Gautam Buddha University

Greater Noida – 201 310

Website : www.gbu.ac.in

BID FORM

FOR THE SUPPLY OF EQUIPMENTS FOR

MATERIAL TESTING LABORATORY

OF

SCHOOL OF ENGINEERING

Gautam Buddha University
Greater Noida – 201 310

TENDER FOR SUPPLY OF EQUIPMENT FOR MATERIAL TESTING LABORATORY OF SCHOOL OF ENGINEERING

Tender	**Supply of Equipment for Material Testing Laboratory**
Opening Date	13th May, 2011
Closing Date	13th June 2011 upto 3.00 p.m.
Last date of Bid Submission	13th June 2011 upto 5.00 p.m.
Technical Bid Opening Date, Time & Place	14th June 2011 at 3.00 p.m. Venue : Conference Room of the Registrar Office, 1st Floor, Administrative Building, G.BU., Gr. Noida.
Earnest Money Deposit	2% of the offered cost
Completion Period	Within 10-12 weeks from the date of Purchase Order issued
Bid System	Two Tier : 1) Technical Bid 2) Financial Bid
Technical Bid Shall Contain	i. Technical specifications of each equipment quoted ii. All documents in support of commercial terms & conditions and eligibility criteria. iii. Bidders Proforma iv. EMD & Tender Fee demand drafts / pay orders.
Financial Bid	The Financial Bid shall contain rate schedule only. The price shall be in words as well as in numeric numbers.

"TECHNICAL BID (BIDDER'S PROFORMA)"
(To be submitted in separate envelope)

1. Name of the firm: ……
2. Date of incorporation……..
3. Name of the company – Government / Public Ltd. / Private Ltd. / Partnership / Proprietorship : ……
4. Specify the number of years in this line of activity by the company:……..
5. Sales Tax/VAT registration No. (please attach certificate) : ……
6. Experience (in year) of supplying & installation for similar software to IITs, NIT's or Central Universities or any Academic Institute of National Repute (please attached certificate/P.O.) : ……..
7. Turnover in the last three financial years (Figures should be in Indian Rupees in Lakhs; please attach the certified copies of balance sheet with trading, profit & loss account) : (if the figures for 10-11 are not available then they may furnish balance sheet of year 07-08)

2008-09	2009-10	2010-11

8. Provide the postal address, telephone & fax numbers, and email address of the nearest service center : ……
   ……..
9. Mention delivery period from the date of the placement of an official purchase order : ……..
10. Enclose the list of customers to whom you have supplied /serviced during the last 3 years ending 31/03/2011 with full postal address and name of the contact person with phone, FAX numbers, and E-mail-id, billing amount etc. Certificate regarding satisfactory performance from the minimum three end users should be furnished.
11. Are you the manufacturer / authorized dealer / distributor/ reseller for the product quoted (please attached relevant certificate): ……..
12. Was there any lapse or delay in supplying the goods ordered or any service related issue during the warranty period for the products supplied by your firm to different Institutes/Universities during last three years? If yes, provide details.
13. Deviations in specifications, if yes, please mention in separate sheet.
14. Whether technical specification are attached with Technical Bid or not. Yes/No

DECLARATION

1. The rates quoted in financial bid are inclusive of all taxes, packing, handling and installation charges.
2. The information given in the financial bid by the undersigned is correct.

(SIGNATURE OF THE BIDDER)
WITH SEAL

NAME : ……

ADDRESS : ……

: ……

: ……

Tel./Mobile No. : ……

Note: The financial bid is required to be submitted separately in a sealed cover super scribing as 'Supply of Equipments for Material Testing Lab. of School of Engineering".

Annexure : 'A'

Gautam Buddha University

School of Engineering

TECHNICAL SPECIFICATIONS: MATERIAL TESTING LABORATORY

S. No.	Equipment	Technical Specifications
1	**Vicker Hardness Testing Machine**	**Hardness Scales** :Vickers; Test Load: 10gf – 50kgf; Force Application: Load cell; **Standard Compliance**: ISO 6507, ASTM E384 & E92, and ISO 4546; **Load Control**: Automatic (loading/dwell/unloading); **Load Duration** (Dwell Time) 1 - 999 seconds; **Turret**: Automatic; **Eyepiece** Magnification 10X; **Digital Encoder Resolution**: 0.1µm; **Objectives**: 50X; **Total Magnification**: 400X (for measurement); **Optical Path 2-way switchable** : eyepiece/camera; **Light Source**: LED; **Hardness**: Value 5-digit; **Diagonal Length**: 4-digit (D1, D2): **Data output**: Built-in printer; **Statistics**: Number, Average, Standard deviation, Range; **Conversion:** Brinell, Rockwell, Superficial Rockwell, Tensile Strength; Vertical Capacity: 79mm(3.1 in) – motorized; **Test Load accuracy: =/- 1.5% < 200g, +/- 1% > 200g**; **Motorized XY – Stage**; **Operating Temperature Range**: Should be workable in Indian weather conditions; **Humidity** 10%-90% non-condensing; **Power Supply** 220V AC, 60/50Hz. Accessories: Diamond Indenter with opposite sides of the faces should be 136^{o}(As per standard)
2	**Brinell Hardness Testing Machine**	**Hardness Scales:** Brinell; **Application:** Castings & Forgings; **Optics:** Magnification 40X, resolution 12.5 µm, range 4mm; **Display:** Hardness HB Value (After Entering Diagonal Length into Keypad Calculator); **Resolution:** 0.1 unit if HB < 100; else 1.0 unit; **Standards Compliance:** Conforms to ISO 6506, ASTM E10, and JIS; **Load Control:** Automatic, Load Cell Control; **Load Range:** 187.5 - 3000 kgf; **Test Loads:** 187.5, 250, 500, 750, 1000, 1500, 3000 kgf; **Brinell Test Procedures:** HBW 10/3000, HBW 10/1500, HBW 10/1000, HBW 10/500, HBW 10/250, HBW 10/100,

		HBW 5/750, HBW5/250, HBW 2.5/187.5; **Conversion:** Brinell, Rockwell, Superficial Rockwell, Tensile; **Dwell Time 2:** 2- 99 Seconds; **Data Output:** Thermal Printer Integrated and Bi-Directional RS-232; **Maximum Specimen Height:** 280 mm (11 in); **Throat Depth:** 130 mm (5 in) (from Centre-Line); **Specimen Access:** External Surfaces Roughly Grinded, Ra <21.6 µm; **Power Supply:** 220VAC, 50/60 Hz; **Operating Temperature Range**: Should be workable in Indian weather conditions Accessories Flat anvil with a diameter of 235 mm (9.2 in) for large specimens, such as castings and forgings. Extra large V-anvil, for round parts with a diameter between V-Anvil 60-150 mm (2.4 - 5.9) Indentors: Steel Ball Indentor – 2.5mm, 5mm, 10mm Carbide Ball Indentors: 2.5 mm, 5 mm, 10mm

Annexure : 'B'

Gautam Buddha University

School of Engineering

TECHNICAL SPECIFICATIONS: MATERIAL TESTING LABORATORY

S. No.	Equipments	Technical Specifications
1	**Rockwell Hardness Testing Machine**	**Hardness Scales** A, B, C, D, E, F, G, H, K, L, M, P, R, S, V; **Preliminary Load** 10 Kgf (98.07 N); **Total Test Force** Kg (N) 60, 100, 150 Kg (588.4, 980.7, 1471 N**); Test Force Application Type**: Calibrated Spring (Minor Load), **Dead weight stack** (Major load); **Dwell Time**: Minor **Dwell Time** 0.1 - 50.0 seconds, **Major Dwell Time** 1.0 - 50.0 seconds; **Elastic Recovery** 0.2 - 50.0 seconds; **Machine Dimensions** : Overall height 934 mm (36.83 in), Overall width 292 mm (11.53 in), Overall depth 566 mm (22.3 in); **Vertical Testing Capacity** 289 mm (11.43 in) accessories may decrease available capacity; **Throat Depth** 175 mm (6.93 in) at the top, 155 mm (6.13 in) at the bottom; **Maximum Specimen Weight** 100 Kg (220 lb); **Specimen Illumination** Adjustable LED; **Standards** Compliant ASTM E18, ASTM D785, ASTM B294, ISO 6508, JIS Z2245, GB/T 230; **Test** Cycle Type Motorized (Manual preload, auto trip, auto brake); **Resolution** 0.1 or .01 HR (adjustable); **Statistics:** Number of Tests, Mean, Standard Deviation, Maximum, Minimum Range, CP, CPk, Individual test hardness numbers (displayed in a scrolling vertical list); **Conversion** ASTM E140, ISO 18265, DIN 50150, GB T1172; **Convert** up to 4 scales simultaneously; **Data Output** USB and RS-232; **Data Memory** 999 per each hardness scale; **Languages** English, German, Spanish, French, Italian, Chinese (Simplifi ed); **Display LCD** digital panel, backlight, 320 x 240 resolution; **Power Supply:** 220V AC, 60/50 Hz; **Operating Temperature Range**: Should be workable in Indian weather conditions. Accessories: Diamond Rockwell C indentor, Rockwell Indentor (Steel Ball) 1/16", Plat anvil 70mm and V –anvil 6 mm dia., HRB traceable HRC, HRB test blocks with certificate, Diamond Cone, User's Manual
2	**Torsion Testers**	**Torsion,10,000 in-lbf w system 220V, 50/60 Hz, 1 Ph, Maximum Specimen Diameter :** 38mm**; Maximum specimen length:** 457mm**; Test speed:** 5^{o} – 360^{o}**; Torsion Measurement accuracy:** +/- 0.5 %

		of indicated torque from 0.2% to 100% capacity**; Position Measurement Accuracy:** +/- 0.1% of reading or 0.05^{o} whichever is greater**; Speed Accuracy:** = +/- 0.1% of set speed**; Operating Temperature Range**: Should be workable in Indian weather conditions**; Storage Temperature Range:** -10^{o}C to 45^{o} C**; Humidity Range:** 10% to 90% non condensing wet bulb method**; Power supply:** Standard 220/240 VAC, 50-60 HZ**; Closed Loop Control Note: Machine must be capable of CLC; Standard Software Package; Torsion Test Module required with software** **Accessories: Two Torsion Pick-Up 1K-10K** capacity machines are preferred to obtain a more accurate indication of the differential specimen twist. The angle of twist module is required. Bi-directional Gripping systems to assure slip free specimen clamping regardless of twist direction. **One Set of holding chucks**: These chuks enable the testing of specimens from 5/16" to at least 1-1/2" in diameter. The distance between chucks should be adjustable up to a distance of 18 inches. A trilingual, backlit LCD display should read torque in in-lbf, kg-cm, or N-m and position in either degrees or radians. Speed should be displayed in degrees or radians per minute. The amount of specimen twist should be displayed if the torsion pickups and signal conditioner are obtained. The handheld terminal can be used within a 6 foot radius of the console. A keypad provides functionality for setting a closed-loop speed, return, max values and stop. A precision optical encoder should be included with every machine which monitors the position of the driven chuck and reads in either degrees or radians. • A high speed serial port for data transmission or connection to a computer. • A variable sample break function to display peak values automatically. • The system is modular, it accepts additional load cells and other transducers, which are automatically identified by the system. Loading System: A four-quadrant drive is included to provide closed-loop speed control from 5^{o} to 360^{o} per minute. Speeds and direction of twist may be preset or changed during tests by means of the keypad. A variety of computer/software options are available for closed-loop control of more complex functions such as load and angle of twist rate and hold functions. **Standard Software Package** The software should be used for data acquisition and, if the machine has the appropriate servo system or four-quadrant drive, for closed loop machine control. In addition, this software should include the following features:

		a) Use of SQL 2000 Databases b) User Customized Reports c) Standard Programs for X-bar, R and frequency distribution/histograms d) The ability to recall, replot, and rescale curves e) Selection of available standard Test Modules for a variety of testing applications f) The ability to recall test information spanning Test Modules g) User configurable Machine Parameter and Control Settings Built-in Recall Functionality HTML Help which includes the ability to print a manual; Standard Device Interface - requires Gage port NT receiver; Test Result Creator; Ability to zoom in on a section of the graph; Ability to have different Graphs generated between printout and the screen; Ability to have different Reports generated between printout and the screen; Advanced Modulus Calculations; Multi Curve Functionality; Ability to export test results and test curve data in ASCII delimited format; Instrument Setup - Channel Definition; Ability to incorporate Company Logo on Printouts; Calculate Results from a stored curve **Closed Loop Control Note: Machine must be capable of CLC** System arranged for closed-loop feedback machine control of load/strain/position. The testing machine must possess either a servo control loading system for a 4-quadrant motor drive system for mechanical machines. **Torsion Test Module required with Software** Additional Torsion Test Module for Software.
3	**Impact Testing Machine (IZOD/ CHARPY)**	**Pendulum Impact Tester for Metals with Digital Display; Basic Pendulum Capacity: 406 J – 450 J ; Drop Height: 1.52 m; Impact Velocity: 5.3 – 5.47m/s; Digital Display facility; Electronic Brake facility; Motorized Return facility including electric brake; Electric Suppy: 220V; Charpy Striker (ASTM E 23) 8 mm radius; Charpy Centering Tongs(Metal Impact); Charpy Anvils; Metal Impact IZOD Height setting gage; IZOD Stiker; IZOD anvils; Impact Metal platform for software; Metals library for software provided.** Pendulum Impact Tester for metals should complie with the latest requirements of ASTM E 23 and ISO 148. The microprocessor impact Display, should be provided with a backlit LCD display and key pad membrane for conducting the test, obtaining test results, calibrating and configuring the system. Other features should include: Port for outputting test data to a serial printer or to a computer; Automatic windage and friction correction; Automatic or manual update of specimen number; Operator selectable energy units of in.-

		lbf, ft-lbf, Joules, kg-m, kg-cm; Calculation and display of two strengths based on dimensional inputs. Units of ft-lbf/in., J/m, in.-lbf/in., kg-m/m, ft-lbf/in², kJ/m², in.-lbf/in², kg-m/m² should be selectable; Selection of break types for report documentation with calculation and display of average and standard deviation selectable for a series of tests and by similar break types. **Charpy Striker (ASTM E 23) 8 mm radius:** Charpy Striking Tup for testing in accordance with ASTM E 23 **Charpy Centering Tongs, Metal Impact** Self-Centering Tongs for use in properly setting Charpy specimens in the machine, especially those which have been subjected to either heat or cold. **CHARPY ANVILS** **Metal Impact Izod Height Setting Gage** A Notched Izod Height Setting Gage is used to help the operator clamp the 10mm square izod specimen firmly in the support vise so that the centerline of the notch is in the plane of the top of the vise within 0.125mm (0.005in.). As per ASTM Method E23. **Izod Striker:** Izod Striking Tup. **Software for Impact Testing Machines** Impact Testing Module of Laboratory Data Acquisition System software should be provided. A database for storage, retrieval and reporting of Impact results should be present. In addition, this software should include the following features: Test Method Library (ASTM, ISO, EN etc.) for a wide variety of applications; Test Method Editor to create/modify own test settings from a method above; Results editor to create your own results; The ability to control multiple machines; Multifaceted levels of security; Tabbed Test and Recall area to work on multiple machines
4	**UTM (1000KN)**	**Universal Testing Machine** 1,000 kN capacity Hydraulic Universal Testing Machine A trilingual, backlit LCD display will read force in either lbf, N, or kgf. It should also display position and strain values when the appropriate instrumentation and signal conditioners are obtained. If the position instrumentation (high resolution encoder) and signal conditioning card are ordered, the speed will be displayed. The Indicating and Control System should be mounted on the console or can be handheld within a 6 foot radius of the console. A keypad provides functionality for loading and unloading in the manual mode, for pump start/stop, return, max values, crosshead up/down and stop. Through the handheld terminal, this system operates in the manual mode only, which can be configured via a menu-driven user interface. A variety of hardware and computer/software options are available for closed-loop servo control, the plotting of curves, data

		acquisition and storage etc. Other Features Included Are: An high speed serial port for data transmission or connection to a computer. A variable sample breaks function to display peak values automatically, and return the crosshead when activated. The system should be modular; it should accept additional load cells and other transducers, which are automatically identified by the system. Accuracy: Within +/- 0.5% of the indicated load from 0.2% to 100% of capacity. Typical resolution is better than 1/100,000 of capacity. **Basic Testing Clearance:** **Horizontal opening between columns**: 20" - 30" **Maximum tension length specimen length including stroke**: 40" - 45" **Maximum compression length clearance including stroke** : 35" - 40" **Standard Speed Ranges**: 0 to 3" per minute testing speed 12" per minute adjustable crosshead (flange mounted motor on crosshead) Standard Tools: **One (1) set of liners, pinion shafts, and cranks (for use with optional wedge grips).** **One (1) 9" diameter compression plate** Electrical Equipment: Motor and Controls - Pump Motor - 3 H.P. Crosshead Motor - Reversing 2 H.P. 230volts/440 +/- 10%, 50/60 Hz, 3 phase (Specify voltage) Push button controls; Automatic limit switches Other Outstanding Features: a)Pressure Transducer Load Weighing System, with dual pressure, friction-free piston. b)Automatic backlash eliminators - eliminate mechanical lag in the loading system c)Reversing adjustable motorized crosshead with push button control mounted on the console d)Automatic Valve - Hydraulic safety valves e)Automatic piston zero positioned **Closed Loop Controller**: Indicating and Control System can be provided with closed-loop control, allowing precise control of load, strain and position rates when used with Software. The software when used with this servo option also should allow to program in segmented control functions including rate, hold and slow speed

		cycling (not through zero load). End conditions should be preprogrammed so that the system will automatically switch control modes during a test. The end condition for a segment can be a selected value of load, strain, position or a change in time. In addition, a number of steps can be programmed to be repeated a number of times. These capabilities are available only with a computer and our software. **Grips and Accessories:** The load frame shall be equipped with open front **hydraulic gripping** to allow for quick and easy loading and unloading of tensile specimens. Jaw faces for flat samples of 0-70mm thick samples and for round samples the diameter is 12-70mm. **2 No. Solid Flat Grips, 200,000-lb** Solid Flat Wedge Grips, 200,000 lb. capacity **2 No. V- Grips, 200,000-lb** V- Grips, 200,000 lb. capacity **Display of Position via Encoder and Module** High Resolution Encoder and Signal Conditioning Card to provide for the indication, feedback and control of position and speed functions down to 0.002 in. (0.05 mm) per minute. **Screw Covers for UTM, set of 4** Non-Metallic Screw Covers, for 200,000 lb capacity standard UTM, to prevent dirt and grit from contaminating screw threads. **Compression Tool Suspended 6-1/2" dia. 350K cap.** Suspended 6-1/2” diameter, Spherically Seated Compression Plate (350,000 lbf capacity) **Compression Tool Block 6-1/2" dia. 350K capacity** Spherically Seated Compression Blocks: 6-1/2” diameter, 350,000 lbf capacity **Transverse Flexure Tool, 30" span - 6" wide** Flexure Tool – 30” span, 6” wide **Strain Gage Extensometer with Quick Attachment Kit (50mmgl. with 20% measuring range)** **Software required with UTM** Software Package for use with machine equipped Indicating and Control System with closed loop control. In addition, this software includes the following features: Test Method (ASTM, ISO, EN etc) Library for a wide variety of applications; Test Method Editor to create/modify your own test settings from a method above; Results editor to create your own results; The ability to recall, replot, and rescale curves; The ability to control multiple machines; Multilingual; Multifaceted levels of security; Tabbed Test and Recall area to work on multiple machines;

		Software package supplied with Test Method Library Set. Standard Functionality: • User Friendly Graphic Interface • At least one Test Method Library Set • Built-in Recall Functionality • Advanced Database Utilization, SQL Server 2005 Express Edition SP2 • Standard SPC analyses for X-bar, R and frequency distribution/histograms • Zoom-Ability to zoom in on a section of the graph • Multiple and different graph capability within one method • Multi Curve Functionality • Ability to export test results and test curve data in ASCII delimited format • Central server capability • Calculate new results from a stored curve • Ability to incorporate Company Logo on Printouts • Free Help Desk Support **Formula Generation AFM for the Software :** The ability to create your own customized formulas **Closed Loop Control AFM for the Software** **Electrical Requirements** *Voltage tolerance is +/- 10%*
5	**Spring Testing Machine**	**25kN Dual Column Spring Testing System, Capacity 25 kN (2,500 kg, 5,600 lb)** **Basic Frame:** Standard features include: **Servo motor drive system** - Digital crosshead drive system with fully variable speed control. - Integrated digital closed-loop control **User Control Panel (UCP) mounted to load frame provides** a convenient means for operating the test system and improving test efficiency. The panel includes the following functions: - Manual control of system load crosshead - Fine control thumb-wheel for precise control of crosshead - 2 user programmable soft keys for functions such as zeroing channels - Specimen protect feature to limit load applied to test system while in manual control - Test start/stop and return to start - Reset height button **Controller:** Data acquisition

		- Integrated electronics synchronously measures load and height - Data acquisition rates up to 500 Hz - Fast and Simple one stroke testing. - Two optional analog channels available for additional load or height measuring devices. - One optional channel for additional digital position device - Automatic recognition and calibration of load and position transducers. **Safety Devices** - Interlocked lexan guard with keyed switch for set-up mode - Adjustable crosshead travel limits - Prominent emergency stop switch - Software selectable load safety limits **Standard Pressure Plates** - Set of two 180 mm diameter pressure plates, hardened and ground - M16 female thread for mounting additional load cells, tension devices or other fixtures. - Main upper and lower pressure plates factory adjusted to be parallel within 0.02 mm at 100 mm distance. **Machine parameters** - Maximum testing speed: 1000 mm/min (40 in/min). - Crosshead travel: 1135 mm (44.7 in). - Horizontal daylight: 420 mm (16.5 in). - Position resolution 0.000125 mm (0.000005) - Position accuracy under no load conditions 0.02 mm - Data collection: 500 Hz synchronous data logging. - Dual Pre-loaded ballscrews with two 50 mm guide columns. CE mark conformity. Voltage option 220 V. Standard Test Space, Maximum Crosshead Travel, 1135 mm (44.7 in) **Load Cell:** Tension/Compression Load Cell, Capacity 25 kN (2,500 kg, 5,625 lb.) - Accuracy +/- 0.5% of reading from 1% to 100% of load cell capacity. - 300% overload capacity - Integral compression load stops minimize chance of cell damage during overload conditions. - M16 female connection on 180 mm compression plate - 180 mm plane compression plate integral to load cell assembly. **Software:** Software for Testing Machines. Software manages and streamlines the testing process from entering pre-test parameters to conducting a test, to result calculation, through

		report generation and distribution. Common applications include tensile, compression, shear, bend, and flexure. Partner is designed for the Windows XP and Vista operating systems and is compatible with a variety of network environments. Software provides the following functionality and features: - User-Friendly Test Wizards walk even beginning operators step-by-step through test set-up - Seamless integration with Microsoft Office Professional - Multimedia on-line help system educates and trains users on software operation and materials testing concepts - True multi-tasking capability allows multiple applications to be run concurrently - Results and data stored to Microsoft Access database for easy storage and retrieval locally or on a network - User-definable test tags before and after the test - Numeric test tags allow operators to change test parameters without accessing entire test procedure. - Auto-zeroing prior to a test - Trilingual calculations and displays in either US Customary, Metric and SI Units - Simultaneous digital and graphical displays - Automatic and manual plot scaling The basic software provides the following calculations: - Area under the curve, Linear regression, Peak, Value at Break, Value at Peak, Value at Valley, Average Value, Find Value, Incremental Change, Change, Apparent, Elastic Limit, Automatic Modulus, Expression Builder, Line intersection Proof Test Wizard - Upon selection of a desired template, highly graphical Test Wizard prompts operator to enter a variety of data (such as specimen type, test speed, calculation result selection, etc.) in the appropriate sequence prior to conducting a test. Spring Testing Suite: A collection of Partner components for conducting load testing on springs and spring like components. Includes Spring Wizard, Spring Calculation Library and Procedure Templates. Procedure Templates contain defaults for the Wizard that the user can accept and perform common spring tests such as compression, tension or the user can override for performing custom and specialized Tensile Tests. Includes the following spring calculations: Test point (Load at Height, Height at Load), Free Height, Spring Rate, Initial Tension, Test Point Advanced.
6	**Dynamic Mechanical**	Capacity (1000 Pa to 1000 GPa), Temperature range (-150 to 600 deg C), Frequency range (0.01 to 200 Hz), Force range (0.0001 to 18 Newton's), Amplitude range (0.5 to 10,000 microns with resolution

	Analyser	to 1 nanometer), 220-240 V electrical power. With ultra sensitive force measurements capability down to 0.0001 Newtons for low stiffness specimen. With VGA touch control color screen, automated furnace movement and easy clamping accessibility. Pressure (70psi) maintained by air compressor. Accessories': Three Point Bending Kit, Ethernet Switch Kit, Parallel Plate Compression Kit, dual cantilever bending fixture, Gas Cooling Accessory with 50 L stainless steel tank, automated electronic control, connecting hoses, and cables, AR-Series Rheometer EHP Temperature system, Parallel Plate Compression Kit, Filter Regulator with Auto-Drain, digital calipers, steel standards, torque meter, Time Temperature Superposition software. Language option: English

GENERAL TERMS AND CONDITIONS

1. Detailed information about the Equipments/Instruments and their specifications are available in tender document, which can be downloaded from the University website www.gbu.ac.in.
2. Two bids system of tender will be adopted.
   (i) The bid containing technical specifications and EMD
   (ii) Bid containing financial offer

   Technical and financial bids should be submitted in separate covers. The envelopes should be marked as technical bid and financial bid with reference numbers. These two envelops shall be sealed in a common cover and addressed to **The Registrar, Gautam Buddha University, Greater Noida, Gautam Budh Nagar -201310 (U.P.**) superscribing "**Tender against Notification Advt. GBU/S&P/02/2011, Name of supply: Laboratory Equipments/Instruments for the Material Testing Lab. in School of Engineering"** so as to reach us on or before last date of bid submission.

3. The Technical Bid and Financial Bid should be duly filled-up.
4. These bids will be opened in two stages. The bid containing technical specifications and EMD will be opened at first stage and if same is found according to required specifications, the bid containing financial offer shall be opened in second stage.
5. The "**Technical Bid"** shall contain all documents in support of quoted Equipments/Instruments, their specifications, commercial terms & conditions and eligibility criteria along with the page number for cited specifications in the company brochure for the particular item.
6. The **"Financial Bid"** shall contain price schedule only. The rates and units shall not be overwritten in the price schedule. The price shall be both in words and figures.

7. **Eligibility Criteria**: All the participating suppliers/firms or principal manufacturer- should meet the following qualifying criteria. The firm should be a registered supplier for such supplies. Following documents are required to be submitted with Technical Bid, to qualify eligibility criteria:
   (a) Sales Tax/VAT registration certificate.
   (b) PAN and TIN number should be mentioned.
   (c) The firm should have experience of supplying & installation for similar Equipments/Instruments to institute of National repute such as IIT, AIIMS, CSIR labs etc. The company should also furnish a list of clients of last 3 years.
   (d) Certified copy of balance sheet with trading, profit & loss account for the last three financial years should be submitted.
   (e) Name of branch offices & service centres after sales arrangements.
   (f) Earnest Money Deposit (EMD) **as 2% of the offered cost** is required to be submitted in the form of DD/Banker's Cheque only drawn in favour of "Finance Officer, Gautam Buddha University" payable at "Greater Noida" along with the Technical Bid. If supply is not made within the prescribed period EMD would be forfeited.
   (g) Authorized signatory should sign on all pages. Bids without authorized signature will be rejected.
   (h) ***Minimum turnover required to procure the equipments/instruments :*** *Rupees One Crore for Annexure – 'A' and Rupees Two Crore for Annexure – 'B'.*
   (i) The bidder must be either sole Manufacturer of the Equipments/Instruments or the authorized agent/representative of the OEM. In the case of agent/representative, certified copy of the agency/authorization issued by the OEM should be enclosed with the tender.

8. Offer should be sent in a sealed envelope, submitted either in person or by post on which name and address of the supplier/firm shall be written. Tenders received through E-mails or FAX will not be considered.
9. The technical bids will be opened on scheduled date and time in the presence of the vendors present possessing authorization letter from the respective companies/firms. Suppliers intending to attend the tender opening should intimate in advance.
10. The rate quoted should be F.O.R. Gautam Buddha University (Gautam Budh Nagar, Greater Noida, UP) in rupees inclusive of all charges e.g. packing, forwarding local taxes, railway freight, transit insurance, for outside firms and free delivery at University stores in the case of local firms. The total price should include all accessories required for final installation of the Equipments/Instruments.
11. The Equipments/Instruments should have USEPA/International/National validation certificates, wherever applicable.
12. The cost of the tender is Rs.1000/- (Rupees One Thousand) inclusive of taxes (Non-refundable) and it shall be paid separately in the form of DD/Banker's Cheque only drawn in favour of "Finance Officer, Gautam Buddha University" payable at "Greater Noida" and should be attached with technical bid envelope.
13. The EMD of the successful bidder will be refunded after two months of the completion of the supply and installation of the Equipments/Instruments to the satisfaction of the Gautam Buddha University. The EMD of the unsuccessful bidders will be returned to the concerned immediately after finalization of the tenders. No interest will be paid on EMD in any case.
14. The required delivery period must be mentioned against each item. Tenders should preferably be given only for those equipments/items/articles, which are available ex-stock. Rates of imported goods should be quoted excluding custom duty, as this University is exempted from payment of custom duty (by letter of Department of Scientific and Industrial Research, Ministry of Science & Technology, GOI).
15. Detailed specifications with the mention of make and model/Version of each item should be clearly given supported by the illustrated pamphlets wherever possible. Quotations without specified make and Model/Version and other particulars may be rejected. The payment will be made after the goods have been received, opened, checked, installed and found to be working satisfactorily as per the specifications and requirements. The accessories included in the Equipments/Instruments should also be clearly mentioned.
16. Losses or damage in transit will be borne by the Supplier. The supplier may, if he so desires, get the goods insured and include such charges in the tendered rate.
17. Offered prices should be valid at least for two months from the last date of receipt of tenders.
18. All legal proceedings, if necessity arises to the University may be any of the parties (University or Contractor/Supplier) shall have to be lodged in the courts situated at Gautam Buddha Nagar and not elsewhere.
19. (a) The Equipments/Instruments delivery time should be preferably within 10-12 weeks after the date of issuance of the purchase order. If the delivery time is quoted more than 10-12 weeks, GBU reserves all rights to permit the bidder to compete.

    (b) The Penalty Clause is as under:-

    Should the bidder fail to deliver the goods within stipulated period**,** the Competent Authority may, at his discretion, allow an extension in time subject to recovery from the bidder as agreed liquidated damages, and not by way of penalty, a sum equal to the percentage of the value of tender amount which the bidder has failed to supply for period of delay as stated below:-

i.Delay up to one week	1%
ii.Delay exceeding one week but not	2%

exceeding two weeks	
iii. Delay exceeding two weeks but not exceeding one month	5%
iv. Delay exceeding one month	5% for each month and part there of subject to maximum 10%

(c) In case of failure to supply the goods within stipulated delivery period and in accordance with the specifications given in the quotations, the University shall be free to cancel the order.

20. Supply of the placed order in part will not be accepted.
21. The University's term for payment: 90% against delivery of items in good condition, installation and putting those in satisfactory working conditions; balanced 10% payment shall be released after 60 days of satisfactory working of the items. For balance 10% payment, the firm has to raise bill/letter for balance payment. No advance payment shall be released.
22. The AMC cost, wherever applicable, after warranty period shall be made in equal installments at the end of each quarter subject to satisfactory service rendered.
23. The price quoted should be in Indian Rupees.
24. No revision of price bid will be allowed once the price bids are opened.
25. No increase in price will be allowed after our purchase order(s) are placed.
26. Warranty certificate against all the Equipments/Instruments developed defects covering warranty period, which commences from the date of installation shall be given at the time of supply of the Equipments/Instruments.
27. Inspection certificates of the equipments/instruments inspected by the qualified engineer of the manufacturer and packed in accordance with the terms and conditions of this order must be enclosed.
28. During the warranty period whenever the firm is called upon to attend to the rectification of the defects/faults in the consignments, the firm shall attend to the repair work within a period of a week. They should render timely back up service whenever called upon. A certificate to the effect should be attached to the tender.
29. A certificate to the effect that Equipments/Instruments supplied is fully operational and no additional accessory or space is required to fully functioning the Equipments/Instruments should be issued along with the delivery challans/invoice. GBU reserves the right to refuse payment in the event of not furnishing this certificate at the time of supply.
30. Complete user, technical and service manuals/installation drawings/documentation and spare parts catalogue are to be provided along with the supply of the item.
31. Failure to comply with all the terms and conditions mentioned herein would result in the tender being summarily rejected.
32. Vendors are informed that once the firms are shortlisted based on the eligibility criteria and technical specifications, only then the financial bids of the firms meeting eligibility criteria, technical specifications / requirements would be opened.
33. Conditional tenders will not be accepted.
34. Any cutting and overwriting in the financial bid will not be accepted.
35. GBU reserves the right to change the order quantity or split the orders among multiple vendors without assigning any reason (s) whatsoever.
36. GBU reserves the right to reject any or all the tenders without assigning any reasons whatsoever.

SPECIAL TERMS AND CONDITIONS

1. Warranty period of equipments should be of two years.
2. Quote for three year extensive Annual Maintenance Contract (AMC) should be submitted separately in financial bid.
3. Price quoted shall include all necessary component parts, accessories and software required to run the equipments for successful intended experiments.
4. To verify the technical specifications and capabilities while evaluating technical bids, the firm may be asked to demonstrate the equipment in the University. If demonstration of the equipments in the University is not possible the firm shall arrange a visit of university officials to the nearby location for the same
5. Successful bidders shall arrange training programmes for the faculty and staff for the period decided by the University.
6. All equipments shall be compatible for Indian environmental conditions.

Registrar
Gautam Buddha University

ACCEPTANCE

We accept the above terms and conditions and shall comply with them strictly.

SIGNATURE OF THE AUTHORISED SIGNATORY : ……

NAME OF THE SUPPLIER : ……

ADDRESS : ……

: ……

: ……

Annexure : 'A'

FINANCIAL BID
Name of Laboratory : MATERIAL TESTING LAB.

Name of the School : School of Engineering

S. No.	Equipment	Qty.	Unit Price (Rs. In figure)	Unit Price (Rs. in words)	Total Cost (Rs.)
1	Vicker Hardness Testing Machine	01			
2	Brinell Hardness Testing Machine	01			

Extensive Annual Maintenance Contract cost (three years) should be mentioned on a sheet for each item separately.

Total cost of the offer is Rs._____ in words (Rupees _____

_____. I abide by all the terms & conditions of the tender.

DECLARATION

1. The information given in the financial bid by the undersigned is correct.

SIGNATURE OF THE AUTHORISED SIGNATORY: _____

NAME OF THE SUPPLIER : _____

ADDRESS : _____

_____

Annexure : 'B'

FINANCIAL BID
Name of Laboratory : MATERIAL TESTING LABORATORY
Name of the School : School of Engineering

S. No.	Equipment	Qty.	Unit Price (Rs. In figure)	Unit Price (Rs. in words)	Total Cost (Rs.)
1	Vicker Hardness Testing Machine	**01**			
2	Torsion Testers	**01**			
3	Impact Testing Machine (IZOD/ CHARPY)	**01**			
4	UTM (1000KN)	**01**			
5	Spring Testing Machine	**01**			
6	Dynamic Mechanical Analyser	**01**			

Extensive Annual Maintenance Contract cost (three years) should be mentioned on a sheet for each item separately.

Total cost of the offer is Rs._____ in words (Rupees _____

_____. I abide by all the terms & conditions of the tender.

DECLARATION

1. The information given in the financial bid by the undersigned is correct.

SIGNATURE OF THE AUTHORISED SIGNATORY: _____

NAME OF THE SUPPLIER : _____

ADDRESS : _____

_____