

MUC Women's College, Burdwan

Notice No. :328

Date: 17.11.2017

Sealed quotations are invited from interested suppliers for purchase of equipment and other items to be procured for the College out of State grant. PAN & GST number and Trade License to be attached as credentials any or all of which will be taken into account at the time of preparing comparative statement. Rate for items of specific brand & configuration as applicable against the items is to be quoted in order of their appearance in the format.

Rate must include the cost of delivery.

Last date of submission of quotation is **23.11.17 upto 03:00 pm.**

ITEM	Quantity	BRANDS & SPECIFICATIONS	RATE*	TOTAL COST (inclusive GST)
Department of Botany				
Electric Item				
LED tube light(4 ft)	5	Make: Havells /Philips/Eveready/Syska		
Furniture				
File Cabinet	1	Make: Godrej interio Model:4 Drawer VFC (470/620/1320)		
Steel Almirah (Standard ,front transparent glass for book)	2	Make: Any Reputed brand		
Herbarium Cabinete	6	Make: Any Reputed brand 18gauge (1.02 mm) sheet. Drawers Finished in heavy compound colour Polish. Drawer Size 45 x 37 x 8 cm Herbarium Cabinet with 6 drawers. bottom fitted with puller knob and index card holder		
Equipments				
Monocular student Microscope	10	Make: INSTAVISION Model: INSTA MS		

iScope Microscope (Compound digital)	1	Make: EUROMEX, Holland Model :1153EPL with ProPad-5 WiFi		
Single beam UV-VIS digital Spectrophotometre	1	Make: Systronic Model:118		
Distilling Apparatus accessory (Condensor) 1.5Lt/Hr.	1	Make:Borosil Unit Cat.No.3361 Product Code:0361021		
<u>LED Projector (Full HD RESOLUTION WITH UPTO 3,200 LUMENS PROJECTOR)</u>	1	Make: Epson Model: EB –X31		
DeskJet	1	Make: HP Model:Ink Advantage 3776(Wirless)		
Samsung SCX -3401 printer cartridge (laser)	2	Make: Any compatible model		
Chemicals				
Benedict's solution	2 bottles	Merck		
Fehling's A soln.	2 bottles	Merck		
Fehling's B soln.	2 bottles	Merck		
Filter paper (Watman No.1)	5 pack	Merck		
Nitric Acid	1pcs	Merck		
Sulphuric acid	1pcs	Merck		
Benzene	4pcs	Merck		
Chloroform	2pcs	Merck		
Acetic Acid	4pcs	Merck		
DPX	2pcs	Merck		
Butanol	4 pcs	Merck		
Crystal violet	1pcs	Merck		
Crystal violet Solution	2 pcs	Merck		
Staining Solution	10 pcs	Merck		
Stain Leishman	10pcs	Merck		
α -naphthool	2 bottle	Merck		
Barfoed's reagent	2 bottle	Merck		
Conc. HCl	2 bottles	Merck		
AgNO ₃	1 pcs.	Merck		
Sodium acetate	2 psc	Merck		
Ammonium molybdate	2 pcs.	Merck		
Cobalt chloride	1pcs.	Merck		
NH ₄ OH	1 bottle	Merck		
FeSO ₄	1 pcs	Merck		

FeCl ₂	1 pcs.	Merck		
CdCl ₂	1 pcs	Merck		
Potassium ferrocyanide	1 pck	Merck		
Ammonium thiocyanate	1 pck	Merck		
Potassium thiocyanate	1 pck	Merck		
HgCl ₂	1 pck.	Merck		
Millon's reagent	2 pcs	Merck		
Sodium bi-carbonate	1 pck	Merck		
KoH- beads	1pck	Merck		
KNO ₃	1pck	Merck		
Phloroglucinol	1 bottle	Merck		
Tetrazolium salt	1 bottle	Merck		
Safranine solution	1 bottle	Merck		
Brine Solution	1 bottle	Merck		
Xylol	1 bottle	Merck		
Silica Gel G for TLC (Merck)	4 bottles	Merck		
Chloroform	2 bottles	Merck		

Department of Chemistry

Computer	1 nos	Compaq 1TB HD, 5 GB RAM, Core i7, intel		
Almirah for seminar library	1 nos	6.5 ft height		
Refrigerator	1 nos	Samsung(190 lt)		
Quartz Heater	1 nos	Heater of glass single distillation unit of capacity 4 litre/hr.		
Balance	1 nos	High Precision balance Model no-KAB200 capacity-200g-0.001g Pan size-90 mm		
Boiling Point apparatus	2 nos	Glass round bottomed flask fitted with B-24 distillation head and tail and condenser, thermometer in mercury		
Heating mantle	2 nos	For 1 Litre RB flask		
Distillation Head	10 nos	B-24 Borosil		
Distillation tail	10 nos	B-24 Borosil		
Round bottomed flask	5 nos	B-24, 250 mL, Borosil		
Burette	1 doz	Borosil		
Pipette	2 doz	Borosil		
Burette	2 doz	Borosil		

Pipette	2 doz	Borosil		
Graduated Pipette	2 doz	Borosil (10ml,2ml)		
Stalagmometer	2 doz	Borosil		
Viscometer	2 doz	Borosil		
Funnel	2 doz	Borosil		
Beaker	2 doz	Borosil (500ml&100ml)		
Conical Flask	2 doz	Borosil (500&250 ml)		
Volumetric Flask	1 doz each	Borosil (50ml,100ml, 250ml,500ml,1lit)		
Silver Nitrate	(25x4 gm)	LR		
Potassium Iodide	(500x4 gm)	LR		
Toluene	500 lit	LR		
Mercury	50 gm	LR		
Cyclohexanone	500 gm	LR		
Crotonaldehyde	500 gm	LR		
Anisole	500 gm	LR		
Ethyl methyl ketone	500 gm	LR		
Mesityl oxide	500 gm	LR		

Department of Physics

To determine g and velocity for a freely falling body using Digital Timing Technique.	One	Best Quality		
To determine the Young's Modulus of a Wire by Optical Lever Method.	One	Best Quality		
To study the characteristics of a series RC Circuit	One	Best Quality		
Digital Dual CRO	One	APLAB		
Signal Generator (100 Hz to 10 MHz) ,upto 1 volt	One	APLAB		
Digital multimeter	Two	Best Quality		
Ballistic galvanometer	Four	Best Quality		
Dead beat galvanometer	Two	Best Quality		
Grating (imported) with stand (15000 LPI, 7500 LPI)	Ten	Imported		
Spectrometer (v. c. 10 second, 9 inch dia)	Two	INCO		
He source with transformer	Two	Best Quality		
Sodium vapour lamp with transformer	Four	Best Quality		

Newton' ring set up	One	Best Quality		
B-H loop with set up	One	Best Quality		
To compare capacitances using De'Sauty's bridge.	One	Best Quality		
Measurement of field strength B and its variation with distance using search coil.	One	Best Quality		
To verify the Thevenin and Norton theorems.	One	Best Quality		
To verify the Superposition, and Maximum power transfer theorems.	One	Best Quality		
To study the response curve of a parallel LCR circuit and determine its (a) Anti-resonant frequency and (b) Quality factor Q.	One	Best Quality		
Voltage Source (0- 30 volt, 0-5A)	Two	Best Quality		
To determine the thickness of a thin paper by measuring the width of the interference fringes produced by a wedge-shaped Film.	One	Best Quality		
To study the variation of Thermo-Emf of a Thermocouple with Difference of Temperature of its Two Junctions	One	Best Quality		
To calibrate a thermocouple to measure temperature in a specified Range using (i) Null Method, (ii) Direct measurement using Op-Amp difference amplifier and to determine Neutral Temperature	One	Best Quality		
To convert a Boolean expression into logic circuit and design it using logic gate ICs	One	Best Quality		
To minimize a given logic circuit.	One	Best Quality		
Half Adder, Full Adder and 4-bit binary Adder	One	Best Quality		
Half Subtractor, Full Subtractor, Adder-Subtractor using Full Adder I.C	One	Best Quality		
To build JK Master-slave flip-flop using Flip-Flop ICs	One	Best Quality		
To design an astablemultivibrator of given	One	Best Quality		

specifications using 555 Timer				
To design a monostable multivibrator of given specifications using 555 Timer	One	Best Quality		
Write the following programs using 8085 Microprocessor a) Addition and subtraction of numbers using direct addressing mode b) Addition and subtraction of numbers using indirect addressing mode c) Multiplication by repeated addition. d) Division by repeated subtraction	One	Best Quality		
Measurement of Planck's constant using black body radiation and photo-detector	One	Best Quality		
Measurement of Planck's constant using black body radiation and photo-detector	One	Best Quality		
Photo-electric effect: photo current versus intensity and wavelength of light; maximum energy of photo-electrons versus frequency of light	One	Best Quality		
To determine work function of material of filament of directly heated vacuum diode	One	Best Quality		
To determine the Planck's constant using LEDs of at least 4 different colours	One	Best Quality		
To determine the wavelength of H-alpha emission line of Hydrogen atom	One	Best Quality		
To determine the absorption lines in the rotational spectrum of Iodine vapour	One	Best Quality		
To setup the Millikan oil drop apparatus and determine the charge of an electron.	One	Best Quality		
To show the tunneling effect in tunnel diode using I-V characteristics.	One	Best Quality		
Study of V-I & power curves of solar cells, and find maximum power point & efficiency.	One	Best Quality		
To study a Wien bridge oscillator for given frequency using an op-amp.	One	Best Quality		
To design a digital to analog converter (DAC) of given	One	Best Quality		

specifications.				
To study the analog to digital convertor (ADC) IC.	One	Best Quality		
To design a precision Differential amplifier of given I/O specification using Op-amp.	One	Best Quality		
To investigate the use of an op-amp as an Integrator	One	Best Quality		
To investigate the use of an op-amp as a Differentiator	One	Best Quality		
Study of Electron spin resonance- determine magnetic field as a function of the resonance frequency	One	Best Quality		
Study of Zeeman effect: with external magnetic field	One	Best Quality		
To show the tunneling effect in tunnel diode using I-V characteristics	One	Best Quality		
Measurement of susceptibility of paramagnetic solution (Quinck's Tube Method)	One	Best Quality		
To measure the Magnetic susceptibility of Solids (Guoy method)	One	Best Quality		
To determine the Coupling Coefficient of a Piezoelectric crystal	One	Best Quality		
To measure the Dielectric Constant of a dielectric Materials with frequency	One	Best Quality		
To determine the band gap using a thermistor	One	Best Quality		
To determine the refractive index of a dielectric layer using SPR	One	Best Quality		
To study the PE Hysteresis loop of a Ferroelectric Crystal.	One	Best Quality		
To draw the BH curve of Fe using Solenoid & determine energy loss from Hysteresis	One	Best Quality		
To measure the resistivity of a semiconductor (Ge) with temperature by four-probe method (room temperature to 150 °C) and to determine its band gap	One	Best Quality		
To determine the Hall coefficient of a semiconductor sample	One	Best Quality		
To verify the law of Malus for plane polarized light	One	Best Quality		
To analyze elliptically polarized Light by using a Babinet's compensator	One	Best Quality		

To determine the wavelength and velocity of ultrasonic waves in a liquid (Kerosene Oil, Xylene, etc.) by studying the diffraction through ultrasonic grating	One	Best Quality		
To study the reflection, refraction of microwaves	One	Best Quality		
To determine the refractive index of liquid by total internal reflection using Wollaston's air-film	One	Best Quality		
To determine the refractive Index of (1) glass and (2) a liquid by total internal reflection using a Gaussian eyepiece	One	Best Quality		
To study the polarization of light by reflection and determine the polarizing angle for air-glass interface	One	Best Quality		
To verify the Stefan's law of radiation and to determine Stefan's constant	One	Best Quality		
To determine the Boltzmann constant using V-I characteristics of PN junction diode	One	Best Quality		
Slide callipers (Stainless Steel)	Ten	Best Quality		
Screw Guage (Stainless Steel)	Ten	Best Quality		
Resistance Box (0- 10000 ohm)	Ten	Best Quality		
Rheostat (10 ohm, 5A)	Ten	Best Quality		
Hot Plate (1000 watt)	Five	Best Quality		

Department of Zoology

Olympus CH20i microscope	25			
Olympus Binocular with night vision	05			
Objective lens (Olympus , 10X, 40X)	20 each			
Objective, Olympus, 5X, 10X, 15X	10 each			
Steel almirah for keeping microscopes 6'x6'x3', 16 gauge, chamber- 2'x2'x2'	03			
Wooden dissecting table , 4'x2', Sal wood (frame), Teak wood (Top of table)	08			

Department of Maths

Personal Computer	10 PC	(Intel I3; 2 GB; 1 TB)		
External-hard-drive	(1TB)	Transcend		

Department of Nutrition

MAJOR INSTRUMENT

Autoclave (12" X 20")	1	Incon		
Microscope (Binocular)	2	Olympus		
Spectrophotometer	1	Systronics		
Water distillation plant	1	Borosil		
Digital balance (0.5 gm to 5 gm) (Electrical analytical balance)	1	Sartories		
Harpenden Skin fold scaliper	1	Holtoin (UK)		
Micropipette (1-2 ml)	2	Tarson		
MINOR INSTRUMENT				
Body weight machine	4	Crown		
Anthropometric rod	4	-		
Haemocytometer (Neubers' Chamber)	8	-		
Sphygmanometer with stethoscope	2	Micro Diagnostic Systems Pvt. Ltd.//Novaphon 300		
Staining tray (steel made)	8	-		
Inoculation loop (For microbiology)	10	-		
COMPUTER AND PRINTER				
Desktop	4			
Printer	1			
MISCELLANEOUS				
Spatula (plastic made)	20			
Test tube stand	12			
Sucker (Pipette)	12			
Dropper	10			
Glass rod	10			
Glass slide (Blue star)	4 pack			
Tissue paper	10 pack			
Syringe (2ml)	1 box			
Absorbent cotton	4 pack			
Tourniquet	2 gauze			
Test tube holder	30 pieces			
Glass Goods				
Beaker (1L)	10	Borosil		
Beaker (500 ml)	10	Borosil		
Beaker (250 ml)	10	Borosil		
Beaker (100 ml)	10	Borosil		

Conical flask (250 ml)	20	Borosil		
Conical flask (100 ml)	20	Borosil		
Petridish	30 pair	Borosil		
Test tubes	200 pieces	Borosil		
Glass pipette (1 ml)	10	Borosil		
Glass pipette (2 ml)	10	Borosil		
Glass pipette (5 ml)	10	Borosil		
Glass pipette (10 ml)	10	Borosil		
Pasteur pipette	50	Borosil		
Measuring cylinder (100 ml)	10	Borosil		
Measuring cylinder (250 ml)	10	Borosil		
Bottle with cap (500 ml)	10	Borosil		
Bottle with cap (500 ml)	10	Borosil		
Coupling jar	10	Borosil		

List of Chemicals

MICROBIOLOGICAL WORK RELATED CHEMICALS						
Sl No.	Name of the reagent	Amount	Brand/Make	No. of pack required	RATE*	TOTAL COST (inclusive GST)
1	EMB Agar	100 gm/500gm	HIMEDIA	1		
2	Sulfanilic acid (GR)	100 gm/500gm	MERCK	1		
3	Peptone	250 gm/500gm	MERCK	1		
4	Beef extract powder	250 gm/500gm	MERCK	1		
5	Potassium nitrate	250 gm/500gm	VETEC	1		
6	Agar-Agar	250gm/500gm	MERCK	1		
7	Potassium phosphate dibasic	250gm/500gm	VETEC	1		
8	Tryptone water (Tryptone Broth)	250gm/500gm	HIMEDIA	1		
9	Potassium hydroxide pellets	250gm/500gm	EMPLURA	1		
10	Lactose	250gm/500gm	SRL	1		
11	Magnesium sulfate heptahydrate	250 gm/500gm	EMPLURA	1		
12	Potassium Nitrate	250gm/500gm	EMPLURA	1		
13	Potassium dihydrogen phosphate	250 gm/500gm	EMPLURA	1		
14	Di-potassium hydrogen phosphate anhydrous purified	250 gm/500gm	MERCK	1		
15	Zinc powder pure	250m/500gm	MERCK	1		
16	Sodium chloride cryst. pure	500gm/500gm	MERCK	1		
17	Dextrose anhydrous purified	500gm/500gm	MERCK	1		
18	Di-sodium hydrozen phosphate, L.R.	500gm/500gm	HIMEDIA	1		
19	P-Dimethyl Amino Benzaldehyde	100gm/500gm	10BA Chemie	1		

20	1-Naphthol	100gm	MERCK	1		
21	Ethanol	500ml	MERCK	10		
22	Methanol	500ml	MERCK	4		
23	Hydrochloric acid	500ml	MERCK	4		
24	Acetic acid glacial	500ml	MERCK	4		
25	Isoamyl alcohol	500ml	MERCK	4		
26	Phenol Red solution	100 ml	NICE	4		
27	Methyl Red	125ml	MERCK	4		
28	Gram's crystal violet	125ml	MERCK	10		
29	Gram's safranin solution	125ml	MERCK	10		
30	Gram's IODINE solution	125ml	NICE / STANBIO REAGENTS(P)LTD	10		
31.	Immersion oil	20 ml	Merck	5		

BIOCHEMISTRY WORK RELATED CHEMICALS

Sl No.	Name of the reagent	Amount	Brand/Make	No. of pack required	RATE*	TOTAL COST (inclusive GST)
1.	Sulfuric acid	2.5 ml	Merck/Himedia	2		
2.	Hydrochloric acid	2.5 ml	Merck/Himedia	4		
3.	Nitric acid	500 ml	Merck/Himedia	2		
4.	Glycerol	500 ml	Merck/Himedia	4		
5.	Anthrone	100 gm	Merck/Himedia	2		
6.	Folin-phenol reagent	100 ml	Merck/Himedia	4		
7.	Sodium hydroxide	500 ml	Merck/Himedia	2		
8.	Copper sulphate	500 gm	Merck/Himedia	1		
9.	Sodium-Potassium tartarate (Rocheri salt)	500 gm	Merck/Himedia	1		
10	Bovine serum albumin (BSA)	100 gm	Merck/Himedia	1		
11.	Iodine solution	100 ml	Merck/Himedia	2		
12.	Glucose powder (Laboratory grade)	500 gm	Merck/Himedia	1		
13.	Potassium bisulphate	500 gm	Merck/Himedia	1		
14.	alpha naphthol (1 naphthol)	100 gm	Merck/Himedia	2		
15.	Benedict qualitatice reagent	500 ml	Merck/Himedia	6		
16.	Cupric acetate	500 gm	Merck/Himedia	2		
17.	Resorcinol	250 gm	Merck/Himedia	2		
18.	Sodium bicarbonate					

PHYSIOLOGY WORK RELATED CHEMICALS

1.	Leishman stain	100 ml	Merck/Himedia	10		
2.	RBC diluting fluid	100 ml	Merck/Himedia	10		
3.	WBC diluting fluid	100 ml	Merck/Himedia	10		
4.	Blood grouping reagent (Ag and antibody)		Merck/Himedia	6 vial / each antigen and antibody		

5.	Drabkin's solution	500 ml	Merck/Himedia	1		
6.	Rectified spirit	500 ml	Merck / Himedia	1		

Department of Geography

SL. NO.	ITEMS	QUANTITY	TOTAL NUMBER		
1	INSTRUMENTS				
	Survey Equipments: Abneys Level	08	08		
	Survey Equipments: Clinometer	08	08		
	Theodolite with stand and staff(Full set)	02	02		
	Dumpy Level with stand and staff(Full set)	02	02		
	Automatic Level, Heavy Duty Aluminum Tripod and 4 M 4 Fold Leveling Staff	01	01		
	40 Meter Laser Distance Measurer	01	01		
	Prismatic Compass (Full set) Large size	04	04		
	Rotameter	05	05		
2	EQUIPMENTS				
	LCD Projector with allied items with fittings	02	02		
	Laptop	01	01		
	Borosil Graduated Test-tube with cork 10 ml.	60	60		
	Borosil Graduated Dropper (0.5ml, 1ml, 2 ml)	20	20		
3	CHEMICALS				
	For Kit Box, Soil testing reagent Container no. 01	06	06		
	Soil testing reagent Container no. 02	02	02		
	Soil testing reagent Container no. 06	04	04		
	Soil testing reagent Container no. 07	04	04		
	Soil testing reagent Container no. 11	04	04		
	Soil testing reagent Container no. 12	04	04		
	Soil testing reagent Container no. 13	04	04		
	Soil testing reagent Container no. 15	10	10		
	Soil testing reagent Container no. 16	10	10		
	Barium Sulfate Purified 500g.	01	01		
4	WOODEN FURNITURE				
	Wooden Cabinet (Wall Fittings)	02	02		
5	STEEL FURNITURE (Almirah)	02	02		
6	COMPUTER WITH ALLIED ITEMS WITH FITTINGS	15	15		

Department of Microbiology

MUC Women's College

List of Chemicals, Media, Glassware and Instruments to be purchased on 2017

Sl	Chemicals	Brand	Quantity	Remarks/specifications	RATE*	TOTAL COST (inclusive GST)
1	Ascorbic acid	Merck	Min pack			
2	MnSO ₄	Merck	500 gm			
3	KOH	Merck	500 gm			
4	Na ₂ S ₂ O ₃	Merck	500 gm			
5	Allythiourea	Merck				
6	Sulphuric acid	Merck	2.5 lit			
7	Agarose	Merck	200 gm	Low melting point		
8	DNA gyrase	Merck	Min Pack			
9	ATP	Merck	Min Pack			
10	NTG	Merck	Min Pack			
11	HNO ₂	Merck	Min Pack			
12	CaCl ₂	Merck	500gm			
13	Mol Weight Marker DNA	Merck	Min Pack	1 -10 kbp		
14	Caedarwood Oil	Merck	100 ml			

sl	Glassware	brand	quantity	Remarks/spe cifications	RATE*	TOTAL COST (inclusive GST)
1	100 ml conical flask	Borosil	30			
2	250 ml conical flask	Borosil	30			
3	Spreader L Shaped	tarson	20			
4	Reagent Bottle Screw cap	Borosil	20	100 ml		
5	Flat bottom screw cap tube	borosil	40	10 ml		
6	Glass rod					
7	Beaker	Borosil	10	250 ml		

sl	Instruments and others	brand	quantity	Remarks/spe cifications	RATE*	TOTAL COST (inclusive GST)
1	Computer	Dell	5	Inspiron 3268 Small Desktop		
2	refrigerator	LG	1	Double door		
3	Hair Dryer	Philips	2	With temp control		

sl	Kit	brand	quantity	Remarks/spe cifications	RATE*	TOTAL COST (inclusive GST)
1	DOT ELISA					

2	Bacteriological Membrane filter • SF93A • SF93B	Himedia	6 pack each	13 mm diameter		
3	Non Absorbant Cotton		20 rolls			

sl	Permanent slide	brand	quantity	Remarks/specifications		
1	Plant cell TS		2			
2	Animal cell TS		2			
3	Acid fast Bacteria		2			
4	Stages of Mitosis		2			
5	Stages of Meiosis		2			

sl	Live Bacterial Strain	Brand	quantity	Remarks/specifications	RATE*	TOTAL COST (inclusive GST)
1	Tryptophan auxotroph <u>E. coli</u>		2 Lyophilized culture	MTCC		
2	Threonine Auxotroph <u>E. coli</u>		2 Lyophilized culture	MTCC		
3	Methionine Auxotroph <u>E. coli</u>		2 Lyophilized culture	MTCC		
4	Mycobacterium smegmatis		2 Lyophilized culture	MTCC		

Sd/-
Principal
M U C Women's College,
Burdwan