

TECHNICAL SPECIFICATIONS OF THE CONSUMABLES FOR THE DEPARTMENT OF CARDIOTHORACIC SURGERY, AIIMS, BILASPUR, H.P.

A) GENERAL CLAUSE

1. The items will be considered on individual basis i.e., each item will be compared individually for technical as well as price bid. Thus, price of each item should be quoted separately.
2. The firm participating in the tender must supply their catalogue. The items quoted must be numbered and labeled/highlighted in the catalogue.
3. All the items quoted should be CE (European)/ US FDA/ISO/CDSCO approved.
4. Sample of the items must be provided by the bidders for compliance of specifications and operational capabilities to AIIMS, Bilaspur, H.P., if requested. Samples of only the quoted items must be sent. If the company/bidder fails to provide sample of the quoted product or provides sample of the product other than the quoted item, the bidder would be liable for rejection.
5. For the items where multiple sizes have been grouped as a single item as enlisted below average prices for all sizes should be quoted by the bidder.
 - a) Non-Ringed ePTFE tube graft, All sizes (3.5-5mm)
 - b) Non-Ringed ePTFE tube graft, All sizes (16-20mm)
 - c) Polyester (Dacron) Grafts- All sizes (8mm-28mm) diameter
 - d) BOC mask, All sizes (Size 1- size 5)
 - e) Airway exchange Catheter with ventilation port, All sizes (11Fr-19Fr)
 - f) Disposable Laryngoscope with blades, All sizes (Size 0-Size 4)
 - g) Hudson T-piece (Aerosol Tee Connector), All sizes (22mm OD x 15mm ID to 22mm OD x 22mm ID)
 - h) Tracheal Closed Suction system, Adult, All sizes (10Fr-14Fr)
 - i) Tracheal Closed Suction system, Pediatric, All sizes (5Fr-8Fr)
 - j) Sterile Foley's urinary catheter. All Silicone
 - k) Chest binders
6. Minimum 2/3rd of the items in a Group must be quoted by a single bidder to qualify for technical and financial evaluation in that particular group. For example, for the group Cardiovascular grafts and patches a bidder must quote minimum 7 items to qualify.
7. For the Heart Valves and Rings group, minimum 5 years median outcome clinical studies of the quoted valves/rings published in a peer-reviewed indexed (PubMed/Embase/Scopus/Web of Science) international journal must be provided at the time of submission of documents.



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B) TECHNICAL SPECIFICATIONS

S. No.	Group Name	PRODUCT	SPECIFICATIONS	Quantity
1	Sternal Band	Sternal band	Sternal closure implant made of biocompatible PEEK (polyetheretherketone) polymer with consistent tension across sternotomy or fracture of the sternum	30
2	Heart Valves and Rings	Bileaflet Mechanical Mitral Valve	All sizes (24/25mm-33/34mm)- The valve should be rotatable after seating. To be supplied with a suitable holder, sizer and leaflet tester have to be supplied along with the valve. Minimum 5 years median outcome clinical studies of the quoted valves/rings published in a peer-reviewed indexed (PubMed/Embase/Scopus/Web of Science) international journal must be provided at the time of submission of documents. The valves have to be supplied on consignment basis such that - a stock of one valve in each size should be made available in the user area (CTVS-OT) and after the utilization of a valve of particular size, the same must be replaced to fill the stock by the firm who supplied the valve. The information on utilization of the valve would be conveyed to the supplier by the storekeeper who in turn will be informed by the SNO of the CTVS OT.	70
3	Heart Valves and Rings	Bileaflet Mechanical Aortic Valve	All sizes (16/17mm-23/24mm)- The valve should be rotatable after seating. To be supplied with a suitable holder, sizer and leaflet tester must be supplied along with the valve. Minimum 5 years median outcome clinical studies of the quoted valves/rings published in a peer-reviewed indexed (PubMed/Embase/Scopus/Web of Science) international journal must be provided at the time of submission of documents. The valves have to be supplied on consignment basis such that - a stock of one valve in each size should be made available in the user area (CTVS-OT) and after the utilization of a valve of particular size, the same has to be replaced to fill the stock by the firm who supplied the valve. The information of utilization of the valve would be conveyed to the supplier by the storekeeper who in turn will be informed by the SNO of the CTVS OT.	20
4	Heart Valves and Rings	Tricuspid Valve Annuloplasty Ring	Partial, Rigid ring, All sizes (25/26mm-35/36mm)- Near anatomical contour with downward angle at septal end. Should be supplied with suitable holder & sizer. Minimum 5 years median outcome clinical studies of the quoted valves/rings published in a peer-reviewed indexed (PubMed/Embase/Scopus/Web of Science) international journal must be provided at the time of submission of documents.	50

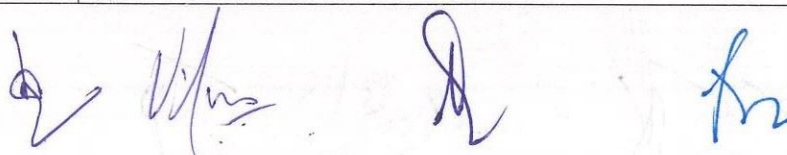
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			The rings must be supplied on consignment basis such that - a stock of one ring in each size should be made available in the user area (CTVS-OT) and after the utilization of a ring of particular size, the same has to be replaced to fill the stock by the firm who supplied the ring. The information on utilization of the ring would be conveyed to the supplier by the storekeeper who in turn will be informed by the SNO of the CTVS OT.	
5	Cardiovascular grafts and patches	Ringed ePTFE tube graft- Straight, 8mm x 40cm	Straight, 8mm, 40cm in length. Rings should be removable. Kink resistant. SPR The grafts have to be supplied on consignment basis such that - a stock of one graft in each size should be made available in the user area (CTVS-OT) and after the utilization of a graft of particular size, the same has to be replaced to fill the stock by the firm who supplied the graft. The information on utilization of the graft will be conveyed to the supplier by the storekeeper who in turn will be informed by the SNO of the CTVS OT.	100
6	Cardiovascular grafts and patches	Ringed ePTFE tube graft- Straight, 8mm x 80cm	Straight, 8mm, 80cm in length. Rings should be removable. Kink resistant. SPR The grafts have to be supplied on consignment basis such that - a stock of one graft in each size should be made available in the user area (CTVS-OT) and after the utilization of a graft of particular size, the same has to be replaced to fill the stock by the firm who supplied the graft. The information of utilization of the graft will be conveyed to the supplier by the storekeeper who in turn will be informed by the SNO of the CTVS OT.	50
7	Cardiovascular grafts and patches	Ringed ePTFE tube graft- Axillo-bifemoral branched graft	8x8mm diameter, 70x40cm length. Rings should be removable. SPR The grafts have to be supplied on consignment basis such that - a stock of one graft in each size should be made available in the user area (CTVS-OT) and after the utilization of a graft of particular size, the same has to be replaced to fill the stock by the firm who supplied the graft. The information on utilization of the graft will be conveyed to the supplier by the storekeeper who in turn will be informed by the SNO of the CTVS OT.	20
8	Cardiovascular grafts and patches	Non-Ringed ePTFE tube graft, All sizes (3.5-5mm)	Straight, 10cm in length. Should be kink resistant. Should be heparin bonded. SPR The grafts have to be supplied on consignment basis such that - a stock of one graft in each size should be made available in the user area (CTVS-OT) and after the utilization of a graft of particular size, the same has to be replaced to fill the stock by the firm who supplied the graft. The information on utilization of the graft will be conveyed to the supplier by the storekeeper who in turn will be informed by the SNO of the CTVS OT.	10



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9	Cardiovascular grafts and patches	Non-Ringed ePTFE tube graft, All sizes (16-20mm)	Straight, 20cm in length. Should be kink resistant. Should be heparin bonded. SPR The grafts have to be supplied on consignment basis such that - a stock of one graft in each size should be made available in the user area (CTVS-OT) and after the utilization of a graft of particular size, the same has to be replaced to fill the stock by the firm who supplied the graft. The information on utilization of the graft will be conveyed to the supplier by the storekeeper who in turn will be informed by the SNO of the CTVS OT.	10
10	Cardiovascular grafts and patches	Polyester (Dacron) Grafts- 16x8mm diameter	Collagen impregnated, Branched. SPR The grafts have to be supplied on consignment basis such that - a stock of one graft in each size should be made available in the user area (CTVS-OT) and after the utilization of a graft of particular size, the same has to be replaced to fill the stock by the firm who supplied the graft. The information on utilization of the graft will be conveyed to the supplier by the storekeeper who in turn will be informed by the SNO of the CTVS OT.	50
11	Cardiovascular grafts and patches	Polyester (Dacron) Grafts- All sizes (8mm-28mm) diameter	Collagen impregnated, Straight, 30-60cm length. SPR The grafts have to be supplied on consignment basis such that - a stock of one graft in each size should be made available in the user area (CTVS-OT) and after the utilization of a graft of particular size, the same has to be replaced to fill the stock by the firm who supplied the graft. The information on utilization of the graft will be conveyed to the supplier by the storekeeper who in turn will be informed by the SNO of the CTVS OT.	20
12	Cardiovascular grafts and patches	ePTFE Pericardial Membrane	0.1mm thickness, 6x12cm. The brochure containing the necessary details on the dimensions and the material of the fabric has to be submitted. The specification for thickness must be adhered whereas the length or width can exceed the specified. SPR	5
13	Cardiovascular grafts and patches	PTFE Felt, low-porosity	1.85mm thick, 10x10cm. The brochure containing the necessary details on the dimensions and the material of the fabric must be submitted. The specification for thickness must be adhered to whereas the length or width can exceed the specified.	20
14	Cardiovascular grafts and patches	Polyester (Dacron) double-valour, woven cardiovascular patch	Collagen coated, 0.61-0.65mm thick, 10x10cm. The brochure containing the necessary details on the dimensions and the material of the fabric must be submitted. The specification for thickness must be adhered to whereas the length or width can exceed the specified.	5

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15	Cardiovascular grafts and patches	PTFE FELT pledgets	Thickness x breadth & length: 1.65 mm x 4.8mm x 6 mm For vascular and cardiac sutures - Specify the number of pledgets in a pack and the rate of the pack clearly. SPR	200
16	Infusion	IV infusion set with Flow regulator and micro drip chamber	Sterile. Should have universal spike with integrated 15-micron filters. Flow rates should be numbered on the dial from 80 - 300 mL/hr including "open." Flow rates less than 80 mL/hr should be noted with ramp up markings. Components should not be made with DEHP or natural rubber latex. 15 drop drip chamber.	10
17	Infusion	IV infusion set with Flow regulator with standard drip chamber	Sterile. Should have universal spike with integrated 15-micron filters. Flow rates should be numbered on the dial from 80 - 300 mL/hr including "open." Flow rates less than 80 mL/hr should be noted with ramp up markings. Components should not be made with DEHP or natural rubber latex. 60 drop drip chamber. 50 per box	50
18	Transducer	Disposable blood pressure transducer kit	Sterile. Disposable. Priming should be easy with minimal waveform distortion. Approx 3cc flush device. Connector wires should be gold plated for high fidelity signal transfer. 20 per box	30
19	Transducer	Transducer set holder	Should be able to hold minimum 3 and maximum 7 pressure monitoring devices. Should have simple squeeze-and-release clamping action allows single-handed operation for efficient mounting. Should have color-coded inserts for easy identification of disposable pressure transducer (DPT) lines. Dimensions 8" L x 2.75" W x 2.5" H.	50
20	Blood sampling system	Adult Closed blood sampling system with needle-less cannula, 20" sampling kit	Sterile. Should have 5 cc reservoir. For use with disposable pressure transducers and for connection to central line catheters and arterial catheters. Can be pole mounted on a backplate or used as an arm mount. Sample port should reduce blood buildup for collection of undiluted sample.	200
21	Blood sampling system	Pediatric Closed blood sampling system with needle-less cannula, 6" sampling kit	Sterile. Should have 5 cc reservoir. For use with disposable pressure transducers and for connection to central line catheters and arterial catheters. Can be pole mounted on a backplate or used as an arm mount. Sample port should reduce blood buildup for collection of undiluted sample.	50
22	Catheter and sheath	Swan Ganz catheter, 7Fr with or without cardiac output	triple lumen, without cardiac output	20

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23	Catheter and sheath	Pulmonary Artery catheter introducer sheath, 8Fr	Sterile. Disposable.	30
24	Catheter and sheath	Introducer sheath kit for femoral access	12cm in length, atraumatic tip, should have snap lock feature to secure dilator in sheath during insertion, should have rotating suture ring for convenient suture placement, should be provided with guidewire. All sizes (6Fr-8Fr)	50
25	Infusion	Needle free connectors without extension	Closed Luer IV access system with silicone split septum. No moving parts with transparent housing. Straight unobstructed fluid path for clearing blood and blood residual with low flush volumes. Easy to clean silicon surface for connecting syringe/intravenous infusion set. Should be compatible with blood transfusion. Should allow blood withdrawal. Should be Latex-free and DEHP-free.	20
26	Infusion	Needle free connectors with single extension	Needle-free IV connector device with single extension length 15 cm. Closed Luer IV access system with silicone split septum. No moving parts with transparent housing. Straight unobstructed fluid path for clearing blood and blood residual with low flush volumes. Easy to clean silicon surface for connecting syringe/intravenous infusion set. Should be compatible with blood transfusion. Should allow blood withdrawal. Should be Latex-free and DEHP-free.	20
27	Infusion	Needle free connectors with double extension	Needle-free IV connector device with single extension length 15 cm. Closed Luer IV access system with silicone split septum. No moving parts with transparent housing. Straight unobstructed fluid path for clearing blood and blood residual with low flush volumes. Easy to clean silicon surface for connecting syringe/intravenous infusion set. Should be compatible with blood transfusion. Should allow blood withdrawal. Should be Latex-free and DEHP-free.	20
28	Airway management	BOC mask, All sizes (Size 1-size 5)	A Connel type mask of conductive neoprene dipped over latex rubber. Should have an inflatable pad without visible joint line or crevices where debris or bacteria may be trapped. Should have a five-pronged ring which will accommodate any two-, three, or four-tailed harness on all sizes. 22mm female inlet.	20
29	Airway management	Transparent (Silicone) Anesthesia Masks	Disposable, BPA and PVC free, Non-slip ridges and a flexible mask body, Non-scented. All sizes (size 0-size 5)	10

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30	Airway management	BIS Sensor,Adult	8.75 in. x 7.75 in. (approx.), Polycarbonate plastic connector (patient contact surface), Tab stiffener made of Polycarbonate sheet with one side coated with adhesive, Module made of Copper/brass/Kapton, Flexible circuit made of Polyester screen printed with cured Ag/AgCl and dielectric inks (for incidental patient contact), Electrode tines retaining disk of size 1/32 inch with white polyethylene foam with both sides coated with medical-grade adhesive, Basepad having 1/16 inch white polyethylene foam with both sides coated with medical-grade adhesive	50
31	Airway management	Airway exchange Catheter with ventilation port, All sizes (11Fr-19Fr)	80cm length with 15mm adapter and luer-lock	20
32	Airway management	Straight connector for EtCO2 port	Sterile. disposable	100
33	Airway management	Angle piece for EtCO2 port	Sterile. disposable	100
34	Airway management	Disposable Laryngoscope with blades, All sizes (Size 0-Size 4)	Single use blade with handle, preloaded with batteries, surgical grade stainless steel blade, high grade reinforced plastic handle with ergonomic grip, different sizes should be color coded.	20
35	Airway management	Hudson T-piece (Aerosol Tee Connector), All sizes (22mm OD x 15mm ID to 22mm OD x 22mm ID)	Latex free. Disposable.	75
36	Airway management	Jackson Rees (JR) circuit, Pediatric	100cm length, 0.5 liters capacity, corrugated flex tube	10
37	Airway management	Jackson Rees (JR) circuit, Adult	180cm length, 2 liters capacity, corrugated flex tube	50
38	Airway management	Tracheal Closed Suction system, Adult, All sizes (10Fr-14Fr)	50cm length with double swivel elbow, reusable upto 24 hours	300
39	Airway management	Tracheal Closed Suction system, Pediatric, All sizes (5Fr-8Fr)	30cm length, Number and color-coded markings for easy and proper depth suctioning, reusable upto 24 hours	50

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40	Airway management	Endobronchial blockers	Two distinct pilot balloons which match color of the distal lumens. It provides indication of blocker orientation after placement. Central lumens should allow carbon dioxide flow check. Distal ends should be bifurcated and color coded with low volume cuffs made of polyurethane. The catheter of the blocker should have radiopaque marker line. The catheter should have depth markings. Should be provided with multiport adaptor.	10
41	Surgical clipper	Rechargeable professional surgical clipper	6 cm length and 20cm width approx. Blade width approx 35mm. Should be powered by Lithium ion battery. Should provide atleast 2 hours battery life on single charge. Should have LED indicator lights that provide battery charge status. Cutting blade position should be away from skin. Should have universal or single blade intended for all body area. Recharge time should be less than 5 hours. Overcharge protection should be present. Warranty for atleast 2 years.	20
42	Surgical clipper	Surgical clipper blades.	Compatible with the Rechargeable surgical clipper.	500
43	Umbilical Tapes	Umbilical Tapes	Sterile. 75x3cm. Braided non-absorbable natural cotton material.	800
44	Sterile Foley's urinary catheter. All Silicone	Sterile Foley's urinary catheter. All Silicone	2-way, 30cc rubber valve. All Silicone. 16" length. All sizes (12Fr-16Fr)	50
45	Chest drainage system	Chest drainage system	Should be equipped with dry suction control and dry seal. Should have self-sealing luer-lock sample port for in-line collection. Should operate with reduced airflow capacity of a minimum of 6 liters per minute (LPM). Suction regulator should maintain a constant suction level, variable between -10 to -40 cm water. Should be able to quantify the size and progress of air leak. Should have integrated One-Way Valve that allows air to exit the pleural space while preventing atmospheric air re-entry at all times. Should have positive Pressure Relief Valve which opens with increases in positive pressure, preventing pressure accumulation. Should have Filtered High Negativity Relief Valve provided to vent excessive negativity. Should have Negative Pressure Indicator that confirms negative pressure on patient side of seal. 2000 ml collection capacity	150
46	Gigli saw	Gigli saw wire	Made of stainless steel. 70cm in length. Distal End Rings for fitting handles	50

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47	Gigli saw	Gigli saw handle	Reusable. Made of Stainless steel. T-Shaped Design. Distal Hook to securely hold the Gigli saw	10
48	Hospital grade disinfectant	Hospital grade disinfectant	5 litres can. Electrolysed Non-Toxic, Non-Irritant and Non-Corrosive, Ready to use Disinfectant Solution with Neutral pH containing Sodium Chloride (NaCl)-)0.023%, Sodium Hypochlorite (NaOCl)- 0.005%, Hypo Chlorous Acid (HOCl)-0.004%, Electrolysed Water- 99.97%.	20
49	Vascular tourniquet (Snugger) set	Vascular tourniquet (Snugger) set	color coded 4 tubes with one snare- for snugging the purse string sutures during open heart procedures, All sizes (5"-7" long) for open heart surgery - SPR	50
50	Red rubber latex catheters	Red rubber latex catheters	for vessel snugging - High quality and tension resistant body - at least 16" long overall, All sizes (6Fr- 10Fr) -SPR	500
51	Silicone vessel (vascular) loop	Silicone vessel (vascular) loop	All sizes (1mm to 2.5 mm wide), Large size sterile medical grade radiopaque silicone loop, < 1.2 mm thick & at least 40 cm long. for encircling the blood vessels during dissection. To be available in at least 3-4 colors (in each size) - preferably individual loop packed in a separate foil. The cost of a single loop will be taken for comparison purposes and hence the number of loops present in a single pack needs to be mentioned -SPR	500
52	Temporary Pacing wire	Temporary Epi-myocardial Pacing wire - Adult type	at least 60 cm long for intraoperative placement during cardiac surgery- Incorporating a straight cutting needle of at least 60 mm long with 'breakaway' feature enabling the remaining butt to be used as a connecting plug to the Pacemaker. The other end of the wire should have 25 to 27 mm tapercut 1/2 circle needle -SPR.	250
53	Temporary Pacing wire	Temporary Epi-myocardial Pacing wire - Pediatric type	at least 60 cm long for intraoperative placement during cardiac surgery- Incorporating a straight cutting needle of at least 60 mm long with 'breakaway' feature enabling the remaining butt to be used as a connecting plug to the Pacemaker. The other end of the wire should have 16 to 18 mm tapercut 1/2 circle needle -SPR.	50
54	Disposable Aortic - Vascular Punch	Disposable Aortic -Vascular Punch	All sizes (3 mm to 4.5mm), with smooth telescoping movement & adequate finger grip mechanism. SPR	50
55	IMA (Internal Mammary Arterial) cannula	IMA (Internal Mammary Arterial) cannula	1mm, with bulb shaped tip for checking patency of the artery	10

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56	Ophthalmic cautery	Ophthalmic cautery	Sterile, disposable & battery operated for making perfect holes in the prosthetic vascular grafts	10
57	Peritoneal Dialysis Catheter set	Peritoneal Dialysis Catheter set	16 Fr Pull-Apart Introducer Set. Set should include: 16 Fr Pull-Apart Sheath / Dilator, 18G Introducer Needle, 10 mL Syringe, J/Straight 0.038" guidewire, 15cm Catheter	20
58	Chest binders	Chest binders	Easy to apply and remove. Strong & V shape band to ensure good compression. All sizes (Size Small-XL)	200
59	Disposable Microscalpel	Disposable Microscalpel	with high quality micro-blade attached for coronary arteriotomy - SPR	100
60	Sterile cover for Echocardiographic probe	Sterile cover for Echocardiographic probe	For use in the operative -field. Should fit universally all ultrasound probes commonly used during cardiac surgery with special fold to accommodate the probe end without wrinkles. Should be made up of clear transparent latex free medical grade material polythene. Length of cover - 150 cm; Width of the cover - 10 cm. The kit should also contain securing tapes to hold the cover around the probe and preferably with ultrasound transmission gel - pack.	100

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