

PHARMACEUTICS LAB

The **Pharmaceutics Lab** in a pharmacy college is an essential part of the curriculum where students gain practical knowledge about the formulation and evaluation of various pharmaceutical dosage forms. This laboratory focuses on transforming active pharmaceutical ingredients (APIs) into safe, effective, and patient-friendly medications such as tablets, capsules, syrups, suspensions, ointments, and sterile preparations. Students learn important techniques like mixing, granulation, emulsification, sterilization, and encapsulation using specialized equipment such as tablet punching machines, dissolution and disintegration testers, and pH meters. The lab also emphasizes quality control parameters such as uniformity, viscosity, solubility, and drug release profiles. Through hands-on experiments and real-world scenarios, students develop a deep understanding of how physicochemical properties of drugs influence formulation and delivery. The lab follows strict safety and hygiene protocols to ensure accurate results and instill professional discipline. Overall, the pharmaceutics lab plays a vital role in bridging the gap between theoretical pharmaceutical sciences and practical industrial applications.

List of Equipment Available:

Sr. No.	Name	Quantity Available
1	Digital balance (10mg)	5
2	Microscopes	10
3	Autoclave	1
4	Vacuum Pump	1
5	Standard sieves, sieve no. 8, 10, 12,22,24, 44, 54, 60, 80, 85, 100, 120	10 sets
6	Tablet dissolution test apparatus IP (Digital single/double Unit)	1
7	Magnetic stirrer, 500ml and 1 litter capacity with speed control	5
8	Digital pH meter	1
9	Capsule Counter	2
10	Hot Plate	2
11	Distillation Unit	1
12	Tablet counter – small size	2
13	Hot air oven	1
14	Electric water bath unit	2
15	Stalagmometer	5

16	Desiccator	5
17	Buchner Funnels (Medium)	10
18	Filtration assembly with Vacuum Pump	1
19	Andreasen's Pipette	5
20	Ointment slab	20
21	Ointment spatula	20
22	Pestle and mortar porcelain	20
23	Refrigerator	1
24	Micrometre slide Eyepiece	5
25	Micrometre slide Stage	5
26	Viscometer Ostwald/Brookfield	1
27	Stop watch	1
28	Sintered glass filter with vacuum	4