

Faculty of Technology
B. Tech. Food Technology
(R 2017) Semester – II
BT8261 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.	Lamina 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	20		
12.	Petridishes as required, glass cuvettes as needed	20		
13.	Burette	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	20		
16.	glucose, fructose, galactose, maltose, starch, amino acids, DNA, RNA, lipids and commercial enzymes as required	20		

Faculty of Technology
B. Tech. Food Technology
(R 2017) Semester – III
FD8311 FOOD 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.	Static Incubators	1		
3.	Light Microscopes	5		
4.	Incubator Shaker	1		
5.	Colorimeter	2		
6.	Lamina Flow Chamber	3		
7.	Refrigerator	2		
8.	Colony counter	5		
9.	Water bath	4		
10.	pH meter	2		
11.	Weighing Balance	2		
12.	Analytical Balance	1		

Faculty of Technology
B. Tech. Food Technology
(R 2017) Semester – III
FD8312 FOOD CHEMISTRY AND NUTRITION LABORATORY
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Viscometer	2		
2.	Vortex	5		
3.	Pycnometer	5		
4.	Texture Analyser	1		
5.	Refractometer	2		
6.	Soxhlet	3		
7.	Muffle Furnace	1		
8.	Polarimeter	1		
9.	pH meter	3		
10.	Heating mantle	5		
11.	Weighing balance	2		
12.	Thermometer	5		
13.	Water bath	4		
14.	Colorimeter	5		
15.	Hot air oven	1		
16.	Analytical Balance	1		
17.	Moisture Balance	1		

18.	Stadiometer	2		
19.	Skin fold caliper	5		
20.	Weight machine	2		

Faculty of Technology
B. Tech. Food Technology
(R 2017) Semester – IV
FD8411 FOOD ANALYSIS LABORATORY
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Soxhlet apparatus	5		
2.	Kjeldahl apparatus	2		
3.	UV spectrophotometer	1		
4.	Colour comparator	1		
5.	Water bath	2		
6.	pH meter	3		
7.	Fume hood	1		
8.	Dean and stark apparatus	1		
9.	Weighing balance	1		
10.	Hot air oven	1		
11.	Simple distillation unit	2		

Faculty of Technology
B. Tech. Food Technology
(R 2017) Semester – IV
FD8412 UNIT OPERATIONS LABORATORY
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Orifice meter	1		
2.	Venturi meter	1		
3.	Rotameter	1		
4.	Packed column	1		
5.	Centrifugal separator	1		
6.	Steam distillation unit	2		
7.	Fluidized bed column	1		
8.	Rotary flash evaporator	1		
9.	Cyclone separator	1		
10.	Ball mill	1		
11.	Hammer mill	1		
12.	Burr mill	1		
13.	Pin mill	1		

Faculty of Technology
B. Tech. Food Technology
(R 2017) Semester – V
FD8511 FOOD PROCESSING AND PRESERVATION LABORATORY
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Plate heat exchanger	1		
2.	Refrigerator	2		
3.	Deep freezer	1		
4.	Tray dryer	1		
5.	Hot air oven	1		
6.	Refractometer	1		
7.	Extruder	1		
8.	RO equipment	1		
9.	Double seamer machine	1		
10.	Canning and bottling unit	1		
11.	Pasteurizer	1		
12.	Spray dryer	1		
13.	Retort unit	1		
14.	Thermometer	3		
15.	Water vapour permeability tester	1		
16.	Tensiometer	1		

17.	Viscometer	1		
18.	Desiccator	5		
19.	Weighing balance	2		
20.	Vegetable chopper	1		

Faculty of Technology
B. Tech. Food Technology
(R 2017) Semester – V
FD8512 BIOCHEMICAL ENGINEERING LABORATORY
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Colorimeter	4		
2.	UV/Vis spectrophotometer	2		
3.	Bioreactor (Fermenter)	2		
4.	Gas analyser (O ₂ and Co ₂)	2		
5.	Shaking incubator	3		
6.	Static incubator	3		

Faculty of Technology
B. Tech. Food Technology
(R 2017) Semester – VI
FD8611 FRUITS AND VEGETABLE PROCESSING TECHNOLOGY LABORATORY
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Mixer	1		
2.	Canning unit	1		
3.	Metal can sealer	1		
4.	Tray dryer	1		
5.	Refractometer	1		
6.	Jelly cups/moulds	10		
7.	Cooking vat	5		
8.	Gas stove	2		
9.	Gas cylinder	2		
10.	Stainer	5		
11.	Blender	2		
12.	Retort processor	1		
13.	Laminar air flow chamber	1		
14.	Incubator	1		
15.	Viscometer	1		

Faculty of Technology
B. Tech. Food Technology
(R 2017) Semester – VI
FD8612 BAKING AND CONFECTIONERY TECHNOLOGY LABORATORY
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Refrigerator	2		
2.	Sedimentation cylinder	1		
3.	Deck oven	1		
4.	Dough mixer	3		
5.	Fermentation cabinet	1		
6.	Humidity chamber	1		
7.	Hunter calorimeter	1		
8.	Cake & candy moulds	10		
9.	Farinograph	1		
10.	Extensograph	1		
11.	Egg beater	3		
12.	Texture analyzer	1		
13.	Weighing balance	1		

Faculty of Technology
B. Tech. Food Technology
(R 2017) Semester – VII
FD8711 TESTING OF PACKAGING MATERIALS LABORATORY
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Tensile testing machine digital	1		
2.	Wall thickness gauge	1		
3.	Friction tester	1		
4.	Puncture resistance tester	1		
5.	Modified Atmospheric cum Vacuum Packaging machine	1		
6.	Moisture meter	1		
7.	Drop tester	1		
8.	Pouches	1		
9.	Heat sealer	1		
10.	Freshness tester	1		
11.	Retort processor	1		

Faculty of Technology
B. Tech. Food Technology
(R 2017) Semester – VII
FD8712 DAIRY PROCESS TECHNOLOGY LABORATORY
Requirements for a batch of 30 students

Sl. No.	Description of Equipment	Quantity required (R)	Quantity available (A)	Deficiency (R - A)
1.	Gerber centrifuge	1		
2.	Butyrometer	15		
3.	Lactometer	4		
4.	Water bath	4		
5.	Refractometer	3		
6.	Polarimeter	1		
7.	Milko tester	1		
8.	pH meter	3		
9.	Deep freezer	1		
10.	Heating mantle	5		
11.	Thermometer	3		
12.	Weighing balance	2		
13.	Kjeldhal apparatus	1		
14.	Lovi bond comparator disc	1		
15.	Laminar air flow chamber	1		
16.	Incubator	1		

17.	Blast freezer	1		
18.	Homogeniser	1		
(Common for all experiments from IInd semester to VIIth semester)				
19.	Conical Flask (100 ml)	15		
20.	Conical Flask (250 ml)	20		
21.	Conical Flask (500 ml)	5		
22.	Beaker (100 ml)	10		
23.	Beaker (250 ml)	15		
24.	Beaker (500 ml)	10		
25.	Beaker (1000 ml)	5		
26.	Burette (50 ml)	10		
27.	Petriplates	50		
28.	Test tubes (15 ml)	500		
29.	Test tube holders	20		
30.	Glass rod	30		
31.	Spatula	20		
32.	Glass bowls	5		
33.	Steel bowls	5		
34.	Ladle	5		
35.	Table spoon	5		

36.	knife	5		
37.	Induction stove	2		
38.	Induction bowls	5		
39.	Induction cooker	2		
40.	Gas stove with cylinder	1		
41.	Mixer grinder (Food processor)	1		
42.	Electric egg Beater (mixer)	2		
43.	Baking oven (OTG)	2		
44.	Microwave oven	2		
45.	Fridge	2		
46.	Tray	5		
47.	Baking containers	4		
48.	Measuring cylinder (10 ml)	10		
49.	Measuring cylinder (25 ml)	10		
50.	Measuring cylinder (100 ml)	10		
51.	Measuring cylinder (500 ml)	4		
52.	Measuring cylinder (1000 ml)	4		
53.	Weighing balance (g)	2		
54.	Weighing balance (mg)	2		
55.	Magnetic stirrer	5		