar and normal solutions - Sodium thiosulphate	1	0	0	1
10.		D+9	Preparation and standardization of various molar and normal solutions - Sulphuric acid	1	0	0	1
11.		D+10	Tutorial (Problem solving session/ class test)	0	1	0	1
			<b>TOTAL</b>	8	2	0	<b>10</b>
12.		D+11	Preparation and standardization of various molar and normal solutions - Potassium permanganate	1	0	0	1
13.		D+12	Preparation and standardization of various molar and normal solutions - Ceric ammonium sulphate.	1	0	0	1
14.		D+13	Sources of errors, and types of errors	1	0	0	1
15.		D+14	Methods of minimizing errors	1	0	0	1
16.		D+15	<b>REVISION</b>	0	1	0	1
17.		D+16	Significant figures.	1	0	0	1
18.		D+17	Pharmacopoeia	1	0	0	1

19.		D+18	Sources of impurities in medicinal agents	1	0	0	1
20.		D+19	limit tests	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	Theories of acid base indicators	1	0	0	
23.		D+22	Acid base titrations	1	0	0	1
24.		D+23	Theory involved in titrations of strong, weak, and very weak acids and bases	1	0	0	1
25.		D+24	Neutralization curves	1	0	0	1
26.		D+25	<b>REVISION</b>	0	1	0	1
27.		D+26	Acidimetry and alkalimetry titration	1	0	0	1
28.		D+27	Estimation of Sodium benzoate and Ephedrine HCl.	1	0	0	1
29.		D+28	Precipitation titrations	1	0	0	1
30.		D+29	Modified Volhard's method used in Precipitation titration	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	Complexometric titration	1	0	0	1
33.		D+32	Estimation of Magnesium sulphate by Complexometric titration	1	0	0	1
34.		D+33	Estimation of calcium gluconate by Complexometric titration	1	0	0	1
35.		D+34	Principle and steps involved in gravimetric analysis	1	0	0	1
36.		D+35	<b>REVISION</b>	0	1	0	1
37.		D+36	Co-precipitation and post precipitation	1	0	0	1
38.		D+37	Basic Principles, methods and application of diazotisation titration	1	0	0	1
39.		D+38	Redox titrations	1	0	0	1
40.		D+39	Types of redox titrations (Principles and applications)	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	Cerimetry	1	0	0	1
43.		D+42	Iodimetry	1	0	0	1

44.		D+43	Iodometry	1	0	0	1
45.		D+44	Bromatometry	1	0	0	1
46.		D+45	<b>REVISION</b>	0	1	0	1
47.		D+46	Dichrometry	1	0	0	1
48.		D+47	Titration with potassium iodate	1	0	0	1
49.		D+48	Electrochemical methods of analysis	1	0	0	1
50.		D+49	Conductometry	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	Potentiometry	1	0	0	1
53.		D+52	Polarography	1	0	0	1
54.		D+53	<b>REVISION</b>	0	1	0	1
55.		D+54	<b>REVISION</b>	0	1	0	1
56.		D+55	<b>REVISION</b>	0	1	0	1
57.		D+56	<b>REVISION</b>	0	1	0	1
58.		D+57	<b>REVISION</b>	0	1	0	1
59.		D+58	<b>REVISION</b>	0	1	0	1
60.		D+59	<b>REVISION</b>	0	1	0	1
61.		D+60	Tutorial (Problem solving session/ class test)	0	1	0	1
			<b>TOTAL</b>	<b>2</b>	<b>8</b>	<b>0</b>	<b>10</b>
62.		D+91	<b>REVISION</b>	0	1	0	1
63.		D+92	<b>REVISION</b>	0	1	0	1
64.		D+93	<b>REVISION</b>	0	1	0	1
65.		D+94	<b>REVISION</b>	0	1	0	1
66.		D+95	<b>REVISION</b>	0	1	0	1
67.		D+96	<b>REVISION</b>	0	1	0	1
68.		D+97	<b>REVISION</b>	0	1	0	1
69.		D+98	<b>REVISION</b>	0	1	0	1
70.		D+99	<b>REVISION</b>	0	1	0	1

<b>71.</b>		D+100	Tutorial (Problem solving session/ class test)	0	1	0	
			<b>TOTAL</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>10</b>