SPECIFICATIONS FOR CO2 LASER

	CO2 LASER
1	It should be a carbon dioxide laser with a wavelength of 10.60 micrometres, infrared.
2	It should have 50 watts of power and above.
3	It should have 5mw red diode aiming beam,635nm, adjustable intensity
4	The beam delivery should be through a lightweight carbon dioxide glass hollow fiber and 7-joint, fixed mirror, spring balanced arm
5	The reach of the arm should be at least 160 cm with 360 deg rotation.
6	Co2 fiber should be min. 2 meters long, 1.04mm outside diameter, sterile, single/multipleuses, 2.0m long preferably glass hollow fiber.
7	Spot size: at least 295µm at the fiber output. Up to 50 watt
8	It should be microprocessor based
9	It should have a sealed co2 laser tube.
10	It should have continuous, single pulse and repeat pulse tissue exposure modes.
11	It should have continuous power of 02 – 50 watts
12	It should have a super pulse power of 0.5 – 16 watts.
13	It should have a timed exposure of the following durations; on time (single pulse) – 0.05 – 1.0 sec. At 1.0 to 4.5 watts - 0.01- 1.0 sec at 5-40 watts on time (repeat pulse) – 0.05 – 1.0 sec at 1- 4.5 watts - 0.01 – 1.0 sec at 5-40 watts
14	It should have a repeat delay, off time, 0.01 to 1.0 sec.
15	It should have at least 5 user-defined memory settings.
16	It should have a 0.2mm focused handpiece.
17	It should have at least two bacterial filters.
18	It should have five laser safety glasses.
19	It should supply with scanner with preset recommendations for parameters and delivery devices for different applications.
20	It should have a multi-color screen panel with soft touch buttons
21	It should have a user-friendly graphic display to provide step-by-step operating instructions.
22	It should have a self-contained closed loop cooling system.

Prof. Avinash Agrawal
MD, IDCC, IFCCM, FICCM, FIACCM, FCCP (USA)
Head, Department of Critical care,
King George's Medical University, UP, I

23	It should be compatible with 230v, 3a, and 50hz power supplies.
	Accessories
24	It should have oral, pharyngeal, and nasal handpiece set for oral, pharyngeal, and nasal applications which should include
25	230mm handpiece unit (CVD optical unit, ports holder, conical main extender, contamination collector)
26	Extra conical main extender, backstop extender-3 nos,
27	Tip extender-3 nos, • straight tip, nasal tip-3 nos,
28	Tonsil tip-3 nos, • 90 degrees angled mirror tip extender, • Cleaning brush, Tygontube (8mm id, 1.5m long) w/reducer smoke evacuator
29	Compatible with the laser machine, imported quality, should be of the same manufacturer
30	Smoke evacuation unit with the pneumatic footswitch, vi 6 filter-6-hour double port 7/8" and 1-1/4",7/8" tubing with wand and tip-2 nos,sml of 50-laser mask 0.1mm filtration media (flat mask)
31	laser mask 0.1mm filtration media (flat mask) 4) fiber accessories
32	Reusable Co2 fiber- 02 nos
33	Rigid handpiece kit at least 8 rigid handpieces with handpiece cleaning kit - 60mm, straight, straight tip, 180mm, straight, straight tip, 60mm, straight, curved tip, 140mm, straight, curved tip, 180mm, straight, curved tip, 240mm, bent, curved tip, 140mm, bent, straight tip, 240mm, bent, straight tip,
34	Endoscope protection sheath – 2 nos Length: 640 mm, od: 1.7 mm
35	Handpiece bending tool
36	Handpiece cleaning kit: includes 3 cleaning
37	Brushes and 20 extra silicone tubes for handpieces
38	Bending and cutting tools to reuse fibber
39	Sterilization tray for fibers note

Conditions for tenderers:

1. All accessories should be from the same Original Equipment Manufacturer for the main unit.

Prof. Avinash Agrawal
MD, IDCC, IFCCM, FICCM, FIACCM, FCCP (USA)
Head, Department of Critical care,
King George's Medical [illegible]y, UP, Lko.

2. Instruments must be ISO certified and a copy should be enclosed. (The ISO Certificate must be issued by any organization accredited by the Bureau of Indian Standard or accredited by the international accrediting forum "IAF" (Certificate to be attached).
3. Should be USA FDA andEuropean CE be approved by 4 digits notified body.
4. Other necessary certifications if any required will be provided by the bidder for the smooth functioning of the machine.
5. Installation process should be performed by O.E.M trained service engineers/ service representatives on OEM letterhead or Service Report within 15 days of supply, with the mandatory provision of providing preventive services visit of OEM trained Service Engineer/ Service Representative quarterly per year till the completion of warranty period (i.e., 20 visits for the first 05 years) & further quarterly visits (04 visits/year) year till the completion of CMC period.
6. The equipment should have a Brand name/ Model Number embossed/etched on the equipment.
7. All the technical specifications in the compliance statement must be supported by Original Literature from the firm/ O.E.M with highlighting Numbering & flagging of all technical certificates.
8. Offered Equipment should have a strong Government Installation base.
9. Offered Equipment should have a Regional Sales Service Centre of the Original Equipment Manufacturer in the region for a 95 % uptime guarantee.
10. For the offered main unit, the essential, optional required consumables'/accessories' shelf life should be declared on the Original Equipment Manufacturer's letterhead.
11. In case of technical snag/failure/breakdown the response time for the inspection should be within 24 hours and repair within 05 days otherwise provide a service machine/ alternate arrangement to be made till the period of recovery of the breakdown of the unit, failing which attracts penal action as per the decision of institute/ hospital.
12. For offered equipment the Training of technical staff and users should be performed by Original Equipment Manufacturer trained Service Engineers at the proper designated place- at bidders' cost.
13. Company should quote their latest model and need to provide an affidavit for the same.

Prof. Avinash Agrawal
MD, IDCC, IFCCM, FICCM, FIACCM, FCCP (USA)
Head, Department of Critical Care,
King George's Medical University, UP, Lko.

14. As a tendering process the Demonstration of the offered Equipment is Mandatory at hospital/institute premises or other designated places at the bidder's cost.
15. The bidder must comply with the General Financial Rules and their modifications if any issued by the Government of India- 2017.
16. Any bidder from a country that shares a land border with India will be eligible to bid in the tender only if the bidder is registered with the Competent Authority (i.e., Registration certificate issued by the Ministry of Commerce and Industry (Department for Promotion of Industry and Internal Trade- DPIIT after October 2020). If any such bidder is not registered with DPIIT they will be liable for technical disqualification.
17. Principal (OEM) must authorize only one agent to be quoted in the bid otherwise multiple quotes through different agents in the same bid will be canceled.
18. The Bidder and its OEM both have to submit a notarized affidavit on the Indian Non-Judicial Stamp Paper of Rs.100/- that the bidder has not quoted the price higher than the current financial year and last financial year supplied to any government Institute/ Organization/ reputed Private Organization. OEM also has to submit that the price quoted by the bidder in the bid is on its behalf and the lowest in the current and last financial year in the country. Therefore, if at any stage it has been found that the supplier and its OEM have quoted lower rates than those quoted in this bid; the Institute (the purchaser) would be given the benefit of lower rates by the Supplier and any excess payment if any, will become immediately payable to the Institute (the purchaser). If such an affidavit is not submitted, the bid will be outrightly rejected. (Part of technical bid).
19. Guarantee / Warranty Period: Separate offers of Comprehensive Maintenance Contract (CMC on main equipment) and Annual Maintenance Contract (AMC on main equipment) for further 5 years after expiry of 5 years of warranty (i.e., 6^{th}, 7^{th}, 8^{th}, 9^{th} and 10^{th} years) in rupees only (and on basis of percentage of price) should be included in a financial bid in the absence of which the offer is liable to be rejected. Payment for CMC/AMC shall be made only after the expiry of the warranty of 5 years, in case the Institute (the purchaser) decides for availing of CMC/AMC services. Contract for CMC/AMC shall be decided on expiry of warranty but rates (not more than 5% inclusive of all taxes for 6^{th} to 10^{th} year) will be frozen at the price of an issued purchase order before the release of payment by the Institute (the purchaser). However, the Institute (the

Prof. Avinash Agrawal
MD, IDCC, IFCCM, FICCM, FIACCM, FCCP (USA)
Head, Department of Critical care,
King George's Medical University, UP, Lko

purchaser) may decide not to enter into any CMC/AMC contract without assigning any reason for the same, which shall be binding upon the bid.

Prof. Avinash Agrawal
MD, IDCC, IFCCM, FICCM, FIACCM, FCCP (US
Head, Department of Critical care,
King George's Medical University, UP, L