Government Degree College

Dharmanagar-799250, North Tripura

Ph: 03822-220387 e-mail: gdcdmr@rediffmail.com

NOTIFICATION

NO.F.5(25)-UGC/GDC/DMR/2007-12/4042

Dated: Dharmanagar, the 17th November, 2012

Sealed Tenders/Quotations (preferably under DGS & D rate, where applicable) are invited from the interested "Authorized manufactures/dealers" of India for procurement of Lab. equipments, water cooler, audio visual equipments, computer & computer accessories, projector, etc for Physical & Biological Laboratories and also for Smart Classrooms. Details of the tender notice/documents, equipments/articles with specification and terms & conditions will be available at our College website www.gdcdharmanagar.in or via e-mail from 21th November 2012. Last date of receipt of complete tender/quotation is 5th December, 2012 (4pm).

For further all procurements notice inviting Tender/Quotation will be uploaded time to time in our College website, so no more advertisement will be made in any other media.

(Dr. Sambhunath Rakshit)
Principal

Government Degree College Dharmanagar, North Tripura

Terms and condition for submitting quotation.

1	The supplier/manufacturer should carefully place the quotation of the items/apparatus which they		
	can supply reliably and in due time. Unnecessary quoting of items which they will be unable to		
	supply at later stage at the time of issuing supply order could results in penalty or as decided by		
	the concerned College authority and can also leads to cancelling of purchase order of the same.		
2	The supplier/manufacturer can quote for any or all of the annexure. However, Quotation should be		
	submitted separately for each annexure. In the quotation our notification reference number should		
	be mentioned separately for each of the quotation as mentioned in the corresponding annexure.		
3	The quotation must contain a valid supplier reference number and date. The validity of the		
	quotation should be at least 45 days. The supplier quotation number should be separate		
	corresponding to each annexure they quote.		
4	The quotation should contain detail specification of the items as and whenever expected with brand		
	name, details accessories provided etc. Wherever quotation for a complete set is requested should		
	imply including the accessories needed for the experiment. The price of all/part accessories which		
	are not included in main set/unit should be mentioned separately along with specification.		
5	It should be noted that no advance payments in any form for supplying the materials will be made		
	to the competent supplier quoting the lowest price and to whom the purchase/supply order will be		
	issued. The payment will only be made after satisfactory delivery of items in good condition and		
	after checking, installation &demo etc, (as and wherever required). If however any supplier needs		
	any advance payment it should be exclusively mentioned in their quotation and for this if or when		
	payment is to be made a valid documents and receipts should be provided or handed over at the		
	time of receiving the advance payments to concerned authority.		
6	It should be noted that no payment will be made towards packing, freight, forwarding, handling		
	and transportation to F.O.R destination Govt. Degree College, Dhamanagar. So it only		
	CST/VAT/surcharges (if any) as applied will be applicable only on the actual quoted items. The		
	CST/VAT/Surcharges etc. should be separately mentioned in the quotation. If supplier needs to		
	add the transportation charges (if any) it should be mentioned separately as a percentage of actual		
	value (e.g. say $x\%$). For comparison the price/cost of items as required then will be calculated/		
	considered by adding actual values and other charges like transportation if any [excluding only the		
	taxes (CST/VAT/SURCHARGES etc.).]		
7	It should be noted that the items quoted with specification should matches with the actual items		
	they supply. If at the time of checking, delivery it is found that the items quality and specification		
	differs from what asked for, it will be rejected then and thereby and the payment will not be made.		
8	Supplier should provide their TIN/VAT/CST etc. registration no. in the quotation.		
Tho	supplier/manufacturer or alike whoever he submitting quotations should		

The supplier/manufacturer or alike whoever be submitting quotations should comply with the above terms and conditions and thus submitting a quotation would imply their agreement on the same.

Annexure-A

Dated:17/11/2012

NO.F.5(25)-UGC/GDC/DMR/2007-12/4042 (A)

S1. No.	Description of the equipments
1	Research grade biprism optical bench assembly (make-INCO) with heavy cast iron, ~170-180 cm long, attached stainless steel micrometer scale, with 4 riders having attached vernier with horizontal and vertical cross motion, 1 slit, 1 Bi-prism holder & 1 micrometer eye-piece provided with lateral horizontal and vertical cross motion by micrometer screws, with accessories as (a) Na lamp assembly with lamp (55watt/35 Watt), lamp transformers and lamp house four side slit and (b) Hg vapor lamp (125 watt) with choke coil and lamp house assembly as white light assembly (c) spirit level and reading lens, (d) One each (i) Fresnel Biprism , (ii) double convex lens (50mm dia/100 mm FL), (iii) double concave lens (70mm dia/150 mm FL) , complete set in all respect with detailed manual.
2	Na light assembly complete with Na vapor lamps (a) 55watt (b) 35Watt complete with vaccum jacket, wooden box lamp house having three side slits and one side door opening options with holder and plug fittings and with lamp transformers (a) 55watt (b) 35Watt complete assembly.
3	Rubber tubing dia ~ 6 mm heat and shock resistant for using with Callender Berns apparatus, Lee Chorlton apparatus. Poiseuille apparatus etc. 1 coil/1 Kg
4	Calendar and Barnes Apparatus complete having spiral heating element inside a ~ 17" long glass tube surrounded by another glass tube double glass jacket with water in/out option – thermometer chambers of brass with asbestos insulation – fitted on finish wooden base – complete with constant level brass tank (source, sink and supply) with adjustable height stand, with complete rubber tubing and complete sealing option for no water leakage, with pinch cock arrangement, two thermometer (-5 to 110 degree 1/10th degree, graduation 0.1 degree), rheostat 100 ohm/3A , 30V/3A CC/CV DC power supply with digital voltmeter and ammeter, one dc digital ammeter 0- 5.000 Ampere dc, digital dc voltmeter 0-30.00 volt dc, resistance of 0.1ohm, 10 wire Potentiometer bridge (teak wood), resistance box 10000 ohm, digital dc galvanometer resolution <1 μA, standard dc power supply, one way & two way plug keys, connecting wires, P.O. box, heat and shock resistant rubber tubing 1 coil for fitting, and all other accessories as required for complete experiment with detailed manual and set of typical data
5	Bad conductor by Lee's and Charlton apparatus complete set consisting Heavy brass disc, suspended from a heavy metal upright with heavy base stand- circular disc of experimental material and a brass steam chamber with steam in and out nozzle of same diameter as brass disc - complete with three discs of different badly conducting materials (like Bakelite, ebonite etc. (thickness~2-3mm) thermal conductivity value should be supplied in manual), two thermometers (-5 to 110 degree 1/10th degree graduation 0.1 degree), digital stop watch(1/10th second), one boiler, heat and shock resistant rubber tubing 1 coil for fitting, one gas Bunsen burner with brass pipe and air regulator with stop cock and tripod stand for heating the boiler complete set with detailed manual and set of typical data.
6	Determination of Young's modulus of the material of a beam by the bending of beam method (flexure) consisting two heavy metal stands with leveling arrangements and steel knife- edges –the stirrup with steel knife-edge, pointer and pan (or hanger), vernier fitted spherometer set attached with stand, – complete with ~110 cms. one Steel bar, one brass bar, with set of weights 10 nos each 0.5 kg) complete assembly set.
7	Spectrometer. Research Model. 9" circle. 20/10 Sec Vernier with circular slit, micrometer scale fitted to eye piece, with Glass X-line graticule instead of cross wire and one extra eye piece, with cover and two reading lens attached over two vernier. Should be Complete with prism clamping device & diffraction grating stand and with vertical adjusting screws to both the collimator & Telescope with clamping,

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	spirit level and other necessary arrangement.	
8	Platinum Resistance thermometer pure platinum with jacketing glass tube – ~11" length and 15 mm dia. – nickel plated brass cap With ebonite top having four terminals- Complete in case and including Platinum Resistance Thermometer Flusk long neck borosil for expt.	
9	Lamp and scale arrangement complete with lamp house with lamp holder containing converging lens fitted with crosswire, one lamp, one transparent scale, scale holder, stand with heavy base and plug wire complete to use with ac main 220-230 Volt	
Photo diode cell characteristic response and Planck's constant determination apparary with digital photo detector, with digital ammeter & voltmeter, with variable frequency of atleast seven values using filters selector and also with intensity control of incident light supply in built and mounted on sliding bench with attached scale for varying distance source and the diode cell complete assembly with additional photodiode cell and accessor for the expt. with detailed manual and set of typical data for performing following expt.		
	Exp-1: To determine Planck's Constant by Photodiode cell. Exp-2 To verify the inverse square law	
11	Analog dual dc ammeter 0-50 microA/0-10 mA dc with stand and toggle switch 1μ A/0.1mA division	
12	Digital dual dc ammeter 0-500 microA/0-50 mA with stand & toggle switch 0.1μA/0.01mA resolution	
13	Digital galvanometer dc minimum resolution <1 μA	
14	Determination of the resistance of a suspended coil galvanometer by the method of half-deflection. and To calculate the figure of merit of the galvanometer complete set up with suspended coil dead-beat galvanometer, lamp and scale arrangement, meter scale, resistance boxes, plug keys, battery power supply eliminator, connecting wires, plug commutator, low resistance box, tapping keys complete assembly with detailed manual and set of typical data.	
15	Triode valve (6J5) for triode characteristic study	
16	To measure a current by potentiometer using a known low resistance (Resistance of the potentiometer to be measured by a P.O. Box.) complete set with potentiometer 10 wire heavy (teak wood) with jockey, digital galvanometer, keys, plug commutator, resistance boxes, PO boxes, low resistances, digital dc voltmeter, digital dc ammeter, rheostat 100 ohm/2A, power supply dc 2-12V/2A variable, connecting wires complete assembly set with detailed manual and set of typical data.	
17	High voltage transformer for all type of discharge tube = 4 - 5 K.V. Continuously variable. Should be gradually scale printed on top around the variac. The intensity/ brightness should increase continuously with variac.	
18	Spectrometer prism Double Extra dense flint glass (r.i. 1.71) size 38x38mm	
19	Spectrometer prism Extra dense flint glass (r.i. 1.65) size 38x38mm	
20	Plane transmission grating 15,000 line per inch imported quality with mountable stand window size ~ 50x35 mm	
21	TO STUDY RS, D, T, JK & JK MASTER SLAVE FLIP FLOP provided with lot of discrete components on board printed circuit and with inbuilt bread board complete set all with several digital meters	
22	STUDY OF OPTO-ELECTRONIC DEVICES . To study characteristic of LED, LDR, Solar cell, Photo Diode etc. apparatus on board complete all with several digital meters with bread board attached on	

	board detailed manual and set of typical data.			
23	VERIFICATION OF NETWORK THEORMS Thevnin, Norton, Superposition & M. Power Transfer all provided with lot of discrete components on board printed circuit and with inbuilt bread board all with several digital meters bread board attached on board complete set with detailed manual.			
24	P.N. JUNCTION & ZENER DIODE COMBINED CHARACTERISTICS APPARATUS complete w four digital meters (one microampere dc, one mA dc, two dc voltmeter) with connecting leads w bread board attached on board detailed manual and set of typical data.			
25	DETERMINATION OF ENERGY/BAND-GAP IN SEMI-CONDUCTOR DIODE APPARATUS a with digital meters with bread board attached on board detailed manual and set of typical data.			
26	Standard resistance manganin coil MFR (a) 1 ohm (b) 0.01 ohm (c) 0.02 ohm two terminal housed in a metal container with moisture free oil with lead and terminal			
27	Meghohm box four dial resistance box (x1K x10K x100K x1M ohm total 10.11Mega ohm) MFR manganin coil			
28	Five dial resistance box (x1 x10 x100 x1000 x10000 ohm) MFR manganin coil dial type			
29	LOGIC GATE TRAINER For studying gates, De-Morgan's theorem & Boolean expressions, half adder circuit & combinational logic circuits with several digital meters with bread board attached on board with detailed manual and set of typical data.			
30	Copper wire single stranded with double cotton covered for connection 1 kg (wire dia ~0.80 mm)			
31	Digital multifunctional altimeter consisting of barometer , temperature , humidity , altimeter and related features with option to display required no of parameters (larger size display clock size ~ with clamping option)			
32	Sodium vapor lamp ((a)55watt and (b)35 Watt) imported quality to be fitted to normal bulb holder			
33	Brass wire for suspension wire . Wire dia ~ 0.50mm quantity. 100gm			
34	Steel wire for suspension wire Wire dia ~ 0.50mm quantity. 100gm			
35	Mercury for lab experiment 500gm			
36	Digital AC null detector with stand and wire plug complete for using with Anderson bridge			
37	Tripod stand height ~18-22 cm and upper circle dia ~8 cm for placing boiler			
38	Ethanol (pure) for laboratory purpose 300 ml bottle x 10 nos. (1 box)			
39	Borosil glass measuring cylinder 20 cc capacity graduation (a) 0.1 (b)0.2 cc accurately calibrated			
40	Electric Bunsen burner (make – Toshniwal)			

Annexure-B

Dated:17/11/2012

NO.F.5(25)-UGC/GDC/DMR/2007-12/4042 (B)

Sl.	Name of equipments	Detail Specification of the equipments
No.		
1	Gross Dissection imaging system	5.0 MP computer controlled camera, 16X computer controlled zoom lens, high frequency colour balanced, cool florescence lighting, high intensity coaxial spot light for cavity illumination, ergonomic arms position monitor, keyboard and mouse comfortably, footswitch control of image preview and acquisition, live preview of image and full control of zoom focous and exposure. Field of view- minimum- 1.75" X 1.3",maximum-28"X21" Computer details- Display- 17"sealed LCD 1280 x 1024, OS- Windows XP professional or Windows 7, Processor Intel Core 2 Duo 2.2 GHz, Memory-2GB DDR SDRAM-standard,2DDR SO-DIMM sockets upto 4 GB, Video-integrated graphic card, Storage- 150 GB SATA hard drive,,External I/O ports- Seven USB 2.0 inputs on external hub Four USB 2.0 ports on computer, two serial/com port.
2	Illumination Magnifying glass	Magnifying lens with mild lighting system (22 watt) surrounding the dioptre magnifying lens, double power 2x-20x wide lens, the whole system should be in a stand.
3	Tissue embedding center	Dimension 550X500X360 (WxDxH), working voltage 220V, 800 Watt, magnifier, foot switch, heated forcep, stainless steel paraffin dispenser, (2-5 lit.), digital thermostat(+70°C), halogen lighting system, wide aluminium hot plate with holes for forceps, cooling spot for specimens.
4	Occular and stage micrometer	Occular micrometer –standard size for research microscopes, Stage Micrometer –Transmitted and reflected light type (total
	_	
5	(ENAMAR®) Rotary Flask Shaker	length of micrometer scale: 1 mm, 0.01mm per division) Speed-30-200 rpm, Control-feedback control system, platform size-380mm X 380mm, Digital display, Overall dimension
5	(ENAMAR®) Rotary Flask Shaker Mini/Micro Centrifuge	length of micrometer scale: 1 mm, 0.01mm per division) Speed-30-200 rpm, Control-feedback control system, platform size-380mm X 380mm, Digital display, Overall dimension WxDxH-38x355x190, Clamps to hold conical flask of 250 ml Capacity(ml)-6x15, RPM- 3500-6000, Size- 310x310x295,
6	(ENAMAR®) Rotary Flask Shaker Mini/Micro Centrifuge machine	length of micrometer scale: 1 mm, 0.01mm per division) Speed-30-200 rpm, Control-feedback control system, platform size-380mm X 380mm, Digital display, Overall dimension WxDxH-38x355x190, Clamps to hold conical flask of 250 ml Capacity(ml)-6x15, RPM- 3500-6000, Size- 310x310x295, digital display system
7	(ENAMAR®) Rotary Flask Shaker Mini/Micro Centrifuge machine Electronic Moisture analyser (MERCK-IR35DE)	length of micrometer scale: 1 mm, 0.01mm per division) Speed-30-200 rpm, Control-feedback control system, platform size-380mm X 380mm, Digital display, Overall dimension WxDxH-38x355x190, Clamps to hold conical flask of 250 ml Capacity(ml)-6x15, RPM- 3500-6000, Size- 310x310x295, digital display system Balance accuracy-1mg, reproducibility- from1g initial weight(%)-+/-20, from 5g initial weight(%) +/-0.05, max weight of sample-35 g, sample dish 90mm, temperature setting-40-160°C, heat source- IR heating elements, analysis modefully automatic, Display mode-moisture dry weight, ratio, weight loss, residual weight g/lit.
8	(ENAMAR®) Rotary Flask Shaker Mini/Micro Centrifuge machine Electronic Moisture analyser (MERCK- IR35DE) Environmental chamber	length of micrometer scale: 1 mm, 0.01mm per division) Speed-30-200 rpm, Control-feedback control system, platform size-380mm X 380mm, Digital display, Overall dimension WxDxH-38x355x190, Clamps to hold conical flask of 250 ml Capacity(ml)-6x15, RPM- 3500-6000, Size- 310x310x295, digital display system Balance accuracy-1mg, reproducibility- from1g initial weight(%)-+/-20, from 5g initial weight(%) +/-0.05, max weight of sample-35 g, sample dish 90mm, temperature setting-40-160°C, heat source- IR heating elements, analysis modefully automatic, Display mode-moisture dry weight, ratio, weight loss, residual weight g/lit. Type- forced convection type, temp range- 10°C-60°C(+_1°C), Humidity creation –by steam, Humidity range-40%-95%, MOC outer- Powder coated CRC steel sheath, MOC inner –chamber and tray should be steel made, Microprocessor based humidity and temperature control system, Inbuilt voltmeter, size- 700x 640x900 mm, no. of trays-4, 15 cuft vol.
7	(ENAMAR®) Rotary Flask Shaker Mini/Micro Centrifuge machine Electronic Moisture analyser (MERCK-IR35DE)	length of micrometer scale: 1 mm, 0.01mm per division) Speed-30-200 rpm, Control-feedback control system, platform size-380mm X 380mm, Digital display, Overall dimension WxDxH-38x355x190, Clamps to hold conical flask of 250 ml Capacity(ml)-6x15, RPM- 3500-6000, Size- 310x310x295, digital display system Balance accuracy-1mg, reproducibility- from1g initial weight(%)-+/-20, from 5g initial weight(%) +/-0.05, max weight of sample-35 g, sample dish 90mm, temperature setting-40-160°C, heat source- IR heating elements, analysis modefully automatic, Display mode-moisture dry weight, ratio, weight loss, residual weight g/lit. Type- forced convection type, temp range- 10°C-60°C(+_1°C), Humidity creation –by steam, Humidity range-40%-95%, MOC outer- Powder coated CRC steel sheath, MOC inner –chamber and tray should be steel made, Microprocessor based humidity and temperature control system, Inbuilt voltmeter, size- 700x

Annexure-C

Dated:17/11/2012

NO.F.5(25)-UGC/GDC/DMR/2007-12/4042 (C)

S.No.	Name of Equipment	Specifications	Company
1	Burete, rotaflow Needle valve	25 ml	Riviera
	stopcock		
2	Measuring cylinder with hexagonal	500 ml	Riviera
	base and short line graduation		
3	Volumetric flask with I/c glass	100 ml	Riviera
	stopper blue colored marking		
4	Funnel plain 50 angle long stem	50mm diameter	Riviera
5	Micropipette-variable volume	0.5 to 10 μl	Riviera
6	Graduated pipette	25 ml	Riviera
7.a	Transfer pipette, Volumetric	1 ml	Riviera
b	Transfer pipette, Volumetric	2 ml	Riviera
c	Transfer pipette, Volumetric	5 ml	Riviera
d	Transfer pipette, Volumetric	10 ml	Riviera
e	Transfer pipette, Volumetric	25 ml	Riviera
f	Test tube without rim	15x 125 ml	Riviera
8	Spirit pocket test thermometer with	-10°-110°	Riviera
	blue case and pen clip		
9	Distillation unit-vertical panel	31/hr	Riviera
	mounted		
10	Kern CM Pocket balance	CM 320IN	Riviera
11	Graduated centrifuge tube	Plastic made R-	Remi
		83B 15 ml	
		polypropylene tubes	
12	Hemoglobinometer		-
13	Olympus Microscope	Model- GB; with	Olympus
		objectives	
14	Sphygmomanometer with stethoscope		-
1.5	***		
15	Hemocytometer		-
16	Pneumograph	2 1	-
17	Pipette, graduated	2 ml	Riviera
18	Pipette, graduated	5 ml	Riviera
19	Pipette, graduated	10 ml	Riviera
20	Electric water kettle	1 ltr.	
21	pH meter digital		systronics

Annexure-D

Dated:17/11/2012

NO.F.5(25)-UGC/GDC/DMR/2007-12/4042 (D)

Sl. No.	Name of equipments and Details Students Laboratory Compound Microscope (MONOCULAR)		
1			
	a. Olympus b. Other Company		
	c. Instavision Model: BS/MS		
2	Olympus Research Microscope CX 21i (Binocular Version)		
3	Olympus Research Microscope CX 21i (Trinocular Version) With Olympus Trinocular Head (Japan).		
4	Magnus Trinocular Research Microscope CX 21i (Binocular Version) Model: MLXi-Tr		
5	Model: MLXi-Tr Magnus Digital Microphotography System (For photography from binocular/ trinocular research microscope) About 12 megapixel camera and all other accessories like adapter to fit both binocular and tronocular, USB interfacing options with cables, software.		

Annexure-E

Dated:17/11/2012

NO.F.5(25)-UGC/GDC/DMR/2007-12/4042 (E)

S.No.	Name of Equipment	Specifications	Company
1.	Mechanical Shaker	Capacity 250 mL x	Senco
		6 pc conical flask,	
2	D: '- 1 D1	Rotary type	A 11 '
2.	Digital Blance	3 digit, capacity-	Addair- Dutt
		200g	Duu
3.	Conductivity meter	Systronics (304)	Systronics
4.	Electric Bunsen Burner		Toshniwal
5.	Digital melting point Bath	Up to 300°C	Senco
6. a	Heating Mantle	Capacity 500 mL	Senco
b	Heating Mantle	Capacity 250 mL	Senco
С	Heating Mantle	Capacity 100 mL	Senco
d	Heating Mantle	Capacity 1L	Senco
7.	Vaccum Pump		Precivac
8.	Magnetic Stirrer	Capacity 2 mL	Remi
9.	Magnetic Stirrer with heating	Capacity 2 mL	Remi
10.	Volumetric Flask	100 mL	Borosil
11.a	Round Bottom flask with B-24 joint	250 mL	Borosil
b	Round Bottom flask with B-24 joint	100 mL	Borosil
С	Round Bottom flask with B-24 joint	500 mL	Borosil
12.	Condenser With B-24 std joint		Borosil
13	Pipette	5 mL	Borosil
14	Specific Gravity Bottle	15 mL	Borosil
15	Viscometer		Borosil
16	Measuring Cylinder	Plastic, 10 mL	
17	Soxhlet apparatus	1L	Borosil
18a	Column with Bulb	450mm x 30 mm	Borosil
b	Column with Bulb	450mm x 18 mm	Borosil
c	Column with Bulb	250mm x 15 mm	Borosil
d	Column with Bulb	200mm x 10 mm	Borosil
19	pH meter digital		systronics
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