



# SKN COLLEGE OF AGRICULTURE

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No.F. ( )/CS/SKNCOA/2026/2931

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## CORRIGENDUM

In continuation of the E Tender for supply and Installation of laboratory equipment's & other Items wide bid document No. F. ( )/CS/SKNCOA/2026/2867 dated 17/02/2026, please read following specifications, instead of existing specifications in published document of E Tender.

Amended Specifications in E-Tender (Lab. Equipment's)				
Item No.	Cat egor y	Particula rs/ Name of item	Existing Specifications in E Bid Document	Modified Guidelines/ Specifications
02	A	Automati c Verte cle Autoclave	<ol style="list-style-type: none"><li>1. Used for sterilization under saturated steam pressure at any selected point between 5 to 22 p.s.i. (adjustable)</li><li>2. These double walled units have inner chamber (Boiler) made of stainless steel (SS-304 grade). Precise De-greased &amp; Pre located outer SS-304 sheet chamber.</li><li>3. Micro Processor based Automatic Control System for Pressure, time and temperature settable by user.</li><li>4. Thick stainless-steel lid is tightened by radial locking system and can be lifted through a pedal lifting device for user comfort better mineral / glass wool</li><li>5. Insulation keeps the surface Temperature normal &amp; avoids heat / steam loss. Systems are hydraulically tested up to 40 p.s.i., as a Safety Measure Fitted with joint less neoprene rubber gasket. Drain Valve facilitates easy cleaning of the chamber. Automatic low water Cut off Device/ with Alarm Pressure control switch Space between boiler and outer shell works as air</li></ol>	Point No. 6, Model ATL /AT3 deleted

*[Handwritten Signature]*

			insulation 6. Model ATL/AT3 7. Interior (mm) 550 x 350 8. Heater "w" Wattage 3 KW Basket 1 no.	
05	A	Compound student Microscope	1. <b>Magnification:</b> 40x to 400x 2. <b>Stand:</b> All metal constructed body with properly balanced, inclinable arm up to 90 degrees for easy viewing 3. <b>Focusing:</b> Separate coarse fine focusing knobs 4. <b>Stage:</b> Full square stage 112 x 112 mm size. 5. <b>Illumination:</b> Substage Mirror Attachment and <b>L.E.D Substage</b> 6. <b>Attachment with Light Adjuster.</b> 7. <b>Nose piece:</b> High quality triple nose piece with positive click stops 8. <b>Objectives:</b> 10x & 40/45x (S. L.) (all achromatic) 9. <b>Eyepieces:</b> High quality Wide-fields 10xWF & 15x WF <b>Condenser:</b> Movable abbe type condenser with iris diaphragm	Certificates of ISO 9001, ISI and CE certificates should be given
06	A	Dietary fiber analysis system	1. Multi Analysis Dietary Fibre estimation system for quantitative determination of total soluble and insoluble dietary fibre content with rapid filtration and other recognized methods AOAC & EPA). <b>RAPID Fully AUTOMATED</b> Auto Sequence Microprocessor Based system. Suitable for determination of Dietary fibre content in all type of raw material Feed & Agriculture Products, Forages, Grains, related parameters in plants materials, Oil Cakes, Cereals & its products, Seeds & Many More & Many More. Sample loading: 8-12 samples with an independent sample loading facility with individual valves for drain and vacuum. The system should have facilitated either individual filtration or	Point No. 2, modified as-System should have Water Bath shaker for precise PID temperature controller with digital display with inbuilt safety features for auto tuning and auto error display. It should have especially for continuous nonstop biological operation for uniform noiseless orbital /reciprocal motion. System should have perfect orbital motion, continuous variable speed with accurate RPM/SPM controller, Digital display of Speed and time. Auto stop/auto start feature with anti-vibration mount operation, sample size: 0.1 to 5 gm. Electrical Requirement: 230 V/50Hz-230V/60Hz, Capacity: 24-48 samples per day.

		<p>common filtration based on the application required. It should incorporate a borosilicate expansion vessel.</p> <p>2. System should have Water Bath shaker for precise PID temperature controller with digital display with inbuilt safety features for auto tuning and auto error display. It should have especially for continuous nonstop biological operation for uniform noiseless orbital motion. System should have perfect orbital motion, continuous variable speed with accurate RPM controller, Digital display of Speed and time. Auto stop/auto start feature with anti-vibration mount operation, sample size: 0.1 to 5 gm. Electrical Requirement: 230 V/50Hz-230V/60Hz, Capacity: 24-48 samples per day. Electric Voltage controller stabilizer should provide. ISO 9001:2015 &amp; CE Certified.</p> <p>3. Other Features: Vacuum Source: Electrical Vacuum suction pump for filtration, Fixed filtration glass chamber in the filtration module. Sample loading: Individual sample loading with independent mechanical control. Control valves: Individual control valves for vacuum and filtration. Uniquely designed expansion vessel to feed samples after enzymatic digestion &amp; residue collection vessel. Counter pressure option with reverse air stream. Essential Accessories like Crucible Rubber, Extractor Rubber, Teflon Bush &amp; Nylon Bush.</p> <p>4. Bath designed for studies on Tissue metabolism, Enzymes and Protein coagulation &amp; experiments requiring. Shaking of subject</p>	<p>Electric Voltage controller stabilizer should provide. ISO 9001:2015 &amp; CE Certified.</p>
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matter at constant speed under controlled temperature environment. System consists of stirring in SS water tank with reciprocal motion with thermostatic heating bath. Enzymatic digestion vessel. Microprocessor based Digital PID Temperature controller with auto tuning facility. Temperature range: Ambient to 110°C, Temperature Setting: Increments of 1°C. Strokes: 0-120 strokes/minute continuously variable. Drive: Heavy duty DC motor designed for uniform noiseless motion. Shaking speed can be controlled by means of Electronic Speed Controller cum Digital Indicator upto 150 RPM. Speed Indication: Digital LED Display. Heater: Immersion heater thermostatically controlled. Inner tank made of Stainless Steel-316 grade and Exterior of Stainless Steel-304 grade. High density glass wool insulation to prevent heat loss & ensure constant temperature. Shaking tray consist of Lotus clamps to hold Erlenmeyer flasks. High grade Silica glass Crucible with P2 (P100) Disc, 40-90 µm Microns for free Timer should be inbuilt digital timer: 0 to 99.59 Settable in Hrs. Ins & Secs, Speed setting with Rotary potentiometric knob for continuously variable speed. Speed Indication should be Digital Display with LED indication. High grade Silica glass marked crucible with P1 grade disc, 40-90 µm Microns (70mm height) Optional (P0/P2) for free reagent while operation. Safety Features: Over temperature protection, Auto error Indication, Sensor break

			<p>protection. Heater cut off feature with buzzer indication and alarm, Acoustic signals with visual display Auto tuning facility, Anti vibration mount, Auto stop &amp; Start feature. System should be kept in AC rooms. System should have power requirements should be 220-240V with Power controlled voltage Stabilizer.</p>	
08	A	Double Beam UV-Spectrophotometer	<ul style="list-style-type: none"> <li>• Double Beam UV-VIS Spectrophotometer</li> <li>• Parameter Specification</li> <li>• Type UV-Vis Double Beam Spectrophotometer</li> <li>• Source Deuterium lamp and tungsten halogen lamp</li> <li>• Detector Two-Photodiodes</li> <li>• Grating Holographic diffraction Grating -1200mm lines/mm</li> <li>• Automatic function <ul style="list-style-type: none"> <li>a) Automatic lamp section</li> <li>b) Automatic wavelength selection, filter selection</li> <li>c) Automatic Dark correction</li> <li>d) Automatic Cuvette Selection- Five position</li> <li>e) Automatic Base line calibration</li> </ul> </li> <li>• Range of operation <ul style="list-style-type: none"> <li>Wavelength: 190 nm to 1100nm</li> <li>Photometric Absorbance: Up to <math>\pm 4.0</math> Abs</li> <li>Transmittance: 0 to 100 %T</li> </ul> </li> <li>• Bandwidth 1.0 nm</li> <li>• Resolution 0.1 nm, 0.001 Abs &amp; 0.1 %T</li> <li>• Measurement mode <ul style="list-style-type: none"> <li>%T, Abs, Concentration (By K-factor, BY standard, or BY saved Standard), DNA and Protein analysis, Multicomponent analysis, Fluoride analysis, Nitrate analysis, And Time Scan</li> </ul> </li> <li>• Path length Default 10 mm path length, compatible with 20 mm, 40 mm, 50 mm &amp; 100 mm</li> <li>• Accuracy Wavelength: <math>\pm 0.5</math></li> </ul>	<p>Point No14. Display In-built Display LCD Touchscreen (1200 x 800 Resolution)-Multitouch Size- &gt; 10.0 Inches</p>

			<p>nm Absorbance: ± 0.005 Abs Transmittance: ± 0.5%T</p> <ul style="list-style-type: none"> <li>• Display In-built Display LCD Touchscreen (1200x 800 Resolution)-Multitouch Size- 10.1 Inch</li> <li>• Other parameters Total Memory: 128 GB Printer port: External Support All printers supporting windows 10 or Higher version PC connectivity: YES, through USB Other connectivity: Wi-Fi And Bluetooth</li> <li>• Operating system Windows 10 or Higher</li> <li>• Power supply 230 V± 20 volt and 50Hz</li> <li>• Operating temperature 8 – 48 degree Celsius</li> <li>• Operating humidity 40 to 85 %</li> <li>• Accessories 2 number cuvette, pen drive, USB cable, Manuals</li> <li>• Password Protection Yes</li> <li>• Administrator and User Login Yes</li> <li>• Audit Trial Yes</li> <li>• Provision for organization name, Chemist name &amp; Instrument ID Yes</li> <li>• Inbuilt Debug Software Yes</li> <li>• Warranty 3 Years</li> </ul>	
13	A	Hot Air Oven	<ol style="list-style-type: none"> <li>1. The equipment must have a microprocessor PID controller that includes a timing function for precise temperature control.</li> <li>2. The chamber should be made of polished stainless steel and feature rounded corners to facilitate easy and efficient cleaning.</li> <li>3. The equipment must ensure uniform distribution of air temperature within the chamber to guarantee consistent results.</li> <li>4. The equipment should</li> </ol>	<p>Point No. 6. The internal dimensions of the chamber should be 550 mm (width) x 450 mm (depth) x 550 mm (height). Approx. The external dimensions of the equipment should be 830 mm (width) x 585mm (depth) x 695 mm (height). Approx.</p> <p>7. The chamber should have a total volume of 125-130 litres.</p>

utilize forced-air convection to enhance temperature uniformity and stability.

5. The equipment must be equipped with a double-layer glass door and a larger viewing window to provide better visibility of the interior.
6. The internal dimensions of the chamber should be 550 mm (width) x 450 mm (depth) x 750 mm (height). Approx. The external dimensions of the equipment should be 830 mm (width) x 585mm (depth) x 695 mm (height). Approx.
7. The chamber should have a total volume of 125-130 litres.
8. The equipment must have a temperature range of Room Temperature +10°C to 300°C. The temperature accuracy of the equipment should be within  $\pm 1^\circ\text{C}$ .
9. The temperature display should have a resolution of  $0.1^\circ\text{C}$  for precise readings.
10. The equipment must offer a timing range from 1 minute to 9999 minutes.
11. The equipment should include 2 shelves for internal organization.
12. The equipment must have a power consumption of 1500-2000 watts.
13. The equipment should operate on a power supply of 220-240 volts, 50Hz, single phase.
14. The equipment must comply with ISO 9001, CE, GMP, and USFDA standards or be European CE certified.

Documentation for Installation Qualification (IQ), Operational Qualification (OQ), and Performance Qualification (PQ)

			must be provided.	
15	A	Magnetic stirrers	<ol style="list-style-type: none"> <li>1. Magnetic Stirrers with stainless steel top housing,</li> <li>2. PMDC/BLDC or equivalent motor,</li> <li>3. Speed regulation controller,</li> <li>4. Step-less speed control,</li> <li>5. Digital Speed Indicator</li> </ol> Maximum loading 2 litre	Add RPM speed = > 1400
18	A	Rotary Shaker	<ol style="list-style-type: none"> <li>1. Body made out of thick mild steel finished with powder coating.</li> <li>2. PMDC/BLDC or equivalent motor used for shaking</li> <li>3. Power: AC 220V/110V 50HZ/60HZ</li> <li>4. Speed: 0-360rpm (digital display)</li> <li>5. Amplitude: 20mm</li> <li>6. Mode: rotary</li> <li>7. Power of electric motor: 120w</li> <li>8. Time range: 0-99minutes</li> <li>9. Storage: 250MLx20</li> </ol> Size: 50x38x22cm	Point No. 4. Speed: 50-360rpm (digital display) Point No. 9. Size: 50x38x22cm Deleted
01	C	<b>Gel Documentation System.</b>	<b>Gel documentation system-</b> <ol style="list-style-type: none"> <li>1. System should have in-built touchscreen with Larger 12.5"-14.5" display for image acquisition, Protein visualization and further quantification, documentation and publication should have software.</li> <li>2. System should have option to operate with laptop or desktop computer.</li> <li>3. System should have 16-bit scientific grade camera with 65,536 Grey levels</li> <li>4. System should have camera with 20-megapixel native resolution.</li> <li>5. System should have built-in computer-controlled camera, lens, lighting, darkroom and interchangeable UV and Blue light table options.</li> <li>6. System should have USB 3.0 technology for fast image transfer.</li> <li>7. System should have passive cooling (camera air circulation) for significant</li> </ol>	Point No. 18 written as: system should have options for UV pad for DNA/ RNA and protein gels and option for fluorescence stain imaging: Ethidium Bromide, Sybr-Safe, Sybr-Green, Gel-Red, Gel-Green, Sybr-Gold, GFP, Pro-Q Emerald, Sypro Ruby, FITC, DAP.

		<p>background noise reduction.</p> <ol style="list-style-type: none"> <li>8. System should have dark room and EPI White LED along with UV light.</li> <li>9. System should have UV cut-off filter and 4 or more positions filter wheel.</li> <li>10. System should be made of Stainless Steel, Rust Free, covered with chemical-resistant Epoxy paint.</li> <li>11. System should have UV Trans illuminator of dimension 26 x 21 cm FOV image area and Slide out Super Bright transilluminator to get background noise free images.</li> <li>12. System should have multiuser Software for analysis with local area network (LAN) connectivity.</li> <li>13. System should have remote access for image transfer and further analysis.</li> <li>14. System should have Image Master Assistant - powerful tool to control sample image quality. A modification of the image display does not modify the Image Master data.</li> <li>15. System should have One-touch fully automated image acquisition process.</li> <li>16. System should have Auto-exposure, manual-exposure and serial modes - 3D and 3D-live image acquisition view mode.</li> <li>17. System should have future option for Image enhancement, annotation, illustration and comparison, Molecular weight, Dendrogram.</li> <li>18. System should have UV pad for DNA/ RNA gels and option for fluorescence stain imaging: <i>Ethidium Bromide, Sybr-Safe, Sybr-Green, Gel-Red, Gel-Green, Sybr-Gold, GFP, Pro-Q Emerald, Sypro Ruby, FITC, DAP.</i></li> <li>19. System should have future</li> </ol>	
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			<p>option for Colorimetric stained protein gels, X-Ray film, auto-read, SSCP gels, colony dish and flask imaging and other EPI white light applications.</p> <p>20. System should have power requirements should be 220-240V with separate Power controlled voltage Stabilizer.</p> <p>21. System should have all necessary accessories and should be kept in AC rooms.</p> <p>22. System must be supplied with compatible branded desktop i5, 8GB RAM, 19 inch screen with key board, mouse and one branded 3 KVA online UPS with 45 minutes or more power backup.</p> <p>System should have Warranty three years and must be mentioned on authorization letter.</p>	
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Copy for information and n/a to:

1. The Comptroller, SKNAU, Jobner
2. The Convener/Members of Tender Committee, SKNCOA, Jobner
3. The DDO/SO, SKNCOA, Jobner
4. The Treasury Officer, SKNAU, Jobner
5. O/I CIMCA, SKNAU, Jobner for uploading to University Website-[www.sknau.ac.in](http://www.sknau.ac.in),  
[www.sppp.rajasthan.gov.in](http://www.sppp.rajasthan.gov.in) & <https://eproc.rajasthan.gov.in>
6. Guard File

  
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