

TENDER NOTICE NO.01/2020 [MODROBS]

Sealed tenders in double envelope in three complete sets and subscribed "Purchase under MODROBS SBSSTC/2020" are invited from the Manufacturers or their accredited agents/stockiest/dealers (with valid proof/authority) for supply of following equipments:

1. Universal Process Control Trainer
2. Control Valve Characteristics Set-up

Tender document alongwith specifications and terms and conditions can be obtained from the college website www.sbsstc.ac.in. Last date and time for submission and opening of tenders is 03.02.2020 at 1.30 and 3.00 p.m. respectively.

Corrigendum, if any, will be issued on website only

Director

SHAHEED BHAGAT SINGH STATE TECHNICAL CAMPUS

(Established by the Govt. of Punjab)

Moga Road, FEROZEPUR-152004

Ph.8288012050 Fax. 01632-242138

SHORT TERM TENDER NOTICE NO. 01/2020

IMPORTANT

(Tender Fee Rs.1000/-)

Date & time schedule:

1. Last date and time for receipt of Tender bids: : 03.02.2020 at 1.30 p.m.
2. Date and time for opening of Tenders : 03.02.2020 at 3.00 p.m..

Venue: - Conference Room D Block, SBSSTC Ferozepur

Tender documents alongwith specifications and terms & conditions can be downloaded from college website www.sbsstc.ac.in. and submitted alongwith DD of Rs. 1000/-as tender fee.

TENDERS SHOULD BE SUBMITTED IN TWO BID SYSTEMS I.E. TECHNICAL BID AND COMMERCIAL BID IN TWO SET (original and duplicate). ALL PAPERS OF TENDER BID SHOULD BE SIGNED.

FIRST OF ALL THE TECHNICAL BIDS WILL BE OPENED AND EVALUATED. THE COMMERCIAL BIDS ONLY OF ELIGIBLE BIDDERS WILL BE OPENED.

Tenderers are requested to go through all the terms and conditions of Tender Notice/Tender Document carefully and to abide by the same. The under mentioned instructions should be followed strictly while quoting the rates:-

1. Quotations must be enclosed in a properly sealed envelope addressed to Director SBSSTC Ferozepur by designation and not by name. The quotations must be super scribed **“Tender for supply of ----- for Category ----- during the year 2020 as called for in tender notice 01/2020 due by ----- (as above).**
2. Rates of each Item should be quoted on letter pad of supplier with stamp of the firm. It should also be clearly mentioned whether the specification quoted are as per NIT. All Tenders shall be either type-written or written clearly in indelible ink. Any individual(s) signing the tender or other documents connected there with should specify whether he is signing: (i) as sole proprietor of the concern or as attorney of the sole proprietor (ii) as partner or partner of the firm. All tender papers should be signed by the bidder.
3. The offer must carry the following details clearly: Name & Specification of each item, Percentage discount if any. Mode of delivery Cost of per Item, Taxes and other duties if any, Insurance if any.
4. The tenderers should quote their lowest possible prices applicable to educational institutes. Discount for early inspection/payment should be specified very clearly if available.
5. **EMD 2% of total quoted amount, in shape of DD issued from a Nationalized Bank in favour of Director SBSSTC payable at Ferozepur** of total cost of the equipments must be enclosed alongwith the bid. Without EMD, the bid will be rejected. No interest will be paid on EMD amount.
6. Rates quoted for all Items are straightly FOR SBSSTC Ferozepur.
7. Performance Statement of Unit should be submitted alongwith the tender bid.
8. The Purchaser reserves the right to accept or reject any Tender, and to annul the tendering process and reject all Tenders at any time prior to award of Contract, without thereby incurring any liability to the affected Tenderer or Tenderers or any obligation to inform the affected Tenderer or Tenderers of the grounds for the purchaser’s action.
9. The Institution will be at liberty to increase or decrease the quantity/no. of items to be purchased.
10. The tender shall be kept valid for acceptance for a minimum period of 90 (Ninety) days from the date fixed for opening of tenders. The tenders from those who have not kept the validity open as mentioned above shall be rejected.
11. The payment of the equipment(s) supplied will be made only after the satisfactory installation of the equipment(s) at the college campus as per college rules.
12. In case, the purchase order for equipment(s) is given to a successful tender bidder/firm and the firm does not supply the order within the stipulated period mentioned in the purchase order, the same firm may be blacklisted in the college record for future supplies.

13. All other General Terms and Conditions (pages1-37 of tender booklet) and mentioned in tender notice as well, are the part of this term tender notice no.01/2020 and these are to be abide by the tenderers.
14. **All statutory deductions such as TDS would be made by the Institution from payment to be made to the Contractor.**
15. **Guarantee/Warrantee of machines as per company's Brochure shall be applicable**
16. **Submission of copy of PAN card alongwith the tender is must.**
17. The Successful Contractor has to deposit **Performance Bank Guarantee** (10% of the total cost) for warranty period regarding satisfactory performance of machines.
18. **If the tender opening day is declared holiday or any administrative reason arises, then the tenders will be received and opened on the next Institution working day as per same schedule.**
19. **ANY CORRIGENDUM / ADDENDUM / CORRECTIONS, IF ANY SHALL BE PUBLISHED ON THE WEBSITE ONLY. THE BIDDERS SHOULD KEEP CHECKING THE WEBSITE AND FOLLOW ACCORDINGLY TILL THE DAY OF OPENING OF TENDERS.**
20. Submission of Certificate from Manufacturers or their accredited agents/stockiest/dealers (with valid proof/authority) is required. Decision of the PFC in this regard will be final and binding.
21. Bidders are advised to go through all the required specifications/samples of items discussing technical points if any before participating in the tender.
22. Certified that all the terms and conditions of Short Terms Tender Notice no.01/2020 are acceptable me/us (tenderers)

Signature of supplier/tenderer with Seal

Annexure -1

Proforma for performance Statement:

(For a period of last three years)

Tender no.....Category.....Date of Opening.....

Order Placed by (full address of Purchases)	Order No. & date	Description of goods Ordered.	Value of Order	Date of completion of delivery	Remarks indicating reason for late delivery	Has the equipment been satisfactorily commissioned and is it giving Trouble free Service
				As per actual Contact	if any,	

Signature and seal of the
Manufacturer/Tenderer

Annexure-2

PROFORMA FOR AUTHORITY FROM MANUFACTURERERS

No.....Dated.....

To,

The Director, Shaheed Bhagat Singh State Technical Campus Ferozepur

Dear Sir,

Sub: Tender No..... ofhaving factories at.....and offices atdo hereby authorized M/S.....(name and address of agent) to represent us, to tender, negotiate and conclude the contract on our behalf with you against Tender No.....

No. company /firm or individual other than M/S.....are authorized to represent us in regard to this business against this specific tender.

Your faithfully

Name.....

For & on behalf of M/S.

(Name of Manufacture)

Note: This letter of authority should be on the letter head of the manufacturing concern and should be signed by a person competent and having the power of attorney to bind the manufacture.

ANNEXURE -3

PROFORMA FOT STATEMENT OF DEVIATIONS FOR TENDER CONDITIONS

The following are the particulars of deviations from the requirements of the instructions to tenderers General and Special conditions of contract.:-

Clause	Deviation	Remarks (including justifications)
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Signature and seal of the Manufacturer/Tenderer.

Note:- Where there is no deviation, the statement should be returned duly signed with an endorsement indicating "No Deviations"

Annexure-4

PROFORMA FOR STATEMENT OF DEVIATIONS TECHNICAL SPECIFICATIONS

The following are the particulars of deviations from the requirements of the Technical Specifications.

CLAUSE	DEVIATIONS	REMARKS (including justifications)
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Signature and seal of the Manufacturer/Tenderer.

Note:- Where there is no deviation, the statement should be returned duly signed with an endorsement indicating "No Deviations"

Annexure-5

(These are clause 5 of General Conditions of Contract)

PROFORMA OF BANK GUARANTEE FOR CONTRACT

PERFORMANCE GUARANTEE BOND

Ref.....

Dated.....

Bank Guarantee No.....

To

The Director
Shaheed Bhagat Singh State Technical Campus
Moga Road,
Ferozepur-152004

1. Against contract-Vide Acceptance of Tender
No.....datedcovering supply of(hereinafter called the said contract) entered into between the Director, S.B.S.College of Engineering & Technology, through the Director Technical Education Punjab, Chandigarh (hereinafter called the purchaser) and(hereinafter called the supplier) this is to certify that at request of the Supplier we.....(hereinafter referred to as the Bank) do, as primary obligor and not merely as surety, hereby irrevocably, unconditionally and absolutely undertake against loss or damage caused to or suffered or would be caused to or suffered by the purchaser by reason of any failure of the Supplier to perform or omission or negligence to perform any part of his/their obligation, viz., the performance of the contract till warranty period the satisfaction of the purchaser in terms of the contract.
2. We.....do hereby undertake to pay the amount due and payable under this guarantee without any demur merely on demand from the purchaser stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the conditions contained in the said contract or by reason of the supplier(s) failure or omission or negligence to perform the said contract till warranty period or any part thereof. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee, which shall not be considered as satisfaction of any part of or obligation hereunder. However our liability under this guarantee shall be restricted to an amount not exceeding Rs.....
3. We undertake to pay to the purchaser any amount so demanded by the purchaser not withstanding.;

- (i) Any dispute or difference between the purchaser or the Supplier or any other person or between the Supplier or any person or any suit or proceeding pending before any court or tribunal or arbitrator relating to; or
 - (ii) The invalidity, irregularity or enforceability of the contract ;or
 - (iii) Or any other circumstances which might otherwise constitute discharge of this guarantee, including any act or omission or commission on the part of the purchaser to enforce the obligations by the supplier or any other person for any reason for whatsoever.
4. We.....(indicate the name of Bank) further agree that the guarantee herein contained shall be continued one and remain in all force and effect during the period that would be taken for the performance of the said agreement till warranty period and that it shall continue to be enforceable till all the dues of the purchaser under or by virtue of the said agreement till warranty period have been fully paid and its Claims satisfied or discharged or till.....Office/Department Ministry ofcertifies that the terms and conditions of the said agreement till warranty period have been fully and properly carried out by the said Supplier(s) and accordingly this guarantee.
5. We.....(indicate the name of Bank) agree and undertake that any claim which the bank may have against the Supplier shall be subject and subordinate to the prior payment and performance in full of all the obligations of the Bank hereunder and the bank will not without prior written consent of the purchaser exercise any legal rights or remedies of any kind in respect of any such payment or performance so long as the obligations of the bank hereunder remain owing and outstanding, regardless of the insolvency, liquidation or bankruptcy of the supplier or otherwise any sum outstanding to the credit of the purchaser with it.
6. We.....(indicate the name of the Bank) further agree with the purchaser that the purchaser shall have the fullest Liberty without our consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said supplier(s) from time to time or to postpone for any time or from time to time and of the power exercisable by the purchaser against the said supplier(s) and for bear or enforce any of the terms and the conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said contract(s) or for any for bearance, act or omission of the part.

TENDER NOTICE NO. 01/2020

- | | |
|---|-----------|
| 2. Purchase of Universal Process Control Trainer | 01 |
| 3. Control Valve Characteristics Set-up | 01 |

(Tender Fee Rs.1000/-)

SPECIFICATIONS:

UNIVERSAL PROCESS CONTROL TRAINER: -

RANGE OF EXPERIMENTS:

Study of basic components.

1. Study of transducer/ transmitter
2. Study of control valve characteristics
3. Calibration of measuring devices

Study of process dynamics

4. Experiment related to study of dynamics of process system

Single loop feedback control

5. Study P/PI/PD and PID control

PID control, tuning, Stability of following processes

6. Temperature control
7. Flow control of pump / process outlet
8. Level control by inlet flow/ outlet flow manipulation using pneumatic valve
9. Level control by inlet flow manipulation using Plunger pump
10. Pressure control of closed tank (Air)/ (water)

Multi-loop control

11. Study Cascade control (Level + Flow)
12. Study Cascade control (Temperature + Flow)
13. Study Cascade control (Level + Pressure)
14. Study Feed forward control
15. Study Ratio control
16. Study Three element control (Level)
17. Study interactive loops (Pressure & level/ Level and flow)

Study of PLC

18. PLC Study and control

SOFTWARE: -

Control designer software including SCADA Software package which helps in learning basics of SCADA programming and DCS control. The software can be operated in development and runtime mode. The experiments are conducted in Runtime mode and the engineering can be viewed / modified in Development mode. The software is easy to use, flexible & scalable with features like Data access, trend plots, Data logging, Printing, data export in excel formats.

SPECIFICATIONS: -

Type of control	DCS and SCADA
Control unit/ PID controller	Make Honey well
Communication Interface	RS232, RS485, Ethernet
Software packages	DCS/ SCADA
Temperature sensor	RTD, PT100
Temperature transmitter	PT100, Type 2 wire, Range 0-100 deg. C, Output 4-20mA, 2Nos
Flow transmitter	DPT, Type 2 wire, Range 0-200 mm H ₂ O, Output 4-20mA, Sq. root
Level transmitter	DPT, Type 2 wire, Range 0-500 mm H ₂ O, Output 4-20mA, Linear
Level transmitter	GPT, Type 2 wire, Range 0-600 mm H ₂ O, Output 4-20mA
Pressure transmitter	GPT, Type 2 wire, Range 0-2.5 bar, Output 4-20mA
Position transmitter	Type Electronic, 2 wire, O/P 4-20mA
I/P converter	Input 4-20mA, Output 3-15 psig (2Nos)
Heating control	Input 4-20mA
Heater	Type Electrical 2 coil, Capacity 3 KW
Rotameter	0-400LPH, Eureka
Solenoid valves	Type 2/2 way normally closed, ¼" BSP, water (2Nos)
Control valves	Type: Pneumatic, SS, Size: ½", Input 3-15psig
VFD	Input single phase 200VAC, 1.1A output AC3 phase
Pump	Fractional horse power, type centrifugal
Diaphragm pump	Positive Displacement Diaphragm pump, Cap 200Lph
All wetted parts/ valves/ tanks/ heat exchanger etc	SS304, appropriate capacity and nos.
Process hardware	for temperature, flow, level, pressure control and others
Compressor	1 Hp, 3.8CFM, 10 kg/cm ² with 45 lit inbuilt tank receiver

CONTROL VALVE CHARACTERISTICS: *Setup*

RANGE OF EXPERIMENTS:

- Study of valve flow coefficient
- Study of inherent characteristics
- Study of installed characteristics
- Study of hysteresis of control valve
- Study of rangeability of equal percent control valve
- Study of valve positioner

SPECIFICATIONS: -

Control valve (Linear)	Type: Pneumatic; Size: 1/2", Input: 3-15 psig, Air to open
Control Valve (equal %)	Type: Pneumatic; Size: 1/2", Input: 3-15 psig, Action: Air to close
Control valve (quick opening)	Type: Pneumatic; Size: 1/2", Input: 3-15 psig, Air to open
Rotameter	0-600LPH, Eureka
Ball valves	Stainless steel
Water tanks	SS304, 02 nos
Pressure indication	Manometric single Tube at control valve inlet
Pump	Fractional horse power, type submersible
Pressure gauge	Range 0-2.5 kg/cm ²
Air regulator	Range 0-2.5 kg/cm ²
Valve positioner (for linear valve)	One
Compressor	Appropriate capacity
All wetted parts	Stainless steel
Setup mounted on a rigid structure as an assembly	

