

BAHAUDDIN ZAKARIYA UNIVERSITY,
MULTAN.

TENDER DOCUMENT

For

LABORATORY MACHINES FOR
THE DEPARTMENT OF MECHANICAL ENGINEERING

Last Date of Submission: 23.02.2017

BAHAUDDIN ZAKARIYA UNIVERSITY, MULTAN

www.bzu.edu.Pk

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TENDER FORM OF THE BAHAUDDIN ZAKARIYA UNIVERSITY, MULTAN FOR THE YEAR 2016-17.

Laboratory Machines for the Department of Mechanical Engineering ON F.O.R. Basis

Advertised Tender No. T/2016-17/87

Last Date of Receipt of Tender 23-02-2017 11:30 a.m.

Date of Tender Opening 23-02-2017 12:30 p.m.

Tender Price:- Rs.1000/- (Non-refundable)

Earnest Money @5% on Estimated Amount (Refundable)

VENUE TENDER: Treasurer Office B.Z. University, MULTAN.

1. All tender must be submitted on their tender document with sealed envelope and addressed to the Treasurer, Bahauddin Zakariya University, Multan.
2. Any offer not received as per terms & conditions of the tender will be rejected.
3. Photocopy of CDR should be attached with Technical Bid.
4. No offer shall be accepted if:
 - (i) It is received after the time and date fixed for its receipt.
 - (ii) Received without earnest money from the firms.
 - (iii) The tender document is unsigned.
 - (iv) The tender is ambiguous.
 - (v) The offer is conditional.
 - (vi) The offer is from a firm, black listed /suspended or removed from the approved list.
 - (vii) The offer is received by telegram or Fax.
 - (viii) The offer is received with shorter validity than required in tender enquiry.
 - (ix) The offer is not conforming to specifications indicated in the tender enquiry.

Detail

Earnest Money @5% on Estimated Cost: Rs.125000/-

CNC LATHE MACHINE

Precision CNC Lathe for education and advanced model engineering

8 Automatic Tool Changes (ATC)

Slant bed

Ultra high precision linear rails

PC based CNC system

Distance between centres 280mm

Maximum spindle speed 3000rpm

Positional accuracy 0.015mm

Repeatable positional accuracy 0.01mm

Hybride motors

WORKING AREA	
Turning diameter over bed(max)	200mm
Travel across slide	90mm
Center width	280mm
SPINDLE	
Chuck diameter	100mm
Spindle speed	100-3000r/min
Spindle through-hole	20mm
Spindle mount	MT3
Spindle motor power	1000W
FEED	
X travel	100mm
Z travel	175mm
The max moving speed	3000mm/min
Motor	3N.m
TOOL REST	
Tool position	8
Tool dimension 4 internal	φ12mm
4 external	8×8mm
TAILSTOCK	
Tailstock taper	MT1
Tailstock sleeve diameter	22mm
Travel of tailstock	30mm
ACCURACY	
Positioning accuracy	±0.010mm
Repeatability accuracy	±0.005mm

The CNC lathe should high precision machine, suited for the education sector, the model engineer and the prototype workshop. It should have 8 Automatic Tool Change (ATC), allowing for multiple tools to be set at once. The slant bed and the high precision rails mean this machine is extremely accurate with positional accuracy should at least 0.015mm. The lathe should supplied with operating system software and can be connected by an Ethernet (LAN) cable to any Windows based computer. The softwarehaving an in-built help and tuition programme and capableto accept G-Code inputs.The options for this machinemust include a hand wheel controller and coolant system.

CONTROLLER FOR LATHE SYSTEM

Controllable axes: 2(X, Z); simultaneous controllable axes: 2 (X, Z). Tapping to machine metric/inch single/multiple straight. Dimension for programs: - 9999.999 ~ 9999.999mm ; min. unit: 0.001mm. Rapid traverse speed: max. 16000mm /min(option: 30000mm /min) Rapid override: time real tuning F0 , 25% , 50% , 100%. 28 kinds of G instructions: G00, G01... Most 32 tool selections build in PLC. Display: 320 × 240 lattice. Bidirectional communication for programs and parameters between CNC and PC, CNC and CNC. 6144KB,384 part programs memory capacity required.

ACCESSORIES REQUIRED

4-jaw chuck(independent) with flange

Cutter 11 pieces set

Cutter set (tips replaceable)

Tailstock chuck

Hand wheel

Stand and Computer stand

CNC Machine Center

SPECIFICATION

4 Automatic Tool Changes (ATC)
Full transparent enclosure
PC based CNC system
0.015mm positional accuracy
0.01 repeatable position accuracy
Hybride motors

TABLE	
Table size	400×145mm
T slot (amount×width×distance)	3×12mm×40mm
Max. load	20kg
TRAVEL	
X travel	260mm
Y travel	152mm
Z travel	180mm
Spindle nose to table	60-240mm
Spindle center to column	200mm
SPINDLE	
Spindle taper	ISO20
Spindle motor	1000w
Spindle speed	5000r/min
FEED	
The max moving speed	2000mm/min
The max feeding speed	500mm/min
Power of X/Y	1.35Nm
Power of Z	2.2Nm
TOOL CHANGER	
Tool number	4
Max.tool diameter	10mm
Max.tool length	110mm
Max.tool weight	0.5kg
Time of tool changing	10s
ACCURACY	
Positioning accuracy	0.015mm
Repeatability accuracy	0.01mm

A highly accurate CNC milling machine, shouldmanufactured in high grade cast iron, resulting in a stable and vibration system.It must having a complete transparent enclosure allowing for the workpiece and the cutting tool to be viewed at all times and at all angles. This machine having at least 4 tool Automatic Tool Change (ATC), meaning multiple tools can be set up at once giving a more continuous programme. A full range of accessories should be available with machine including a 4th axis and handwheel control. CNC machine should come with an easy-to-use windows based operating system which have an in-built tuition program and accepts all G-code inputs.

CONTROLLER FOR MILLING MACHINE

Capable to Configur a system 4-axis 3 link, and the rotation axis can be set by parameters; Display should 10.4 inch LCD. The max. positioning speed can reach 30m /min, and the max. interpolation speed can reach 15m /min; The system capable to store up to 400 programs and can have the back stage edit function and can edit the program on the background The system must have standard RS232 and USB interface which can realize the bidirectional transmission of programs, parameters and PLC programs between CNC and PC; The system can DNC control and its baud rate can be set; Its built-in PLC can realize the various of logic control functions; its ladder can be edit , uploaded and downloaded on-line;

ACCESSORIES REQUIRED

100mm Rotary table (the 4th axis)

Hand wheel

Clamping kit

Mill chuck

Quick vice

Engraving tool set

Note:

1. For all the Brands mentioned in this tender (if any), the term “or equivalent” is hereby added and shall be considered as per PPRA rules.
2. The firm should prepare Technical bid as per requirement of Tender Document and submit with clear heading “Technical Bid/Offer”.
3. Further, Company profile may be submitted (with supporting documents) in the sequence as required for Technical evaluation of firm/tender.
4. Technical bid/offer complete in all respect being submitted be paginated by the firm.

TENDER DOCUMENT

Certificate

1. We / I hereby confirm to have read carefully the terms & conditions of your Tender Enquiry dated for opening on ----- for the purchase of -----.
We agree to abide by all these terms & conditions/instructions.
2. Certified that the prices quoted against advertises tender dated-----are not more than the prices charged from any other purchasing Agencies in the country in the financial year ----- and in case of any discrepancy, we/I hereby undertake to refund the price charged in excess if and when asked to do so.
3. Certified that the prices quoted by our firm are inclusive of G.S.T and all taxes as per rules and regulations.

1. NAME OF FIRM-----
2. ADDRESS-----
3. INCOME TAX NO-----
4. SALE S TAX REGN NO-----
5. NAME OF TENDERER-----
6. NAME OF BANK AND A/C NO.-----
7. C.N.I.C NO.-----
8. SIGNATURE OF TENDERER -----
9. DATE AND STAMP -----

CRITERIA FOR TECHNICAL EVALUATION OF THE TENDER

The quotation /bid who secure 60% marks will qualify for the competition.

Sr. No.	Parameter	Weight age
1	Technical Specification of Product	45%
2.	Age of Company/Firm	10%
4.	Financial strength of the vender	15%
5.	H.R. Strength	05%
6.	On site back up support	10%
7.	Relevant experience	10%
8.	Certified Engineer	05%

Total **100%**

TENDER DOCUMENT

TERMS & CONDITIONS

- i. Sealed bids are invited for the purchase of Laboratory Machines for the Department of Mechanical Engineering, B.Z. University Multan.
- ii. The interested bidders shall submit their bids under Single stage- two envelope procedures as defined by Govt. of Punjab Procurement Regulatory Authority.
- iii. The bidders will submit their bid in the two envelopes shall contain technical and financial proposals separately and clearly marked as "TECHNICAL PROPOSAL" & "FINANCIAL PROPOSAL" in bold letters. The financial proposal should accompany earnest money @5% of the Estimated Cost, in the form of call deposit in favor of the Treasurer, B.Z University Multan.
- iv. In the first stage, only the envelopes containing "TECHNICAL PROPOSAL" shall be opened in the presence of bidders (or their authorized representatives) who may like to attend the tender opening meeting.
- v. The "TECHNICAL PROPOSAL" shall be evaluated and no amendments in the "TECHNICAL PROPOSAL" permitted.
- vi. Financial bid will be opened after the completion of all codal formulation of evaluation of the Technical Bid on the date, and time which will be communicated to the bidders.
- vii. Financial bid will be opened for those bidders who submitted their Technical bids OR fulfill the Technical requirement in the presence of the bidders in case any bidder after written call will not be present at the time of opening due to any reason then any claim by him will not be accepted in future. Otherwise their Financial Bids shall be returned un-opened to the respective bidder.
- viii. Bahauddin Zakariya University, Multan reserves the right to drop any item given in the tender without assigning any reason and also reserves the right to reject any or all bids.
- ix. Sole distributor/Dealer/Reseller certificate (if any) should be attached with the bids.
- x. The quotations offering sub standard product can be screened out to ensure quality procurement of Laboratory Machines.
- xi. The rates will be valid up for 120-days from the date of opening the tender.
- xii. A University Inspection committee will inspect the Laboratory Machines and further will recommend for payment.
- xiii. The firm must attach photocopy of income tax and Sales Tax Registration with the quotation, otherwise quotation will not be accepted.
- xiv. Attached proforma/Certificate should invariable be filled and submitted with the quotation.
- xv. All bids should reach the office of Treasurer, Bahauddin Zakariya University, Multan on or before **23.02.2017** at **11:30 a.m.** The bids will be opened on the same date at **12:30 p.m.**
- xvi. Price of each item should be mentioned including GST/ all Taxes applicable in Tender.
- xvii. The tender should be quoted on the basis of free delivery of Laboratory Machines at the Department of Mechanical Engineering, B.Z. University Campus.
- xviii. Quotation should be submitted in print output/typed condition preferably.
- xix. Conditional bid will not be accepted.

TREASURER
UAN. 111229988 Ext.1318