27.08.2019

TAMILNADU MEDICAL SERVICES CORPORATION LTD.,

TENDER FOR SUPPLY AND INSTALLATION OF FULLY AUTOMATED INTEGRATED CHEMISTRY ANALYZER AND IMMUNOASSAY WITH COMPREHENSIVE SOFTWARE FOR LAB TO INSTITUTE OF BIOCHEMISTRY, RAJIV GANDHI GOVT. GENERAL HOSPITAL, CHENNAI

TENDER NO.472/ANL/NHM/TNMSC/ENGG/2019, DT.29.05.2019

Corrigendum

a) The following corrigendum are issued:-

Sl. No.	Tender document reference	Instead	Read as
1.	Page No.54 to 59 Section VI: Technical Specification	Existing Text	Revised Text at Annexure - I
2.	Page No.65 Section VII: Bid Form and Price Schedule Price Schedule	Existing Text	Revised Text at Annexure - II

All other terms and conditions of the tender remain unaltered.

The above forms part of the bidding documents. The bidder shall attach the copy of this corrigendum duly signed by their authorized signatory, in their bid.

Sd/-
General Manager (E)

ANNEXURE - I

SECTION VI : TECHNICAL SPECIFICATIONS - REVISED

SPECIFICATION FOR FULLY AUTOMATED INTEGRATED CLINICAL CHEMISTRYANALYZER AND IMMUNOASSAY WITH COMPREHENSIVE SOFTWARE FOR LAB

1. Description of Function

1.1 Fully automated random access analyzer to perform analysis of serum, plasma, urine, cerebrospinal fluid (CSF), body fluids, saliva, hemolysate and whole blood for HbA1c.

2. Operational Requirements

2.1 A discrete patient prioritized automated random access clinical chemistry and immunoassay analyzer for chemistries, elecrolytes, immunoglobulins, drug assay, hormones etc., in blood/urine/fluids. Should have photometry, potentiometry, Turbidimetry and latest Chemiluminescence on board technologies.

3. Technical Specification

3.1 Analytical Mode: End point as well as Kinetic, Automatic, discrete, Random access clinical chemistry analyzer should have the facility of performing special parameters like NGSP certified HbA1c testing, Lactate, hsCRP, Myoglobin, Prealbumin.

3.2 Onboard parameters: Atleast 60 reagent positions for chemistry and 25 reagent positions for immunoassay. Sample capacity minimum 150 with continuous loading facility to be provided.

3.3 Through put: minimum 1400 test/hour for chemistry and Electrolytes, minimum 170 tests per hour for immunoassay. Facility to add chemistry and or immunoassay module on demand.

3.4 Sample volume: Minimum 2µl/test for photometry. Reagent volume: maximum 150-300 micro litre for single reagent. Multi-reagent facility should be provided.

3.5 Should have facility for minimum carry over during mixing for both samples and reagents.

3.6 Onboard washing for chemistry; disposable cuvettes and tips for immunoassay is preferable to prevent carry over contamination. Water requirements in maximum throughput to be specified.

3.7 On board test parameters 150-200 preferable, and reagents should be available from the same manufacturer. Reaction time for the common Immuno assay tests given below should be 10-30 minutes.

Commonly preformed Immunoassay Tests

- T3, T4
- Free T3
- Free T4
- TSH
- Cortisol
- PSA
- Prolactin
- PTH
- Vitamin D
- Ferritin
- Free PSA /Procalcitonin
- Alpha feto protein
- ACTH
- CA 125
- CA 19.9
- CA 15.3
- CEA
- Thyroglobulin
- Anti TG
- Anti TPO
- Anti TSH Receptor
- LH
- FSH
- Testosterone
- Free Testosterone
- Estrogen
- Progesterone

3.8 Auto dilution facility: For high value samples repeat run facility: Facility to check the results by repeat run on the desired samples should be available.

3.9 Sample clot and probe crash detection facility: For excluding erroneous analysis.

3.10 Self diagnosis and troubleshooting: For minor day-to-day problem. Error – check: Automatic flagging for errors.

3.11 Calibration & quality control: Linear/Non-Linear. Lot –to- lot calibration for both assays .

3.12 Onboard bar code facility: Bar code ID for sample tube and reagent identification facility.

3.13 Reagent storage facility: Onboard refrigeration of 50-70 reagent bottles.

3.14 Stat facility: separate provision for urgent samples 8-12 preferred.

3.15 LAN interface facility: Online data transmission facility through Middle ware – LAN to the computer network of the Hospital along with necessary software.

3.16 Probe system: separate probe for reagent and sample.

3.17 Optical System: a) Light source: Halogen/Xenon Lamp b) Wavelength of range: 340-800 nm with polychromatic correction. c) Optical detection: Diffraction grating d) OD range: 0-2.5

3.18 One computer system as specified- CPU core i5 or later version, 2.7 GHz and above; 8GB RAM; 1 TB Hard Disk Drive; serial and parallel ports; keyboard, Monitor, Mouse; preloaded latest MS windows versions; Laser printer; suitable Modem , latest anti-virus programme.

3.19 Middle ware Requirments:

a) Middle ware solutions with facility to connect upto 12 equipments (Biochemistry, Hematology, Coagulation, blood gas, electrolytes, Urine analysers of different manufacturers.

b) The system should be Web Based Design or with facility to access laboratory from anywhere using a secure connection thereby allowing complete control over lab.

c) Facility to monitor key indicators of the lab in real-time basis such as QC violations, Mask analytes, number of samples exceeding turnaround time, Instrument flags, Analyte pending for medical validation.

d) The software should have the facility of Archiving & Retrieval of sample.

e) Hardware requirements: Suitable hardware and accessories should be provided for implementation and installation of middleware.

f) Live demonstration of the middleware with all mentioned features is mandatory.

4. Accessories, spares and consumables

4.1 Suitable Uninterrupted Power supply system to support the complete analyser and the Middle ware, with 60 minutes back up. Should be maintained during warranty, and thereafter be covered in CAMC including change of batteries.

4.2 Deoiniser: Suitable water output capacity to meet the requirements in full throughput, which shall be maintained during warranty, and thereafter be covered in CAMC.

4.3 Bar code printer and scanner - 2 nos. each, bar code labels 50,000 nos.

One Data processor computer having licensed latest windows based operating system with Laser printer, UPS in addition to regular supply to be provided.

4.4 All consumables required for installation and standardization of system to be given free of cost.

4.5 Necessary plumbing and electrical works for equipment installation at the site to be provided.

5. Environmental Factors

5.1 Shall meet IEC – 60601-1-2: 2001 (or Equivalent BIS) for General Requirements of safety, electromagnetic compatibility or should comply with 89/366/EEC; EMC-directive.

5.2 The unit shall be capable of being stored continuously in ambient temperature of 0-50 deg C and relative humidity of 15-90%

5.3 The unit shall be capable of operating in ambient temperature of 20-30 deg C and relative humidity of less than 70%.

5.4 Complete installation of the system including water input and drainage system has to be installed.

6. Power Supply

6.1 Power input to be 220-240 VAC (single phase)/ 400-440 V (3 phase)/50 Hz as appropriate fitted with Indian plug.

6.2 Voltage corrector/stabilizer of appropriate ratings meeting ISI specification (Input 160-260 V and output 220-240V and 50 Hz)

6.3 Suitable UPS with maintenance free batteries for minimum on-hour back-up should be supplied with the system and maintained during the warranty period of main equipment.

7. Standards, Safety and Training

7.1 Should be FDA or CE approved for In vitro diagnostics.

7.2 Comprehensive training for lab staff and support services till familiarity with the system.

7.3 Attach original manufacturer's product catalogue and specification sheet. Photocopy/computer print will not be accepted. All technical data to be supported with original product data sheet. Please quote page number on compliance sheet as well as on technical bid corresponding to technical specifications.

7.4 Should be compliant with IEC 61010-1: (or any international equivalent eg (EN/UL 61010) covering safety requirements for electrical equipment for measurement control and laboratory use.

8. Documentation

8.1 User/Technical/Maintenance manuals to be supplied in English.

8.2 Certificate of calibration and inspection.

8.3 List of equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service/technical manual.

8.5 Log book with instruction for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

8.6 Performance report in the last 5 years from major hospitals should be enclosed.

9. Reagents and Consumables

The bidder should quote the price for the following test separately in the price schedule and the rate will be frozen for 5 years. The cost should not be included in the main price of the equipment.

Sl. No.	NAME OF THE PARAMETER	AVERAGE TESTS PER YEAR
1	Albumin	180000

Sl. No.	NAME OF THE PARAMETER	AVERAGE TESTS PER YEAR
2	Ammonia	18000
3	Bilirubin direct	180000
4	Bilirubin total	180000
5	Calcium	18000
6	Cholesterol	18000
7	Creatinine by Jaffe method	360000
8	Creatinine by enzymatic method	120000
9	Fructosamine	1200
10	Glucose	540000
11	HbA1c	18000
12	HDL-c	18000
13	Iron	1200
14	Lactate	2400
15	LDL-c	1200
16	Magnesium	3600
17	Phosphorus	18000
18	Triglycerides	18000
19	Total Protein	180000
20	Urea	360000
21	Total Iron binding capacity	1200
22	Uric acid	36000
23	Alkaline phosphatase	180000
24	SGOT	180000
25	SGPT	180000
26	Amylase	18000
27	Cholinesterase	1200
28	CK-NAC	7200
29	CK-MB	7200
30	GGT	7200

Sl. No.	NAME OF THE PARAMETER	AVERAGE TESTS PER YEAR
31	LDH	18000
32	Lipase	18000
33	Alpha 1 acid glycoprotein	1200
34	Alpha 1 antitrypsin	1200
35	Alpha 1 microglobulin	1200
36	Total Protein (urine)	24000
37	Total Protein (CSF)	18000
38	Copper	1200
39	Ceruloplasmin	1200
	IMMUNOASSAYS	
40	Anti-streptolysin O	1200
41	Anti thrombin III	1200
42	Apo-A	1200
43	Apo-B	1200
44	Lp(a)	1200
45	Beta2 microglobulin	1200
46	Ceruloplasmin	1200
47	CRP-hs	6000
48	CRP	6000
49	D-Dimer	1200
50	Growth hormone	1200
51	Haptogloblin	1200
52	IgA	1200
53	IgG	1200
54	IgM	1200
55	Kappa light chain	1200
56	Lambda light chain	1200
57	Myoglobin	1200
58	Procalcitonin	3600

Sl. No.	NAME OF THE PARAMETER	AVERAGE TESTS PER YEAR
59	Pre albumin	1200
60	Transferrin	1200
61	Cystatin C	1200
62	ACTH	1200
63	AFP	1200
64	ANTI-TG	1200
65	ANTI-TPO	1200
66	B-CROSS LAPS	1200
67	CA 125	1200
68	CA 15-3	1200
69	CA 19-9	1200
70	CA 72-4	1200
71	Cortisol	1200
72	C – peptide	1200
73	DHEA	1200
74	Estradiol	1200
75	Ferritin	1200
76	Total PSA	3600
77	Free PSA	3600
78	FSH	3600
79	FT3	48000
80	FT4	48000
81	Insulin	1200
82	LH	1200
83	TSH	48000
84	Osteocalcin	1200
85	P1NP	1200
86	Pro-BNP	1200
87	Progesterone	1200

Sl. No.	NAME OF THE PARAMETER	AVERAGE TESTS PER YEAR
88	Prolactin	3600
89	PTH	1200
90	SHBG	1200
91	T3	3600
92	T4	3600
93	Free Testosterone	1200
94	Total Testosterone	1200
95	Free beta HCG	1200
96	ANTI CCP	1200
97	IL-6	3600
98	Vitamin B 12	1200
99	Folate	1200
100	Vitamin D	3600
101	Homocysteine	1200
102	HIV	6000
103	HBsAg	24000
104	Anti HBsAg	1200
105	HCV Ag	24000
106	Cyclosporine	1200
107	Tacrolimus	1200
108	Sirolimus	1200
	ELECTROLYTES	
109	Sodium	360000
110	Potassium	360000
111	Chloride	360000

All consumables including controls, calibrators and accessory items as applicable to the respective manufacturer must be included in the rate list.

Note: Bidders shall furnish technical compliance statement for the model quoted , details of manufacturer including deviations if any. Technical catalogue /data sheet shall also be furnished in support of technical compliance statement with out fail.

ANNEXURE - II

PRICE SCHEDULE – REVISED

1	2	3	4	5					6	7	8
				PRICE FOR EACH UNIT							
Sch No.	Item Description	Country of origin	Quantity & Unit	Ex-factory Ex-warehouse Ex-showroom off-the shelf for CIF (a)	Packing & forwarding (b)	Inland transport, Insurance and Incidental costs incidental to delivery (c)	Incidental services as listed in clause 7 of SCC (d)	Customs duty (e)	Unit price a+b+c+d+e	Total price per schedule for delivery at final destination (4 x 6)	GST – IGST/CGST/ SGST payable if contract is awarded
1.	Fully Automated Integrated Clinical Chemistry Analyzer and Immunoassay with Comprehensive Software for Lab as per specification		1 No.								
1a.	**Reagent and Consumables**										
1	Albumin		180000 tests per year								
2	Ammonia		18000 tests per year								
3	Bilirubin direct		180000 tests per year								
4	Bilirubin total		180000 tests per year								
5	Calcium		18000 tests per year								
6	Cholesterol		18000 tests per year								

7	Creatinine by Jaffe method		360000 tests per year								
8	Creatinine by enzymatic method		120000 tests per year								
9	Fructosamine		1200 tests per year								
10	Glucose		540000 tests per year								
11	HbA1c		18000 tests per year								
12	HDL-c		18000 tests per year								
13	Iron		1200 tests per year								
14	Lactate		2400 tests per year								
15	LDL-c		1200 tests per year								
16	Magnesium		3600 tests per year								
17	Phosphorus		18000 tests per year								
18	Triglycerides		18000 tests per year								
19	Total Protein		180000 tests per year								

20	Urea		360000 tests per year								
21	Total Iron binding capacity		1200 tests per year								
22	Uric acid		36000 tests per year								
23	Alkaline phosphatase		180000 tests per year								
24	SGOT		180000 tests per year								
25	SGPT		180000 tests per year								
26	Amylase		18000 tests per year								
27	Cholinesterase		1200 tests per year								
28	CK-NAC		7200 tests per year								
29	CK-MB		7200 tests per year								
30	GGT		7200 tests per year								
31	LDH		18000 tests per year								
32	Lipase		18000 tests per year								

33	Alpha 1 acid glycoprotein		1200 tests per year								
34	Alpha 1 antitrypsin		1200 tests per year								
35	Alpha 1 microglobulin		1200 tests per year								
36	Total Protein (urine)		24000 tests per year								
37	Total Protein (CSF)		18000 tests per year								
38	Copper		1200 tests per year								
39	Ceruloplasmin		1200 tests per year								
40	Anti-streptolysin O		1200 tests per year								
41	Anti thrombin III		1200 tests per year								
42	Apo-A		1200 tests per year								
43	Apo-B		1200 tests per year								
44	Lp(a)		1200 tests per year								
45	Beta2 microglobulin		1200 tests per year								
46	Ceruloplasmin		1200 tests per year								
47	CRP-hs		6000 tests per year								

48	CRP		6000 tests per year								
49	D-Dimer		1200 tests per year								
50	Growth hormone		1200 tests per year								
51	Haptogloblin		1200 tests per year								
52	IgA		1200 tests per year								
53	IgG		1200 tests per year								
54	IgM		1200 tests per year								
55	Kappa light chain		1200 tests per year								
56	Lambda light chain		1200 tests per year								
57	Myoglobin		1200 tests per year								
58	Procalcitonin		3600 tests per year								
59	Pre albumin		1200 tests per year								
60	Transferrin		1200 tests per year								
61	Cystatin C		1200 tests per year								
62	ACTH		1200 tests per year								

63	AFP		1200 tests per year								
64	ANTI-TG		1200 tests per year								
65	ANTI-TPO		1200 tests per year								
66	B-CROSS LAPS		1200 tests per year								
67	CA 125		1200 tests per year								
68	CA 15-3		1200 tests per year								
69	CA 19-9		1200 tests per year								
70	CA 72-4		1200 tests per year								
71	Cortisol		1200 tests per year								
72	C – peptide		1200 tests per year								
73	DHEA		1200 tests per year								
74	Estradiol		1200 tests per year								
75	Ferritin		1200 tests per year								
76	Total PSA		3600 tests per year								
77	Free PSA		3600 tests per year								

78	FSH		3600 tests per year								
79	FT3		48000 tests per year								
80	FT4		48000 tests per year								
81	Insulin		1200 tests per year								
82	LH		1200 tests per year								
83	TSH		48000 tests per year								
84	Osteocalcin		1200 tests per year								
85	P1NP		1200 tests per year								
86	Pro-BNP		1200 tests per year								
87	Progesterone		1200 tests per year								
88	Prolactin		3600 tests per year								
89	PTH		1200 tests per year								
90	SHBG		1200 tests per year								
91	T3		3600 tests per year								
92	T4		3600 tests per year								

93	Free Testosterone		1200 tests per year								
94	Total Testosterone		1200 tests per year								
95	Free beta HCG		1200 tests per year								
96	ANTI CCP		1200 tests per year								
97	IL-6		3600 tests per year								
98	Vitamin B 12		1200 tests per year								
99	Folate		1200 tests per year								
100	Vitamin D		3600 tests per year								
101	Homocysteine		1200 tests per year								
102	HIV		6000 tests per year								
103	HBsAg		24000 tests per year								
104	Anti HBsAg		1200 tests per year								
105	HCV Ag		24000 tests per year								
106	Cyclosporine		1200 tests per year								
107	Tacrolimus		1200 tests per year								

108	Sirolimus		1200 tests per year								
109	Sodium		360000 tests per year								
110	Potassium		360000 tests per year								
111	Chloride		360000 tests per year								

i. Unit price in (6) (Rs. in words)

1. Fully Automated Integrated Clinical Chemistry Analyzer and Immunoassay with Comprehensive Software for Lab as per specification with HSN Code/rate of GST……..

1a. The bidder should furnish as a part of their price bid the prices for the above test for the period of 5 years. The rate quoted will be taken in to account for price evaluation. Hence the bidder should compulsorily quote the rates for the above. Bids without the prices of the above items will be liable for rejection. The rates quoted by the successful bidder for the above will be frozen for a period of 5 years from the date of order.

a) Annual Maintenance Charges (labour only) per year /per unit for 7 years after 3 years free warranty maintenance period

1. Fully Automated Integrated Clinical Chemistry Analyzer and Immunoassay with Comprehensive Software for Lab as per specification with HSN Code/rate of GST……..

b) Annual Maintenance Charges (Comprehensive) for 7 years / per year / per unit after free warranty maintenance period

1. Fully Automated Integrated Clinical Chemistry Analyzer and Immunoassay with Comprehensive Software for Lab as per specification with HSN Code/rate of GST……..

Note:

(a) In case of discrepancy between unit price and total price, the unit price shall prevail.

(b) **This price schedule should be placed in separate sealed cover "Cover B"**

(c) GST applicable for Annual Maintenance Charges shall be indicated separately.

(d) The bidder should indicate the HSN code of the equipment/ service and applicable GST rates.

(e) The bidder should quote for the prices separately from column 5(a) to 5(e) and should not state "as inclusive".

(f) The cost of reagent kit per test should be quoted for 5 years.

(g) **The evaluation will be done including the following rates:**

1. Unit rate of equipment with tax

2. CAMC rate for 7 years at a discount rate of 8% per annum

3. Consumables cost quoted for 5 years at a discount rate of 8% per annum.

Place :

Date :

Signature of Bidder.....……..

Name ……

Business Address ……