

ADP Scheme - 777 (100336)
(Package-3) For GTC, Timergara, Kohat, Nowshera and Abbottabad
CHEMISTRY B-TECH

LIST OF GLASSWARE FOR CHEMISTRY LABORATORY

S#	Items	Specification	Unit	For one college Qty	For 4 college Qty	Unit Price (Both in Figures and words) Inclusive all taxes	Total Price (both in Figures and words) Inclusive all taxes
1	Beaker 50 ml (Pyrax)	Pyrax	NO	24	96		
2	Beaker 250 ml (Pyrax)	Pyrax	NO	24	96		
3	Beaker 500 ml (pyrax)	Pyrax	NO	24	96		
4	Beaker 1000 ml (Pyrax)	Pyrax	NO	12	48		
5	Wash bottle (plastic)		NO	24	96		
6	Bottle reagent 500ml (narrow mouth)		doz	16	64		
7	Bottle reagent 250 ml (narrow mouth)		doz	24	96		
8	Bottle Reagent 500 ml (wide mouth)		doz	6	24		
9	Bottle Reagent 3 ltr		NO	24	96		
10	Burette 50 ml		NO	24	96		
11	Measuring cylinder 100 ml		NO	6	24		
12	Measuring cylinder 10 ml		NO	6	24		
13	Crucible Porcelain with lid		NO	24	96		
14	Cork rubber assorted		doz	6	24		
15	Fusion tube		gross	24	96		
16	Capillary tube		lb	4	16		
17	Centered Glass Crucible lid		NO	24	96		
18	Borosilcate Glass		NO	24	96		

19	Dish evaporating (Porcelain 75		NO	15	60		
20	Flask Round bottom 500 ml		NO	24	96		
21	Flask Flat Bottom 3 ltr,		NO	6	24		
22	Flask Conical 100 ml		NO	24	96		
23	Flask Filtration 500 ml		NO	24	96		
24	Funnel Buckner		NO	24	96		
25	Funnel separating 250 ml		NO	24	96		
26	Funnel		NO	24	96		
27	Filter paper		pkt	6	24		
28	Glass rods		NO	24	96		
29	Kips 's apparatus 1000 ml Litmus paper		NO	4	16		
30	Litmus paper blue and Red		pkt	24	96		
31	Pipette 10 ml		NO	24	96		
32	Pestle & Mortar glass		NO	2	8		
33	Tiles Glazed white		NO	24	96		
34	Test tube hand		gross	4	16		
35	Trough Glass		NO	24	96		
36	Burette.		NO	24	96		
37	Suction pump glass		NO	24	96		
38	Watch glass		NO	24	96		
39	Ostwald Viscometer		NO	24	96		
40	Stalagmometer		NO	24	96		

ADP Scheme - 777**(Package-3) For GTC, Timergara, Kohat, Nowshera and Abbottabad
CHEMISTRY B-TECH****LIST OF EQUIPMENT FOR CHEMISTRY LAB**

S#	Items	Specificat ion	Unit	For on e coll eg e Qty	For 4 colleg e Qty	Unit Price (Both in Figures and words) Inclusiv e all taxes	Total Price (both in Figures and words) Inclusiv e all taxes
1	Electrolyzer 220V, 50HS with platinum electrode and DC power supply.		Nos	2	8		
2	Filter paper (whatman No.1) .		Sheet s	10 0	400		
3	Glass funnel dia: 7.5 cm		Nos	25	100		
4	Glass tube: Soda lime length: 150cm Ex-dia:3-4 mm		Nos	25	100		
5	Glass rods: (Stirring) Length: 20 cm, dia: 6-7 mm		Nos	25	100		
6	Pipette Graduated: 10m,		Nos	50	200		
7	Pipette 15ml.		Nos	50	200		
8	Stand Tripped (cast iron) Height: 20cm, with circular top,		Nos	50	200		
9	Spirit lamp. Metallic medium size.		Nos	50	200		
10	Test Tubes: Dimension: 150x12mm, Pyroz.		Nos	30 0	1200		
11	Test tube stand (wooden) .		Nos	25	100		
12	Tongs (Black ended steel) with Bow length: 20cms, /.		Nos	25	100		
13	Wash Bottle (Polythne) 0.250ml, .		Nos	20	80		
14	Wire gauze, .		Nos	50	200		
15	Volumetric flask. 100ml,		Nos	12	48		
16	Volumetric flask. 250ml,		Nos	12	48		

17	Distillation plant: Stainless steel, 220 V, 300V, capacity: 1 gallon. .		Nos	2	8		
18	Periodic chart,		Nos	2	8		
19	Copper sulphate (anhydrous).	Merck/BDH /Sigma	kg	0.5	2		
20	Potassium Nitrate		kg	0.5	2		
21	Ferrous sulphate		kg	0.5	2		
22	Calcium sulphate.		kg	0.5	2		
23	Soda Ash.		kg	0.5	2		
24	Sodium Bicarbonate.		kg	0.5	2		
25	Spirit Methylated.		ltr	2.5	10		
26	Iron Stand with clamp.		Nos	50	200		
27	Wooden Stand. .		Nos	50	200		

ADP Scheme - 777
(Package-3) CHEMISTRY B-TECH

LIST OF EQUIPMENT FOR CHEMICAL LAB

S#	Items	Specificatio n	Unit	For one colleg e Qty	For 4 colleg e Qty	Unit Price (Both in Figur es and words) Inclus ive all taxes	Total Price (both in Figur es and words) Inclus ive all taxes
1	Sulfuric Acid	Merck/BDH/Si gma	ltr	5	20		
2	Nitric Acid		ltr	5	20		
3	Hydrochloric Acid		ltr	5	20		
4	Sodium Hydroxide (Pellets)		kg	2	8		
5	Ammonia liquor		ltr	2.5	10		
6	Carbon Disulphide		kg	2	8		
7	Silver Nitrate		gm	250	1000		
8	Ammonium carbonate		kg	0.5	2		
9	Sodium Carbonate		kg	0.5	2		
10	Sodium Nitrate		kg	0.5	2		
11	Sodium bicarbonate		kg	0.5	2		
12	Potassium carbonate		kg	0.5	2		
13	Potassium chloride		kg	0.5	2		
14	Potassium chromate		kg	0.5	2		
15	Potassium Dichromate		kg	0.5	2		
16	Potassium chlorate		kg	0.5	2		
17	Ammonium sulfide		kg	0.5	2		
18	Ammonium sulfate		kg	0.5	2		
19	Ammonium Molybedate		kg	0.5	2		
20	Bismith Nitrate		kg	0.5	2		

21	Bismuth Chloride		kg	0.5	2		
22	Cadmium Nitrate		kg	0.5	2		
23	Cadmium chloride		kg	0.5	2		
24	Lead Nitrate		kg	0.5	2		
25	Lead Carbonate		kg	0.5	2		
26	Lead Acetate		kg	0.5	2		
27	Sodium Nitropersulfate		kg	0.5	2		
28	Sodium sulfite		kg	0.5	2		
29	Sodium sulfate		kg	0.5	2		
30	Sodium Thiosulfate		kg	0.5	2		
31	Sodium Chloride		kg	0.5	2		
32	Sodium chromate		kg	0.5	2		
33	Acetic acid (glacial)		ltr	2.5	10		
34	Oxalic Acid		kg	1	4		
35	Maleic Acid		kg	1	4		
36	Succinic Acid		kg	1	4		
37	Salicylic acid		ltr	2.5	10		
38	Ethylene glycol		kg	1	4		
39	Potassium permanganate		kg	0.5	2		
40	Glycerine		kg	0.5	2		
41	Acetone		ltr	2.5	10		
42	Chloroform		ltr	2.5	10		
43	Carbon Tetrachloride		ltr	2.5	10		
44	Benzene		ltr	2.5	10		
45	Toluene		ltr	2.5	10		
46	Xylene		ltr	2.5	10		
47	Acetaldehyde		ltr	2.5	10		
48	Benzaldehyde		ltr	2.5	10		
49	Cyclohexane		ltr	2.5	10		

50	Bleaching powder		kg	1	4		
51	Butyl acetate		ltr	2.5	10		
52	Methyl ethyl ketrone		ltr	2.5	10		
53	Copper sulfate		kg	1	4		
54	Copper Chloride		kg	1	4		
55	Zinc Chloride		kg	1	4		
56	Zinc Sulfate		kg	1	4		
57	Zinc Carbonate		kg	1	4		
58	Zinc Granules		kg	1	4		
59	Urea		kg	1	4		
60	Magnesium sulfate		kg	1	4		
61	Magnesium Chloride		kg	1	4		
62	Magnesium Nitrate		kg	1	4		
63	Magnesium Dixide		kg	1	4		
64	Magnesium sulfate		kg	1	4		
65	Cobalt chloride		kg	1	4		
66	Cobalt Nitrate		kg	1	4		
67	Cobalt carbonate		kg	1	4		
68	Nickel sulfate		kg	1	4		
69	Nickel nitrate		kg	1	4		
70	Stannous chloride		kg	1	4		
71	Stannic chloride		kg	1	4		
72	Phenolphthalein		kg	0.5	2		
73	Methyl orange		pack	1	4		
74	Methyl red		pack	1	4		
75	Congo red		pack	1	4		
76	Aluminum Nitrate		kg	1	4		
77	Aluminum sulfate		kg	1	4		
78	Ethyl alcohol absolute		ltr	2.5	10		

79	Methyl alcohol		ltr	2.5	10		
80	Sodium Benzonate		kg	1	4		
81	Sodium phosphate		kg	1	4		
82	Sodium tripolyphosphate		kg	1	4		
83	Sodium silicate		kg	1	4		
84	Chalk		pack	1	4		
85	Talc		pack	1	4		
86	Zinc Oxide		kg	1	4		
87	Boric Acid		kg	0.5	2		
88	Sodium Tetra Borate (Borax)		kg	0.5	2		
89	Stearic Acid		kg	0.5	2		
90	Iodine crystals		kg	0.5	2		
91	Potassium Iodide		kg	0.5	2		
92	Starch		kg	0.5	2		
93	Buffer solution pH-7		ltr	1	4		
94	Buffer solution pH-4		ltr	1	4		
95	Buffer solution pH-9/-10		ltr	1	4		
96	Citric acid		kg	0.5	2		

ADP Scheme - 777**(Package-3) For GTC, Timergara, Kohat, Nowshera and Abbottabad CHEMISTRY
B-TECH****LIST OF CHEMICALS FOR CHEMISTRY LABORATORY B-TECH**

S#	Items	Specificati on	Unit	For one colle ge Qty	For 4 colleg e Qty	Unit Price (Both in Figure s and words) Inclusi ve all taxes	Total Price (both in Figure s and words) Inclusi ve all taxes
1	Acid Acetic		ltr	2.5	10		
2	Acid Picric		kg	1	4		
3	Aniline		kg	1	4		
4	Ammonium Chloride		kg	1	4		
5	Ammonium Cyanate		kg	1	4		
6	Ammonium Phosphate		kg	1	4		
7	Ammonium Acetate		kg	1	4		
8	Ammonium Chloride		lb	1	4		
9	Acetic Phenone		lb	1	4		
10	Acetic Aldehyde		lb	1	4		
11	Acid Cinnamic		lb	1	4		
12	Antimony Chloride		lb	1	4		
13	Alcohol Absolute		kg	1	4		
14	Barium Chloride		kg	1	4		
15	Barium Nitrate		ltr	2	8		
16	Benzene		ltr	1	4		
17	Bromine		lb	1	4		
18	Cadmium Bromide		lb	1	4		
19	Calcium Acetate		lb	1	4		
20	Calcium Carbonate		lb	1	4		
21	Calcium Chloride Anhydrate		lb	1	4		

22	Calcium Sulphate Anhydrate		lb	1	4		
23	Chloroform		ltr	5	20		
24	Cobalt Sulphate		lb	1	4		
25	Copper Carbonate		lb	1	4		
26	Copper Chloride		lb	1	4		
27	Copper Nitrate		lb	2	8		
28	Copper Sulphate		lb	2	8		
29	Chemical Label books		dozen	2	8		
30	Dimethyl Amine		kg	10	40		
31	2,4- Dintro Phenyl Hydrazine		gm	100	400		
32	Ferric Chloride		lb	2	8		
33	Ferrous Sulphate		kg	1	4		
34	Ferrous Sulphate		kg	5	20		
35	Dextrose		lb	1	4		
36	Hydroxyl Amine Hydro Chloride		gm	10	40		
37	Lead Acetate		kg	1	4		
38	Lead Nitrate		kg	1	4		
39	Magnesium Metal		lb	1	4		
40	Magnesium Nitrate		kg	1	4		
41	Magnesium Iodide		kg	1	4		
42	Mercuric Chloride		gm	250	1000		
43	Nickel Chloride		kg	1	4		
44	Potassium Bromide		lb	1	4		
45	Potassium Chloride		lb	1	4		
46	Potassium Chromate		lb	1	4		
47	Potassium Ferricyande		lb	1	4		
48	Potassium iodide		lb	1	4		
49	Potassium Nitrate		lb	1	4		
50	Potassium oxalate		lb	1	4		

51	Potassium Thiocyanate		lb	1	4		
52	Potassium Sulphate		kg	1	4		
53	Phenyl Hydrazine Hydrochloride		lb	1	4		

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S.No	Name of items	Specification	Unit	For one college Qty	For 4 college Qty	Unit Price (Both in Figures and words) Inclusive all taxes	Total Price (both in Figures and words) Inclusive all taxes
1	PH Meter Portable:	<p>Ø PH Range: -2.00~16.00pH:</p> <p>Ø PH Accuracy: ±0.01pH</p> <p>Ø MV Range: -1999~1999mV</p> <p>Ø MV Accuracy: ±1mV</p> <p>Ø Calibration Points: 2 points</p> <p>Ø Calibration Solutions: USA (pH4.01, 7.00, 10.01)</p> <p>Ø Temperature Range: 0~100°C, 32~212°F</p> <p>Ø Temperature Accuracy: ±1°C</p> <p>Ø Temperature Calibration: Manual</p> <p>Ø Temperature Compensation: 0~100°C, 32~212°F</p> <p>Ø Automatic or Manual</p> <p>Ø Hold Function : Manual</p> <p>Ø Memory: 50 data sets with Date/Time stamping</p> <p>Ø Output: USB Communication Interface</p>	No	5	20		

		<p>Ø Connector : BNC</p> <p>Ø Built in battery Luxury III arm stand;</p> <p>Ø PH Electrode, Temp Probe.</p>					
2	Conductivity Meter	<p>Ø Conductivity Range: 0~20mS/cm (Max.200mS/cm)</p> <p>Ø Conductivity Accuracy: ±0.5% Full Scale</p> <p>Ø Calibration Points: Up to 5 points</p> <p>Ø Calibration Solutions: 10uS/cm, 84uS/cm, 1413uS/cm, 12.88mS/cm, 111.8mS/cm</p> <p>Ø TDS Range: 0~10ppt (Max. 20ppt, Depending on factor setting)</p> <p>Ø TDS Accuracy: ±1% Full Scale</p> <p>Ø TDS Factor: 0.1~1.0 (Default 0.5)</p> <p>Ø Temperature Range: 0~105°C, 32~221°F</p> <p>Ø Temperature Accuracy: ±0.5°C, ±0.9°F</p> <p>Ø Temperature Calibration: Manual</p> <p>Ø Temperature Compensation: 0~100°C, 32~212°F, Automatic or Manual</p> <p>Ø Temperature Coefficient: 0.0~10.0% per °C</p> <p>Ø Compensation Modes: Linear or Pure Water</p> <p>Ø Cell Constant:: K=0.1, 1, 10, Selectable</p>	No	5	20		

		<p>Ø Normalization Temperature: 20°C or 25°C</p> <p>Ø Auto-Off: Manual or Automatic (10, 20, 30 minutes after last key pressed, Selectable)</p> <p>Ø Reset Function: Yes</p> <p>Ø Sensor Type: Platinum (Order Code: CON-0.1, CON-1 or CON-10)</p> <p>Ø Memory: 500 data sets with Date/Time stamping</p> <p>Ø Battery operated Stand</p>					
3	Balance Digital	<p>Capacity: 2000gm Sensitivity: 0.1gm</p> <p>For: 220-240V, 50/60Hz, single phase supplies(Range: 3200gm-3500gm)</p>	No	5	20		
4	Balance Digital	<p>Capacity: 300gm</p> <p>Sensitivity: 0.01gm</p> <p>For: 220-240V, 50/60Hz, single phase supplies.</p>	No	5	20		
5	Electronic Balance Analytical	<p>Capacity: 200gm</p> <p>Readability: 0.0001gm</p> <p>For: 220-240V, 50/60Hz, single phase supplies</p>	No	3	12		
6	Oven	<p>Temperature range: 250 - 300 °C</p> <p>With natural convection Air, microprocessor PID controller, separately adjustable over-temperature controller, and perforated stainless steel Inner side. For 230V 50/60Hz single phase supplies.</p>	No	5	20		

7	Water Bath	Capacity: 50-60 lit Hole: 4 or 6 Stainless steel Inner side, with integral heating element, connector with cable, constant level and set of concentric rings. For 220VAC single phase supplies; rating 1kW.	No	5	20		
8	Magnetic Stirrer with Hot Plate.	It's heating temperature from room temperature to 300 degrees Celsius. Magnetic stirrer built-in the CPU chip, it can controls each operation functions of stirrers. The stirrer uses push-button to increase or decrease the stir speeds, Stirring Volume: 0 to 2000MI, Stirring Speed: 0 to 1250rpm Panel Material: Stainless Steel, Temperature: ambient to 300 °C, Timer: 0 to 999 minutes, Power Requirements: 220V/50Hz, with internal thermocouple, slimy bar	No	5	20		
9	Muffle Furnace	Temperature: ambient to 1150 °C. Programmable 0 °C to maro in two steps. Suitable for element analysis and quenching, tempering and annealing of small steel parts	No	1	4		
10	Centrifuge Machine	Max. speed: 4000rpm, Capacity: 12×20ml, Max.RCF: 2325*g, Power source: 220V 50Hz, Time range: 0~ 60min, constant? Pulse?	No	5	20		

11	Spectrophotometers	Product/Specification: - Wavelength Range 325-1000nm - Spectral Bandwidth 4nm Optical System Single Beam , - Grating 1200 lines/mm Wavelength - Accuracy $\pm 2\text{nm}$ - Wavelength Repeatability 1nm Wavelength - Setting Manual - Photometric Accuracy $\pm 0.5\%T$ - Photometric Range 0-200%T , -0.3 - 3A Stray Light 0.3%T - Stability $\pm 0.004A/h$ @500nm - Display 128*64 Dots LCD - Detector Silicon Photodiode- Power Requirement AC 220/50Hz.- Water distillation	No	2	8		
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