

Ref: HLL/ID/15/09/2015-16

Dated:19-06-2015

**Amendment No: 1**

to

**Tender no. HLL / ID / 15 / 2015-16 Dtd:12.06.2015**

for

**AUGMENTATION OF NUCLEAR MEDICINE DEPARTMENT WITH PET- CT UNIT &  
DUAL HEAD GAMMA CAMERA**

at

**JAWAHARLAL INSTITUTE OF POSTGRADUATE MEDICAL EDUCATION &RESEARCH  
,PUDUCHERRY**

**In SECTION I- 1. NOTICE INVITING TENDER (NIT)**

**For:**

<b>Pre Tender Meeting Date &amp; Time</b>	23.06.2015, 1400 hrs IST
<b>Pre Tender Meeting Venue</b>	HLL Project office, Jawaharlal Institute of Postgraduate Medical Education & Research, Puducherry

**Read As:**

<b>Pre Tender Meeting Date &amp; Time</b>	23.06.2015, 12:00 noon.
<b>Pre Tender Meeting Venue</b>	Board Room, Admin Block , Jawaharlal Institute of Postgraduate Medical Education & Research, Puducherry.

## In SECTION I- 2. SCOPE OF WORK

For:

### LIST OF APPROVED MAKES FOR EQUIPMENT & MATERIALS

S.N	Details of Materials / Equipment	Manufacturer's Name
1.	Air Handling Unit	Blue Star, Carrier, Voltas, VTS, Caryaire, Edgetech, Zeco
2.	Fan Coil/Cassette Unit	Blue Star, Voltas, Caryaire, Mukund, Edgetech, Zeco, Midea
3.	Centrifugal fans	Nikotra, Comfrei, Kruger
4.	Thermal Heat Recovery Wheel	ABB, Bry Air, Novelaire
5.	M.S. & GI Pipes.	Tata Steel, Jindal
6.	Ball valve (up to 30 mm)	Danfoss, RB, Sant, Rapid
7.	Butterfly valve	Intervlve, C&R, Audco, Advance, Econsto
8.	Pressure Gauge	Feibig, Wika, H Guru.
9.	Thermometer	Emerald, H Guru, Feibig
10.	Ball valves (Fan Coil Units)	Rapid Control, Emerald, Castel
11.	Auto Air Vent Valve	Rapid Control, RB, Anergy
12.	Grille/diffuser	Caryaire, Ravistar, Air Master, Dynacraft, Air Breeze / Ajanta
21.	Volume/Fire Damper	Caryaire, Ravistar, Air Master, Dynacraft Air Breeze / Ajanta
13.	Closed Cell Elastomeric Insulation along with adhesive	Armacell, Armaflex, Eurobatex, K Flex
14.	Fiberglass (Foil Faced)	UP Twiga, Owens Corning, Kimmco
15.	Expanded Polystyrene (TF Quality)	Beardsell, Qualitythermopack, Coolite

16.	Two way motorized valve for AHU & FCUs	Tour Andover , Johnson Control , Honeywell, Siemens
17.	Room Thermostat/Humidistat	Tour Andover , Johnson Control, Honeywell, Siemens
18.	Flow Switch	Honeywell, Siemens, Rapid Control
19.	Factory Fabricated Ducts	Zeco, Rollarstar, Camduct, Western Air
20.	GI Sheets	Jindal, Tata
21.	Aluminium Sheet	Hindalco, Balco, Nalco
22.	Acoustic Insulation	UP Twiga, Owens Corning, Kimmco
23.	Exhaust Propeller Blower/Fans	Kruger, Caryaire, System air

**Read As:**

**LIST OF APPROVED MANUFACTURERS / AGENCIES**

**Services / Materials to be consumed in the work shall be of the following manufacturers / agencies. In case the required materials / services are not available or the materials / services available with the manufacturers / agencies mentioned below do not meet the specifications (decision of the E-in-C in this regard shall be final & binding), the contractor shall obtain materials / services from the manufacturers / agencies approved by the E-in-C in writing.**

**1. LIST OF APPROVED MAKES / AGENCIES FOR CIVIL & PLUMBING MATERIALS**

<b>S. No</b>	<b>Materials</b>	<b>Manufacturers / Agencies</b>
1	Ready mixed Concrete	UltraTech, RMC, RAMCO, ACC, Birla

2	Ordinary Portland Cement (Minimum 43 Grade)	UltraTech, RAMCO, India Cements, Birla (Grasim), ACC
3	Reinforcement/Structural Steel (Each LOT shall accompany manufacturer's Test Certificate)	SAIL, TISCO, RINL or BIS approved manufacturers
4	Stainless Steel	Salem Steel or as approved by E-in-C
5	White Cement	JK Cement, Birla White
6	Sand	Only River sand after approval of the sample by E-in-C
7	Bricks, Stones slabs, Lime, Neeru Stone aggregate	Samples to be got approved by E-in-C before use
8	Vitrified Tiles	Nitco, Johnson, Naveen, Euro, Morbito, Somany
9	Flush doors	Kutty Flush Doors, Mysore Boards, Indian Plywood Mfg, Co, 'KIT' Ply' brand or any BIS approved brand
10	Fire check steel doors	Godrej, Sukri, Pacific works controls
11	FRP Doors	Fibrevent, Techno skills or Equivalent (or as approved by E-in-C)
12	Aluminium Fittings	Everite, Garnish, Crown Classic
13	Hydraulic floor Spring	Everite, Garnish, Hardwyn
14	Aluminium Extruded Sections	Jindal, Hindalco, Indalco

15	Aluminium Doors/Windows	As approved by E-inN-C
16	Paints, Distempers	Jenson & Nicholson, Asian, ICI, Nerolac
17	Glazing	Float Glass of Modiguard or Saint-Gobain
18	Water proofing Works	As approved by E-in-C
19	Hydraulic Door Closers	Hardwyn, Everite, Garnish
20	Water Proofing Cement Paint	Showcem India, ICI, Nerolac
21	Ceramic Glazed Floor Tiles	Nitco,, Kajaria, Somany, Naveen
22	Super plasticizer	CICO, MC Bauchemie (India) Pvt Ltd, Roffes Construction Chemicals, Pedilite Industries
23	PVC Flooring	Armstrong
24	False Ceiling (a) Fibre (b) Galvanized Steel (c) Calcium Silicate	Armstrong, Gyproc (Saint-Gobain) Armstrong, Gyproc (Saint-Gobain) Aerolite, Gyproc (Saint-Gobain)
25	Cast Iron Pipe and Fittings (Soil Pipes)	BIC, HEP, NECO, Ajmera
26	RC Hume Pipes	Indian Hume Pipe Co, Spun Pipe Co., Sementia, CH Patel & Co or Equivalent
27	Stoneware Pipes & Fittings	Dalmia, Parry, TACEL or equivalent

28	Cast Iron Pressure Pipes & Fittings	Tisco, BRM, KESORM or Equivalent
29	GI Pipes (ISI marked)	TATA, Zenith, Jindal, Gujarat Steel, ITC
30	GI Fittings (ISI marked)	'R' Brand, UNIK or equivalent
31	Gunmetal Valves & Fittings	Premier, Leader, Zoloto, or ISI marked brand
32	CI Sluice Valves, Check valves	IVC (Calcutta) Kirloskar/ Upadyaya/or with ISI mark
33	CP Brass Sanitary and water supply Fittings	Jaguar/Essess/SOMA/BILMAT/ Dripless or equivalent approved by E-In-C
34	Vitreous China Sanitary ware	Hindustan, EID Parryware, Cera
35	WC Seats & Covers	Commander, Diplomat, Admiral
36	Polyethylene/Polypropylene CISTERN	EVERLAST, FLUSHFLO, ESYFLO, CHALLENGER, CHAMPION, COMMANDER, MARVEL, Slimline
37	CI Fixtures, CI Cover & Frame	Ashok Iron Works/Bombay Iron Works/A Husainji / Ismaelji, Neco, BIC, RIF
38	CPVC Pipes	Astral Polytechnik, Ashirvad, Ajay Industrial corp
39	Curtain/Wall/Structural Glazing	Specialist Agency to be employed with Prior Approval of E-In-C
40	Plywood Products,	Duroply (Green Marked, BWR Century Plywood,

	Particle Boards & Veneers	Green Plywood Kitply, Mysore Boards
41	Adhesive	Pidilite, Araldite
42	Plastic Laminates	Formica, Greenlam, Bakelite HYLAM
43	Powder Coatings	Berger/Nerocoat/Jenson & Nicholson
44	Tile Joint Filler	Bal Adhesives & Grouts, "ROFFE" Rainbow Tile Mate, Silicon Sealnet of GE Bayer Silicon "Zentrival FM" of MC-Bauchemie (India) P Ltd
45	Resin Bonded Glass Wool	Crown Fibre Glass/Rock Lloyd or equivalent approved by E-in-C
46	MS Tubes	TATA or equivalent
47	Roof Water Proofing	India Water Proofing, CICO, SIKA
48	Silicon Sealant	GE Bayer Silicone, SIKA
49	Anchor Fastener	Hilti, Bosch
50	Formwork Release Agent	Fosroc, MBT, MC Bauchemie CICO, ADO Conmat
51	EPOXY	FOSROC. SIKA Qualcrete, Araldite MBT
52	Water proofing System	CICO, FOSROC, SIKA, Supreme Siltech Chemicals, ADO Conmat
53	Modular Operation Theatre	MGI India P Ltd, PES or Equivalent

54	Stainless Steel Sinks	Prestige/AMC/Jayna/Kingston/Neelkanth
55	CP Waste, Spreaders for Urinals	Jaguar / Essess
56	Sensor based Auto Flushing System for Urinals	AOS Systems/Angash
57	SFRC Manhole Covers	Southern Concrete Industries, Rajvaibav Enterprises or equivalent
58	UPVC Pipes/Fittings	Supreme/Prince/ Finolex
59	Mirror	Atul / Modifloat/Saint Gobain/Golden Fish

## 2. LIST OF APPROVED MAKES FOR ELECTRICAL AND SUBSTATION ITEMS

S. No	Materials	Manufacturers / Agencies
1	H.T.Panel	Crompton/ABB/Alsthom/Siemens/Ashok Leyland
2	Transformer	Crompton/kirloskar/Voltamp/Alsthom/(DRY, Cast Resin) / BHEL/ Universal
3	Bus trunking/Rising mains	(Along with all accessories) L&T /Schneider/GE/Control & Switchgear)
4	LT Panels	GE/BB/L&T/SIMENS/SCHNEIDER



5	ACBs	Same as in (4)
6	MCCBs	Same as in (4)
7	MCBs with DBs	Legrand/Hager/Alsthom/Merlin/Gerin/ Havells/Standard/Indo-asian
8	Accessories of HT/LT Panels	As per manufacturer's specified make
9	HT/LT UG cables	Cable corporation/Universal/Gloster/Havells/NICO /Polycab
10	Wiring cables	Polycab/Havells/RR Cables/Finolex
11	Switches (SFU)	GE/ABB/L&T/Siemens/Schneider
12	Modular Switches (SFU)	Legrand/Carbtree/EssEsskay(signature)MK/dipsal/Northwest
13	Piano Type switches and Boxes	Anchor/Leader
14	Cubicle Type Fuse Unit	Siemens /GE/L&T/Siemens/Schneider
15	SFUs/Isolators	Siemens/GE/L&T/ABB/ SCHNEIDER
16	Starters / Contractor/Bi metal Relay	Siemens/L&T/ABB
17	Push Button/Indicating	Siemens/L&T/ABB

	Lamps (LED type)	
18	CTs	Kappa
19	Control Fuse Base with HRC fuse	GEC / Alsthom
20	Selector Switch	Salezor
21	Measuring Instruments	AE/IMP/Rishab
22	MS Conduit	Supreme /BEC/NIL /or any Other ISI marked
23	PVC Conduit	Precision/Avon Plast/Clipsal
24	Accessories for PVC Conduit	Precision/Avon Plast
25	Capacitors	Universal / Siemens/L&T / GE
26	Relays	L&T/EE/GE
27	Digital Meters	Enercon/Alacrity/L&T
28	Jointing Kits	Rey Chem/3 Birla

### 3. LIST OF APPROVED MAKES FOR FIRE HYDRANT SYSEM

S. No	Materials	Manufacturers / Agencies
1	Diesel Engine	Kirloskar/Cummins

2	Fire Pumps	Kirloskar/Mather & Platt/Seimens
3	Electrical Motors	Kirloskar / Seimens
4	MS Pipes ('C' Class)	TATA / ZENITH
5	Butterfly Valves	Intervolve / Audco/ Leader
6	BALL VALVE (15-40 mm Dia)	RB/ITAP/Leader
7	Sluice Valves	Kirloskar/Kalpana/UNIK'R' Brand
8	Non-Return Valve (Flap Type C I)	Intervolve/Audco
9	Hydrant Valves	Newage/Minimax/Peter Autokit
10	Hose	Newage, Premier Extra, Padmini, Aqua Dura
11	Fire Extinguisher	Safex/Minimax/Peter Autokit
12	Pressure Guage	HD/Waree/H-GURU/Fiebig
13	Pressure Switch	Danfoss/Indfoss
14	Termination Lugs	Dowells/Usha
15	PVC insulated Copper Wires	FINOLEX/MINCAP/POLYCAB
16	Cables	Universal/CCI/Gloster
17	SFU's/FSU's	Ee/L&T/C&S
18	HRC Fuses	Havells/Ee
19	Over Load Relays	Ee/L&T

20	Single Phase Preventer	L&T/ Minilac
21	Indicating Lamps & Push Buttons	L&T /Technic
22	Air Break Contractors	Seimens/L&T/ABB
23	Sprinkler Head	HD/Tyco/Reliable/Fireasfe
24	Sprinkler lcv	HD/Tyco/Viking/Reliable/Fireasfe/Wormacd
25	Gunmetal Branch Pipe	Newage/Minimax/WINCO/Kailash
26	Threaded pipe fittings	R Brand/Unik
27	Air Release Valve	Rb/Tbs/Cimbrio
28	First Aid Hose Reel Drum	Minimax/Newage
29	First Aid Hose pipe	Padmini/Swastik/Usha Fire
30	Suction Strainer	Grandprix / Jaypee/Kirloskar/Leader
31	Battery	Exide/Amco
32	Pipe Protection	Pipe Kote (4mm Thick)
33	Pipe Support	Hi-Tech /Fabricated As per Site Conditions
34	Nozzle	Newage/Winco/Kailash
35	Foot valve (Gunmetal)	Neta/Leader
36	Foot Valve (Cast iron)	Kirloskar

#### 4. LIST OF APPROVED MAKES FOR FIRE DETECTION SYSTEM

S. No	Materials	Manufacturers / Agencies
1	Addressable Smoke and Heat Detectors and Multi Criteria	Notifier/Edwards/Bosch
2	PVC Insulated Copper Cables	Finolex/Lapp/Belden
3	Addressable Panel	Edwards/Bosch Notifier
4	Duct Detectors/Manual Call Box/input Module/Control Module	Zicon, Firepro, Honeywell, Siemens, Schneider, Bosch
5	Strobe	System Sensor /UL listed
6	Conduit	BEC/Vimco

#### 5. LIST OF APPROVED MAKES FOR EQUIPMENT & MATERIALS

S.No	Details of Materials / Equipment	Manufacturer's Name
1.	Air Handling Unit	Blue Star, Carrier, Voltas, VTS, Caryaire, Edgetech, Zeco
2.	Fan Coil/Cassette Unit	Blue Star, Voltas, Caryaire, Mukund, Edgetech, Zeco, Midea
3.	Centrifugal fans	Nikotra, Comfrei, Kruger
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6.	Ball valve (up to 30 mm)	Danfoss, RB, Sant, Rapid

7.	Butterfly valve	Intervlve, C&R, Audco, Advance, Econsto
8.	Pressure Gauge	Feibig, Wika, H Guru.
9.	Thermometer	Emerald, H Guru, Feibig
10.	Ball valves (Fan Coil Units)	Rapid Control, Emerald, Castel
11.	Auto Air Vent Valve	Rapid Control, RB, Anergy
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21.	Aluminium Sheet	Hindalco, Balco, Nalco
22.	Acoustic Insulation	UP Twiga, Owens Corning, Kimmco
23.	Exhaust Propeller Blower/Fans	Kruger, Caryaire, System air