<u>CORRIGENDUM TO TENDER Notice for the supply of equipments/ instruments for</u> <u>the Textiles Committee laboratory at Cochin</u>

S.No	Reference	As per the tender docu	ment	corrected and read as
1.	Page no:5 Schedule of		.12.2015 3.30 P.M	Date and time for Pre-bid meeting (Briefing Session)28.12.2015 at 3.30 P.Min order to clarify any points related to the tender.at 3.30 P.M
	Tendering process And Page no 6 last para		<mark>.01.2016</mark> 3.00 P.M	Last date and time of submission of Bid (Both Technical & Financial Bids)
			. <mark>01.2016</mark> 3.30 P.M	Date and time of opening of Technical Bid18.01.2016 at 3.30 P.M
		Date and time of opening of Financial Bid (only for successful technical bidders)	<mark>2016.</mark> at 3.00 P.M	Date and time of opening of Financial Bid (only for successful technical bidders)28.012016 at 3.00 P.M
			s are given in closure-1C	Earnest Money Deposit (Bid Security) Details are given in Enclosure- 1C
2.	Page no:22	iii. Phase-3 : Advanced		iii. Phase-3 : Advanced training on Instrument
	Schedule of Tendering process	training on Instrument operation and application : This will be conducted abroad after completion of the 2 nd stage for atleast two persons. Boarding, lodging, to & fro local conveyance, airfare and training expenses of the trainee has to be borne by the successful bidder.		operation and application : This will be conducted at the application / training centre after completion of the 2 nd stage for at least two persons. Boarding, lodging, to & fro local conveyance, airfare and training expenses of the trainee has to be borne by the successful bidder.
3.	Pageno: 25 & 26 Sr.No 5 under name of equipment column	Tensile Tester Universal: <mark>50</mark> Capacity.	<mark>)0 Kgs</mark>	Tensile Tester Universal: <mark>1000</mark> <mark>Kgs</mark> Capacity.
4.	Pageno:27 Sr.No 1 under requirement column	<u>Multirange FTIR</u> Spectro meter capable of both ra and step scan operation minimum spectral range <u>c</u> 8500 cm-1.	pid scan covering	<u>Multirange FTIR</u> Spectro photo meter capable of both rapid scan and step scan operation covering minimum spectral range_of 350 to 7800 cm-1 or above.
5.	Pageno:27 Sr.No 3 under requirement	50,000: 1peak to per 25,0000:1 RMS or better spectral resolution, 5 seco	(4 cm-1	50,000: 1peak to peak and 25,000:1 RMS or better (4 cm- 1 spectral resolution, 5 second

	column	collection time, room temperature, ZNSE optics, DTGS <i>detector</i>).	data collection time, room temperature, ZNSE / KBR optics, DTGS detector).
6.	Pageno:27 Sr.No 6 under requirement column	High intensity Ceramic infra-red source with high sensitivity Fast recovery deuterated triglycine sulfate (DTGS) detector.	High intensity Ceramic infra- red source with high sensitivity deuterated triglycine sulfate (DTGS) detector.
7.	Pageno:29 Sr.No 12 under requirement column	Training should be imparted to at least 2 technical personnel in 3 phases as follows i) Basic technique. ii) During installation. iii) At manufacturer's site / Application centre.	 Training should be imparted to at least 2 technical personnel in 3 phases as follows I. Basic technique. II. During installation III. Application Centre/training centre.
8.	Pageno:30 Sr.No 2 under specification column	Electronic Pneumatics Control (EPC) Channel	Pneumatics Control
9.	Pageno:30 Sr.No 2under Requirment column	Should be possible to adjust the pressure in increments of 0.01 psi up to 100 psi	Should be possible to adjust the pressure in increments of 0.01 psi up to 100 psi and above
10.	Pageno:30 Sr.No 3 under Requirment column	Should have two Split/Split less injector with EPC and as PTV with heating rate of 700'C per min. One capillary split/split less and one PTV split/split less injection port.	Should have two Split/Split less injector with pneumatic control and as PTV with heating rate of 200'C or more per min. One capillary split/split less and one PTV split/split less injection port.
11.	Pageno:30 Sr.No 4 under Requirment column	Should have at least two detector ports with EPC. (one each for MS and another for future addition of ECD).	Should have at least two detector ports with pneumatic control . (one each for MS and another for future addition of ECD).
12.	Pageno:30 Sr.No 5 under Requirment column	The sampler should have the capacity to hold at least 100 vials of 2ml. capacity, controllable from the GC keyboard or software (optionally). Area Reproducibility: 0.5 % RSD and Injection volume linearity with 99% correlation. The Head Space Sampler should be transfer line based with loop system for precise quantification and it should be from same manufacturer. It should have up gradation facility as well	The sampler should have the capacity to hold at least 90 vials or more of 2ml. capacity, controllable from the GC keyboard or software (optionally). Area Reproducibility: 0.5 % RSD and Injection volume linearity with 99% correlation. The Head Space Sampler should be transfer line based with loop system for precise quantification and it should be from same manufacturer. It should have up gradation facility as well

13.	Pageno:30 Sr.No 6 under Requirment column	Should be possible to program <mark>6</mark> temperature ramps (<mark>7</mark> plateaus)	Should be possible to program <mark>9</mark> temperature ramps (<mark>10</mark> plateaus)
14.	Pageno:31 Sr.No 8 under Requirment column	Capillary columns 0.32 mm ID, 30 Mts, DB5 and DB 35 suitable for the analysis System should come with three stationary phase columns for azo dyes identification.	Capillary columns 0.10- 0.25 mm ID, 30 Mts, DB5 or equivalent and DB 35 or equivalent suitable for the analysis System should come with three stationary phase columns for azo dyes identification.
15.	Pageno:31 Sr.No 9 under Requirment column	System should have capability of locking/adjusting the retention time so that same retention time can be reproduced from system to system and the method should be electronically transferred. NIST 2014 or latest library along-with AMDIS/DRS software should be provided and also retention time locked databases with NIST Database.	System should have capability of locking/adjusting the retention time so that same retention time can be reproduced from system to system and the method should be electronically transferred. NIST 2014 or latest library along- with AMDIS/DRS software should be provided and also retention time locked / adjusted databases with NIST Database.
16.	Pageno:31 Sr.No 1 under Requirment column	The instrument should have Quadropole based collector for the analysis of various compounds with a mass range up to 1150 amu or better preferably monolithic quartz type.	The instrument should have Quadropole based collector for the analysis of various compounds with a mass range up to 1050 amu or better with metallic / monolithic quartz type.
17.	Pageno:31-32 Sr.No 4 under Requirment column	Should have Mass range up to 1150 amu in 0.1 amu steps or better. Mass resolution should be unit mass resolution throughout the range Mass Axis Stability should be \pm 0.10 amu / 48 hrs or better. Scan rate should be 5,000 to 10,000 amu /sec Dynamic range should be 10 ⁶	Should have Mass range up to 1050 amu or more in 0.1 amu steps or better. Mass resolution should be unit mass resolution throughout the range Mass Axis Stability should be \pm 0.10 amu / 48 hrs or better. Scan rate should be 5,000 to 12,000 amu /sec or better Dynamic range should be 10 ⁶
18.	Pageno:32 Sr.No 5 under Requirment column	El Scan – 100:1 S/N for 1 pg/ul OFN standard scan from 50 to 300 u with Helium or better El SIM – 10:1 S/N for 20 fg OFN	El Scan – 1000:1 S/N for 1 pg/ul OFN standard as performance scan or better from 50 to 300 u with Helium or better
19.	Pageno:32 Sr.No 8 under Requirment column	Full Scan or SIM. Scan speed up to 12,000 u/sec or better. Provision for quadruple heating (150 °C or above) to keep the source clean for a long period.	Full Scan or SIM. Scan speed up to 12,000 u/sec or better. With or without Provision for quadruple heating (150 °C or above) to keep the source clean

20.	Pageno:33 Sr.No 3 under Requirment column	Ionization source temperature programmable up to 350 °C. It should include turbo molecular pump with 260 L/Sec capacity or better. Unit resolution across the total mass range Latest version of NIST databases (including original CD) with license number from manufacturer. Refining Provision for refining of spectra Libraries – Should provide NIST, Wiley07, Pesticide, Drug toxicology or any other latest library	2014. Pesticide, Drug toxicology
21.	Pageno:34 Sr.No 6 under Requirment column	Five Years Comprehensive Warranty and additional two years maintenance warranty must be provided in order to keep system in continuous working conditions.	or any other latest library The entire row is deleted.
22.	Pageno:34 Sr.No 10 under Requirment column	Training should be imparted to at least 2 technical personnel in 3 phases as follows: i) Basic technique ii) During installation iii) At manufacturer's site / Application centre	Training should be imparted to at least 2 technical personnel in 3 phases as follows: i) Basic technique ii) During installation iii) Application centre/ Training centre
23.	Pageno:35 Sr.No 1 under Requirment column	An automated quaternary LC system capable of pumping two solvents at a time with a wide range of flow rate and with minimum dead volume. The system should have reliable and stable solvent delivery over a wide range of flow rate	An automated quaternary LC system capable of pumping four solvents at a time with a wide range of flow rate and with minimum dead volume. The system should have reliable and stable solvent delivery over a wide range of flow rate
24.	Pageno:35 Sr.No 2 under Requirment column	 i) High pressure Quatenary Pump with on-line vacuum degasser able to deliver 2 solvents. ii) Flow Rate Range: - 0.001ml/min to 5 ml. in 0.001 ml/ min increments iii) Flow Precision: - Less than 0.1% or better iv) Operating Pressure:- approx up to 95000 or more 	i)High pressure Quatenary Pump with on-line vacuum degasser able to deliver 4 solvents. ii)Flow Rate Range: - 0.001ml/min to 5 ml and above. in 0.001 ml/ min increments iii)Flow Precision: - Less than 0.1% or better iv)Operating Pressure:- approx up to 9500 or more psi
25.	Pageno:35 Sr.No 3- Manual injector	Rheodyne Injector with mounting brackets having 20 micro L loop injector Syringe:- 25 micro L or 100 micro L	The entire row is deleted.

26.	Pageno:35 Sr.No 4 under Requirment column	Should provide a temperature ranging from 10°C below ambient to 80°C or better with temperature accuracy \pm 0.1°C with force air cooling or better. Should have capacity to hold 2 columns up to 300 mm length. Should have provision to upgrade with a column switching valve Temperature accuracy: \pm 0.5	Should provide a temperature ranging from ambient to 80° C or better with temperature accuracy $\pm 0.1^{\circ}$ C with force air cooling or better. Should have capacity to hold 2 columns up to 300 mm length. Should have provision to upgrade with a column switching valve Temperature accuracy: ± 0.5
27.	Pageno:35 Sr.No 6 under Requirment column	(i) Should have sample capacity of at least 100 x 2 ml vials	(i)Should have sample capacity of at least 90 or more x 2 ml vials
28.	Pageno:36 Sr.No 12 under Requirment column	Training should be imparted to at least 2 technical personnel in 3 phases as follows: iv) Basic technique v) During installation vi) At manufacturer's site / Application centre	Training should be imparted to at least 2 technical personnel in 3 phases as follows: iv) Basic technique v) During installation vi) Application centre/ training centre
29	Pageno:37 Sr.No 12 under Requirment column	Automatic sample applicator should be provided with Data input and monitoring through software. Provision should be for the application of spots, bands. Application mode should be both contact and Spray Application of sample solutions onto any planar medium Application volume: (i) 5 micro litre by contact method (ii) 0.5 to > 50 mico litre by spray method Variable rate of delivery Built in validation method, GLP compliance	Semi-automatic sample applicator should be provided with Data input and monitoring through software. Provision should be for the application of spots, bands. 4 mode Applicator. Prefarably with 1) Quantitative analysis, 2) Micro- preparative isolation, 3) In-situ addition of internal std. or reagents 4) Superimpose. 10- method memory storage, stand- alone or System Manager control. Sample positioning on X & Y axis freely selectable, variable automatic rate of delivery, 100 µl syringe for analytical work & 500 µl syringes for micro-preparative work. Self diagnostic + software link to System Manager built-in. Built in validation method, GLP compliance.
30	Pageno:37-38 Sr.No 7 under Requirment column	Latest version Window based compatible software to control all the functions of TLC and scanner. Quick measurement time. Measurement up to 36 tracks. Integration either with automatic or	Latest version Window based compatible software to control all the functions of TLC and scanner. Quick measurement time. Measurement up to 36 tracks. Integration either with automatic

		 manual baseline correction. Quantitative evaluation with calibration functions. Dual and multi wave length scan. Track optimization. Calibration/validation for checking the instrument performance. Spectrum library with provision of user to create his own library. Report printout of the entire analysis including all the measurement. Fully GLP and GMP compliant software with audit trails, multilevel password protection and report generation in Acrobat format 	or manual baseline correction. Quantitative evaluation with calibration functions. multi wave length scan. GLP and GMP compliant software with audit trails, multilevel password protection and report generation in Acrobat format
31	Pageno:38 Sr.No 10 under Requirment column	Training should be imparted to at least 2 technical personnel in 3 phases as follows: vii) Basic technique viii) During installation ix) At manufacturer's site / Application centre	Training should be imparted to at least 2 technical personnel in 3 phases as follows: vii) Basic technique viii) During installation ix) Application centre/Training centre
32	Pageno:40 Sr.No 6 under Requirment column	(VII) Pre-load weights for fabric strength test for applying the tension, if applicable.	(viii)Pre-load weights for fabric strength test for applying the tension, if no provision for the same is available.
33	Pageno:40 Sr.No 7 under Requirment column	Pneumatic rubber: - 25 x 25 mm – set of 2 - 25 x 75 mm – set of 2 - optional 25 x 25 mm – set of 2 Grab insert Manual jaws: 25 x 25 mm - set of 2 25 x 75 mm - set of 2 Fibre grip set of 2 Bollard grip- 1 Compression kits- 1 Lea grip up to 500 kg – 1 Manual Vice grips for 5 KN: - 25 mm x 75 mm - set of 2 Corrugated jaws: 25 m x 75 mm - set of 2	 1.Pneumatic rubber: Upper Jaw : with a set of 75X min 25 mm jaw faces. Lower Jaw : with a set of 75 x min 25 mm jaw faces. 2.Pneumatic rubber: Upper Jaw : with a set of 150 X min 50 mm jaw faces. Lower Jaw : with a set of 150 x min 25 mm jaw faces. Lower Jaw : with a set of 150 x min 25 mm jaw faces. 3.Grab insert : set of 25X 25 mm jaw faces. 4.Fibre grip : 1 set 5.Bollard grip- 1 set capable of testing single thread strength of cotton yarn, high tenacity yarn , with pneumatic gripping. Lea grip : -1 set - required only if the provision for the same is not available with bollard grips.