

LIMITED TENDER # 31, 32 &33/2018

Sealed Quotation/Tenders quoting rates for the supply of stores as detailed below to National Institute for Biotechnology and Genetic Engineering (NIBGE), FAISALABAD, are invited as under:-

Limited Tender #	Item	Reference File No.	Date & Time of Tender Opening
31/2018	Chemicals/Enzymes/DNA Markers	Proc-5(389)/2018 /NIBGE	20-08-2018
32/2018	Kits	Proc-5(390)/2018 /NIBGE	20-08-2018
33/2018	Kits	Proc-5(391)/2018 /NIBGE	20-08-2018

The following terms and conditions have been laid down for suppliers for submitting their quotations to NIBGE, Faisalabad.

- (I) The quotations should be submitted showing description/ specifications/ drawings along with signatures of dealer/ suppliers duly affixed with his seal. The suppliers are not allowed to change or modify the given specifications.
 - (II) Additional information & Literature may also be attached and position of availability of stores in stock, indicated before signing the quotations. Samples may be attached, if required.
 - (III) Quotation/Tender should be sent in sealed cover duly marked with **File No. and opening dated**. Quotations received without the marking on the Envelope will not be considered.
 - (IV) Quotation should normally be valid for a period of 90-days from the date of opening of quotations and it will be presumed that the Firms/dealers will supply the items on credit.
 - (V) The bill will be paid at the earliest possible, provided the supplied store is of the ordered's specifications, in serviceable condition & correct quality.
 - (VI) All amendment/over writing of rates in quotation may please be attested failing which the quotations will not be considered.
 - (VII) The rates are to be quoted on F.O.R. NIBGE, FAISALABAD, basis.
 - (VIII) In any condition contrary to these terms detailed above are laid down by the supplier, such condition would not be acceptable or binding on NIBGE.
 - (IX) **Earnest Money @ 2% of the total quoted value (including 17% GST) in the shape of Deposit-at-Call duly affixed Revenue Stamps according to its value (Cheque /Pay Order/ Bank Draft/ Demand Draft not acceptable) in favour of Accounts Officer, NIBGE, FAISALABAD must accompany the quotation. The bids not supported with CDR OR with less amount earnest money shall be rejected at spot.**
 - (X) The quotations may be sent through POST/COURIER SERVICE to the undersigned OR by hand at R & I (NIBGE) Faisalabad before due date. Quotations shall be received at **14:30 hrs** hours and opened at **15:00** hours.
 - (XI) The Competent Authority reserves the right to accept/reject any of the quotations or part thereof without assigning any reason.
 - (XII) The quotations of those firms will be accepted which are registered with Sales Tax Department having Sales Tax Registration which should clearly be mentioned on quotation.
 - (XIII) The rates should be in full rupee inclusive of 17% General Sales Tax. If GST not mentioned as **Exclusive or Exempted** in quotation, the quoted rates shall be considered as **Inclusive** of 17% GST. Any decimal figure shown with quoted rates shall be considered as deleted/ignored.
- NOTE: Writing as "GST as per Govt. rules" will also be deemed as misleading and shall be considered as inclusive of GST.**
- **All the firms who are interested to participate must be registered with any academic or research institute working under Government of Punjab and should not be black listed by any establishment of Pakistan Atomic Energy Commission of Pakistan.**

Sr. Admin. Officer (Procurement)
NIBGE, P.O.Box # 577, Jhang Road, Faisalabad.
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Limited Tender No. 31/2018

Sr. #.	Chemicals	Units
1	Enzymes	
	<p>i) BamHI DNase free, 10U/μl, provided with 10X buffers for single and double digests, BSA, Triton, Tween or DTT, One unit of the restriction enzyme should completely digest 1 μg of lambda DNA in one hour (Weiss unit), specifications should be easily accessible as a brochure with the quote/supply or internet search using catalogue number, which should be clearly provided.</p>	4000 units
	<p>ii) BglII DNase free, 10U/μl, provided with 10X buffers for single and double digests, BSA, Triton, Tween or DTT, One unit of the restriction enzyme should completely digest 1 μg of lambda DNA in one hour (Weiss unit), specifications should be easily accessible as a brochure with the quote/supply or internet search using catalogue number, which should be clearly provided.</p>	2500 units
	<p>iii) ClaI/Bsu15I DNase free, 10U/μl, provided with 10X buffers for single and double digests, BSA, Triton, Tween or DTT, One unit of the restriction enzyme should completely digest 1 μg of lambda DNA in one hour (Weiss unit), specifications should be easily accessible as a brochure with the quote/supply or internet search using catalogue number, which should be clearly provided.</p>	6000 units
	<p>iv) EcoRV DNase free, 10U/μl, provided with 10X buffers for single and double digests, BSA, Triton, Tween or DTT, One unit of the restriction enzyme should completely digest 1 μg of lambda DNA in one hour (Weiss unit), specifications should be easily accessible as a brochure with the quote/supply or internet search using catalogue number, which should be clearly provided.</p>	2000 units
	<p>v) EcoRI DNase free, 10U/μl, provided with 10X buffers for single and double digests, BSA, Triton, Tween or DTT, One unit of the restriction enzyme should completely digest 1 μg of lambda DNA in one hour (Weiss unit), specifications should be easily accessible as a brochure with the quote/supply or internet search using catalogue number, which should be clearly provided.</p>	5000 units
	<p>vi) HindIII DNase free, 10U/μl, provided with 10X buffers for single and double digests, BSA, Triton, Tween or DTT, One unit of the restriction enzyme should completely digest 1 μg of lambda DNA in one hour (Weiss unit), specifications should be easily accessible as a brochure with the quote/supply or internet search using catalogue number, which should be clearly provided.</p>	4000 units
	<p>vii) KpnI DNase free, 10U/μl, provided with 10X buffers for single and double digests, BSA, Triton, Tween or DTT, One unit of the restriction enzyme should completely digest 1 μg of lambda DNA in one hour (Weiss unit), specifications should be easily accessible as a brochure with the quote/supply or internet search using catalogue number, which should be clearly provided.</p>	4000 units
	<p>viii) NcoI DNase free, 10U/μl, provided with 10X buffers for single and double digests, BSA, Triton, Tween or DTT, One unit of the restriction enzyme should completely digest 1 μg of lambda DNA in one hour (Weiss unit), specifications should be easily accessible as a brochure with the quote/supply or internet search using catalogue number, which should be clearly provided.</p>	4000 units

ix) NotI DNase free, 10U/μl, provided with 10X buffers for single and double digests, BSA, Triton, Tween or DTT, One unit of the restriction enzyme should completely digest 1 μg of lambda DNA in one hour (Weiss unit), specifications should be easily accessible as a brochure with the quote/supply or internet search using catalogue number, which should be clearly provided.	4000 units
x) PstI DNase free, 10U/μl, provided with 10X buffers for single and double digests, BSA, Triton, Tween or DTT, One unit of the restriction enzyme should completely digest 1 μg of lambda DNA in one hour (Weiss unit), specifications should be easily accessible as a brochure with the quote/supply or internet search using catalogue number, which should be clearly provided.	4000 units
xi) SacI DNase free, 10U/μl, provided with 10X buffers for single and double digests, BSA, Triton, Tween or DTT , One unit of the restriction enzyme should completely digest 1 μg of lambda DNA in one hour (Weiss unit), specifications should be easily accessible as a brochure with the quote/supply or internet search using catalogue number, which should be clearly provided.	4000 units
xii) SalI DNase free, 10U/μl, provided with 10X buffers for single and double digests, BSA, Triton, Tween or DTT , One unit of the restriction enzyme should completely digest 1 μg of lambda DNA in one hour (Weiss unit), specifications should be easily accessible as a brochure with the quote/supply or internet search using catalogue number, which should be clearly provided.	4000 units
xiii) SmaI DNase free, 10U/μl, provided with 10X buffers for single and double digests, BSA, Triton, Tween or DTT , One unit of the restriction enzyme should completely digest 1 μg of lambda DNA in one hour (Weiss unit), specifications should be easily accessible as a brochure with the quote/supply or internet search using catalogue number, which should be clearly provided.	4000 units
xiv) XbaI DNase free, 10U/μl, provided with 10X buffers for single and double digests, BSA, Triton, Tween or DTT , One unit of the restriction enzyme should completely digest 1 μg of lambda DNA in one hour (Weiss unit), specifications should be easily accessible as a brochure with the quote/supply or internet search using catalogue number, which should be clearly provided.	4000 units
xv) XhoI DNase free, 10U/μl, provided with 10X buffers for single and double digests, BSA, Triton, Tween or DTT , One unit of the restriction enzyme should completely digest 1 μg of lambda DNA in one hour (Weiss unit), specifications should be easily accessible as a brochure with the quote/supply or internet search using catalogue number, which should be clearly provided.	4000 units
xvi) MSS1 DNase free, 10U/μl, provided with 10X buffers for single and double digests, BSA, Triton, Tween or DTT, One unit of the restriction enzyme should completely digest 1 μg of lambda DNA in one hour (Weiss unit), specifications should be easily accessible as a brochure with the quote/supply or internet search using catalogue number, which should be clearly provided.	1000 units
xvii) NdeI DNase free, 10U/μl, provided with 10X buffers for single and double digests, BSA, Triton, Tween or DTT, One unit of the restriction enzyme should completely digest 1 μg of lambda DNA in one hour (Weiss unit), specifications should be easily accessible as a brochure with the quote/supply	500units

	or internet search using catalogue number, which should be clearly provided.	
2	RNase (DNase, proteinase-free) RNase required for degradation of RNA. Conc. 10mg/ml, Applications in plasmid and genomic DNA purifications	3x 10mg/ml
3	DNase I (recombinant Grade) Strength 1u/μl, Required for digestion of single and double stranded DNA and preparation of DNA free RNA prior to RT-PCR.	500 units
4	Taq DNA polymerase (5 U/μl) MB garde Thermostable recombinant enzyme that synthesizes DNA from single-stranded templates in the presence of dNTPs and a primer. The enzyme consists of a single polypeptide with a molecular weight of 94 kDa. It has a 5'→3' DNA polymerase activity and a 5'→3' exonuclease activity. TA overhangs in PCR products, suitable for sequencing PCR products up to 5 kb in size, 2.5 ml 10X PCR buffer (200 mM Tris-HCl pH 8.4, 500 mM KCl), 1 ml Magnesium Chloride (50 mM)	5x500 unit
5	T4 DNA Ligase (5 unit/μl) Forms phosphodiester bonds in the presence of ATP between double-stranded DNAs with 3' hydroxyl and 5' phosphate termini. buffer (250 mM Tris-HCl (pH 7.6), 50 mM MgCl ₂ , 5 mM ATP, 5 mM DTT, 25% (w/v) polyethylene glycol-8000]. Store at -20°C. it should be suitable for ligation of blunt-end or cohesive-ends and adding linkers or adapters to blunt-ended DNA.	1x1000unit
6	qPCR master mix high sensitivity at low template DNA concentration, reduced primer/dimer formation, reaction setup and shipment without dry ice, contains dUTP to prevent cross contamination without UNG treatment	2x200
7	PCR master mix Ready-to-use, high fidelity, Amplification up to 6 kb to 20kb from genomic DNA, PCR product 3'-A overhangs, mixed with Taq DNA polymerase (0.05 U/μL), reaction buffer, 4 mM MgCl ₂ , and 0.4 mM of each dNTP Nuclease-free water, Store at -20°C.	3x200 rexns
8	Casein enzymatic hydrolysate, PCCT grade, powder Source milk, organic nitrogen source for plant tissue culture, Storage at room temperature	2 x 500g
9	Chloroform: isoamyl alcohol, ≥99.8%, HPLC grade Chemical Formula CHCl ₃ , FW: 119.4 required for nucleic acid purification,	1x 2.5 L
10	Ethanol, LC/MS grade and 99.99% purity, Chemical Formula C ₂ H ₆ O, MW 46.07 Required for DNA precipitation	2x2.5 L
11	2-Mercaptoethanol, MB Grade, min 98% Reducing agent Empirical formula C ₂ H ₆ OS Molar mass (M) 78.13 g/mol	2x250ml
12	3-Methyl butano (isoamyl alcohol), MB grade, 99% pure Linear Formula: CH ₃) ₂ CHCH ₂ CH ₂ OH Molecular Weight 88.15	1x 500 ml
13	2-Propanol, >99.5%, ACS reagent, MB grade Linear Formula: (CH ₃) ₂ CHOH Molecular Weight: 60.10	2x2.5L
14	D-Glucose, PCCT, 99% pure, RNase/DNase free FW: 180.16, C ₆ H ₁₂ O ₆ ,	20x1kg
15	Sucrose, PCCT, D(+)-sucrose 99% pure, RNase/DNase free FW:	5x 1kg

	C12H22O11, soluble in water @ 1970g/l at 15°C	
16	Murashige & Skoog (MS) Basal Medium with Gamborg vitamin, macro and micro nutrients, and Vitamins as described by Murashige & Skoog (1962): Ammonium Nitrate: 37.21 %, Potassium Nitrate: 42.85 %, EDTA, Disodium Salt, Dihydrate: 0.84 %, Cobalt Chloride, Hexahydrate: 0.0006 %, Cupric Sulfate, Pentahydrate: 0.0006 %, Sodium Molybdate(VI), Dihydrate: 0.006 %, Manganese Sulfate, Monohydrate: 0.38 %, Potassium Iodide: 0.019 %, Boric Acid: 0.14 %. Plant Cell Culture Tested, Storage Temp: 2-6 °C, pH: 3.5 - 4.5, soluble in water, off-white to yellow powder, odorless.	10x100L
17	Sodium Hydroxide (NaOH) anhydrous, F.wt: 40, MB grade	1 kg
18	MgCl ₂ .6H ₂ O 99% pure FW: 203.3 MB and PCCT grade	2 x 1kg
19	MgSO ₄ .7H ₂ O 99% pure MB and PCCT grade, FW: 246.466	1x1kg
20	KNO ₃ 99% pure MB and PCCT grade, FW: 101.1032	2x1kg
21	NaCl MB grade, DNase/RNase and protease free FW:58.5	2x1 kg
22	Cetyl trimethyl ammonium bromide (CTAB) Chemical Formula: C ₁₉ H ₄₂ BrN, FW: 364.5 Purity 99%, MB grade required for Plant DNA isolation/extraction	1x1 kg
23	Tris HCl Reagent MB grade, ≥99.0% (titration), crystalline powder Nuclease free, pH 7-9, pKa: 8.1, storage room temperature Linear Formula NH ₂ C(CH ₂ OH) ₃ ·HCl Molecular Weight 157.60	500g
24	Sodium dodecyl sulfate (SDS), MB grade, purity, Mol. Wt: 288.38 99%	1 kg
25	Hydrochloric acid (HCl) Fwt. 36.5- 38% MB grade	1x2.5 L
26	Mercuric chloride (HgCl ₂), Fwt. 271.5 purity 99.5%	250 g
27	Ethidium bromide, powder Chemical formula: C ₂₁ H ₂₀ BrN ₃ Fwt. 394.2, MB grade	5gm
28	Ethylenediaminetetraacetic acid disodium salt, Chemical formula: NaEDTA, Fwt. 372.24 min. 99%, PCCT grade	500g
29	Ethylene diamine tetraacetic acid iron (III) Chemical Formula: Iron-EDTA, crystalline Fwt. 367.05 , PCCT grade	500g
30	Calcium chloride dehydrate Purity ≥99% MB grade Chemical Formula: CaCl ₂ .2H ₂ O Fwt. 147.01 Free of Dnase, RNase and proteinase Suitable for plant cell culture	1x100g
31	Potassium Iodide Purity ≥99% MB grade Chemical Formula: KI Mwt: 166 Free of Dnase, RNase and proteinase Suitable for plant cell culture	100g

32	Copper(II) sulfate pentahydrate Chemical Formula: CuSO ₄ .5H ₂ O Fwt: 249.69 ≥99.5%, MB grade Free of Dnase, RNase and proteinase Suitable for plant cell culture	100g
33	Cobalt chloride hexahydrated Chemical formula:CoCl ₂ .6H ₂ O FWt: 158 ≥99.5%, MB grade Free of Dnase, RNase and proteinase Suitable for plant cell culture	50g
34	Sodium molybdate dihydrate ≥99.5%, MB grade Chemical Formula: NaMoO ₄ .2H ₂ O FW: 241.95 Free of Dnase, RNase and proteinase Suitable for plant cell culture	100g
35	Zinc sulfate heptahydrate Purity ≥99% and MB grade Chemical formula: ZnSo ₄ .7H ₂ O Mwt. 287.56 Free of Dnase, RNase and proteinase Suitable for plant cell culture	100g
36	Manganese(II) sulfate tetrahydrate Purity ≥99% and MB grade Chemical Formula: MnSo ₄ .4H ₂ O Fwt. 223.06 Free of Dnase, RNase and proteinase Suitable for plant cell culture	100g
37	Potassium dihydrogen phosphate Molecular Formula: KH ₂ PO ₄ Mwt. 136.09 Purity ≥99% MB grade Free of DNase, RNase and proteinase Suitable for plant cell culture	5g
38	Boric Acid Chemical Formula: H ₃ BO ₃ F.wt: 61.83 Purity ≥99% MB grade Free of DNase, RNase and proteinase Suitable for plant cell culture	200g
39	Ascorbic Acid Solubility Water, Grade ACS Reagent, 99 %, Formula Weight 176.13, Formula C ₆ H ₈ O ₆ ,	1x500 G
40	Methyl 4- hydroxy benzoate Molecular Weight 152.15, mp 125-128 °C(lit.) , 99% Linear Formula HOC ₆ H ₄ CO ₂ CH ₃ ,	1x500 G
41	Sorbic Acid Linear Formula CH ₃ CH=CHCH=CHCOOH, Molecular Weight 112.13, assay ≥99.0% (T) , solubility ethanol: 0.1 g/mL,	1x500 G

	clear, antibiotic activity spectrum fungi	
42	Streptomycin sulphate Purity >99% Molecular Formula $C_{42}H_{84}N_{14}O_{36}S_3$, Molecular Weight 1457.376 g/mol, conc. 250mg/ml	2x100g
43	Yeast instant Insect food flaavors	12x500 G
44	Agar Technical Plant cell culture tested Linear Formula $(C_{12}H_{18}O_9)_n$	6x500 G
45	Honey Nectar source 64 cal/100g Fermentation free At 20C, density 1.38-1.45kg/L	3x1 L
46	Vitamin Powder Solubility Water , Physical Form Solid	3x500 G
47	Chickpea powder	10x1 kg
48	Formaldehyde Mb grade Chemical formula: HCHO Molecular Weight 30.03 10-15% methanol as stabilizer Chemical formula: HCHO Molecular Weight 30.03	1x1 L
49	Glycerine Chemical Formula HOCH ₂ CH(OH)CH ₂ OH Molecular Weight 92.09	1x500 g
50	Acetic Acid Mb grade Chemical Formula 13CH ₃ CO ₂ H Molecular Weight 61.04	2x2.5 L
51	Cholesterol Mb grade	4x25 G
52	Choline Chloride Mb grade , purity >99%, Chemical Formula) C ₂₇ H ₄₆ O Molecular Weight 386.65	1x500 G
53	Saccharose (carbohydrate)	1x1 kg
54	L.Cysteine Mb grade, >97% Chemical Formula HSCH ₂ CH(NH ₂)CO ₂ H Molecular Weight 121.16	4x25 G
55	Wession Salt Mixture Powder rich in Ca, Fe and Na insect cell culture	2x500 G
56	Riboflavin Mb grade Molecular Formula C ₁₇ H ₂₀ N ₄ O ₆ Molecular Weight 376.38	4x25 G

57	Folic Acid Mb grade Purity >97% Empirical Formula (C ₁₉ H ₁₉ N ₇ O ₆) Molecular Weight 441.40	3x25 G
58	Ammonium acetate Mb grade Linear Formula CH ₃ CO ₂ NH ₄ Molecular Weight 77.08	1x500 G
59	DNA ladder 1Kb Ready to use, MB grade, intact visible DNA bands after long run after staining destaining, 11 DNA bands consisting of 500 bp repeats from 0.5 to 3 kb, 1 kb repeats from 3 to 6 kb, and 2 kb repeats from 6 to 10 kb, can be stained with ethidium bromide, SYBR Green, Mixed with loading buffer and dyes For single application loading volume; 5µl/well	1x500 appli
60	DNA ladder 200bp Ready to use, MB grade intact visible 10 DNA bands with 100 bp increments after long run and staining/destaining, mixed with loading buffer and dyes For single application loading volume; 5µl/well	1x500 appli
61	Tetracycline HCl, Cell culture tested Molecular Formula: C ₂₂ H ₂₄ N ₂ O ₈ . HCl F.Wt: 480.9 Purity: >98% Suitable for bacterial growth	1x25g
62	Rifampicine MB grade, purity 99% Fwt : 822.94 g/mol Suitable for bacterial growth Formula : C ₄₃ H ₅₈ N ₄ O ₁	1x5g
63	Spectinomycin Spectinomycin dihydrochloride pentahydrate Molecular Formula: C ₁₄ H ₂₄ N ₂ O ₇ ·2HCl ·5H ₂ O Molecular Weight: 495.5 Derived from: Streptomyces sp. Suitable for Plant Tissue Culture	1x 25g
64	Kanamycin sulphate Powder and water soluble Sources; Streptomyces kanamyceticus Formula; C ₁₈ H ₃₆ N ₄ O ₁₁ ·H ₂ SO ₄ , Fwt. 583 g/mole Effective for fast selection of stable eukaryotic cell lines and fits for selection in multiple organisms	1x 25g
65	Phytigel (gelrite), gelling agent, PCCT powder, strength 550-850g/cm ² , provide clear colorless and high strength gel, loss on drying, ~15% Polysaturite comprising glucuronic acid, rhamnase and glucose, should not react with MgCl ₂	3x1kg
66	Plant Growth regulators, PCCT grade	
	i) 2,4-D: 2-4-Dichlorophenoxyacetic acid (10mg/ml) Chemical Formula C ₈ H ₆ Cl ₂ O ₃ ; MW:221.04 Purity 98%, Plant Cell Culture Tested, Crystalline white to light yellow,	2x100 ml
67	ii) Indole-3-Acetic Acid (IAA) formula: C ₁₀ H ₉ NO ₂ , FW: 175.2, purity: 99%,	1x25 g

	Plant Cell Culture Tested, off white to tan crystals.	
68	iii) Indole-3-butyric acid Molar mass: 203.24 g; purity: 99%, Chemical formula: C ₁₂ H ₁₃ NO ₂ Plant cell culture tested, purity	1x25 g
69	iv) 1-Naphthalene acetic acid (NAA): Chemical formula: C ₁₂ H ₁₀ O ₂ , FW: 186.2, purity: 99% Plant Cell Culture Tested, Storage Temp: 2-8 C, Solubility: acetone: 50mg/ml, crystalline, light yellow	1x100 g
70	v) Gibberellic acid Chemical formula: C ₁₉ H ₂₂ O ₆ ; Fwt: 346.37 Plant cell culture tested, Purity 99%. Storage Temp: 2-8 °C, Solubility: acetone/KOH: 50mg/ml, crystalline, light yellow,	1x5g
71	vi) 6-Benzylaminopurine Purity: 99%. Chemical formula: C ₁₂ H ₁₁ N ₅ Molar mass: 225.26 g Plant culture tested	1x25g
72	vii) Kinetin Purity: 99%. Formula:C ₁₀ H ₉ N ₅ O Molecular Weight 215.21 Plant cell culture tested	2x1g
73	viii) Zeatin Riboside Chemical formula: C ₁₅ H ₂₁ N ₅ O ₅ MW: 351.37 Storage/Handling: -15°C. Plant cell culture tested	2x50 mg
74	Thiamine HCl 99% Chemical formula: C ₁₂ H ₁₇ ClN ₄ O ₄ • HCl, Fwt: 337.27 Plant cell culture tested Powder, soluble in water Storage room temperature	2x 25g
75	Pyridoxine HCl 99% Chemical formula: C ₈ H ₁₁ NO ₃ .HCl, Fwt: 205.64 Plant cell culture tested Powder, soluble in water Storage room temperature	4 x25g
76	Nicotinic Acid Purity 99% Chemical formula: C ₆ H ₅ NO ₂ , Fwt: 123.12 Plant cell culture tested Powder, soluble in water Storage room temperature	1x100g
77	Gossy Plure Pheromone	4x50 no
78	Trimedlure	1x250 ml
79	Methyl Eugenol	1x250 ml
80	Pheromone trap for pink boll worm	3x50 No
81	Pheromone trap for moths	1x50 No.
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Limited Tender No. 32/2018

Sr. #.	Items	Quantity
1.	Conical 50ml pre-sterilized centrifuge tubes , made PP, chemical resistant, at up to 9000 rpm	4x500 nos
2.	Dishes Disposable Dish size: 90 x15mm Lid size: Vented and clear lid Sterile, transparent and high optical clarity Made polystyrene	45x480
3.	Filter paper Sheet Dimensions (L x W) 72 x 45 cm , 100 sheets/pk Pore size >10nm Pore size distributions: 35%	1 pkt
4.	Syringe filter 0.22 um , sterile suitable for filtration of additives, tissue culture media and antibiotics , Hydrophilic membrane: cellulose mixed ester	2x50/pk
5.	Parafilm Roll Dimensions: 4 inch x125ft Temperature range: 45-50°C Stretching: 200% Resistant to saline solutions, inorganic acids and alkaline solutions	10 X1roll
6.	Refillable box 1000 ul hinged tip, Capacity to hold 100 tips, Repeatedly autoclave able Made, polypropylene	5 box
7.	Refillable box 200 µl tip hinged tip Holding capacity 192 tips Repeatedly autoclave able Made, polypropylene	5 No.
8.	Electroporation cuvettes, Gap size: 0.1-0.2 cm individually wrapped and sterile by g-irradiation Suitable for bacterial transformations Volume capacity: 400µl, Made of crystal styrene Aluminum electrodes, Field strength: 25.0 kV/cm	2x 50 / pk
9.	Gloves Latex, Nitrile, Large size, powdered Textured fingertips for an improved grip Beaded cuff design hel, DNase, RNase free Good Thickness distribution for tactile sensitivity Puncture/chemical resistance	10 pkt (100/pkt)
10.	Beaker 1L Tapered jugs High clarity polypropylene Crisp blue printed, molded graduations Ergonomically designed handle Thumb grip for easy carrying Use up to 135°C Autoclavable, shatter proof	2x1
11.	Beaker 2L Tapered jugs High clarity polypropylene Crisp blue printed graduations Ergonomically designed handle	2x1

	<p>Thumb grip for easy carrying</p> <p>Use up to 135°C</p> <p>Autoclavable, shatter proof</p>	
12.	<p>Flasks 1L with screwed lid</p> <p>PPCO (Polypropylene Copolymer)</p> <p>Repeatedly autoclavable for long life and rigorous use</p> <p>Shatter proof</p> <p>Chemical resistant</p> <p>Translucent wall to see liquid level (easily visible)</p>	2x2
13.	<p>Trap for pink boll worm</p> <p>weather resistant</p> <p>insect monitoring</p>	50 no
14.	<p>Trap for moths</p> <p>weather resistant</p> <p>insect monitoring</p>	50 no

Limited Tender No. 33/2018

Sr. No.	Kits	Quantity
1	Vip3A ELISA kit for the qualitative analysis Double Antibody Sandwich (DAS) ELISA Suitable for the qualitative detectable of the Vip3A protein in Plant leaf or seed, enzyme (horseradish peroxidase)-labeled Vip3A antibody, Antibody-coated 96-well microtiter plates, Peroxidase enzyme conjugate, concentrated, RUB6 conjugate diluents, TMB substrate solution, Positive control, PBST buffer, 20X concentrate	1x 1kit
2	Total RNA isolation Kit Rapid column based purification of total RNA from a wide range of cell and tissue types,, high-quality RNA in less than 20 minutes, Up to 1,000 µg of purified RNA from a single extraction	1x1kit (50 preps)
3	cDNA Synthesis Kit Includes RevertAid or Maxima Reverse Transcriptases (RT). Temperature 42-55°C, reading length 3 kb, RNase free sensitivity: 0.1ng template, one step cDNA synthesis and quick (2 min) and easy gDNA removal prior to reverse transcription step	1x1kit
4	cDNA Synthesis Kit Reaction set-up and shipment without dry ice, high specificity and yield, reaction temperature up to 50°C, fast 35 min reaction time, 4 priming option, enhanced RNase H activity.	1x 7 vial kit (50 preps)
5	Gel Extraction kit, To purify DNA fragments from 25 bp to 20 kb in size with recovery rates up to 95%., binding capacity of up to 25 µg of DNA and can process up to 1 g of agarose gel. Purified DNA should be suitable for ligation, restriction digestion, PCR, sequencing, and labeling.	1X50prep
6	PCR Product Cloning kit, 30 reactions, TA system for direct one-step cloning of PCR products with 3'-dA overhangs (1). The high quality TA cloning vector pTZ57R/T for efficient ligation with PCR products providing high cloning yields and low background supplied with the TransformAid™ Bacterial Transformation Kit – a set of solutions for preparation of chemically competent E. coli cells. The DNA insert can be readily excised from the versatile polylinker of pTZ57R/T, sequenced using standard M13/pUC primers or in vitro transcribed with T7 RNA polymerase.	1x20 rx
7	Plant RNA reagent, high-yield, high-purity RNA (determined by A260/A280 and gel analysis) from a variety of plant material sources. greater flexibility for sample size and processing formats, and can be used for both small-scale (up to 0.1 g plant tissue) and large-scale (0.1–5 g plant tissue) total RNA isolation.	1x100ml