GOVERNMENT POLYTECHNIC, YAVATMAL.

शासकीयतंत्रनिकेतन, यंवतमाळ.

Dhamangaou Road, Yayatnial - 445001.

Phone: - (07232)243278

E-mail :-gpyavatmal@gmail.com

Fax: - (07232)248807

Website:-www.gpyavatmal.edu.in

<u>OUOTATION</u>

No.GPY/CS/INST PUR /QUOTATION/2017-18/3/5/ Dt 29 /01/2018.

Sub: Quotation for purchase of equipments. (Due Date: 8/02/2018)

Sealed Quotations are from eligible and interested manufacturers/ dealers/distributors/ for the following items on the terms and conditions mentioned below.

Sr.	Name of the item with specification	Quantity required	Estimated cost
No.			
1.	LIST ATTACHED HERE WITH		

TERMS AND CONDITIONS

- The bid/quotation should be submitted in two bid format.
- The first envelope will contain Technical specifications of the product, technical literature/ teaflet and other documents mentioned below.
 - 1. Covering Letter for Quotation on the company letter head mentioning official address, Contact No.
 - 2.e Mail address and website (if available) address
 - 3. Certificate from competent authorities, if exemption is claimed.
 - 4. GST registration certificate/ Number
 - 5. GST Clearance Certificate/ GST Challan for last quarter of the financial year.
 - 6. Authorization/ Distributorship certificate from manufacturer. Proof of permission to Manufacture the equipment/ item mentioned in the quotation from competent authorities (to be submitted if the bidder is not a manufacturer).
 - 7. Technical literature / leaflet of the make and model no of equipment quoted.

Additional document may also be asked by undersigned for confirming the details.

The second envelope will contain the financial bid in which the all inclusive rates F.O.R. Destination will be written and signed with the stamp of the establishment in the following format.

Sr.	Name of the item with specification	Quantity required	All inclusive	All inclusive cost for
No.		1	; ;	quantity mentioned.
1.	LIST ATTACHED HERE WITH			

Date: 29/01/2018

Place : Yavatina

(N. N. Shende)

CANAGERAL

Principal

·Govt. Polytechnic, Yavatmal.

महस्रवालक तंत्र शिक्षण, गरेशिक कार्यालक, क्रमश्रस्ती १९४७ के 837 विकास 512-118

- The two envelopes should be sealed with a mention of the type of envelope (technical/ Financial), Reference no., Date of opening the quotation on the front side of the envelope. These two envelopes should be sealed in a third envelope by giving heading "Quotation for supply of CHEMICALS SCIENCE LAB EQIPMENTS" and writing, complete address of the undersigned.
- The quotations should reach the undersigned on or before dt. 8 /02/2018.
- The material will be checked at this institute.
- No extra charges will be paid for cartage, packing etc. for the material rejected and replaced
- Quotations will be opened at 9/02/2018 at: 11.00 AM on dt. 9/02/2018.
- Rates should be valid for 6 months from the date of confirmation letter.
- Materials should be quoted for standard makes and minimum pkgs.
- Delivery to the consignee has to be effected within 4weeks from the date of issue of purchase order.
- The undersigned reserves the right to accept or reject any offer or all offers without assigning any reason thereof.

(N. N. Shende)

Principal

Govt. Polytechnic, Yavatmal.

Copy to 1 The Director, Directorate of Technical Education, 3Mahapalika Marge, M.S. Mumbai. Please publish the enquiry of above item on your website.

- -2. The Joined Director, Technical Department, Regional Office, Gadge Nagar, Amravati. Please publish the enquiry of above item on your website.
 - 3. Programmer, Govt. Polytechnic Yavatmal .Publish the enquiry of above item on the Institute website.
 - 4. Notice board Main building Govt. Polytechnic, Yavatmal.

LIST OF CHEMICAL& SCIENCE LAB EOIPMENTS.

Sr. No.	B. C.O.		· 	بساء ميان واستاره المنطق واستعداد والجداء
21.140"	Name of the equipments	Specification	Quantity Required	Estimated cost Per Pro.
1.	Heat Transfer in forced	1) Test Pipe- 32mm NB G.I. pipe long,	01	2 : 75
	convection	heated by band heater, outer side. 2)	· · · ·	- (5
		Centrifugal blower to force air through test		ĺ
1		pipe with flow control valve. 3) Vatic 2A		•
		capacity to control heater input, 4) An orifice	1	
		meter with differential water manometer. 5)		
		Voltmeter and Ammeter to measure heater		
•		input. 6) Multichannel digital temperature		
		indicator to measures various temperatures.	* (
· · ·				
2.	Thermal Conductivity of	1) Metal bar 25mm die, of adequate length,	01	30200
	Metal rod	provide with 8 thermocouples along the	. (
		length, Band heater at one end and water	-	
		cooled heat sink at other end. Test length of		
•		bar is adequately insulated. 2) Instruments	· . · · · [
		panel comprising of - a) Volumeter - 1Mo., b)		* * *
•		Ammeter - 1No. c) Dimmer 0-230V, 2A,		•
	• •		. \	
	•	capacity. d) Multi channel digital temp.	•	
		Indicator. 3) Measuring flask and stop watch.		• • • • • • • • • • • • • • • • • • •
·			40.7	
3.	Heat Transfor Through	As per Heat Transfer curriculum of CH5G.	01	27800
	Composite Wall	the equipment is needed to perform an		
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	experimentation to study heat transfer		
)	phenomenon through composite wall.		
	T. C.	1) Pipe - Brass pipe 38mm dia. OD, 500mm	01	27650
Δ.	Heat transfer in natural		01	27030
	convection	long, fitted with cartridge heater inside 2)		
		Thermocouples are fitted along the length of		
l		pipe for temperature measurement -7nos. 3)		
		Enclosure 200mm x 200mm x 800mm size,		
		with one side of Perspex sheet 4)		
		Measurements & Controls- a) A dimmer stat)
		for heater input control. b) Voltmeter and		ľ
}		Ammeter for heater input measurement c)	}	
		Multi channel digital temperature indicator.		
<u></u>			 	84780
5.	Batch Crystallizer	Crystallizer (Jacketed type): Material		84/80
		Stainless Steel, Cap. 2 Liters with conical	1	
		bottom, Stirrer: FHP, variable Speed. Heater:		
		Nichrome wire Heater. Cooling Water Tank:		
		Material stainless Steel, capacity 30 Liters		
1		fitted with Pump. Flow Measurement: Rota		
1		meter for cooling Water. Pump: FHP		
1	1			
		Receiving Tank: Material Stainless Steel		.
		Capacity 2 Liters with SS sieve, Temp		1
		Sensors: RTD PT-100 type, Control Pane		
1		comprises of digital temp. Indicator 0-199.9)]	
		deg C with multi channel switch and		
1		standard make on/off switch, mains indicato		. (
1		etc., The whole set up is well designed and	1	
		arranged in a good quality painted structure.		
	1		. }	}
	Digital Total Dissolved	Range-0-1000 ppt in 5 ranges, Power supply	: 01	8050

	Solid Meter	230V+/- 10% 50Hz AC with Cell k=1.0			
7	Digital Nephlometer	Accessories-Test set of 5 Accuracy ±2%FS ±	01		9000
	1	1Digit. Dimension- 245x260x125mm			
		Display 31/2 Digit 7 Segment LED			
		Power-230Volt ± 10%AC,50HZ,Range 0-200 NTU			
8.	Redwood Viscometer	Heavy Silver plated brass -oil cup with	01		11500
		precision stainless still jet assembled in		- '	·
÷	,	chromium platted bath fitted with heating			,
•		tube and cup assembly, Silver plated ball			
		valve, sprif level and cover thermometer clip and receiver of capacity of 50ml.			
9.	Copper Voltmeter	Made up of glass container of capacity 01	01	-	1500
		Liter Ebonite lid cover along with 02 copper Plate electrode.			
10.	Digital Battery Eliminator	0-5 Volts.0-2Amp.D.C. Regulator power	10		1755
· ·		supply			

GOVERNMENT POLYTECHNIC, YAVATMAL.

शासकीयतंत्रनिकेतन, यवतमाळ.

Dhamangaon Road, Yavatmal - 445001.

- (07232)243275 (07232)248607 Fan:

E-mail :-gpyavatmal@gmail.com Website:-www.gpyavatmal.edu.in

OUOTATION

No.GPY/CS/INST PUR /QUOTATION/2017-18/3 4 Dt. 29 /01/2018.

Sub: Quotation for purchase of equipments.

(Due Date: 8 /02/2018)

Sealed Quotations are from eligible and interested manufacturers/ dealers/distributors/ for the following items on the terms and conditions mentioned below.

{	Sr.	Name of the item with specification	Quantity required	Estimated cost
ĺ	No.		<u> </u>	
ĺ	l.	LIST ATTACHED HERE WITH		

TERMS AND CONDITIONS

- The bid/quotation should be submitted in two bid format.
- The first envelope will contain Technical specifications of the product, technical literature/leaflet and other. documents mentioned below.
 - 1. Covering Letter for Quotation on the company letter head mentioning official address, Contact No.
 - 2.e Mail address and website (if available) address
 - 3. Certificate from competent authorities, if exemption is claimed.
 - 4. GST registration certificate/ Number
 - 5. GST Clearance Certificate/ GST Challan for last quarter of the financial year.
 - 6. Authorization/ Distributorship certificate from manufacturer. Proof of permission to Manufacture the equipment/ item mentioned in the quotation from competent authorities (to be submitted if the bidder is not a manufacturer).
 - 7. Technical literature / leaflet of the make and model no of equipment quoted.

Additional document may also be asked by undersigned for confirming the details.

The second envelope will contain the financial bid in which the all inclusive rates F.O.R. Destination will be

written and signed with the stamp of the establishment in the following format.

Sr.	Name of the item with specification	Quantity required	All inclusive cost per unit	All inclusive cost for quantity
				mentioned.
1.	LIST ATTACHED HERE WITH			

Date: 29/01/2018 Place : Yavatmal.

(N. N. Shende) Principal

Govt. Polytechnic, Yavatmal.

Charling.

- The two envelopes should be sealed with a mention of the type of envelope (technical/Financial), Reference no., Date of opening the quotation on the front side of the envelope. These two envelopes should be sealed in a third envelope by giving heading "Quotation for supply of CIVIL & APPLIED MECHLAB EQIPMENTS" and writing complete address of the undersigned.
- The quotations should reach the undersigned on or before dt. 3/02/2018.
- The material will be checked at this institute.
- No extra charges will be paid for cartage, packing etc. for the material rejected and replaced
- Quotations will be opened at 9/02/2018 at: 11.00 AM on dt. 9/02/2018.
- Rates should be valid for 6 months from the date of confirmation letter.
- · Materials should be quoted for standard makes and minimum pkgs.
- Delivery to the consignee has to be effected within 4weeks from the date of issue of purchase order.
- The undersigned reserves the right to accept or reject any offer or all offers without assigning any reason thereof.

(N. N. Shende) Principal

Govt. Polytechnic, Yavatmal.

- <u>Copy to</u>1. The Director, Directorate of Technical Education, 3Mahapalika Marge, M.S. Mumbai. Please publish the enquiry of above item on your website.
 - 1. The Joined Director, Technical Department, Regional Office, Gadge Nagar, Amravati.

 Please publish the enquiry of above item on your website.
 - 3. Programmer, Govt. Polytechnic Yavatmal Publish the enquiry of above item on the Institute website.
 - 4. Notice board Main building Govt. Polytechnic, Yavatmal.

LIST OF CIVIL&APPLIED MECH, LAB EQIPMENTS.

Sr. No.	Name of the equipments	ST OF CIVIL&APPLIED MECH. LAB EQIPMENT Specification	Quantity	Estimated
,01.110.	, anne or the equipments		Required	cost Per No.
. 1	Pressure measuring	Connection: 1/2"bsp m/f/1/4"nozzle Range: 200-0-200	- 02	5000
	device attached in a pipe	mm to 3000-0-3000 mm wc/HgPress Rating: 5		
	or two disserent pipes.	Kg/cm2Tcmp. Rating: Up to 100 -200 Deg.C		
-	Pyrometer, simple u tube	Body: Aluminum C Channel With Powder Coated		
' '	manometer and Burden's	Scale Calibration: mm/cmsGlass tube: Borosil 4mm		· .
ļ	tube gauge	9.5 mm Material /Wetted Part: SS 304/SS 316/		
		(Std)Optional wetted parts Accuracy +/-0.5 to 1% of		
		FSD For burdens pressure gauge: Pressure connection		
		Material: stainless steel 316L Lower mount (LM) or		
		lower back mount (LBM) 63 mm: G ° B (male), 14		
		mm flats 100, 160 mm: G 1/2 B (male), 22 mm flats		
		Pressure element Material: stainless steel 316L < 100		
_	}	bar: C-type \geq 100 bar: helical type Movement		
		Stainless steel Dial White aluminum with black lettering,		
÷	1	63 mm with pointer stop.		
. 2	Difference of Pressure	Metering Tube Special uniform bare thick walled	02	4000
	measuring device	borosilicate glass tube diameter Packing: Teflon / Neoprene		
•	attached to pipe	Casing : M.S. /Aluminum Casing from three sides and		
	Differential U-tube	aluminum cover with transparent acrylic front		-
	manometer, Inverted U-	Scale: Scale milky white PVC with Black Color Lining and		
-	tube Differential	figures Painting: Industrial Grade painted / Powder coated		1
	manometer	Zero adjustment scale Stand mounted		†
•	manometer	~		1
	Bernoulli's apparatus	Metering Tube :Special uniform bare thick walled	01	15000
1	with 15 pyrometer tubes	borosilicate glass tube diameter Packing: Tellon / Neoprene		
· 	with 15 pyrometer tuess	Casing: M.S. /Aluminum Casing from three sides and		
	1	aluminum cover with transparent acrylic frontSeale: Scale	 •	
		milky white PVC with Black Color Lining and		
		figuresPainting: Industrial Grade painted / Powder coated		} .
		Zero adjustment scale Stand mounted		
		·	ļ <u>. </u>	
4	Reynolds Apparatus	Storage tank: Made up of PVC resist corrosion.Capacity:	01	15000
		100 Ltr. (Approx.), Mono-block pump: 1-phase 1/2 HP,	1	
		Make: Crompton Greaves or Equivalent.Constant Head		
		Tanks: 2 numbers of suitable size mounted on stand, Material: Acrylic Differential venture of 300 mm length		}
		made out of Acrylic Square Bar. Measuring Tank: 25 Liters,		•
		Material: Rota mould, Make:		
		Ariston.MultitubeManometer,Material:AluminumSupporting		
		stand structure for the equipment. Piping: PVC piping with		
		valves. Digital stop watch Frame: Made of M.S. square tubes		•
		& sheets, welded & powder coated. Necessary electrical		
	•	wiring with on / off switch & indicators.		
	•		<u> </u>	
5	Friction factor apparatus	Block Type Aerylic Differential Manometer (250-0-250	01	17000
1	and minor losses	mm) Flow control valve to change Discharge. Two Pipes		-
1	apparatus	(Length of pipe between two pressure tapings 1 mtr.)Dia. of	•	
1	•	pipe - 0.022 m (For pipe ¾")Dia of pipe - 0.016 m (For		
		pipe ½")Transparent pyrometer tube with scale to measure		
		measuring tank discharge. Measuring tank- 295 X 345 X 345		
		mmSump tank- 900 X 350 X 350 min motor for		
		recalculating type unit 0.511.P. Self Priming Stop clock.		
	Venturimeter Fitted in	Venturi-meter - 13 mm (Mild Steel with Painting) Block	01	20000
6	venumeter rued in	- chartages 15 thin (think stoot min to be		

pipe Type Acrylic Differential Manometer (250-0-250 mm) Flow control valve to change Discharge Transparent pyrometer tubes with scale to measure measuring tank discharge. Measuring tank: 295 X 345 X 345 mm Sump tank: 900 X 350 X 350 mm intoor for recalculating type unit. 9.51LP. Self Priming Stop clock 7 Orifice Supply Tank: 0.4 X 0.3 X 0.5 m height, Orifice: 8mm and 10mm Monthpiece LD = 4 LD = 1 Boards mouthpiece. Convergent mouthpiece. X-Y gauge for orifice jet coordinates. Measuring tank of suitable capacity OR a calibrated water flow meter. Sump tank of suitable capacity. 0.5 HP pump with valve 8 Notch (Rectangular Mechangular notch 50 mm wide, triangular notch 450 and 600,tank 1000 finecapacity, open flow channel 250 x 200 x 1000 mm 9 Pitot tube apparatus Test Section: Material Clear Acrylic, Compatible to 1° Dia PipeWater Circulation: FIPP Pump, Cromption / Sharp make Flow Measurement: Using Measuring Tank, Capacity 40 Lts. Sump Tank: Capacity 70 Ltrs.Stop. Watch: Electronic Control Panel: Gn / Off Switch, Mains Indicator etc. Tanks will be made of Stantess Steel The whole Set-up is well designed and arranged in a good quality painted Structure 16 Electronics Balance Capacity: 1 Kg. Precision: 1 mg. Platform Size (mm): 150 Air Tight 11 Electronics Balance Capacity: 1 Kg. Precision: 500mg Platform Size (mm): 150 Air Tight Capacity: 1 Kg. Precision: 500mg Platform Size (mm): 300 x 300 Power Consumption: 1 Lt to 15 W Auto Power Saver Inbuilt Baitery Back-up System Over Load Protection 12 Bulk Density Container Capacity: 3 Liters Pouring Cylinder with conical. Apparatus Capacity: 3 Liters Pouring Cylinder with conical. Furnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm Square					
control valve to change Discharge Transparent pyrometer tubes with scale to measure measuring tank discharge. Measuring tank: 295 X 345 X 345 min Sump tank: 900 X 350 X 350 mm niotor for recalculating type unit. 0.511.P. ScIP Priming Stop clock 7 Orifice Supply Tank: 0.4 X 0.3 X 0.5 m height, Orifice: 8mm and 10mm.Mouthpiece. LIO = 4 LID = 1 Boards mouthpiece. Convergent mouthpiece. XrY gauge for orifice jet coordinates. Measuring tank: of suitable capacity. On a calibrated water flow meter. Sump tank of suitable capacity. 0.5 HP pump with valve 8 Notch (Rectangular Rectangular motch 50 min wide, triangular notch 450 and 600 tank 1000 htrecapacity, open flow channel 250 x 200 x 1000 min 9 Pitot tube apparatus Test Section: Material Clear Aerylic, Coinpatible to 1° Dia. PipeWater Ciccubalion: FHP Pump, Crompton / Sharp make Plow Measurement: Using Measuring Tank, Capacity 40 Ltrs. Sump Tank: Capacity 70 Ltrs.Stop Watch ElectronicControl Panle: Gn / Orl F Switch, Mains Indicator etc.Tanks will be made of Stainless Stoci The whole Set-up is well designed and arranged in a good quality painted Structure 16 Electronics Balance Capacity: 1 Kg Precision: 100 mg Platform Size (mm): 150 Air Tight 11 Electronics Balance Capacity: 5 Kg Precision: 500 mg Platform Size (mm): 12 to 15W Auto Power Saver Inbuilt Baltery Back-up System Over Load Protection 12 Bulk Density Container Capacity: 3 Liters Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded 13 Sand Replacement Apparatus Capacity: 3 Liters Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm		pipe	Type Acrylic Differential Manometer (250-0-250 mm) Flow		
Measuring tank - 295 X 345 X 345 min Sump tank - 900 X 330 X 330 mm intotor for recalculating type unit - 0.511.P. Self Priming Stop clock			control valve to change Discharge Transparent pyrometer	· · · · · · · · · · · · · · · · · · ·	
350 X 350 mm miotor for recalculating type unit- 0.51h.P. Self Priming Stop clock			tubes with scale to measure measuring tank discharge.		* *
Self Priming Stop clock Supply Tank: 0.4 X 0.3 X 0.5 m height, Orifice: 8mm and 10mm.Monthpiece LID = 4 LID = 1 Boards monthpiece. Convergent monthpiece. LYD = 4 LID = 1 Boards monthpiece. Convergent monthpiece. XYY gauge for orifice jet coordinates. Megauring tank of suitable capacity. O.5 HP pump with valve			Measuring tank- 295 X 345 X 345 mm Sump tank- 900 X	. }	
7 Orifice Supply Tank: 0.4 X 0 3 X 0.5 m height, Orifice: 8mm and 10mm. Monthpiece LID = 4 LID = 1 Boards monthpiece. Convergent monthpiece. X:Y gauge for orifice jet coord!nates. Measuring tank of suitable capacity OR a calibrated water flow meter. Sump tank of suitable capacity. 9 Notch (Rectangular Rectangular notch 50 mm wide, triangular notch 450 and 600,tank 1000 htrecapacity, open flow channel 250 x 200 x 1000 mm 9 Pitot tube apparatus Test Section: Material Clear Acrylic, Compatible to 1" Din. PipeWate Circulation: FHP Pump, Crompton / Sharp make Flow Measurement: Using Measuring Tank, Capacity 40 Ltrs. Sump Tank: Capacity 70 Ltrs.Stop Watch: ElectronicControl Panel: Gn / Oil Switch, Mains Indicator etc. Tanks will be made of Stainless Steel The whole Set-up is well designed and arranged in a good quality painted Structure 10 Electronics Balance Capacity: 1 Kg Precision: ting Platform Size (mm): 150 Air Tight 11 Electronics Balance Capacity: 5 Kg Precision: 500mg Platform Size (mm): 150 Air Tight 12 Bulk Density Container Capacity: 3 Liters Pouring Cylinder with conical Platform of Apparatus Capacity: 3 Liters Pouring Cylinder with conical Oil 5000 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Baitery Back-up System Over Load Protection 13 Sand Replacement Apparatus A	.		350 X 350 mm motor for recalculating type unit. 0.5H.P.	}	100
10mm.Mouthpiece LID = 4 LID = 1 Boards mouthpiece. Convergent mouthpiece. XrY garge for office jet eo- ordInates. Measuring tank of suitable capacity. OR a calibrated water flow meter. Sump tank of suitable capacity. 0.5 HP pump with valve 8 Notch (Rectangular & Rectangular notch 50 mm wide, triangular notch 450 and 600,tank 1000 inrecapacity, open flow channel 250 x 200 x1000 mm 9 Pitot tube apparatus Test Section: Material Clear Aerylic, Compatible to 1" Dia. PipeWater Circulation: FHP Pump, Crompton / Sharp make Plow Measurement: Using Measuring Tank, Capacity 40 Utrs. Sump Tank: Capacity 70 Lirs.Stop Watch ElectronicControl Panel: On / Off Switch, Mains Indicator etc.Tanks will be made of Stainless Steet The whole Set-up is well designed and arranged in a good quality painted Structure 10 Electronics Balance Capacity: I Kg Precision: Img Platform Size (mm): 350 Air Tight 11 Electronics Balance Capacity: 5 Kg Precision: 500mg Platform Size (mm): 300 x 300 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Battery Back-up System Over Load Protection 12 Bulk Density Container Capacity: 3 Litres Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded 13 Sand Replacement Apparatus Capacity: 3 Litres Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm		•	Self Priming Stop clock		
10mm.Mouthpiece LID = 4 LID = 1 Boards mouthpiece. Convergent mouthpiece. XrY garge for office jet eo- ordInates. Measuring tank of suitable capacity. OR a calibrated water flow meter. Sump tank of suitable capacity. 0.5 HP pump with valve 8 Notch (Rectangular & Rectangular notch 50 mm wide, triangular notch 450 and 600,tank 1000 inrecapacity, open flow channel 250 x 200 x1000 mm 9 Pitot tube apparatus Test Section: Material Clear Aerylic, Compatible to 1" Dia. PipeWater Circulation: FHP Pump, Crompton / Sharp make Plow Measurement: Using Measuring Tank, Capacity 40 Utrs. Sump Tank: Capacity 70 Lirs.Stop Watch ElectronicControl Panel: On / Off Switch, Mains Indicator etc.Tanks will be made of Stainless Steet The whole Set-up is well designed and arranged in a good quality painted Structure 10 Electronics Balance Capacity: I Kg Precision: Img Platform Size (mm): 350 Air Tight 11 Electronics Balance Capacity: 5 Kg Precision: 500mg Platform Size (mm): 300 x 300 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Battery Back-up System Over Load Protection 12 Bulk Density Container Capacity: 3 Litres Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded 13 Sand Replacement Apparatus Capacity: 3 Litres Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm					
Convergent mouthpiece. X-Y gauge for office jet co- ord Inates. Measuring tank of suitable capacity OR a calibrated water flow meter. Sump tank of suitable capacity. 0.5 HP pump with valve 8 Notch (Rectangular & Triangular) 1000 hirecapacity, open flow channel 250 x 200 x 1000 mm 9 Pitot tube apparatus 101 Test Section: Material Clear Acrylic, Compatible to 1" Dia. PipeWater Circulation: FHP Pump, Crompton / Sharp make Flow Measurement: Using Measuring Tank, Capacity 40 Lits. Sump Tank: Capacity 70 Lits.Stop Watch ElectronicControl Panel: Gn / Off Switch, Mains Indicator etc.Tanks will be made of Stainless Steel The whole Set-up is well designed and arranged in a good quality painted Structure 10 Electronics Balance 11 Capacity: 1 Kg Precision: ling Platform Size (mm): 150 Air Tight Capacity: 5 Kg Precision: 500mg Platform Size (mm): 300 x 300 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Baitery Back-up System Over Load Protection 12 Bulk Density Container Capacity: 3 Litres Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded 13 Sand Replacement Apparatus Capacity: 3 Liters Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal (ray, 30cm)	. 7	Orifice	Supply Tank: 0.4 X 0.3 X O.5 m height, Orifice: 8mm and	- 01	15000
ordInates. Measuring tank of suitable capacity OR a calibrated water flow meter. Sump tank of suitable capacity. 0.5 HP pump with valve Rectangular notch 50 mm wide, triangular notch 450 and 600 tank 1000 introcapacity, open flow channel 250 x 200 x 1000 mm Test Section: Material Clear Acrylic, Compatible to 1" Dia. PipeWater Circulation: FHP Pump, Crompton / Sharp make Plow Measurement: Using Measuring Tank, Capacity 40 Utrs. Sump Tank: Capacity 70 Utrs.Stop Watch: ElectronicControl Panel: Gn / Off Switch, Mains Indicator etc.Tanks will be made of Stainless Steel The whole Set-up is well designed and arranged in a good quality painted Structure 16 Electronics Balance Capacity: 1 Kg Precision: 1mg. Platform Size (mm): 150 Air Tight 11 Electronics Balance Capacity: 5 Kg Precision: 500mg Platform Size (mm): 300 x 300 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Baitery Back-up System Over Load Protection 12 Bulk Density Container Capacity: 3 Litres Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded 13 Sand Replacement Apparatus Capacity: 3 Liters Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm	}		10mm.Mouthpiece LID = 4 LID = 1 Boards mouthpiece.		
calibrated water flow meter. Sump tank of suitable capacity. 0.5 HP pump with valve Rectangular morch 50 mm wide, triangular notch 450 and 600,tank 1000 litrecapacity, open flow channel 250 x 200 x1000 mm Test Section: Material Clear Aerylic, Compatible to 1" Dia PipeWater Circulation: FHP Pump, Crompton / Sharp make Flow Measurement: Using Measuring Tank, Capacity 40 Ltrs. Sump Tank: Capacity 70 Ltrs. Stop Watch ElectronicControl Panel: Gn / Off Switch, Mains Indicator etc. Tanks will be made of Stainless Steel The whole Set-up is well designed and arranged in a good quality painted Structure Rectangular notch 50 mm wide, triangular notch 450 and 01 5000 Platform Size (mm): 150 Air Tight Electronics Balance Capacity: 1 Kg Precision: 1mg, Platform Size (mm): 300 x 300 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Baitery Back-up System Over Load Protection Bulk Density Container Capacity: 3 Litres Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded Sand Replacement Apparatus Capacity: 3 Litres Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm			Convergent mouthpiece. X•Y gauge for orifice jet co-	. }	
8 Notch (Rectangular Rectangular notch 50 mm wide, triangular notch 450 and 600,tank 1000 hirecapacity, open flow channel 250 x 200 x 1000 mm 9 Pitot tube apparatus Test Section : Material Clear Acrylic, Compatible to 1" Dia. PipeWater Circulation : FHP Pump, Crompton / Sharp make Flow Measurement : Using Measuring Tank, Capacity 40 U.s. Sump Tank : Capacity 70 Utrs.Stop Watch ElectronicControl Panel : Gn / Off Switch, Mains Indicator etc.Tanks will be made of Stainfess Steel The whole Set-up is well designed and arranged in a good quality painted Structure 10 Electronics Balance Capacity: 1 Kg Precision : lung Platform Size (mm) : 150 Air Tight 11 Electronics Balance Capacity : 5 Kg Precision : 500mg Platform Size (mm) : 300 x 300 Power Consumption : 12 to 15W Auto Power Saver Inbuilt Battery Back-up System Over Load Protection 12 Bulk Density Container Capacity : 3 Liters Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded 13 Sand Replacement Apparatus Capacity : 3 Liters Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm					
Rectangular notch 50 mm wide, triangular notch 450 and 600,tank 1000 hirecapacity, open flow channel 250 x 200 x1000 mm Pitot tube apparatus Test Section: Material Clear Aerylic, Compatible to 1° Dia. PipeWater Circulation: FHP Pump, Crompton / Sharp make Flow Measurement: Using Measuring Tank, Capacity 40 Ltrs. Sump Tank: Capacity 70 Ltrs.Stop Watch: ElectronicControl Panel: Gn / Off Switch, Mains Indicator etc.Tanks will be made of Staintess Steel The whole Set-up is well designed and arranged in a good quality painted Structure Electronics Balance Capacity: 1 Kg Precision: Img. Platform Size (mm): 150 Air Tight Electronics Balance Capacity: 5 Kg Precision: 500mg Platform Size (mm): 300 x 300 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Baltery Back-up System Over Load Protection Bulk Density Container Capacity: 3 Litres Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded Sand Replacement Apparatus Capacity: 3 Litres Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm					
8 Triangular) 600,tank 1000 htrecapacity, open flow channel 250 x 200 x 1000 mm 7 Pitot tube apparatus Test Section: Material Clear Aerylic, Compatible to 1" Dia PipeWater Circulation: FHP Pump, Crompton / Sharp make Flow Measurement: Using Measuring Tank, Capacity 40 Utrs. Sump Tank: Capacity 70 Utrs.Stop. Watch: ElectronicControl Panel: On / Off Switch, Mains Indicator etc.Tanks will be made of Stainless Steel The whole Set-up is well designed and arranged in a good quality painted Structure 10 Electronics Balance Capacity: I Kg Precision: Img Ol 5000 Platform Size (mm): 150 Air Tight Capacity: 5 Kg Precision: 500mg Platform Size (mm): 300 x 300 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Baitery Back-up System Over Load Protection 12 Bulk Density Container Capacity: 3 Litters Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded 13 Sand Replacement Apparatus Capacity: 3 Litters Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm	. }		0.5 HP pump with valve		
8 Triangular) 600,tank 1000 htrecapacity, open flow channel 250 x 200 x 1000 mm 7 Pitot tube apparatus Test Section: Material Clear Aerylic, Compatible to 1" Dia PipeWater Circulation: FHP Pump, Crompton / Sharp make Flow Measurement: Using Measuring Tank, Capacity 40 Utrs. Sump Tank: Capacity 70 Utrs.Stop. Watch: ElectronicControl Panel: On / Off Switch, Mains Indicator etc.Tanks will be made of Stainless Steel The whole Set-up is well designed and arranged in a good quality painted Structure 10 Electronics Balance Capacity: I Kg Precision: Img Ol 5000 Platform Size (mm): 150 Air Tight Capacity: 5 Kg Precision: 500mg Platform Size (mm): 300 x 300 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Baitery Back-up System Over Load Protection 12 Bulk Density Container Capacity: 3 Litters Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded 13 Sand Replacement Apparatus Capacity: 3 Litters Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm					
Pitot tube apparatus Test Section: Material Clear Aerylic, Compatible to 1" Dia. PipeWater Circulation: FHP Pump, Crompton / Sharp make Flow Measurement: Using Measuring Tank, Capacity 40 Ltrs. Sump Tank: Capacity 70 Ltrs.Stop. Watch: ElectronicControl Panel: Gn / Off Switch, Mains Indicator etc.Tanks will be made of Stainless Steel The whole Set-up is well designed and arranged in a good quality painted Structure 10 Electronics Balance Capacity: I Kg Precision: Img. Platform Size (mm): 150 Air Tight 11 Electronics Balance Capacity: 5 Kg Precision: 500mg Platform Size (mm): 300 x 300 Power Consumption: 12 to 15 W Auto Power Saver Inbuilt Baitery Back-up System Over Load Protection. 12 Bulk Density Container Capacity: 3 Litres Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded 13 Sand Replacement Apparatus Capacity: 3 Liters Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm	8	· · · · · · · · · · · · · · · · · · ·		101	20000
Pitot tube apparatus Test Section: Material Clear Acrylic, Compatible to 1° Dia. PipeWater Circulation: PHP Pump, Crompton / Sharp make Plow Measurement: Using Measuring Tank, Capacity 40 Urs. Sump Tank: Capacity 70 Urs.Stop Watch: ElectronicControl Panel: On / Off Switch, Mains Indicator etc.Tanks will be made of Stainless Steel The whole Set-up is well designed and arranged in a good quality painted Structure Capacity: 1 Kg Precision: Img Platform Size (mm): 150 Air Tight Electronics Balance Capacity: 5 Kg Precision: 500mg Platform Size (mm): 300 x 300 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Baltery Back-up System Over Load Protection Bulk Density Container Capacity: 3 Litres. Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded Sand Replacement Apparatus Capacity: 3 Liters Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm		&Triangular)			
PipeWater Circulation: FHP Pump, Crompton / Sharp make Flow Measurement: Using Measuring Tank, Capacity 40 Ltrs. Sump Tank: Capacity 70 Ltrs.Stop Watch: ElectronicControl Panel: Gn / Off Switch, Mains Indicator etc.Tanks will be made of Stainless Steel The whole Set-up is well designed and arranged in a good quality painted Structure Capacity: 1 Kg Precision: ting. Platform Size (mm): 150 Air Tight Electronics Balance Capacity: 5 Kg Precision: 500mg Platform Size (mm): 300 x 300 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Baitery Back-up System Over Load Protection Bulk Density Container Capacity: 3 Litres Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded Sand Replacement Apparatus Capacity: 3 Liters Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm			x1000 mm		
PipeWater Circulation: FHP Pump, Crompton / Sharp make Flow Measurement: Using Measuring Tank, Capacity 40 Ltrs. Sump Tank: Capacity 70 Ltrs.Stop Watch: ElectronicControl Panel: Gn / Off Switch, Mains Indicator etc.Tanks will be made of Stainless Steel The whole Set-up is well designed and arranged in a good quality painted Structure Capacity: 1 Kg Precision: ting. Platform Size (mm): 150 Air Tight Electronics Balance Capacity: 5 Kg Precision: 500mg Platform Size (mm): 300 x 300 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Baitery Back-up System Over Load Protection Bulk Density Container Capacity: 3 Litres Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded Sand Replacement Apparatus Capacity: 3 Liters Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm			70	0)	5000
Flow Measurement: Using Measuring Tank, Capacity 40 Ltrs. Sump Tank: Capacity 70 Ltrs.Stop Watch: ElectronicControl Panel: On / Off Switch, Mains Indicator etc.Tanks will be made of Stainless Steel The whole Set-up is well designed and arranged in a good quality painted Structure 10 Electronics Balance Capacity: 1 Kg Precision: ting Platform Size (mm): 150 Air Tight 11 Electronics Balance Capacity: 5 Kg Precision: 500mg Platform Size (mm): 300 x 300 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Battery Back-up System Over Load Protection 12 Bulk Density Container Capacity: 3 Liters Pouring Cylinder with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded 13 Sand Replacement Capacity: 3 Liters Pouring Cylinder with conical funnel and-shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm	9	Pitot tube apparatus	Test Section: Material Clear Acrylle, Companie to 1 Dia.	01	3000
Lits. Sump Tank: Capacity 70 Ltrs.Stop Watch ElectronicControl Panel: On / Off Switch, Mains Indicator etc.Tanks will be made of Stainless Steel The whole Set-up is well designed and arranged in a good quality painted Structure 10 Electronics Balance Capacity: 1 Kg Precision: Ling. Platform Size (mm): 150 Air Tight 11 Electronics Balance Capacity: 5 Kg Precision: 500mg Platform Size (mm): 300 x 300 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Battery Back-up System Over Load Protection 12 Bulk Density Container Capacity: 3 Litres Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded 13 Sand Replacement Apparatus Capacity: 3 Liters Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm				,	
Electronic Control Panel: On / Off Switch, Mains Indicator etc. Tanks will be made of Stainless Steel The whole Set-up is well designed and arranged in a good quality painted Structure Capacity: 1 Kg Precision: 1mg. O1 5000 Platform Size (mm): 150 Air Tight Electronics Balance Capacity: 5 Kg Precision: 500mg O1 10000 Platform Size (mm): 300 x 300 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Battery Back-up System Over Load Protection Bulk Density Container Capacity: 3 Litres Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded Sand Replacement Capacity: 3 Litres Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm	•				, ·
tet. Tanks will be made of Stainless Steel The whole Set-up is well designed and arranged in a good quality painted Structure Capacity: 1 Kg Precision: Img. Platform Size (mm): 150 Air Tight Capacity: 5 Kg Precision: 500mg Platform Size (mm): 300 x 300 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Battery Back-up System Over Load Protection Bulk Density Container Capacity: 3 Litres. Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded Sand Replacement Apparatus Capacity: 3 Litres Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm			Cirs. Sump rank Capacity 70 Lits. Stop water	! ` -	
The whole Set-up is well designed and arranged in a good quality painted Structure 10 Electronics Balance Capacity: 1 Kg Precision: 1mg Platform Size (mm): 150 Air Tight 11 Electronics Balance Capacity: 5 Kg Precision: 500mg Platform Size (mm): 300 x 300 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Baltery Back-up System Over Load Protection 12 Bulk Density Container Capacity: 3 Litres Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded 13 Sand Replacement Apparatus Capacity: 3 Litters Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm					
Rectronics Balance Capacity: 1 Kg Precision: Img. Description Platform Size (mm): 150 Air Tight	•				
Capacity: 1 Kg Precision: Img. Deletronics Balance Platform Size (mm): 150 Air Tight					
Platform Size (mm): 150 Air Tight Capacity: 5 Kg Precision: 500mg Platform Size (mm): 300 x 300 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Battery Back-up System Over Load Protection Bulk Density Container Capacity: 3Litres.Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded Sand Replacement Apparatus Capacity: 3 Liters Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm			quanty painted structure		
Platform Size (mm): 150 Air Tight Capacity: 5 Kg Precision: 500mg Platform Size (mm): 300 x 300 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Battery Back-up System Over Load Protection Bulk Density Container Capacity: 3Litres.Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded Sand Replacement Apparatus Capacity: 3 Liters Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm	10	Electronics Polones	Canacity: 1 Kg Precision: Ling	01	5000
Capacity: 5 Kg Precision: 500mg Platform Size (mm): 300 x 300 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Battery Back-up System Over Load Protection Bulk Density Container Capacity: 3 Litres. Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded Sand Replacement Apparatus Capacity: 3 Liters Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm	10	prectiones parance	,		
Platform Size (mm): 300 x 300 Power Consumption: 12 to 15W Auto Power Saver Inbuilt Battery Back-up System Over Load Protection Bulk Density Container Capacity: 3Litres.Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded Sand Replacement Apparatus Capacity: 3 Liters Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm					10000
Power Consumption: 12 to 15W Auto Power Saver Inbuilt Battery Back-up System Over Load Protection Bulk Density Container Capacity: 3Litres.Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded Sand Replacement Capacity: 3 Liters Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm	11	Electronics Balance		01	10000
Inbuilt Battery Back-up System Over Load Protection. Bulk Density Container Capacity: 3Litres.Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded Sand Replacement Apparatus Capacity: 3 Liters Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm			1	1	
Bulk Density Container Capacity: 3Litres.Complete with one Tapping Road, Round, 16mm dia and 600mm long One End Rounded Sand Replacement Capacity: 3 Liters Pouring Cylinder with conical funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm		* **		}	
Round, 16mm dia and 600mm long One End Rounded 13 Sand Replacement Capacity: 3 Liters Pouring Cylinder with conical 01 . 5000 Apparatus funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm			Inbuilt Battery Back-up System Over Load Protection		
Round, 16mm dia and 600mm long One End Rounded 13 Sand Replacement Capacity: 3 Liters Pouring Cylinder with conical 01 . 5000 Apparatus funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm	·				
Round, 16mm dia and 600mm long One End Rounded 13 Sand Replacement Capacity: 3 Liters Pouring Cylinder with conical 01 . 5000 Apparatus funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm	12	Bulk Density Container	Capacity: 3Litres.Complete with one Tapping Road,	01	15000
Sand Replacement Capacity: 3 Liters Pouring Cylinder with conical 01 5000 Apparatus funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm					
Apparatus funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm)				·
Apparatus funnel and shutter, Internal dia 10cm and internal depth 15cm, fitted with a flange, Metal tray, 30cm	13	Sand Kenlacement	Capacity: 3 Liters Pouring Cylinder with conical	0.1	5000
depth 15cm, fitted with a flange, Metal tray, 30cm	~~		funnel and shutter, Internal dia 10cm and internal		
			depth 15cm, fitted with a flange, Metal tray, 30cm		
				1	1
				<u></u>	<u> </u>

Wayler Care

GOVERNMENT POLYTECHNIC, YAVATWAL.

शासकीयतंत्रनिकेतन, यवतमाळ.

Dhamangaon Road, Yavatmal - 445001.

Phone: - (07232)243278

Faze -

(07232)248807

E-mail:-gpyavatmal@gmail. 🧸 😘 Website:-www.gpyavatmal.... in

OUOTATION

No.GPY/CS/INST PU DUOTATION/2017-18/ Dt. 29/01/2018.

Sub: Quotation for purchase of equipments.

(Due Date: 8 /02/2018)

Sealed Quotations are from eligible and interested manufacturers/ dealers/distributors/ ... be following items on the terms and conditions mentioned below.

٩	Sr.	Name of the item with specification	Quantity required	Estimated co.
•.	No.			·
	1.	LIST ATTACHED HERE WITH	,	

TERMS AND CONDITIONS

- The bic/quotation should be submitted in two bid format.
- The first envelope will contain Technical specifications of the product, technical literature/ leaflet and other documents mentioned below.
 - 1. Covering Letter for Quotation on the company letter head mentioning official address, Contact No.
 - 2.e Mail address and website (if available) address
 - 3. Certificate from competent authorities, if exemption is claimed.
 - 4.GST registration certificate/ Number
 - 5.GST Clearance Certificate/ GST Challan for last quarter of the financial year.
 - 6. Authorization/ Distributorship certificate from manufacturer. Proof of permission to Manufacture the equipment/ item mentioned in the quotation from competent authorities (to be submitted if the bidder is not a manufacturer).
 - 7. Technical literature / leaflet of the make and model no of equipment quoted.

Additional document may also be asked by undersigned for confirming the details.

The second envelope will contain the financial bid in which the all inclusive rates F.O.R. Destination will be written and signed with the stamp of the establishment in the following format.

	Sr. No.	Name of the item with specification	Quantity required	All inclusive cost per unit	All inclusive cost for quantity mentioned.
•	1.	LIST ATTACHED HERE WITH			

Date: 29/01/2018

Place: Yavatmal.

(N. N. Shende) Principal

Govt. Polytechnic, Yavatmal.

- The two envelopes should be scaled with a mention of the type of envelope (technical/ Financial), Reference no., Date of opening the quotation on the front side of the envelope. These two envelopes should be scaled in a third envelope by giving heading "Quotation for supply of ELCTRONICS LAB EQIPMENTS" and writing complete address of the undersigned.
- The quotations should reach the undersigned on or before dt. 8 /02/2018.
- The material will be checked at this institute.
- No extra charges will be paid for cartage, packing etc. for the material rejected and replaced
- Quotations will be opened at 9/02/2018 at: 11.00 AM on dt. 9/02/2018.
- Rates should be valid for 6 months from the date of confirmation letter.
- Materials should be quoted for standard makes and minimum pkgs.
- Delivery to the consignee has to be effected within 4weeks from the date of issue of purchase order.
- The undersigned reserves the right to accept or reject any offer or all offers without assigning any reason thereof.

(N. N. Shende)
Principal
Govt. Folytechnic, Yavatmal.

<u>Copy to</u>1. The Director, Directorate of Technical Education, 3Mahapalika Marge, M.S. Mumbai. Please publish the enquiry of above item on your website,

- 1. 2. The Joined Director, Technical Department, Regional Office, Gadge Nagar, Amravati.
 Please publish the enquiry of above item on your website.
 - 3. Programmer, Govt. Polytechnic Yavatmal .Publish the enquiry of above item on the Institute website.
 - 4. Notice board Main building Govt. Polytechnic, Yavatmal.

LIST OF ELCTRONICS LAB EQIPMENTS.

,		LIST OF ELCIRONICS LAB EUIPMEN		
Sr. No.	Name of the equipment	Specification	Quantity Required	Estimated Cost Per No.
1 .	Trainer kit for R and RC triggering circuits on firing angle of SCR.	Different fixed resistance or different fighringangles of SCR for R and RC triggering. On board power supply. Manual with all circuit detail and specifications	01	2000
2	Trainer kit for the effect of variation of R on firing angle in synchronized UIT triggering circuit	SCR - On board power supply. Manual with all circuit detail and specifications	01	2000
3	Framer kit for transfer and output characteristics of Insulated - Gate Bipolar	 On board analog voltmeter & Ammeter as per circuit requirement. On board power supply. 	01	2000
	Transistor (IGBT)	-On board variable voltages for gate and Anode to Cathode Voltage Manual with all circuit detail and specifications		
4	Trainer kit for output *characteristics of power transistor.	On board analog voltmeter & Ammeter as per circuit requirement. On board power supply. Manual with all circuit detail and specifications.	•01	2000
5	Trainer kit for Study of Chopper (step up and step down)using SCR.	-On board power supplyManual with all circuit detail and specifications	01	3000
6	Trainer kit for Study of current commuted Chopper step down Chopper using SCR	-On board power supplyManual with all circuit detail and specifications	02	2000
7	Trainer kit for the speed control of DC series motor using SCR PHASE CONTROL AND Plot speed Vs armature voltage characteristic	- Provided variable resistance for different figuring angle of SCR. - On board voltmeter for measuring the armature voltage. -On board power supply. -Manual with all circuit detail and specifications	02	2500
8	Trainer kit for V-1 characteristics of SCR.	On board meter for measurement of Gate current, Gate Voltage, Anode to Cathode Voltage and Anode	02	2000
9	Trainer kit for Single phase full wave controlled rectifier (centre tapped) with resistive load and inductive load with and without freewheeling diode.	 current Circuit is midpoint converter Facility to be provided to observe half wave controlled rectifier output voltage waveform. On board figuring circuit for controlled rectifier to provide different figuring angles. On board power supply. Manual with all circuit detail and specifications 	02	3000
10	Trainer kit for Single phase full wave controlled Bridge rectifier (Fully controlled as well as halfly controlled) with resistive load and inductive load with and without freewheeling diode.	On board figuring circuit for controlled rectifier to provide different figuring angles. On board power supply. Manual with all circuit detail and specifications.	02	2500
11	Trainer kit for Study of the effect of firing angle on output voltage in DIAC - TRIAC phase control circuit.	On board power supplyManual with all circuit detail and specifications	02*	2000
12	Study of strain gauge trainer	To study strain measurement using strain gauge & cantilever assembly. To determine linear range operation of strain measurement Build in DC power supply 3½ digit LED display Onboard cantilever arrangement Provide test point for measurement of voltage of whetstone bridge with different weight from 0 Kg to	02	3000

~	Fig. 15 The Sales and The Control of	The same of the sa	age of a finite same of	and the state of t
13	Study of Temperature	Characteristics of NTC Thermostat	02	2500
	Transducer trainer kit	Characteristics of Platinum RTD (pt-100)		
		Characteristics of K type Thermocouple Build in power supply		
		Student should measure resistance of RTD by varying		
	.	temperature of RTD	¥	
•		Provide electronic heater with pot to measure the		1
		temperature with the help of thermometer.		
		Provide thermometer (o to The mister 150C) RTD-		
•		3000C Manual should provide the circuit details		·
		- Patch cords as per circuit diagram.		ľ
		- Fully documented manual Characteristics R-type		
		thermal of detailed circuit specification		
		- Functional block indicated on board		
		Provide necessary voltmeter and ammeter.		
4	Pressure measurement using	0-6 Kg/Cm2 Pressure range tank with bourdon type	02	3000
	diaphragm type pressure	compressor		
	gauge. Along with Diaphragm			
	& Bellows			
5	Trainer kit kit for wine bridge	For different combinations of R & C.	02	2000
	oscillator.	for different frequency range.	1 .	}
$\overline{6}$	Study of FET characteristic	Should evaluate AC drain resistance Trans conductor,	02	2000
	trainer kit	Amplification factor DC drain resistance. On board	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
		power supply		
		On board ammeter & voltmeter as per characteristics	:	
	li e e e e e e e e e e e e e e e e e e e	requirement,		
		Manual with detailed circuit diagram.		1
7	Trainer of BJT amplifier &	BJT amplifier having CE configuration.	02	2000
-	emitter follower	On board power supply.		1 2000
· · · · .		Small signal AC voltage with different frequency to		
		the input.		ļ
		On board AC voltmeter for measuring input voltage	,	
-		of Amplifier and another voltmeter for measuring		
. !		output of amplifier. Circuit should provide		
_		amplification & frequency response of the above		
		amplifier.		
8	Water level measurement	- Precise signal conditioning with different test point.	02	2000
	Trainer Kit	- Manual should consist of details ckt. Specification		
	•	& procedure for performing experiment.		
		- With 4 to 20 is current o/p 0-300 mm height of level		
	 	tank. With 230 v power Supply.		
9	Transistor Characteristics	1) Study of the characteristics of PNP transistor in *	-02	2000
.	Trainer	common base configuration and to evaluate input		
		resistance, output resistance and current gain	_	
		2) Study of the characteristics of PNP transistor in		
		common emitter configuration and to evaluate input		
		resistance, output resistance and current gain	*	
- 1		3) Study of the characteristics of NPN transistor in		
- (common base configuration and to evaluate input		
ı	·	resistance, output resistance and current gain 4) Study of the characteristics of NPN transistor in	÷	
		common emitter configuration, and to evaluate input		
		resistance, output resistance and current gain		•
		5) Study of the characteristics of NPN transistor in	9	τ.
.		common collector configuration and to evaluate input	· · · · · · · · · · · · · · · · · · ·	
(resistance, output resistance and current gain		
	* .	- In built power supply; in built digital display for the		·-
]		measurement if DC input & output voltage & current.		· .
1		- Circuit manual with neat circuit diagram, procedure		
.		for the respective experiment.		
		- g- me corporatio exportment.		

2) Memory EPROM 1: 32K byte5 with monitor software. EPROM 1: 32K potend 32K ROM RAM 1: 32K data RAM RAM 2: 32K program/data RAM RAM 2: 32K pro	
RAM 1: 32K data RAM RAM 2: 3K program/data RAM 3) I/O Parallel: 48 I/O lines using two 8255 4) I/O Serial: One R8 2-32 compatible interface. 5) Timer: Three I bit is counter I limer using 82-33 6) Keyboard: Consisting of 28 numbers of computer Grade keys. 7) Display: Six numbers of seven segment displays. 8) Monitor software: 32Kb of powerful user friendly monitor software with keyboard & scriat 9) Bus Signals. Bus signals terminated in burg strip. Controller spacetific lines like port 1 lines. 70: TI, INTO, INTI, etc. Terminated in a burg strick header. 10) Power supply: Built in IOC regulated power Supply. Kit operate on 230 V; 50 IIz AC supply 1) O/IV voltage - 0 to 30 Voli, 2A in 3 range in both power Supply channel 2) Display - 3 1/2 digit 3) Load regulation - 0.5 % + 15 mv for ±1- Variation around 230 voli 5) O/IV imp 45 milliohars 6) Ripple -less than I mv rms. 7) IV supply - 230 V ±1- 10 % 50 IIz. 22 Trainer kit for Study of Battery charger using SCR. Trainer kit for verifying the characteristics of LDR/Photo diode and phote Transistor. For LDR Light intensity Vs Resistance. For Photodiode intensity of source Vs Photocurrent. For transistor Vi/Ste On board power supply. Manual with all circuit detail and specifications Trainer kit for Culprit of the should consist of different pair of capacitor or range operated on the should be compared to the should be current and variable intensity of source On board meters for measurements of currents and voltages. Manual with all circuit detail and specifications & natche cord 24 Trainer kit inclement R-2R Provide different combination 8 digital input. 92 2000 2000 2001	
RAM 2: 32K program/data RAM 3) I/O Parallel: 48 I/O lines using two 8255 4) I/O Serial: One R8 232 comparible interface. 5) Timer: Three 16 bit counter I timer using 8253 6) Keyboard: Consisting of 28 numbers of computer Grade keys 7) Display: Six numbers of seven against displays. 8) Monitor software: 32Kb of powerful user friendly monitor software with keyboard & serial 9) Bus Signals: Bus signals terminated in burg strip. Controller specific lines like port I lines, TO, TI, INTO, INTI, etc. Terminated in a burg stick header. 10) Power supply: Buil in DC regulated power Supply. Kit operate on 230 V, 50 Hz AC supply 1) O/P voltage - 0 to 30 Volt, 2A in 3 range in both power Supply behannel 2) Display - 3 1/2 digit 3) Load regulation - 0.5 % + 10 mv, no load full load for each channel 4) Line regulation - 0.5 % + 15 mv for +1- Variation around 230 volt 5) O/P imp - 45 milliohms 6) Ripple -less than tmv rons. 7) I/P supply - 230 V +1- 10 % 50 Hz. Trainer kit for Study of Battery charger using SCR. Trainer kit for verifying the characteristics of LDR/Photo diode and phote Transistor. For LDR Light intensity Vs Resistance. For Photodiode intensity of source Vs Photocurrent. For transistor ViVsle On board power supply, meters for measurements of currents and voltages, Light source with provision for maintaining dark current and variable intensity of source Vs Photocurrent. For transistor ViVsle On board power supply, meters for measurements of currents and voltages, Light source with provision for maintaining dark current and variable intensity of source Vs Photocurrent. For measurements of currents and voltages, Light source with provision for maintaining dark current and variable intensity of source. On board meters for measurements of currents and voltages, Manual with all circuit detail and specifications & patch cord	
3) I/O Parallel: 48 I/O lines using two 8255 4) I/O Serial: One RS 232 compatible interface. 5) Timer: Three 16 bit counter Itimer using 8253 6) Keyboard: Consisting of 28 numbers of computer Grade keys. 7) Display: Six numbers of seven segment displays. 8) Monitor software: 32Kb of powerful user friendly monitor software: 48 key pour times and the provider specific lines like port I lines, TO, TI, INTO, INTI, etc. Terminated in a burg stick header. 10) Power supply: Built in DC regulated power Supply. Kit operate on 230 V, 50 Hz, AC supply 1) O/P voltage - 0 to 30 Volt, 2A in 3 range in both power Supply channel 2) Display-3 1/2 digit 3) Load regulation - 0.5 % + 10mv, no load full load for each channel 4) Line regulation - 0.5 % + 10mv, no load full load for each channel 4) Line regulation - 0.5 % + 10mv, no load full load for each channel 7) I/P supply - 230 V + 1. 10 % 50 Hz. To observe change in charging voltage and current provide on board meters. On board power supply. Manual with all circuit detail and specifications Trainer kit for verifying the characteristics of LDR/Photo diode and phote Transistor. For LDR Light intensity Vs Resistance. For Photodiode intensity of source Vs Photocurrent. For transistor V/Vslc On board power supply, meters for measurements of currents and voltages, Light source with provision for maintaining dark current and variable intensity of source. On board meters for measurements of currents and voltages, Manual with all circuit detail and specifications & patch cord 124 Trainer kit for Culprit (1 thould consist of different pair of capacitor or range capacitor for different firequency. 25 Trainer Kit innetemien R-2R Provide different combination 8 digital input. 9 2 2000	
5) Timer: Three 16 bit counter 1 timer using 8253 6) Keyboard: Consisting of 28 numbers of computer Grade keys 7) Display: Six numbers of seven segment displays. 8) Monitor software: 32Kb of powerful user friendly monitor software with keyboard & serial 9) Bus Signals. Bus signals terminated in burg strip. Controller specific lines like port 1 files, TO. 11, INTO, INTI, etc. Terminated in a burg stick header. 10) Power supply: Built in DC regulated power Supply Built in DC regulated power Supply thannel 2D Display - 3 1/2 digit 3) Load regulation - 0.5 % + 15 mw, no load full load for each chainel 4) Line regulation - 0.05 % + 15 mw for +1- Variation around 230 voll 5) O/P imp - 45 milliohans 6) Ripple - less than 1mv rms. 6) Ripple - less than 1mv rms. 7) I/P supply - 230 V + i - 10 % 50 Hz. 7 Trainer kit for Study of Battery charger using SCR. 7 Trainer kit for verifying the characteristics of LDR/Photo diode and phote 7 Trainer kit for verifying the characteristics of LDR/Photo diode and phote 7 Trainer kit for verifying the characteristics of LDR/Photo diode and phote 7 Trainer kit for Culprit and variable intensity of source Vs Photocurrent. For transistor Vi-Vst Con board power supply, macters for measurements of currents and voltages, Light source with provision for maintaining dark current and variable intensity of source. On board meters for measurements of currents and voltages, Light source with provision for maintaining dark current and variable intensity of source. On board meters for measurements of currents and voltages, Manual with all circuit detail and specifications and voltages. 7 Trainer kit for Culprit and condition of different pair of capacitor or range capacitor for different pair of capacitor or range capacitor for different combination 3 digital input. 10 2 2000 capacitor for different combination 3 digital input. 10 2 2000 capacitor for different combination 3 digital input.	
6) Keyboard: Consisting of 28 numbers of computer Grade keys. 7) Display: Six numbers of seven segment displays. 8) Monitor software: 32Kb of powerful user friendly monitor software: 32Kb of powerful user friendly monitor software with keyboard & serial 9) Bus Signals. Bus signals terminated in burg strip. Controller specific lines fike port 1 fines, TO, TI, BNTO, INTI, etc. Terminated in a burg stick header. 10) Power supply. Built in DC regulated power Supply, Kit operate on 230 V, 50 Hz AC supply 1) Off voltage - 0 to 30 Volt, 2A in 3 range in both power Supply channel 2) Display - 3 Hz digit 3) Load regulation - 0.5 % + 10mv, no load full load for each chainful 4) Line regulation - 0.05 % + 15 mv for ±1-Variation around 230 volt 5) Off imp - 45 milliohams 6) Ripple -less than 1mv rms. 7) HP supply - 230 V ±1 ±10 % 50 Hz. Trainer kit for Study of Battery charger using SCR. Trainer kit for verifying the characteristics of LDR/Photo diode and phote Transistor. For LDR Light intensity Vs Resistance, For Photodiode intensity of source Vs Photocurrent. For transistor VrVsle On board power supply, meters for measurements of currents and voltages, Light source with provision for maintaining dark current and variable intensity of source. On board maters for measurements of currents and voltages. Manual with all circuit detail and specifications & patch cord 24 Trainer kit for Culprit Oscillator. Trainer kit implement R-2R Provide different combination 3 digital input. 92 2000 capacitor for different combination 3 digital input. 92 2000	1
Grade keys. 7) Display: Six numbers of seven segment displays. 8) Monitor software: 32Kb of powerful user friendly monitor software with keyboard & scriat 9) Bus Signals: Bus signals terminated in burg stich seader. 10) Power supply: Built in DC regulated power Supply. Built in DC regulated power Supply. Built in DC regulated power Supply. Kit operate on 230 V, 30 Hz. AC supply 1) O/I voltage - 0 to 30 Volt, 2A in 3 range in both power Supply channel 2) Display - 3 1/2 digit 3) Load regulation - 0.5 % + 10my, no load full load for each channel 4) Line regulation - 0.05 % + 15 mv for +1- Variation around 230 volt 5) O/F imply - 45 milliohans 6) Ripple -less than 1mv rms. 7) I/F supply - 230 V +1 - 10 % 50 Hz. 7) I/F supply - 230 V +1 - 10 % 50 Hz. 7) I/F supply - 230 V +1 - 10 % 50 Hz. 7) I/F supply - 230 V +1 - 10 % 50 Hz. 7) I/F supply - 250 V +1 - 10 % 50 Hz. 7)	
7) Display: Six numbers of seven segment displays. 8) Monitor software: 32Kb of powerful user friendly monitor software with keyboard & scriat 9) Bus Signals. Bus signals terminated in burg strip. Controller specific lines fike port 1 lines, TO, TI, INTO, INTI, etc. Terminated in burg strek header. 10) Power supply: Built in IDC regulated power Supply. Built in IDC regulated power Supply shall to IDC regulated power Supply shall regulation of the 3000 power supply. Built in IDC regulated power Supply channel 2) Display - 3 1/2 digit 3) Load regulation - 0.05 % + 15 mv for +1- Variation around 230 volt 5) O/P imp - 45 milliohans 6) Ripple-less than Imv rms. 7) I/P supply - 230 V +1 10 % 50 Hz. To observe change in charging voltage and current provide on board meters. On board power supply. Manual with all circuit detail and specifications Trainer kit for verifying the characteristics of LDR/Photo diode and phote Transistor. For LDR Light intensity Vs Resistance, For Photodiode intensity of source Vs Photocurrent. For transistor VrVsle On board power supply, meters for measurements of currents and voltages, Light source with provision for maintaining dark current and variable intensity of source. On board meters for measurements of currents and voltages, Manual with all circuit detail and specifications & pack ord	ļ.
friendly monitor software with keyboard & scrial 9) Bus Signals. Eus signals terminated in burg strip. Controfler specific lines like port 1 lines, TO, TT, INTO, INTT, etc. Terminated in a burg stick header. 10) Power supply. Built in DC regulated power Supply. Kit operate on 230 V, 50 Hz, AC supply 1) OP voltage - 0 to 30 Volt, 2A in 3 range in both power Supply channel 2) Display - 3 I/2 digit 3) Load regulation - 0.5 % + 10mv, no load full load for each chainel 4) Line regulation - 0.05 % + 15 mv for +1- Variation around 230 volt 5) OP imp - 45 milliohms 6) Ripple -less than Imv rms. 7) I/P supply - 230 V +1- 10 % 50 Hz. To observe change in charging voltage and current provide on board meters. On board power supply. Manual with all circuit detail and specifications Transistor ViVste On board power supply, meters for measurements of currents and voltages, Light source with provision for maintaining dark current and variable intensity of source. On board meters for measurements of currents and voltages. Manual with all circuit detail and specifications & 24 Trainer kit for Culprit Oscillator Trainer Kit implement R-2R Provide different pair of capacitor or range capacitor for different frequency. Provide different combination & digital input. 92 2000	.
9) Bus Signals. Eus signals terminated in burg strip. Controller specific lines like port 1 lines, TO, TI, INTO, INTI, etc. Terminated in a burg stick header. 10) Power supply: Built in DC regulated power Supply. Kit operate on 230 V, 50 Hz, AC supply 1) O/P voltage - 0 to 30 Volt, 2A in 3 range in both power Supply channel 2) Display - 3 1/2 digit 3) Load regulation - 0.5 % + 10mv, no load full load for each channel 4) Line regulation - 0.05 % + 15 mv for E1- Variation around 230 volt 5) O/P imp - 45 milliohms 6) Ripple -less than 1mv ross. 7) I/P supply - 230 V + 1.10 % 50 Hz. 22 Trainer kit for Study of Battery charger using SCR. 23 Trainer kit for verifying the characteristics of LDR/Photo diode and phote Transistor. For LDR Light intensity Vs Resistance, For Photodiode intensity of source Vs Photocurrent. For transistor ViVste On board power supply, meters for measurements of currents and voltages, Light source with provision for maintaining dark current and variable intensity of source. On board meters for measurements of currents and voltages, Manual with all circuit detail and specifications & patch cord 24 Trainer kit for Culprit Oscillator Capacitor for different frequency. 25 Trainer Kit implement R-2R Provide different combination & digital input. 92 2000	į
Controller specific lines fike port 1 fines, TO, TI, INTO, INTI, etc Terminated in a burg stick header. 10) Power supply: Built in DC regulated power Supply. Kit operate on 230 V, 50 Hz, AC supply 11) O/P voltage - 0 to 30 Volt, 2A in 3 range in both power Supply channel 22) Display - 3 1/2 digit 33) Load regulation - 0.5 % + 10mv, no load full load for each chainet 4) Line regulation - 0.05 % + 15 mv for +1- Variation around 230 volt 5) O/P imp - 45 milliohans 6) Ripple -less than Imv rms. 7) I/P supply - 230 V +1-10 % 50 Hz. 22 Trainer kit for Study of Battery charger using SCR. 23 Trainer kit for verifying the characteristics of LDR/Photo diode and phote 24 Trainer kit for Culprit Oscillator 25 Trainer-kit for Culprit Oscillator 26 Trainer-kit for Culprit Oscillator 27 Trainer-Rit implement R-2R 28 Provide different combination & digital input. 29 Ogo and the street of the	1
INTO, INTI, etc. Terminated in a burg stick header. 10) Power supply: Built in DC regulated power Supply. Kit operate on 230 V, 50 Hz AC supply	
Supply Kit operate on 230 V, 50 Hz AC supply 1) O/P voltage - 0 to 30 Volt, 2A in 3 range in both power Supply channel 2) Display - 3 Hz digit 3) Load regulation - 0.5 % + 10 mv, no load full load for each channel 4) Line regulation - 0.05 % + 15 mv for +1-	
D.C. Power supply 1) O/P voltage - 0 to 30 Volt, 2A in 3 range in both power Supply channel 2. Display - 3 1/2 digit 3. Load regulation - 0.5 % + 10mv, no load full load for each channel 4. Line regulation - 0.05 % + 15 mv for +1- Variation around 230 volt 5) O/P imp - 45 milliohms 6. Ripple - less than 1 mv rms. 7) 1/P supply - 230 V + 1- 10 % 50 Hz. Trainer kit for Study of Battery charger using SCR. To observe change in charging voltage and current provide on board meters. On board power supply. Manual with all circuit detail and specifications O2 4000	
power Supply channel 2) Display - 3 1/2 digit 3) Load regulation - 0.5 % + 10mv, no load full load for each chainel 4) Line regulation - 0.05 % + 15 mv for +1- Variation around 230 volt 5) O/P imp - 45 milliohms 6) Ripple -less than Imv rms. 7) VP supply - 230 V +1- 10 % 50 Hz. 22 Trainer kit for Study of Battery charger using SCR. 23 Trainer kit for verifying the characteristics of LDRPhoto diode and phote 25 Trainer kit for verifying the characteristics of LDRPhoto diode and phote 26 Trainer kit for cupit in the supply in	
2) Display - 3 1/2 digit 3) Load regulation - 0.5 % + 10mv, no load full load for each chainel 4) Line regulation - 0.05 % + 15 mv for +1- Variation around 230 volt 5) O/P imp - 45 milliohas 6) Ripple -less than 1mv rms. 7) I/P supply - 230 V + 1- 10 % 50 Hz. 22 Trainer kit for Study of Battery charge using SCR. 23 Trainer kit for verifying the characteristics of LDR/Photo diode and phote 24 Trainer kit for verifying the characteristics of LDR/Photo diode and phote 25 Trainer kit for Culprit oscillator 26 Trainer kit for Culprit oscillator 27 Trainer kit for Culprit oscillator 28 Provide different frequency. 29 Trainer kit inviencent R-2R 20 Display - 3 1/2 digit 3) Load regulation - 0.5 % + 10mv, no load full load for each cluded in the sum of the provide of the sum of the provide of the sum of the provide of the provide of the sum of the provide of the sum of the provide of the sum of the provide	
for each chainel 4) Line regulation - 0.05 % + 15 mv for +1- Variation around 230 yol 5) O/P imp - +5 milliohms 6) Ripple -less than 1mv rms. 7) I/P supply - 230 V + 1- 10 % 50 Hz. 22 Trainer kit for Study of Battery charger using SCR. To observe change in charging voltage and current provide on board meters. On board power supply. Manual with all circuit detail and specifications 23 Trainer kit for verifying the characteristics of LDR/Photo diode and phote Transistor. For LDR Light intensity Vs Resistance, For Photodiode intensity of source Vs Photocurrent. For transistor VrVstc On board power supply, meters for measurements of currents and voltages, Light source with provision for maintaining dark current and variable intensity of source. On board meters for measurements of currents and voltages. Manual with all circuit detail and specifications & patch cord 1 trainer kit for Culprit oscillator 24 Trainer kit for Culprit oscillator 25 Trainer Kit implement R-2R Provide different frequency. 26 2000	
4) Line regulation - 0.05 % + 15 mv for +1- Variation around 230 volt 5) O/P imp - 45 milliohms 6) Ripple -less than Imv rms. 7) I/P supply - 230 V + 1- 10 % 50 Hz. 100 Deserve change in charging voltage and current provide on board meters. On board power supply. Manual with all circuit detail and specifications 100 provide on board meters. On board power supply. Manual with all circuit detail and specifications 101 Trainer kit for verifying the characteristics of LDR/Photo diode and phote 102 dood 103 Trainer kit for verifying the characteristics of LDR/Photo diode intensity of source Vs Photocurrent. 103 For Photodiode intensity of source Vs Photocurrent. 104 For transistor VrVsle On board power supply, meters for measurements of currents and voltages, Light source with provision for maintaining dark current and variable intensity of source. On board meters for measurements of currents and voltages. 103 Manual with all circuit detail and specifications & patch cord 103 It should consist of different pair of capacitor or range capacitor for different frequency. 103 Trainer Kit implement R-2R 104 Provide different combination of digital input. 105 October 105 Million of the provide different combination of digital input. 106 October 105 Million of the provide different combination of digital input. 108 October 105 Million of the provide different combination of digital input. 109 October 105 Million of the provide different combination of digital input. 100 Million of the provide different combination of digital input. 100 Million of the provide different combination of digital input. 101 Million of the provide different combination of digital input. 102 October 105 Million of the provide different combination of digital input. 103 October 105 Million of the provide different combination of digital input.	} .
Variation around 230 volt 5) O/P imp - 45 milliohms 6) Ripple -less than Imv rms. 7) I/P supply - 230 V + 1- 10 % 50 Hz. Trainer kit for Study of Battery charge rusing SCR. Trainer kit for verifying the characteristics of LDR/Photo diode and phote Transistor, For LDR Light intensity Vs Resistance, For Photodiode intensity of source Vs Photocurrent. For transistor VrVsle On board power supply, meters for measurements of currents and voltages, Light source with provision for maintaining dark current and variable intensity of source. On board meters for measurements of currents and voltages, Manual with all circuit detail and specifications 24 Trainer kit for Culprit oscillator Trainer kit for Culprit oscillator Trainer Kit implement R-2R Provide different combination 8 digital input. Described to the source of	{
5) O/P imp - 15 milliohms	. }
7) I/P supply - 230 V + I - 10 % 50 Hz. 22 Trainer kit for Study of Battery charger using SCR. 23 Trainer kit for verifying the characteristics of LDR/Photo diode and phote 24 Trainer kit for Culprit Oscillator 25 Trainer kit for Culprit of Study of Battery charges in charging voltage and current provide on board meters. On board power supply. Manual with all circuit detail and specifications 24 Trainer kit for Culprit of Study of Source of Capacitor or range capacitor for different frequency. 25 Trainer kit implement R-2R 26 Provide different combination 8 digital input. 27 To observe charge in charging voltage and current of 2 4000 that current supply. Manual with all circuit detail and specifications. 28 Trainer kit for Culprit of Source of Capacitor or range capacitor for different frequency. 29 Trainer Kit implement R-2R 20 Trainer Kit implement R-2R 21 Trainer Kit implement R-2R 22 Trainer Kit implement R-2R 23 Trainer Kit implement R-2R 24 Trainer Kit implement R-2R 25 Trainer Kit implement R-2R 26 Trainer Kit implement R-2R 27 Trainer Kit implement R-2R 28 Trainer Kit implement R-2R 29 Trainer Kit implement R-2R	
Trainer kit for Study of Battery charge in charging voltage and current provide on board meters. On board power supply. Manual with all circuit detail and specifications Trainer kit for verifying the characteristics of LDR/Photo diode and phote Transistor For LDR Light intensity Vs Resistance, For Photodiode intensity of source Vs Photocurrent. For transistor VrVsle On board power supply, meters for measurements of currents and voltages, Light source with provision for maintaining dark current and variable intensity of source. On board meters for measurements of currents and voltages. Manual with all circuit detail and specifications & patch cord Trainer kit for Culprit It should consist of different pair of capacitor or range capacitor for different frequency. Trainer Kit implement R-2R Provide different combination 8 digital input. 02 4000 4000 4000 4000 4000 4000 4000 4000 4000 4000 4000 4000 4000 4000 For Photodiode intensity Vs Resistance, Por Photocurrent and voltages, Por transition for maintaining dark current and voltages, Manual with all circuit detail and specifications & patch cord 24 Trainer kit for Culprit It should consist of different pair of capacitor or range capacitor for different irequency.	1
charger using SCR. provide on board meters. On board power supply. Manual with all circuit detail and specifications Trainer kit for verifying the characteristics of LDR/Photo diode and phote Transistor, For LDR Light intensity Vs Resistance, For Photodiode intensity of source Vs Photocurrent. For transistor VrVsle On board power supply, meters for measurements of currents and voltages, Light source with provision for maintaining dark current and variable intensity of source. On board meters for measurements of currents and voltages. Manual with all circuit detail and specifications & patch cord It should consist of different pair of capacitor or range Coscillator Trainer Kit implement R-2R Provide different combination 8 digital input. 22 2000	
Manual with all circuit detail and specifications 23 Trainer kit for verifying the characteristics of LDR/Photo diode and phote For Photodiode intensity of source Vs Photocurrent. For transistor VrVsle On board power supply, meters for measurements of currents and voltages, Light source with provision for maintaining dark current and variable intensity of source. On board meters for measurements of currents and voltages. Manual with all circuit detail and specifications & patch cord 24 Trainer kit for Culprit It should consist of different pair of capacitor or range capacitor for different frequency. 25 Trainer Kit implement R-2R Provide different combination 8 digital input. 20 2 2000	
Trainer kit for verifying the characteristics of LDR/Photo diode and phote Transistor. For LDR Light intensity Vs Resistance, For Photodiode intensity of source Vs Photocurrent. For transistor VrVsle On board power supply, meters for measurements of currents and voltages, Light source with provision for maintaining dark current and variable intensity of source. On board meters for measurements of currents and voltages. Manual with all circuit detail and specifications & patch cord Trainer kit for Culprit It should consist of different pair of capacitor or range capacitor for different frequency. Trainer Kit implement R-2R Provide different combination 8 digital input. O2 2000	}
characteristics of LDR/Photo diode and phote For Photodiode intensity of source Vs Photocurrent. For transistor VrVsle On board power supply, meters for measurements of currents and voltages, Light source with provision for maintaining dark current and variable intensity of source. On board meters for measurements of currents and voltages. Manual with all circuit detail and specifications & patch cord It should consist of different pair of capacitor or range capacitor for different frequency. Trainer Kit implement R-2R Provide different combination 8 digital input. O2 2000	
diode and phote For transistor VrVsle On board power supply, meters for measurements of currents and voltages, Light source with provision for maintaining dark current and variable intensity of source. On board meters for measurements of currents and voltages. Manual with all circuit detail and specifications & patch cord It should consist of different pair of capacitor or range Capacitor for different frequency. Trainer Kit implement R-2R Provide different combination 8 digital input. 02 2000	
meters for measurements of currents and voltages, Light source with provision for maintaining dark current and variable intensity of source. On board meters for measurements of currents and voltages. Manual with all circuit detail and specifications & patch cord 24 Trainer-kit for Culprit It should consist of different pair of capacitor or range Coscillator Capacitor for different frequency. 25 Trainer Kit implement R-2R Provide different combination 8 digital input. 20 2000	-
Light source with provision for maintaining dark current and variable intensity of source. On board meters for measurements of currents and voltages. Manual with all circuit detail and specifications & patch cord 24 Trainer-kit for Culprit It should consist of different pair of capacitor or range capacitor for different frequency. 25 Trainer Kit implement R-2R Provide different combination 8 digital input. 20 2000	{
meters for measurements of currents and voltages. Manual with all circuit detail and specifications & patch cord 24 Trainer kit for Culprit It should consist of different pair of capacitor or range capacitor for different frequency. 25 Trainer Kit implement R-2R Provide different combination 8 digital input. 202 2000	
Manual with all circuit detail and specifications & patch cord 24 Trainer kit for Culprit It should consist of different pair of capacitor or range capacitor for different frequency. 25 Trainer Kit implement R-2R Provide different combination 8 digital input. 02 2000	-
patch cord 24 Trainer kit for Culprit It should consist of different pair of capacitor or range O2 2000 Oscillator capacitor for different frequency. 25 Trainer Kit implement R-2R Provide different combination 8 digital input. O2 2000	.
24 Trainer kit for Culprit It should consist of different pair of capacitor or range 02 2000 Oscillator capacitor for different frequency. 25 Trainer Kit implement R-2R Provide different combination 8 digital input.	
Oscillator capacitor for different frequency. 25 Trainer Kit implement R-2R Provide different combination 8 digital input. 02 2000	
25 Trainer Kit implement R-2R Provide different combination 8 digital input. 02 . 2000	
D/A Converter Provide voltmeter to measure output of the circuit. Manful with all circuit details and specifications &	}
patch cords	1
200	
26 Trainer Kit to Verify Truth Segment Decoder using IC 7447 or IC 7448 02 2000 Manual with all circuit details and specifications &	Ì
patch cords	
27 Trainer kit for Switching on board voltmeter and ammeter , power supply 02 2500	
characteristics of BJT	}
28 Trainer kit for Switching on board voltmeter and ammeter , power supply 02 2500	}
characteristics of MOSFET. with operating manual	
ebaracteristics of HIT with operating manual	
30 Trainer kit for Frequency Response of single stage common emitter amplifier, 02 2500	
to determine gain and BW. Facility for different gain.	1
With operating manual.	
31 Trainer kit for Frequency Response of two stages RC coupled amplifier using 02 250	
BJT. Facility for different gain 32 Trainer kit for Frequency Response of single funed amplifier of BJT& 02 250	
32 Trainer kit for Frequency Response of single tuned amplifier of BIT& 02 250 determine tuned frequency and bandwidth. Facility	
for different gain	

.

33	Trainer kit for Frequency	Response and BW of amplifier without & with negative voltage series feedback Amplifier is the CE	02	2500
34	Trainer kit for Draw	Input and output wave forms of class B push pull amplifier and determine efficiency.	02	2500
		On board wave from generator with different voltage & frequency to give input to amplifier. With operating manual.	•	
35	Trainer kit for Determine	Frequency of saw tooth oscillator using UTF at different combination of R-C combination and verify with actual value:	02	2500
36	Trainer kit for Determine Ton, T-off.	Duty cycle of Miller's sweep generator	02	2500
37	Trainer Kit to Measure pressure using Bourdon tube pressure gauge	Pressure measurement using diaphragm type pressure gauge Along with Diaphragm 0-6 Kg/Cm2 Pressure range tank with bourdon type compressor.	02	2000
	<u>.</u>			
44	Trainer Kit to Calibrate pressure gauge using Dead weight pressure gauge	Bored piston cylinder with hand heel arrangement. Pressure range of 0 to 6kg/cm2 with standard weight of 0.5kg, 1kg, 2kg, 5kg with dial gauge of 0 to 6kg/cm2	02	2000
45	Trainer Kit to Determine the rate of flow of liquid in pipe using Rota meter.	Rota meter with 0 - 1000lph flow range. With pipeline with manual values pump 2kw, 240 kAC Reservoir of 15lit water	02	2000
46	Trainer Kit to Calculate flow through pipe using orifice meter	Rota meter with 0 - 1000lph flow range. With pipeline with manual values pump 2kw, 240 kAC Reservoir of 15lit water. With orifice plate & man metric differential pressure indication.	02	2000

GOVERNMENT POLYTECHNIC, YAVATMAL.

शासकीयतंत्रनिकेतन, यवतमाळ.

Dhamangaon Road, Yavatmal - 445001.

Phone: - (07232)243278 Fax: - (07232)248807

E-mail:-gpyavatmal@gmail.com
Website:-www.gpyavatmal.edu.,n

OUO TATION

No.GPY/CS/INST PUR /GUOTATION/2017-18/ Dt. 29 /01/2018.

Sub: Quotation for purchase of equipments. . (Due Date: 8 /02/2018)

Sealed Quotations are from eligible and interested manufacturers/ dealers/distributors/ for the following items on the terms and conditions mentioned below.

Sr	Name of the item with specification		Quantity required	Estimated cost
. No.		, ,		
1.	LIST ATTACHED HERE WITH	· · ·		

TERMS AND CONDITIONS

- The bid/quotation should be submitted in two bid format.
- The first envelope will contain Technical specifications of the product, technical literature/ leaflet and other documents mentioned below.
 - 1. Covering Letter for Quotation on the company letter head mentioning official address, Contact No.
 - 2.e Mail address and website (if available) address
 - 3. Certificate from competent authorities, if exemption is claimed.
 - 4.GST registration certificate/ Number
 - 5.GST Clearance Certificate/ GST Challan for last quarter of the financial year.
 - 6. Authorization/ Distributorship certificate from manufacturer. Proof of permission to

 Manufacture the equipment/ item mentioned in the quotation from competent authorities (to be submitted if the bidder is not a manufacturer).
 - 7. Technical literature / leaflet of the make and model no of equipment quoted.

Additional document may also be asked by undersigned for confirming the details.

The second envelope will contain the financial bid in which the all inclusive rates F.O.R. Destination will be written and signed with the stamp of the establishment in the following format.

Sr.	Name of the item with specification	Quantity required	All inclusive cost per unit	All inclusive cost for
No.				quantity mentioned.
1.	LIST ATTACHED HERE WITH			

Date: 29/01/2018 Place:Yavatmal. (N. N. Shende) Principal Govt. Polytechnic, Yavatmal.

सहस्रवालक तंत्र शिक्षण, बादेशिक अभिराजन, अमरावती १९३७ (स्थाप 5/2)/8

- The two envelopes should be sealed with a mention of the type of envelope (technical/ Financial), Reference no., Date of opening the quotation on the front side of the envelope. These two envelopes should be sealed in a third envelope by giving heading "Quotation for supply of MECHANICAL LAB EQIPMENTS" and writing complete address of the undersigned.
- The quotations should reach the undersigned on or before dt. 8 /02/2018.
- The material will be checked at this institute.
- No extra charges will be paid for cartage, packing etc. for the material rejected and replaced
- Quotations will be opened at 9/02/2018 at: 11.00 AM on dt. 9/02/2018.
- Rates should be valid for 6 months from the date of confirmation letter.
- Materials should be quoted for standard makes and minimum pkgs.
- Delivery to the consignee has to be effected within 4weeks from the date of issue of purchase order.
- The undersigned reserves the right to accept or reject any offer or all offers without assigning any reason thereof.

(N. N. Shende)
Principal
Govt. Polytechnic, Yavatmal.

· A Malana

<u>Copy to</u>1. The Director, Directorate of Technical Education, 3Mahapalika Marge, M.S. Mumbai. Please publish the enquiry of above item on your website.

- \ 2. The Joined Director, Technical Department, Regional Office, Gadge Nagar, Amravati. Please publish the enquiry of above item on your website.
 - 3. Programmer, Govt. Polytechnic Yavatmal. Publish the enquiry of above item on the Institute website.
 - 4. Notice board Main building Govt. Polytechnic, Yavatmal.

Sr. No.			Quantity Required	Estimated east Per No.	
Slip gauge Metric 112 pieces workshop		Slip gauge Metric 112 pieces workshop grade	01	40900	
2	Porter Governor Aluminum Die cast Model Standard make		01	5000	
3	HartwellGovernor	Aluminum Die east Model Standard make	01.	5000	
4	Multi Digital Stroboscope	Measurement in operating range of 500-4900 rpm, Resolution 10 RPM high accuracy	01	15000	
		crystal controlled LED display power 220v +10% 50 HZ Mains operation, built incl. regulated internal supplies. 4 digit digital counter.			
5	Burdon Tube Trainer	Bourdon gauges is mounted on the pressure chamber. The movement of bourdon element will be measured by using the displacement sensor. The digital indicator reads bourdon pressure and displacement. The system works under 230V/50Hz.	01	4000	
6	Cut Section working Model of IC Engines) 2 stroke with gear box and clutch	Two stroke suitably section to show internal construction of engine, gear box, clutch & rear wheel mechanism standard make	01	20000	
7	Cut Section Model of Steam Stop Valve	Suitably section to show internal construction of steam stop valve standard make	01	2000	
8	Test Rig to measure Thermal conductivity for metallic rod	Test rig to determine thermal conductivity of metal rod Brass/steel/copper rod of 400 mm, die 20-30 mm diameter, cylindrical shell with cooling chamber, digital display of voltage, ammeter, temperature, thermocouples of 0-500 range.	01	15000	
9	Fuel Pump	fuel pump to be manually pump up to 10 - 20 bar with nozzle & stove burner.	01	5000	
· 10	Model of Three Speed Reverse Gear	Aluminum Die cast Model Standard make	01	2000	
11	Model of Worm Gear	Aluminum Die cast Model Standard make	01	2000	
12	Model of Reversing Gear Tumbler Type	Aluminum Die cast Model Standard make	. 01	1000	
13	Model of Plat cam with Flat Follower	Aluminum Die cast Model Standard make	01	1000	
14	Exhaust Gas Analyzer for petrol/diesel engine	Gasses measured CO, CO2, and HC. Operating temp 0-45degree. Range: CO -0 to 15%, HC-0 to 30000ppm, O2-0-to 25 % CO2-0to 20%	,	20000	
. 15	Multi cylinder Diesel/Petrol engine for Morse Test	4 stroke, 4 cylinder, 5HP. Car engine 1200 rpm vertical engine, water cooling, Electrical dynamometer digital control panel, Liquicooling, etc.	վ	50000	

16	Adjustable Snap gauge	Adjustable Snap gauge	01 each	10000
		25-45 mm , 50-65 mm		ĺ
L	<u> </u>		L	
17	Sine bar	Sine bar 200mm, 300mm	01 each	10000
			* .	
18	Screw thread micrometer	Screw thread micrometer 0 - 25 and 25	01 each	20000
1		50 mm with set of interchangeable anvils (m1		
		to m6.)).	