

Faculty of Technology
B. Tech. Pharmaceutical Technology
(R 2017) Semester – II
PY8211 Biochemistry Laboratory
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Autoclave	1		
2.	Hot Air Oven	1		
3.	Incubators	2		
4.	Light Microscopes	4		
5.	Incubator Shaker	1		
6.	Colorimeter	2		
7.	Laminar Flow Chamber	2		
8.	Test tubes	200		
9.	Beakers – 50 ml, 100 ml, 250 ml one each per student	20		
10.	Beakers - 500 ml and 1000 ml atleast 5 per batch of 20 students	5		
11.	Watch glasses one per student	20		
12.	Petridishes as required, glass cuvettes as needed	20		
13.	Burette – one per student	20		
14.	Glass pipette – one each in 0.5 ml, 1 ml, 5 ml and 10 ml with suitable pipette aid	20		
15.	TLC plate as required for the experiment	20		
16.	Chemicals: glucose, fructose, galactose, maltose, starch, amino acids, DNA, RNA, lipids and commercial enzymes as required	20		

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B. Tech. Pharmaceutical Technology
(R 2017) Semester – III
PY8311 Physical Pharmaceutics Laboratory
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Optical Microscope	5		
2.	Stage Micrometer	5		
3.	Eye piece micrometer	5		
4.	Stalagmometer	10		
5.	Ostwald's Viscometer	10		
6.	Brookfield viscometer	1		
7.	Tapped density apparatus	3		
8.	Andreason pipette	3		
9.	Sieve shaker with sieve sets of different sizes	1		
10.	Pycnometer, Funnel, Beakers, Measuring cylinders, Dessicator, Mortar and pestle	30		

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B. Tech. Pharmaceutical Technology
(R 2017) Semester – III
BT8361 Microbiology Laboratory
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Autoclave	1		
2.	Hot Air Oven	1		
3.	Incubators	2		
4.	Light Microscopes	4		
5.	Incubator Shaker	1		
6.	Colorimeter	2		
7.	Lamina Flow Chamber	2		
8.	Petridish, Test tubes, Microscopic slides, Inoculation loop, Gas burner	30		
9.	Bacterial culture media, Yeast culture media, 70% ethanol, antibiotics, Crystal violet, Iodine, Safranin, India ink (capsule staining), Immersion oil	1		

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B. Tech. Pharmaceutical Technology
(R 2017) Semester – IV
PY8411 Analytical Methods and Instrumentation Laboratory
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Digital weighing balance	5		
2.	Digital pH meter	5		
3.	UV chamber	1		
4.	TLC chamber	1		
5.	UV/Vis spectroscopy	1		
6.	Colorimeter	5		
7.	HPLC	1		
8.	IR spectroscopy	1		
9.	Nessler's cylinder, Burette, Conical flask, Beakers and standard volumetric flasks	30		

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B. Tech. Pharmaceutical Technology
(R 2017) Semester – IV
PY8412 Molecular Biology and Genetic Engineering Laboratory
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	PCR machine	1		
2.	Electrophoretic assemblies for DNA and protein separations	5		
3.	ELISA reader	1		
4.	Ultracentrifuge	1		
5.	Laminar air flow cabinets	2		
6.	Cooling centrifuge	1		

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B. Tech. Pharmaceutical Technology
(R 2017) Semester – V
PY8511 Physiology and Pharmacology Laboratory
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Microscopes	5		
2.	Haemocytometer with Micropipettes	5		
3.	Hutchinson's spirometer	1		
4.	Spygmomanometer	5		
5.	Stethoscope	5		
6.	Haemoglobinometer	5		
3.	Sherrington's Kymograph Machine / Polyrite	5		
4.	Sherrington Drum	5		
5.	Computer with LCD	1		
6.	Software packages for experiment	1		
7.	Convulsiometer	1		
8.	Plethysmograph	1		
9.	Permanent Slides for various tissues-one pair for each tissues	1		

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(R 2017) Semester – V
PY8512 Medicinal Chemistry Laboratory
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Hot plates	10		
2.	Hot air Oven	2		
3.	Suction pumps	2		
4.	Muffle Furnace	1		
5.	Mechanical Stirrers	10		
6.	Magnetic Stirrers with Thermostat	10		
7.	Vacuum Pump	2		
8.	Digital pH meter	1		
9.	Distillation Unit	1		
10.	Buchner Funnel	5		
11.	Reflux condenser	3		

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B. Tech. Pharmaceutical Technology
(R 2017) Semester – VI
PY8611 Bioprocess Engineering Laboratory
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Bioreactor (Fermentor lab scale)	1		
2.	Microbial shaker incubator	1		
3.	Cooling centrifuge	1		
4.	Refrigerator	1		
5.	Incubator	1		

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B. Tech. Pharmaceutical Technology
(R 2017) Semester – VI
PY8612 Technology of Dosage Forms Laboratory
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Mechanical stirrers	10		
2.	Homogenizer	5		
3.	Tray dryer	1		
4.	Propeller type mechanical agitator	10		
5.	Capsule filling machine	2		
6.	Ampoule washing machine	1		
7.	Ampoule filling and sealing machine	1		
8.	Tablet punching machine	1		
9.	Tablet disintegration test apparatus	1		
10.	Tablet dissolution test apparatus	1		
11.	Monsanto's hardness tester	3		
12.	Friability test apparatus	1		
13.	Clarity test apparatus	1		
14.	Ointment filling machine	1		
15.	Collapsible tube crimping machine	1		
16.	Bulk Density Apparatus	2		
17.	Liquid Filling Machine	1		

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B. Tech. Pharmaceutical Technology
(R 2017) Semester – VII
PY8711 Biopharmaceutics and Pharmacokinetics Laboratory
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	UV-Visible spectrophotometer	5		
2.	HPLC	1		
3.	Dissolution apparatus	1		
4.	pH meter	5		
5.	Digital balance	2		

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(R 2017) Semester – VII
PY8712 Chemistry of Natural Products Laboratory
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Microscope	5		
2.	Digital Balance	1		
3.	Rotary vacuum evaporator	2		
4.	Hot air oven	1		
5.	Refrigerator	1		
6.	Colony counter	1		
7.	Sterility testing unit	1		
8.	Camera Lucida	5		
9.	Heating mantle	5		
10.	Flourimeter	1		
11.	Vacuum pump	2		
12.	Micropipettes (Single and multi channeled)	2		
13.	Micro Centrifuge	1		
14.	Projection Microscope	1		
15.	Clavengers apparatus	5		
16.	Soxhlet apparatus	5		
17.	TLC chamber and sprayer	3		
18.	Distillation unit	1		