

STANDARD BIDDING DOCUMENTS

SUPPLY OF LAB EQUIPMENTS & CHEMICAL



Samtse College of Education

Samtse, Bhutan

2019





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བསམ་རྒྱུ་ཤེས་རིག་མཁོ་རིམ་སློབ་གླིང་།

Royal University of Bhutan
Samtse College of Education



"You cannot give what you do not have." **Druk Gyalpo**

Ref: Ref: 37/SCE-Quot/2019-2020/ 004

Date: 31.05.2019

The General Manager
Advertisement Division
Kuensel Corporation
Thimphu

Sir

I would appreciate if you could kindly publish the following notice inviting tender in your newspaper of 5th June, 2019 and the bill may be sent to us for payment:

**SAMTSE COLLEGE OF EDUCATION
NOTICE INVITING TENDER**

Samtse College of Education under Royal University of Bhutan is pleased to invite sealed tender from eligible license holders for the supply and services of following items for fiscal year 2019-2020.

Sl.No	Particulars
1	Supply of Stationary items
2	Supply of Hardware, Electrical & Plumbing items
3	Supply of Games & Sport items
4	Supply of IT equipments & Accessories
5	Science Laboratory equipments and chemical
6	Running College Canteen
7	Supply of Vegetables and Grocery items
8	Supply of Library Books
9	Peling Bookshop

The bidding documents can be downloaded from College website (www.sce.edu.bt). The last date for submission of tender is 5th July, 2019 at 12 pm and it will be opened on the same day at 2:30PM

PRESIDENT

Yours sincerely

(Rinchen Dorji, PhD)

PRESIDENT

Copy to:

1. Office copy
2. Finance Officer



: 05 365391(Director General) 365274 (Adm) 365273 (Office) 365363 (Fax) P.O Box No. 329
Visit us at www.sce.edu.bt

Date: 05.06.2019

Invitation for Quotation (IFQ)

Invitation for Quotation (IFQ)

Contract Ref: 37/SCE/QUOT/2019-2020/004

Dear Sir/Madam,

1. You are invited to submit your priced bid for the supply of the following items;

Information on technical specifications and required quantities are attached

2. The bidder(s) may quote for any or all items under this invitation. Each item shall be evaluated and contract awarded separately to the firm(s) offering the lowest evaluated price for each item
3. The bidder(s) shall submit one original of the priced quotation with the Form of Bid and clearly marked ORIGINAL. In addition, the bidder(s) should also submit one copy marked as COPY. The quotation including all documents in the attached format should be sealed in an envelope as required by PRR 2009 clause 5.1.7.2 and addressed to and delivered at the following address [insert address of receipt of bids].

Your quotation in the required format should be addressed and submitted to:

PRESIDENT
Royal University of Bhutan
College of Education
Samtse, Bhutan.

4. The deadline for receipt of your quotation(s) by the purchaser at the indicated address is 12.00PM Bhutan time on 5th July, 2019 and will be opened on the same day at 2.30PM.
5. The bid shall be accompanied by a bid security of Nu. 6,000/- (Six thousand only) in the form of cash warrant, demand draft or unconditional Bank Guarantee valid till six months. Any bid not accompanied by bid security shall be treated as non-responsive.



6. Quotations by fax or by electronic means are **not** acceptable. The quotation should be submitted as per the following instructions and in accordance with the attached Contract. The attached Terms and Conditions of Supply is an integral part of the Contract.
- a) **PRICE:** all prices shall be quoted in Ngultrum. The quoted price shall be inclusive of all related costs including taxes, duties and other levies to the final place of delivery. The final place of delivery is **Samtse College of Education, Samtse, Bhutan.**
 - b) **EVALUATION OF QUOTATION:** offers determined to be substantially responsive to the technical specifications will be evaluated by comparison of their quoted prices. In evaluating the quotations, the purchaser will determine for each quotation the evaluated price by adjusting the priced quotation by making any correction for any arithmetical errors as follows:
 - (i) Where there is a discrepancy between amounts in figures and in words, the amount in words will govern;
 - (ii) Where there is discrepancy between the unit rate and the line item total resulting from multiplying the unit rate by the quantity, the unit rate as quoted shall govern unless in the opinion of the Employer there is an obviously gross misplacement of the decimal point in the unit rate, in which case the line item total as quoted shall govern, and the unit rate shall be corrected.
 - (iii) If the supplier refuses to accept the correction, this quotation will be rejected and the bid security shall be forfeited.
 - c) **AWARD OF PURCHASE ORDER:** the award will be made to the bidder who is offering the lowest evaluated price that meets the specifications. The successful bidder will sign a contract as per attached form of contract and terms and conditions of supply.
 - d) **VALIDITY OF THE OFFERS:** your quotation(s) shall be valid for a period of 90 days from the deadline for receipt of quotation(s).



7. Further information can be obtained from:

Procurement Officer

The Samtse College of Education, Samtse, Bhutan

Phone No. 05-365363/17756422

8. The Samtse College of Education has a budget allocation for the purchase of Goods and wishes to apply some of that allocation for the purchase of Goods for which this Request for Quotation is issued.
9. Depending on the final requirement, the purchaser may increase or decrease the quantities by fifteen percent (15%) of the purchase order.
10. The quotation(s) will be opened in the presence of bidders or their representatives who choose to attend at the specified venue and time.
11. The Purchaser is not bound to accept the lowest bid and reserves the right to accept or reject any or all the bids without assigning any reason whatsoever.
12. The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the supply order (sample form attached).
13. Normal commercial warranty/guarantee shall be applicable to the supplied goods.



Royal University of Bhutan
Samtse College of Education
chemistry lab- 2019-2020 Fiscal year



Sl.Nos	Name	Specifation	Quantity	Rate	Remarks
CONSUMABLE ITEMS					
1	Methyl red indicator	MARK	ml		
2	Brucine Sulfate	MARK	gm		
3	Ethanol	MARK	ml		
4	Diphenyl indicator	MARK	ml		
5	Petroleum ether	MARK	ml		
6	Potassium bi- phthalate	MARK	gm		
7	Potassium chloroplatinate	MARK	gm		
8	selenium powder	MARK	gm		
9	zironyl chloride ocathhydrate	MARK	gm		
10	ferrous ammonium sulfate	MARK	gm		
11	Ferric sulphate	MARK	gm		
12	Ferrion indicator	MARK	ml		
13	LAS	MARK	gm		
14	macroeticular resign	MARK	ml		
15	Sodium arsenite	MARK	gm		
16	First Aids Box	Packed in a plastic case, All neccasry must be presnt .	Box		
17	BOD bottle		nos		
18	marbal chips	MARK	gm		
19	Ammonium solution	MARK	ml		
20	Manganese sulphate	MARK	gm		
21	Aluminium Chloride	MARK	gm		
21	Zinc Chloride	MARK	gm		
22	Methyl acetate	MARK	gm		
23	Propan-1-ol	MARK	ml		
24	2- methyl propan-1-ol	MARK	ml		
25	Propan- 2- ol	MARK	ml		
26	Butan - 2- ol	MARK	ml		
27	Panten - 3- ol	MARK	ml		
28	2-methyl propan-2-ol	MARK	ml		
29	2-methyl butan-2-ol	MARK	ml		
30	Methanol	MARK	ml		
31	Ferrous sulphate	MARK	gm		
32	Ferric sulphate	MARK	gm		
33	Zinc Sulphate	MARK	gm		
34	Zinc Nitrate	MARK	gm		
35	Acetone	MARK	ml		



36	Molish's reagent	MARK	ml		
37	water monitoring kit	Code: 122320- 0011,PACK: This Water Chemistry Test Kit in carrycase with waterproof foam insert includes: Laqua Twin pH Tester, Laqua Twin Triple Range EC Tester,pH Test Strips Quantofix Nitrate Test Strips,Spirit and Electronic Thermometer , Turbidity Visocolor Low Range Phosphate Test Kit,Visocolor Dissolved Oxygen Test	set		
38	Volumatric flask	10 ml (Borosil)	nos		
		25 ml (Borosil)	nos		
		50 ml (Borosil)	nos		
		100 ml (Borosil)	nos		
39	Chromatography paper	chromatograp hy paper is a fine grade of paper made from cotton cellulose. available in three forms: roll, sheet and strips. Each package includes 100	Per Pkts		



This paper can be used in electrophoresis applications.

EQUIPMENTS

1	separating funnel	capacity- 500ml, materials - polypropylene	nos		
2	UV-visible spectrophotometer	Band Width: 1 nm Brand: LABTRONICS Model: LT-291, Laboratory Use/Industrial Use/Educational Use Wavelength Setting Automatic, Wavelength Repeatability ± 0.1 nm	nos		
3	Digital Nephelometer	Brand: Sunshine scientific, Display/ LED, Power: 220/230 volts, 50 Hz	set		
4	Magnetic stirrer	L; max temp; capable of operating upto 200 C (hot plate	set		
		speed Control cabinet finish; aluminum powder coated. Feature: inclu with hot plate			



5	<u>digital colorimeter S-910</u>	LED, rang(mm) 400- 700nm,Mode no.: s-918, Light source: LED weight(kg) 2: kgm, power(Hz):5: 0Hz, Voltage(v):23 0 VAC	set		
6	<u>Conductivity meter (Didac stainless</u>	Brand: labman, model:LMCM 20, usage industrial, laboratory, automation: grade: power: electric	set		
7	<u>BOD incubator</u>	250 litre capacity 5 degree to 75 degree Celsius temperature range	set		
8	Fume hood	window sash made up of tempered glass that acts as a shield for theoperator against hazardous aerosols. A stainless steel sink installed inside the hood which	nos		
9	<u>Multi meter</u>		nos		



10	<u>PH meter</u>	Our portfolio covers a wide range of measurements including pH, conductivity, ion concentration, ORP and dissolved oxygen.	set		
11	<u>Kjeldahi digestion and distillation a</u>	Distillation Unit operable in Auto or Manual mode. Programmable Logic Controller with built - in HMI. Provision for storing two analysis programs simultaneously and can be recalled depends on the analysis routine. Analysis cycle includes auto addition of receiver solution, water dilution, alkali addition, medium size.	set		
12	<u>COD Digital</u>	Brand: Blaze, heating rate: 20 to 165 degree C in 10 min, Digestion tube height: 150mm	set		



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འབྲུག་རྒྱལ་ཁའི་རྒྱལ་ཁྲུག་ལག་སྒྲིབ་ཤི།
བསམ་ཏེ་ཤེས་རིག་མཛོ་རིམ་སྒྲིབ་ཤི།



Royal University of Bhutan Samtse College of Education

Biology lab- 2019-2020 Fiscal year

Sl.No	Name of Particular	Specification	Quantity	Rate	Amount
1	Digital Blood pressure monitor	CH-432B	Per No.		
2	Sphygmomanometer	300mmHg	Per No.		
3	Water testing kit	To check water quality	Per No.		
4	Soil Testing kit	Test for acidity & nutrients present in soil(NPK)	Per No.		
5	Binocular	Branded one which can able to see the small specimen clearly (Olympus)	Per No.		
6	Test tube brush	Good quality	Per No.		
7	Surber sampler (to collect the specimen/ organism from the water for research)				
8	Gloves (used while handling the chemical)	25x25cm with 0.05μm mesh	Per No.		
9	FFP3 mask (use while handling the chemical)	Branded one			
10	Beaker (branded glass with label)	Good quality that can prevent the risk of chemicals entering into the mouth			
11	Rubber tube (small)	75MM, good quality	Per No.		
12	Disecting box set	Used for joining the glass tube	Per No.		
13	Vaccum cleaner	Good quality	Per set		
		medium sizes with good quality	Per No.		

14	Specimen sorting white tray	Good quality	Per No.		
15	Bunsen burner	made of thick brass pipe, chrome plated, painted	Per No.		
16	Secateurs	Good quality	Per No.		
17	Aquarium(Plastic)	Good quality with 100x50 sizes	Per No.		
18	Sterilised lancet	For blood grouping	Per Pkt		
19	Thermometer (To measure the air and water temperature)	Good quality	Per No.		
20	Spirit lamp	Good quality	Per No.		
21	Watch bottle	Good quality	Per No.		
22	Brush(painting)	Good quality	Per No./set		
23	Blotting paper	Good quality	Per No./set		
24	First AID set	Good quality	Per No./set		
25	Human brain(Model)	Label clearly all parts of brain with english	Per No.		
26	Human ear	Label all its parts with english	Per No.		
27	Human eye	Label all its parts with english	Per No.		
28	Specimen bottle	Attached the sample in the last page.	Per No.		
29	Cobalt chloride paper	Good quality	Per pkt		
30	Glass rod (nutral glass 36")	Good quality	Per No/Set/bundle		
31	Watch glass(75MM)	Borosil	Per No./set		
32	Cotton		Per kg		
33	Dropper	Branded which can hold the chemical	Per No./set		
Chemicals					
1	Ethanol (Ethyl alcohol)	500ml	Per No.		
2	Hydrogen peroxide	500ml	Per No.		



3	Carbonic Acid	500ml	Per No.	
4	Acetic Acid	500ml	Per No.	
5	Sodium Chloride	500gm	Per No.	
6	Sodium carbonate	500gm	Per No.	
7	Sodium bicarbonate		Per No.	
8	Iodine solution	250ml	Per No.	
9	Agar Agar (used for the bacteria extraction)	500mg	Per No.	
10	Ammonia solution	500ml	Per No.	
11	Auxin	500gm	Per No.	
12	Indole acetic acid	500gm	Per No.	
13	Sucrose	500gm	Per No.	
14	Molisch reagent	250ml	Per No.	
15	Seliwanoff's reagent	250ml	Per No.	
16	Barfoed reagent	250ml	Per No.	
17	Bial's reagent	250ml	Per No.	
18	Foxin solution	500ml	Per No.	
19	Maltose	500gm	Per No.	
20	Ribose	500gm	Per No.	
21	Glycerine	500ml	Per No.	
22	Spirit		Per litres	
23	Monoclonal Antibodies (Anti-A, B and D)	Sets	Per sets	



Physics Lab equipments-2019-2020

Sl	Items	Description and details(minimum specification of goods to be supplied)	Qty	Rate	Remarks
1	95-Piece professional technician tool kit	1.7 piece folding hex keyset-1.5mm, 2.0mm, 2.5mm, 3mm, 4mm, 5mm, 6mm.DIP IC extractor,Fine tip stainless steel tweezer #00,5-piece needle file set,10-piece electronic wrench set - 4mm, 4.5mm, 5mm, 5.5mm, 6mm, 7mm, 8mm, 9mm, 10mm, 11mm,Alignment screwdriver,250 gram claw hammer,Inspection mirror with telescoping,30 ft PVC electrical insulation tape (Color: Black),Tape measure,Plastic liptop box,4.5" Diagonal plier,4.75" Long nose plier,5.75" Bent nose plier,5" Flat nose plier,6" Side cutting plier,6" Long nose plier,6" Slip joint plier,8" Combination plier,9" Wire stripper/crimper for 0.75mm-6mm wire,6-Piece assorted precision screwdriver set,Lead-free solder core,7" Brush knife,7" Hook scraper,7" Fork-spike,Plastic desolder pump,30-Watt soldering iron,6" Wire stripper plier for 22-10AWG wire,29-Piece 1/4" driver socket wrench set,Light blue elastic wrist strap (6 feet long),Aluminum flashlight (Color: Red),Super cushion-grip screwdriver set: #3x150mm, #2x100mm, #1x100mm, 8x150mm, 6x100mm, 5x100mm,6" Adjustable chrome-plated wrench with insulation handle Mini drill with various drill bits,Aluminum jaw mini hobby vise (width opening: 2.4"),Heavy-duty tool case with protective corners (Color: Navy blue, Size: 18.4"L x 13.4"W x 6.4"H),Multimeter	set		
2	seismometer	a sensitive instrument that can detect waves emitted by even the smallest earthquakes.	Per No.		





3	sound level meter PCE-353-ICA	Measuring range 30 ... 130 dB Resolution 0.1 dB Accuracy ± 1.0 dB Memory 30 groups with measuring conditions Frequency 20 Hz ... 12.5 kHz / A, C, F (Flat) Measurement parameters Lp, Lmax, Leq, LN Function(s) Maximum hold Power supply 4 x 1.5 V AAA batteries PC interface RS-232 Dimensions Approx. 236 x 63 x 26 mm / 9.29 x 2.48 x 1.02" Weight Approx. 170 g / 0.38 lb	Per No.		
4	Bar Magnet	chrome steel in pairs with keepers 6cm long, good quality	pairs		
5	zener diode characteristics apparatus	good quality with power supply inside it.	Per No.		
6	characteristic transistor	good quality with power supply inside it.	Per No.		
7	Gold leaf electroscope	used for detecting the electric charge	Per No.		
8	solar cell characteristic SAO27	photoelectric semiconductor device that converts solar energy into electric energy.	Per No.		
9	Spherometer	Least count 0.1mm head scale, good quality metal	Per No.		
10	Resistance box	Plug type with brass blogs in const. coils or mang. Coils. Range: 0-10,000 ohms	Per No.		

11	Pendulum bob	made of brass.	Per No.	
12	Transformer	The device used to step up or step down the voltage. Range: 230V.AC(6-0-6)V Range :230V.AC(0-12)V	Per No.	
13	Universal clamp	UC-103/16003, dia casting with boss head.	Per No.	
14	solar cell with motor	it consists of a simple pulley, dia: 16mm and capable of raising a mass of at least 4g. PE-237/17535	Per No.	
15	Ceramic Magnet	2" Square x 1" Thick 15 lb.	Per No.	
16	Large Ceramic Donut Magnet .	Size 2 3/4" OD, 1 1/4" ID, 1/2" thick	Per No.	
17	Solar Power 3 in 1 DIY kit	School Project For Kids	Per No.	
18	Air quality particle counting meter PCE-RCM 10	Laser particle meter for measurement in cleanrooms or conventional rooms / Storage capacity for 8,000 data sets / data sets stored as *.csv files / max. concentration: 4,000,000 particles per ft ³ / laser particle meter with internal pump. The data will be stored as *.csv files and can be read and revised via Excel. - With filter test - Max. concentration: 4,000,000 particles/ ft ³ - USB connection for data download - Data storage for 8,000 data sets - Included software - For measurement in cleanrooms - Large color display - Units: particle/ m ³ or particles/ ft ³	Set	



19	Gear Motor High Torque Electric Micro Speed Reduction Geared	No-load Speed: 5RPM at 12V Torque: 147Ncm Power: 3W No-load Current: 0.1A Load Current: 0.25A Reduction Ratio: 1: 516 Mounting Screw Size: M3.	Per No.	
20	NEODYMIUM ROUND DISC MAGNETS.	SUPER STRONG RARE EARTH IN DIFFERENT CAPACITIES (70x60mm/2,75x2,36" (705lbs), Type 52)	Per No.	
21	Timing car SJ155	Display, On/Off, Start/Stop, Review, Memory Clear, Data Transfer, Back Light	Per No.	
22	Superb Soldering Iron Kit	Soldering Iron 60 W Adjustable Temperature, Soldering Iron Stand, Soldering Iron Tip Set, Soldering Iron multimeter Kit for Electronics (1 x Multimeter Set, Multicolor)	Per No.	
23	surface tension apparatus	used to find the surface tension of the liquid	Per No.	
24	eye piece for vernier microscope	10X with cross wire set.	Per No.	
consumable items.				
1	first aid box	contains all necessary items.contents are: cotton crepe bandage, cotton wool, bandage,surgical tape,dettol,clinical thermometer, scissors, burnol,cipladine ointment, band-aid.	Per No.	
2	sodium vapour lamp set	sodium bulb, wooden box with slits, voltage regulatorfor for sodim vapour lamp	Per No.	
3	sodium vapour lamp bulb.	philips SOX 35W, frequency 220V low pressure sodium.	Per No.	
4	concave mirror	focal length 20 cm	Per No.	

5	convex mirror	focal length 20 cm	Per No.	
6	convex mirror	focal length 15cm	Per No.	
7	convex mirror	focal length 10cm	Per No.	
8	concave lens	focal length 10cm	Per No.	
9	Hare's apparatus.	wooden board, inverted U-tube scale.	Per No.	
10	Analogue Multi meter probe	Samwa, YX-360 TRB	per pair	
11	Digital Multimeter	scientific SM7023 3 3/4 DMM with manual book and all accessories	Per No.	
12	spectro meter prism	2"(crown glass, for spectro meter, 2 faces opaque)	Per No.	
13	Micro ammeter	De-0-250 μ A	Per No.	
14	Milli ammeter	DC 0-15mA.	Per No.	
15	Voltmeters	Dc 0-10V	Per No.	
16	Digital thermometer	Range: -50°C to +500°C on/off switch.	Per No.	
17	Galvanometers	10-0-10 divisions Sensitivity 2mA/division	Per No.	
18	Millivoltmeter	DC 0-10mV 0-25mV	Per No. Per No.	
19	meter scale	100cm hard wood.	Per No.	