



OFFICE OF THE CHIEF DISTRICT MEDICAL & PUBLIC
HEALTH OFFICER, KANDHAMAL
E-Mail: cdmophulbani@gmail.com,
Phone / Fax No- 06842-253249

No. 8112 Phulbani Dated 12/07/2018
DWH / 40 / NIDAN / 18-19

To

The Director,
I & PR Department, Govt. of Odisha
Lok Sampark Bhawan, Bhubaneswar
E-mail id: ipr.advt@gmail.com / iprenews@gmail.com

Sub: **Publication of the advertisement related to supply of Diagnostic Reagent, Chemicals, Kits and Consumables to Kandhamal district.**

Sir,

Please find here with a specimen copy of the advertisement related to **supply of Diagnostic Reagent, Chemicals, Kits and Consumables to Kandhamal district** for Publication of the same in two nos. of daily news paper (One time) by **Dt.13.07.2018**.

This is for favour of your kind information and necessary action.

Yours faithfully,


Chief District Medical & PH Officer,
Kandhamal

Memo No. 8113 / DWH

Date: 12/07/2018

1. Copy to the DI & PRO, Kandhamal for information and necessary action.
2. Copy to the DIO, NIC, Kandhamal for information with a request to publish the same along with the enclosures (enclosed herewith) in the District website of Kandhamal district for wide publicity.


Chief District Medical & PH Officer,
Kandhamal

OFFICE OF THE CHIEF DISTRICT MEDICAL & PUBLIC HEALTH OFFICER, KANDHAMAL
No. 8111 /DWH Tender Call Notice Date 12-07-18

Sealed tenders are invited from authorized firms for **supply of Diagnostic Reagent, Chemicals, Kits and Consumables to Kandhamal district**. The details are available in the district website: www.kandhamal.nic.in. The eligible bidders may submit their tender papers **on or before 28.07.2018 by 12 Noon** through Registered Post / Speed Post / Courier only to the undersigned. The **Technical Bid document will open on 28.07.2018 at 4 PM**. Who will qualify in the technical bid, their **Price Bid will be opened on the same day i.e. 28.07.2018** by the purchase committee in the office chamber of the undersigned. The undersigned reserves the right to accept or reject any or all the tender without assigning any reason thereof.

Sd/-

Chief District Medical & PH Officer, Kandhamal



**CHIEF DISTRICT MEDICAL & PUBLIC HEALTH OFFICER
KANDHAMAL**

Tel: 06842-253385;
e-mail :cdmophulbani@gmail.com,

Tender Reference No. DWH/2018-19/8111

**TENDER DOCUMENT
FOR
SUPPLY OF
DIAGNOSTIC REAGENT, CHEMICALS,
KITS AND CONSUMABLES**

**Address for Correspondence- Office of the Chief District
Medical & Public Health Officer, Kandhamal
At/Po-Phulbani, Dist- Kandhamal, Odisha
Pin-762001**

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OFFICE OF THE CHIEF DISTRICT MEDICAL & PUBLIC HEALTH OFFICER, KANDHAMAL

SECTION -I

NOTICE INVITING TENDER

Tender Reference No. : - DWH/2018-19/8111

Dated: 12.07.2018

TENDERS ARE INVITED FROM ELIGIBLE BIDDERS AS PER THE ELIGIBILITY CRITERIA FOR SUPPLY OF DIAGNOSTIC REAGENT, CHEMICALS, KITS AND CONSUMABLES

1	Period of Availability of Tender Document	From 13.07.2018 TO 28.07.2018 (Downloadable from website: www.kandhamal.nic.in) In case of any bid amendment and clarification, responsibility lies with the bidders to collect the same from the above mentioned website before last date of submission of tender document and the tender inviting authority shall have no responsibility for any delay / omission on part of the bidder.
2	Last date & time for submission of Tender	Date: 28.07.2018, Time: 12 Noon Address of Submission of Bid: OFFICE OF THE CHIEF DISTRICT MEDICAL & PUBLIC HEALTH OFFICER, KANDHAMAL At/Po- Phulbani, Dist.- Kandhamal, Pin- 762001 (Through Speed post / Registered post / Courier)
3	Date, time and place of opening of Tender	A. Technical Bid (Cover-A): Opening – 28.07.2018 at 4.00 PM in the address mentioned above. B. Financial Bid (Cover B): Opening – 28.07.2018 at 5.00 PM in the address mentioned above. (Venue is mentioned at the address mentioned above) (Bidders / authorized representative may remain present at the time of opening of bid)

SECTION -II

IMPORTANT INSTRUCTIONS TO BE NOTED CAREFULLY BY THE TENDERERS

1.	Mode of Procurement	Through Open Advertisement
2.	Purchaser	Chief District Medical & Public Health Officer, Kandhamal
3.	Consignee	DHH,SDH,AH,CHC, PHC (N), SC etc of District Kandhamal
4.	Delivery Period	Within 15 days from issue of the purchase order.
5.	Mode of Delivery	By Air / Road / Rail
6.	Tender Document Cost	Rs. 2,000/- : The tender document cost (Non-refundable) is to be submitted in the shape of bank draft in favour of the ZSS Non NRHM Fund, Kandhamal from any Nationalized / Scheduled Bank payable at Phulbani.
7.	Earnest Money Deposit (EMD)	<p>The bidder may quote for any or all the items by submitting the required EMD (Refundable) of Rs.20,000/-.</p> <p>The Earnest Money Deposit will be paid in the shape of demand Draft only in favour of ZSS Non NRHM Fund, Kandhamal from any Nationalized / Scheduled Bank payable at Phulbani.</p>

SECTION -III

TERMS & CONDITIONS

Sealed tenders are invited from the eligible bidders as per the eligibility criteria for **supply of Diagnostic Reagent, Chemicals, Kits and Consumables** for the District, Kandhamal.

1. The bidders have to submit their tenders in separate sealed covers (i.e. **Cover "A"-Technical Bid & Cover "B"- Price Bid**). Both the covers should be put into a third **Cover "C"** which must be super-scribed as "**Tender for "Supply of Diagnostic Reagent, Chemicals, Kits and Consumables"** and **& Tender Reference No.** _____.
2. **The Cover "A" (Technical Bid) should contain as follows:**
 - 1) Checklist with details of the documents enclosed in **Cover "A"** (as per **Annexure - I**) with page number. The document should be **serially arranged** as per this **Annexure - I** and should be securely tied and bound.
 - 2) Manufacturing unit / supplier, who has been blacklisted either by the Tender inviting authority or by any state Govt. or Central Govt. organization, is not eligible to participate in the tender for that item during the period of blacklisting. They should submit a declaration about this by a **Notary Public as per Annexure-V**.
 - 3) EMD **Rs.20,000/-** (Rupees Twenty Thousand only - Refundable) in shape of Bank Draft / Bankers Cheque in favour of ZSS Non NRHM Fund, Kandhamal payable at Phulbani.
 - 4) Tender Paper Cost **Rs.2000/-** (Rupees Two Thousand only – Non-refundable) in shape of Bank Draft / Bankers Cheque in favour of ZSS Non NRHM Fund, Kandhamal payable at Phulbani.
 - 5) List of Item (s) Quoted individually in the prescribed format (**Annexure -III**).
 - 6) Copy of organization PAN.
 - 7) Copy of organization Income Tax Acknowledgement Report (**Assessment Year 2015-16, 2016-17, 2017-18**) and copy of the audited financial statement for the last three financial year i.e. 2014-15, 2015-16 & 2016-17.
 - 8) Photocopy of the GST registration certificate.
 - 9) The manufacturer / supplier should have 5 years market standing in supplying above tendered items to Govt./Corporate/PSU Hospitals in India. The copy of purchase order from the user should be furnished in support of the information provided in the market standing statement (item wise).

- 10) Performance Statement during the last five years towards proof of supply of above tendered items to any Govt./Corporate/PSU Hospitals in India. The copy of certificate from the user should be furnished in support of the information provided in the performance statement.
- 11) Copy of Valid Manufacturing License of the manufacturer (s) / Import License by the Importer (s) / Authorization certificate from the Original Manufacturer (s) as per **Annexure-VI**.
- 12) Copy of valid ISO Certificate.
- 13) Copy of valid ISI / CE / BIS / US FDA / IEC certificate.
- 14) All the tender documents should sign by the bidders at the bottom of each page with his official seal duly affixed.
- 15) They should quote the rates for individual items inclusive of excise duty, insurance, packing, forwarding, freight (door delivery) and exclusive GST (if any) and should submit a self declaration about this as per **Annexure-VII**.
- 16) They must submit the undertaking that they will supply the stocks **within 15 days** after receipt of the Purchase Order from this office. In case of non-supply, the authority may allow extension for a **maximum period of 5 (five) days** after the stipulated date of supply with a **penalty of 0.1% per day**, which will be deducted from the purchase order value as "**Liquidated Damage**".
- 17) If the supplier fails to complete the supply within the extended period, i.e. 20 days after being allowed by the purchaser, no further purchase order will be placed to the firm for the said item including forfeiture of the EMD and the concerned firm will be blacklisted for three (3) years from the date of issue of letter for the said item.
- 18) Violating the tender terms and conditions & non supply / supply which is not as per technical specification will disqualify the firm to participate in the tender for a period of three (3) years from the date of issue of letter and his E.M.D will be forfeited and no further purchase order will be placed to that firm for that item.
- 19) The supplier shall have a minimum turnover of Rs.1 (one) Crores or more in the last three year financial years i.e. 2014-15, 2015-16 & 2016-17 and copy of the audited financial statement for the last three financial year i.e. 2014-15, 2015-16 & 2016-17.

3. General Condition:

- 1) Eligible bidders should submit their tender documents to the CDM&PHO Kandhamal through **Speed Post / Registered Post / Courier only on or before 28.07.2018 by 12 Noon**.
- 2) Any tender documents received after the due date & time will be rejected and returned to the sender unopened.

CHECK LIST

Sl. No.	List of Tender Documents Submitted	Yes	No	Page No.
1	Cover "A"-Technical Bid			-
2	Cover "B"- Price Bid			-
3	EMD Rs.20,000/- (Rupees Twenty Thousand only - Refundable) in shape of Bank Draft / Bankers Cheque in favour of ZSS Non NRHM Fund, Kandhamal payable at Phulbani.			
4	Tender Paper Cost Rs.2000/- (Rupees Two Thousand only – Non-refundable) in shape of Bank Draft / Bankers Cheque in favour of ZSS Non NRHM Fund, Kandhamal payable at Phulbani.			
5	List of Item (s) Quoted in the prescribed format (Annexure – III)			
6	Self attested photocopy of organization PAN.			
7	Self attested photocopy of organization Income Tax Acknowledgement Report (Assessment Year 2015-16, 2016-17, 2017-18) and copy of the audited financial statement for the last three financial year i.e. 2014-15, 2015-16 & 2016-17.			
8	Self attested photocopy of the GST registration certificate.			
9	Self attested photocopy regarding 5 years market standing in supplying above items to Govt./Corporate/PSU Hospitals in India.			
10	Performance Statement during the last 5 years towards proof of supply of similar EIF to any Govt./Corporate/PSU Hospitals in India. The copy of certificate from the user should be furnished in support of the information provided in the performance statement.			
11	Self attested photocopy of valid ISO certificate.			
12	Self attested photocopy of valid ISI / CE / BIS / US FDA / IEC certificate.			
13	All the tender documents should sign by the bidders at the bottom of each page with his official seal duly affixed.			
14	Declaration by Notary Public regarding blacklisted of Manufacturer / supplier either by the Tender inviting authority or by any state Govt. or Central Govt. organization as per Annexure-V .			
15	Copy of Valid Manufacturing License of the manufacturer (s) / Import License by the Importer / Authorization letter from the Original Manufacturer as per Annexure-VI .			
16	Self Declaration regarding quote the rates for individual items inclusive of excise duty, insurance, packing, forwarding, freight (door delivery) and exclusive of GST charges (if any) as per Annexure-VII .			
17	Self Declaration regarding the rate quoted and accepted will be binding on the tenderer for a period of one year from the date of approval of the rate contract and on no account, any increase in the price will be entertained till the completion of this tender period as per Annexure-VIII .			
18	Undertaking regarding they will supply the stocks within 15 days after receipt of the Purchase Order from this office as per Annexure-IX .			
19	Declaration regarding the supplier shall have a minimum turnover of Rs.1 (one) Crores or more in the last three year financial years i.e. 2014-15, 2015-16 & 2016-17 as per Annexure-X . The bidders shall submit the audited financial statement for the last financial year i.e. 2014-15, 2015-16 & 2016-17 for verification of turnover.			

TENDER ITEMS

Sl. No.	Name of the Items
Reagent Solutions & Chemicals	
1	(N/10) Hydrochloride Solution (Haemoglobin Estimation)
2	3.8% Sodium Citrate Solution (ESR)
3	ANTI-A
4	ANTI-A1
5	ANTI-AB
6	ANTI-B
7	ANTI-D
8	ANTIGEN for Red Cell Pannel
9	ANTI-H
10	Baciloacid 500ml
11	BOVINE ALBUMIN
12	Carbolic Acid 500ml
13	Coombs Reagent (Direct & indirect) (AHG Anti C3d monoclonal)
14	Distile Water
15	Haematology test Reagent for Automated haematology Analyzer (3 part)
16	Haematology test Reagent for Automated haematology Analyzer (5 part)
17	Immersion Oil (Microscope)
18	JSB Stain-I (Malaria Parasite)
19	JSB Stain-II (Malaria Parasite)
20	Kovac's Indole reagent
21	Laboratory Stain (Giema Stain)
22	Laboratory Stain (Leishman Stain)
23	Liquid Paraffin
24	Lysol 500ml
25	Occult Blood
26	Platelete Diluting Fluid (Platelet Count)
27	PT Reagent (Prothombin Time)
28	RBC Diluting Fluid (Total Red Blood Cell Count)
29	Sanisol Disinfectant
30	Sterillium 500ml
31	Total Eosinophil Count Fluid
32	WBC Diluting Fluid (TLC)
Rapid & Packed Kits	
33	ASO
34	CRP: C-REACTIVE PROTEIN (CRP) - SLIDE
35	Dengue IgM/ IgG Rapid
36	Dengue Rapid KIT (Dengue NS1 Ag Rapid)
37	H2S Strip
38	HBsAg (Rapid test)

39	Hepatitis B&C Card Test
40	Hepatitis IgM A and E Kit for ELISA test
41	HIV (Rapid) Whole Blood Finger Prick Test Kits
42	Malaria Rapid Kit(Malaria Antigen Rapid (Pan Specific / pf))
43	Pregnancy Kit (Urine Pregnancy Test)
44	Rheumatoid Factor (Rh Typing)
45	RPR Card test for Syphilis
46	Toxoplasma (Rapid)
47	Troponin T
48	Troponin-I (Card Test)
49	Uri-Stic (URINE Complete rapid test reagent strips)
50	Widal Test Kit
Biochemical Reagents (Semi auto / Fully Auto Analyzer)	
51	Alkaline peptone water 500mg
52	Bilirubin (D)
53	Blood Sugar (Lab Method)
54	Blood Urea
55	Carry Blair medium 500mg
56	Catalase Test Hydrogen peroxide 500ml
57	CLED Agar(Bromothymol blue) Himedia 500mg
58	Hektoen Enteric Agar 500gm
59	Kligler Iron Agar 100gm
60	Lysine Iron Agar 500gm
61	Mac-conkey Agar 500mg
62	Mac-conkey broth 500gm(Double strength MS39S)
63	Mac-conkey broth 500mg(Single strength M007)
64	Mannitol Motility Agar 100gm
65	Mannitol Salt Agar Base 100gm
66	Methyl Red Indicator
67	MR-VP broth 500gm
68	Mueller Hinton Agar 500gm
69	Nutrient agar 500mg
70	S. Albumin
71	S. Alkaline Phosphate
72	S. Amylase
73	S. Bilirubin (T)
74	S. Calcium
75	S. Cholesterol
76	S. Creatinin
77	S. HDL
78	S. LDH
79	S. Potassium
80	S. Sodium
81	S. Total Protein

82	S. Triglyceride
83	S. Uric Acid
84	S. VLDL
85	Salmonella Shigella Agar 500gm
86	SGOT
87	SGPT
88	Simmon citrate Agar 500gm
89	Triple Sugar Iron Agar 500gm
90	Urea Agar 500gm
91	XLD Agar 500gm
Other Consumables	
92	Agarose:
93	Beaker 1000 mL:
94	Beaker 500 mL:
95	Blood sample carrying cool pack
96	Boric Acid (crystal salt):
97	Borosil Glass Test tube Rimless (10 ml).
98	Borosil Glass Test tube Rimless (20 ml).
99	Borosil Glass Test tube Rimless (30 ml).
100	Carbon Tetra Chloride (CCl ₄):
101	Conical flask (1000ml)
102	Conical flask (100ml)
103	Conical flask (250ml)
104	Conical flask (500ml)
105	De-ionised water:
106	Durahm's tube GW163
107	EDTA K3 vial 2ml
108	EDTA Vial 5ml
109	Ethylene-diamino-tetra acetic-acid, disodium salt (EDTA) or Ethylene-dinitrilo-tetra acetic-acid, disodium salt (EDTA):
110	Filter paper grade-1:
111	Fluoride vial 5ml
112	Glass Coverslip
113	Glass plates:
114	Gram staining kit
115	Hand protector grip for hot glass-wares:
116	Hand wash 100 mL:
117	Measuring cylinder 100 mL:
118	Measuring cylinder 500 mL:
119	Microcentrifuge tube 1.5ml:
120	Microcentrifuge tube rack 20 places:
121	Microscopic Glass Slide
122	Microtip
123	Oxidase disc Bottle
124	Paraffin wax 500 gm:

125	Parafilm roll
126	Pasteur pipettes:
127	pH paper strip (Small range)
128	pH paper strip (Wide range)
129	Pipate Tips
130	Plain Vial 5ml
131	Plastic boxes (large):
132	Plastic Trays (large for lab use):
133	Pre sterilised & Disposable petridishes 80 - 90 mm
134	Reagent Bottle:
135	Rubber band in kg
136	Spreader Autoclavable
137	Staining racks
138	Staining rods
139	Sterile Cotton Swab-PW1136-1X500nos
140	Storage box:
141	Storage vial:
142	Test tube rack 62 places:
143	Tissue paper roll:
144	Tris (hydroxymethylaminomethane) buffer GR:
145	Urine Collection Bottle
146	Vacutainer:
147	Wash bottle with long nozzle for dispensing:
148	Wide mouth bottle 1000ml
149	Wide mouth bottle 500ml
150	X-ray Developer
151	X-ray Fixer

Annexure- III

LIST OF ITEMS QUOTED

Sl. No.	Tender Quoted Sl. No.	Name of the Item (As per Annexure-II)	Manufacture Name	Specification submitted by the Bidders (mention details)

Signature of the Bidder with seal

Annexure- IV

PRICE BID

Sl. No.	Name of the Item	Manufacturer	Unit Price with all accessories (as per Tender Clause No.-2.15) (both in words and figures)

Signature of the Bidder with seal

DECLARATION

(Filled by the Notary)

I / We _____ do hereby declare that I / We have **not been de-recognized / black listed** by the Tender inviting authority or by any state Govt. or Central Govt. organization for supply of **Not of Standard Quality Items / non-supply**.

I / We agreed that the Tender Inviting Authority can forfeit the Earnest Money Deposit and blacklist me / us for a period of 3 years if, any information furnished by me / us proved to be false at the time of inspection / verification and not complying with the Tender terms & conditions.

Seal & Signature of the Notary

MANUFACTURER'S AUTHORISATION FORM

*(to be submitted by authorized distributor/importers in a **letterhead** in case the bidder is the authorized distributor/importer of OEM)*

No.

Dated:

To

**The Chief District Medical & Public Health Officer,
Kandhamal, Phulbani, Odisha**

Dear Sir / Madam,

Bid Reference No. :
Equipment Name :

We (name of the OEM) are the original manufacturers of the above equipment having registered office at (full address with telephone number/fax number & email ID and website), having factories at _____ and _____, do hereby authorize M/s. _____ (Name and address of bidder) as _____ (Importer / Distributor) to submit bids, and subsequently negotiate and sign the contract with you against the above bid no..

No company or firm or individual other than M/s. _____ are authorized to bid, negotiate and conclude the contract in regard to this business against this specific bid reference no.

We also hereby undertake to provide full guarantee/warrantee /CMC/AMC as agreed by the bidder in the event the bidder is changed as the dealers or the bidder fails to provide satisfactory after sales and service during such period of Comprehensive warranty/CMC/AMC and to supply all the spares/reagents / consumables for 6 years.

We also hereby declare that we have the capacity to manufacture and supply, install and commission the quantity of the equipments bided within the stipulated time.

(Name)

for and on behalf of M/s. _____

(Name of manufacturers)

Date:

Place:

Seal

Note: *This letter of authority should be on the letterhead of the manufacturing concern and should be signed by a person competent and having the power of attorney to bind the manufacturer.*

Annexure- VII

DECLARATION

(Filled by the Bidder)

I / We _____ do hereby declare that I / We have quoted the rates for individual item inclusive of excise duty, insurance, packing, forwarding, freight & door delivery and exclusive GST (if any).

Signature of the Bidder with seal

Annexure- VIII

DECLARATION

(Filled by the Bidder)

I / We _____ do hereby declare that the rate quoted and accepted will be binding on the tenderer for a period of **one year** from the date of approval of the rate contract and on no account, any increase in the price will be entertained till the completion of this tender period, otherwise the Tender Inviting Authority can **forfeit the Earnest Money Deposit and blacklist me / us for a period of next 3 years.**

Signature of the Bidder with seal

DECLARATION

(Filled by the Bidder)

I / We _____ do hereby declare that I / We supply the stocks **within 15 days** after receipt of the Purchase Order from the Tender Inviting Authority. In case of non-supply within the stipulated time period, the tender inviting authority may please be allowed extension for a **maximum period of 5 days** after the stipulated date of supply with a **penalty of 0.1% per day**, which will be deducted from the purchase order value as "**Liquidated Damage**".

I / We agreed that the Tender Inviting Authority can **forfeit the Earnest Money Deposit and blacklist me / us for a period of next 3 years for non-supply / part supply** of the stocks within the time period.

Signature of the Bidder with seal

ANNUAL AVERAGE TURN OVER STATEMENT
(To be furnished in the letter head of the Chartered Accountant)

The Annual Turnover of M/s _____ for the last 3 financial years are given below and certified that the statement is true and correct.

Sl. No.	Financial Year	Turnover in Crore (Rs.)
1	2014-15	
2	2015-16	
3	2016-17	
Average Annual Turnover in Crore (Rs.)		

Date:

Signature of Chartered Accountant

Place:

(Name in Capital)

Seal Membership No.-

Note:

- 1) To be issued in the letter head of the Chartered Accountant with membership No.
- 2) Also attach photocopies of the audited P/L account of each year highlighting the turnover in support of that.

TECHNICAL SPECIFICATION OF THE ITEMS

REAGENT SOLUTIONS & CHEMICALS

1. Hemoglobin Estimation:

Reagent/Chemicals:

- ❖ (N/10) Hydrochloride Solutions (HCL)
- ❖ Pack Size: 500ml/1000ml
- ❖ Packed in a narrow mouth polyethylene bottle.
- ❖ Manufacturer should be ISO 13485 certified
- ❖ Product should be CE certified as per IVD directive

2. Total Leukocytes counts-

Chemicals:

- ❖ WBC Diluting Fluid
- ❖ pH value within 2.00-2.40
- ❖ Concentration:
- ❖ Pack Size: 100ml/500ml
- ❖ Packed in a narrow mouth high density polyethylene bottle.
- ❖ Manufacturer should be ISO13485 certified
- ❖ Product should be CE certified as per IVD directive

3. Different Leucocytes Count

4. Malaria parasite:

1 JSB Stain-I

- i. Methylene Blue (Medicinal) : 0.5 gm
- ii. Sulphuric Acid (H₂SO₄) 1% : 3 c.c.
- iii. Potassium Dichromate (K₂Cr₂O₇): 0.5 gm
- iv. Disodium Hydrogen Phosphate: 3.5 gm Dehydrate (Na₂HPO₄2H₂O)
- v. Distilled Water: 500 c.c.

2 JSB Stain-II

- i. Eosin Yellow (Water soluble): 1.0 gm
- ii. Distilled water: 500 c.c.
- ii) **Packing:** Each bottle of JSB Stain-I & II will contain 125 ml of stain in a glass or plastic bottle.

- ❖ Manufacturer should be ISO13485 certified
- ❖ Product should be CE certified as per IVD directive

5. E.S.R(Erythrocyte Sedimentation Rate):

- ❖ 3.8% Sodium Citrate solution
 - ❖ PH vale lies between 7.8-8.0
 - ❖ Concentration : 3.70%- 3.90%
 - ❖ Pack Size: 100/500ml
 - ❖ Packed in a narrow mouth high density polyethylene bottle.
 - ❖ Manufacturer should be ISO13485 certified
 - ❖ Product should be CE certified as per IVD directive

6. Distilled water.

Laboratory grade distille water
0.1 micron filtered
pH value :5-7.5
Packed in transparent

8. Blood Grouping (ABO-RH typing)

ANTI-A	Monoclonal IgM reagent for forward grouping	Anti A consists of blood grouping reagent for slide and tube tests. The reagent is murine monoclonal IgM for forward grouping. Ready to use solution containing IgM (murine monoclonal) class antibodies specific to the 'A' antigen on the R.B.C Specificity: ANTI-A-100% to A , and A antigens Pack Size:5ml/10ml Unopened kit:2-8OC Opened kit : 2-8OC Self-life:24months
ANTI-B	Monoclonal IgM reagent for forward grouping	Anti B consists of blood grouping reagent for slide and tube tests. The reagent is monoclonal IgM for forward grouping. Ready to use solution containing IgM (murine monoclonal) class antibodies specific to the 'B' antigen on the R.B.C Specificity: ANTI-B-100% to B antigens, negative reaction with Acquired B characteristics Pack Size:5ml/10ml Unopened kit:2-8OC Opened kit : 2-8OC Self-life:24months
ANTI-A,B	Monoclonal IgM reagent for forward grouping	Anti A,B consists of blood grouping reagent for slide and tube tests. The reagent is monoclonal IgM for forward grouping. Ready to use solution containing IgM (murine monoclonal) class antibodies specific to the 'A'and 'B'antigens on the R.B.C Specificity: ANTI-A,B-100% to A and B antigens, negative reaction with Acquired B characteristics Pack Size:5ml/10ml Unopened kit:2-8OC Opened kit : 2-8OC Self-life:24months
ANTI-D	Polyclonal IgG reagent for Rh (D)	Anti D (IgG) consists of blood grouping reagent for slide and tube tests. The reagent is

	typing	<p>monoclonal IgG for Rho (D) typing & Du testing.</p> <p>Ready to use solution containing IgG (human monoclonal) class antibodies specific to the 'D' antigen on the R.B.C</p> <p>Specificity: ANTI-D (IgG) - 100% to Rho(D) antigen</p> <p>Unopened kit:2-8OC Opened kit : 2-8OC Self-life:24months</p>
ANTI-H	Monoclonal IgM reagent for Rho (D) typing	<p>Anti H (IgM) consists of blood grouping reagent for slide and modified tube tests. Used for recognition of the H antigen on human red blood cells. It is useful, especially for assessing the H secretor status of group 'O' individuals and also in differential grouping of A subgroup along with Anti- int A lectin.</p> <p>Ready to use solution containing IgM (human monoclonal) class antibodies</p> <p>Specificity: Negative reacting with 'O ' phenotype</p> <p>Reactivity: Graded reactivity with different red cells, O>A >A B>B>A >A B</p> <p>Unopened kit:2-8OC Opened kit : 2-8OC Self-life:24months</p>
ANTI-A1	Monoclonal IgM reagent for Rho (D) typing	<p>used for differentiation of A1 and A2 subgroups and can be used either for slide or tubetest.</p> <p>Specificity:A1 antigen on human RBCs</p> <p>Unopened kit:2-8OC Opened kit : 2-8OC Self-life:24months</p>
Bovine Albumin for Grouping & Cross matching		<p>Bovine Albumin is primarily used to enhance the reactivity of blood group antibodies, either in direct agglutination tests or indirect</p>

		<p>antiglobulin test.</p> <p>Pack sizes 5 ml/10ml dropper vial.</p> <p>Stability : at 2-80 C</p> <p>Self-life: 24 months.</p> <p>The reagent should contain 0.1% sodium azide as a preservative.</p> <p>protein concentration : Adjustable to 22%</p> <p>Adjustable pH of 7.1(± 0.1)</p>
Antigen For Red Cell Panels	Used to detect expected ABO blood group antibodies in patient and donor samples.	<p>High quality 3% & 5% Reagent Red Blood Cells.</p> <p>Four-vial set consisting of one vial each of A1, A2, B, and group O cells.</p> <p>Vial of 4x10ml</p>
<ul style="list-style-type: none"> ❖ Manufacturer should be ISO13485 certified ❖ Product should be CE certified as per IVD directive 		

8. Total Eosinophil count: Absolute Eosinophil Count fluid, size: 100ml, stable at Room temperature.

9. Total red blood Cell Count: RBC diluting Fluid, Size: 100ml, stable at Room temperature.

10. Platelet Count: Platelet Diluting Fluid, 100ml, stable at Room Temperature.

11. Packed Cell Volume:

1. Graduated Wintrobe Tube. Length of 110 mm and has 100 markings, each at the interval of 1 mm. Internal diameter is 3 mm. It can hold about 3 ml of blood.

2. Pasteur pipette with a rubber bulb and a sufficient length of capillary to reach the bottom of the Wintrobe tube.

- ❖ Manufacturer should be ISO13485 certified

- ❖ Product should be CE certified as per IVD directive

Packet of 10nos

12. OccultBlood: The FOB Rapid Test Device (Feces) is a rapid visual immunoassay for the qualitative presumptive detection of human hemoglobin in human fecal specimens. This kit is intended to be used as an aid in the diagnosis of lower gastrointestinal (g.i.) pathologies.

KIT COMPONENTS

- Individually packed test strips: Each strip contains colored conjugates and reactive reagents pre-speeded at the corresponding regions.
- Specimens' collection cards: For specimens collection use.
- Specimen's dilution tube with buffer: Each contains 2 ml of 0.1 M Phosphate buffered saline (PBS) and 0.02% sodium azide.
- Storage Condition:
- Self-life:

Laboratory Stains

1. Giemsa Stain Solution: Pack size of 250ml/500ml/1000ml, Buffer solution of pH value lies :6.9-7.2, Self life minimum 24 months.
2. Leishman : Pack size of 250ml/500ml/1000ml, Buffer solution pH value lies: 6.4-7.00, Self life minimum 12 months.

13. Coombs Reagent (Direct&Indirect)

Kit for Anti human Globulin Serum with monoclonal Anti C3d for Direct and Indirect Coombs test;

- ❖ Ready to use reagent containing antibodies reactive with human complement component C3d.
- ❖ The anti-complement antibodies are IgM class monoclonal and they impart the required sensitivity.
- ❖ Pack Size: 5ml/10ml
- ❖ Self-life: One year
- ❖ Supplied with Coombs Control solution of 5ml pack

AHG Anti C3d monoclonal

1. Antisera must be appropriate for tube technique
2. Should give clear positive reactions with appropriately sensitized cells
3. Should give clear negative reactions with unsensitized cells
4. should not haemolyse the cells.
5. Should not produce rouleaux
6. Titre :
 - a. For polyspecific minimum 128 for IgG and minimum 4 for C3d;
 - b. for monospecific anti-IgG minimum 256
 - c. for monospecific Anti C3d minimum 16
7. Must be evaluated and approved by NIB and IVD (EC)

Technical Specification Rapid test Kits

Quality Standard:

The following standards and criteria's are applicable to all the following products.

- The bidder/manufacture shall furnish a certificate from the competent FDRA (Food and Drug Reactions anaphylaxis) that the manufacturer of the pharmaceutical or vaccine product covered by this Invitation for Bids is licensed to manufacture these products
 - All products must meet the requirements of manufacturing legislation and regulation of pharmaceuticals or vaccines in the country of origin.
 - Must undergo strict raw material inspection, in process checks, appropriate material handling to eliminate cross contamination (of molecules) and final product testing to ensure quality and consistency of the products.
 - All reagents/Rapid KITS should be with suitable control.
 - The manufacturer should be ISO13485 certified
 - All the kits should approved by CE(IVD) /USFDA/GMP
 - All the Kit should be DCGI approved.
 - If selected, demonstration of all Kits should be provided by the company with demo kits
1. RPR Card test for syphilis
Intend of Use: The assay should allow for qualitative and semi quantitative determination of reagin antibodies in serum or plasma for serodiagnosis of syphilis based on flocculation principle using non treponemal antigens.

Technical Characteristics:

- The assay should be suitable to perform with either serum or plasma
- The assay should have sensitivity of 80% or more in primary syphilis and a specificity of 90% or more
- The assay should be calibrated to WHO reference serum and the same should be supported by statements in kit insert and certificate from manufacturer.
- The test should be able to yield results within 20 minutes.
- The pack size of RPR test kit should be 50 tests per kit
- The assay components should include positive and negative serum controls sufficient for conducting 20% of the tests (10% negative and 10% positive controls)
- The kit should have all essential accessories required for the test such as cards, droppers, applicator, etc. in adequate quantities for the number of tests to be performed.
- The kit should have more than 60% residual shelf-life or 10 months (whichever is more) at the time of dispatch to the consignee
- The kit should have a storage temperature of 2 0C to 8 0C and supplier/ local agent should have the facility to store kits at 2 0C to 8 0C
- Cumulative Time Temperature Indicator should be part of the kit as per specifications defined in the terms and conditions.
- Literature, detailing the components, methodologies, validity criteria, performance characteristics, storage conditions, manufacturing and expiry dates should be provided with each kit.

- **KIT COMPONENTS PROVIDED**
- 1) RPR Carbon Antigen (Red Label): Carbon particles coated with a lipid complex (cardiolipin, lecithin and cholesterol) in phosphate buffer 20 mmol/L, pH 7.0 containing a preservative.
- 2) RPR Positive Control: Artificial serum with reagin titer 1/4.
- 3) RPR Negative Control: Animal serum containing a preservative
- 4) Dispensing bottle (1 x 2 ml).
- 5) Dispensing Needle (x1).
- 6) Disposable agglutination slides.
- 7) Plastic stirrers.

2. HIV (Rapid) Whole Blood Finger Prick Test Kits

Intended of Use: The assay should be able to detect antibodies of HIV1, HIV2 and all the subtypes by detection of antibodies by the agglutination/ Enzyme

Should be 3rd generation

1. The assay should have sensitivity of 100% or more and specificity of 100% or more as per data from an identified national reference laboratory.
2. The assay should have solid phase/ particles coated with synthetic and/ or recombination or both types of antigens of HIV1 & HIV2.
3. Total procedure time should not be more than 30 minutes.
4. The manufacturers should ensure that:
 - d) The test kit should be packed such that there is a provision to conduct single test at a time;
 - e) The assay components should include HIV positive and negative serum controls sufficient for conducting 20% of the tests (10% negative and 10% positive controls); and
 - f) The pack size of HIV rapid test kits should be 30 tests per Kit.

3. Rheumatoid Factor

Intended Of Use: Rapid qualitative or semi-quantitative detection of IgM Rheumatoid Factor in serum.

- Visual reading
- Results output <2 minutes
- Ready-to-use
- High sensitivity :98.75%

- Specificity :98.37%
- The kit should meet all safety requirements with positive and negative controls.

KIT Configuration:

1. **RF Reagent:** A suspension of uniform polystyrene particles coated with IgG (human) in glycine buffer, pH 8.2; reagent sensitivity is standardized with the World Health Organization RF Standard.
2. **RF Positive Control Serum:** A stabilized, prediluted human serum containing at least 30IU/mL/8 IU/mL of RF.
3. **RF Negative Control Serum:** A stabilized, prediluted human serum containing less than 8 IU/mL of RF.
4. **Glycine-Saline Buffer (20x):** pH 8.2 ± 0.1M glycine and 0.15M NaCl
5. Reaction Slide.
6. Pipette
7. Disposable Stir Sticks.

Pack Size of the Kit:50 test/100Test

4.ASO

Intend of Use: For the qualitative measurement of antibodies to streptococcal exoenzymes in human serum.

Sensitivity of the test should be minimum: 200 IU/ml

Kit Configuration:

1. ASO Latex Reagent: Contains polystyrene latex particles coated with Streptolysin O in a stabilized buffer with less than 0.1% sodium azide as preservative.
2. ASO Positive Control: Human serum containing more than 200 IU/ml ASO with less than 0.1% sodium azide as preservative.
3. ASO Negative Control: Human serum that has been diluted and stabilized with buffer and contains less than 0.1% sodium azide as preservative.
4. Disposable pipettes
5. Disposable agglutination Slides.

5.HBsAg (Rapid test)

Intended Of Use:HBsAg/HCV Ab Rapid Test is a lateral flow chromatographic immunoassay for the qualitative detection of Hepatitis B surface antigen (HBsAg) and anti-Hepatitis C virus antibodies (IgG, IgM, IgA) in human serum, plasma and whole blood. It is intended to be used as a screening test and as an aid in the diagnosis of infection with Hepatitis B virus (HBV) and Hepatitis C virus (HCV).

- Should be immunoassay/capture principle
- Should be lateral flow device
- Should have in built quality control band or dot
- Should have short interpretation time not more than 30 minutes
- Should have specificity and sensitivity of 100 %
- Must be evaluated and approved by NIB

Kit Configuration

1. Diagnostics Rapid Card
2. HBsAg colloidal gold rapid test strips, each placed in white plastic cassette and packed in foil pouch.
3. Instructions for use.
4. 1 vial of sample diluent.

Sensitivity 100 %

Specificity 100 %

5. CRP:C-REACTIVE PROTEIN (CRP) - SLIDE

Intended of Use: CRP TEST is intended to be used for the qualitative screening and semi-quantitative determination of C - reactive protein antibodies (CRP) in serum

Kit Configuration:

1. CRP Reagent: Contains polystyrene latex particles coated with anti-human CRP in a stabilized buffer with less than 0.1% sodium azide as preservative.
 2. CRP Positive Control: Human Serum that contains more than 6mg/L CRP and less than 0.1% sodium azide as preservative.
 3. CRP Negative Control: Human serum that has been diluted and stabilized with buffer and contains less than 0.1% sodium azide as preservative.
 4. Glycine-saline Buffer: (20X) Concentrate To be diluted 1:20 with distilled water.
 5. Disposable pipettes and test slides.
- Pack Size:50test/100test

7.URINE Complete rapid test reagent strips :

- Urine Reagent Strips are for in vitro diagnostic use only.
- Indications for urine test strips:
 - Screening for prevention
 - Treatment monitoring
 - Patient self-testing
- Urine Reagent Strips provide tests for the following parameters:
 1. Glucose
 2. Bilirubin
 3. Ketone (Acetoacetic acid)
 4. Specific Gravity
 5. Blood
 6. pH
 7. Protein
 8. Urobilinogen
 9. Nitrite
 10. Leukocytes
 11. Ascorbic Acid in Urine.
- The Urine Reagent Strips should be packaged along with a drying agent in a plastic bottle with a cap to provide complete air tight.
- Each strip should be stable and ready to use upon removal from the bottle.
- The entire reagent strip should be disposable.
- Results are obtained by direct comparison of the test strip with the color blocks printed on the bottle label.
- All the reagent strips should be withstand at a room temperature between 15°-30°C (59°-86°F) and out of direct sunlight.
- The minimum self-life of the urine strips should be 1year unopened and minimum 3months once it is opened.
- The required controlled shall be provided along with the strip packet.
- The strip pack sizes should be of 25/50/100 sizes.
- Urinalysis test strips types
 1. Ketones- Single test
 2. Glucose, Protein &pH-Three parameter
 3. Glucose, Protein pH, Leukocytes, Nitrites, Ketones, Bilirubin, Blood, Urobilinogen, and Specific Gravity-10 parameter
 4. Leukocytes and Nitrite-Special parameter

Quality Standards:

- The manufacturer should be ISO 13485 certified.
- The strips should be USFDA/CE (IVD) approved.
- The strips should be DCGI approved.

8.Urine Pregnancy Test:

Intended of Use: One step hCG Serum/Urine Combo Rapi-Card rapid test for the qualitative detection of human chorionic gonadotropin (hCG) in serum and urine.

- Serum/Urine Combo Pregnancy Test Cassette is a rapid test that qualitatively detects the presence of hCG in serum and urine specimens at the sensitivity of 20mIU/mL. The test utilizes a combination of monoclonal and polyclonal antibodies to selectively detect elevated levels of hCG
- Result should be produced with 1minute.
- Accuracy:99%
- Sensitivity:20mIU/mL
- The test strips should have inbuilt quality control to achieve the above accuracy.

Kit Configuration

1. Urine Pregnancy Test Rapid Card
 2. Disposable pipette
 3. Instructions for use
- Storage condition 2-30 degree

Quality Standards:

- The manufacturer should be ISO 13485 certified.
- The strips should be USFDA/CE (IVD) approved.
- The strips should be DCGI approved.

9.Widal test KIT

The test kit should have the following configuration

1. 'O' Antigen 5ml
 - 2 'H' Antigen 5ml
 - 3 AH' Antigen 5ml
 - 4 BH' Antigen 5ml
 - 5 Positive control 5ml
 - 6 Negative control 5ml
 - 7 Test Serum Sample 2 ml
 - 8 Glass Slide 1 No.RT
 - 9 Disposable Mixing Sticks
- Result should be within 3 minutes
 - Homologuesantigen antibody reaction with no cross reactivity with other salmonellar groups
 - High specificity:98%
 - Higher sensitivity:98%
 - Self-life 1year

10A. Dengue Rapid KIT (Dengue NS1 Ag Rapid)

- Should be a rapid test based on lateral flow technique.
- Test must be able to detect Dengue virus NS1 Ag from Day 1 of fever.
- Should be able to detect all the 4 Dengue serotypes (DEN-1, DEN-2, DEN-3, and DEN-4).
- Test should provide results within 20 minutes
- Should have long shelf life: 24 months.

- It should have a convenient pack size : 25 tests
- Adequate documents detailing the principle, components, bio-safety, methodologies, validity criteria, interpretation of results, performance characteristics, storage conditions, limitation of assays, manufacturing and expiry dates should be provided with each kit
- The kit to be procured should have approval of the statutory authority in its country of origin
- In case of imported kits it should be registered and licensed in India by DCG (I)
- In case of indigenous manufacturers they should be licensed by the competent authority defined under Drugs and Cosmetics act 1940 after appropriate evaluation by the centers approved by DCG(I)
- Sensitivity- > 95% and Specificity- 99%

10.B.Dengue IgM/ IgG Rapid

- Test should be a solid phase in vitro immunochromatographic test for the qualitative and differential detection of IgG and IgM antibodies to dengue virus serotype DEN-1, 2, 3 and 4 in human serum, plasma or whole blood
- The test should be able to differentially detect IgG and IgM antibodies against all 4 serotypes of Dengue virus
- Results should be available in 15-20 min.
- Test should be able to give a presumptive differentiation between primary & secondary dengue infections
- Test should have no cross reactivity with other Flavivirus group mediated and mosquito-borne disease
- Dengue IgG/IgM (Plasma Serum WB) : Sensitivity 94%, Specificity \geq 96% Adequate documents detailing the principle, components, bio-safety, methodologies, validity criteria, interpretation of results, performance characteristics, storage conditions, limitation of assays, manufacturing and expiry dates should be provided with each kit
- The kit to be procured should have approval of the statutory authority in its country of origin
- In case of imported kits it should be registered and licensed in India by DCG (I)
- In case of indigenous manufacturers they should be licensed by the competent authority defined under Drugs and Cosmetics act 1940 after appropriate evaluation by the centers approved by DCG(I)
- Kit should have minimum shelf life of 60% or 12 months (whichever is more at the port of discharge of consignees)

11. Malaria Rapid Kit (Malaria Antigen Rapid (Pan Specific / pf))

- Should be a rapid immunochromatographic test
- Test should be able to detect and differentiate between Antigen of *P.falciparum* (HRP-2/LDH) and Pan Plasmodia against *P.falciparum*, *P.vivax*, *P.ovale*, *P.malariae* (LDH) from human serum or plasma or whole blood
- The test should be based on the principle of capture of parasite antigen from blood using monoclonal antibodies
- specific for antigen target
- Each test kit should contain all the material required for conducting the
- Each batch of Rapid tests should be tested during time of delivery to ensure sensitivity and specificity of > 99%.
- Each kit should be packed in a hermetically sealed and nonpermeable pouch and should have moisture adsorbent material
- Kit should have a pack size of 25 such test cards/strips
- Result should be available in 20 minutes

- Adequate literature detailing the components methodologies, validity criteria, storage conditions, expiry
- date and limitations of test should be provided
- The kit to be procured should have approval of the statutory authority in its country of origin
- In case of imported kits it should be registered and licensed in India by DCG (I)
- In case of indigenous manufacturers they should be licensed by the competent authority defined under Drugs and Cosmetics act 1940 after appropriate evaluation by the centers approved by DCG(I)
- Kit should have minimum shelf life of 12 months (whichever is more at the port of discharge of consignees)

12. Troponin-I (Card Test)

Troponin I test is a rapid, qualitative test for the detection of cardiac troponin I (cTnI) in serum, plasma, whole blood as an aid in the diagnosis of myocardial infarction of a patient.

Test principle: Immuno-chromatographic.

Detection of: Cardiac troponin I (cTnI)

It should detect cardiac Troponin I at a concentration of >0.5ng/ml

Sample Type: Serum, Plasma, whole blood

Specificity: 98.9%

Sensitivity: 96.9%

Time to result: 10-15 minutes

Storage Condition: 2-30°C

Self-Life: 24 months

Pack Size: 10 test cards individually sealed/packed in a box.

The box should contain

1-Test Device

2-Disposable droppers

3-Buffer Solution

4-Package insert

CE marked as per IVD

Manufacturer Should be ISO13485 certified.

13. Troponin T

Qualitative detection of troponin in anticoagulated

(EDTA or heparin) venous whole blood

- Reaction time < 15 min.
- Positive result from a threshold (cut-off) of 100 ng/L
- Storage at 2 to 8°C
- Test can be used immediately after removal from the refrigerator
- Self-life: 1 month

Pack Size:

1. Disposable test strips (individually sealed)

2.5 pipettes (150 µL)

3. Disposable labels

4.1 package insert

5.1 vial of negative control solution (lyophilized) for 6 determinations

Technical Specification for Biochemical Reagents

Quality Standards and general description of the reagents packs

- All reagent kits should be liquid stable & ready to use.
- Reagent should be free from all carcinogenic & hazardous material.

- Reagent should be used for all open biochemistry analyzer systems (Both Semiautomatic & Fully automatic irrespective of make & model)
- Reagents must be approved by a reputed regulatory body like CE(IVD)/USFDA
- Manufacturer should be ISO13485 approved.
- The entire reagent should be DCGI approved.
- Calibrators traceable to Certified Reference Material (CRM)
- Standardization of reagent kits traceable to Standard Reference Material (SRM).
- Calibrators and Controls preferably of human matrix.
- Reagent methodology should be traceable to some reference method, e.g., IFCC, CDC, etc.
- Results should be correlated with Gold Standard Methods.
- Reagents CV% should be less than 4 – 5%.
- Reagents specificity should be within 90 – 100%.
- Purity of the reagent should be 98-99%
- Sensitivity mentioned should be excellent enough to ensure measurement of very low analyte present in the sample.
- Reagents should ensure wide linearity for proper interpretation.
- All reagents should be with suitable control.
- The reagents should not be older than one sixth (1/6th) of its shelf life from the date of manufacture.
- If selected, demonstration of all reagents should be provided by the company with demo kits.

Sl.No	Name of the Reagent	Pack Size(in ml)	Method	Sensitivity	Linearity
1	Blood Sugar	100/200/500/1000	End point	0.6mg/dl	400mg/dl
2	Blood urea,	200/500/1000	End point	2.5mg/dl	300-350mg/dl
3	S. creatinin	100/200/1000 R1,R2,R3-Stanard (Vial)	2-point	0.05mg/dl	Upto 30mg/dl
4	S.Bilirubin (T)	50/100/200/1000 R1,R2-Direct Nitrite Vial	End Point	0.1mg/dl	20mg/dl
5	Bilirubin (D)	100/200/1000	End Point	0.2mg/dl	25mg/dl
6	SGOT	50/200/500	Kinetic	8u/l	Up to 800U/l
7	SGPT	50/200/500	Kinetic	5u/l	Up to 800U/l
8	S.Alkaline Phosphate	50/200/500	Kinetic	8.8U/L	Up to 700U/l
9	S.Total Protein	50/250/500 R1,R2-Standard(vial)	End point	0.17g/dl	Upto 18g/dl
10	S.Albumin	50/250/500 R1,R2-Standard(Vial)	End point	0.1g/dl	.6-.7g/dl
11	S.Calcium/Potacium/Sodium	50/100/200 R1,R2-Standvial	End point	0.12mg/dl	25mg/dl
12	S.LDH	50/200	Kinetic	0.13mg/dl	20-1000mg/dl
13	S.Amaylase	25/ 50/100	kinetic	0.03	1300U/l
14	S.Uric Acid	25/50 R1,R2-Standvial	Endpoint	0.02mg/dl	Up to 25mg/dl
15	S.Cholesterol	25/50/100 R1,R2-Standvial	Endpoint	0.3 mg/dL	800-900mg/dL
16	S.Triglyceride	25/ 50/100	Endpoint	1.6 mg/dL	600-700 mg/dL

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17	S.VLDL	100	End Point	0.28 mg/dL	990 mg/dL
18	S.HDL	25/50	End Point	3.0 mg/dL	150 mg/dL

Technical Specification for Other Consumables

Sl no	items	Specifications	Preferable brand
1	Agarose:	low EEO, DNase, RNase free, room temp. storage, pack of 100g preferable to avoid contamination and loss	Merck speciality
2	Beaker 1000 mL:	autoclavable, transparent, graduated, PolyPropylene	Borosil
3	Beaker 500 mL:	autoclavable, transparent, graduated, PolyPropylene	Tarson
4	Boric Acid (crystal salt):	DNase, RNase protease free. Assay above 99.0%, pH 3.0 - 4.0, heavy metal and other impurities less than/equal to 0.001%	Merck speciality
5	Carbon Tetra Chloride (CCl ₄):	GR or AR grade, assay over 99.0%	Merck speciality/SRL
6	Conical flask, 250 mL:	Glass, graduated, narrow mouth with 34 mm neck D, Hard glass withstanding high temp	Borosil
7	De-ionised water:	5 lts sealed jerkin	Merck speciality
8	Ethylene-diamino-tetra acetic-acid, disodium salt (EDTA) or Ethylene-dinitrilo-tetra acetic-acid, disodium salt (EDTA):	Assay above 99.0%, pH 4.0 - 5.0, heavy metal and other impurities less than/equal to 0.01%. pack of 100g preferable to avoid contamination and loss	Merck speciality/SRL
9	Filter paper grade-1:	580 x 680 Sheets. Recommended for haemoglobin electrophoresis.	Whatman GE healthcare
10	Glass Cover slip:	18x18 mm, thickness No 1, for microscopy	Blue Star
11	Glass plates:	~3.5"x~4" size with 1 - 2 mm thickness, for gel casting for electrophoresis test (local purchase)	Local make
12	Glass slide:	75x25 mm, thickness 1.45 mm for microscopy	Blue Star
13	Hand protector grip for hot glass-wares:	high quality silicon rubber made, thumb/finger pockets, studs/bids in inner side for good grip	Tarson
14	Hand wash 100 mL:	for medical use	Dettol
15	Measuring cylinder 100 mL:	translucent, autoclavable, stable hexagonal base, well graduation are ring moulded for better reading, hydrophobic, PolyPropylene	Borosil
16	Measuring cylinder 500 mL:	translucent, autoclavable, stable hexagonal base, well graduation are ring moulded for better reading, hydrophobic, PolyPropylene	Borosil
17	Microcentrifuge tube 1.5ml:	PolyPropylene, autoclavable, hydrophobic, graduated, can withstand centrifugation up to 20000xG, ultra smooth polished interior surfaces.	Tarson
18	Microcentrifuge tube rack 20 places:	autoclavable, PolyPropylene, slant	Tarson
19	Paraffin wax 500 gm:	65 degree C melting, cubes, suitable for slide sealing during sickling test.	Nice Chemicals

20	Pasteur pipettes:	disposable, sterile, 3 mL (hydrophobic, autoclavable, low density poly-ethylene)	Tarson
21	Plastic boxes (large):	for discarding used gel in water/keeping Filter paper cuttings in dry condition/keeping 1.5 mL microcentrifuge tubes/sterile droppers	Local make
22	Plastic Trays (large for lab use):	strong quality smooth	Local make
23	Reagent Bottle:	graduated, with screw cap and pouring ring, 500 mL, 1000 mL	Borosil
24	Storage box:	compatible to low temp storage, lockable box with 100 places for 1.5/2.0 mL tube storage, PolyPropylene, autoclavable	Tarson
25	Storage vial:	5ml, screw cap, high quality, spillage proof, hydrophobic, autoclavable, PolyPropylene, well graduated, interior smooth surface.	Tarson
26	Test tube rack 62 places:	polycarbonate material, high quality, compatible to 12x75, 13x100 mm tubes & 15 mL tubes	Tarson
27	Tissue paper roll:	high quality	Local make
28	Tris (hydroxymethylaminomethane) buffer GR:	Assay above 99.0%, melting point about 170°C, heavy metal and other impurities less than/equal to 0.01%. pack of 100g preferable to avoid contamination and loss	Merck speciality
29	Vacutainer:	EDTA spray dried 3/4 mL, 13x75 mm, sterile, with stopper lubrication, lavender cap	BD peripherals, NJ USA
30	Wash bottle with long nozzle for dispensing:	500 mL, with nozzle cap, hydrophobic, autoclavable, low density polyethylene	Tarson
31	Wide mouth bottle:	1000 mL, medical grade, autoclavable, PolyPropylene, transparent	Tarson
32	Wide mouth bottle:	500 mL, medical grade, autoclavable, PolyPropylene, transparent	Tarson
33	Blood sample carrying cool pack	Thermo coolant insulation, good polymer made, with handle locking and carrying stripe/handle, sufficient for storing at least 200 blood sample tubes (in rack)	Cello