

**MAULANA AZAD NATIONAL URDU UNIVERSITY
GACHIBOWLI, HYDERABAD 500032**

(A Central University established by an Act of Parliament in 1998)



TENDER DOCUMENT

OF

Supply and Installation of Venturimeter and other Lab Equipments

At

MANUU, Polytechnic Hyderabad, Bangalore & Darbhanga

**Tender No. MANUU/Purchase/F.188/2018/..۰۵. dt: ۹th May 2018
[Through e-procurement (CPPP) only]**

TENDER DOCUMENT
***For supply of Venturimeter and other Lab Equipments for Polytechnic Hyderabad,
 Bangalore, Darbhanga MANUU***

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TENDER DOCUMENT AT A GLANCE

1.	Work	Supply and installation of Venturimeter and other lab equipments for Civil Engineering Lab for Civil Engineering at MANUU, Polytechnic Hyderabad, Bangalore & Darbhanga
2.	Authority inviting tender	Registrar, Maulana Azad National Urdu University, (MANUU) Hyderabad
3.	Duration of contract	One year from the date of signing of contract extendable further
4.	Estimated cost of contract	Rs.26.00 Lacs (Rupees Twenty Six Lacs only)
5.	<i>How the bids should be submitted</i>	Online on Central Public Procurement Portal (CPPP) of NIC, Government of India.
6.	To whom <i>the EMD in original</i> should be submitted	Assistant Registrar, Purchase & Stores Section, Room No. 5, Admin. Building, MANUU Gachibowli, Hyderabad - 500 0032 Ph. No. 040-23001697
7.	Date and time of opening of financial bids	To be notified later to only those bidders who qualify in technical bids.
8.	Amount of Bid Security (EMD)	Rs.1,30,000/- (Rupees One Lac Thirty thousand only)
9.	Bid Validity <i>Period</i>	90 (ninety) days from the last date of submission of bids
10.	Total number of pages of Tender Document	42

SECTION -1

NOTICE INVITING TENDER

Maulana Azad National Urdu University (MANUU), Hyderabad (a Central University established by an Act of Parliament) invites online bids under e-procurement method on two bid systems (technical and financial) from the reputed firms for Supply and Installation of Venturimeter and other lab equipments for Civil Engineering Lab for MANUU, Polytechnic Hyderabad, Bangalore & Darbhanga within the specified period.

The document can be downloaded from the Government of India, Central Public Procurement Portal (CPPP) website www.eprocure.gov.in or from the University's website www.manuu.ac.in.

The bidding documents (technical bid and financial bid) duly filled-in as per the instructions contained in Section 2 of this document (Instructions to Bidders) along with scanned copy of required documents and Account Payee Demand Draft / Banker's Cheque / Bank Guarantee/ Fixed Deposit Receipts for Rs.1,30,000/- drawn / made in favour of the Finance Officer, Maulana Azad National Urdu University, Hyderabad towards Bid Security (Earnest Money Deposit) must be uploaded on CPP Portal on or before 31st May, 2018 up to 03.00 PM. The EMD in original must be submitted to the Assistant Registrar (Purchases & Stores), MANUU before the last date and time of submission of bids either by hand or through post.


REGISTRAR

SECTION – 2

INSTRUCTION TO BIDDERS

2.1 General Instructions

- 2.1.1 For the bidding / tender documents purposes, 'Maulana Azad National Urdu University' (MANUU) shall be referred to as 'Client' and the bidder / successful bidder shall be interchangeably referred to as 'Contractor' and / or 'Bidder'.
- 2.1.2 The invitation for bid is open to reputed firms engaged in supply of Civil Engineering Lab Equipments etc.
- 2.1.3 The bidding documents (technical bid and financial bid) must be uploaded on CPPP on or before 31st May, 2018 up to 03.00 pm. Late bids shall not be accepted on any ground whatsoever.
- 2.1.4 While all efforts have been made to avoid errors in preparation of tender documents, the bidders are advised to check the same carefully. No claim on account of any error detected in the tender document shall be entertained.
- 2.1.5 The duly filled-in technical bid along with scanned copy of requisite supporting documents and financial bid should be uploaded online on CPPP as required under e-procurement method of Government of India. Non-receipt of any of the required documents or bid with incomplete details will lead to rejection of tender).
- 2.1.6 Any person signing on behalf of a bidder must attach scanned copy of the authorization letter/ Power of Attorney from the actual bidder as the proof of authorization for signing on his/ her behalf.
- 2.1.7 Each bidder shall submit only one bid against this invitation of tender.
- 2.1.8 Bid containing conditional offers, offers with deviation from the conditions of contract, bids not meeting the eligibility criteria, technical bids not accompanied with Bid Security / Earnest Money Deposit of requisite amount / format or any other requirements stipulated in the tender documents are liable to be rejected.
- 2.1.9 The tenderer, after submitting the tender online, may withdraw, substitute or modify the tenders without forfeiture of Bid Security/ EMD up to the date and time of receipt of the tender. Any such request received after the prescribed date and time of receipt of tenders will not be considered.
- 2.1.10 No bid shall be withdrawn in the interval between the last date of submission of bids and expiration of the period of bid validity.
- 2.1.11 A bidder shall not have conflict of interest with other bidders. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:
- they have controlling partner(s) in common; or
 - they receive or have received any direct or indirect financial stake from any of them; or
 - they have the same legal representative/ agent for the purpose of this bid; or
 - they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another bidder.

- 2.1.12 A prospective bidder may seek clarification in writing from the MANUU on the tender documents well before the due date of submission of bids.
- 2.1.13 At any time prior to the date of submission of bids, the MANUU may, whether its own initiative or in response to a clarification sought by a prospective bidder, amend bid documents by using corrigendum which shall be notified on the MANUU official website.
- 2.1.14 In case the amendments in the tender document require revision in the bids already submitted by that time and there being inadequate time to revise the bids by the notified last date and time for submission of revised bids by the bidders, the date and time of submission of bids may be suitably extended at the discretion of the MANUU. In such a situation, the bidders shall also be required to extend the validity period of their bid security / EMD.

2.2 Bid Security (Earnest Monet Deposit)

- 2.2.1 The bid must be accompanied by a Bid Security (Earnest Money Deposit) of Rs.140,000/- in the form of an Account Payee Demand Draft / Banker's Cheque / Fixed Deposit Receipts/ Bank Guarantee of any nationalized bank drawn / made in favour of the Finance Officer, Maulana Azad National Urdu University, Gachibowli, Hyderabad payable at Hyderabad. However, the firms / companies registered as Micro and Small Enterprises (MSEs) as defined in Government of India's MSE Procurement Policy, Start-ups as recognized by Government of India, Department of Industrial Policy & Promotion are exempted to furnish bid security subject to production of proof of their registration for printing and supply of course materials / other academic materials.
- 2.2.2 Scanned copy of financial instrument mentioned in para 2.2.1 should be uploaded along with the technical bid and the bid security / EMD in original must be submitted to the Assistant Registrar (Purchases & Stores), MANUU before the last date and time of submission of bids either by hand or through post.
- 2.2.3 The Bid Security should remain valid for a period of 90 days beyond the final bid validity period.
- 2.2.4 No request for transfer of any previous deposit of earnest money or security deposit or adjustment against any pending bill held by the Client in respect of any previous services/ work shall be entertained.
- 2.2.5 A bidder's Bid Security will be forfeited if the bidder withdraws or amends its offer or impairs or derogates from the tender in any respect within the period of validity of the tender.
- 2.2.6 In the case of a successful bidder, the Bid Security will be forfeited, if the bidder fails to
(i) furnish the required Performance Security within the specified period;
(ii) honour his/ her own quoted prices for the services or part thereof;
(iii) sign the contract in accordance with the terms of the tender document.
- 2.2.7 Bid Securities of unsuccessful bidders will be returned to them through e-payment at the earliest after expiry of the final bid validity period and latest by 30th day after the award of contract.
- 2.2.8 In the case of successful bidder, the Bid Security will be returned on receipt of Performance Security.

2.3 Minimum Eligibility Criteria

- 2.3.1 The bidder shall necessarily be a legal entity having valid GST Registration, Income Tax Registration, incorporation certificate under Companies Act, 1956 or 2013 (in case of a Company so incorporated).
- 2.3.2 ~~Bidders shall have to meet the following pre-qualification criteria:~~
- (a) Should have the Average Annual Turnover of Rs.7,80,000/- during the preceding three years ending 31st March, 2017.
- and**
- (b) (i) Should have supplied similar lab equipments against three purchase orders of the worth Rs.10,40,000/- each during the last five years
- or**
- (ii) Should have supplied similar lab equipments against two purchase orders worth Rs.13,00,000/- each during the last five years.
- or**
- (iii) Should have supplied similar lab equipments against one purchase order worth Rs.20,80,000/- during the last five years.
- 2.3.3 Bidder should not have suffered any financial loss for more than one year during the preceding three years ending 31st March, 2017.
- 2.3.4 The bidder having their own office/service centre at Hyderabad / Secunderabad, Bengaluru & Darbhanga would be preferred. However, in case the bidder does not have any office / service centre at these places they must provide warranty to undertake services of the instruments covering the warranty period as per the tender document.
- 2.3.5 Bidder should not have been blacklisted on any score by any Government Department/ Autonomous Body/ Public Sector Undertaking/ Private Sector Organization. Any information in this regard subsequently found to be incorrect after submission of bid or award of contract will entail rejection of the bid or cancellation of contract as the case may be.
- 2.3.6 Only those bidders shall be treated as eligible to participate in the bidding process who, through their letter of submission of bid (Bid Cover Letter), declares as under:
- (i) No benefit shall be offered to the employees of the Client's organization which are not legally available to them and also no offence shall be committed under Prevention of Corruption Act, 1988 or Indian Penal Code, 1860;
- (ii) No payment has been made to any agent/ broker or any other intermediary for this bidding;
- (iii) No transgression has been committed in the past with any other organization in India or abroad that may impinge on the anti-corruption principle.
- 2.3.7 In proof of having fulfilled the minimum eligibility criteria mentioned at clauses 2.3.1 to 2.3.6, the scanned copy of the following self attested documents/ information must be uploaded with the technical bid:
- (a) Copy each of PAN and GSTIN.
- (b) Copies of audited Balance Sheet and Profit & Loss Account of the firm for the years 2014-15 to 2016-17;
- (c) Copies of work orders and experience certificates in support of information required at clause 2.3.2 above;
- (d) An affidavit on non-judicial stamp paper for R 50/- declaring that the firm/ company had never been blacklisted by any authority.
- 2.3.8 This Request for Proposal (RFP) is issued with no financial commitment and the MANUU reserves the right to change or vary any part thereof or foreclose the procurement

process at any stage. The MANUU also reserves the right to disqualify any vendor, should it be necessary, at any stage.

2.4 Bid Validity Period

- 2.4.1 Bids shall remain valid and open for acceptance for a period of 90 (ninety days) days from the last date of submission of bids.
- 2.4.2 The University may, without assigning any reason, request for extension of bid validity for another period of 30 (thirty) days without any modification in the bid already submitted.

2.5 Submission of Technical Bid

- 2.5.1 Technical Bid should be submitted online on Government of India's Central Public Procurement (CPP) Portal in the form prescribed at Annexure-II of this tender document.
- 2.5.2 The following documents shall comprise the Technical Bid:
- (a) Technical Bid Submission Letter (Bid Cover Letter) in the form prescribed at Annexure-I inter alia containing the declaration required at clause 2.3.6. The letter should be printed on company's letter head and signed by the authorized signatory.
 - (b) Duly filled-in and signed Annexure-II containing information required in clauses 2.3.1 to 2.3.7.
 - (c) Scanned copy of all the supporting documents as required in clause 2.3.7
 - (d) Scanned copy of Bid Security (EMD) in any of the form mentioned in clause 2.2.1 (original to be submitted either by hand or by post)
 - (e) Tender document signed and stamped on each page.
 - (f) Check List duly filled-in and signed in the form prescribed at Annexure-II.

2.6 Submission of Financial Bid

- 2.6.1 Financial bid should be submitted online (CPP Portal) in the 'Price Schedule' Form prescribed at Annexure-III of this tender indicating rates with applicable taxes and other charges as per the format given.
- 2.6.2 Financial Bid should be signed by the authorized signatory.
- 2.6.3 Bidders must quote in Annexure-III as per terms stipulated in Section 6 keeping in view the requirements in Section 3.

2.7 Opening of Technical Bids

- 2.7.1 The technical & Financial bids received online shall be opened online only by the duly authorized Committee.
- 2.7.2 In case, the date fixed for opening of bids is subsequently declared as holiday by the Government / University, the bids will be opened on next working date with time and venue remaining unaltered.
- 2.7.3 After opening of technical bids, a preliminary scrutiny would be conducted to ensure that EMD of requisite amount and other documents as required in clause 2.5.2 are furnished. The bids found deficient in these requirements shall be declared invalid and such bids will not be considered further for technical evaluation.

- 2.7.4 The bidders whose technical bids are otherwise found valid shall be termed as responsive bidders. The detailed evaluation of technical bids of such responsive bidders will be carried out later.

2.8 Technical Bid Evaluation

- 2.8.1 The technical bids shall be evaluated based on the documents submitted by the bidders in totality as required under clause 2.5.2 above. To assist in the examination, evaluation, comparison of the bids and qualification of the bidders, the MANUU may, at its discretion, ask any bidder for a clarification on its bid. Any clarification submitted by a bidder that is not in response to a request by the MANUU shall not be considered. The MANUU's request for clarification and the response shall be in writing.
- 2.8.2 If a bidder does not provide clarifications of its bid by the date and time set in the University request for clarification, its bid may be rejected.
- 2.8.3 MANUU also reserves its right to seek confirmation / clarification on the supporting documents submitted by the bidder from the agency(ies) issuing such document(s).
- 2.8.4 MANUU shall intimate the technically qualified bidders through written communication the date, time and venue for opening of financial bids.

2.9 Opening of Financial Bids

- 2.9.1 The financial bids of all the technically qualified bidders shall be opened online e-procurement method (CPP Portal) on the appointed date and time.
- 2.9.2 Mere becoming the lowest bidder, prior to financial bid scrutiny will not give any right to the lowest bidder to claim that he is successful in the bidding process. The successful bidder (L1) shall be decided only after following due procedure.

2.10 Financial Bid Evaluation

- 2.10.1 The evaluation of financial bids shall be made on the L-1 item wise rate basis plus applicable GST and other charges as prescribed in Section – 6 i.e. Price Schedule.
- 2.10.2 The bidder whose financial bid is found to be lowest in terms of clause 2.10.1 above shall be declared as successful.
- 2.10.3 In case of two or more firms /companies quoting the same lowest rates, all such firms will be asked to submit fresh financial quotations for all the items on short notice.

2.11 Right of Acceptance

- 2.11.1 Maulana Azad National Urdu University, Hyderabad reserves the right to accept or reject any bid and to cancel the bidding process and reject all bids (including the lowest) at any time prior to award of contract without incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders for the University action. The decision of the competent authority of the University in this regard shall be final and binding.
- 2.11.2 In the event of L1 bidder not being capable of supplying of Lab equipment in entirety as per notified specifications within the stipulated time frame as required by the University, the competent authority of the University reserves the right to split the work and award a portion of it to L2 bidder at accepted L1 rate if he agrees to do so. Otherwise the offer will pass on to L3 bidder and so on. The decision of the University in this regard will be binding on the bidders.

2.11.3 In case of failure to comply with the provisions of the terms and conditions mentioned, by the agency that has been awarded the contract, the competent authority of the Maulana Azad National Urdu University reserves the right to award the contract to the next higher bidder and the difference of price shall be recovered from the defaulter agency who has been awarded the initial contract and this will be binding on the bidders.

2.12 Notification of award by issuance of 'Letter of Acceptance'

2.12.1 After determining the successful evaluated bidder, MANUU shall issue a Letter of Acceptance (LoA) / Letter of Award in duplicate in Form - 4 to the said successful bidder, who will return one copy to MANUU duly acknowledged, *unconditionally* accepted and signed by the authorized signatory, within three (3) days of receipt of the same by him.

2.12.2 The issuance of the Letter of Acceptance to the bidder shall constitute an integral part and it will be a binding to the contract.

SECTION-3

SCHEDULE OF REQUIREMENTS

This Schedule of Requirements contains details of Lab Equipments and supplied by the firms at MANUU and other relevant information and instructions in this regard.

University may issue order for any other equipments with the same specifications.

3.1 General Instructions to the bidders:

3.1.1 **Specification:** The specifications and allied technical details of Lab Equipments for the Civil Engineering Lab shall be as follows:

S.No	Name of Equipments	Quantity Required		
		Hyderabad	Bangalore	Darbhangha
1	Venturimeter and Orificemeters 1. The test rig should consists of a GI pipe line fitted with a set of gunmetal venturimeter and orificemeter of size 25 mm(1"), and of d/D Ratio = 0.6. 2. The flow meters are to be provided with pressure tappings with quick change over cocks.3. A differential manometer with mercury is to be provided to measure the pressure difference across the venturimeter/orificemeter which is to be tested. 4. The pressure tappings are to be connected to a common manifold which in turn to be connected to the manometer. A strong iron stand is to be provided for supporting the pipe lines.5. A stop watch and an Stainless Steel collecting tank of capacity 90 liters with a gauge glass scale fitting, a drain valve and a bend are to be provided to measure the actual flow rate.6. A 220 volt AC, 0.5 HP, single phase monoblock ISI pumpset with suitable pipe fittings, strainer foot valve, and switch is to be provided to supply water to the test rig. A sump tank of size 200 liters with suitable drain is to be provided to store the water. A strong iron stand is to be fitted with wheels supports the complete test rig. The unit is to be moveable. All tanks are to be provided with FRP lining for total rust protection	1	1	1
2	Orifices and Mouthpieces, 1. Apparatus should consist of an Stainless Steel supply tank of size 0.3m x 0.3m and 0.8m height with an inlet diffuser for damping flow oscillations, an overflow outlet, a gauge glass scale fitting, a drain cock and a provision for fixing interchangeable orifice plates and mouthpieces.2. A modified hook gauge with a suitable scale sliding apparatus is to be provided to measure the x-y trajectory of the jet. 3. Two standard orifices of size 10mm and 12mm and four mouthpieces with l/d = 2.5, and 4, Bourda mouthpiece, and converging diverging mouthpiece are to be provided for conducting the experiments.4. A digital stop watch and a Stainless Steel collecting tank of size 45 litres with a gauge glass scale fitting, a drain valve and a bend are to be provided to measure the flow rate.5. A 220 volt AC, 0.5 HP, single phase mono block ISI pump set with suitable pipe fittings, strainer foot valve, and switch is to be provided to supply water to the test rig.6. A sump tank of size 250 litres with suitable drain is to be provided to store the water. 7. A strong iron stand should be fitted with wheels supports the complete test rig. The unit is moveable.8. All tanks are provided with FRP lining for total rust protection.	1	1	-
3	Notches, • Channel Test Section : Size 1600 x 250 x 200 mm • Notches : Material Brass (3 Nos.), • 1. Rectangular Notch • 2. 45 deg. V Notch , • 3. 60 deg. v Notch, • 4. Trapezoidal Notch • Hook / Pointer : With Vernier Scale, • Water Circulation: FHP Pump., • Flow Measurement : Using Measuring Tank with Peizometer, Capacity of 25 Liters. , • Sump Tank: Capacity 70 liters. • Stop Watch : Electronic • Control Panel: On/Off Switches, Main indicator etc. • The whole Set-up is to be well designed and arranged in a good quality painted structure. • Tanks should be made of Stainless Steel.	1	1	1

4	<p>Set up for frictional losses and minor losses in pipes: . Test rig-should consists of 12.5mm pipes of stainless steel, aluminium and copper of length over 100 times the diameter with pressure tappings at either ends to measure the losses due to pipe friction - major losses.</p>	1	-	-
	<p>2. To measure the minor losses, a 15mm(1/2") GI pipe is to be fitted with a bend, an elbow, a sudden enlargement and a sudden contraction. 3. Suitable flow control valves are to be provided in all the pipe lines.4. Each test pipe and pipe fitting is provided with pressure tapings to measure the pressure loss. A differential manometer with mercury is to be provided to measure this pressure loss. 5. The pressure tapings are to be connected separately to amanifold which in turn is connected to the manometer for easy change over. 6. A strong iron stand is to be provided for supporting the pipe lines. A digital stop watch and Stainless Steel collecting tank of size 90 litres with a gauge glass scale fitting, a drain valve and a bend are to be provided to measure the actual flow rate.7. A 220 volt AC, 0.5 HP, single phase mono block ISI pump set with suitable pipe fittings, strainer foot valve, and switch is to be provided to supply water to the test rig.8. A sump tank of size 200 litres with suitable drain is to be provided to store the water. A strong iron stand fitted with wheels should support the complete test rig. The unit should be moveable.9. All tanks should be provided with FRP lining for total rust protection</p>			
5	<p>Setup for verification of Bernoullis theorem:1. Setup should consists of supply and receiving chambers of 100mm dia and 600 mm long with gauge glass scale fitting for the measurement of total potential head. 2. The two chambers are to be provided with control valves and should be connected with an inter linking duct made of thick transparent prespex sheet of smooth variable converging-diverging cross section. 3. The transparent duct should have suitable pressure tapings, which are to be connected to glass piezometer tubes. 4. These tubes are to be mounted on a suitable stand with graduated scales to read directly the potential head 5. The complete unit should be supported on a strong iron stand. 6. A digital stopwatch and Stainless Steel collecting tank of size 30 liters should be fitted with a gauge glass scale fitting, a drain valve and a bend to measure the actual flow rate. 7. A 220 volt AC, 0.5 HP, single phase monoblock ISI pumpset with suitable pipe fittings, strainer foot valve, and switch is to be provided to supply water to the test rig. 8. A sump tank of size 200 liters with suitable drain is to be provided to store the water. 9. A strong iron stand is to be fitted with wheels to support the complete test rig. The unit should be moveable. 10. All tanks are to be provided with FRP lining for total rust protection.</p>	1	1	1
6	<p>Pelton Wheel Turbine Test:1. The Set-up should consist of a runner. 2. The buckets are to be mounted on the runner. 3. The water is to be fed to the turbine through Stainless Steel nozzle with a Stainless Steel spear, by means of Centrifugal Pump tangentially to the runner.4. Row of water into turbine is to be regulated by adjusting the spear position with the help of a given hand wheel. 5. The runner should be directly mounted on one end of a central Stainless Steel shaft and other end is connected to a brake arrangement. 6. The Circular window of the turbine casing is to be provided with a transparent acrylic sheet for observation of flow on to the buckets. 7. This runner assembly should be supported by rigid ms structure. 8. Load is to be applied to the turbine with the help of this brake dynamometer so that the efficiency of the turbine can be calculated. 9. The pressure gauge should be fitted at the Inlet of the turbine to measure the total supply head of the turbine.</p> <ul style="list-style-type: none"> • Technical Specification Speed :1000 RPM (approx.)Impeller :Material Brass, Bucket Type ozzle :Material Stainless Steel, Mild Steel Spear: Material Stainless Steel, Mild Steel Discharge Measurement: Pitot Tube with ManometerControl Panel :Star/ Delta Starter, Mains 	1	-	-

	Indicator, MCB for overload protection			
7	Francis Turbine Test: 1. The set-up should consist of a runner. The water should fed to the turbine by means of centrifugal Pump, radially to the runner. 2. The runner should be directly mounted on one end of a central SS shaft and other end should be connected to a brake arrangement. 3. The circular window of the turbine casing is to be provided with a transparent acrylic Sheet for observation of flow on to the runner. 4. The runner assembly should be supported by thick cast iron pedestal. 5. Load should be applied to the turbine with the help of brake arrangement so that the efficiency of the turbine canbe calculated. 6. A draft tube should be fitted on the outlet of the turbine. 7. The Set-up should be complete with guide mechanism. Pressure and vacuum Gauge are to be fitted at the Inlet and Outlet of the turbine to measure the total supply head on the turbine.Technical Specification Model 5 HP Output Power 5 HP/3.75KW Discharge 2000 LPM (Approx.) Supply Head 15 m Rope Brake Dynamometer Dia 300 mm Sump Tank Capacity 600 Liters Water Circulation Capacity 15 HP Centrifugal Pump Three Phase Speed 1500 RPM (approx.) Runner Having Curved Vanes Discharge Measurement Pitot tube with Manometer Control Panel Star/ Delta Starter, Mains Indicator, MCB for overload protection	1	-	-
8	Kaplan Turbine Test:1. The Set-up should consist of a scroll casing housing a runner. 2. Water should enter the turbine through the stationary guide vanes and passes through the runner axially. 3. The runner should have a hub and airfoil vanes, which are mounted on it. 4. The water is to be fed to the turbine by means of Centrifugal Pump. 5. The runner should be directly mounted on one end of a central SS shaft and other end is connected to a brake arrangement. 6. A transparent hollow cylinder made of acrylic should be fitted in between the draught tube and the easing for observation of flow on to the airfoil vanes. 7. This runner assembly should be supported by thick cast iron pedestal. 8. Load should be applied to the turbine with the help of this brake arrangement so that the efficiency of the turbine can be calculated. 9. The set-up should supply with control panel. 10. A draft tube is fitted on the Outlet of the turbine.11. The Set-up should be complete with guide mechanism. 12. Pressure and Vacuum Gauge are to be fitted at the Inlet & Outlet of the turbine to measure the total supply head on the turbine. Technical Specification Model 6 HP Output Power 5 HP/3.75KW Discharge 5000 LPM (Approx.) Supply Head 5 m Rope Brake Dynamometer Dia 300 mm Sump Tank Capacity 600 Litres, Water Circulation Centrifugal Pump Cap.20 HP, Three phase Speed 1500 RPM (approx.)Runner With adjustable Curved Vanes Discharge Measurement Pitot tube with Manometer Control Panel Star/ Delta Starter, Mains Indicator, MCB for overload protection	1	-	-
9	Reciprocating pump test rig 1. The test rig should consists of a reciprocating pump set suitable for determining its characteristics such as the efficiency and input power at various head and discharge. 2. The test pump should be of size 25mm x 20mm (1"x3/4") and should be driven by a 1.0 HP single phase 220Volts, 50Hz electric motor. 3. A stop watch and Stainless Steel collecting tank of capacity 90 liters with a gauge glass scale fitting, a drain valve and a bend are to be provided to measure the actual flow rate. 4. An energy meter is to be provided to measure the input power to the pump set.5. Other standard accessories include switch, flow control gate valve, foot valve and piping system with suitable pressure taps should fix the pressure and vacuum gauges. 6. A sump tank of capacity 250 liters with suitable drain is to be provided to store the water. 7. A strong iron stand should be fitted with wheels supports the complete test rig. 8. The unit is to be moveable.9. All tanks are to be provided with FRP lining for total rust protection.	1	-	-
10	Centrifugal pump test rig , 1. The test rig should consists of a pair of similar centrifugal pumps fitted with suitable pipe work and valves such that the pumps could be operated separately, in series, or in parallel and individual unit. . The test rig should be suitable for determining the characteristics such	1	-	-

	as the efficiency and input power at various head and discharge when the pumps are operated in any one of the three modes. 3. The test pumps are of 0.5HP capacity each operating on 220V, single phase. 4. A stop watch and a stainless steel collecting tank of capacity 150 liters with a gauge glass scale fitting, a drain valve and a bend are to be provided to measure the actual flow rate.			
	5. An energy meter is to be provided to measure the input power to the pump set. 6. Other standard accessories include switch, flow control gate valve, foot valve and piping system with suitable pressure taps are to be fixed to the pressure and vacuum gauges. 7. A sump tank of size 250 liters with suitable drain is to be provided to store the water. A strong iron stand fitted with wheels supports the complete test rig. 8. The unit is to be moveable. 9. All tanks are to be provided with			
11	Submersible Pump Test. The test rig should consist of an open well submersible pump suitable for determining its characteristics. 2. The test pump is to be driven by a 1.0 HP single phase 220Volts, 50Hz electric motor. 3. A stop watch and a stainless steel collecting tank of capacity 150 litres with a gauge glass scale fitting, a drain valve and a bend are to be provided to measure the actual flow rate. 4. An energy meter is to be provided to measure the input power to the pump set. 5. Other standard accessories include switch, flow control gate valve, foot valve and piping system with suitable pressure taps are to be fixed to the pressure and vacuum gauges. 6. A sump tank of capacity 250 litres with suitable drain is to be provided to store the water. 7. A strong iron stand should be fitted with wheels supports to complete test rig. 8. The unit should be moveable. 9. All tanks are to be provided with FRP lining for total rust protection	1	-	-
12	Flow Over Weir or Open Channel Apparatus1. Different shapes of "Weirs" generally used are sharp-crested weir, broadcasted weir and ogee shaped weir. 2. In the unit a centrifugal pump should suck the water from the sump tank, and discharge it to a small flow channel. 3. The weir is to be fitted at the end of channel. All the weirs should be interchangeable. 4. The water-flowing over the weir should fall in the collector. 5. Water coming from the collector can be directed to the sump or can be directed in to the measuring tank for measurement of flow. SPECIFICATIONS • (1) The unit should be provided with following weirs: • (a) Sharp-crested weir. • (b) Broad-crested weir. • (c) Ogee shaped weir. • (2) Pump 1/2 H.P. mono block. • (3) Flow measurement - Measuring tank calibrated water flow meter is to be provided.	1	-	-
13	Study of Pipe Fittings 1. The Set-up should consist of a 1/2 bend and elbow, a sudden expansion & sudden contraction fitting from 15 mm to 25 mm, ball valve and gate valve. 2. Pressure tapings should be provided at inlet and outlet of these fittings under test. 3. A differential manometer should be fitted in the line gives pressure loss of individual fitting. 4. Present Set-up of self-contained water re-circulating unit, should be provided with a sump tank and a centrifugal pump etc. Flow control valve and by-pass valve are to be fitted in water line to conduct the experiment on different flow rates. 5. Flow rate of water should be measured with the help of measuring tank and stop watch. Salient, Features: • Sudden Enlargement : From 15mm to 25mm • Sudden Contraction : From 25mm to 15mm • Bend : ½ • Elbow : ½ • Ball Valve : ½ • Gate Valve : 1/2 • Water Circulation : FHP Pump • Flow Measurement: Using Measuring Tank with Peizometer. Capacity of 25 litres. • Sump Tank: Capacity of 50 litres. • Stop Watch: Electronic • Control Panel: On / Off Switch, Mains Indicator etc. • The whole Set-up should be well designed and arranged in a good quality painted structure.	1	-	-
14	Reynolds apparatus 1. The Apparatus should consist of a stainless steel. supply tank of size 30 litres and fitted with suitable flow damping sieves. 2. A transparent tube of about 1.0m lengths is to be attached to an elliptical inlet and is provided with a control valve to obtain the required flow rate in the tube. 3. A small bend with suitable needle and valve is to be provided for injecting dye in the transparent	1	-	-

	tube for flow visualisation. 4. A stopwatch and a stainless steel collecting tank of size 35 litres with gauge glass scale fitting, a drain valve, a bend are provided to measure the flow rate. 5. A 220 volt AC, 0.5 HP, single phase mono block ISI pump set with suitable pipe fittings, strainer foot valve, and aswitch is provided to supply water to the test rig. 6. A sump tank of size 200 litres with suitable drain is provided to store the water. A strong iron stand fitted with wheels supports the complete test rig. 7. The unit is moveable. 8. All tanks are provided with FRP lining for total rust protection			
15	<p>Pitot Static Tube Set-up 1. A Pitot tube is used to measure the local velocity at a given point in the flow state. 2. A Pitot tube of standard design made of copper / SS is supplied and is to be fixed below Vernier scale 3. The Vernier scale is to be capable to measure the position of Pitot tube in transparent pipe section.</p> <p>4. The pipe should have a flow control valve to regulate the flow.</p> <p>5. A U-tube manometer is to be provided to determine the velocity head. 6. The set-up should be self contained water re-circulating unit, provided with a sump tank and a centrifugal pump etc. Flow control valve and by-pass valve are fitted in water line to conduct the experiment on different flow rates. 7. Flow rate of water is to be measured with the help of measuring tank and stop watch.</p> <p>Salient Features: Pitot Tube : Material Copper/SS of compatible size Test Section fitted with Vernier Scale. Material Clear Acetylite.</p>	1	-	-

3.1.2 **Warranty:** All the items shall carry a minimum one year OEM Warranty.

3.1.3 **Supply:** The firm should supply the lab equipments at following Polytechnics of MANUU within (30) days from the date of issue of confirmation / Purchase order.

1. Principal, MANUU, Polytechnic Hyderabad, MANUU, Gachibowli, Hyderabad – 500 032.
2. Principal, MANUU, Polytechnic Bangalore, 8th Cross , 1st Stage, 3rd Block Near, Suverna Badavane, Nagarbhavi, Bengaluru – 560 072.
3. Principal, MANUU, Polytechnic Darbhanga, Ilyas Ashraf Nagar, Chandanpatti, Laheriasari, Darbhanga – 846 001 (Bihar).

3.1.4 The firms should submit authorization certificate specific to this open tender or copy of authorized dealership distributor Certificate without which the tender will be rejected.

SECTION 4**GENERAL CONDITIONS****4.1 Confidentiality**

- 4.1.1 The bidder shall take all precautions not to disclose, divulge and / or disseminate to any third party any confidential information, proprietary information related to University. The obligation is not limited to any scope and the contractor shall be held responsible in case of breach of the confidentiality of University information.
- 4.1.2 If the Contractor receives inquiries from any person or outside agencies including Press / Media, the same shall be referred by the Contractor to University immediately on receipt of such queries.

4.2 Performance Security

- 4.2.1 The successful bidder within fourteen days of the date of issue of the LoA shall furnish a Performance Security in the form of an Account Payee Demand Draft / Fixed Deposit Receipts from a commercial bank or bank guarantee issued / confirmed from any of the commercial bank in India (in the form prescribed at Annexure-VI) for a sum equal to 10 % of the total cost as mentioned in the *accepted* financial bid in favour of Finance Officer, Maulana Azad National Urdu University, Hyderabad payable at Hyderabad.
- 4.2.2 If the contractor is called upon by the competent authority of the University to furnish Performance Security and the contractor fails to provide the said security within the period and in the form specified at clause 4.2.1 above, such failure shall constitute a breach of the contract and the Client shall be entitled to make other arrangements at the risk, cost and expense of the contractor.
- 4.2.3 The Performance Security so furnished should remain valid for a period of 60 (sixty) days / after completion of warranty period and completion of tender obligations.
- 4.2.4 The Bank Guarantee will be forfeited and credited to University account in the event of any breach or negligence or non-observance of any terms / conditions of contract or for unsatisfactory performance or for non-commencement of work after issue of 'Notice to Proceed'.
- 4.2.5 On due performance and completion of the order in all respects, the Performance Security will be returned to the firm / bidder without any interest on presentation of an absolute No Demand Certificate. However, such portion of the said Performance Security, as may be considered by the University sufficient to cover any incorrect or excess payment made on the bills to the firm, shall be retained until the final report on the account of firm's bill has been received and examined.

4.3 Signing of contract agreement

- 4.3.1 The Client shall provide a draft Contract Agreement, as prescribed at Annexure-VII, to the successful bidder along with LoA. The bidder shall, along with Performance Security, return the duly concurred and signed Contract Agreement printed on the non-judicial stamp paper of Rs.100/- adjudicated by the Registrar of Stamps of Telangana State within fourteen days of the issue of LoA.
- 4.3.2 The competent authority of the Client shall sign the Contract Agreement and return a copy of the same to the successful bidder.

4.4 Validity of contract

- 4.4.1 The contract shall be valid for a period of one year from the date of its signing by both the parties subject to continuous satisfactory performance by the contractor.
- 4.4.2 The period of contract may, in the exigencies of work requirement, be extended beyond one year for any period not exceeding further one year with mutual written consent of the contractor on the same terms and conditions as agreed to under this contract.

4.5 Payments

- 4.5.1 All payments for supply of Lab Equipments shall be made to the bidder as per the rates quoted by the contractor in the financial bid / price schedule (Annexure-III) and accepted by the University.
- 4.5.2 No price escalation, other than the revision in applicable taxes as notified by the Central / State Government from time to time, shall be entertained by the University.
- 4.5.3 Payment will be made as per order only on receipt of materials subject to certification by the concerned officials of the University.
- 4.5.4 University shall make deductions on account of Goods & Services Tax (GST) and Income Tax or any other deductions as made applicable by the laws promulgated by the Government of India or the State Government of Telangana, as the case may be, from any payments made to the bidder, and the amount so deducted shall be deemed to be a payment made to the bidder. The Client shall provide a certificate certifying the deductions so made.
- 4.5.5 All payments by the University to bidder shall be made by means of NEFT / RTGS in the bank account of the bidder.
- 4.5.6 Neither payment shall be made in advance nor shall any loan from any bank or financial institution be recommended by the University in favour of the bidder on the basis of the order of award of work.

4.6 Disclaimer

- 4.6.1 The relatives / near relatives of employees of the University are prohibited from participation in this bid. The near relatives for this purpose shall be one who is related to the other in the manner as husband, wife father, mother, son(s), son's wife (daughter-in-law), daughter(s) & daughter's husband (son-in-law), brother(s) & brother's wife, sister(s) and sister's husband (brother-in-law).

4.7 Termination of contract

- 4.7.1 The University may, without prejudice to any other remedy, for breach of contract / order, by written notice of default sent to the firm, terminate the contract / order in whole or part at the risk and cost of the defaulting firm:
- (a) If the firm fails to execute the supply of all the materials of desired quality and quantity within the stipulated period(s) as specified in the order or within any extension thereto granted by the University;
- (b) If the supplier fails to perform any other obligation(s) under the contract / order.

4.8 Governing laws and settlement of dispute

4.8.1 This contract shall be governed by the laws of Republic of India and shall be subject to the ~~exclusive jurisdiction of the courts in Hyderabad.~~

4.8.2 Any claims, disputes and or differences (including a dispute regarding the existence, validity or termination of this contract) arising out of, or relating to this contract including interpretation of its terms shall be resolved through joint discussion of the authorized representatives of the concerned parties. However, if the disputes are not resolved by discussions as aforesaid within a period of 30 days, then the matter will be referred for adjudication to the arbitration of a sole arbitrator to be appointed by the University in accordance with the provisions of the Arbitration and Conciliation Act, 1996 and rules made there under including any modifications, amendments and future enactments thereto. The venue for the arbitration will be Hyderabad and the decision of the arbitrator shall be final and binding on both the parties.

SECTION 5

SPECIAL CONDITIONS OF CONTRACT

The Special Conditions of Contract shall supplement the "Instructions to Bidders" and "General Conditions of Contract" as contained in Sections 2 and 4 respectively.

5.1 Indemnification

- 5.1.1 The contractor shall completely indemnify and keep the University indemnified against all liabilities, losses, damages, penalties, awards, decrees arising out of litigation/ claims/ application initiated against the University.
- 5.1.2 University shall be vested with the sole discretion to determine damages / losses suffered on account of wrongful act or negligence by the bidder and deduct the same from the dues payable from performance security by way of initiating suitable legal action against the contractor at any point of time.

5.2 Penalties

- 5.2.1 Failure to supply Lab equipment as per Schedule of Requirements including any subsequent addition/ reduction made thereto within the period stipulated in clause 3.2.3 shall entitle the Procuring Entity (MANUU) to charge liquidated damages @ ½ % (half percent) for each week or part thereof of delay on the value of the item covered in the purchase order and delivered late unless extension is obtained in writing from the office on valid ground before expiry of delivery period. The total liquidated damages shall not exceed 10 (ten) per cent of the value of delayed materials.
- 5.2.2 If the deliveries are not ensured forcing the Procuring Entity to buy the materials at the supplier's risk and cost from elsewhere, the loss or damage that may be sustained thereby would be recovered from the defaulting supplier.

5.3 Force Majeure obligations of the supplier

- 5.3.1 In the event of "Force Majeure", as soon as reasonably practicable but not more than 48 (forty eight) hours following the occurrence of such an event, the printer and supplier shall notify the University of the event of Force Majeure stating inter alia the anticipated period of Force Majeure during which the required services are likely to remain affected and also the measures which the affected party has taken or proposes to take to alleviate/mitigate the impact of the Force Majeure and to resume performance of such of its obligations affected.

Note:- "Force Majeure" shall mean any event beyond the control of the printer and supplier, which is unavoidable notwithstanding the reasonable care of the party affected, and which could not have been prevented by exercise of reasonable skill and care and good industry practices and shall include, without limitation, any natural calamities, strike, unlawful lockout, riot, terrorist act etc.

SECTION 6

PRICE SCHEDULE (FINANCIAL BID)

6.1 Form

6.1.1 The Price Schedule (Financial Bid) shall be submitted in the form prescribed at Annexure-III.

6.2 Other terms

6.2.1 The charges quoted by the bidder / firm in the price schedule shall be per item inclusive of GST, other taxes or cess or any other charges as may be levied by the Central / State Government from time-to-time and service charges for warranty period of the instruments. However, unit price, taxes/ cess and other charges, if any, should be shown separately in the schedule.

6.2.2 In addition to the applicable taxes/ cess, the rates quoted by the bidder shall be inclusive of all the charges.

6.2.3 No price escalation, other than the revision in applicable taxes as notified by the Central / State Government from time to time, shall be entertained by the Client during the period of contract including the extended period, if any.

6.2.4 If a Firm / Company quotes NIL rates / charges, the bid shall be treated as unresponsive and will not be considered.

6.2.5 The bidders shall have to ascertain the exact percentage of GST applicable on each of the items while quoting the rates in the financial bid (Annexure-III). In case of discrepancy/difference of opinion on GST rates, the University shall decide the lowest quotation on verification of the relevant rules of the GST Act vis-à-vis supporting documents provided by the bidders in respect of the claim for the GST. The decision of the University shall be final and binding in this regard.

SECTION 7

FORMS

Annexure-I	Bid Cover Letter
Annexure-II	Technical Bid Submission Form
Annexure-III	Financial Bid Submission Form
Annexure-IV	Letter of Acceptance
Annexure-V	Form for submission of Bid Security (Through Bank Guarantee)
Annexure-VI	Form for submission of Performance Security
Annexure-VII	Contract Form
Annexure-VIII	Check List

ANNEXURE-I

BID COVER LETTER
(To be written on the letter head of company)
[Ref. clause 2.3.6 & 2.5.2(a)]

To

The Registrar,
Maulana Azad National Urdu University,
Gachibowli,
Hyderabad 500032

Ref: Invitation for bid vide MANUU's Advertisement No..... dated for supply of Venturimeter and other lab equipment for Civil Engineering at Polytechnic Hyderabad / Polytechnic Bangalore / Polytechnic Darbhanga, MANUU.

Sir,

We, the undersigned, declare that:

1. We have examined and have no reservations to the bidding documents, including corrigendum/ addenda issued, if any, in accordance with Instructions to Bidders.
2. We offer to execute in conformity with the bidding documents for supply of Lab Equipments at Polytechnic Hyderabad / Polytechnic Bangalore / Polytechnic Darbhanga, MANUU.
3. Our bid shall be valid for a period of 90 days from the date fixed for the bid submission deadline in accordance with the bidding documents and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
4. If our bid is accepted, we commit to submit a performance security in accordance with the bidding documents.
5. Government of India or any State Government or other Public Sector or Private Sector Organizations have not declared us ineligible or black listed us on charges of engaging in corrupt, fraudulent, collusive or coercive practices or any failure/lapses of serious nature.
6. We also accept all the terms and conditions of this bidding document and undertake to abide by them, including the condition that you are not bound to accept highest ranked bid / lowest bid or any other bid that you may receive.
7. We also declare that
 - (i) No benefit shall be offered to the employees of the Client's organization which are not legally available to them and also no offence shall be committed under Prevention of Corruption Act, 1988 or Indian Penal Code, 1860;
 - (ii) No undisclosed agreement or understanding with other bidders shall be entered into with respect to prices, certifications etc.;
 - (iii) The items, as required in the tender document herein, have not been and will not be made available to other entities at prices lower than the bid price;
 - (iv) No payment has been made to any agent/ broker or any other intermediary for this bidding;
 - (v) No transgression has been committed in the past with any other organization in India or abroad that may impinge on the anti-corruption principle.

Yours sincerely,

(Authorized Signatory)
Full Name and Designation
Company's Seal

Note:- Authorized person shall attached a copy of authorization for signing on behalf of Bidding Company.

ANNEXURE-II**TECHNICAL BID SUBMISSION FORM**

(Ref. clause 2.5.1)

1.	Name of the company	M/s.										
2.	Address of the Company along with Telephone/ Mobile No., e-mail ID, website address etc.											
3.	Details of EMD	Rs.1,30,000/- D.D. No. _____ dated _____ Bank _____										
	Exemption of EMD for registering with MSME, NSIC, N.C.C.F, Kendriya Bhandar etc. will be considered as per Govt. of India's rules on submission of documentary proof.											
4.	Details of Registration with GST	Upload Scanned Copy										
5.	PAN details	Upload Scanned Copy										
6.	Average Annual Turnover during the preceding three years 2014-15, 2015-16 & 2016-17 (Attach scanned copy of audited balance sheet and Profit & Loss Account for these years, Certificate Certified by CA)	(In R) 2014-15 2015-16 2016-17 Upload Scanned Copies										
7.	Value of Purchase Orders of Lab Equipments carried out during the preceding five years (Ref. Clause 2.3.2 (b) - Attach scanned copy of Purchase Orders)	(In R) 2012-13 2013-14 2014-15 2015-16 2016-17 Upload Scanned Copies										
8.	Compliance Report of Each Item <table border="1"> <thead> <tr> <th>Name of the item</th> <th>Specification as per Tender</th> <th>Specification quoted with Brand & Model</th> <th>Warranty</th> <th>Deviation (if any)</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Name of the item	Specification as per Tender	Specification quoted with Brand & Model	Warranty	Deviation (if any)						Upload compliance report of item (s) quoted in detail
Name of the item	Specification as per Tender	Specification quoted with Brand & Model	Warranty	Deviation (if any)								
9.	Has the Company ever been declared ineligible or blacklisted by any authority?	Upload Scanned Copy										
10.	Letter from OEM / authorization specific to this tender	Upload Scanned Copy										
11.	Any other relevant information	Upload Scanned Copy										

DECLARATION

I / We hereby declare that the information furnished above are true and based on available documentary evidences. In case, any of the information furnished above, either in full or in part, is at any stage, found to be incorrect, our bid shall stand cancelled or if contract has been awarded, the same shall stand terminated.

(Authorized Signatory)
Full Name and Designation
Official Seal

Note:- Authorized person shall attached a copy of authorization for signing on behalf of Bidding Company.

ANNEXURE-III

FINANCIAL BID SUBMISSION FORM

(Ref Clauses 2.6.1 & 2.6.2)

(To be filled Online only as per the CPPP format)

Name of the Bidder/ Bidding Firm / Company :								
PRICE SCHEDULE (DOMESTIC TENDERS - RATES ARE TO GIVEN IN RUPEES (INR) ONLY) (This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)								
NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder in Rs. P	GST Amount on Item Qty x Basic Rate in INR Rs. P	TOTAL AMOUNT Without Taxes col (13) = (4) x (7) in Rs. P	TOTAL AMOUNT With Taxes col (14) = sum (8) to (13) in Rs. P	TOTAL AMOUNT In Words
1	2	4	5	7	9	13	14	15
1	Supply of venturimeter and other lab equipments							
1.1	Venturimeter and Orificemeters 1. The test rig should consists of a GI pipe line fitted with a set of gunmetal venturimeter and orificemeter of size 25 mm(1"), and of d/D Ratio = 0.6. 2. The flow meters are to be provided with pressure tapplings with quick change over cocks.3. A differential manometer with mercury is to be provided to measure the pressure difference across the venturimeter/orificemeter which is to be tested. 4. The pressure tapplings are to be connected to acommonmanifold which in turn to be connected to the manometer. A strong iron stand is to be provided for supporting the pipe lines.5. A stop watch and an Stainless Steel collecting tank of capacity 90 liters with	03	Nos			0.00	0.00	Zero Only

	a gauge glass scale fitting, a drain valve and a bend are to be provided to measure the actual flow rate.6. A 220 volt AC, 0.5 HP, single phase monoblock ISI pumpset with suitable pipe fittings, strainer foot valve, and switch is to be provided to supply water to the test rig. A sump tank of size 200 liters with suitable drain is to be provided to store the water. A strong iron stand is to be fitted with wheels supports the complete test rig. The unit is to be moveable.All tanks are to be provided with FRP lining for total rust protection							
1.2	Orifices and Mouthpieces, 1. Apparatus should consist ofan Stainless Steel supply tank of size 0.3mx0.3m and 0.8m height with an inlet diffuser for damping flow oscillations, an overflow outlet, a gauge glass scale fitting, a drain cock and a provision for fixing interchangeable orifice plates and mouthpieces.2. A modified hook gauge with a suitable scale sliding apparatus is to be provided to measure the x-y trajectory of the jet. 3. Two standard orifices of size 10mm and 12mm and four mouthpieces with l/d = 2.5, and 4, Bourda mouthpiece, and converging diverging mouthpiece are to be provided for conducting the experiments.4. A digital stop watch and a Stainless Steel collecting tank of size 45 litres with a gauge glass scale fitting, a drain valve and a	02	Nos			0.00	0.00	Zero Only

	<p>bend are to be provided to measure the flow rate.5. A 220 volt AC, 0.5 HP, single phase mono block ISI pump set with suitable pipe fittings, strainer foot valve, and switch is to be provided to supply water to the test rig.6. A sump tank of size 250 litres with suitable drain is to be provided to store the water. 7. A strong iron stand should be fitted with wheels supports the complete test rig. The unit is moveable.8. All tanks are provided with FRP lining for total rust protection.</p>							
1.3	<p>Notches, • Channel Test Section : Size 1600 x 250 x 200 mm • Notches : Material Brass (3 Nos.), • 1. Rectangular Notch • 2. 45 deg. V Notch , • 3. 60 deg. v Notch, • 4. Trapezoidal Notch • Hook / Pointer : With Vernier Scale, • Water Circulation: FHP Pump., • Flow Measurement : Using Measuring Tank with Peizometer, Capacity of 25 Litters. , • Sump Tank: Capacity 70 litters. • Stop Watch : Electronic • Control Panel: On/Off Switches, Main indicator etc. • The whole Set-up is to be well designed and arranged in a good quality painted structure. • Tanks should be made of Stainless Steel.</p>	03	Nos			0.00	0.00	Zero Only
1.4	<p>Set up for frictional losses and minor losses in pipes: . Test rig should consists of 12.5mm pipes of stainless steel, aluminium and copper of length over 100 times the diameter</p>	01	Nos			0.00	0.00	Zero Only

	<p>with pressure tapings at either ends to measure the losses due to pipe friction - major losses.</p>							
	<p>2. To measure the minor losses, a 15mm(1/2") GI pipe is to be fitted with a bend, an elbow, a sudden enlargement and a sudden contraction. 3. Suitable flow control valves are to be provided in all the pipe lines.4. Each test pipe and pipe fitting is provided with pressure tapings to measure the pressure loss. A differential manometer with mercury is to be provided to measure this pressure loss. 5. The pressure tapings are to be connected separately to a manifold which in turn is connected to the manometer for easy change over. 6. A strong iron stand is to be provided for supporting the pipe lines. A digital stop watch and Stainless Steel collecting tank of size 90 litres with a gauge glass scale fitting, a drain valve and a bend are to be provided to measure the actual flow rate.7. A 220 volt AC, 0.5 HP, single phase mono block ISI pump set with suitable pipe fittings, strainer foot valve, and switch is to be provided to supply water to the test rig.8. A sump tank of size 200 litres with suitable drain is to be provided to store the water. A strong iron stand fitted with wheels should support the complete test rig. The unit should be moveable.9. All tanks should be provided with FRP lining for total rust protection</p>							

1.5	<p>Setup for verification of Bernoullis theorem:1. Setup should consists of supply and receiving chambers of 100mm dia and 600 mm long with gauge glass scale fitting for the measurement of total potential head. 2. The two chambers are to be provided with control valves and should be connected with an inter linking duct made of thick transparent perspex sheet of smooth variable converging-diverging cross section. 3. The transparent duct should have suitable pressure tapings, which are to be connected to glass piezometer tubes. 4. These tubes are to be mounted on a suitable stand with graduated scales to read directly the potential head 5. The complete unit should be supported on a strong iron stand. 6. A digital stopwatch and Stainless Steel collecting tank of size 30 liters should be fitted with a gauge glass scale fitting, a drain valve and a bend to measure the actual flow rate. 7. A 220 volt AC, 0.5 HP, single phase monoblock ISI pumpset with suitable pipe fittings, strainer foot valve, and switch is to be provided to supply water to the test rig. 8. A sump tank of size 200 liters with suitable drain is to be provided to store the water. 9. A strong iron stand is to be fitted with wheels to support the complete test rig. The unit should be moveable.</p>	03	Nos			0.00	0.00	Zero Only
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	10. All tanks are to be provided with FRP lining for total rust protection.							
	Pelton Wheel							
1.6	<p>Turbine Test:1. The Set-up should consist of a runner. 2. The buckets are to be mounted on the runner.</p> <p>3. The water is to be fed to the turbine through Stainless Steel nozzle with a Stainless Steel spear, by means of Centrifugal Pump tangentially to the runner.4. Row of water into turbine is to be regulated by adjusting the spear position with the help of a given hand wheel.</p> <p>5. The runner should be directly mounted on one end of a central Stainless Steel shaft and other end is connected to a brake arrangement. 6. The Circular window of the turbine casing is to be provided with a transparent acrylic sheet for observation of flow on to the buckets. 7. This runner assembly should be supported by rigid MS structure.</p> <p>8. Load is to be applied to the turbine with the help of this brake dynamometer so that the efficiency of the turbine can be calculated. 9. The pressure gauge should be fitted at the Inlet of the turbine to measure the total supply head of the turbine.</p> <ul style="list-style-type: none"> • Technical Specification Speed :1000 RPM (approx.)Impeller :Material Brass, Bucket Type ozzle :Material Stainless Steel, Mild Steel Spear: Material Stainless Steel, Mild Steel Discharge 	01	Nos			0.00	0.00	Zero Only

	Measurement: Pitot Tube with Manometer Control Panel :Star/ Delta Starter, Mains Indicator, MCB for overload protection							
1.7	Francis Turbine Test: 1. The set-up should consist of a runner. The water should be fed to the turbine by means of centrifugal Pump, radially to the runner. 2. The runner should be directly mounted on one end of a central SS shaft and other end should be connected to a brake arrangement. 3. The circular window of the turbine casing is to be provided with a transparent acrylic Sheet for observation of flow on to the runner. 4. The runner assembly should be supported by thick cast iron pedestal. 5. Load should be applied to the turbine with the help of brake arrangement so that the efficiency of the turbine can be calculated. 6. A draft tube should be fitted on the outlet of the turbine. 7. The Set-up should be complete with guide mechanism. Pressure and vacuum Gauge are to be fitted at the Inlet and Outlet of the turbine to measure the total supply head on the turbine. Technical Specification Model 5 HP Output Power 5 HP/3.75KW Discharge 2000 LPM (Approx.) Supply Head 15 m Rope Brake Dynamometer Dia 300 mm Sump Tank Capacity 600 Liters Water Circulation Capacity 15 HP Centrifugal Pump Three Phase Speed 1500 RPM (approx.) Runner Having Curved Vanes Discharge Measurement Pitot tube	01	Nos			0.00	0.00	Zero Only

	with Manometer Control Panel Star/ Delta Starter, Mains Indicator, MCB for overload protection							
1.8	<p>Kaplan Turbine</p> <p>Test:1. The Set-up should consist of a scroll casing housing a runner. 2. Water should enter the turbine through the stationary guide vanes and passes through the runner axially. 3. The runner should have a hub and airfoil vanes, which are mounted on it. 4. The water is to be fed to the turbine by means of Centrifugal Pump. 5. The runner should be directly mounted on one end of a central SS shaft and other end is connected to a brake arrangement. 6. A transparent hollow cylinder made of acrylic should be fitted in between the draught tube and the easing for observation of flow on to the airfoil vanes. 7. This runner assembly should be supported by thick cast iron pedestal. 8. Load should be applied to the turbine with the help of this brake arrangement so that the efficiency of the turbine can be calculated. 9. The set-up should supply with control panel. 10. A draft tube is fitted on the Outlet of the turbine.11. The Set-up should be complete with guide mechanism. 12. Pressure and Vacuum Gauge are to be fitted at the Inlet & Outlet of the turbine to measure the total supply head on the turbine. Technical Specification Model 6 HP Output Power 5 HP/3.75KW Discharge 5000 LPM (Approx.)</p>	01	Nos			0.00	0.00	Zero Only

	Supply Head 5 m Rope Brake Dynamometer Dia 300 mm Sump Tank Capacity 600 Litres, Water Circulation Centrifugal Pump Cap.20 HP, Three phase Speed 1500 RPM (approx.)Runner With adjustable Curved Vanes Discharge Measurement Pitot tube with Manometer Control Panel Star/ Delta Starter, Mains Indicator, MCB for overload protection							
1.9	Reciprocating pump test rig 1. The test rig should consist of a reciprocating pump set suitable for determining its characteristics such as the efficiency and input power at various head and discharge. 2. The test pump should be of size 25mm x 20mm (1"x3/4") and should be driven by a 1.0 HP single phase 220Volts, 50Hz electric motor. 3. A stop watch and Stainless Steel collecting tank of capacity 90 liters with a gauge glass scale fitting, a drain valve and a bend are to be provided to measure the actual flow rate. 4. An energy meter is to be provided to measure the input power to the pump set.5. Other standard accessories include switch, flow control gate valve, foot valve and piping system with suitable pressure taps should fix the pressure and vacuum gauges. 6. A sump tank of capacity 250 liters with suitable drain is to be provided to store the water. 7. A strong iron stand should be fitted with wheels supports the complete test rig. 8. The unit is to be moveable.9. All tanks are to be provided with FRP	01	Nos			0.00	0.00	Zero Only

	lining for total rust protection.							
1.10	<p>Centrifugal pump test rig. 1. The test rig should consists of a pair of similar centrifugal pumps fitted with suitable pipe work and valves such that the pumps could be operated separately, in series, or in parallel and individual unit. . The test rig should be suitable for determining the characteristics such as the efficiency and input power at various head and discharge when the pumps are operated in any one of the three modes. 3. The test pumps are of 0.5HP capacity each operating on 220V, single phase. 4. A stop watch and a stainless steel collecting tank of capacity 150 liters with a gauge glass scale fitting, a drain valve and a bend are to be provided to measure the actual flow rate. 5. An energy meter is to be provided to measure the input power to the pump set. 6. Other standard accessories include switch, flow control gate valve, foot valve and piping system with suitable pressure taps are to be fixed to the pressure and vacuum gauges. 7. A sump tank of size 250 liters with suitable drain is to be provided to store the water. A strong iron stand fitted with wheels supports the complete test rig. 8. The unit is to be moveable. 9. All tanks are to be provided with</p>	01	Nos			0.00	0.00	Zero Only
1.11	<p>Submersible Pump Test. The test rig should consist of an open well submersible pump suitable for determining its characteristics. 2. The test pump is to</p>	01	Nos			0.00	0.00	Zero Only

	<p>be driven by a 1.0 HP single phase 220Volts, 50Hz electric motor.</p> <p>3. A stop watch and a stainless steel collecting tank of capacity 150 litres with a gauge glass scale fitting, a drain valve and a bend are to be provided to measure the actual flow rate.</p> <p>4. An energy meter is to be provided to measure the input power to the pump set.</p> <p>5. Other standard accessories include switch, flow control gate valve, foot valve and piping system with suitable pressure taps are to be fixed to the pressure and vacuum gauges.</p> <p>6. A sump tank of capacity 250 litres with suitable drain is to be provided to store the water. 7. A strong iron stand should be fitted with wheels supports to complete test rig. 8. The unit should be moveable.</p> <p>9. All tanks are to be provided with FRP lining for total rust protection</p>							
	<p>Flow Over Weir or Open Channel Apparatus1. Different shapes of "Weirs" generally used are sharp-crested weir, broadcasted weir and ogee shaped weir. 2. In the unit a centrifugal pump should suck the water from the sump tank, and discharge it to a small flow channel. 3. The weir is to be fitted at the end of channel. All the weirs should be interchangeable. 4. The water-flowing over the weir should fall in the collector. 5. Water coming from the collector can be directed to the sump or can be directed in to the measuring tank for measurement of flow.</p> <ul style="list-style-type: none"> • SPECIFICATIONS • (1) The unit should be provided with 	01	Nos			0.00	0.00	Zero Only
1.12								

	<p>following weirs: • (a) Sharp-crested weir. • (b) Broad-crested weir. • (c) Ogee shaped weir. • (2) Pump 1/2 H.P. mono block. • (3) Flow measurement - Measuring tank calibrated water flow meter is to be provided.</p>							
1.13	<p>Study of Pipe Fittings</p> <p>1. The Set-up should consist of a 1/2 bend and elbow, a sudden expansion & sudden contraction fitting from 15 mm to 25 mm, ball valve and gate valve.</p> <p>2. Pressure tapings should be provided at inlet and outlet of these fittings under test.</p> <p>3. A differential manometer should be fitted in the line gives pressure loss of individual fitting.</p> <p>4. Present Set-up of self-contained water recirculating unit, should be provided with a sump tank and a centrifugal pump etc. Flow control valve and by-pass valve are to be fitted in water line to conduct the experiment on different flow rates.</p> <p>5. Flow rate of water should be measured with the help of measuring tank and stop watch.</p> <p>Salient Features:</p> <ul style="list-style-type: none"> • Sudden Enlargement : From 15mm to 25mm • Sudden Contraction : From 25mm to 15mm • Bend : ½ • Elbow : ½ • Ball Valve : ½ • Gate Valve : 1/2 • Water Circulation : FHP Pump • Flow Measurement: Using Measuring Tank with Peizometer. Capacity of 25 litres. • Sump Tank: Capacity of 50 litres. • Stop Watch: Electronic • Control Panel: On / Off Switch, Mains 	01	Nos			0.00	0.00	Zero Only

	Indicator etc. • The whole Set-up should be well designed and arranged in a good quality painted structure.							
1.14	Reynolds apparatus 1. The Apparatus should consist of a stainless steel. supply tank of size 30 litres and fitted with suitable flow damping sieves. 2. A transparent tube of about 1.0m lengths is to be attached to an elliptical inlet and is provided with a control valve to obtain the required flow rate in the tube. 3. A small bend with suitable needle and valve is to be provided for injecting dye in the transparent tube for flow visualisation. 4. A stopwatch and a stainless steel collecting tank of size 35 litres with gauge glass scale fitting, a drain valve, a bend are provided to measure the flow rate. 5. A 220 volt AC, 0.5 HP, single phase mono block ISI pump set with suitable pipe fittings, strainer foot valve, and aswitch is provided to supply water to the test rig. 6. A sump tank of size 200 litres with suitable drain is provided to store the water. A strong iron stand fitted with wheels supports the complete test rig. 7. The unit is moveable. 8. All tanks are provided with FRP lining for total rust protection	01	Nos			0.00	0.00	Zero Only
1.15	Pitot Static Tube Set-up 1. A Pitot tube is used to measure the local velocity at a given point in the flow state. 2. A Pitot tube of standard design made of copper / SS is supplied and is to be fixed below Vernier scale 3. The Vernier scale is to be capable to measure the position of Pitot tube	01	Nos			0.00	0.00	Zero Only

	in transparent pipe section. 4. The pipe should have a flow control valve to regulate the flow.							
	5. A U-tube manometer is to be provided to determine the velocity head. 6. The set-up should be self contained water re-circulating unit, provided with a sump tank and a centrifugal pump etc. Flow control valve and by-pass valve are fitted in water line to conduct the experiment on different flow rates. 7. Flow rate of water is to be measured with the help of measuring tank and stop watch. Salient Features: Pitot Tube : Material Copper/SS of compatible size Test Section fitted with Vernier Scale. Material Clear Aclyte.							
Total in Figures						0.00	0.00	INR Zero Only
Quoted Rate in Words								

LETTER OF ACCEPTANCE
or
LETTER OF AWARD
(Ref. clause 2.12.1 & 2.12.2)

Confidential

Tender No. MANUU/Purchase/F.179/2017-18/

Dated:

Contract Title: Supply of venturimeter and other lab equipments for Civil Engineering at Polytechnic Hyderabad / Bangalore / Darbhanga, MANUU, Hyderabad.

To

M/s
.....
.....

Subject:- Award for tender No. MANUU/Purchase/F.188/2017-18/... Supply of venturimeter and other Equipments for Civil Engineering at Polytechnic Hyderabad / Bangalore / Darbhanga, MANUU, Hyderabad."

Ref. Your offer No.....dated.....against our tender No. MANUU/ Purchase/F.188/2017-18/..... opened on.....

Dear Sir/ Madam,

I am directed to inform you that after evaluating the bid documents submitted by you on(date), Maulana Azad National Urdu University, Hyderabad is pleased to inform you that you have been selected as the successful bidder for **"Supply of Civil Lab Equipments at Polytechnic Hyderabad / Bangalore / Darbhanga MANUU**, The total cost shall be(amount) as indicated in your financial bid submitted on.....(date), in accordance with the procedures intimated in the relevant bid documents.

2. You / your authorized representative(s) are requested to be personally present at Office of the Registrar, Maulana Azad National Urdu University, Hyderabad for signing of the contract by.....(date).
3. In this respect, we also request you to submit the performance security of Rupeesby.....(date). Security deposit being 10 % of the total cost of Rs.....
4. Please apply for refund of EMD deposited along with the bid.
5. You are requested to execute necessary agreement within seven days from the date of issue of this letter in the enclosed agreement form.
6. This notification concludes the legally binding contract between you and the Maulana Azad National Urdu University, Hyderabad till issue of a formal contract.

Encl. Agreement Form along with the Schedule of Requirements

Yours truly,

Registrar

ANNEXURE-V

**BID SECURITY SUBMISSION FORM
(THROUGH BANK GUARANTEE)
(Ref. clause 2.5.1)**

No.....

Date.....

To

The Registrar (hereinafter called "The Client")
Maulana Azad National Urdu University,
Gachibowli
Hyderabad 500032

Whereas M/s.....(hereinafter called "the tenderer") has submitted its bid dated.....for "Supply of Venturimeter and other lab equipments for Civil Engineering at MANUU, Polytechnic Hyderabad / Bangalore / Darbhanga against owner's Tender No. MANUU/Purchase/ F.179/2017-18/..... dated.....

KNOW ALL MEN by these presents that WEhaving our registered office at (hereinafter called 'the Bank') are bound unto the Client in the sum of Rs./(Rupees only) for which payment will and truly to be made to the said Client, the Bank binds itself, its successors and assigns by these present. Sealed with the Common Seal of the Bank thisday of2018.

THE CONDITIONS OF THIS OBLIGATION ARE:

1. If the tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender,
2. If the tenderer having been notified of the acceptance of his tender by the Client during the period of its validity:
 - (a) fails or refuses to accept /execute the contract,
 - (b) fails or refuses to furnish the Performance Security for the due performance of the contract,

We undertake to pay the Client up to the above amount upon receipt of its first written demand, without the Client having to substantiate its demand, provided that in its demand the Client will note that the amount claimed by it is due to it owing to the occurrence of any one or both of the conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including 45 days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

Signature of the authorized officer of the Bank
Name & Designation of the office
Seal, Name & Address of the Bank and Branch
Tel No./ Fax No. of Branch

ANNEXURE-VI

**PERFORMANCE SECURITY SUBMISSION FORM
(THROUGH BANK GUARANTEE)**

(To be executed on non-judicial stamped paper of an appropriate value)
(Ref. clause 4.2.1)

Date :

Bank Guarantee No :

Amount of Guarantee :

Guarantee Period : From to

Guarantee Expiry Date :

Last date of Lodgement :

WHEREAS Maulana Azad National Urdu University, Gachibowli, Hyderabad 500032 (hereinafter referred to as "**The Owner**" which expression shall unless repugnant to the context includes their legal representatives, successors and assigns) has executed a binding to the contract on [insert date of acceptance of the letter of acceptance(LOA)] with [insert name of the Successful Bidder](hereinafter referred to as the "**Contractor**" which expression shall unless repugnant to the context include its legal representatives, successors and permitted assigns) for the performance, execution and supply of Civil Lab Equipments shall have the meaning ascribed to it in the Contract] based on the terms & conditions set out in the Tender Documents number [insert reference number of the Tender Documents] dated [insert date of issue of Tender Documents].....and various other documents forming part thereof.

AND WHEREAS one of the conditions of the Contract is that the Contractor shall furnish to the Owner a Bank Guarantee from a commercial bank in India having a branch at Hyderabad for a sum of R...../- (the amount guaranteed under this bank guarantee shall hereinafter be referred to as the "**Guaranteed Amount**") against due and faithful performance of the Contract including the performance bank guarantee obligation and other obligations of the Contractor for the supplies made and the services being provided and executed by under the Contract. This bank guarantee shall be valid from the date hereof up to the expiry of the Contract Period including any extension thereof.

AND WHEREAS the Contractor has approached [insert the name of the commercial bank] (here in after referred to as the "**Bank**") having its registered office at [insert the address].....and at the request of the Contractor and in consideration of the promises made by the Contractor, the Bank has agreed to give such guarantee as hereunder:

- (i) The Bank hereby undertakes to pay under this guarantee, the Guaranteed Amount claimed by the Owner without any further proof or conditions and without demur, reservation, contest, recourse or protest and without any enquiry or notification to the Contractor merely on a demand raised by the Owner stating that the amount claimed is due to the Owner under the Contract. Any such demand made on the Bank by the Owner shall be conclusive as regards the amount due and payable by the Bank under this bank guarantee and the Bank shall pay without any deductions or set offs or counterclaims whatsoever, the total sum claimed by the Owner in such Demand. The Owner shall have the right to make an unlimited number of Demands under this bank guarantee provided that the aggregate of all sums paid to the Owner by the Bank under this bank guarantee shall not exceed the Guaranteed Amount. In each case of demand, resulting to change of PBG values, the Owner shall surrender the current PBG to the bank for amendment in price.

- (ii) However, the Bank's liability under this bank guarantee shall be restricted to an amount not exceeding Rs...../[Rupees..... only].
- (iii) The Owner will have the full liberty without reference to the Bank and without affecting the bank guarantee to postpone for any time or from time to time the exercise of any powers and rights conferred on the Owner under the Contract and to enforce or to forbear endorsing any powers or rights or by reasons of time being given to the contractor which under law relating the Surety would but for the provisions have the effect of releasing the surety.
- (iv) The rights of the Owner to recover the Guaranteed Amount from the Bank in the manner aforesaid will not be affected or suspended by reasons of the fact that any dispute or disputes have been raised by the Contractor and / or that any dispute(s) are pending before any office, tribunal or court in respect of such Guaranteed Amount and/ or the Contract.
- (v) The guarantee herein contained shall not be affected by the liquidation or winding up, dissolution, change of constitution or insolvency of the Contractor but shall in all respects and for all purposes be binding and operative until payment of all money due to the Owner in respect of such liability or liabilities is effected.
- (vi) This bank guarantee shall be governed by and construed in accordance with the laws of the Republic of India and the parties to this bank guarantee hereby submit to the jurisdiction of the Courts of Hyderabad for the purposes of settling any disputes or differences which may arise out of or in connection with this bank guarantee and for the purposes of enforcement under this bank guarantee.
- (vii) All capitalized words used but not defined herein shall have the meanings assigned to them under the Contract.
- (viii) NOTWITHSTANDING anything stated above, the liability of the Bank under this bank guarantee is restricted to the Guaranteed Amount and this bank guarantee shall expire on the expiry of the Warranty Period under the Contract.
- (ix) Unless a Demand under this bank guarantee is filed against the Bank within six (6) months from the date of expiry of this bank guarantee all the rights of the Owner under this bank guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities hereunder.
- (x) However, in the opinion of the Owner, if the Contractor's obligations against which this bank guarantee is given are not completed or fully performed by the Contractor within the period prescribed under the Contract, on request of the Contractor, the Bank hereby agrees to further extend the bank guarantee, till the Contractor fulfills its obligations under the Contract.
- (xi) We have the power to issue this bank guarantee in your favour under Memorandum and Article of Association and the Undersigned has full power to do so under the Power of Attorney dated [*date of power of attorney to be inserted*] granted to him by the Bank.

Date:

Bank
(Corporate Seal of the Bank)
*Signature of the a person duly authorized
to sign on behalf of the Bank*

ANNEXURE-VII

CHECK LIST
(Ref. clause 2.5.2)

Sl. No.	Particulars	Strike out (/) which is not applicable
TECHNICAL BID		
1.	Have you signed prescribed 'Bid Cover Letter' on the letter head of the Company ?	Yes / No
2.	Have you signed and put seal of the Company on each page of the tender document and attached the same with your bid?	Yes / No
3.	Have you filled in all the columns of Annexure-II of the tender document with all the relevant information?	Yes / No
4.	Have you attached self attested copies of all the documents required under clause 2.3.2 of Section 2 of the tender document in support of meeting minimum eligibility criteria?	Yes / No
5.	Have you enclosed Bid Security (EMD) along with the Technical Bid?	Yes / No
6.	Have you attached proof of authorization to sign on behalf of the bidder in the Technical Bid?	Yes / No
FINANCIAL BID		
7.	Is your financial bid proposal duly filled in the form prescribed at Annexure-III of the tender document and signed with the Company's seal ?	Yes / No
8.	Have you Ensured that columns of price schedule (Annexure-III) have been filled as indicated below?	Yes / No

Signature of authorized signatory
Full Name & Designation
Company's seal

Instructions for filling up BOQ (Online Only)

Name of the Bidder/ Bidding Firm / Company :									
PRICE SCHEDULE (DOMESTIC TENDERS - RATES ARE TO GIVEN IN RUPEES (INR) ONLY) (This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)									
NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER #	NUMBER	NUMBER #	NUMBER #	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	BASIC RATE In Figures To be entered by the Bidder in Rs. P	GST Amount on Item Qty x Basic Rate in INR Rs. P	TOTAL AMOUNT Without Taxes col (13) = (4) x (7) in Rs. P	TOTAL AMOUNT With Taxes col (14) = sum (8) to (13) in Rs. P	TOTAL AMOUNT In Words	
1	2	4	5	7	9	13	14	15	

