

HUMAN ANATOMY AND PHYSIOLOGY (HAP) AND PHARMACOLOGY LAB

The **Human Anatomy and Physiology (HAP) and Pharmacology Lab** in a pharmacy college is a crucial facility designed to provide students with a comprehensive understanding of the human body and how drugs interact with it. In the **HAP lab**, students study the structure and function of various organ systems through models, charts, microscopes, and preserved specimens. They learn about tissues, muscles, bones, blood components, and organ systems such as cardiovascular, respiratory, digestive, and nervous systems. This hands-on experience helps in correlating theoretical knowledge with real anatomical structures. In the **Pharmacology lab**, students are introduced to the principles of drug action, pharmacokinetics, and pharmacodynamics. Using simulated experiments, software tools, and in some cases, animal tissue preparations (as per ethical guidelines), students learn about drug-receptor interactions, dose-response relationships, and the effects of various drugs on different organ systems. The lab is equipped with instruments like kymographs, organ baths, and digital simulators. Both labs emphasize experimental accuracy, ethical practices, and safety. Together, these laboratories play a vital role in shaping the foundational knowledge and practical skills of pharmacy students, preparing them for clinical and research roles in the healthcare industry.

List of Equipment Available:

Sr. No.	Name	Quantity Available
1	Microscopes	20
2	Haemocytometer with Micropipettes	20
3	Sahli's haemoglobinometers	20
4	Sphygmomanometers	5
5	Stethoscopes	10
6	Human Permanent Slides for various tissues	One pair of each tissue Organs and endocrine glands
7	Models for various organs	One model of each organ system
8	Specimen for various organs and systems	One model for each organ system
9	Human Skeleton and bones	One set of skeleton and one spare bone
10	Different Contraceptive Devices and Models	One set of each device
11	Digital Balance (10 mg Sensitivity)	1
12	Computer with LCD	1
13	Licensed Software packages for Physiological & Pharmacological experiment	1
14	IR Thermometer	2
15	Refrigerator	1
16	First aid equipment	Adequate number
17	Stop watch	20
18	Dummy Inhalers and Nebulizer	1
19	Pharmacotherapeutic charts for various diseases & disorders	Adequate number
20	Surgical devices and Sutures	Adequate number
21	Digital BP Instrument	5

22	Mercury Thermometer	10
23	Digital Thermometer	10
24	Pulse Oximeter	5
25	ESR Apparatus (Westergren and Wintrobe)	10
26	Peak Flow meter	10
27	Stadiometer	2
28	Adult Weighing Scale (150 kg)	5
29	Glucometer	10
30	Projection microscope	1
31	Permanent slide set of plants and charts for Pharmacognosy Lab	Adequate number
32	Drug information resources	Adequate number
33	Various types of PPE Kits,	Adequate number
34	Charts /displays/ AVs on tobacco control, glycemic index of foods, nutrition, reproductive health	Adequate number
35	Menstrual hygiene products	Adequate number
36	Display for various disinfectants, mosquito repellents etc	Adequate number
37	Water Testing Kit	Adequate number
38	Permanent slide of different microbes	Adequate number

