

No. of Hours	TOPIC	Days	Expected date	Conducted date	Remark
1	Introduction to syllabus	THU	19-06-25		
2	Calibration and validation-as per ICH and USFDA guidelines	FRI	20-06-25		
3	Calibration of following Instruments	SAT	21-06-25		
4	Electronic balance	THU	26-06-25		
5	UV-Visible spectrophotometer	FRI	27-06-25		
6	IR spectrophotometer	SAT	28-06-25		
7	Fluorimeter	THU	03-07-25		
8	Flame Photometer	FRI	04-07-25		
9	HPLC	SAT	05-07-25		
10	Gas Chromatography	THU	10-07-25		
11	Radio immune assay	FRI	11-07-25		
12	Importance, various components',	SAT	12-07-25		
13	Principle, different methods,	THU	17-07-25		
14	Limitation and Applications of Radio immune assay	FRI	18-07-25		
15	Extraction techniques:	SAT	19-07-25		
16	General principle and procedure involved in the	THU	24-07-25		
17	solid phase extraction	FRI	25-07-25		
18	liquid-liquid extraction	SAT	26-07-25		
19	Hyphenated techniques	THU	31-07-25		
20	LC-MS/MS	FRI	01-08-25		
21	GC-MS	SAT	02-08-25		
22	MS	THU	07-08-25		
23	HPTLC-	FRI	08-08-25		
24					
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No. of Hours	TOPIC	Days	Expected date	Conducted date	Remark
26	Nuclear Magnetic Resonance spectroscopy	SAT	09-08-25		
27	Principles of H-NMR	THU	21-08-25		
28	Principles of C-NMR,	FRI	22-08-25		
29	chemical shift, factors affecting chemical shift	SAT	23-08-25		
30	coupling constant, Spin - spin coupling, relaxation,	THU	28-08-25		
31	instrumentation and applications Mass Spectrometry- Principles,	FRI	29-08-25		
32	Fragmentation, Ionization techniques	SAT	30-08-25		
33	Electron impact, chemical ionization	THU	04-09-25		
34	MALDI, FAB, Analyzers-Time of flight	SAT	06-09-25		
35	Quadrupole, instrumentation, and applications.	THU	11-09-25		
36	Thermal Methods of Analysis:	FRI	12-09-25		
37	Principles, instrumentation and applications of Thermogravimetric Analysis (TGA),	SAT	13-09-25		
38	Differential Thermal Analysis (DTA),	THU	18-09-25		
39	Differential Scanning Calorimetry (DSC)	FRI	19-09-25		
40	X- Ray Diffraction Methods:	SAT	20-09-25		
41	Origin of X-rays, basic aspects of crystals	THU	25-09-25		
42	X- ray Crystallography, rotating crystal technique	FRI	26-09-25		
43	single crystal diffraction,	SAT	27-09-25		
44	powder diffraction,	FRI	03-10-25		
45	structural elucidation and applications	SAT	04-10-25		