

JODHPUR

Dated: 11th November, 2016

CORRIGENDUM

Rate Contract

for

Consumables for Cardio Thoracic and Vascular Surgery

Tender No.	:	Admn/RC/07/2016-AIIMS.JDH
NIT Issue Date	:	23 rd September, 2016
Last Date of Submission	:	25 th October, 2016 at 03:00 PM
Revised Last date of Submission	:	21 st November, 2016 at 03:00 PM

Modifications for Rate Contract for Radiology Consumables are as under:

S. No.	Tender	Existing Detail	Modifications
	Ref. No.		
1	9	Item Name: SWAN GANZ PA CATHETER INTRODUCER KIT SET Specification: Percutaneous Sheath introducer set should have bonded hemostasis valve & amp; side port along with .035 x 45 cm straight & amp; "J" tip guide wire for introducing 7.5 Fr& 8.0 Fr PA Catheter. It should have sheath diameter of 8.5 F & amp; sheath length of ≈11 cm. It should be made of radiopaque polyurethane & amp; should have a coating of Heparin as well as antimicrobial material (Benzalkonium Chloride) on entire sheath surface. It should come with 1 catheter contamination shield, ≈80 cm in length. It should have one 4-waystopcock, one vessel dilator & amp; four 4x 4gauze pads.One disposable scalpel, # 11 blade & amp; one 18 ga x 2 ½ thin wall needle. 	 Specifications: Percutaneous Sheath introducer set should have bonded hemostasis valve & amp; side port along with .035 x 45 cm straight & amp; "J" tip guide wire for introducing 7.5 Fr& 8.0 Fr PA Catheter. It should have sheath diameter of 8.5 F & amp; sheath length of ≈11 cm. It should be made of radiopaque polyurethane & should be FDA approved. It should come with 1 catheter contamination shield, ≈80 cm in length. It should have one 4-waystopcock, one vessel dilator & amp; four 4x 4gauze pads.One disposable scalpel, # 11 blade & amp; one 18 ga x 2 ½ thin wall needle.
2	10	Item Name: SWAN GANZ THERMODILUTION VIP CATHETER	Specification:



S. No.	Tender	Existing Detail	Modifications
	Ref. No.		
		Specification:• Flow directed 5-lumen balloon tipped pulmonary artery catheter. 7.5 Fr in diameter &≈110cm110cm• It should have a coating of Heparin as well as antimicrobial material (Benzalkonium Chloride) on entire catheter• Should be able to give Cardiac output using Thermo be able to give PA pressure, PAWP & RA Pressure when connected to trasducer.• Should have proximal infusion & proximal injectateports at ≈31 cm &≈30 cm respectively.	 Flow directed 5-lumen balloon tipped pulmonary artery catheter. 7.5 Fr in diameter & amp;≈ 110 cm in length It should have US FDA approved. Should be able to give Cardiac output using Thermo dilution method Should be able to give PA pressure, PAWP & amp; RA Pressure when connected to trasducer. Should have proximal infusion & proximal injectateports at ≈31 cm & amp;≈30 cm respectively. It should come with one volume-limiting syringe of 1.5cc for balloon inflation
		• It should come with one volume-limiting syringe of 1.5cc for balloon inflation	
3	11	Item Name:	Specification:
	10	SWAN GANZ PA CATHETER Specification: • Flow directed 3 lumen balloon tipped pulmonary artery catheter, 7 Fr in diameter & ≈110 cm in length • Should be able to give PA pressure, PAWP & RA Pressure when connected to transducer. Should have proximal infusion port at 30 cm. Recommended guide wire size 0.89 mm. • It should come with one volume-limiting syringe of 1.5cc for balloon inflation	 Flow directed 3 lumen balloon tipped pulmonary artery catheter, 7 Fr in diameter & ≈110 cm in length Should be able to give PA pressure, PAWP & RA Pressure when connected to transducer. Should have proximal infusion port at 30 cm. Recommended guide wire size 0.89 mm. It should come with one volume-limiting syringe of 1.5cc for balloon inflation It should be US FDA Approved.
4	18	THERMOPLASTIC SUPRA-GLOTTIC AIRWAY DEVICE Specification: • Should have soft non inflatable anatomical seal, epiglottis blocker; buccal cavity stabilizer, integrated bite block; integrated gastric channel for passage of nasogastric tube • Size: 1, 1.5,2,3,4,5	Item to be read as DELETED
5	46	Item Name: SPECIFICATION FOR BIS SENSORS Specification: • It should have four sensors element to capture, recognize and discard artifact. • Connector should provide secure click-in connection with push button release	 Specification: It should have four sensors element to capture, recognize and discard artifact. Connector should provide secure click-in connection with push button release It should include an additional above eye element, which captures critical eye motion data, along with other important physiological signals.



S. No. Tender	Existing Detail	Modifications
Ref. No.	. It should include an additional shoup ave	. It should have flevible design adjusts to different
	element, which captures critical eve motion	• It should have hexible design adjusts to different head sizes
	data, along with other important physiological	 It should have FDA approval
	signals.	 Should be supplied by authorized channel partner
	• It should have flexible design adjusts to	from principal company/ manufacture. Electrode
	different head sizes	 It should have US FDA Approved.
	 It should have FDA approval 	
	• Should be supplied by authorized channel	
	partner from principal company/ manufacture.	
	Electrode	
6 47	Item Name:	Specification:
	NIRS SENSORS	ADULT AND PEDIATRIC
		It should have US FDA Approved
	Specification:	
	ADULT AND PEDIATRIC	
7 48		Specification:
	DISPOSABLE POLSE OXIMETER SENSORS (SP02)	 Should be compliant with the equipment intended to continuously estimate and display non
	Specification:	invasively a patient's arterial blood oxygen
	• Should be compliant with the equipment	saturation and pulse rate
	intended to continuously estimate and display	 Proposed sensors must comply with
	non-invasively a patient's arterial blood oxygen	NellcorTechnology.
	saturation and pulse rate	 Digit sensors should be available in Adult,
	Proposed sensors must comply with	Pediatric, Neonatal and Infant sizes to
	NellcorTechnology.	accommodate diverse patient sizes, weights and
	Digit sensors should be available in Adult,	needs.
	accommodate diverse nationt sizes weights	• Seller must have all types of sensors available
	and needs.	available in Adult. Pediatric. Infant and Neonatal
	Seller must have all types of sensors available	Sizes.
	(e.g., finger, forehead, and ear). Sensor must be	• Sensor extension cables must be available in 4'
	available in Adult, Pediatric, Infant and	and 9' lengths.
	Neonatal Sizes.	The sensors must be compatible with all
	• Sensor extension cables must be available in	generations of NellcorOximetry Technology in
	4' and 9' lengths.	NellcorOximeters and OEM/Licensee Multi-para
	• The sensors must be compatible with all	meter systems with all generation of Nelicor
	NellcorOximeters and OEM/Licensee Multi-	• The sensor shall resist inadvertent displacement
	para meter systems with all generation of	The sensor shall resist interference from ambient
	Nellcor technology. • The sensor shall resist	light.
	inadvertent displacement.	• The sensors shall not be adversely affected by
	• The sensor shall resist interference from	fluid spills or common disinfectantsolutions.
	ambient light.	 It should have US FDA approved.
	• The sensors shall not be adversely affected by	
	tluid spills or common disinfectantsolutions.	
8 53		Specification:
		should have sharp, dual cutting edge for clean,
	Specification:	should have a conical tip or round / elliptical tip
	Should have Sharp, dual cutting edge for clean.	for easy insertion by straight or button hole
	precise removal of aortic tissue	technique.



S. No.	Tender Ref No	Existing Detail	Modifications
	Kell No.	 should have a conical tip for easy insertion by straight or button-hole technique Punch should be available with tapered cutting blade to increase visibility. Should be available in all functional sizes Should have long and short handle configuration 	 Punch should be available with tapered cutting blade to increase visibility. Should be available in all functional sizes Should have long and short handle configuration It should have US FDA approved.
9	54	Item Name: Coronary artery retraction clips Sizes 3mm and 5mm Specification: • Should be designed to improve exposure to a coronary anastomosis site. Should be able to small prongs and gently hold tissues away from the vessel to improve vision.	 Specification: Should be designed to improve exposure to a coronary anastomosis site. Should be able to small prongs and gently hold tissues away from the vessel to improve vision. It should have US FDA approved.
10	55	Item Name: Temporary pigtail pacing wire Specification: • Should include unipolar atrial and ventricular pacing, pediatric unipolar pacing, and the bipolar pacing lead.	 Specification: Should include unipolar atrial and ventricular pacing, pediatric unipolar pacing, and the bipolar pacing lead. It should have US FDA approved.
11	56	Item Name: Tissue Stabilizer for beating heart Specification: • Should be a low profile tissue stabilizer with auto spread feature of pods.	 Specification: Should be a low profile tissue stabilizer with auto spread feature of pods. It should have US FDA approved.
12	57	Item Name: Heart positioner for beating heart Specification: • Should be a low profile positioner for apex and off apex position use/ to lift the heart.	 Specification: Should be a low profile positioner for apex and off apex position use/ to lift the heart. It should have US FDA approved.
13	58	Item Name: Tissue Stabilizer for Minimally invasive beating heart surgery. Specification: • Should be stabilizer to be used via thoracotomy with detachable shaft and should have fully rotating pods.	 Specification: Should be stabilizer to be used via thoracotomy with detachable shaft and should have fully rotating pods. It should have US FDA approved.
14	59	Item Name: Heart positioner for Minimally invasive beating heart surgery Specification: Should be a positioner with detachable shaft	 Specification: Should be a positioner with detachable shaft for MICS via thoracotomy. It should have US FDA approved.
15	60	Item Name:	Specification:



S. No.	Tender Ref. No.	Existing Detail	Modifications
	NC1. NO.	Mist Blower	Should have specialized nozzle utilizing a micro
			orifice for fluid delivery and a separate
		Specification:	orifice for gas delivery. Should have the malleable
		Should have specialized nozzle utilizing a	shaft and on/off control on the hand piece.
		micro orifice for fluid delivery and a separate	• It should have US FDA approved.
		orifice for gas delivery. Should have the	·····
		malleable shaft and on/off control on the hand	
		piece.	
16	61	Item Name:	Specification:
		Arteriotomyshunts(Intra Coronary Shunts)	• Sizes 1.0,1.25,1.5,1.75,2.0,2,5,2.5, 2.75 & amp;
			3.0mm.
		Specification:	Should be beveled tip.
		• Sizes 1.0,1.25,1.5,1.75,2.0,2,5,2.5, 2.75	• Should have fully transparent body.
		& 3.0mm.	 It should have US FDA approved.
		• Should be beveled tip.	
		 Should have fully transparent body. 	
17	62	Item Name:	Specification:
		ACT Cartridges	a. Should have double cell measurement to
			increase accuracy of results,
		Specification:	b. Should use liqiuid kaolin activator for real time
		a. Should have double cell measurement to	efficient clot detection,
		increase accuracy of results,	c. Should allow room temperature storage
		b. Should use liqiuid kaolin activator for real	 It should have US FDA approved.
		time efficient clot detection,	
		c. Should allow room temperature storage	
18	68	Item Name:	Specification:
		LV Vent:	 Left ventricular vent should consist of round
			tipped dual lumen tube with lateral eyes,
		Specification:	suture collars & amp; proximal funnel connectors
		Left ventricular vent should consist of round	used for emptying the Left Ventricle for clearer
		tipped dual lumen tube with lateral eyes,	view during surgery. All sizes.
		suture collars & proximal funnel	 It should be US FDA approved.
		connectors used for emptying the Left Ventricle	
		for clearer view during surgery. All sizes.	
19	69	Item Name:	Specification:
		AntegradeOstialCardioplegia Cannula - All Size	Antegrade-cardioplegia cannula should be made
			of soft 100% silicone conduit with distal bulbous
		Specification:	end & should have luer lock connector at the
		Antegrade-cardioplegia cannula should be	proximal end for administration of cardioplegia
		made of soft 100% silicone conduit with distal	solution into the coronary ostia. Sizes: 3.5, 4, 4.5,
		bulbous end & should have luer lock	5, 5.5, 6 mm
		connector at the proximal end for	It should be US FDA approved.
		administration of cardioplegia solution into the	
		coronary ostia. Sizes: 3.5, 4, 4.5, 5, 5.5, 6 mm.	
20	70	Item Name:	Specification:
		Cardioplegia Cannula Size Infant:	Cardioplegia cannula should be made of soft
			100% silicone & amp; should be tapered conduit
		Specification:	with distal open tip having adjacent lateral eyes,
		Cardioplegia cannula should be made of soft	followed by a flange for secure
		100% silicone & amp; should be tapered conduit	positioning. It should have proximal luer lock
		with distal open tip having adjacent lateral	& a SS needle with hub. Size: Infant.
		eyes, followed by a flange for secure	It should be US FDA approved.



S. No.	Tender Ref. No.	Existing Detail	Modifications
		positioning. It should have proximal luer lock & amp; a SS needle with hub. Size: Infant.	
21	71	Item Name: Arterial cannula for arch cannulation Sizes 20FR -24 Fr. Specification:	 Specification: Should have elongated one piece wire wound body with radiopaque suture ring and dilator with depth markings. It should be US EDA approved.
		 Should have elongated one piece wire wound body with radiopaque suture ring and dilator with depth markings. 	
22	72	Item Name: Axillary artery one piece cannula with central arterial pressure measurement Specification: Sizes 18 Fr24Fr.Should have elongated one piece wire wound body with radiopaque suture ring and dilator with depth markings. Should	Specification: Sizes 18 Fr24Fr.Should have elongated one piece wire wound body with radiopaque suture ring and dilator with depth markings. Should have integrated pressure monitoring port at tip It should be US FDA approved.
23	73	have integrated pressure monitoring port at tip Item Name: One piece Pediatric Aortic cannula Size 6FR-16 Fr Vented Specification:	Specification: Should be beveled with thin wall tips and should be elongated one piece. It should be US FDA approved.
		Should be beveled with thin wall tips and should be elongated one piece.	
24	74	Item Name: Straight Tip Arch cannula Sizes 8Fr-24 Fr vented and Non vented; Pediatric and Adult Specification: • Should be beveled thin wall tips attached to tapered cannula bodies. Should be available in podiatric and adult sizes	 Specification: Should be beveled thin wall tips attached to tapered cannula bodies. Should be available in pediatric and adult sizes. It should be US FDA approved.
25	75	Item Name: Angled tip Arterial cannula Sized 8 Fr -24 Fr Specification: • Should be beveled thin wall tips attached to tapered cannula bodies. Should have kink resistant wire wound bodies.	 Specification: Should be beveled thin wall tips attached to tapered cannula bodies. Should have kink resistant wire wound bodies. It should be US FDA approved.
26	76	Item Name: Arterial cannula angled with diffused flow tip Sizes 18 Fr-24Fr Specification: • Should be one piece wire wound body with integrated flutes for diffused flow.	Specification: • Should be one piece wire wound body with integrated flutes for diffused flow. It should be US FDA approved.
27	77	Item Name: Femoral one piece Arterial and venous cannula kit	Specification: • Sizes 8-21 Fr. arterial and 8-29 Fr. Venous cannula • Should be one piece wire wound body.



S. No.	Tender	Existing Detail	Modifications
	Ref. No.		
		 Specification: Sizes 8-21 Fr. arterial and 8-29 Fr. Venous cannula Should be one piece wire wound body. 	It should be US FDA approved.
28	78	Item Name: Femoral Multistage venous cannula Specification: • Sizes: 29/29/29 Fr and 29/46/37 Fr • Should be one piece wire wound multiple side holes body with percutaneous kit	 Specification: Sizes: 29/29/29 Fr and 29/46/37 Fr Should be one piece wire wound multiple side holes body with percutaneous kit. It should be US FDA approved.
29	79	Item Name: Standard insertion kit for femoral cannulation	Specification: a. Kit for femoral cannulation should contain 12-14 Fr, Scalpel # 11 blade, Introduce needle 18 ga,
		Specification: a. Kit for femoral cannulation should contain 12-14 Fr, Scalpel # 11 blade, Introduce needle 18 ga, vessel dilator 8-10 Fr, vessel dilator Guidewire .038 in X 180 cm, catheter tip , Syringe	vessel dilator 8-10 Fr, vessel dilator Guidewire .038 in X 180 cm, catheter tip , Syringe It should be US FDA approved.
30	80	Item Name: Carpentier Bi-caval femoral venous cannula Specification: • Sizes : 24/29 Fr, 30/33Fr • Should have wire wound kink resistant two stage design.	 Specification: Sizes : 24/29 Fr, 30/33Fr Should have wire wound kink resistant two stage design. It should be US FDA approved.
31	81	Item Name: Single stage venous cannula with Metal tip Sizes 12-31 Fr Specification: • Should have kink resistant wire wound taper	 Specification: Should have kink resistant wire wound taper body with beveled metal tip. It should be US FDA approved.
		body with beveled metal tip.	
32	82	Item Name: Single stage Venous cannula with right angle Sizes 12-40 Fr Specification: • Should have kink resistant wire wound taper body with tapered multiport tips. be right angled with plastic tip.	 Specification: Should have kink resistant wire wound taper body with tapered multiport tips. be right angled with plastic tip. It should be US FDA approved.
33	83	Item Name: Single stage straight venous cannula malleable Sizes 12-40 Fr Specification: Should have kink resistant malleable wire	Specification: Should have kink resistant malleable wire wound taper body with tapered multiport tips. It should be US FDA approved.
		wound taper body with tapered multiport tips.	
34	84	Item Name:	 Specification: Should be two-stage cannula with oval body in various sizes. Should be two-stage cannula with



S. No.	Tender	Existing Detail	Modifications
	Ket. NO.	Double stage veneus cannula round and eval	round body in various sizes. Should have cannula
		change Singe 28/26/26/26/46/22/46	hour body in various sizes. Should have cannula
		Shape Sizes 28/30,30/40,32/40,	body with thin walled with depth markings.
		36/51, 32/40, 36/46 Fr.	it should be US FDA approved.
		Specification:	
		Should be two-stage cannula with oval body	
		in various sizes. Should be two-stage	
		cannula with round body in various sizes.	
		Should have cannula body with thin walled	
		with depth markings.	
35	85	Item Name:	Specification:
		Three stage venous cannula Sizes 29/29/29 Fr	Should be three stage venous cannula for Vacuum
		29/46/37 Fr	Assisted Venous Drainage(VAVD)/Kinetic Assisted
			Venous Drainage(KAVD)
		Specification:	It should be US FDA approved.
		Should be three stage venous cannula for	
		VacuumAssisted Venous	
		Drainage(VAVD)/Kinetic Assisted Venous	
		Drainage(KAVD)	
36	86	Item Name:	Specification:
		Multiple Stage Venous cannula Sizes 23 Fr and	Should have polyurethane wire wound body with
		29 Fr	radiopague markers and multiple holes at distal
			end.
		Specification:	It should be US FDA approved.
		Should have polyurethane wire wound body	
		with radiopaque markers and multiple	
		holes at distal end.	
37	87	Item Name:	Specification:
		Aortic root cannula Sizes 4 Fr-11 Fr	 Should have radiopaque tips attached to clear
			PVC bodies. Additional features: aortic
		Specification:	root pressure monitoring and left heart venting.
		 Should have radiopaque tips attached to 	Can be used to aspirate air emboli as
		clear PVC bodies. Additional features: aortic	well administer cardioplegia.
		root pressure monitoring and left heart	It should be US FDA approved.
		venting. Can be used to aspirate air emboli as	
		well administer cardioplegia.	
38	88	Item Name:	Specification:
		Aortic root cannula with Vent line Sizes 5 Fr-11	 Should have radiopaque tips attached to clear
		Fr	bodies with separate vent line.
			It should be US FDA approved.
		Specification:	
		 Should have radiopaque tips attached to 	
		clear bodies with separate vent line.	
39	89	Item Name:	Specification:
		Aortic root cannula pediatric Neonatal Sizes 4	• Should be able to aspirate air from Aorta, Should
		Fr	have radiopaque tip and standard 50.5 in length or
			a shortened 2.5 in.
		Specification:	It should be US FDA approved.
		• Should be able to aspirate air from Aorta,	
		Should have radiopaque tip and standard 50.5	
		in length or a shortened 2.5 in.	
40	90	Item Name:	Specification:



S. No.	Tender	Existing Detail	Modifications
	Ref. No.		
		Cardiopleiga needles: Neonatal, Pediatric and Adult Sizes. 5Fr and 8 Fr	• Should have stainless steel tip with plastic depth stop, Needle should be attached to Flexible PVC tubing which should include a drape clamp and
		Specification:	female luer.
		 Should be able to aspirate air from Aorta, Should have radiopaque tip and standard 50.5 in length or a shortened 2.5 in 	It should be US FDA approved.
41	91	Item Name:	Specification:
		Silicon Ostial cannula for continuous perfusion Sizes 15 Fr,17Fr and 20 Fr	• Should have a silicon body with soft bulb shaped tips, should have a female luer connection site It should be US FDA approved.
		 Specification: Should have a silicon body with soft bulb shaped tips, should have a female luer connection site 	
42	92	Item Name:	Specification:
		Ostial perfusion cannula with basket tip and soft convex tip Sizes 10 Fr, 12 Fr and 14 Fr.	 Should have flanged, radiopaque basket tips/soft tips attached to malleable stainless steel shafts.
		Specification:	It should be US FDA approved.
		 Should have flanged, radiopaque basket tips/soft tips attached to malleable stainless steel shafts. 	
43	93	Item Name:	Specification:
		Minimally invasive Aortic root cannula with length more than 30 cm	 Should have more than 30 cm long body to allow insertion during MICS It should be US FDA approved.
		Specification:Should have more than 30 cm long body to allow insertion during MICS	
44	94	Item Name: Minimally invasive retrograde cardioplegia cannula with deflecting tip Sizes 13 and 15 Fr	 Specification: Should have tip deflecting models for sinus placement through thoracotomy should be able to allow minimum 10mm sweep. Should be
		 Specification: Should have tip deflecting models for sinus placement through thoracotomy should be able to allow minimum 10mm sweep. Should be auto/ manual inflatable. 	auto/ manual inflatable. It should be US FDA approved.
45	95	Item Name:	Specification:
		Retrograde cardioplegia cannula with Auto inflate Sizes 13 Fr and 15 Fr	 Should have silicon/ PVC bodies with auto inflatable cuff and pressure monitoring lines; should have multiport tip/ integral stopcock.
		Specification:	It should be US FDA approved.
		 Should have silicon/ PVC bodies with auto inflatable cuff and pressure monitoring 	
		lines; should have multiport tip/ integral	
46	06	Item Name:	Specification
0	50	Multiple perfusion set	Should have silicon/ PVC bodies with auto
			inflatable cuff and pressure monitoring
		Specification:	lines; should have multiport tip/ integral stopcock.



S. No.	Tender Ref. No.	Existing Detail	Modifications
		• Should have silicon/ PVC bodies with auto inflatable cuff and pressure monitoring lines; should have multiport tip/ integral stopcock.	It should be US FDA approved.
47	97	Item Name: Distal perfusion kit	Specification: Should be able to perform simultaneous perfusion of Aortic root and upto 3 or more
		Specification: Should be able to perform simultaneous perfusion of Aortic root and upto 3 or more vein grafts.	vein grafts. It should be US FDA approved.
48	98	Item Name: Left Heart Vent Catheters Sizes 10 Fr,13Fr,15Fr,16Fr,18Fr,20Fr,24Fr Specification: Should be of PVC or silicon, could be used for direct and indirect venting, should have perforated tip, malleable bodies with depth mark. Should have a choice of either PVC or Silicone along with straight body with depth marking. All ventsshould terminate with a vented or non vented ¼ in connector.	Specification: Should be of PVC or silicon, could be used for direct and indirect venting, should have perforated tip, malleable bodies with depth mark. Should have a choice of either PVC or Silicone along with straight body with depth marking. All ventsshould terminate with a vented or non vented ¼ in connector. It should be US FDA approved.
49	99	Item Name: Pericardial Sumps Sizes 20 Fr Specification: Should feature a fluted tip, should be encased in a stainless steel spring and should have weight at the end	Specification: Should feature a fluted tip, should be encased in a stainless steel spring and should have weight at the end. It should be US FDA approved.
50	100	Item Name: Intra-cardiac sump Size 20 Fr Specification: • Should feature a perforated pool tip to maximize suction and minimize tissue trauma. The tip design should be ideal for atraumatic suction within the heart chambers.	 Specification: Should feature a perforated pool tip to maximize suction and minimize tissue trauma. The tip design should be ideal for atraumatic suction within the heart chambers. It should be US FDA approved.
51	101	Item Name: Suction Tube Sizes 6 Fr,10Fr and 20 Fr Specification: Should have variety of cardiac suction tubes, intracardiac suction tubes & amp; rigid suction tubes.	Specification: Should have variety of cardiac suction tubes, intracardiac suction tubes & amp; rigid suction tubes. It should be US FDA approved.
52	102	Item Name: Micro Suction tubes Sizes 9 Fr Specification: • Should have a vacuum control port, malleable shaft, should equipped with a length of	 Specification: Should have a vacuum control port, malleable shaft, should equipped with a length of tubing and clamp terminating with a ¼ in (0.64cm) connector. It should be US FDA approved.



S. No.	Tender	Existing Detail	Modifications
	Ref. No.		
		tubing and clamp terminating with a $\frac{1}{4}$ in (0.64cm) connector	
53	103	Item Name:	Specification:
55	100	Macro Rigid suction tubes Sizes 20 Fr	• Should have tip made up of stainless steel.
			should have fluted pool tip to maximize
		Specification:	suction and minimize tissue trauma, should offer
		• Should have tip made up of stainless steel,	gentle suction.
		should have fluted pool tip to maximize	It should be US FDA approved.
		suction and minimize tissue trauma, should	
		offer gentle suction.	
54	104	Item Name:	Specification:
		PA vent cannula	Should have a soft, pliable tip with female luer
			end; should have movable depth marker
		Specification:	and an introducer needle should be included.
		Should have a soft, pliable tip with female luer	It should be US FDA approved.
		end; should have movable depth marker	
	105	and an introducer needle should be included.	
55	105	Item Name:	Specification:
		Tourniquet sets sizes 12 Fr, 10 Fr and 19 Fr.	lengths for adults and pediatric should
		Specification:	have wire spares included with the tube set
		Should have color coded tubes with varying	It should be US FDA approved.
		lengths for adults and pediatric, should	
		have wire snares included with the tube set.	
56	106	Item Name:	Specification:
		Vessel cannula with and without valve sizes	Should have clear and radiopaque bodies. These
		2mm,3mm, 4mm	should terminate with a female luer.
			Should have tips in various sizes and shapes.
		Specification:	It should be US FDA approved.
		Should have clear and radiopaque bodies.	
		These should terminate with a female luer.	
F 7	107	Should have tips in various sizes and shapes.	Cresting
57	107	Item Name: Arteriotomy Connula Sizes 2mm 2mm 4mm	Specification:
		Smm 6mm	shaped tin connected to winged female luer
			It should be US FDA approved.
		Specification:	and a construction of the second
		• Should have polyurethane tube with a bulb	
		shaped tip connected to winged female luer.	
58	108	Item Name:	Specification:
		Rapid priming set Length 35cm and 40cm	These should facilitate the transfer of fluid during
			the priming of the circuit. Should
		Specification:	have large bore spikes attached to flexible tubing
		These should facilitate the transfer of fluid	with a clamp. Should terminate with
		during the priming of the circuit. Should	either an open end tube or a male luer.
		have large bore spikes attached to flexible	It should be US FDA approved.
		tubing with a clamp. Should terminate with	
EO	100	either an open end tube or a male luer.	Specification
23	103	Ranid Priming "V" Set Length around 1 m	Specification: These should facilitate the transfer of fluid during
			the priming of the circuit Should
		Specification:	have large bore spikes attached to flexible tubing
	1		



S. No.	Tender Ref. No.	Existing Detail	Modifications
		These should facilitate the transfer of fluid during the priming of the circuit. Should have large bore spikes attached to flexible tubing with a clamp. Should attach to a "Y" adapter with a length of tubing and another clamp.	with a clamp. Should attach to a "Y" adapter with a length of tubing and another clamp. It should be US FDA approved.
60	110	clamp.Item Name:SPECIFICATION FOR ADULT OXYGENATORSpecification:Priming volume should be less than 300 ml.Blood flow range should be 0-7lts/min.Oxygen transfer should be atleast 400ml/min.Heat exchange efficiency should not be less than 0.50.Housing material should be of polycarbonate.Surface area of the fibers should be from 1.8m 2 to 2.4m 2Heat exchanger should be made of stainless steel and surface area should be approx. 20cm 2Blood inlet port (from pump) 3/8Blood outlet port 3/8Cardioplegia port 1/4Gas Outlet port 1/4Gas Outlet port 1/4Water Ports ½Maximum Pressure Blood inlet 1000 mmHg water Inlet 42 PSIBlood storage capacity of hard shell reservoir should be approx. 4000mlMinimum operating volume of reservoir should be 200ml.Hard shell reservoir should have cardiotomy filter and de-foaming partHard shell reservoir should have venous filter with pore size 452mmThe hard-shell reservoir should have venous filter with port (to pump) ¾Suction ports (six) ¼Water Inlet 42 PSIVenous blood inlet port ½Blood outlet port (to pump) ¾Suction ports (six) ¼Water Inlet 42PSIVertical port to CR Filter ¼Quick Prime port ½Auxiliary port ½-¾	 Specification: Priming volume should be less than 300 ml. Blood flow range should be 0-7lts/min. Oxygen transfer should be atleast 400ml/min. Heat exchange efficiency should not be less than 0.50. Housing material should be of polycarbonate. Surface area of the fibers should be from 1.8m 2 to 2.4m 2 Heat exchanger should be made of stainless steel and surface area should be approx. 20cm 2 Blood inlet port (from pump) 3/8 Blood outlet port 3/8 Cardioplegia port 1/4 Gas Outlet port 1/4 Gas Outlet port 1/4 Gas Outlet port 1/4 Water Ports ½ Maximum Pressure Blood inlet 1000 mmHg water Inlet 42 PSI Blood storage capacity of hard shell reservoir should be 200ml. Hard shell reservoir should have cardiotomy filter and de-foaming part Hard-shell reservoir should have venous filter with pore size 452mm The hard-shell reservoir should have Venous blood inlet port ½ Blood outlet port 1/4 Suction ports (six) ½ Water Inlet 42 PSI Vertical port to CR Filter ½ Quick Prime port ¼ Auxiliary port ¼-¾ Sustainable negative pressure should be 15010mmHg It should be US FDA approved.
61	111	15010mmHg Item Name:	Specification:
		SPEICIFICATION FOR PEDIATRIC OXYGENATOR Specification:	 Priming volume should beless than 150ml. Blood flow range should be 0.40.01ltrs/min. Oxygen transfer should not be less than 250ml/min.



S. No.	Tender Ref. No	Existing Detail	Modifications
	NCI. NU.	• Priming volume should beless than 150ml	Pressure drop should be least-up to 100mmHg or
		• Blood flow range should be 0.40.01ltrs/min.	less.
		• Oxygen transfer should not be less than	Heat exchange efficiency should not be less than
		250ml/min.	0.65.
		• Pressure drop should be least-up to	• Housing material should be of polycarbonate.
		100mmHg or less.	• Surface area of the fibers should be approx 1.0m
		• Heat exchange efficiency should not be less	2.
		than 0.65.	• Heat exchanger should be made of stainless steel
		• Housing material should be of polycarbonate.	and surface area should be approx 1300cm 2.
		• Surface area of the fibers should be approx	Blood inlet port 3/8
		1.0m 2 .	Blood outlet Port 3/8
		• Heat exchanger should be made of stainless	Cardioplegia port 1/4
		steel and surface area should be approx	Gas Inlet Port 1/4
		1300cm 2 .	Gas Outlet port 1/4
		Blood inlet port 3/8	Water Port 1/2
		Blood outlet Port 3/8	Maximum Pressure Blood inlet 1000mmHg, Water
		Cardioplegia port 1/4	Inlet 42 PSI
		Gas Inlet Port 1/4	 Blood Storage capacity of hard shell reservoir
		Gas Outlet port 1/4	should be max 3000ml.
		Water Port 1/2	 Minimum operative volume of hard shell
		Maximum Pressure Blood inlet 1000mmHg,	reservoir should be 100ml.
		Water Inlet 42 PSI	 Hard-shell reservoir should have cardiotomy
		Blood Storage capacity of hard shell reservoir	filter and defoaming part.
		should be max 3000ml.	Hard-shell reservoir should have venous filter
		Minimum operative volume of hard shell	with pore size should be 20mm
		reservoir should be 100ml.	 The hard-shell reservoir should have
		Hard-shell reservoir should have cardiotomy	 Venous blood inlet port 3/8 rotatable
		filter and defoaming part.	 Blood outlet port (to pump) 3/8
		Hard-shell reservoir should have venous filter	• Suction port(six) ¹ ⁄ ₄
		with pore size should be 20mm	 Vertical port to CR filter 3/8
		• The hard-shell reservoir should have	Quick prime port ¼
		• Venous blood inlet port 3/8 rotatable	 Auxiliary port 3/8
		• Blood outlet port (to pump) 3/8	Water Inlet 42 PSI
		• Suction port(six) ¼	It should be US FDA approved.
		• Vertical port to CR filter 3/8	
		Quick prime port ½	
		• Auxiliary port 3/8	
<u></u>		Water Inlet 42 PSI	
62	112		Specification:
		SPECIFICATION FOR NEONATAL OXYGENATOR	• Blood flow range should be 0.1 – 2 liters/min.
			Priming volumes should be around 40 ml.
		Specification:	Oxygen transfer should be minimum 100 mi/min
		Blood flow range should be 0.1 – 2 liters/min.	Pressure drop should be least up to 100mmHg of
		Prinning volumes should be around 40 ml.	Heat exchange officiency cheveld not be less that
		• Oxygen transfer should be minimum 100	• Heat exchange efficiency should not be less than
		Prossure drep should be least up to 100mm list	• Housing material should be af naturasthanata
		• Fressure arop should be least up to LoommHg	Fousing material should be of polycarbonate. Surface area of the fibers should be so fime 2 and
		• Host exchange officiency should not be less	 Surface area of the libers should be ≈0.5m 2 and material should be micro percus polypropyland
		than	Host exchanger should be made of steinless stee
		Housing material should be of polycarbonate	and surface area should be approv 0.025m 2
		• Surface area of the fibers should be a fiber 2	• Plead inlet port (from pump) 1/



S. No.	Tender	Existing Detail	Modifications
	Ref. No.		
		and material should be micro porous polypropylene.• Heat exchanger should be made of stainless steel and surface area should be approx 0.035m 22.• Blood inlet port (from pump) ¼ Blood outlet port ¼ Luer port (for recirculation or blood cardioplegia) one luer lock on blood outlet Gas inlet port 5/16 Water ports ½ Maximum pressure Blood inlet 1000mmHg • Blood storage capacity of hard shell reservoir should be 1000ml• Minimum operating volume of hard-shell reservoir should be 15ml • Hard-shell reservoir should have cardiotomy filter and defoamer • The hard-shell should have • Venous blood inlet port ¼ • Blood output port (to pump) ¼ • Suction port (five) 3/16 • Quick prime port ¼ • Auxiliary port ¼-3/8 Maximum sustainable negative pressure in reservoir -150mmHg	Blood outlet port ¼ Luer port (for recirculation or blood cardioplegia) one luer lock on blood outlet Gas inlet port ¼ Gas outlet port 5/16 Water ports ½ Maximum pressure Blood inlet 1000mmHg • Blood storage capacity of hard shell reservoir should be 1000ml • Minimum operating volume of hard-shell reservoir should be 15ml • Hard-shell reservoir should have cardiotomy filter and defoamer • The hard-shell should have • Venous blood inlet port ¼ • Blood output port (to pump) ¼ • Suction port (five) 3/16 • Quick prime port ¼ • Vent port ¼ • Auxiliary port ¼-3/8 Maximum sustainable negative pressure in reservoir -150mmHg Water inlet 2Kgf/cm 2 It should be US FDA approved.
63	113	Water inlet 2kgf/cm 2 Item Name: SPECIFICATIONS FOR PEDIATRIC ARTERIAL FILTER WITH BYPASS LOOP Specification: The Arterial Filter should be for pediatric use. Priming volume should not be more than 90ml Filter pore size should be 30- 40 micron. The outlet and inlet blood posts should be 3/8 or ¼". The filter should allow maximum blood flow rate of 5.0L/min. The filter should be provided with a bypass loop at the inlet and outlet port	 Specification: The Arterial Filter should be for pediatric use. Priming volume should not be more than 90ml Filter pore size should be 30- 40 micron. The outlet and inlet blood posts should be 3/8 or ¼". The filter should allow maximum blood flow rate of 4.0 to 5.0 L / min The filter should be provided with a bypass loop at the inlet and outlet port.
64	114	Item Name: SPECIFICATIONS FOR CARDIOPLEGIA HEAT EXCHANGER(BCD) Specification: It should have priming volume less than 50 ml. Blood flow rate should be between 0-600 ml/min Filter screen should be around 100 um.	Specification:It should have priming volume less than 50 ml.Blood flow rate should be between 0-600 ml/minFilter screen should be around 100 um.Inlet connection should be ¼and outlet connectionshouldbe3/16.Heat exchange surface area should be \approx .20m 2.Heat exchange should be of stainless steelcorrugated/convolutedpipes.



S. No.	Tender	Existing Detail	Modifications
	Ref. No.		
		Inlet connection should be ¼and outlet connection should be 3/16. Heat exchange surface area should be ≈.20m 2. Heat exchange should be of stainless steel corrugated/ convoluted pipes. Bubble trap should be integrated for highly efficient de-bubbling Integrated by pass manifold for easy de- bubbling Exchangeable water in /water out Blood flow path bottom up It should have a Stopcock Prime/ Perfusion for easy priming. It should have tip in the surgeon pack so that it can be connected to cardioplegia cannula. It should be available both in 4:1 and 1:4	Bubble trap should be integrated for highly efficientde-bubbling de-bubbling Integrated by pass manifold for easy de-bubbling Exchangeable water in /water out Blood flow path bottom up It should have a Stopcock Prime/ Perfusion for easy priming. It should have tip in the surgeon pack so that it can be connected to cardioplegia cannula. It should be available both in 4:1 and 1:4 configurations.It should be US FDA approved.
		configurations.	
65	119	EXTRA CORPOREAL MEMBRANE OXYGENATOR (NEONATAL) Specification: • ECMO should have a validation for 14 days and should be phthalate free (NO DOP). • Membrane used should be of polymethyl pentene fibers. • Priming volume should be 100 ml. • Should have contact surface area ≈0.70 square meters. • Should cater for blood flow from 0.2 to 1.5 L/min	 Specification: ECMO should have a validation for 14 days and should be phthalate free (NO DOP). Membrane used should be of polymethyl pentene fibers. Priming volume should be 100 ml. Should have contact surface area ≈0.70 square meters. Should cater for blood flow from 0.2 to 1.5 L/min. Heat exchanger surface area should be ≈0.4 square meter. Heat Exchanger performance factor should be of 0.77 (1.5 liter /min). Oxygenator and tubing should have coating of
		 Heat exchanger surface area should be ≈0.4 square meter. Heat Exchanger performance factor should be of 0.77 (1.5 liter /min). Oxygenator and tubing should have coating of Phosphorylcholine. Inlet and outlet connector preferred is 1/4 (6.35 mm) 	 • Inlet and outlet connector preferred is 1/4 (6.35 mm). It should be US FDA approved.
66	120	Item Name: EXTRA CORPOREAL MEMBRANE OXYGENATOR (PAEDIATRIC) Specification: ECMO should have a validation for 14 days and should be phthalate free (NO DOP). • Membrane used should be of polymethylpentene fibers. • Should have priming volume 200 ml. • Should have contact surface area of around1.4 square meters.	 Specification: ECMO should have a validation for 14 days and should be phthalate free (NO DOP). Membrane used should be of polymethylpentene fibers. Should have priming volume 200 ml. Should have contact surface area of around1.4 square meters. Should cater for blood flow from 0.3 to 4 liter /min. Heat exchanger should have surface area of ≈0.8 square meter.



S. No.	Tender	Existing Detail	Modifications
	Ref. No.	• Should ester for blood flow from 0.2 to 4 liter	• Heat exchanger performance factor chould be of
		/min.	≈ 0.6 (@ 4 liter /min).
		• Heat exchanger should have surface area of	• Oxygenator and tubing should have coating of
		≈0.8 square meter.	Phosphorylcholine(PC).
		Heat exchanger performance factor should be	• Inlet and outlet connections preferred is 3/8(9.53
		of ≈0.6 (@ 4 liter /min).	mm) It should be US EDA enproved
		• Oxygenator and tubing should have coating of Phosphorylcholine(PC)	it should be US FDA approved.
		• Inlet and outlet connections preferred is	
		3/8(9.53 mm)	
67	121	Item Name:	Specification:
		EXTRA CORPOREAL MEMBRANE OXYGENATOR (ADULT)	ECMO should have a validation for 14 days and should be phthalate free (NO
		Specification:	Membrane used should be of polymethylpentene
		ECMO should have a validation for 14 days and	fibers.
		should be phthalate free (NO	• Should have priming volume of≈250ml.
		DOP).	• Should have contact surface area of 1.7-1.9
		Membrane used should be of network the should be of fibers	square meters.
		Should have priming volume of 250ml	• Should cater for blood flow from 0.4 to 7 liters/
		 Should have prining volume of 250m. Should have contact surface area of 1.7-1.9 	 Heat exchanger should have surface area of
		square meters.	≈0.8square meter.
		• Should cater for blood flow from 0.4 to 7	• Heat exchanger performance factor should be
		liters/ min.	≈0.6 (@ 4 liters /min).
		Heat exchanger should have surface area of	• Oxygenator and tubing should have coating of
		 ≈0.8square meter. Heat exchanger performance factor should be 	 Inlet and outlet connections preferred is 3/8 (9.53)
		≈ 0.6 (@ 4 liters /min).	mm)
		• Oxygenator and tubing should have coating of Phosphorylcholine.(PC)	It should be US FDA approved.
		• Inlet and outlet connections preferred is 3/8	
	400	(9.53 mm)	
68	122		Specification:
		(Integrated with arterial filter & amp: heat	with cardiotomy/ venous reservoir
		exchanger)	• Should have integrated arterial filter with self
			venting technology.
		Specification:	• Heat exchanger surface area should be no more
		Oxygenator should have integrated arterial	than 0.2m 2 .
		 fliter with cardiotomy/ venous reservoir. Should have integrated arterial filter with self 	Venous filter should be 50 micro meter. Priming volume should not be more than 350ml
		venting technology	Blood flow range should be 0.5 to 7 IPM
		Heat exchanger surface area should be no	Heat exchange efficiency should not be less than
		more than 0.2m 2 .	0.50 at max flow.
		• Venous filter should be 50micro meter.	• pressure drop should be minimum, up to 110
		• Priming volume should not be more than	mmHg or less.
		SUUMI.	Arterial filter should be 35micron meter. Membrane surface area should be 3.3.5 m 3
		Heat exchange efficiency should not be less	It should be US FDA approved.
		than 0.50 at max flow.	
		• pressure drop should be minimum, up to 110	



S. No.	Tender Ref. No.	Existing Detail	Modifications
		 mmHg or less. Arterial filter should be 35micron meter. Membrane surface area should be 2-2.5 m 2. 	
69	123	Item Name: SPECIFIAITON FOR SMALL ADULT OXYGENATOR (Integrated Filter and Heat Exchanger) Specification Oxygenator should have integrated arterial filter with cardiotomy/venous reservoir. • Should have integrated arterial filter with self venting technology. • Heat exchanger surface area should be no more than 0.14m 2 • Venous filter should be 50micro meter. • Priming volume should not be more than 150ml • Blood flow range should be 0.5 to 5 LPM. • Heat exchange efficiency should not be less than 0.5 max flow @ 5 LPM • Pressure drop should be minimum up to 110 mmHg or less.	SpecificationOxygenator should have integrated arterial filterwithcardiotomy/venous• Should have integrated arterial filter with selfventingtechnology.• Heat exchanger surface area should be no morethan0.14m2.• Venous filter should be 50micro meter.• Priming volume should not be more than 150ml• Blood flow range should be 0.5 to 5 LPM.• Heat exchange efficiency should not be less than0.5max• Pressure drop should be minimum up to 110mmHgor• Arterial filter should be35micro meter.It should be US FDA approved.
70	124	 Arterial nitter should be35micro meter. Item Name: SPECIFICATION FOR PAEDIATRIC INFANT OXYGENATOR(Integrated Filter and Heat Exchanger) Specification: Oxygenator should have integrated arterial filter with cardiotomy / venous reservoir. Should have integrated arterial filter with self venting technology. Heat exchanger surface area should be no more than 0.035m 2 . Venous filter should be50micro meter. Priming volume should not be more than 45ml. Blood flow range should be 0-1.5Ltrs/min. Heat exchange efficiency should not be less than 0.6 at max flow. Pressure drop should be minimum up to 100mmHg or less @ 1.5 LPM Arterial filter should be35micro meter. 	Specification:• Oxygenator should have integrated arterial filterwithcardiotomy/venousreservoir.• Should have integrated arterial filter with selfventingtechnology.• Heat exchanger surface area should be no morethan0.035m2• Venous filter should be50micro meter.• Priming volume should not be more than 45ml.• Blood flow range should be 0-1.5Ltrs/min.Heat exchange efficiency should not be less than0.6atmaxflow.Pressure drop should be minimum up to 100mmHgorless@1.5LPMArterial filter should be35micro meter.It should be US FDA approved.
71	125	Item Name: Arterial Perfusion CannulaeAdult. Specification: Non-wire reinforced beveled tip Size 18Fr, 20Fr, 22Fr and 24 Fr. Overall lengthshould be approx.15cm with suture bump.	Specification: Non-wire reinforced beveled tip Size 18Fr, 20Fr, 22Fr and 24 Fr. Overall lengthshould be approx.15cm with suture bump. It should be US FDA approved.



S. No.	Tender	Existing Detail	Modifications
72	126	Itom Namo	Specification
72	120	Arterial Perfusion Cannulae Pediatric	Sizes: 8Fr, 10Fr, 12Fr,14Fr and 16Fr. Non wire reinforced bevel tip.
		Specification:	Overall length 18cm with suture bump.
		Sizes: 8Fr, 10Fr, 12Fr,14Fr and 16Fr.	It should be US FDA approved.
		Non wire reinforced bevel tip.	
		Overall length 18cm with suture bump.	
73	127	Item Name:	Specification:
		Venous Cannulae Single Stage. (neonate)	Thin Flexible wire reinforced straight open light house tip. Overall length approx.28cm
		Specification:	with ¼ acceptance size 12Fr, 14Fr and 16Fr
		Thin Flexible wire reinforced straight open light	It should be US FDA approved.
		house tip. Overall length approx.28cm	
		with ¼ acceptance size 12Fr, 14Fr and 16Fr	
74	128	Item Name:	Specification:
		Venous Cannulae Single Stage(pediatric)	Thin Flexible wire reinforced straight open light
			house tip. Overall length approx.
		Specification:	35cm with ¼and 3/8 acceptance Size 18Fr, 20Fr,
		Thin Flexible wire reinforced straight open light	22Fr and 24Fr.
		house tip. Overall length approx.	It should be US FDA approved.
		35cm with ¼and 3/8 acceptance Size 18Fr,	
		20Fr, 22Fr and 24Fr.	
75	129	Item Name:	Specification:
		Venous Cannulae Single Stage(small adult)	Thin flexible wire reinforced straight open
		Crestination	lighthouse tip. Overall length 35cm with 3/8
		Specification:	acceptance Size 26Fr and 28Fr.
		lighthouse tin Overall length 25cm with 2/8	it should be US FDA approved.
		accentance Size 26Er and 28Er	
76	130	Item Name:	Specification:
70	150	Venous Cannulae Single Stage(adult)	Thin Elexible wire reinforced straight open
			lighthouse tip. Overall length should be
		Specification:	approx.40cm with 3/8 acceptance Size 30Fr. 32Fr.
		Thin Flexible wire reinforced straight open	34Fr, 36Fr, 38Fr and 40Fr.
		lighthouse tip. Overall length should be	It should be US FDA approved.
		approx.40cm with 3/8 acceptance Size 30Fr,	
		32Fr, 34Fr, 36Fr, 38Fr and 40Fr.	
77	131	Item Name:	Specification:
		Venous Cannulae Right Angled	Wire reinforced 90 0 angled plastic tip 10Fr,
			overalllength approx.28cm and 1/4
		Specification:	acceptance.
		Wire reinforced 90 0 angled plastic tip 10Fr,	It should be US FDA approved.
		overalllength approx.28cm and 1/4	
		acceptance.	
78	132	Item Name:	Specification:
		Venous Cannulae Right Angled	Wire reinforced 90 0 angled plastic tip 12Fr, 14Fr
			and 16Fr. Overall length should be
		Specification:	approx. 33cm with ¼& 3/8 acceptance
		wire reinforced 90 0 angled plastic tip 12Fr,	It should be US FDA approved.
		14Fr and 16Fr. Overall length should be	
70	122	approx. 33cm with ¼& 3/8 acceptance	Crossification.
79	133	item Name:	Specification:



S. No.	Tender Ref. No.	Existing Detail	Modifications
		Venous Cannulae Right Angled Specification: Wire reinforced 90 0 angled plastic tip 12Fr, 14Fr and 16Fr. Overall length should be approx. 33cm with ½&: 3/8 acceptance	Wire reinforced 90 0 angled plastic tip 12Fr, 14Fr and 16Fr. Overall length should be approx. 33cm with ¼& 3/8 acceptance It should be US FDA approved.
80	134	Item Name: Venous CannulaeRight Angled Specification: Wire reinforced 90 0 angled plastic tip 22Fr, 24Fr and 28Fr. Overall length should be approx 38cm with 3/8 accentance	Specification: Wire reinforced 90 0 angled plastic tip 22Fr, 24Fr and 28Fr. Overall length should be approx.38cm with 3/8 acceptance. It should be US FDA approved.
81	135	Item Name: Retrograde Cannula catheter Specification: Self-inflating smooth balloon with preshapedstylet and handle 14Fr. Overall lengt should be approx. 27cm & amp; should have 18-20 mm sized smooth balloon	Specification:Self-inflating smooth balloon with preshapedstyletandhandle14Fr.Overalllengtshould be approx.27cm & amp; should have 18-20mm sized smooth balloon.It should be US FDA approved.
82	136	Item Name: Aortic Perfusion Cannulae; Specification: Wire reinforced dispersion tip Sizes: 21Fr and 24Fr overall length approx.35cm and vent	Specification:Wire reinforced dispersion tip Sizes: 21Fr and 24Froveralllengthapprox.35cmandvent.It should be US FDA approved.
83	137	Item Name: Dual Stage Venous Cannulae; Specification: Wire reinforced 32/40Fr and 36/51Fr. Overall length should be approx. 40cm and %accentance	Specification: Wire reinforced 32/40Fr and 36/51Fr. Overall length should be approx. 40cm and ½acceptance. It should be US FDA approved.
84	138	Item Name: Femoral Arterial Cannulae; Specification: Wire reinforced overall length should be 19.5.2 cm with ¼ vented connector sizes: 8Fr, 10Fr. 12Fr and 14Fr.	Specification:Wire reinforced overall length should be 19.5.2 cmwith ¼ vented connector sizes: 8Fr,10Fr, 12Fr and 14Fr.It should be US FDA approved.
85	139	Item Name: Femoral Arterial Cannulae; Specification: Wire reinforced overall length should be approx. 24cm with 3/8 vented connector sizes: 16Fr, 18Fr and 20Fr.	Specification:Wire reinforced overall length should be approx.24cm with 3/8 vented connector sizes:16Fr, 18Fr and 20Fr.It should be US FDA approved.
86	140	Item Name: Femoral Venous Cannulae;	Specification:



S. No.	Tender	Existing Detail	Modifications
	Ref. NO.	Specification:	Wire reinforced overall length should be approx
		Wire reinforced overall length should be	24cm with ¼ non vented
		approx. 24cm with ¼ non vented	connector.Sizes 8Fr, 10Fr, 12Fr and 14Fr.
		connector.Sizes 8Fr, 10Fr, 12Fr and 14Fr.	It should be US FDA approved.
87	141	Item Name:	Specification:
		Venous Femoral Cannulae;	Wire reinforced overall lengthshould be 752 cm
			with 3/8 non vented connector sizes
		Specification:	18Fr, 20Fr, 22Fr, 24Fr and 28Fr.
		Wire reinforced overall lengthshould be 752 cm	It should be US FDA approved.
		18Er 20Er 22Er 24Er and 28Er	
88	257	Item Name:	
00	257	Thoracic catheter with trocar – All Sizes	
		Specification:	
		Thoracic drainage catheter with trocar for	Item to be read as DELETED
		thoracic drainage purpose. Catheters to be	
		marked at every 5, 10, 15 & 20 cm from the last	
		eye. Fitted with tapered connector. Sterile,	
		packed in peelable pouch pack. Sizes: 12, 16,	
89	261	20, 24, 26, 52, 50 FG	
05	201	FOGARTY ARTERIAL EMBLECTOMY CATHETER	Specification:
			Vinyl Latex Balloon tipped catheter for Arterial
		Specification:	Emblectomy procedure.
		Vinyl Latex Balloon tipped catheter for	 Usable length 60-80 cm, Size 2F to 8F.
		Arterial Emblectomy procedure.	 Recessed winding technique for balloon
		• Usable length 60-80 cm, Size 2F to 8F.	attachment for maintaining balloon symmetry for
		Recessed winding technique for balloon	uniform contact with vessel wall, providing
		for uniform contact with vessel wall providing	consistent clot removal
		consistent clot removal	it should be os FDA approved.
90	262	Item Name:	Specification:
		THRU LUMEN FOGARTY CATHETER	Vinyl Latex Balloon tipped catheter for Arterial
			Embolectomy procedure.
		Specification:	 Usable length 80 cm.
		Vinyl Latex Balloon tipped catheter for	• Size 2F-8F.
		Arterial Embolectomy procedure.	Second lumen for guide wire compatibility
		Usable length 80 cm.	facilitating crossing occluded, tortuous & stenotic
		• Second lumen for guide wire compatibility	blood sampling
		facilitating crossing occluded. tortuous	Stainless steel bushes under proximal & distal
		&stenotic arterial wall OR to be used for drug	balloon windings for visualization under
		delivery & blood sampling.	fluoroscopy.
		• Stainless steel bushes under proximal & distal	 Recessed winding technique for balloon
		balloon windings for visualization under	attachment for maintaining balloon symmetry for
		fluoroscopy.	uniform contact with vessel wall, providing
		Recessed winding technique for balloon	consistent clot removal
		attachment for maintaining balloon symmetry	it should be US FDA approved.
		consistent clot removal	
91	273	Item Name:	Specification:



S. No.	Tender Ref. No.	Existing Detail	Modifications
		Aortic punch Long handle Specification: • Size: 2.5cm to 6cm • Should have sharp dual cutting edge for clean, precise removal of aortic tissue. • A conical tip should be there for easy insertion by straight or button hole technique. • Ten blade sizes for trimming to desired size and shape 2 5mm – 6 0mm	 Size: 2.5cm to 6cm Should have sharp dual cutting edge for clean, precise removal of aortic tissue. A conical tip should be there for easy insertion by straight or button hole technique. Ten blade sizes for trimming to desired size and shape 2.5mm – 6.0mm It should be US FDA approved.

Additions are as under:

S. No.	Tender	Item Name	Specification
	Ref. No.		
1	288	Silicone Thoracic Drainage Catheter	Should have 100% silicone made.
			Should be soft.
			Should have open distal end and with multiple side holes.
			Should have 2cm marking from the last side hole.
			Should come 16-36 fr sizes.
			Should come in Sterile, double packed in peelable pouch
			pack.
2	289	Needle Free IV Access Device	Should be DEHP free
			Should have Silicon auto shut valve
			Should have Luer Lock Fitment conforming to ISO-549
			standards
			Should be having high flow rate.
			Should come in sterile and ready to use, peelable packing
3	290	Needle Free IV Access Device with	Should be DEHP free
		Extension arm	Should have one male Luer Lock at one end.
			Should Have One/Two/Three Extension line with Female
			Luer Lock and needle free Access ports with Silicon auto
			shut valve at each arm.
			Should have low priming volume (0.5 ml to1.6 ml)
			Should have Luer Lock Fitment conforming to ISO-549
			standards
			Should be having high flow rate.
			Transparent housing to allow visual assessment of fluid
			path.
			Should come in sterile and ready to use, peelable packing
			Quote items separately
4	291	Multi port	3 gang Manifold provided with 1 male and 4 female Luer Lock
			ports.
			Manifold stopcock assist in controlling of fluid flow through
			IV delivery system at High Flow rate in various configurations
			to meet various IV therapy needs.
			Should be Lipid resistant.
			Transparent housing to allow visual assessment of fluid path.
			Should come in sterile and ready to use, peelable packing.



S. No.	Tender	Item Name	Specification
	Ref. No.		
5	292	ARTIFICIAL HEART VALVE BILEAFLET	Should be Made up of pure Pyrolytic carbon
		MITRAL	Should have optimal profile height
			Should have 90 degree leaflet opening angle
			should have flared inlet at inflow
			Should have wide range of sizes from 23 mm to 33 mm
			Should have both CE and FDA approval
6	293	MECHANICAL BILEAFLET AORTIC HEART	Should be Made up of pure Pyrolytic carbon
		VALVE	Should have optimal profile height
			Should have 90 degree leaflet opening angle
			should have leaflet guard design
			should have flared inlet at inflow
			Should have wide range of sizes from 19 mm to 29 mm
			Should have both CE and FDA approval
7	294	Pacing wire	O -26mm, 1/2 circle taper point, 88 mm straight cutting
			breakaway needle,
			2-0 , 17 mm 3/8 circle, Taper point , with distal breakaway
			needle
			3-0 26 mm,1/2 circle taper point, 60 mm straight cutting
			needle
			USFDA Approved
8	295	VAMP Plus/ DPT Combination Kits	Device combination kit with in line closed reservoir for
		(blood sampling kit)	infection free blood sampling along with disposable
			pressure transducer. It should have 60" patient tubing with
			two blood sampling sites located 13" and 55" from the
			patient; pole mountable with needleless shielded cannula
			• USF'.DA Approved.
9	296	Porcine Bio Prosthetic Heart Valve Aortic	Should be Native Stented Porcine Valve
		and Mitral	Should have T-6 Anti Calcification to reduce calcification
			Should come in all sizes
			Should have clinical papers on survival rates for more than
			25 years.
			Should be US FDA approved.
10	297	Right Ventricle to Pulmonary Artery	
		Conduit in all sizes	
11	298	Unipolar Temporary Myocardial Pacing	Should have fixation coil to minimize tissue trauma
		Lead	Should have discrete Electrodes for reliable sensing and
			pacing
			Should have Silastic Fixation Disc for arterial placement
			Should have sleeve insulating connector pins when in use

Page No.: 3 > Earnest Money > Point No.: 2: For:

Amount of Earnest Money Deposit

:

No. of quoted	Amount
items	(INR)
1-30	50,000/-
31-70	1,00,000/-
71-130	1,50,000/-
131-200	2,00,000/-
More than 200	2,50,000/-



Read:

Amount of Earnest Money Deposit : 50,000/- (Rupees Fifty Thousand Only)

Page No.: 4 > Earnest Money > Point No.: 2 For:

Earnest Money:

Earnest money by means of a Bank Demand Draft may be enclosed with the quotation (Technical Bid). It is also clarified that the quotations received without earnest money will be summarily rejected. The DD may be prepared in the name of "**All India Institute of Medical Sciences, Jodhpur**". Details of EMD is as under:

No. of quoted items	Amount (INR)
1-30	50,000/-
31-70	1,00,000/-
71-130	1,50,000/-
131-200	2,00,000/-
More than 200	2,50,000/-

- a) No request for transfer of any pervious deposit of earnest money or security deposit or payment of any pending bill held by the institute in respect of any previous work will be entertained.
- b) Tender shall not be permitted to withdraw his offer or modify the terms and conditions thereof. In case the tenderer fail to observe and comply with stipulations made herein or backs out after quoting the rates, the aforesaid amount of earnest money will be forfeited to the AIIMS.
- c) The Tenders without Earnest Money will be summarily rejected.
- **d)** The firms who are registered with National Small Industries Corporation (NSIC) / OR Small Scale Industrial (SSI) are exempted to submit the EMD (copy of registration must be provide along with)
- e) No Claim shall lie against the AIIMS in respect of erosion in the value or interest on the amount of EMD.
- **f)** The EMD, in case of successful bidders shall be refunded on submission of performance security. In case of non-submission of the same, EMD will be forfeited.
- **g)** The EMD, in case of unsuccessful Bidders shall be retained by the Purchaser, upto a maximum period of 6 months from the date of opening of the Bids or till the finalization of the tender, whichever is later. The bid security shall be refunded to the unsuccessful tenderers on written request. No interest will be payable by the AIIMS authorities on the EMD.

Read:

Earnest Money:

Earnest money by means of a Bank Demand Draft of **Rs. 50,000/- (Rupees Fifty Thousand only)** may be enclosed with the quotation (Technical Bid). It is also clarified that the quotations received without



earnest money will be summarily rejected. The DD may be prepared in the name of "All India Institute of Medical Sciences, Jodhpur". Details of EMD is as under:

- a) No request for transfer of any pervious deposit of earnest money or security deposit or payment of any pending bill held by the institute in respect of any previous work will be entertained.
- **b)** Tender shall not be permitted to withdraw his offer or modify the terms and conditions thereof. In case the tenderer fail to observe and comply with stipulations made herein or backs out after quoting the rates, the aforesaid amount of earnest money will be forfeited to the AIIMS.
- c) The Tenders without Earnest Money will be summarily rejected.
- **d)** The firms who are registered with National Small Industries Corporation (NSIC) / OR Small Scale Industrial (SSI) are exempted to submit the EMD (copy of registration must be provide along with)
- e) No Claim shall lie against the AIIMS in respect of erosion in the value or interest on the amount of EMD.
- f) The EMD, in case of successful bidders shall be refunded on submission of performance security. In case of non-submission of the same, EMD will be forfeited.
- **g)** The EMD, in case of unsuccessful Bidders shall be retained by the Purchaser, upto a maximum period of 6 months from the date of opening of the Bids or till the finalization of the tender, whichever is later. The bid security shall be refunded to the unsuccessful tenderers on written request. No interest will be payable by the AIIMS authorities on the EMD.

Page No.: 5 > Point No.: 8 > DOCUMENTS COMPRISING THE BID > Point No.: (e):

For:

The technical bid should be accompanied by Demand draft of **Rs. 1000/- (non-refundable) against tender fee** and Demand Draft of **EMD** as mentioned above.

Read:

The technical bid should be accompanied by Demand draft of Rs. 1000/- (non-refundable) against tender fee and Demand Draft of EMD of Rs. 50,000/- (Rupees Fifty Thousand only).

Page No.: 9 > Point No.: 23 >

For:

Performance Security:

The bidder shall require to submit the performance security after receipt of award of notification, in the form of irrevocable Bank Guarantee (BG) / or Fixed Deposit Receipt (FDR) issued by any Scheduled Bank. Details of performance security is as mentioned below:

S. No.	No. of Awarded Items	Amount of Performance Security (INR)
1	1-30	50,000/-
2	31-60	1,50,000/-
3	61-120	4,00,000/-



4	121-180	8,00,000/-
5	More than 180	12,00,000/-

The security deposit of successful bidders will be kept for the period of one and half year from the date of award of the contract and shall be refunded without any interest on it within 15 to 90 days after completion of the contract as per order, or after the expiry of contract on satisfactory completion of the same whichever is later.

The security deposit can be forfeited by the Institute in the event of any breach or negligence or nonobservance of any condition of contract or for unsatisfactory performance or non-observance of any condition of the contract.

Read:

The bidder shall require to submit the performance security after receipt of award of notification, in the form of irrevocable Bank Guarantee (BG) / or Fixed Deposit Receipt (FDR) issued by any Scheduled Bank. Details of performance security is as mentioned below:

S. No.	No. of Awarded Items	Amount of Performance Security (INR)
1	1-30	1,00,000/-
2	31-60	2,00,000/-
3	61-120	4,00,000/-
4	121-180	8,00,000/-
5	More than 180	12,00,000/-

The security deposit of successful bidders will be kept for the period of one and half year from the date of award of the contract and shall be refunded without any interest on it within 15 to 90 days after completion of the contract as per order, or after the expiry of contract on satisfactory completion of the same whichever is later.

The security deposit can be forfeited by the Institute in the event of any breach or negligence or nonobservance of any condition of contract or for unsatisfactory performance or non-observance of any condition of the contract.

Administrative Officer