



No. P/097/2022/ CEK

date: 02/02/2022

PŘINCIPAL

QUOTATION NOTICE

Sealed quotations are invited for the supply of the following Equipments for the Mechanical

Department of the College.

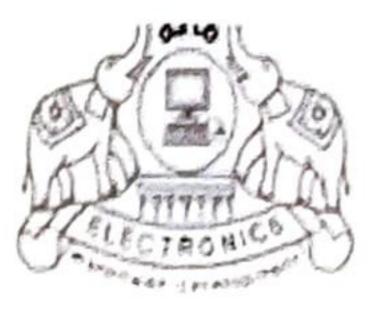
Ita		
Item		QTY
Name	Item Specifications	
		(Nos)
	Impact of Jet on Vanes	
	 Target : Flat Plate and Hemispherical Cup, 1 No. each 	
	• Nozzle : Material Brass	
	 Jet Enclosure : Made of Acrylic 	
*.	 Counter weights : One set of dead weights. 	
•	 Water Circulation : FHP Pump, Standard make 	
Impact of	 Flow Measurement : Using Measuring Tank with piezometer, Capacity 25 	
Jet on	Ltrs. (approx.)	
Vanes	• Sumn Tank · Canacity more than 50 I tre	

vanes	 Sump Tank : Capacity more than 50 Ltrs. 	Nee
	• Stop watch : Electronic.	Nos
	Control Panel Comprises of :	
	 Standard make On/Off Switch, Mains Indicator, etc. 	
	 Tanks will be made of Stainless Steel. 	
	• Instruction manual consisting of experimental procedures, block diagram etc.	
	• The whole set-up is to be well designed and arranged on a rigid structure	
	painted as per industry standards.	
	Warranty: 2 year onsite warranty	
Cut		
model of	Cut model of Centrifugal Pump	1
Centrifug	Cut model of centrifugal pump for demonstration of working of pump. It must be	Nos
al Pump	suitable for the lab/class room demonstration purposes.	

The envelope containing the quotation should bear the superscription "Quotation for the supply of Impact of Jet on Vanes & Cut model of Centrifugal Pump" for the Mechanical department of the college and should be addressed to the Principal, College of Engineering Karunagappally. Intending quotationists may submit the quotation in their own letter heads.

Last date fixed for receipt of the quotations is at 11 AM on 18/02/2022. Late quotations will not be accepted. The quotations will be opened at 12 noon on 18/02/2022 in the presence of the quotationists, or their authorized representatives, who be present at the time of opening the quotations. All other details can be had from the college website www.ceknpy.ac.in





No. P/98/2022/ CEK

date: 02/02/2022

QUOTATION NOTICE

Sealed quotations are invited for the supply of the following Equipments for the Mechanical Department of the College.

Item Name	Item Specifications	QTY (Nos)
Reciproc ating Pump test rig	 DRIVE: Stepped pulley reduction V belt drive to run the pump at 3 different speeds. Pipelines: B Class pipes with ISI fittings. Piping systems consists of pipes, pressure relief valve, valves and fitting with Pressure gauges. Pump Motor: A double acting reciprocating pump of 1hp Kirloskar/Suguna/Crompton brand with air vessel to discharge about 20 lpm @ 40 m head with gun metal jet assembly. Glass tube fitting: ISI brand gun metal Pressure & vacuum gauge: ISI brand or equivalent. Valve: Gunmetal valve ISI brand for flow control, Gun metal imported ball valve for tank drain. Gun metal foot valve ISI brand. Sump Tank size: 2000x800x500 mm Measuring tank size: 500x500x600 mm with overflow with gauge glass, scale arrangement and a ball valve Tanks: All tanks are made of 3mm MS Sheet with water repellent FRP leak proof lining Frame work mounting: Mounted on frame work & completely fitted with all the above items as self contained unit suitable for operation without any foundation. Control panel: MS angle stand to house GEM/HPL make main Switch with L&T starter and energy meter. Installation including wiring: The supplier should install the equipmentwith necessary foundation, if required. The necessary wiring from the electric power point provided in the lab at a maximum distance of 5m. Manual: Self-explanatory Instruction manual with sample calculation 	1 Nos

The envelope containing the quotation should bear the superscription "Quotation for the supply of Reciprocating Pump test rig" for the Mechanical department of the college and should be addressed to the Principal, College of Engineering Karunagappally. Intending quotationists may submit the quotation in their own letter heads.

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No. P/99/2022/ CEK

date: 02/02/2022

QUOTATION NOTICE

Sealed quotations are invited for the supply of the following Equipments for the Mechanical Department of the College.



Item Name	Item Specifications	(Nos)	
	FLOW THROUGH ORIFICE AND MOUTH PIECE APPARATUS SPECIFICATIONS:Pump set: 0.5 HP, Monoblock, ISI, Make:Kirloskar /CRI/CG/EquivalentSump tank: 1200 x 300 x 400 mm, SS304Collecting Tank : 300 x 300 x 400 mm, SS304: 300 x 300 x 600 mm, SS304Supply Tank: 300 x 300 x 600 mm, SS304Mouth Pieces: 3 different types of Mouthpieces made of Brass /SSHead Measurement: A Vernier depth gauge with slider attachment (Pointer gauge)Piezometer: A graduated glass tube (graduation in cm)Experimental Capability: Actual Discharge, Co-Efficient of Discharge by Constant/ Variable Head method		
Flow	Set of Orifice: Made of SS (3 nos). Dia of 10 mm, 12 mm & 15 mm		
through	Hook gauge: Made of brass with gear arrangement for fine movement, with vernier scale for		
Mouth	X and Y axis measurement.		
Piece	Glass tube fitting : ISI brand gun metal		
Apparatus	Valve : ISI brand for flow control, Gun metal imported ball valve for tank drain.		
	Gun metal foot valve ISI brand		
	Frame work mounting: Mounted on frame work & completely fitted with all the above items		
	as self contained unit suitable for operation without any foundation.		
	Control panel : MS angle stand to house GEM/HPL make main Switch with L&T starter		
	Installation including wiring: The supplier should install the equipment with necessary		
	foundation, if required. The necessary wiring from the electric power point provided in the lab		
	at a maximum distance of 5m.		
	Manual : Self-explanatory Instruction manual with sample calculation.		
	Warranty: 2 year onsite warranty		

The envelope containing the quotation should bear the superscription "Quotation for the supply of Flow through Mouth Piece Apparatus" for the Mechanical department of the college and should be addressed to the Principal, College of Engineering Karunagappally. Intending quotationists may submit the quotation in their own

letter heads.

Last date fixed for receipt of the quotations is at 11 AM on 18/02/2022. Late quotation will not be accepted. The quotations will be opened at 12 noon on 18/0/2/2022 in the presence of the quotationists, or their authorized representatives, who be present at the time of opening the quotations. All other details can be had from the college website <u>www.ceknpy.ac.in</u>

PRINCIPAL





No. P/100/2022/ CEK

date: 02/02/2022

QUOTATION NOTICE

Sealed quotations are invited for the supply of the following Equipments for the Mechanical Department of the College.

ltem Item Specifications Name QTY

		(Nos)
	FLOW THROUGH NOTCH APPARATUS SPECIFICATIONS:	
	Pump set : 0.5 HP, 1Ph, Monoblock, ISI Make' Kirloskar	
	/CRI/CG/Equivalent	
	Sump tank : 1200 x 300 x 400 mm, SS304	
	Collecting Tank : 300 x 300 x 400 mm, SS304	
	Open channel : 1200 x 200 x 200 mm, SS304	
	Notches : Triangular Notch, Rectangular Notch made of brass sheet	
	Head Measurement : A Depth Vernier scale attachment	
	Piezometer : A graduated glass tube (graduation in cm)	
	Experimental Capability: Actual Discharge, Co-Efficient of Discharge	
Flow	Hook gauge: Made of brass with gear arrangement for fine movement, with vernier	
through	scale for X and Y axis measurement.	
Notch	Glass tube fitting : ISI brand gun metal	
		1 Nos

Apparatus

8

e: value ISI brand for flow control, Gun metal imported ball value for tank drain

Gun metal foot valve ISI brand

Frame work mounting: Mounted on frame work & completely fitted with all the above items as self contained unit suitable for operation without any foundation. Control panel : MS angle stand to house GEM/HPL make main Switch with L&T starter.

Installation including wiring: The supplier should install the equipmentwith necessary foundation, if required. The necessary wiring from the electric power point provided in the lab at a maximum distance of 5m.

Manual : Self-explanatory Instruction manual with sample calculation

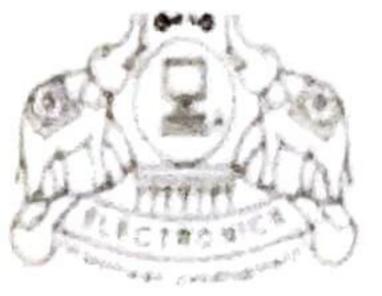
Warranty: 2 year onsite warranty

The envelope containing the quotation should bear the superscription " Quotation for the supply of Flow through notch apparatus" for the Mechanical department of the college and should be addressed to the Principal, College of Engineering Karunagappally. Intending quotationists may submit the quotation in their own letter heads.

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PRINCIPAL





No. P/101/2022/ CEK

date: 02/02/2022

QUOTATION NOTICE

Sealed quotations are invited for the supply of the following Equipments for the Mechanical Department of the College.

Item Name	Item Specification	S	QTY (Nos)
	PIPE FRICTION	APPARATUS SPECIFICATIONS:	
	Pump set	: 0.5 HP, 1Ph, Monoblock, Make: Kirloskar	
	/CRI/CG/Equaval	ent	
	Sump tank	: 1200 x 300 x 400 mm, SS304	
	Collecting Tank	: 300 x 300 x 400 mm, SS304	
	Pipes	: 3 different sizes of pipes, 1/2", 3/4" and 1" with pressure tapings	
	at 3 meter distanc	e	
	Head Measureme	ent: Acrylic body Manometer, 150-0150 mm with Mercury	
	Piezometer	: A graduated glass tube (graduation in cm)	
	Experimental Ca	pability: Actual Discharge, Friction factor	
	Manual	: Self-explanatory Instruction manual with sample calculation	
	Glass tube fitting	: ISI brand gun metal	
Pipe		brand for flow control. Gun metal imported ball valve for tank	

friction

Apparatus

drain.

valve . valve 151 bland for mow condior, oun metal imported can valve for any

I Nos

Gun metal foot valve ISI brand

Frame work mounting: Mounted on frame work & completely fitted with all the above items as self contained unit suitable for operation without any foundation. **Control panel :** MS angle stand to house GEM/HPL make main Switch with L&T starter.

Installation including wiring: The supplier should install the equipmentwith necessary foundation, if required. The necessary wiring from the electric power point provided in the lab at a maximum distance of 5m.

Manual: Self-explanatory Instruction manual with samplecalculationWarranty: 2 year onsite warranty

The envelope containing the quotation should bear the superscription "Quotation for the supply of Pipe friction Apparatus" for the Mechanical department of the college and should be addressed to the Principal, College of Engineering Karunagappally. Intending quotationists may submit the quotation in their own letter heads.

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PRINCIPAL





No. P/102/2022/ CEK

date: 02/02/2022

QUOTATION NOTICE

Sealed quotations are invited for the supply of the following Equipments for the Mechanical Department of the College.

Item		
Name	Item Specifications	QTY
		(Nos)
	CENTRIFUGAL PUMP TEST RIG	
	DRIVE: Fixed speed with step cone pullow among the step of the s	
	Pipelines: B Class pipes with ISI fittings Diministrangement.	
	Pipelines: B Class pipes with ISI fittings. Piping systems consists of pipes, pressure relief valve, valves and fitting with Pressure gauges.	
	Pump Motor: 1hp (2880 rpm) Kirloskar/Suguna/Crompton brand monobloc type	
	about 500 lpm (a) 10 m head with gun metal iet	
	assembly.	
	Glass tube fitting : ISI brand gun metal Pressure &vaccum gauge : ISI brand or	
	equivalent Valve : Gunmetal valve ISI brand for flow control, Gun metal imported	
	ball valve for tank drain. Gun metal foot valve ISI brand.	
Centrifug	Sump Territor and and and the second	
al numn	Sump Tank size : 2000x800x500 mm Measuring tank size : 500x500x600 mm with	

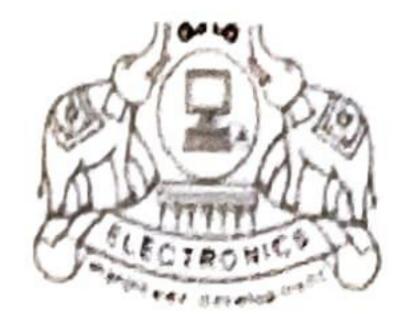
al pump
test rigoverflow with gauge glass, scale arrangement and a ball valve Tanks : All tanks are
made of 3mm MS Sheet with water repellent FRP leak proof lining or Stainless steel
plate.1 NosFrame work mounting:
Mounted on frame work & completely fitted with all the
above items as self contained unit suitable for operation without any foundation.
Control panel: MS angle stand to house GEM/HPL make main Switch with L&T
starter and energy meter.1 NosInstallation including wiring:
The supplier should install the equipmentwith
necessary foundation, if required. The necessary wiring from the electric power point
provided in the lab at a maximum distance of 5m.
Manual:
Self-explanatory Instruction manual with sample calculation
Warranty: 2 year onsite warranty

The envelope containing the quotation should bear the superscription "Quotation for the supply of Centrifugal pump test rig" for the Mechanical department of the college and should be addressed to the Principal, College of Engineering Karunagappally. Intending quotationists may submit the quotation in their own letter heads.

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No. P/103/2022/ CEK

date: 02/02/2022

QUOTATION NOTICE

Sealed quotations are invited for the supply of the following Equipments for the Mechanical Department of the College.

Item Name Item Specifications QTY (Nos)

Metacentric Apparatus

METACENTRIC HEIGHT SPECIFICATIONS:

Sump tank: 800 x 800 x 400 mm, SS304Ship Model: A hollow ship model made up of SS of size 300x200mmand 100mm height, with balancing or tilting weights and circular weightsAngle Measurement: A pendulum & graduated protractor for measuring tiltangle.Experimental Capability: Determination of Metacentric height of Cargo andWar ShipManual: Self-explanatory Instruction manual with sample

calculation

Warranty: 2 year onsite warranty

1 Nos

C

Digital Stop Watch (6 NOS.)	Digital stop watch:-digital racer with time, date, alarm and one lap function, 1/100th of a second, provided with start, stop and reset options. Warranty: 1 year onsite warranty	6 Nos
Digital Tachometer (2 NOS.)	Non Contact Tachometer:- Portable digital tachometer having a minimum of 5 digit bright display, powered by battery and housed in a compact casing,Provided with data hold functions and low battery indicators. Durable, precise and accurate over wide ranges of RPM measurements Warranty: 2 year onsite warranty	2 Nos

The envelope containing the quotation should bear the superscription "Quotation for the supply of Metacentric Apparatus, Digital Stop Watch (6 NOS.), Digital Tachometer (2 NOS.)" for the Mechanical department of the college and should be addressed to the Principal, College of Engineering Karunagappally. Intending quotationists may submit the quotation in their own letter heads.

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No. P/104/2022/ CEK

date: 02/02/2022

QUOTATION NOTICE

Sealed quotations are invited for the supply of the following Equipments for the Mechanical Department of the College.

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Name	Item Specifications		(Nos)
	BERNOULLI'S APPA	ARATUS SPECIFICATIONS:	
	Pump set /CRI/CG/Equivalent	: 0.5 HP, 1Ph, ISI mark, Monoblock, Make: Kirloskar	
	Sump tank	: 1200 x 300 x 400 mm, SS304	
	Collecting Tank	: 300 x 300 x 400 mm, SS304	
	Header Tanks	: 200 x 200 x 500 mm, SS304	
	Duct	: A converging-Diverging duct with varying cross-section, SS /	
	Acrylic		
	Head Measurement	: Graduated Glass tube Piezometers at various points of the duct	
	-8 nos		
Bernoul	is Piezometer	: A graduated glass tube (graduation in cm)	
\$	Experimental Capab	ility: Actual Discharge, Total head, Velocity head	INos

Apparatus
Pipelines: B class pipes with fittings
Valve: SI brand for flow control, Gun metal imported ball valve for tank drain. Gun metal foot valve ISI brand
Frame work mounting: Mounted on frame work & completely fitted with all the above items as self contained unit suitable for operation without any foundation.
Control panel : MS angle stand to house GEM/HPL make main Switch with L&T starter.
Installation including wiring: The supplier should install the equipment with necessary foundation, if required. The necessary wiring from the electric power point provided in the lab at a maximum distance of 5m.
Manual : Self-explanatory Instruction manual with sample calculation
Warranty: 2 year onsite warranty

The envelope containing the quotation should bear the superscription "Quotation for the supply of Bernoulli's Apparatus" for the Mechanical department of the college and should be addressed to the Principal, College of Engineering Karunagappally. Intending quotationists may submit the quotation in their own letter heads.

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No. P/105/2022/CEK

date: 02/02/2022

QUOTATION NOTICE

Sealed quotations are invited for the supply of the following Equipments for the Mechanical Department of the College.

Item Name Item Specifications

nem Name	Item Specifications		QTY
			(Nos)
	CALIBRATION TEST F	RIG FOR ORIFICEMETER and VENRURIMETER	
	SPECIFICATIONS:		
	(combined set up)		
	Calibration Test Rig	for Orifice meter	
	Pump set	: 0.5 HP, 1Ph, Mono block, Make: Kirloskar	
	/CRI/CG/Equivalent		
	Sump tank	: 1200 x 300 x 400 mm, SS304	
	Collecting Tank	: 300 x 300 x 400 mm, SS304 or	
	Orifice meter	: An Acrylic body Orifice, size:25 x 12.5 mm or Gun metal	
	corner tapping orifice i	meter made as per ASME standard of size 20mm and 25 mm	
	Head Measurement	: Acrylic body Manometer, 150-0-150 mm with Mercury	
	Piezometer	: A graduated glass tube (graduation in cm)	

Experimental Capability: Actual & Theoretical Discharge, Co-Efficient of Discharge Manual : Self explanatory Instruction manual with sample calculation **Pipelines** : B Class G I Pipe with fittings, flow control gate valves and mercury Calibration manometer(With mercury) made of brass Test Rig for Orifice meter **Piezometer fittings :** ISI brand brass components and Pressure gauge : Made of ISI gun metal Venturimeter **Glass tube fitting :** ISI brand gun metal Valve: Gunmetal valve ISI brand for flow control, Gun metal imported ball valve for tank drain. Gun metal foot valve ISI brand Frame work mounting: Mounted on frame work & completely fitted with all the above items as self contained unit suitable for operation without any foundation.

1 Nos

Control panel : MS angle stand to house GEM/HPL make main Switch with L&T starter.

Installation including wiring: The supplier should install the equipmentwith necessary foundation, if required. The necessary wiring from the electric power point provided in the lab at a maximum distance of 5m.

 Manual
 : Self-explanatory Instruction manual with sample calculation

 Warranty:
 2 year onsite warranty

The envelope containing the quotation should bear the superscription "Quotation for the supply of Calibration Test Rig for Orifice meter and Venturimeter" for the Mechanical department of the college and should be addressed to the Principal, College of Engineering Karunagappally. Intending quotationists may submit the quotation in their own letter heads.

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