Gautam Buddha University

Greater Noida – 201 310

Website : www.gbu.ac.in

BID FORM

FOR THE SUPPLY OF EQUIPMENTS FOR

WORKSHOP & MANUFACTURING TECHNOLOGY LABORATORY

OF

SCHOOL OF ENGINEERING

Gautam Buddha University
Greater Noida – 201 310

TENDER FOR SUPPLY OF EQUIPMENT FOR WORKSHOP & MANUFACTURING TECHNOLOGY LABORATORY OF SCHOOL OF ENGINEERING

Tender	**Supply of Equipment for Workshop & Manufacturing Technology 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,B.U., 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 Workshop & Manufacturing Technology Lab. of School of Engineering.

Annexure : 'A'

Gautam Buddha University

School of Engineering

TECHNICAL SPECIFICATIONS: WORKSHOP & MANUFACTURING TECHNOLOGY LABORATORY

S. No.	Item	Specifications
1	**Double ended Pedestal Grinder**	Grinding wheel size - 300 x 40 x 50.8 mm, Wheel centre distance - 645 mm, Distance base to wheel centre - 860 mm, Diameter of spindle bearings - 35 mm, Main Motor Power - 2 HP, Grinding wheel speed - 1910 rpm, **Accessories:** 1. Electrical equipment suitable for 415 V, 3 Ph, 50 Hz AC supply 2. One set of wheel guards 3. Tool Rests.
2	**Bench grinder**	H.P – 1.00, Wheel Size (Dia. x Width x Bore) – 200 x 25 x 25.40 mm^3, Spindle (RPM) – 2800.
3	**Oxy-acetylene gas welding set equipment with regulator and other accessories.**	i)Acetylene Regulator – Double stage ii) Oxygen Regulator – Double stage iii) Hose pipe – (Red) for acetylene diameter 08m, length 5 m iv) Hose pipe – (Black or Blue) for acetylene diameter 08mm, length 5 m v) Gas welding torch – 2HP (High pressure),with 6 nos. Nozzles vi) Hose connection (Non Return Valve)- required Hose Pipe. vii) Hose Clip – required Hose Pipe viii) Flash back arrestors for Acetylene and Oxygen Regulator/Hose pipe purpose 01 no each. ix) Tip cleaner 01 no. x) Acetylene cylinder 45 Kg capacity xi) Oxygen cylinder 45 Kg capacity. * All accessories should be ISI Standard.
4	**Universal vice**	Jaw width 6 inches
5	**Fitting shop vice**	Jaw width 6 inches
6	**Inside and outside Spring calipers set**	Range 0-100 mm
7	**Metal Melting crucible**	Graphite crucible for volumes of aluminum with 3 Kg weight.
8	**Metal Melting crucible**	Graphite crucible for volumes of aluminum with 5 Kg weight.
9	**Mallet**	1 kg Plastic with handle.
10	**Soldering iron for sheet metal**	Medium size.

S. No.	Item	Specifications
	application	
11	**Hand hammer**	1 Kg weight with handle.
12	**Tongs**	1 feet long.
13	**Steel scale**	6 feet long, Mitutoyo® or equivalent make.
14	**Steel scale**	1 feet long, Mitutoyo® or equivalent make.
15	**Black smith gauge**	Mitutoyo® or equivalent make.
16	**Scriber**	Taparia® or equivalent make.
17	**Depth gauge**	Mitutoyo® or equivalent make, Range 0-250 mm, Accuracy ±0.04mm, Resolution 0.02mm, Carbide tipped scriber.
18	**Threading die holder with set of dies**	Taparia® or equivalent make.
19	**Threading punch holder with set of dies**	Threading punch holder with set of dies.
20	**Goggles (for welding shop)**	ISI / AWS grade.
21	**Goggles (for machine shop)**	
22	**Hand gloves**	Leather, ISI / AWS grade.
23	**Apron**	Leather, ISI / AWS grade.
24	**Steel wire brush**	SS wire strands on SS base.
25	**Head shield**	ISI / AWS grade
26	**Spark lighter**	ISI / AWS grade.
27	**Hand hammer**	1 Kg weight with handle
28	**Hand hammer**	0.5 Kg weight with handle

Annexure : 'B'

Gautam Buddha University

School of Engineering

TECHNICAL SPECIFICATIONS: WORKSHOP & MANUFACTURING TECHNOLOGY LABORATORY

S. No.	Item	Specifications
1	**Press Dies**	Set of compatible dies for common sheet metal, forging operations and powder metallurgy operations.
2	**Hydraulic power hacksaw**	Stroke- 5.75", blade size- 16x1.25", capacity of round bar- 8", capacity of S.Q. Bar- 6", No. of strokes per minute- 80-100-120, Electric motor required (1440 RPM)- 1HP, L x W x H- 49" x 30" x 32", weight- 500 kg, packing Box size- 55" x 31" x 38". **Standard accessories – Quoting the specification & prices of each accessories separately.**
3	**Electrode drying oven**	Input supply - 220± 10% AC, 50 Hz, 1 Phase;, Input Current Max. - 20 Amps., Input power Max. - 4.5 kW, Temperature range - 50 ˚C to 500 ˚C, Number of compartment – 5, Capacity of electrode Oven - About 25 Kg (450 mm Electrode Length and arc Welding Flux), Air circulation - Natural Convection, Dimensions - 430 X 440 X480 mm^3 (Working), Temp Control - Thermostat with Electronic controller and digital Temp Indicator with variation of less than 1% FSD., Insulation - 2.5''/3" Glass Wool, Heating Type - S/U – Tubular Type, Heating element - Mica Band/ Tubular type (U/S Type), Inside Chamber - Made of Stainless Steel.
4	**Electro Polisher**	**Power Supply** 50/60Hz (max. load 9.8A) 1 x 100V / 120V 50/60Hz (max. load 4.9A) 1 x 220V / 240V **Output voltage/current** Polishing 0 - 100V (1V steps) / 6A Etching 0 - 25V (0.5 V steps) / 6A External Etching 0 - 15V (0.5 V steps) / 1.5A **Software and Electronics** Display 128 x 240 dots (16 x 40 characters), Controls Touch pad.
5	**Machine tools-turning, boring, threading, knurling, power saw blade, reamers, milling cutters, Shaper, Slotter, tool kit etc.(for all machine tools)**	Sandvik® or equivalent

S. No.	Item	Specifications
6	**Lathe machine**	Height of centers- 220 mm, Type of bed- Standard, Swing over bed- 500 mm, Swing over carriage wings- 480 mm, Swing over cross slide- 270, Width of bed-415, Spindle nose/ boreA2-6/53mm, Spindle socket taper-Metric 60/53 mm bore, Spindle speed range- 16 (from 40-2040 forward) & 7 (from 60-143 reverse) bore, Feed range longitudinal –60 (from 0.04 – 2.24 mm/rev),Feed range cross –60 (from0.02 – 1.12 mm/rev), Cross-slide travel – 300 mm, Top slide travel – 150 mm, Tool shank size 25x25 mm^2, Sleeve diameter (mm) / taper – 90/ MT 5, Power of main motor – 11 kW, Power of coolant pump motor – 0.1 kW. Distance between centers- 1000 mm, Carriage travel – 900 mm. **Standard accessories – Quoting the specification & prices of each accessories separately.**
7	**Universal milling machines**	Overall dimension (length x width) – 1520x310 mm^2, Clamping area (length x width) – 1350x310 mm^2, Power operated traverse (longitudinal/ cross/vertical)- 800/265/400 mm, Minimum distance from left hand table end to the centre of spindle – 250 mm, Number of speeds – 18, Speed range – 35.5 – 1800, Spindle nose ISO – 40, Distance from spindle centre to lower face of overarm – 160 mm, Number of feeds – 18, Feed range (longitudinal & cross/ vertical) – 16-800/4-200 mm/ min, Rapid traverse (longitudinal & cross/ vertical) – 3200/800 mm/ min, Main motor power kW/ rpm – 5.5/1500, Feed motor power kW/ rpm – 1.5/1500, Swivel of milling table-45^0 either side in X and Y- planes OR Swivel of milling head-45^0 either side in X and Y- planes (desirable). **Standard accessories – Quoting the specification & prices of each accessories separately.**
8	**Shaping machine**	Length of Ram stroke- 457 mm, length of Ram- 914 mm, Length x Width of Ram Bearing- 711 x 245 mm, Max/ Min distance of table from Ram- 406/89, working surface from table- 381/279 mm, Max. horizontal table travel- 457 mm, Max. vertical table travel- 305 mm, angular movement of table $\pm 60^0$, Max. tool shank size- 30 x 16 mm, max. vertical travel of tool slide- 152 mm, max. swivel of tool head $\pm 60^0$, diameter of clutch pulley-311, number of Ram speed/ strokes- 4, range of ram stroke per min.- 17 to 75, diameter of motor pulley- 89 mm, main motor drive 960 rpm- 2 H.P. Machine Vice, Automatic oil lubrication, Automatic Tool lifting attachment, Key Way cutting attachment, automatic feed to tool slide, Rocker Arm & Bull gear Fine stroke adjustment wheel. **Standard accessories – Quoting the specification & prices of each accessories separately.**
9	**Slotter Machine**	Length of stroke Maximum- 250 mm, Working Stroke- 225 mm, RAM Adjustment- 175 mm, Maximum Diameter Accommodated when Machine at center – 750 mm, height between table & Head- 375 mm, Longitudinal Feed (Manual) – 325 mm, Cross Feed (Manual) – 250 mm, Dimension of table – 375 mm, Number & Range of Speeds – 3(30- 60-90), Motor Recommended – 2 HP 960 RPM, Net Weight – 1350 Kg. **Standard accessories – Quoting the specification & prices of each accessories separately.**

S. No.	Item	Specifications
10	**Drilling Machine**	Drilling capacity in steel - 25 mm, Morse taper in spindle - MT3, Spindle traverse - 140 mm, Pillar diameter - 120 mm, Table working surface - 335 mm dia., Table vertical traverse - 485 mm, Spindle speeds No. / range - 5 / 400 - 1142 rpm, Motor power - 1 HP / 1440 rpm, Compatible drill chuck with arbor and key. **Standard accessories – Quoting the specification & prices of each accessories separately.**
11	**Hydraulic power press**	Capacity – 50 tons **(load variation is essential),** Crank diameter - 95 mm, Stroke adjustment - 13 – 76 mm , Slide adjustment - 40 mm , Hole in Ram - 51 mm, Hole in Bed - 127 mm , Bed size, L x W - 660 x 406 mm, Distance - bed to ram - 290 mm, Max. no. of strokes per minute - 50 , Motor power - 5 HP, Distance - floor to bed - 900 mm, Approx. Weight - 2200 Kgs. **Standard accessories – Quoting the specification & prices of each accessories separately.**
12	**Submerged arc welding machine-800 amp (tractor mounted trolley type)**	**POWER SOURCE :IGBT inverter type** Input Supply Voltage -440± 10%, 3 Phase, 50 Hz, Open Circuit Voltage (OCV) - 60 - 70 Volts, Max. Current at 100% duty cycle 800 Amp., Insulation Class – F, Types of Cooling - Forced Air, Winding –Copper, Display – Digital, Saw Power Control Unit (Integrated with Power Source), Capacity for continues use, Overload Protection, Creep Start , Main Voltage compensation, **SPECIFICATION TRACTOR TROLLEY (WELDING HEAD)** Wire Dia - 2.4 - 5 mm, Wire Feed Speed - 0.3 - 18 Meter / Min., Welding Current Range (Capacity) - 100 - 800 Amps., Welding Head Adjustment - Vertical (100 mm), Horizontal - 100 mm, Swivel Arrangement - 180°. Motorized Trolley fitted with Welding Head, Control Unit, Wire Feeder, Flux Hopper, Flux, Wire etc. Inter Connecting Cable of 5 Meter Length etc.
13	**Micro Plasma Welding**	Setting Current Range - 0.1 To 50 amp.; Duty Cycle at 40 degree ambient temp. - 100% Duty Cycle 50 A; Open Circuit Voltage - 95V; Mains Voltage Tolerances 1X240V (-25% to + 15%); Mains Frequency 50Hz; Mains Fuse(Safety Fuse, Safety Blow) 1x 16 A; Max Connected Power 1.6 kVA ; Weight not more than 50 kg; Adjustable pilot arc current for optimum adjustment to the welding Torch being Used; Operating Modes Non Latched (with or without slope),latched; Standard Interface for mechanized welding : Start/Stop. Current Flow signal, control voltage; Ignition current, welding current& reduced welding current, up & down slopes, gas post flows infinitely adjustable.
14	**Magnetic particle tester**	MPI Techniques - Head Shot & Coil Shot; Max Current Capacity - 1000A AC (RMS) & Half Wave DC (AVG); Input Supply- 230V Single Phase AC +- 10%; Coil Turns - 5 Turn; Coil Diameter – 200 mm; Maximum Job Length – 500 mm; Modes of Operation - Circular, Longitudinal & Combination; Current Variation - Stepless from 100-1000 Amps; Current Control - Microcontroller Based Constant Current Feedback Control System; Meters - Digital Meters with Retention, Digit Height 1",

S. No.	Item	Specifications
		Accuracy of ±5%; Operation Switch - Single Touch Operation; Timing & Sequencing of Shots - Microcontroller Controlled; Current Failure Indicator – Audio; Changeover from AC to HWDC - Solid State & Noiseless; Tank Capacity - 10 Liters; Demagnetizer - In Built. LED Based UV Light with minimum intensity of 1000uW/cm2 at a distance of 15" from the lens of the light as per ASTM E-1444, Dark Room Cover for Machine, MPI Powder MG 410-100gm, High Flash Point Carrier Oil-20L, Digital Handheld Residual Field Indicator (+- 19.9 Guass Range)
15	**Microscope and image analyzer**	**Stands** Transmitted light: 6 position nosepiece Pol (5x H W 0.8; 1x HD DIC M27), 5 position reflector turret Transmitted and reflected light: 6 position nosepiece Pol (5x H W 0.8; 1x HD DIC M27), 5 position reflector turret **Contrasting techniques** Transmitted light: Polarization contrast, orthoscopy, conoscopy, measuring techniques, brightfield, phase contrast, DIC, darkfield Reflected light: Polarization contrast, measuring methods, brightfield, darkfield, DIC, C-DIC, fluorescence **Objectives** Transmitted light: CP-Achromats Pol, Plan-Neofluars Pol Reflected light: Epiplans Pol, Epiplan-Neofluars Pol, EC Epiplan-Neofluars Pol Special objectives: LD Epiplan objectives (long working distance), immersion objectives **Eyepieces** Eyepieces with 23 mm field of view, 10x magnification **Special modules** Conoscopy: Bertrand lens easily adaptable in reflector turret Magnetic domains: First conventionally usable technique for contrasting of Kerr effect **Ergonomy/operating comfort** Stand: Sturdy, space-saving design Focus stop: Protection of specimen and objective Working area: Large area; objective points away from the user for easy access to specimen Reflector cube: Push & Click for easy exchange Ergotube/ photoergotube: 20º viewing angle, height-adjustable in 50 mm range.
16	**3 D optical profilometer**	Measurement Technique - Non-contact, three-dimensional, scanning white light interferometry Scanner Closed-loop piezo-based, with highly linear capacitive sensors Objectives Infinite conjugate interferometric objectives; 1X, 2X, 2.5X, 5X, 10X, 20X, 50X, 100X. Refer to the New View Objective Chart for objective specifications Field of View Objective dependent; from 0.07 to 9.3 mm standard; larger area imaged with field stitching Illuminator Single white-light LED with superior life, uniform

S. No.	Item	Specifications
		imaging and high efficiency Measurement Array 640x480 standard; 992x992 (1K) optional Part Viewing On-screen live display Focus Motorized manual and auto focus Z-Drive (Focus) Stage DC brushless microstepper motor with ball screw drive, 100 mm range, and 0.1 µm resolution Part Stage Options - Manual Tip/Tilt/X/Y with ±6° tip/tilt, 100 mm x/y travel. Motorized Tip/Tilt/X/Y with ±4° tip/tilt, 152 mm x/y travel, Motorized Tip/Tilt/X-Theta (or Y-Theta) with ±4° tip/tilt, 152 mm linear travel. Computer High-performance PC with widescreen LCD monitor Software - running under Microsoft Windows XP Vertical Scan Range - 150 µm (5906 µin); Extended scan range to 20 mm (0.79 in.) Vertical Resolution - < 0.1 nm (0.004 µin) Optical Resolution -0.36 to 9.5 µm (14.2 to 374 µin); objective dependent Data Scan Rate - ≤26 µm/sec, user-selectable; camera and scan mode dependent Maximum Data Points - 307,200 (VGA camera) 984,064 (1K camera) RMS Repeatability - < 0.01 nm (0.0004 µin) RMSσ Step Height - Accuracy ≤ 0.75% Repeatability ≤ 0.1% @ 1σ Material - Various surfaces: opaque, transparent, coated, uncoated, specular, nonspecular Reflectivity 1-100%.
17	**Weighing balance**	Maximum capacity – 210 gm, Precision – 0.01 mg.
18	**Weighing balance**	Maximum capacity – 1 kg, Precision – 0.1 g.
19	**Induction furnace for melting**	Electrical Kantar wire induction furnace with variable temperature regulator for melts upto 2000^0 C melting temperature and digital display panel board, for volume of melt upto 10 Kg aluminum. **Standard accessories – Quoting the specification & prices of each accessories separately.**
20	**Induction furnace for heat treatment**	Furnace with variable temperature regulator for melts upto 1000^0 C heating temperature and digital display panel board. **Standard accessories – Quoting the specification & prices of each accessories separately.**

Annexure : 'C'

Gautam Buddha University

School of Engineering

TECHNICAL SPECIFICATIONS: WORKSHOP & MANUFACURING TECHNOLOGY LABORATORY

S. No.	Item	Specifications
1	**CNC Turning Center**	Swing over bed – 430 mm, Maximum turning diameter over cross slide - 200 mm; Maximum turning length with chuck - 410 mm; Spindle nose – A-2.5", Spindle socket taper – Metric 50, Spindle speed range – 30 to 3000 rpm, type of spindle drive – AC variable speed drive, Feed range (longitudinal/ cross) – 1 to 5000 mm/min, rapid traverse rate (longitudinal/ cross) – 18000 mm / min, Stroke (longitudinal/ cross) – 455/175 mm, type of drive – AC servo, Tail stock spindle diameter – 70 mm, Spindle taper – MT 3, No. of tools (external/ internal) – 8/12, Turret indexing position - 8 (bi-directional random), Turning tool shank size – 20x20 mm^2, Max. boring bar size – 32 mm, Spindle power cont./inter. – 5.5 / 7.5 kW. **Standard accessories – Quoting the specification & prices of each accessories separately.**
2	**CNC Machining Center**	Clamping surface – 650x400 mm^2, Max. load on table – 300 kg, Height of table top from floor – 950 mm, Axes travel (X/ Y/ Z) – 420/ 400/ 420 mm, Feed rate – 0 to 10000 mm/min, Rapid traverse – 30 m/min, Spindle power – 5.5 / 7.5 (30 min) kW, Spindle speed range – 40 to 4000 rpm, Height of spindle face from table top (Min. / max.) – 200/ 620 mm, No. of tools – 12, Max. tool dia. – 80 mm, Maximum tool weight – 8 kg, Max. tool length – 200 mm, Pallet size – 500 x 350 mm^2, No. of pallets – 2, Milling capacity (steel) – 80 cc / min, Drilling capacity (steel) – 20 mm dia., Tapping in steel – M 20x1.5. **Standard accessories – Quoting the prices of each accessories separately.**
3	**Gear Hobber**	Max. module – 6 mm, Max. work dia. – 650 mm, Max. dia. Of hob – 120 mm, Max. length of hob – 127 mm, Max. helix angle - 45^0, Dia. of wok table – 560 mm, Max. center distance between hob arbor and work arbor – 370 mm, Hole through table – 80 mm, Max. dia. of hob arbor – 32 mm, Max. height of cut – 285 mm, Taper of tool head axle – MT 4, No. of hob spindle speeds – 8, Range of hob spindle speeds – 34 -231, No. of vertical feeds – 11, Range of vertical feed /rev – 0.5 -3 mm/rev, **Standard accessories compatible with the gear hobber** Index change wheel, Differential change wheel, speed change wheel, Feed change wheels, work support, 22 teeth wheel and pin, Differential idler wheel bush and pin, , Feed idler wheel bush and

S. No.	Item	Specifications
		pin, Flywheel puller, Feeding handle, Rear and front splash guards, Spanner set, work arbor 30 mm dia. and nut, Cutter arbor 27 mm dia. and nut, Cutter arbor spacer. **Standard accessories – Quoting the specification & prices of each accessories separately.**
4	**Radial drilling machine**	Drilling in steel-32 mm, Drilling in cast iron-35 mm, Tapping in steel - M 27, Tapping in C.I.- M30x3, Spindle nose – MT 4, Spindle nose outside diameter – 55 mm, Quill outside diameter - 60 mm, Spindle travel (drilling depth) – 225 mm, No. of spindle speeds – 12, Spindle speed – 56 to 2800 rpm, No. of power feeds – 6, Power feed range – 0.032 to 0.315 mm/rev, drilling radius – max/ min-930/340, Distance from spindle to column centre max./ min. – 820/230 mm, Distance from spindle to base max./ min. – 990/245 mm, Column diameter – 220 mm, vertical power movement of arm-520 mm, horizontal movement of drill head-590 mm, Swing of arm – 360 mm, Working surface – 1000 mm x 780 mm, drilling motor power kW/rpm -1.5 /1500, Elevating motor for arm kW/rpm – 0.75/1500. **Standard accessories – Quoting the specification & prices of each accessories separately.**
5	**Surface grinder**	Table work area- 625 x 220 mm^2, Longitudinal traverse – 650 mm, Cross traverse – 245 mm, Feeds - Table longitudinal speeds- 3 to 18 mpm, Cross feed per stroke at each reversal – 0.175 to 1.75 mm, Wheel head vertical movement – 280 mm (Max.), Speed of wheel 2800 rpm, Wheel size – 250x20x31.75 mm^3, Wheel head motor- 1.5kW, Hydraulic pump motor – 0.75 kW. **Standard accessories – Quoting the specification &prices of each accessories separately.**
6	**Universal tool and cutter grinder**	Centre height- 130 mm, swing- 280 mm, swing with raising block-370 mm, Swing with cutter head – 405 mm, admit between tailstock centers- 760 mm, admit between work head & tailstock centre- 615 mm, Max. job weight for cylindrical grinding- 15 kg, longitudinal travel- 510 mm, clamping area- 980 x 140 mm, cross traverse- 250 mm, Swivel with centre locking - $\pm 45^0$, Eccentricity with centre line of column – 40 mm, Vertical adjustment (manual)-290 mm, Vertical adjustment (power)- 270 mm, Spindle axis above the axis of centers – 220 mm, Spindle axis below the axis of centers – 70 mm, Swivel (vertical plane) - $\pm 20^0$, Wheel speed in either sense of rotation – 2800/ 5600, Motor power – 0.75 kW, Spindle bore taper – MT5, Speed range -100, 160, 250 rpm, Tail stock taper – MT2, Total power requirement – 3kW. **Standard accessories – Quoting the specification & prices of each accessories separately.**
7	**Multipurpose arc welding table with positioner cum welding booth and fume extractor**	**Welding Table Cum Booth** Dimensions -1380 X 1005 X 920 mm^3, Work Grid Dimension -1350 X 750 mm^2, Height Adjustment - 50mm with min height of 900 mm, Weight- Not to exceed - 300 Kg, Motor Design - IEC B3, Min Load Carrying Capacity of table - 200 Kg, Dimensions of Shades - 1300 X 1000 X 300 mm, **Fume Extractor – Filter/Electricals** Type -Cellulose/Polyester, Shape – Oval, No of Pleats - Not less than 300, No of Filters - Min of 2, Filter Surface area - 2 X 26 Sqm,

S. No.	Item	Specifications
		Filter Height - Min 75mm, Density of Pleats - Filters 4 mm Distance between two Filters, Surface weight - 90 gm/m^2, Efficiency - >99.9%, Filter Class - M according to DIN EN60335-2-69 -At particle size 0.35 micron - at filtration spec 0,056 m/s, Air Capacity - 2500 m^3/Hr(1.5 CFM), Fan Type – Radial, Noise Level - As per ISO 3746, Power Consumption - 2.3 kW, Safety class - IP 66, Nominal Current - 4.4 Amp. **Essential Parameters** Transformer – T 1 amp CCMR1, 24V system – T 2 amp, Power outlet – plug type F (CEE 7/4), Max operating temp - 40^0C, Max relative humidity-80%, Online cleaning -7 times per filter during 2 minutes, Compressed air tank - 9 liters, Compressed air pressure-5-8 bar.
8	**Laser Beam welding Machine Complete Setup**	Machine Size (mm): 1170x590x1250, Worktable Size(mm): 500x350, Travel Path(X, Y, Z): X=300mm ,Y=200mm, Manually adjust the X and Y Axis .Electrically adjust Z Axis., Worktable Bearing Load: 200KG, Machine Weight: 300kg, Power Supply: 220V±10%/50Hz, Laser Type: Nd:YAG Pulsed, Laser Spot: 0.2-0.3mm, Wavelength: 1064nm, Pulse Width : 0.5-25ms, Max. Average Power: 180W, Pulse Frequency: 0-20Hz, Focusing Size: 80mm, Chiller: Water Cooling System, Observing System, Microscope (360°Rotating), Protective Gas: Argon , Welding Wire Dimension: 0.1-0.8mm.

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 Workshop & Manufacturing Technology 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 :*** *No turnover for Annexure – 'A', Rupees One Crore for Annexure – B' and Rupees Two Crore for Annexure – 'C'.*
   (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 exceeding two weeks	2%
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 : Workshop & Manufacturing Technology Laboratory

Name of the School : School of Engineering

S.N.	Item	Qty.	Unit Price (Rs. In figure)	Unit Price (Rs. in words)	Total Cost (Rs.)
1.	Double ended Pedestal Grinder	01			
2	Bench grinder	01			
3	Oxy-acetylene gas welding set equipment with regulator and other accessories.	01			
4	Universal vice	02			
5	Fitting shop vice	20			
6	Inside and outside Spring calipers set	20 Each			
7	Metal Melting crucible	01			
8	Metal Melting crucible	01			
9	Mallet	06			
10	Soldering iron for sheet metal application	02			
11	Hand hammer	15			
12	Tongs	02			
13	Steel scale	02			
14	Steel scale	20			
15	Black smith gauge	02			
16	Scriber	04			

S.N.	Item	Qty.	Unit Price (Rs. In figure)	Unit Price (Rs. in words)	Total Cost (Rs.)
17	**Depth gauge**	**01**			
18	**Threading die holder with set of dies**	**01**			
19	**Threading punch holder with set of dies**	**01**			
20	**Goggles (for welding shop)**	**10**			
21	**Goggles (for machine shop)**	**10**			
22	**Hand gloves**	**10 Sets**			
23	**Apron**	**10**			
24	**Steel wire brush**	**12**			
25	**Head shield**	**02**			
26	**Spark lighter**	**01**			
27	**Hand hammer**	**20**			
28	**Hand hammer**	**10**			

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 : Workshop & Manufacturing Technology Laboratory

Name of the School : School of Engineering

S.N.	Item	Qty.	Unit Price (Rs. In figure)	Unit Price (Rs. in words)	Total Cost (Rs.)
1	**Press Dies**				
2	**Hydraulic power hacksaw**	**01**			
3	**Electrode drying oven**	**01**			
4	**Electro Polisher**	**01**			
5	**Machine tools-turning, boring, threading, knurling, power saw blade, reamers, milling cutters, Shaper, Slotter, tool kit etc.(for all machine tools)**	**01**			
6	**Lathe machine**	**04**			
7	**Universal milling machines**	**01**			
8	**Shaping machine**	**01**			
9	**Slotter Machine**	**01**			
10	**Drilling Machine**	**01**			
11	**Hydraulic power press**	**01**			
12	**Submerged arc welding machine-800 amp (tractor mounted trolley type)**	**01**			
13	**Micro Plasma Welding**	**01**			
14	**Magnetic particle tester**	**01**			

15	**Microscope and image analyzer**	**01**			
16	**3 D optical profilometer**	**01**			
17	**Weighing balance**	**01**			
18	**Weighing balance**	**01**			
19	**Induction furnace for melting**	**01**			
20	**Induction furnace for heat treatment**	**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 : 'C'

FINANCIAL BID

Name of Laboratory : Workshop & Manufacturing Technology Laboratory

Name of the School : School of Engineering

S.N.	Item	Qty.	Unit Price (Rs. In figure)	Unit Price (Rs. in words)	Total Cost (Rs.)
1	**CNC Turning Center**	**01**			
2	**CNC Machining Center**	**01**			
3	**Gear Hobber**	**01**			
4	**Radial drilling machine**	**01**			
5	**Surface grinder**	**01**			
6	**Universal tool and cutter grinder**	**01**			
7	**Multipurpose arc welding table with positioner cum welding booth and fume extractor**	**04**			
8	**LASER welding**	**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 : _____

_____