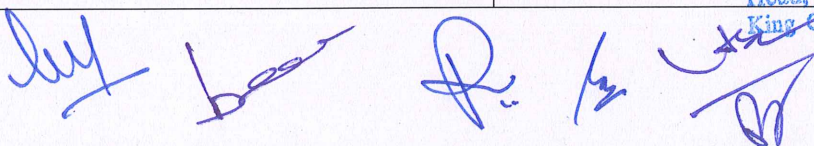


TECHNICAL SPECIFICATION OF 16-SLICE CT SCAN

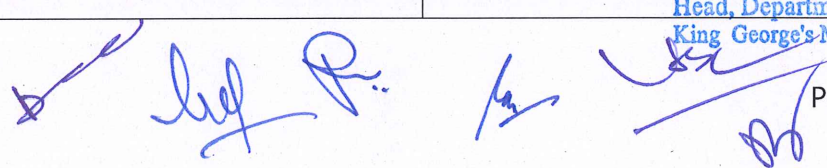
Parameter / Feature	Range
GANTRY	
Scan time for 360-degree rotation	0.8 seconds or less
Minimum Slice thickness	0.8 mm or less
FOV in acquisition mode (in cm)	40 or more
Aperture	70 cm or more
High contrast resolution	At least 15 lp/cm for axial
X-RAY SECTION	
System X-ray power	26 KW or more
mA range	(10 to 230 mA) or more
Heat storage capacity in MHU	3.5 or more
X-ray tube cooling rate in KHU per min	300 or more
DETECTOR	
No. of Detector Rows	16 or more
Effective element/channels per row	650 or more
Should be able to generate at least a detector with	16 slices or more with a minimum thickness of 0.85mm
PATIENT COUCH	
Load bearing capacity	170 Kg or more with 1mm positioning accuracy
Range of metal-free scan	130 cm or more
SPIRAL/ HELICAL SECTION	
Spiral capability	100 seconds or more
Length of the continuous spiral scan	100 cms or more
COMPUTER SYSTEM	
RAM size in GB	16 GB or more
No. of the Monitor	2 or more
Monitor size in inches	19 or more
Display matrix	1024 × 1024 or more

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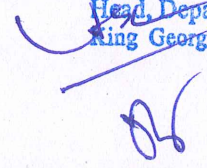


Reconstruction time for an axial scan	120 m seconds or less
Mention Hard disk capacity for image and raw data	1 TB or more
Image storage capacity	100000 images or more
Advanced Workstation RAM	16 GB or more
Mention Hard disk capacity for image and raw data	1 TB or more
RESOLUTION	
High contrast resolution in lp/cm	15 or more
Low contrast resolution in mm at 0.3%	3 or more
DRY CAMERA	
LASER Printer with 3 minimum ports	16 bits and 500 dpi
Throughput per hour	70 or more
Support Multiple Film Sizes: one of which must be 14" x17"	
MUST HAVE SPECIFICATION	
Parameter / Feature	Yes/No
GANTRY	
Gantry tilt	Digital $\pm 20^\circ$
With user control panels on either side	Yes
3 D positioning LASER lights	Yes
X-RAY SECTION	
Compact and inbuilt generator in the gantry	Yes
Dual focus X-ray tube	Yes
X-ray tube cooling unit in built-in gantry	Yes
DETECTORS	
Solid State	Solid State
PATIENT COUCH	
Remote UP/ DOWN, FWD/ BWD option	Yes

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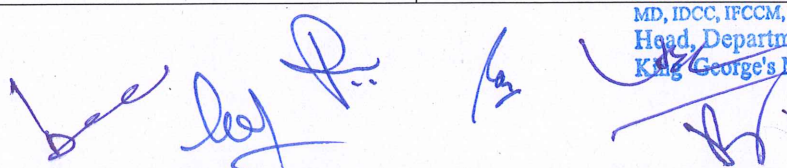
SPIRAL/HELICAL SECTION	
Ability to track contrast medium to trigger scan	Yes
Dose reduction scan	Iterative reconstruction technique
COMPUTER SYSTEM	
Multitasking processors and menu-driven platform	Yes
additional workstation for reporting	
Archiving facility of DVD & CD Main console	Yes
Capability from HIS- RIS interface	Yes
PACS interface without any new hardware or software	Yes
DICOM 3.0 compatibility	Yes
PC based connectivity	Yes
Advanced work station	Yes
IMAGE PROCESSING	
3-D volume rendering	Yes
MIP	Yes
CT angiography	Yes
Artefact suppressions (Including Metal Artefacts reduction)	Yes
Preset 3D reconstruction & display protocols	Yes

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Auto bone removals	Yes
CT-based DSA attachment	Yes
CT perfusion	Yes
Dental scan	Yes
Bone removal	Yes
MPR	Yes
ROI	Yes
VOLUME CALCULATION	Yes
CT NUMBER Measurement	Yes
WINDOW WIDTH	Yes
WINDOW LEVEL	Yes
PROGRAM DISPLAY	Yes
CINE DISPLAY	Yes
HRCT LUNG	Yes
Direct display of MPR images Immediately after scan	Yes
ACCESSORIES	
Whether films are Proprietary and Company specific	Yes
Dual Head Pressure Injector with 100 syringes of 200 ml	Yes

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OTHERS	
Anesthesia machine along with ventilator facility	Yes
The model launched in 2016 or after	Yes

Accessories to be included for 16 Slice CT Scanner

- i. Lead Glass of size-100 X 150 cm- 1 no.
- ii. Lead Apron Hanger -2 nos.
- iii. Zero lead Apron -6 nos.
- iv. Gonadal shields for boys and girls of all age groups — Two set each
- v. Online UPS from a reputed manufacturer having at least 30 minutes back up with appropriate KVA of the entire system. The backup should be such that the scan can be done uninterrupted.
- vi. All patient positioning accessories including the headrest.
- vii. Contrast injector (300 psi) Syringe- 100 nos.
- viii. Trolley cart for consumables injection & syringes.
- ix. Cabinet for storage.
- x. Changing room & accessories for changing room.
- xi. Suitable ACs & lightning.
- xii. Required AC & Ventilation in UPS room.
- xiii. Air curtains as needed.
- xiv. Console privacy curtain.
- xv. Site to be developed as per AERB Guidelines including room layout, lead glass & lead-lined door.
- xvi. Reception counter Counter table, Counter Glass, chairs, and storage cabinet.
- xvii. Furniture for Doctors, Technologists, Receptionist & patients as per site requirement.
- xviii. One additional trolley.

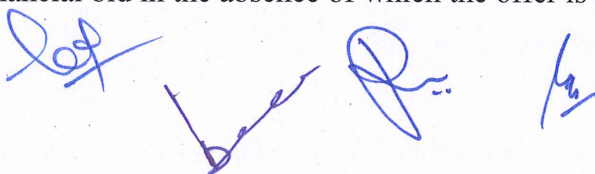
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Conditions for tender:

1. All accessories should be from the same Original Equipment Manufacturer for the main unit.
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 and/ or European CE be approved by 4 digits notified body?
4. Other necessary certifications, if any, 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.

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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.
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 it's 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., 6th, 7th, 8th, 9th and 10th 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



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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 6th to 10th 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 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. Should provide 5-year CMC. CMC cannot be more than 5% of the contract value.

20. System configured application-specific educational video tutorials shall be provided as standard with the system.
21. Details of service outlet in India to render services during 5 years warranty period.
22. The principals must give a certificate if the supplier/vendor is changed during the course of the guarantee/warranty period, the principals would be responsible for the upkeep/maintenance of the quote/supplied equipment, besides honouring all the terms and conditions of CMC/AMC in letter and spirit.

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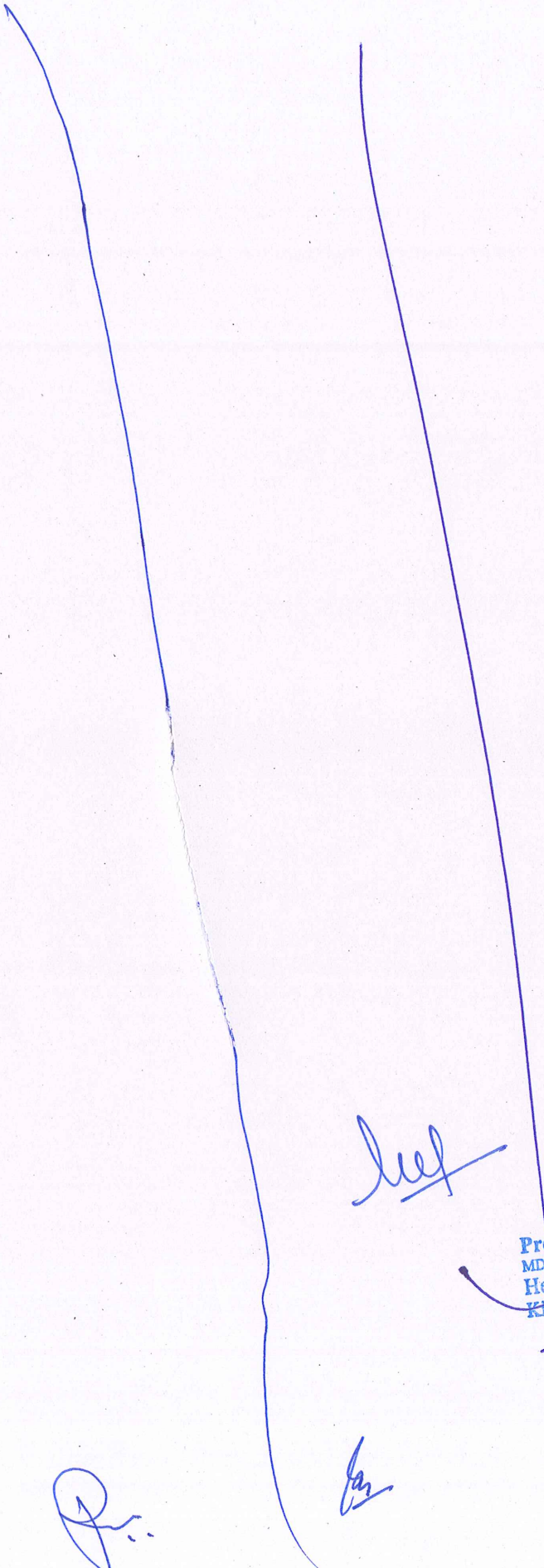
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