

September 1, 2020

Bid Bulletin No. 2

Subject: Supply and Delivery of Various Laboratory Supplies, Chemicals and Personal Protective Equipment under PB 20-03-25

This bid bulletin is being issued to reflect the changes in the Schedule of Requirements and Technical Specifications for PB 20-03-25 Supply and Delivery of Various Laboratory Supplies, Chemicals and Personal Protective Equipment.

REVISED SCHEDULE OF REQUIREMENTS AND TECHNICAL SPECIFICATIONS:

Attached is the Revised Schedule of Requirements and Technical Specifications for complete details (in red font).

Please be guided accordingly.


GENARO S. RILLON
Chairperson, BAC for Goods and Services

Section VI. Schedule of Requirements

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Item no.	Description	Qty	Unit	Total ABC (in PhP)	Division	Delivery Period
	Project 41					within 30 days upon receipt of PO & NTP except those item with specified delivery period
1.	Autoclavable gerber bottles for tissue culture	200	piece	20,000.00	CBC	
2.	Beaker, 1000-mL	15	piece	6,750.00	CBC	
3.	Beaker, 1000-mL	15	piece	4,500.00	CBC	
4.	Beaker, 250-mL	35	piece	7,350.00	CBC	
5.	Beaker, 250-mL	35	piece	5,250.00	CBC	
6.	Beaker, 500-mL	35	piece	10,500.00	CBC	
7.	Beaker, 500-mL	35	piece	8,750.00	CBC	
8.	Beaker, 50-mL	35	piece	7,000.00	CBC	
9.	Centrifuge tubes	20	pack	11,000.00	CBC	
10.	Disposable plastic pipettes	1	pack	3,000.00	CBC	within 60 days upon receipt of PO & NTP
11.	Disposable plastic pipettes	1	pack	3,000.00	CBC	within 60 days upon receipt of PO & NTP
12.	Disposable plastic pipettes	1	pack	3,000.00	CBC	within 60 days upon receipt of PO & NTP
13.	Disposable plastic pipettes	1	pack	3,000.00	CBC	within 60 days upon receipt of PO & NTP
14.	Fermentation tube (borosilicate glass)	100	piece	10,000.00	CBC	
15.	Filter paper #42	10	pack	8,680.00	PBBBD	
16.	Forceps	10	piece	1,000.00	PBBBD	
17.	Forceps	15	piece	9,000.00	PBBBD	
18.	Forceps	20	piece	4,000.00	CBC	
19.	Graduated cylinder	3	piece	2,100.00	ASD	
20.	Graduated cylinder, 100-mL	10	piece	7,000.00	CBC	
21.	Graduated cylinder, 1-L	5	piece	9,000.00	CBC	
22.	Graduated cylinder, 250-mL	15	piece	14,250.00	CBC	
23.	Graduated cylinder, 250-mL	10	piece	9,000.00	CBC	
24.	Graduated cylinder, 25-mL	15	piece	9,750.00	CBC	
25.	Graduated cylinder, 25-mL	10	piece	6,500.00	CBC	
26.	Graduated cylinder, 2-L	5	piece	9,500.00	CBC	
27.	Graduated cylinder, 2-L	5	piece	9,500.00	CBC	
28.	Graduated cylinder, 500-mL	15	piece	22,500.00	CBC	
29.	Graduated cylinder, 500-mL	10	piece	13,000.00	CBC	
30.	Graduated cylinder, 50-mL	15	piece	9,750.00	CBC	
31.	Graduated cylinder, 50-ml	10	piece	6,000.00	CBC	
32.	Interfold paper towel	50	pack	11,000.00	ASD	
33.	Interfolded paper towel	6	pack	600.00	ASD	

34.	Iris scissors	7	piece	2,100.00	PBBD	
35.	Iris scissors	10	piece	740.00	PBBD	
36.	Iris scissors	20	piece	4,000.00	CBC	
37.	Laboratory marker	50	piece	4,500.00	CBC	
38.	Microcentrifuge storage rack	50	piece	40,000.00	CBC	
39.	Microcentrifuge tube storage rack	50	piece	40,000.00	CBC	
40.	Mortar and pestle	10	set	7,000.00	CBC	
41.	Mortar and pestle	10	set	17,000.00	CBC	
42.	Multi-function (4-way) centrifuge tube rack	10	piece	6,000.00	CBC	
43.	PCR plates	1	pack	4,000.00	PBBD	
44.	PCR strip tubes	480	piece	19,200.00	CBC	
45.	Petri dish	10	pack	30,000.00	CBC	
46.	Petri dish, plastic with cover lid	93	piece	32,550.00	CPD	
47.	Pipette tips	1	pack	1,000.00	PBBD	within 60 days upon receipt of PO & NTP
48.	Polypropylase square Laboratory bottles	20	piece	25,000.00	CBC	
49.	Reagent bottle, 100-mL	35	piece	17,500.00	CBC	
50.	Reagent bottle, 1-L	35	piece	24,500.00	CBC	
51.	Reagent bottle, 250-mL	35	piece	28,000.00	CBC	
52.	Reagent bottle, 500 mL	35	piece	19,250.00	CBC	
53.	Resealable plastic bag	500	piece	275.00	ASD	
54.	Stirring bar retriever	3	piece	1,650.00	ASD	
55.	Syringe	10	piece	1,000.00	ASD	
56.	Syringe filter	1	pack	1,120.00	CBC	
57.	Test tube	100	piece	5,000.00	CBC	
58.	Test tube rack	10	unit	7,000.00	CBC	
59.	Weighing boat	1	pack	2,000.00	ASD	
60.	Weighing boat	1	pack	2,000.00	ASD	
61.	Face mask	50	box	25,000.00	ASD	
62.	Face mask	15	box	9,000.00	ASD	
63.	Face mask	9	box	5,516.01	ASD	
64.	Face mask	50	box	40,000.00	ASD	
65.	Face mask	2	box	331.50	ASD	
66.	Face mask	12	box	6,000.00	ASD	
67.	Face mask	60	box	72,721.00	PPD	
68.	Face mask	3	box	1,800.00	PBBD	
69.	Face mask	127	box	76,200.00	PBBD	
70.	Mask	12	piece	3,000.00	ASD	
71.	Mask	30	piece	5,400.00	ASD	
72.	Mask	15	box	2,250.00	ASD	
73.	Mask	10	piece	1,000.00	ASD	
74.	Face Shield	10	piece	1,000.00	ASD	
75.	Face Shield	24	piece	3,600.00	PPD	
76.	Protective Eyewear	25	piece	2,500.00	PBBD	
77.	Protective Eyewear	381	piece	38,100.00	PBBD	
78.	Goggles	10	piece	4,500.00	ASD	
79.	Goggles	5	piece	1,000.00	ASD	
80.	Goggles	5	piece	500.00	ASD	
81.	Goggles	10	piece	3,100.00	ASD	
82.	Goggles	11	piece	1,650.00	PPD	

83.	Working gloves	15	pair	5,250.00	ASD	
84.	Working gloves	30	pair	2,100.00	ASD	
85.	Working gloves	15	pair	4,200.00	ASD	
86.	Working gloves	5	pair	1,400.05	ASD	
87.	Working gloves	15	pair	750.00	ASD	
88.	Working gloves	25	pair	1,500.00	PBBD	
89.	Working gloves	254	pair	15,240.00	PBBD	
90.	Disposable surgical gloves	25	box	9,625.00	PPD	
91.	Nitrile gloves	2	box	10,000.00	PPD	
92.	Laboratory shoes	3	pair	450.00	ASD	
93.	Apron for Laboratory	6	piece	1,800.00	PPD	
94.	Potato dextrose agar	2	bottle	4,400.00	CPD	
95.	Isopropyl alcohol, 70%	120	piece	15,708.00	PBBD	
96.	Ethyl alcohol, 70 %	3	gallon	2,400.00	PBBD	
97.	Cheese cloth	16	yard	1,600.00	PBBD	
98.	Electrolyte solution for pH glass electrode	2	piece	9,000.00	ASD	
99.	pH Electrode	1	piece	30,007.28	ASD	
	Project 42					within 30 days upon receipt of PO & NTP
100.	Acrylamide (40%) bis solution, 29:1, 2x500 mL	3	pack	33,000.00	CBC	within 45 days upon receipt of PO & NTP
101.	Agarose, 500 g/ bottle	1	bottl e	14,500.00	CBC	within 45 days upon receipt of PO & NTP
102.	Broth, LB Broth, 1-L/bottle	2	bottl e	8,000.00	CBC	
103.	Cetyltrimethylammonium bromide (CTAB), 500 g/bottle	2	bottl e	14,000.00	CBC	
104.	Cetyltrimethylammonium bromide (CTAB), 500g./ bottle	1	bottl e	15,000.00	CBC	
105.	Deoxynucleoside Triphosphate (dNTP) solution set	1	set	7,000.00	CBC	
106.	Diethylpyrocarbonate, DEPC,100 mL/bottle	1	bottl e	60,000.00	CBC	
107.	DNA ladder	7	set	21,000.00	CBC	
108.	DNA ladder, 100 bp, 100 ng/uL 1x1 mL	1	bottl e	7,900.00	CBC	
109.	DNA ladder, 100bp, 100 ng/uL 1x1 mL	1	pack	5,0000.00	CBC	
110.	Ethyl alcohol, 20 L	1	carbo uy	4,000.00	CBC	
111.	Hydrochloric acid (HCl),	5	bottl e	6,600.00	ASD	
112.	Kraft lignin, 100 g/bottle	1	bottl e	7,600.00	CBC	
113.	Lambda DNA, 250 mg	3	unit	4,500.00	CBC	
114.	Plant tissue culture agar 500 g/bottle	4	bottl e	22,000.00	CBC	
115.	Polyvinylpyrrolidone (PVP),500 g/bottle	1	bottl e	25,000.00	CBC	

116.	Potato dextrose agar, 500 g/bottle	2	bottle	4,000.00	CPD	
117.	RNase A solution, 10 mg/mL	2	pack	20,000.00	CBC	
118.	Sodium acetate, 500g	1	bottle	10,000.00	CBC	
119.	Sodium citrate, 500 g/bottle	2	bottle	18,000.00	CBC	
120.	Temed, 100 mL	1	bottle	8,250.00	CBC	
121.	Table sugar, 50 kg/pack	1	pack	3,500.00	CBC	

Technical Specifications

Item	Specification	Statement of Compliance
		Bidders must state here either “Comply” or “Not Comply” against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of “Comply” or “Not Comply” must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer’s un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidders statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the provisions of ITB Clause 3.1(a)(ii) and/or GCC Clause 2.1(a)(ii).
	PROJECT 41 Laboratory Supplies	
1.	Two hundred (200) Pieces Autoclavable Gerber Bottles for Tissue Culture 2.5 oz, glass jar without cover	
2-3.	Thirty (30) Pieces Beaker (1000-mL) borosilicate glass, with 50-mL graduation intervals	
4-5.	Seventy (70) Piece Beaker (250-mL) borosilicate glass, with 50-mL graduation intervals	
6-7.	Seventy (70) Pieces Beaker, 500-mL borosilicate glass, with 50-mL graduation intervals	
8.	Thirty Five (35) Piece Beaker (50-mL) borosilicate glass, with 10-mL graduation intervals	
9.	Twenty (20) Packs Centrifuge Tubes (50-mL) conical bottom with cap, self-standing, sterile, made of high transparency polypropylene material, 25 pcs/pack	
10.	One (1) Pack Disposable Plastic Pipettes (5-mL)	

	transparent, 6-inches long, with 0.25 mL graduation intervals, with good chemical resistance, made of polyethylene material, 200 pieces/pack	
11.	One (1) Pack Disposable Plastic Pipettes (3-mL) transparent, 6-inches long, with 0.25 mL graduation intervals, with good chemical resistance, made of polyethylene material, 200 pieces/pack	
12.	One (1) Pack Disposable Plastic Pipettes (1-mL) transparent, 6-inches long, with 0.25 mL graduation intervals, with good chemical resistance, made of polyethylene material, 200 pieces/pack	
13.	One (1) Pack Disposable Plastic Pipettes (2-mL) transparent, 6-inches long, with 0.25 mL graduation intervals, with good chemical resistance, made of polyethylene material, 200 pieces/pack	
14.	One Hundred (100) Pieces, Fermentation Tube made of Borosilicate Glass vertical tube (outside diameter) - 13mm, length - 100 mm; Bulb (outside diameter) - 30 mm; graduation range - 0.1-5 mL; graduation intervals - 1 mL	
15.	Ten (10) Packs Filter Paper (#42) 125 mm, circle, made of good quality virgin wood pulp, 100 pieces/pack	
16.	Ten (10) Pieces Forceps pointed tip, stainless steel, 130 mm long	
17-18.	Thirty Five (35) Pieces Forceps 4 3/4 inches long, sharp point forceps, stainless steel	
19.	Three (3) Pieces Graduated Cylinder (100-mL) with bumper guard, made of borosilicate glass cylinder, single metric scale and graduation mark every 10 scales (10, 20, etc), with pour spout, durable	
20.	Ten (10) Pieces Graduated Cylinder (100-mL) polypropylene, transparent, with pour spout, double metric scale, with 0.2 mL graduation intervals, with bumper guard	
21.	Five (5) Pieces Graduated Cylinder (1-L) polypropylene, transparent, with pour spout, double metric scale, with 10 mL graduation intervals, with bumper guard	
22.	Fifteen (15) Pieces Graduated Cylinder (250-mL)	

	borosilicate glass, transparent, with pour spout, double metric scale, with 2 mL graduation intervals, with bumper guard	
23.	Ten (10) Pieces Graduated Cylinder (250-mL) Polypropylene, transparent, with pour spout, double metric scale, with 2 mL graduation intervals, with bumper guard	
24.	Fifteen (15) Pieces Graduated Cylinder (25-mL) borosilicate glass, transparent, with pour spout, double metric scale, with 0.2 mL graduation intervals, with bumper guard	
25.	Ten (10) Pieces Graduated Cylinder (25-mL) polypropylene, transparent, with pour spout, double metric scale, with 0.2 mL graduation intervals, with bumper guard	
26.	Five (5) Pieces Graduated Cylinder (2-L) borosilicate glass, transparent, with pour spout, double metric scale, with 50 mL graduation intervals, with bumper guard	
27.	Five (5) Pieces Graduated Cylinder (2-L) polypropylene, transparent, with pour spout, double metric scale, with 50 mL graduation intervals, with bumper guard	
28.	Fifteen (15) Pieces Graduated Cylinder (500-mL) borosilicate glass, transparent, with pour spout, double metric scale, with 5 mL graduation intervals, with bumper guard	
29.	Ten (10) Pieces Graduated Cylinder (500-mL) polypropylene, transparent, with pour spout, double metric scale, with 5 mL graduation intervals, with bumper guard	
30.	Fifteen (15) piece Graduated Cylinder (50-mL) borosilicate glass, transparent, with pour spout, double metric scale, with 2 mL graduation intervals, with bumper guard	
31.	Ten (10) Pieces Graduated Cylinder (50-mL) polypropylene, transparent, with pour spout, double metric scale, with 2 mL graduation intervals, with bumper guard	
32-33.	Fifty Six (56) Packs Interfold Paper Towel 203 x 210mm, 1 ply x 175 pulls, highly absorbent, made up of 100% virgin pulp, dermatologist-tested	
34.	Seven (7) Piece Iris Scissors straight, pointed, 4.5-inches long	
35-36.	Thirty (30) Pieces Iris Scissors 11.5 cm (4.5") long, 2.2 cm blades, ring finger handle, stainless steel, straight	

37.	<p>Fifty (50) Pieces Laboratory Marker</p> <p>black, 0.8 mm extra fine line tip and 2 mm fine line tip, oil-based, water resistant</p>	
38.	<p>Fifty (50) Pieces Microcentrifuge Tube Storage Rack</p> <p>reversible; ideal for freezing, accommodates 0.5 mL microcentrifuge tubes on one side while the opposite side holds 1.5 to 2.0 mL microcentrifuge tubes, 96 wells on each side keep; 8 x 12 array, polypropylene; With cover</p>	
39.	<p>Fifty (50) Pieces Microcentrifuge Tube Freezer storage rack</p> <p>reversible, 80-wells (5 x 16 configuration), can accommodate 0.5 mL, 1.5 mL, 2 mL microcentrifuge tubes, polypropylene, ideal for freezing</p>	
40.	<p>Ten (10) Sets Mortar and Pestle (150-mL)</p> <p>small-sized, porcelain, white</p>	
41.	<p>Ten (10) Sets Mortar and Pestle (750-mL)</p> <p>medium-sized; porcelain, white</p>	
42.	<p>Ten (10) Pieces Multi-Function (4-way) Centrifuge Tube Rack</p> <p>Suitable for 0.5 mL, 1.5 mL and 2 mL microcentrifuge tubes and 50 mL centrifuge tube</p>	
43.	<p>One (1) Pack PCR Plates (96-Well)</p> <p>flat top, polypropylene, non-skirted, Clear, sterile, DNase-, RNase-, and pyrogen-free, 25 pcs/pack</p>	
44.	<p>Four Hundred Eighty (480) Pieces PCR Strip Tubes</p> <p>thin wall, 125 per pack, flat E39 0.2 mL 8-strip tubes with attached individual flat cap</p>	
45.	<p>Ten (10) Packs Petri Dish</p> <p>made of borosilicate glass; with top and bottom, dimension: 100 mm (D) x 15 mm (H), 10 pieces/pack</p>	
46.	<p>Ninety Three (93) Pieces Glass Petri Dish with Cover Lid</p> <p>Manufactured from flat, clear borosilicate glass with beaded rims to withstand repeated autoclaving, chemicals and heat. Glass Petri Dish covers are marked in blue enamel and the bottoms in white enamel to facilitate sorting. Bottoms also have triangular orientation mark for serial dilutions.</p> <p>Key Features</p> <p>Industry standard for quality and consistency</p>	

	<p>Reusable to reduce lab waste Beaded rims reduce capillary action on sides Cover/Bottoms marked to facilitate sorting</p> <p>Base ext. dia mm = 114 Cover int. dia mm = 115 Size mm = 120 x 20 Pack quantity = 10</p>	
47.	<p>One (1) Pack Pipette Tips (10 uL)</p> <p>beveled, non-filtered, clear, sterile, autoclavable, 1,000 pcs/pack</p>	
48.	<p>Twenty (20) Pieces Polypropylase Square Laboratory bottles (1000-mL)</p> <p>narrow mouth with cap, PPCO bottle, PO closure polypropylene linerless cap, leakproof molded graduation, autoclavable, milky white translucent, can withstand temperature ranging from -40 °C to 121°C BPA-free, phthalate-free</p>	
49.	<p>Thirty Five (35) Pieces Reagent Bottle (100-mL)</p> <p>clear, screw cap, borosilicate glass, graduated</p>	
50.	<p>Thirty Five (35) Pieces Reagent Bottle (1-L)</p> <p>clear, screw cap, borosilicate glass, graduated</p>	
51.	<p>Thirty Five (35) Pieces Reagent Bottle (250-mL)</p> <p>clear, screw-cap, borosilicate glass</p>	
52.	<p>Thirty Five (35) Pieces Reagent Bottle (500 mL)</p> <p>clear, screw cap, borosilicate glass, graduated</p>	
53.	<p>Five hundred (500) Pieces Resealable Plastic Bag</p> <p>1 kg Dimension: 5" x 7 " double seal</p>	
54.	<p>Three (3) Pieces Stirring Bar Retriever</p> <p>polyethylene, 43.2 cm long</p>	
55.	<p>Ten (10) Pieces Syringe (10-mL)</p> <p>glass with single metric scale</p>	
56.	<p>One (1) Pack Syringe Filter</p> <p>Sterile, 25-mm diameter, 0.22 um pore size, 10 pieces/box, 50 boxes/pack</p>	
57.	<p>One Hundred (100) Pieces Test Tube</p> <p>dimension: 6-6.5 (D) x 50 (H) mm, made of borosilicate glass rimless</p>	
58.	<p>Ten (10) Units Test Tube Rack</p> <p>Can accommodate 25 x 200 mm test tubes, 12 x 6 holes, plastic coated metal</p>	
59.	<p>One (1) Pack Weighing Boat</p> <p>white/transparent, dimension: 8.9 x 2.5 cm, 500 pieces/pack</p>	

60.	One (1) Pack Weighing Boat white/transparent, dimension: 4.1 x 0.8 cm, 500 pieces/pack	
61-69.	Three Hundred Twenty Eight (328) boxes Face Mask 3-ply earloop, hypoallergenic, fluid resistant, form-fit design, 50 pcs/box	
70.	Twelve (12) pieces Mask Waterproof and anti-fog face shield protective Isolation mask Size: 21x6x4.6cm.	
71-72.	Forty Five (45) pieces Mask Pet Film single anti-fog isolation use safety protective examination face shield color: Transparent size:46*44*39cm adjustable	
73.	Ten (10) pieces Face shield Anti-Fog Isolation Face Shield Color: transparent Without Ethylene Oxide Sterilization	
74-75.	Thirty Four (34) pieces Face shield face shield (full face) transparent size:46*44*39cm, adjustable	
76-77.	Four Hundred Six (406) pieces Protective Eyewear Face shield with eyewear	
78.	Ten (10) pieces Goggles Transparent anti-fog mirror foot adjustable size absorb 99.9% UV rays soft and comfortable nose	
79.	Five (5) pieces Goggles Style:Windproof Polarized: No Lens material: Resin Frame material: Plastic adjustable	
80.	Five (5) pieces Goggles laboratory safety goggles, anti splash, anti virus	
81.	Ten (10) pieces Goggles material: polycarbonate lenses color: transparent adjustable side arms heavy duty	
82.	Eleven (11) pieces Goggles transparent plastic window or wire screen	
83.	Fifteen (15) pairs Working gloves Rubber gloves chemical resistant size: medium (5 pcs.) and large (10 pcs.)	

	color : Green	
84-87.	Sixty five (65) pairs Working gloves fabric with rubber in the palm sizes :medium (39 pairs) large: 26 pairs	
88.	Twenty five (25) pairs Working gloves fabric with rubber in the palm small:5 pairs Medium: 10 pairs Large: 10 pairs	
89.	Two Hundred Fifty Four (254) pairs Working gloves fabric with rubber Comfortable, close fitting glove with extended cuff Sizes: Small-20 pairs Medium-80 pairs Large-154 pairs	
90.	Twenty five (25) boxes Disposable Surgical Gloves Blue, large, 100 pcs/box	
91.	Two (2) Boxes Nitrile Gloves medium blue, powder-free, non-sterile, industrial/food service grade, 100 pcs/box	
92.	Three (3) pairs Laboratory Shoes Rubber soled laboratory shoes, size 6, white	
93.	Six (6) pieces Apron for Laboratory dust protect lab gown long sleeves	
94.	Two (2) Bottles Potato Dextrose Agar microbiology grade, 500 g/bottle	
95.	One Hundred Twenty (120) Bottles Isopropyl Alcohol with Moisturizer? (70%) medical grade 500 mL/bottle	
96.	Three (3) Gallon Ethyl alcohol, 70 % medical grade	
97.	Sixteen (16) Yards Cheese Cloth loose-woven gauze like carded cotton cloth, unbleached, free of chemicals and biodegradable	
98.	Two (2) Pieces , Electrolyte solution for pH glass electrode 3.5M KCL, 30 mL/ bottle	
99.	One (1) Piece Electrode for Hanna Instrument pH Meter (pH glass electrode HI1131)	

	measurement range (pH): 0 to 13, reference cell type double, Ag/AgCl junction type/flow rate ceramic, single / 15-20 micro L/h, refill electrolyte 3.5M KCl Body, Material glass Tip / Shape spheric (dia: 9.5 mm)	
	PROJECT 42 Chemicals	
100.	Three (3) Bottles Acrylamide 40% acrylamide and bis-acrylamide solution, 29:1, 1 x 500 mL	
101.	One (1) Bottle Agarose Molecular biology grade, 500 g/bottle	
102.	Two (2) Bottles Lysogeny Broth (LB) Broth (1-L, 1X) microbiology grade, 1 L/bottle	
103.	Two (2) Bottle Cetyltrimethylammonium Bromide (CTAB) molecular biology grade, 500 grams /bottle	
104.	One (1) Bottle Cetyltrimethylammonium Bromide (CTAB) molecular biology grade, 500 grams /bottle	
105.	One (1) Set Deoxynucleoside Triphosphate (dNTP) Solution Set 100 mM, 4x25 umol molecular biology grade, 100 mM, 4 x 0.25 umol, 1 mL	
106.	One (1) Bottle Diethylpyrocarbonate (DEPC) Purity 99%, concentrated solution, 100 mL/bottle	
107.	Seven (7) Set DNA Ladder molecular biology grade, 1Kb, 250-10 kp, 1 x 500 uL / set	
108.	One (1) Bottle DNA Ladder 100 ng/uL, 1 x 1 mL; for 200 lanes, 5 uL per lane, with loading dye (6x) 1 x 1.5 mL contain eighteen DNA fragments (in base pairs): 100 , 150, 200, 300, 400, 500, 600, 800, 1000, 1200, 1600, 2000, 3000, 4000, 5000, 6000, 8000, and 10000	
109.	One (1) Bottle DNA Ladder molecular biology grade, 100bp, 100 ng/uL, 1x1 mL	
110.	One (1) Bottle Ethyl Alcohol (95%) 4 liter, analytical grade	
111.	Five (5) Bottles Hydrochloric Acid technical grade, 20 L/carbouy	

112.	One (1) Bottle Kraft Lignin 100 g, water-soluble, MW=10.000 Da, low sulfonate content <4%	
113.	Three (3) Units Lambda DNA (516 g/mL) molecular biology grade, 250 ug/bottle	
114.	Four (4) Bottle Plant Tissue Culture Agar microbiology grade, 500 g/bottle	
115.	One (1) Bottle Polyvinylpyrrolidone (PVP) Molecular biology grade, 40,000 MW, 500 g/bottle	
116.	Two (2) Pieces Potato Dextrose Agar microbiology grade, 500 g/bottle	
117.	Two (2) Packs RNase A Solution (10mg/mL) molecular biology grade, ready-to-use premixed solution, DNase and protease-free	
118.	One (1) Bottle Sodium Acetate molecular biology grade, 99%, 500 g/bottle	
119.	Two (2) Pieces Sodium Citrate molecular biology grade, 500 g/bottle	
120.	One (1) Bottles Temed (N, N, N',N'-tetramethylethane-1,2-diamine) molecular biology grade, 100 mL/bottle	
121.	One (1) Pack Table Sugar 50 kg/pack technical grade	