# **Tender Note**

RGUKT invites sealed quotations from reputed companies/authorized representatives for supply of Lab consumables, glassware & plastic ware items, accessories and equipment for Labs of Chemical Engineering Department, Basar campus, RGUKT.

#### A) Lab consumables:

S.No	Item description	Lab Name	Required Qty
1	Phenolphthalein Indicator	MTO lab and CRE	1500 ml
	Make:"Sdfine"	Lab	1300 IIII
2	Benzoic Acid Make:"Sdfine"	MTO Lab	10Kgs
3	Toluene	MTO Lab	100Liter
4	Benzene	MTO lab	1 lit
5	Methanol	MTO Lab	100Liter
6	Methanol HPLC	MTO Lab	1 lit
7	Methyl Cyclohexane	MTO Lab	20Liter
8	Hexane	MTO Lab	100 liters
9	Acetic acid glacial (HPLC)		1 lit
10	Methyl orange	MTO Lab	500 ml
11	Activated charcoal		£ 1, a
	Powder(decolorizing powder)		5 kg
12	Methylene blue AR	MTO Lab	100gm
13	Hydrochloric acid	MTO Lab and CRE Lab	6 liter
14	Buffer Solution pH 7	CRE Lab	1Liter
15	Ethyl Acetate Make:"Sdfine"	CRE Lab	20Liter
16	Sodium Hydroxide Pellets	CRE Lab	
	Make:"Sdfine"	212 246	5Kgs
17	Carbon Tetrachloride		1 lit.
18	Iodine ACS		50gm
19	Calcium carbonate powder	MUO Lab	50 kgs
20	Charcoal	MUO Lab	10 kgs

#### **B)** Glassware and Plastic ware:

S.No	Item Description	Lab Name	Required Qty
1	Conical flasks(250 ml)	MTO Lab and CRE Lab	30
2	Conical flasks(100 ml)	MTO Lab and CRE Lab	15

3	Measuring cylinder(100 ml)	MTO Lab and CRE Lab	2
4	Measuring cylinder(50 ml)	MTO Lab and CRE Lab	4
5	Measuring cylinder(25	MTO Lab and CRE Lab	2
6	Measuring cylinder(glass 2 liter)	MTO Lab and CRE Lab	2
7	Measuring cylinder(poly 1 liter)	MTO Lab and CRE Lab	10
8	Burrette(50 ml)	MTO Lab and CRE Lab	8
9	Beaker(500ml)	MTO Lab and CRE Lab	10
10	Beaker	MTO Lab and CRE Lab	10
	(100 ml)		
11	Beaker(250 ml)	MTO Lab and CRE Lab	6
12	Beaker(1 liter)	MTO Lab and CRE Lab	3
13	Stands	MTO Lab and CRE Lab	6
14	Reagent bottle(1 liter)	MTO Lab and CRE Lab	2
15	Reagent bottle(2 liter)	MTO Lab and CRE Lab	10
16	Separating funnel, PP (1 liter)	MTO Lab and CRE Lab	3
17	Separating funnel (1 liter glass)	MTO Lab and CRE Lab	2
18	Lab Droppers(poly)	MTO Lab and CRE Lab	10
19	Centrifuge tubes(15 ml minimum	MUO lab	12
	size)		
20	Pippet pump (10ml capacity)	CRE lab	02
21	Pippet pump (25ml capacity)	CRE lab	01
22	Glass rods	MTO Lab and CRE Lab	10
23	stirrer rod( Poly)(for mixing 10 lit.	MTO Lab and CRE Lab	10
	solution)		
24	Siphon pumps	MTO Lab and CRE Lab	03
25	Lab test tube brush	MTO Lab and CRE Lab	10
26	Laboratory Safety hand Gloves,	CRE Lab	15 pairs
	(chemical resistant)		15 pans
27	Open top plastic box (5 lit capacity)	MTO Lab and CRE Lab	6

### C) Accessories:

S.No	Item Description	Required Qty
1	Oxygen Cylinder with 99.99% purity,	01
	Cylinder inlet pressure should be at	
	least 2500 psi. (for bomb calorimeter)	
2	Pellet press with punch and die set (for	01
	bomb calorimeter)	
3	Gelatin Capsules pack (for bomb	01
	calorimeter)	
4	Vacuum pump with vacuum controller,	01
	final Vacuum should be less than 5	
	mbar(absolute). (Contamination with oil	
	should be avoided.)	

5	Hand gloves (heat resistant up to	01
	650°C) pair	
6	Centrifuge Tubes,PP, 50ml	10
7	Digital weighing machine (2 to 5 kg)	01
8	Soxhlet extractor with heating mantle	01
	and temperature control (1lit)	

### D) Equipment for Chemical Engineering Fluid Mechanics Lab:

S.No	Equipment/apparatus/Experiment set up Name	Required Qty
1	Setup for Identification of laminar and turbulent flows	01
2	Verification of Bernoulli's equation	01
3	Measurement of flow-Orificemeter, venture meter, V-notch	01
	, rotameter, point velocity measurement.	
4	Determination of Friction losses in flow through pipes	01
	(with different diameters and also with different pipe	
	material)	
5	Study of Flow in Fixed bed	01
6	Study of flow in Fluidized bed	01
7	Setup for study of Centrifugal pump characteristics	01
8	Setup for Measurement of terminal velocity	01
9	Setup for Measurement of drag coefficient	01

# E) Equipment for Mechanical Unit Operations Lab:

S.No	Equipment/apparatus/Experiment set up Name	Required Qty
1	Cyclone Separator	01
2	Setup for Verification of stokes law	01

# F) Equipment for Process Heat Transfer Lab:

S.No	Equipment/apparatus/Experiment set up Name	Required Qty
1	Apparatus for determination of Stefan –	01
	Boltzmann constant	

### G) Equipment for Energy and Environmental Engineering Lab:

S.No	Equipment/apparatus/Experiment set up Name	Required Qty
1	Aerobic /Anaerobic reactor 25L capacity	01
2	BOD incubator	01
3	Desiccators	01

4	Microscope	01
5	Water Hardness Test Kit	01
6	TDS meter	01
7	High volume air sampler	01
8	Water analysis kit	01
9	RO system with domestic 2"x12" Membrane	01
	module	
10	H <sub>2</sub> S vial kit	01
11	Fuel cell test kit	01

Interested parties can send their sealed quotations along with Demand Draft for an amount of Rs. 500/- (Rupees Five Hundred Only) payable to DIRECTOR, RGUKT, BASARA from any Nationalized Bank towards tender processing fee. Your quotation along with DD should be kept in a sealed master envelope super scribed "Quotation for Supply of Lab consumables and Accessories for Chemical Engineering Department". The sealed quotations should reach the office of the Director, RGUKT, Basar, Adilabad before 5 P.M. on 20.07.2016.

The sealed quotations should be sent by speed post or register post to the below address.

#### Office Address:

The Director Rajiv Gandhi University of Knowledge Technologies TS-IIIT, Basar campus,

Post: Basar, Mandal: Mudhol,

Dist: Adilabad.

Telangana. PIN: 504107

Ph: 9491306250

Sd/-

Director