

TECHNICAL SPECIFICATIONS

Important Instructions for Technical Specifications

1. The bidders shall NOT write the word “As per specifications”, “specifications compliance” or any other related terms.
2. The bidder shall prepare the bid specifications in an **annotated for ease of comparison & evaluation**. The specifications will also be supported with **brochures of quoted equipment**, reference **picture/design / website link of the product**. The relevant brochures having complete specification must be attached with the technical bid otherwise bids shall be declared as non-responsive

DIALYSIS UNIT		
1	Dialysis system	1
<p><u>COMPUTERIZED HAEMODIALYSIS Machine</u></p> <ul style="list-style-type: none"> • Computerized programmable with graphical/Touch Screen. Mandatory • Electronic control of flow rate and blood flows • Variable Bicarbonate / Acetate Concentration. • Automatic control for various Set Bicarbonate proportions. • Variable sodium concentration • Sodium , UF Profiles • Variable temperature control • Programmable Ultra filtration with control or varying rate • Ultra filtration with diffusion • Programmable Heparin Management, with bolus option • Automatic priming with display • Display for service diagnostic and calibration • Automatic clean and rinsing mechanism • Automatic Thermal disinfect mechanism (upto 80C or above) Mandatory • Blood Pump: 15 to 400ml/minute or above • Heparin pump: 0-10cc/hour • Selectable Dialysate Flow : 600ml/min or above • Temperature Control: up to 39 deg. C.(Adjustable) • Arterial Pressure Monitor:- 300mmHg to +52mmHg or above • Venous Pressure Monitor :-52 mmHg to +400mmHg or above. • Ultra filtration Rate Control: Range of UI R0.0 to 2.4 kg – hour are above. • Balanced ultra filtration control to eliminate patient systems that result from poor fluid management • Air Bubble Detection: Air bubble detector alarm threshold. • Blood Leak Detection: • (Conductivity Control: Acetate and Bicarbonate Solutions Liquid and powder (internal automatic mixing). • Automatic Blood Pump capability for peds & for adult dialysis treatment • Real Time graphical display for dialysis dose delivery Kt/v • Endotoxin Filter • Dialysate flow stop feature • 220 V, 50 Hz power with Automatic Battery backup for at least 15-min. • Integrated B.P monitor 		
2	R.O Plant	1
<p><u>Specification of RO System</u></p> <p>Water Treatment System (Locally assembled with imported components) <u>For 10 Haemodialysis Machines</u></p> <ul style="list-style-type: none"> ▪ Feed Motor (S.S Material) ▪ Sand Filter (16x65) ▪ Carbon Filter (16x65) ▪ Softener (16x65) ▪ 02 x Membrane, Size :4’x40” (Imported) USA Low Pressure ▪ Pre & Post Pressure Monitoring ▪ Flow meters (Permeate and concentrate) ▪ TDS meter / Conductivity meter 		

			<ul style="list-style-type: none">▪ RO Frame▪ Booster Pump (S.S Material)▪ 2 Water Tanks 300 G▪ Ultra-Violet System▪ All UPVC Fitting and plumbing of dialysis loop

Note: Single Certificate is mandatory from the following and it shall be online verifiable

1. CE/EC (European)
2. US-FDA (US-Food and Drugs Authority)
3. MHLW (Ministry of Health Labor and Welfare)