Guru Angad Dev
Veterinary and Animal Sciences University, Ludhiana

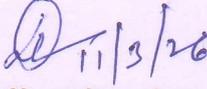Corrigendum No. PC/2025-26/_____*2108*_____ Dated ____*11-3-26*____

CORRIGENDUM

Revised Specifications

This is in reference to e-tender ref no. **PC/2025-26/2098 dated 10/03/2026** and e-tender ID no. **2026_DAH_163207_1** for the purchase of **Purchase of 32 slice CT scan System.** The specifications (certification line) have been revised as under.

"It is certified that the above mentioned specifications of required 32 Slice CT Scanner with 32 Rows of Physical Detectors do not favour any brand/make/model or any firm."

The interested firms/bidders are advised to submit bid(s) keeping in view the above term and conditions for required items. The other terms and conditions shall remain unchanged.

Assistant Store Officer (Purchase)

Corrigendum

This is in reference to e-tender reference no. PC/2025-26/2098 dated 10.3.2026 e-tender ID No. 2026_DAH_163207_1, the specifications (certification line), for the item 32 slice CT scan system has been revised as:

"It is certified that the above mentioned specifications of required 32 Slice CT Scanner with 32 Rows of Physical Detectors do not favour any brand/make/model or any firm."

Memo No.: VSR/2026/ 3269

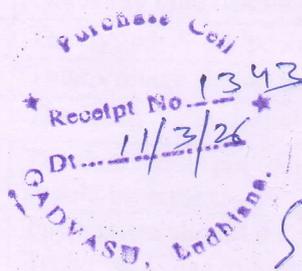Dated: 11.3.2026

Signature of Committee Members

Dr. Vandana
Sangwan, Professor,
Indentor

Dr. Arun
Anand,
Professor cum
Head

Dr. Amarjeet,
Scientist, Dean
Nominee and
Expert Member

Dr. Neetu Saini,
Expert Member

Mrs. Shobha
Rani, AAO,
Comptroller
nominee

Purchase Cell
* Receipt No. 1343 *
Dt. 11/3/26
GADVASU, Ludhiana.

SK-II
@ 11/3/26
11/3/26

Professor cum Head
Deptt. of Veterinary Surgery & Radiology
Guru Angad Dev Veterinary and Animal
Sciences University, Ludhiana.

Department of Veterinary Surgery and Radiology
Specifications of CT scan Unit
REFURBRISHED UNITS WILL NOT BE ACCEPTED

Sr. No.	32 Slice CT Scanner with 32 Rows of Physical Detectors

The offered system should have valid CDSCO Certificate License for manufacturers and import Licence from CDSCO for importers as applicable and system must be AERB type approved. Necessary supportive documents need to be submitted

A	**Gantry:**	
1	The CT scanner should have low Voltage Slip Rings incorporated in the Gantry enables continuous 360 degree rotation of the gantry.	
2	The Minimum scan time for a 360 Degree rotation should be 0.75 Second or less. Standard 32 slice system often features rotation time of 0.5 seconds or less.	
3	The gantry with mechanical tilt of ±30° standard on either side and remote tilt/ Physical Gantry Tilt should be available on either side.	
4	The gantry should be provided with user control panel for easy positioning on either side	
5	CT Should have 32 rows or more physical Detector with each row having at least over 680 elements.	
6	The Gantry should have 3D Positioning Laser lights is mandatory, with patient camera (optional) if possible.	
7	The Scan field of view (FOV) should be 50 cm or more acquisition mode should be 1. Axial scan mode 2. Helical/spiral scan mode 3. Cine (loop) mode	
8	Aperture should be of 70 cm in diameter or more.	
9	Scan times possible with the system in axial & Spiral mode: 1. In axial mode: 0.5 to 0.9 seconds per 360-degree rotation 2. In spiral mode : 0.3 to 0.8 seconds per 360-degree rotation	
B	**X ray Tube:**	
1	The X ray Tube current should be 10 to 400mA or more with increments in steps of not more than 10 mA.	
2	The system should work combined with iterative reconstruction technique to avoid excess radiation.	
3	The X ray tube Cooling Unit should be in built in the Gantry.	
4	The System X ray power should be 32 KW or above.	
5	Tube Voltage should be variable from 70 KV to 140KV	
6	The X-ray Tube should have anode heat storage capacity of at least 5 MHU or more.	
7	The dual focal spot 0.7mm x 06mm to 0.9mm x 0.62mm and 1.2mm x 1.4mm to 1.2mm x 1.2mm should be present.	
8	The System should be equipped with Ultra Low Dose Technology, Specify the Technology with detailed Technical Data On it.	

Dr. Vandana Sangwan, Professor, Indentor

Dr. Arun Anand, Professor cum Head
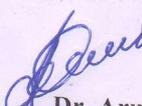
Dr. Amarjeet, Scientist, Dean nominee and Expert Member

Dr. Neetu Saini, Expert Member

Mrs. Shobha Rani, AAO, Comptroller nominee

Professor cum Head
Deptt. of Veterinary Surgery & Radiology
Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana.

C		**X-Ray Generator**
	1.	X-ray generator & chiller should be inbuilt in the gantry
	2.	Should be high frequency type with output atleast 40KW or more
	3.	mA Range: 230mA or more (with incremental steps of 1 mA)
D		**Detectors:**
	1	32 slices per rotation should be possible with the detectors in sub-mm mode. Detector should have minimum 32 rows of physical detectors with each row having at least over 800 elements.
	2	In built mechanism for adapting the tube current during each scan. This should enable radiation dose reduction where body part thickness is less. Specify mechanism used in the system.
	3	Specify the Fan Angle of the X-rays and the geometry. The detectors should not require frequent calibration.
	4	The detectors shall be large area detector with a Z axis coverage of 20 mm or more per rotation
	5	Spiral/helical scannable range should be more than 1210mm in normal mode and in volume mode more than 1165mm. Mention section like maximum spiral capacity, bolus chase acquisition, range of spiral facility in axial direction scan time with 360° rotation pitch factor.
E		**Patient Table:**
	1	The patient table offered should have a minimum load bearing capacity of at least 150 kg or more with Forward, Backward, up & down facility with width of 40 cm or more.
	2	The range of metal free scan should be at least 120 cm or more. Pitch factor = 0.3 to 1.5 sec
	3	Specify the reproducing accuracy of the table.
	4	Vertical & Horizontal table speed range: 1. Up/Down: 20mm +/-5mm/s 2. Tabletop Travel: High Speed:100mm/s or above, Low speed:5mm/s
	5	Mention presence of remote movement of table with speed.
F		**Spiral / Helical Section:**
	1	The system offered should have Spiral Capability of at least 50 seconds & the number of image/sec in real time should be 10 images per second or more for all types of acquisition modes including cone beam correction, neuroimaging studies.
	2	The Image reconstruction Time should be specified.
	3	Contrast Bolus triggered spiral acquisition must be possible
	4	Slice thickness should be atleast 0.8mm or less and range should be freely selectable.
G		**Operator console**
	1.	Separate independent workstation with console, monitor and software from the principal manufacturer alone should be provided
	2.	The applications should be standard at the console and it should be able to perform following functions without requirement of a satellite workstation. (A) Registration, scheduling & protocol selection. (B) Standard functions such as windowing, image addition and subtraction, annotations, measurements, filters, artifact reduction capability etc. (C) Real-time multi-planer reconstruction (MPR) of secondary views, with viewing perspectives in all planes including curved/oblique/coronal/orthogonal/sagittal MPR. (D) Real time contract monitoring. (E) CT Angiography: MIP & MinIP (F) 3D Volume rendering (VRT), volume measurements. (G) 3D surface shaded display. (H) 3D virtual endoscopy. (I) other advanced 3D applicatopns & color coding for different tissues.

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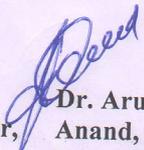nominee and
Expert Member

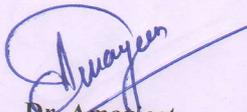Dr. Neetu Saini,
Expert Member

Mrs. Shobha
Rani, AAO,
Comptroller
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Deptt. of Veterinary Surgery & Radiology
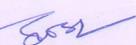Guru Angad Dev Veterinary and Animal
Sciences University, Ludhiana.

| H	**Main Console Computer Section (Acquisition WorkStation) :**
1	The main console CPU offered should be the Latest Multi-tasking Processors and a menu driven platform with a RAM size of at least 16 GB or more, 128 bit Processor.
2	The Monitor should be medical grade with the latest Color of at least 24 inches and high resolution LED flat screen. There should be Console with One Monitor
3	The display matrix should be at least 1024 X 1024.
4	The Hard disk Capacity for both Image and Raw data should be more than 2TB
5	It should have facility to store at least 1,00,000 Images
6	The system should be supported with archiving facility of DVD & CD, USB Blue ray writer in Main Console.
7	Latest DICOM facility to send, store, print, receive, Query / Retrieve, MWM, MPPS etc should be included. The unit should have provision for connecting with the hospital & radiology information system.
8	Option of viewing discs on any PC without DICOM Viewer should be available.
9	Newer version of Compatible DICOM.
10	Computer desk & Cabinet to be included.
11	Console should support filming in user defined formats & filming parallel to other activity , including independence scanning, documentation & post processing & configurable text & image.
12	PACS interface ready without new hardware.
I	**Resolution:**
1	High Contrast Spatial Resolution should be 15 LP/cm or more.
2	The low Contrast resolution must be 2-5mm objects at 0.3%-0.5% contrast difference
3	Noise Suppression protocols to maintain LCR at low dose should be standard.
4	Special Software's (Like MA Modulation in Routine) to ensure Dose efficiency should be standard.
5	Specify the CT Dose Index
J	**Post Processing Workstation: 2 numbers of LCD/LED monitors**
1	Workstation with latest processor, 24 inches or more TFT active- matrix colour LCD/LED Medical Grade monitor with RAM of at least 16 GB & hard disc capacity of minimum 2TB, Image evaluation and processing software including for displaying 512 x512 matrix or more. Screen resolution SXGA or higher. Image archiving by USB, DVD should be available.
2	The reporting Workstation should have veterinary software.
3,	Should be capable of simultaneous viewing all post processing functions and filming independently without the help of main console, two-way data transfer between the operative console & the satellite workstation should be standard.
K	**Dry laser image Printer (Latest configurations)**
1.	Resolution 16bits/500dpi or more with minimum three trays
2.	Support multiple film sizes: one of which must be 17"X14"
3.	17"X14" film 4 packets should be supplied with the machine.
L	**Patient Accessories:**
1	All Patient positioning accessories including patient trolley, head-rest support, coronal head support, leg cushions should be included.

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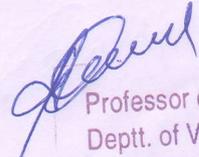
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| M	All Standard Accessories: -
1	Lead Glass of at least 3 ft x 4 ft
2	Compatible UPS of reputed make and suitable rating for the whole system with 30 minutes back-up to run the CT Computer system, console, work stations, Air-conditioners, laser image printer & lighting.
3	Internal/External voltage stabilizer of suitable capacity to handle all electrical gadgets & fittings in the gantry room & console room
4	Single head pressure injector 1 unit (250 syringes) along with tubing should be supplied. Injector monitor with remote injection control facility should be supplied in the console room. Whole equipment assembly should have valid CDSCO Certificate License for manufacturer and import license from CDSCO for importers as applicable, Manufacturing date should not be more than 180 days when it would reach the consignee address.
4	LED X-Ray Film Viewer with adjustable brightness capable of holding 3 films of 14"x17" size: - 2 Nos.
5	Zero Lead Apron (Waist Type) - 4 Nos.
6	Floor Mounted Lead Apron Hanger - 2 Nos.
7	CT Console Table - 1 Nos
N	Training:
1	On site clinical training of 2 week to be provided to Medical Technologists and Radiologist off site training for the two faculty members should be provided in a reputed institute Veterinary specific CT scan course for minimum period of 2 weeks should be provided in India or Abroad.

O. WARRANTY

A. Warranty should be offered for five years for CT scanner system including X-ray tube and all accessories.

B. The offer should be accompanied by original product data sheet/brochure of the product, AERB approval certificate, valid No Objection Certificate (NOC) along with the FDA 510(k) approval/CE certificate for the model offered should be submitted along with the technical bid.

P. Turn key inclusion detail:

1. Vitrified flooring & wall tiling of CT scan room, CT Anteroom, component room, reception area, anesthesia room, screening area, staff & public toilet.
2. Wall painting
3. Plumbing
4. Cables
5. Switches electric
6. Distribution box, MCV
7. Light Fitting
8. Air conditioning of whole unit rooms
9. Furniture
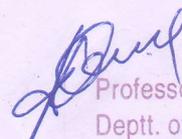10. Centralized oxygen system for anesthesia area, Ante room & CT Scan area.

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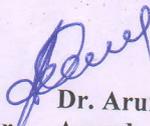
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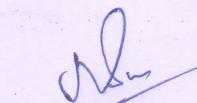
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Q. SPECIAL KEY POINTS

- Additional optional accessories will be purchased as per funds available during the finalization of purchase.
- Service facility should be available in Punjab/Chandigarh.
- List of installation along with reports of at least 10 places in North India.
- Company should not be blacklisted in last 3 year. Certificate must be provided by the firm.
- Bidder can visit the site before placing the bid to evaluate the turn key work. Site Map may be provided to the qualified bidder for reference if needed.
- Selection of tenderer will be by the decision of the technical committee based on the suitability of application and performance of the equipment for veterinary purpose.
- The system and the configuration as mentioned above are mandatory and no particulars as mentioned above shall be treated as optional in the offer.
- All compliance to the tender should be in the form of original data sheet or original certificate from the manufacturer. Particulars mentioned as "Work in progress" will not be considered.

PRICE

- Price quoted should include all parts with installation with no additional financial liability on university.

A. COST OF EQUIPMENT WITH 5 YEARS WARRANTY

Item Name	Basic Price with 5 Years warranty	GST	Total Amount with GST
CT Scan 32 Slice			

B. The cost of the AMC (Annual maintenance contract) from 6th year to 10th year with the terms and condition inclusive of labour and all spares excluding X-ray tube should be quoted in the following table. The AMC should cover all vendor items and local accessories.

Cost of AMC – 6th to 10th year

	6th year	7th year	8th year	9th year	10th year	Total
Cost of AMC						
Tax						
Total						

C. The price of X-ray tube should be quoted separately and should be fixed for the entire duration from 6th to 10th year

	6th year	7th year	8th year	9th year	10th year	Total
Cost of x-ray tube						
Tax						

D. The cost of CMC (Comprehensive Maintenance Contract) from 6th year to 10th year inclusive of labour, all spares and X-ray tube should be quoted.
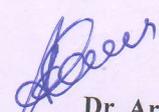
Cost of CMC – 6th to 10 year

	6th year	7th year	8th year	9th year	10th year	Total
Cost of CMC						
Tax						
Total						

E. The AMC and/or CMC cost offered by the bidder will be taken for consideration by technical committee while finalizing the purchase.

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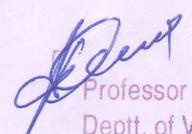
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