



TENDER DOCUMENTS

BIOLOGY/CHEMISTRY LAB CHEMICALS

NUTECH/SCM/Bio/Chem Lab-2019/TD-012

NATIONAL UNIVERSITY OF TECHNOLOGY

TENDER NOTICE

National University of Technology (NUTECH)

NUTECH/SCM/Bio/Chem-2019/TD-012

Sealed bids are invited from Government / FBR Registered Firms for the procurement of Chemicals for NUTECH Biology and Chemistry Technology Labs.

1. Tender documents containing terms & conditions and detailed specifications of items can be downloaded from NUTECH website "<https://nutech.edu.pk/d-p.php>" w.e.f **03-01-2019**.
2. Quotations shall be submitted as per requirement of the tender documents.
- a. Bidders will be required to submit bank draft/PO equal to 4% of quoted value as Bid Bond in favor of National University of Technology (NUTECH).
3. Sealed bids with detailed specification should reach on the following address latest by **1100 hours on 05-02-2019**. Late submission will not be entertained.
4. Bids will be opened at **1130 hours** on **05-02-2019** at SCM Office.
5. Project is to be completed in 110 days from the date of award of contract.

Deputy Director (Supply Chain Management Office)

NATIONAL UNIVERSITY OF TECHNOLOGY (NUTECH) IJROAD, SECI-12,

ISLAMABAD

Tel: 0092-51-5476768, Ext :178



NATIONAL UNIVERSITY OF TECHNOLOGY
SUPPLY CHAIN MANAGEMENT OFFICE

INVITATION TO TENDER

Submission Date/Time 05-02-2019 at 11 00 hours

1. NUTECH desires to procure the list of item(s)/Store(s) as per **Annexure-A**. Interested bidders are requested to send their bids through courier or deliver at NUTECH under two separate sealed envelopes (placed together in third envelope), marked clearly, "**Technical Offer**" and "**Commercial Offer**", respectively to the undersigned, latest by or before above mentioned due date. If due to any unforeseen circumstances, NUTECH establishment remains closed, then the last date of submission will be extended to next working day.
2. Please also note that Technical Offer should contain Annexes-A & B duly filled in (supported with relevant technical literature /details/ catalogues etc). Commercial Offer will contain Annexure-C. Please ensure no space is left blank in the annexes.
3. Following must be noted for this IT (Invitation to Tender):-
 - a. Validity of offer will be 90 days
 - b. Delivery period will be 110 days
 - c. Tender(s) must be accompanied with a Bid Bond in agreement of faithful compliance of the conditions of Contract/Purchase Order. This amount will be equivalent to 4% of the total quoted value. In case of non-acceptance of any offer, the Bid Bond will be returned to the bidder by fastest possible means. The Bid Bond amount submitted by the successful bidder will however, be refunded on effective termination of Contract/ Purchase Order. (The Bid Bond will be forfeited in case of default by the bidder from his commitments made through his offer). Submission of Bid Bond is mandatory, otherwise your offer will be rejected.
 - d. 2 years warranty against 5% bank guarantee will be required from the successful bidders from the date of commissioning.

- e. Rates should be quoted on Free Delivery basis at NUTECH Islamabad.
4. We reserve the rights to accept or reject any or all tenders as a whole or in part without assigning any reason whatsoever. The decision in this regard will be firm, final and binding on all bidders.

DD (Supply Chain Management)



NATIONAL UNIVERSITY OF TECHNOLOGY
SUPPLY CHAIN MANAGEMENT OFFICE

TECHNICAL OFFER

Annex A

User Reference No Bio/Chem Lab -001 Date 26-12-2018

Technical Specification

Ser	Nomen	Description	Country of Origin	A/U	Qty Req	Bidder Compliance			Tech Scrutiny to be done by user	
						Yes	No	Alternate Offer	Accepted	Rejected
Reason of Rejection										
BIOLOGY LAB CHEMICALS										
1	NaCl	AR Grade	EU/American	Kg	2					
2	NaOH	AR Grade	EU/American	Kg	1					
3	Microbiology media a. NA, b. NB, c. yeast extract, d. LB		EU/American	Kg	0.5 each					
4	Ethidium bromide		EU/American	gm	10					

5	Iodine	ACS reagent 99.8%	EU/American	Kg	0.5				
6	Safranin	dye content, >85%	EU/American	Kg	0.5				
7	Crystal violet	dye content, >90%	EU/American	Kg	0.5				
8	Agar agar	For microbiology	EU/American	Kg	2				
9	Agarose		EU/American	Kg	2				
10	Acrylamide		EU/American	Kg	1				
11	Stains/dyes/indicators for a) DNA, b) RNA, c) Protein d) Polysaccharide e) Lipid		EU/American	µL Min. packaging	2 each				
12	Methanol	puriss p.a. ACS reagent 99.8%	EU/American	Lt	2.5x6				
13	Ethanol	Absolute, reagent ISO reagent 99.8%	EU/American	Lt	2.5x6				
14	Ethanol	Absolute, reagent ISO reagent 95%	EU/American	Lt	2.5x6				
15	Isopropanol	AR Grade	EU/American	Lt	2.5x3				
16	Phenol	AR Grade	EU/American	Lt	2.5x3				

17	2-Mercaptoethanol	AR Grade	EU/American	ml	20x3				
18	Xyelene	AR Grade	EU/American	Lt	2.5x3				
19	Acids a) H ₂ SO ₄ b) HCl c) TFA d) TCA e) HNO ₃	AR Grade or ACS reagent 90%	EU/American	Lt	2 x5 each				
20	Glycerol	AR Grade	EU/American	Lt	2.5x3				
21	a) SDS b) ZnPO ₄ c) NH ₄ Cl	puriss p.a. ACS reagent	EU/American	Kg	1 each				
22	Antibiotics Discs		EU/American	Nos	3 Vial				
23	Gel elution kit		EU/American	Nos	8				
24	MS media		EU/American	Kg	2				
25	Tris		EU/American	Kg	1				
26	EDTA		EU/American	Kg	1				
27	160 pH Indicator Test Strips 1-14 Paper Litmus Tester Paper Water Litmus Soil Lab		EU/American	Nos	100 Strip s				
28	Taq DNA Polymerase		EU/American	Nos	40 vials				
29	Trizol		EU/American	Nos	8 bottle s				
30	Antibiotics (Kanamycin,		EU/American	gm	50 each				

	Penicilline, Ampicilline)								
31	Loading dye		EU/American	Nos	20 vials				
32	Gel dye		EU/American	gm	20				
33	n-Hexane		EU/American	Lt	2.5x3				
34	Chloroform		EU/American	Lt	2.5x2				
35	Acetone		EU/American	Lt	2.5x4				
36	Ethyl acetate		EU/American	Lt	2.5x4				
37	Tween 80		EU/American	mL	500				
38	Sabourad Dextrose agar		EU/American	gm	500				
39	Nutrient agar		EU/American	gm	500				
40	Nutrient broth		EU/American	gm	500				
41	Ciprofloxacin		EU/American	mg	500				
42	Clotrimazole		EU/American	mg	250				
43	Ascorbic acid		EU/American	Kg	1				
44	DPPH(2,2- diphenyl-1-picryl- hydrazyl-hydrate)		EU/American	gm	5				

45	Potassium dihydrogen phosphate		EU/American	Kg	1				
46	dipotassium phosphate		EU/American	Kg	1				
47	Acarbose		EU/American	gm	1				
48	Surfactin		EU/American	mg	10				
49	Doxorubicin		EU/American	mg	1				
50	Folin–Ciocalteu reagent (FC)		EU/American	mL	100				
51	Phosphate buffer saline		EU/American	Nos	100 tabs				
52	α-amylase enzyme		EU/American	gm	25				
53	Ferric chloride (FeCl ₃)		EU/American	Kg	1				
54	Gallic acid		EU/American	gm	10				
55	Monosodium dihydrogen phosphate (NaH ₂ PO ₄)		EU/American	Kg	1				
56	Potassium acetate		EU/American	Kg	1				
57	Potassium ferricyanide		EU/American	gm	500				
58	Quercetin		EU/American	gm	10				

59	Trichloroacetic acid (TCA)		EU/American	mg	500				
60	Trypton soya broth (TSB)		EU/American	gm	500				
61	Potassium iodide (KI)		EU/American	mg	500				
62	Ammonium molybdate		EU/American	gm	250				
63	Ascorbic acid		EU/American	Kg	1				
64	Spirit		EU/American	Lt	3				
65	Copper sulphate		EU/American	Kg	1				
66	Sodium citrate		EU/American	Kg	1				
67	Copper acetate		EU/American	mg	500				
68	Glacail acetic acid		EU/American	Lt	1x 2.5				
69	Anhydrous sodium carbonate		EU/American	Kg	1				
70	Alpha naphthanol		EU/American	gm	500				
71	Sodium carbonate		EU/American	Kg	1				
72	Sea salt		EU/American	Kg	1				
73	Artemia saline egg		EU/American	gm	200				

CHEMISTRY LAB CHEMICALS									
1	Ethyl alcohol	Absolute, reag. ISO reag. 99.8%	Europe/Sout h Korea	Lt	1				
2	Acetaldehyde	ACS reagent 99.5%	Europe/Sout h Korea	Lt	1				
3	Glacial Acetic acid	Pharma Grade USP	Europe/ South Korea	Lt	1				
4	Acetic acid	ACS reagent 99.7%	Europe/ South Korea	Lt	4				
5	Acetone	HPLC Plus 99.9%	Europe/ South Korea	Lt	1				
6	Acetonitrile	ACS reagent 99.5%	Europe/ South Korea	Lt	2.5				
7	Aluminum nitrate	ACS reagent 98%	Europe/ South Korea	gm	500				
8	Aluminum chloride	reagent grade 98%	Europe/ South Korea	gm	100				
9	Ammonia solution	puriss anhydrous 99.95%	Europe/ South Korea	Kg	1				

10	ammonia hydroxide solution	ACS reagent 28-30% in NH3	Europe/ South Korea	Lt	1				
11	Ammonium nitrate	puriss p.a. ACS reagent 98%	Europe/ South Korea	Kg	1				
12	Ammonium acetate	puriss p.a. ACS reagent 98%	Europe/ South Korea	Kg	1				
13	ammonium chloride 31107-1KG	puriss p.a. ACS reagent 98%	Europe/Korea a	Kg	1				
14	Ammonium sulfate	puriss p.a. ACS reagent 99%	Europe/ South Korea	Kg	1				
15	Aniline	ACS reagent 99.5%	Europe/ South Korea	Lt	1				
16	Arsenic chloride	99.99% trace metal basis Aldrich	Europe/ South Korea	gm	50				
17	Arsenic oxide	ACS reagent	Europe/ South Korea	gm	125				
18	L-Ascorbic Acid	ACS reagent 99.5%	Europe/ South Korea	gm	500				

19	Barium Nitrate	ACS reagent 99%	Europe/ South Korea	gm	500				
20	Barium chloride	ACS reagent 99.5%	Europe/ South Korea	gm	500				
21	Benedict reagent		Europe/ South Korea	Lt	1				
22	Benzaldehyde	reagent plus 99%	Europe/ South Korea	Lt	1				
23	Benzene	ACS reagent 99%	Europe/ South Korea	Lt	1				
24	Benzoic acid	ACS reagent 99.5%	Europe/ South Korea	gm	500				
25	Boric acid	puriss p.a. ACS reagent 99.8%	Europe/ South Korea	Kg	1				
26	Calcium chloride	ACS reagent 96%	Europe/ South Korea	gm	500				
27	Carbon disulfide	ACS reagent 99.9%	Europe/ South Korea	Lt	1				
28	Chromium trichloride hexahydrate	ACS reagent 99.5%	Europe/ South Korea	gm	1				
29	Citric acid	ACS reagent 99.5%	Europe/ South Korea	Kg	1				

30	Cobaltous acetate tetrahydrate	ACS reagent 98%	Europe/ South Korea	gm	100				
31	Cobaltous chloride hexahydrate	ACS reagent 98%	Europe/ South Korea	gm	100				
32	Cobaltous nitrate hexahydrate	ACS reagent 98%	Europe/ South Korea	gm	100				
33	Cupric chloride dihydrate	ACS reagent 99%	Europe/ South Korea	gm	500				
34	Cupric sulfate	Reagent plus 99%	Europe/ South Korea	gm	500				
35	Cyclohexane	ACS reagent 99%	Europe/ South Korea	Lt	1				
36	Diethyl ether	Anhydrous ACS reagent	Europe/ South Korea	Lt	1				
37	Diethylamine	99.50%	Europe/ South Korea	Lt	1				
38	Dimethyl Sulfoxide	ACS reagent 99.9%	Europe/ South Korea	Lt	2.5				
39	Dimethyl formamide	ACS reagent 99.8%	Europe/ South Korea	Lt	2.5				
40	EDTA	ACS reagent	Europe/ South Korea	Kg	1				
41	Ethylendiamine	puriss p.a. ACS	Europe/ South Korea	Lt	2.5				

		reagent 99.5%							
42	Ethyl acetate	ACS reagent 99.5%	Europe/ South Korea	Lt	2.5				
43	Ferric chloride	reagent grade 97%	Europe/ South Korea	Kg	1				
44	Ferrous sulfate heptahydrate	ACS reagent 99%	Europe/ South Korea	Kg	1				
45	Formaldehyde	ACS reagent methanol as stabilizer	Europe/ South Korea	Lt	2.5				
46	Formic Acid	puriss p.a. ACS reagent 98%	Europe/ South Korea	Lt	2.5				
47	Tetrabutylammoniu m hexafluorophosphat e	99.90%	Europe/ South Korea	gm	100				
48	Hydrochloric acid	puriss p.a. ACS reagent 37%	Europe/ South Korea	Lt	6				
49	Hydrogen peroxide	30 wt % in H ₂) ACS reagent	Europe/ South Korea	ml	500				

50	Perchloric acid	ACS reagent 70%	Europe/ South Korea	Lt	2.5				
51	Hexane	puriss p.a. ACS reagent 99%	Europe/ South Korea	Lt	2.5				
52	Iodine	ACS reagent 99.8%	Europe/ South Korea	Kg	1				
53	Ferric chloride hexahydrate	puriss p.a. ACS reagent 98-102%	Europe/ South Korea	Kg	1				
54	Lactic acid	ACS reagent 85%	Europe/ South Korea	Kg	2.5				
55	Lithium chloride	ACS reagent 99%	Europe/ South Korea	gm	100				
56	Lead chloride	powder 98%	Europe/ South Korea	Kg	1				
57	Magnesium chloride	anhydrous 98%	Europe/ South Korea	Kg	1				
58	Magnesium oxide	ACS reagent 97%	Europe/ South Korea	gm	100				
59	Mercuric nitrate monohydrate	ACS reagent 98%	Europe/ South Korea	gm	500				

60	Methanol	puriss p.a. ACS reagent 99.8%	Europe/ South Korea	Lt	2.5				
61	Methyl acetate	puriss p.a. ACS reagent 99.5%	Europe/ South Korea	Lt	2.5				
62	Methyl orange	ACS reagent Dye content 85%	Europe/ South Korea	gm	500				
63	Naphthol Blue Black	Dye content 80%	Europe/ South Korea	gm	100				
64	Naphthalene	99%	Europe/ South Korea	Kg	3				
65	Nessler reagent	For ammonia and Ammonium analysis	Europe/ South Korea	ml	500				
66	Ammonium bromide	ACS reagent 99%	Europe/ South Korea	gm	500				
67	Nickle Chloride	98% Aldrich	Europe/ South Korea	gm	250				
68	Nickle sulphate 6H ₂ O	ACS reagent 98%	Europe/ South Korea	gm	500				
69	Nickel Acetate	purum p.a. 99%	Europe/ South Korea	Kg	1				

70	Nitric acid	ACS reagent 70%	Europe/ South Korea	Lt	2.5				
71	Oxalic acid	reagent plus 99%	Europe/ South Korea	gm	50				
72	Paraffin oil	puriss sigma Aldrich	Europe/ South Korea	Lt	2.5				
73	polyethylene glycol	average Mn 400 Aldrich	Europe/ South Korea	gm	500				
74	Phenol	GR for analysis Millipore	Europe/ South Korea	Lt	1				
75	Phenolphthalein Indicator	ACS reagent	Europe/ South Korea	Kg	1				
76	Potassium chlorate	ACS reagent 99%	Europe/ South Korea	gm	500				
77	Phosphoric acid	ACS reagent 85% wt in H ₂ O	Europe/ South Korea	Lt	2.5				
78	Potassium nitrate	puriss p.a. ACS reagent 99%	Europe/ South Korea	kg	5				
79	Potassium Chloride	ACS reagent 99-100.5%	Europe/ South Korea	Kg	2.5				
80	Potassium dichromate	ACS reagent 99%	Europe/ South Korea	gm	500				

81	Potassium Hydroxide	ACS reagent 85% pellets	Europe/ South Korea	Kg	2.5				
82	Potassium hexacyanoferrate(III)	ACS reagent 99%	Europe/ South Korea	gm	500				
83	Potassium ferrocyanide	puriss p.a. ACS reagent 99%	Europe/ South Korea	Kg	1				
84	Potassium nitrite	ACS reagent 96%	Europe/ South Korea	gm	100				
85	Potassium Iodide	ACS reagent 99%	Europe/ South Korea	gm	500				
86	Potassium permanganate	ACS reagent 99%	Europe/ South Korea	Kg	1				
87	Potassium Sulphate	ACS reagent 99%	Europe/ South Korea	Kg	2.5				
88	Silver nitrate	ACS reagent 99%	Europe/ South Korea	gm	100				
89	Sodium Acetate	ACS reagent 99%	Europe/ South Korea	Kg	1				

90	Sodium bicarbonate	ACS reagent 99.7%	Europe/ South Korea	Kg	2.5				
91	Borax decahydrate	ACS reagent 99.5%	Europe/ South Korea	Kg	2.5				
92	di-Sodium Hydrogen Phosphate	ACS reagent	Europe/ South Korea	gm	1000				
93	Sodium Dodecyl sulphate	ACS reagent 99%	Europe/ South Korea	gm	100				
94	Sodium hydroxide	puriss p.a. ACS reagent	Europe/ South Korea	Kg	5				
95	Sodium thiosulfate	ACS reagent plus 99%	Europe/ South Korea	Kg	1				
96	Stannic Chloride	98% Aldrich	Europe/ South Korea	gm	250				
97	Stannous chloride	reagent grade 98%	Europe/ South Korea	gm	100				
98	Strontium Chloride hexahydrate	ACS reagent 99%	Europe/ South Korea	gm	500				
99	Sulphuric Acid	ACS reagent 95-98%	Europe/ South Korea	Lt	2.5				

100	Urea	ACS reagent 99-100.5%	Europe/ South Korea	Kg	1				
101	Zinc Chloride	puriss p.a. ACS reagent 98%	Europe/ South Korea	Kg	1				
102	Zinc Sulphate heptahydrate	ACS reagent plus 99%	Europe/ South Korea	Kg	2.5				
103	Toluene	ACS reagent 99.5%	Europe/ South Korea	Lt	2.5				
104	Zinc strips	Aldrich stick dia 7-10 mm	Europe/ South Korea	gm	500				
105	Copper foils	foil thickness 0.25mm of 225cm ²	Local	No. foil	3				
106	MnO ₂	Reagent PLus 99%	Europe/ South Korea	gm	500				
107	Yttrium	chips 99% trace rare earth metal	Europe/ South Korea	gm	15				
108	Barium	pieces 1 cm 99% trace metals	Europe/ South Korea	gm	20				

Special Instructions Biology Lab Chemicals

Description	Bidder			Tech Scrutiny to be done by User		
	Yes	No	Alternate Offer	Accepted	Rejected	Reasons of Rejection
Environment Conditions (a) Temperature range: -05°C to +60°C (b) Relative humidity: 0-90% non-condensing (c) Supplier must maintain the desired temperature chemical during transportation.						
Warranty period Shelf life should not be less than 2 years from the date of delivery. A warranty sticker is to be pasted on each item by the Supplier highlighting Name of Firm, manufacturing date, description of Store and Warranty validity						
Test samples Supplier will provide samples of chemical to check quality (where mentioned above in Annex A)						
Publications Supplier is to provide hard and soft copies (CD) of following manuals. (a) Storage requirements sensitivity conditions (sensitive to temperature, water, air and light, humidity) (b) Hazardous conditions (c) Experimental manuals which must contain the list of the experiments in which that chemical can be used.						
Supporting reagents with chemical Supplier must also provide supporting reagents (buffers) along with chemicals (enzymes) if required.						
Additional Spare / Replaceable chemicals.						

Chemicals nearing expiry may be exchanged/replaced if mutually agreed.						
<p>Physical Inspection Criteria: 100% physical inspection of storage conditions during transportation will be carried out at the time of delivery of chemical for following details:-</p> <ul style="list-style-type: none"> (a) Physical condition. (b) Temperature (c) Vessel (d) Sealing of vials/bottles (e) User guide (f) Quality certificate (g) Certificate and verifiable documents that chemical have been newly synthesized. (h) Brand name and country of origin. (i) Purity/quality should be as specified on label. 						
<p>Delivery of chemicals</p> <ul style="list-style-type: none"> (a) Chemicals will be delivered at firm's risk and expense at NUTECH . (b) Any special requirement for storage and usage must be specified in the offer by the supplier. 						
<p>Special Notes</p> <ul style="list-style-type: none"> (a) Chemicals must be a standard product of the brand available at web address. (b) In case of degraded chemicals the supplier has to replace the chemical free of cost. Required transportation charges would be borne by the supplier. 						

Special Instructions Chemistry Lab Chemicals

Description	Bidder			Tech Scrutiny to be done by User		
	Yes	No	Alternate Offer	Accepted	Rejected	Reasons of Rejection
Environment Conditions (a) Temperature range: -05°C to +60°C Relative humidity: 0-90% non-condensing						

<p>Warranty period</p> <p>(a) The chemicals provided should have a valid expiry date at the time of delivery as per manufacturing standard.</p> <p>(b) For chemicals with no manufacturer's expiry date mentioned on the containers, the certificate of quality has still to be ensured as in I above.</p> <p>(c) The chemicals must be kept in transit and transported as per manufacturer's prescribed storage and transportation instructions/conditions.</p>						
<p>Delivery conditions</p> <p>(a) All containers will be inspected for manufacturer's original seal.</p> <p>(b) Certification of quality will be provided.</p> <p>(c) Any specific conditions of storage will be mentioned</p> <p>(d) No chemicals will be received if standard conditions to store before delivery and at the time of delivery are violated</p>						

Firm Name _____ Signature _____ Name _____ Designation _____



NATIONAL UNIVERSITY OF TECHNOLOGY
SUPPLY CHAIN MANAGEMENT OFFICE

TECHNICAL OFFER

Annex B

User Reference No Bio/Chem Lab -001 Date 26-12-2018

Please fill in the following essential parameters:

1. Validity of Offer: _____ Days (Should not be less than 45 days)
2. Delivery Period: _____ Days (**NOTE: Please seek 15 days prior clearance before delivery of chemicals to confirm availability of storage facility or alternate arrangements, from NUTECH**)
3. Country of Origin: _____
4. Warranty/Guarantee: _____ Months from the date of final acceptance of the stores.

General

GST No: _____ (Please enclose copy)

NTN/CNIC: _____ (if exempted, please provide valid exemption certificate)

Payment Terms:

1. 50 % Advance payment (Against valid bank Guarantee)
2. 50 % Payment after delivery.
3. Others

Details of Payment Recipient

(1) Name/Title: _____

(2) Address: _____

Signature: _____

Official Seal: _____

Name/Designation: _____



NATIONAL UNIVERSITY OF TECHNOLOGY
SUPPLY CHAIN MANAGEMENT OFFICE

FINANCIAL OFFER

Annex C

User Reference No Bio/Chem Lab -001 Date 26-12-2018

Ser	Nomen	Description	A/U	Qty Req	Unit Price (Rs) (excluding GST)	GST (Rs) (if applicable)	Custom Duty (Rs) (if applicable)	Total amount (Rs)
Biology Lab Chemicals								
1	NaCl	AR Grade	Kg	2				
2	NaOH	AR Grade	Kg	1				
3	Microbiology media a. NA b. NB c. yeast extract d. LB		Kg	0.5 each				
4	Ethidium bromide		gm	10				
5	Iodine	ACS reagent 99.8%	Kg	0.5				
6	Safranin	dye content, >85%	Kg	0.5				

7	Crystal violet	dye content, >90%	Kg	0.5				
8	Agar agar	For microbiology	Kg	2				
9	Agarose		Kg	2				
10	Acrylamide		Kg	1				
11	Stains/dyes/indicators for a. DNA, b. RNA, c. Protein d. Polysaccharide e. Lipid		µL Min. packing	2 each				
12	Methanol	puriss p.a. ACS reagent 99.8%	Lt	2.5x6				
13	Ethanol	Absolute, reag ISO reag. 99.8%	Lt	2.5x6				
14	Ethanol	Absolute, reag ISO reag. 95%	Lt	2.5x6				
15	Isopropanol	AR Grade	Lt	2.5x3				
16	Phenol	AR Grade	Lt	2.5x3				
17	2-Mercaptoethanol	AR Grade	ml	20x3				
18	Xyelene	AR Grade	Lt	2.5x3				
19	Acids a. H ₂ SO ₄ b. HCl c. TFA d. TCA e. HNO ₃	AR Grade or ACS reagent 90%	Lt	2 x5 each				
20	Glycerol	AR Grade	Lt	2.5x3				

21	a. SDS b. ZnPO ₄ c. NH ₄ Cl	puriss p.a. ACS reagent	Kg	1 each				
22	Antibiotics Discs		Nos	3 Vial				
23	Gel elution kit		Nos	8				
24	MS media		Kg	2				
25	Tris		Kg	1				
26	EDTA		Kg	1				
27	160 pH Indicator Test Strips 1-14 Paper Litmus Tester Paper Water Litmus Soil Lab		Nos	100 Strips				
28	Taq DNA Polymerase		Nos	40 vials				
29	Trizol		Nos	8 bottles				
30	Antibiotics (Kanamycin, Penicilline, Ampicilline)		gm	50 each				
31	Loading dye		Nos	20 vials				
32	Gel dye		gm	20				
33	n-Hexane		Lt	2.5x3				
34	Chloroform		Lt	2.5x2				
35	Acetone		Lt	2.5x4				
36	Ethyl acetate		Lt	2.5x4				
37	Tween 80			500				

			mL				
38	Sabourad Dextrose agar		gm	500			
39	Nutrient agar		gm	500			
40	Nutrient broth		gm	500			
41	Ciprofloxacin		mg	500			
42	Clotrimazole		mg	250			
43	Ascorbic acid		Kg	1			
44	DPPH(2,2-diphenyl-1-picryl-hydrazyl-hydrate)		gm	5			
45	Potassium dihydrogen phosphate		Kg	1			
46	dipotassium phosphate		Kg	1			
47	Acarbose		gm	1			
48	Surfactin		mg	10			
49	Doxorubicin		mg	1			
50	Folin–Ciocalteu reagent (FC)		mL	100			
51	Phosphate buffer saline		Nos	100 tabs			
52	α-amylase enzyme		gm	25			
53	Ferric chloride (FeCl ₃)			1			

			Kg					
54	Gallic acid		gm	10				
55	Monosodium dihydrogen phosphate (NaH ₂ PO ₄)		Kg	1				
56	Potassium acetate		Kg	1				
57	Potassium ferricyanide		gm	500				
58	Quercetin		gm	10				
59	Trichloroacetic acid (TCA)		mg	500				
60	Trypton soya broth (TSB)		gm	500				
61	Potassium iodide (KI)		mg	500				
62	Ammonium molybdate		gm	250				
63	Ascorbic acid		Kg	1				
64	Spirit		Lt	3				
65	Copper sulphate		Kg	1				
66	Sodium citrate		Kg	1				
67	Copper acetate		mg	500				
68	Glacail acetic acid		Lt	1x 2.5				
69	Anhydrous sodium carbonate		Kg	1				

70	Alpha naphthanol		gm	500				
71	Sodium carbonate		Kg	1				
72	Sea salt		Kg	1				
73	Artemia saline egg		gm	200				
CHEMISTRY LAB CHEMICALS								
1	Ethyl alcohol	Absolute, reag. ISO reag. 99.8%	Lt	1				
2	Acetaldehyde	ACS reagent 99.5%	Lt	1				
3	Glacial Acetic acid	Pharma Grade USP	Lt	1				
4	Acetic acid	ACS reagent 99.7%	Lt	4				
5	Acetone	HPLC Plus 99.9%	Lt	1				
6	Acetonitrile	ACS reagent 99.5%	Lt	2.5				
7	Aluminum nitrate	ACS reagent 98%	gm	500				
8	Aluminum chloride	reagent grade 98%	gm	100				
9	Ammonia solution	puriss anhydrous 99.95%	Kg	1				
10	ammonia hydroxide solution	ACS reagent 28-30% in NH3	Lt	1				

11	Ammonium nitrate	puriss p.a. ACS reagent 98%	Kg	1				
12	Ammonium acetate	puriss p.a. ACS reagent 98%	Kg	1				
13	ammonium chloride 31107-1KG	puriss p.a. ACS reagent 98%	Kg	1				
14	Ammonium sulfate	puriss p.a. ACS reagent 99%	Kg	1				
15	Aniline	ACS reagent 99.5%	Lt	1				
16	Arsenic chloride	99.99% trace metal basis Aldrich	gm	50				
17	Arsenic oxide	ACS reagent	gm	125				
18	L-Ascorbic Acid	ACS reagent 99.5%	gm	500				
19	Barium Nitrate	ACS reagent 99%	gm	500				
20	Barium chloride	ACS reagent 99.5%	gm	500				
21	Benedict reagent		Lt	1				
22	Benzaldehyde	reagent plus 99%	Lt	1				
23	Benzene	ACS reagent 99%	Lt	1				
24	Benzoic acid	ACS reagent 99.5%	gm	500				
25	Boric acid	puriss p.a. ACS reagent 99.8%	Kg	1				
26	Calcium chloride	ACS reagent 96%	gm	500				

27	Carbon disulfide	ACS reagent 99.9%	Lt	1				
28	Chromium trichloride hexahydrate	ACS reagent 99.5%	gm	1				
29	Citric acid	ACS reagent 99.5%	Kg	1				
30	Cobaltous acetate tetrahydrate	ACS reagent 98%	gm	100				
31	Cobaltous chloride hexahydrate	ACS reagent 98%	gm	100				
32	Cobaltous nitrate hexahydrate	ACS reagent 98%	gm	100				
33	Cupric chloride dihydrate	ACS reagent 99%	gm	500				
34	Cupric sulfate	Reagent plus 99%	gm	500				
35	Cyclohexane	ACS reagent 99%	Lt	1				
36	Diethyl ether	Anhydrous ACS reagent	Lt	1				
37	Diethylamine	99.50%	Lt	1				
38	Dimethyl Sulfoxide	ACS reagent 99.9%	Lt	2.5				
39	Dimethyl formamide	ACS reagent 99.8%	Lt	2.5				
40	EDTA	ACS reagent	Kg	1				
41	Ethylendiamine	puriss p.a. ACS reagent 99.5%	Lt	2.5				
42	Ethyl acetate	ACS reagent 99.5%	Lt	2.5				
43	Ferric chloride	reagent grade 97%	Kg	1				

44	Ferrous sulfate heptahydrate	ACS reagent 99%	Kg	1				
45	Formaldehyde	ACS reagent methanol as stabilizer	Lt	2.5				
46	Formic Acid	puriss p.a. ACS reagent 98%	Lt	2.5				
47	Tetrabutylammonium hexafluorophosphate	99.90%	gm	100				
48	Hydrochloric acid	puriss p.a. ACS reagent 37%	Lt	6				
49	Hydrogen peroxide	30 wt % in H ₂) ACS reagent	ml	500				
50	Perchloric acid	ACS reagent 70%	Lt	2.5				
51	Hexane	puriss p.a. ACS reagent 99%	Lt	2.5				
52	Iodine	ACS reagent 99.8%	Kg	1				
53	Ferric chloride hexahydrate	puriss p.a. ACS reagent 98-102%	Kg	1				
54	Lactic acid	ACS reagent 85%	Kg	2.5				
55	Lithium chloride	ACS reagent 99%	gm	100				
56	Lead chloride	powder 98%	Kg	1				
57	Magnesium chloride	anhydrous 98%	Kg	1				
58	Magnesium oxide	ACS reagent 97%	gm	100				
59	Mercuric nitrate monohydrate	ACS reagent 98%	gm	500				

60	Methanol	puriss p.a. ACS reagent 99.8%	Lt	2.5				
61	Methyl acetate	puriss p.a. ACS reagent 99.5%	Lt	2.5				
62	Methyl orange	ACS reagent Dye content 85%	gm	500				
63	Naphthol Blue Black	Dye content 80%	gm	100				
64	Naphthalene	99%	Kg	3				
65	Nessler reagent	For ammonia and Ammonium analysis	ml	500				
66	Ammonium bromide	ACS reagent 99%	gm	500				
67	Nickle Chloride	98% Aldrich	gm	250				
68	Nickle sulphate 6H ₂ O	ACS reagent 98%	gm	500				
69	Nickel Acetate	purum p.a. 99%	Kg	1				
70	Nitric acid	ACS reagent 70%	Lt	2.5				
71	Oxalic acid	reagent plus 99%	gm	50				
72	Paraffin oil	puriss sigma Aldrich	Lt	2.5				
73	polyethylene glycol	average Mn 400 Aldrich	gm	500				
74	Phenol	GR for analysis Millipore	Lt	1				
75	Phenolphthalein Indicator	ACS reagent	Kg	1				
76	Potassium chlorate	ACS reagent 99%	gm	500				

77	Phosphoric acid	ACS reagent 85% wt in H ₂ O	Lt	2.5				
78	Potassium nitrate	puriss p.a. ACS reagent 99%	kg	5				
79	Potassium Chloride	ACS reagent 99-100.5%	Kg	2.5				
80	Potassium dichromate	ACS reagent 99%	gm	500				
81	Potassium Hydroxide	ACS reagent 85% pellets	Kg	2.5				
82	Potassium hexacyanoferrate(III)	ACS reagent 99%	gm	500				
83	Potassium ferrocyanide	puriss p.a. ACS reagent 99%	Kg	1				
84	Potassium nitrite	ACS reagent 96%	gm	100				
85	Potassium Iodide	ACS reagent 99%	gm	500				
86	Potassium permanganate	ACS reagent 99%	Kg	1				
87	Potassium Sulphate	ACS reagent 99%	Kg	2.5				
88	Silver nitrate	ACS reagent 99%	gm	100				
89	Sodium Acetate	ACS reagent 99%	Kg	1				
90	Sodium bicarbonate	ACS reagent 99.7%	Kg	2.5				
91	Borax decahydrate	ACS reagent 99.5%	Kg	2.5				
92	di-Sodium Hydrogen Phosphate	ACS reagent	gm	1000				

93	Sodium Dodecyl sulphate	ACS reagent 99%	gm	100				
94	Sodium hydroxide	puriss p.a. ACS reagent	Kg	5				
95	Sodium thiosulfate	ACS reagent plus 99%	Kg	1				
96	Stannic Chloride	98% Aldrich	gm	250				
97	Stannous chloride	reagent grade 98%	gm	100				
98	Strontium Chloride hexahydrate	ACS reagent 99%	gm	500				
99	Sulphuric Acid	ACS reagent 95-98%	Lt	2.5				
100	Urea	ACS reagent 99-100.5%	Kg	1				
101	Zinc Chloride	puriss p.a. ACS reagent 98%	Kg	1				
102	Zinc Sulphate heptahydrate	ACS reagent plus 99%	Kg	2.5				
103	Toluene	ACS reagent 99.5%	Lt	2.5				

104	Zinc strips	Aldrich stick dia 7-10 mm	gm	500				
105	Copper foils	foil thickness 0.25mm of 225cm ²	No. foil	3				
106	MnO ₂	Reagent PLus 99%	gm	500				
107	Yttrium	chips 99% trace rare earth metal	gm	15				
108	Barium	pieces 1 cm 99% trace metals	gm	20				
TOTAL								

Total Value _____

GST _____

Custom duty (if any) _____

Gross Total Value _____

Bid Bond Ref _____

Firm Name _____ Signature _____ Name _____ Designation _____
