



Government College of Engineering

Station Road, Osmanpura, Aurangabad – 431 005

Phone : (0240) 2366101, 110, 111
E-Mail – principalgeca@yahoo.com

Fax : (0240) 2332835
Web – <http://www.geca.ac.in>

No. GECA/Mech/2019/3640

Date 11.8 NOV 2019

01) Office Notice Board.

02) Institute web site.

03) Office Copy

Subject :- Quotation for Supply Of Mechanical FMHM Lab. machinery & Equipment.

Dear Sir,

You are requested to send your competitive quotations for the supply of the following items subject to the following conditions.

CONDITIONS:

1. Sealed quotations/Tenders should be submitted only by MANUFACTURERS of the given item / items and must reach the institute within 20 (Twenty) days that is up to -----(5 p.m.)
2. Quotations must be valid for 06 (six) months.
3. The bidder must quote for all the items of the tender. Partial quotations will be rejected.
4. The items must have 03 years service warranty after installation of the equipment.
5. Manufacturing license given by the competent authority must be attached along with the bid.
6. Duly signed Audited Balance Sheets for the last three financial years must be attached.
7. Comparison will be done on the basis of individual equipment.
8. Rates quoted must be inclusive of supply, transportation, loading, unloading, installation, demonstration at the laboratory of the institute.
9. Pre-Dispatch Inspection (PDI) by the concerned faculty (Maximum two) will be done at the manufacturer's location and at the manufacturer's cost before the delivery of the item.
10. Rates quoted should be Basic cost + Taxes = Total cost
11. Income Tax clearance certificate till 31/03/2019 must be attached along with the bid.
12. The bid will be a Two-Bid system. One main envelop should contain inside the two envelops: one for Technical Bid and another for Financial Bid. Technical Bid will contain technical specifications, all the required documents whereas Financial Bid will contain only costs. If the Technical Bid does not match with the technical specifications given in the enquiry and all the mentioned supporting documents are not attached, the bid will be rejected. Financial bid of such bidder will not be opened.
13. The main envelop must be super scribed as "Quotation for --(Name of the Item)---for FMHM Lab Mech. Engg. Dept." Inner two envelops must be marked as "Technical Bid" and "Financial Bid" respectively.
14. Payment will be 100% after successful installation and demonstration of the equipment.
15. The right to reject any or all the quotations remains with the Principal, Government College of Engineering, Aurangabad.
16. If any dispute arises, it will be at the Aurangabad jurisdiction only.:

Sr. No.	Descriptions	Qty.
01	Centrifugal Pump Test Rig (1 HP) :- Centrifugal pump to measure input power, output power and efficiency provided with three phase motor, vacuum gauge at suction and pressure gauge on discharge pipe. Pump is provided with variable frequency drive, gate valve at discharge to vary the head which facilitates estimation of pump performance at three speeds and various discharge heads. Power input to motor is measured with energy meter. The unit is recalculating type and totally self contained one. Should be able to measure head, speed, input power, output power, efficiency, to draw characteristic curves. Sump tank made of stainless steel (SS304), size 1200x 300 x 400 mm. Measuring tank made of stainless steel(SS304), size 400x 400 x 600 mm height. Tanks exterior with powder coating and interior with special synthetic rubber paint coated. Energy meter, BHEL /Bentex /Equivalent, for motor input measurement. Starter for motor, pressure and vacuum gauge for measurement of head. Digital speed	01 No.

	indicator with proximity sensor Stop watch. Instruction manual. The assembly of pump and controls should preferably be mounted on the sump tank. Complete set up of test rig.	
02	Combined Venturi meter and Orifice meter Test Rig :- Pump set- 1 HP, 1 Ph, mono block, make- Kirloskar/CRI equivalent Sump tank-made of SS 304, size 1200 x 300 x 400 mm Collecting tank-made of SS 304, size 300 x300 x 400 mm Tanks- Exterior powder coated, interior special synthetic rubber paint coated Orifice meter-An acrylic body orifice, size 25 x 12.5 mm Venturi meter- An acrylic body venturi meter, size 25 x 12.5 x 25 mm Piezometer-A graduated glass tube (graduation in cm)Frames- Made of 50*50*16 gauge square tube(fully powder coated) Experimental capability- Actual and theoretical discharge, coefficient of discharge Self explanatory instruction manual. A complete set up.	01 No.
03	Friction in Pipes Major & Minor Losses) Apparatus :- Pump set- 1 HP, 1 Ph, mono block, make- Kirloskar /CRI equivalent On/off switch with LED indicator Sump tank-made of SS 304, size 1200 x 300 x 400 mm Collecting tank-made of SS 304, size 300 x 300 x 400 mm Tanks- Exterior powder coated, interior special synthetic rubber paint coated Pipes- Major loss-3 different sizes of pipes ½ inch, ¾ inch and 1 inch with pressure tapings Minor loss- ¾ inch pipeline with various fittings like bend, elbow, collar, expansion, contraction and gate valve Head measurement-Acrylic body manometer, 150 mm with mercury Piezometer-A graduated glass tube (graduation in cm) Frames- Made of 50*50*16 gauge square tube (fully powder coated) Experimental capability-Actual discharge, friction factor, major losses, minor losses etc. Manual-Self explanatory instruction manual with sample calculation A complete set up of test rig.	01 No.
04	Impact of Jet Apparatus :- Pump set- 1 HP, 1 Ph, mono block, make Kirloskar/CRI equivalent On/off switch with LED indicator Sump tank-made of SS 304, size 1200 x 300 x 400 mm Collecting tank-made of SS 304, size 300 x 300 x 400 mm Vane tank- made of SS 304, size 300 x 300 x 300 mm Tanks- Exterior powder coated, interior special synthetic rubber paint coated Vanes-3 vanes-flat, flat inclined and hemispherical made of brass / SS Force measurement-A small weighing scale with graduated loading arm Piezometer-A graduated glass tube (graduation in cm) Experimental capability-Actual discharge, velocity of flow, actual impact, theoretical impact, vane coefficient of impact. Frames- Made of 50*50*16 gauge square tube (fully powder coated) Manual-Self explanatory instruction manual with sample calculation A complete set up of test rig.	01 No.
05	Reynolds Apparatus Test Rig :- Pump set- 1 HP, 1 Ph, mono block, make- Kirloskar/CRI equivalent On/off switch with LED indicator Sump tank-made of SS 304, size 1200 x 300 x 400 mm Collecting tank-made of SS 304, size 300 x 300 x 400 mm, with overflow facility Supply tank- made of SS 304, size 300 x 300 x 600 mm. Recalculating type. Tanks- Exterior powder coated, interior special synthetic rubber paint coated Pipe- 1 inch dia, 4mm thick and 800 mm long Clear Acrylic Tube see the flow. Dye Container- An SS vessel containing Potassium Permanganate solution for flow visibility with a small needle and control valve Piezometer-A graduated glass tube (graduation in cm) Experimental capability-Actual discharge, Reynolds number for laminar and turbulent flows Frames-made of 2 inch square tube of 16 gauge of adequate size Manual-Self explanatory instruction manual with sample calculation. A complete set up	01 No.

Yours faithfully



Principal

Govt. College of Engineering
Aurangabad