## INDIAN INSTITUTE OF TEACHER EDUCATION



Ramkrishna Paramhans Vidya Sankul, Nr. Mahatma Mandir "KH"-5, Sector 15, Gandhinagar. Phone -: 079-23243733.

## ભાવપત્રક મેળવવા અંગે.

આઈ.આઈ.ટી.ઈ. સેન્ટર ઓફ એજ્યુકેશન, ગાંધીનગરની ફિઝિક્સ, કેમેસ્ટ્રી તથા લાઇફ સાયન્સ લેબોરેટરીમાં કેમિકલ, કોમ્પોનન્ટસ, ગ્લાસવેર તથા ઇન્સ્ટ્રૂમેન્ટ્સની ખરીદી માટેના ભાવ આમંત્રિત કરવામાં આવે છે. ભાવપત્રક મોકલવાની વિગતો આઈ.આઈ.ટી.ઈ.ની વેબસાઇટ www.iite.ac.in પરથી જોવાની રહેશે, બંધ કવરમાં ભાવપત્રક તા.0૭/૦૯/૨૦૨૩ (8:00 Hrs) થી તા.૧૬/૦૯/૨૦૨૩ (4:00 Hrs) સુધીમાં ભરીને આઈ.આઈ.ટી.ઈ. ખાતે પહોચાડવાના રહેશે. ભાવપત્રક સાથે ઇન્સ્ટ્રૂમેન્ટ્સ ના catalogue આપવાના રહેશે.

સ્થળ -:ગાંધીનગર કુલસચિવ તારીખ-:૦૭૦-૯ ૨૦૨૩- આઈ.આઈ.ટી.ઈ.

## **Chemistry Lab Requirement**

- Required specifications are given below.
- The requisite chemicals are needed in pure form since any impurities in them will drastically modify their properties. Hence, we require all standardizes Laboratory Grade (LR) chemicals.
- Kindly send the quotation (Hard copy) of above chemicals/equipment and glassware as per mentioned address and date(time) in newspaper advertisement.
   Kindly mention name on envelope: Centre of Education (Chemistry), HTE

## Indian Institute of Teacher Education, Gandhinagar Department of Chemistry

**List of Requirements** 

	List of Requirements				
No.	Name of Chemicals	Unit	QTY.		
		(gm or			
		ml)			
1	Chloroform	500ml	1		
2	Glycerine	500ml	1		
3	Ethyl acetate	500ml	1		
4	Benzaldehyde	500ml	2		
5	Aniline	500ml	2		
6	Glacial Acetic acid	2.5 lit	1		
7	Con. HCl	2.5 lit	3		
8	Con. H2SO4,	2.5 lit	1		
9	Oxalic acid	500 gm	2		
10	Benzoic acid	500 gm	2		
11	Alpha naphthol	500 gm	1		
12	Beta Naphthol	500 gm	1		
13	Urea	500 gm	1		
14	Thiourea	500 gm	1		
15	Sodium bicarbonatre (NaHCO <sub>3</sub> )	500 gm	6		
16	Sodium Hydroxide (NaOH)	500 gm	5		
17	Acetone	2.5 lit	4		
18	Methanol	2.5 lit	4		
19	Chloro benzene	500 ml	1		
20	Methyl ethyl ketone	500 ml	1		
21	P- nitro phenol	500 gm	1		
22	Anthracene	100 gm	3		
23	Copper sulphate (CuSO <sub>4</sub> )	500 gm	1		
24	Potassium chloride (KCl)	500 gm	1		
25	Mono chloro acetic acid	500 gm	1		
26	Maleic acid	500 gm	1		
28	Lithium Hydroxide	100 gm	3		
29	Sodium nitrite (NaNO <sub>2</sub> )	500 gm	2		
30	Dimethyl sulphate	500 ml	1		
31	I <sub>2</sub> Granules	100 gm	1		
32	Sodium nitropruside	100 gm	1		
33	ferrous sulphate	500 gm	1		
34	Carbon tetrachloride	500 ml	1		
36	Potassium Iodide	100 gm	1		
37	Dimethyl aniline	500 gm	1		
38	o- phenylene diamine	5 gm	1		

Acetyl acetone(EPH)	40	Silver Nitrate		25 gm.	1
No.   Name of Glasswares &   Unit					_
No.   Name of Glasswares &   Unit		<u> </u>			
No.   Metal wares				210 101	
2   Round Bottom Flask (RBF)   250 ml   10   single neck -19 mm	No.			QTY	Specification
Borosilicate glass with   Recovery Head   - 10   200   19/26 mm   10   19/26 mm   10   10/26 mm   19/26 mm   10/26 mm	1	Burette with pinch clip	50 ml	20	with pinch clip
from Heat resistant, borosilicate glass, suitable for Distillation and reflux application.)  4 Recovery Head - 10 19 /26 mm  5 Thermometer Pocket closed - 10 End 19 /26 mm  6 Glass rods - 30 10-15 cm  7 Watch glass (75 mm) 20 75 mm  8 Pipette Volumetric 25 ml 20 Borosilicate glass with accurate measurement, accurate measurement accurate measur		, ,	250 ml		heat resistant
5 Thermometer Pocket closed 6 Glass rods 7 Watch glass (75 mm) 20 75 mm 8 Pipette Volumetric 25 ml 20 Borosilicate glass with accurate measurement accurate measurement. 9 Pipette Volumetric 10 ml 20 Borosilicate glass with accurate measurement accurate measurement. 10 Conical Flask 250 ml 30 85X145 mm 0.D7 Height, 34 mm neck suitable for mixing 11 Beaker 250 ml 30 Made from high quality borosilicate glass , uniform wall thickness and ideal for heating liquid 12 Beaker 500 ml 20 Made from high quality borosilicate glass , uniform wall thickness and ideal for heating liquid 13 Beaker 100ml 20 Made from high quality borosilicate glass , uniform wall thickness and ideal for heating liquid 14 Measuring Cylinder 10 ml 5 Borosilicate glass ouniform wall thicknes and ideal for heating liquid 14 Measuring Cylinder 10 ml 5 Borosilicate glass, round base, calibrated at 27°C on the plastic of the plastic	3	Condenser	-	10	from Heat resistant, borosilicate glass, suitable for Distillation and reflux
6 Glass rods 7 Watch glass (75 mm) 20 75 mm  8 Pipette Volumetric 25 ml 20 Borosilicate glass with accurate measurement, 25 ml 20 Borosilicate glass with accurate measurement ac	4	Recovery Head	-	10	19 /26 mm
7 Watch glass (75 mm) 20 75 mm  8 Pipette Volumetric 25 ml 20 Borosilicate glass with accurate measurement, 9 Pipette Volumetric 10 ml 20 Borosilicate glass with accurate measurement, 10 Conical Flask 250 ml 30 85X145 mm O.D. Height, 34 mm neck suitable for mixing 11 Beaker 250 ml 30 Made from high quality borosilicate glass, uniform wall thickness and ideal for heating liquid 12 Beaker 500 ml 20 Made from high quality borosilicate glass, uniform wall thickness and ideal for heating liquid 13 Beaker 100ml 20 Made from high quality borosilicate glass uniform wall thickness and ideal for heating liquid 14 Measuring Cylinder 10 ml 5 Borosilicate glass, round base, calibrated at 27°C) 15 Measuring Cylinder 10 ml 10 (plastic, capacity, Round base, calibrated at 27°C) 16 Measuring Cylinder 10 ml 10 (plastic, Round base calibrated at 27°C) 17 Measuring Cylinder 10 ml 10 (plastic Round base	5	Thermometer Pocket closed	-	10	End 19 /26 mm
Pipette Volumetric   25 ml   20   Borosilicate glass with accurate measurement   9   Pipette Volumetric   10 ml   20   Borosilicate glass with accurate measurement   10   Conical Flask   250 ml   30   S5X145 mm   O.D. Height, 34 mm   neck suitable for mixing   11   Beaker   250 ml   30   Made from high quality borosilicate glass   uniform wall thickness and ideal for heating liquid   12   Beaker   500 ml   20   Made from high quality borosilicate glass   uniform wall thickness and ideal for heating liquid   13   Beaker   100ml   20   Made from high quality borosilicate glass   uniform wall thickness and ideal for heating liquid   14   Measuring Cylinder   10 ml   5   Borosilicate glass, round base, calibrated at 27°C   15   Measuring Cylinder   10 ml   10   (plastic, capacity, Round base, calibrated at 27°C)   16   Measuring Cylinder   10 ml   10   (plastic, Round base calibrated at 27°C)   17   Measuring Cylinder   10 ml   10   (plastic, Round base calibrated at 27°C)   17   Measuring Cylinder   10 ml   10   (plastic, Round base calibrated at 27°C)   17   Measuring Cylinder   10 ml   10   (plastic, Round base calibrated at 27°C)   17   Measuring Cylinder   10 ml   10   (plastic, Round base calibrated at 27°C)   17   Measuring Cylinder   10 ml   10   (plastic, Round base calibrated at 27°C)   17   Measuring Cylinder   10 ml   10   (plastic, Round base calibrated at 27°C)   18   Measuring Cylinder   10 ml   10   (plastic, Round base calibrated at 27°C)   18   Measuring Cylinder   10 ml   10   (plastic, Round base calibrated at 27°C)   19   Measuring Cylinder   10 ml   10   (plastic, Round base calibrated at 27°C)   17   Measuring Cylinder   10 ml   10   (plastic, Round base calibrated at 27°C)   18   Measuring Cylinder   10 ml   10   (plastic, Round base calibrated at 27°C)   19   Measuring Cylinder   10 ml   10   (plastic, Round base calibrated at 27°C)   19   Measuring Cylinder   10 ml   10   (plastic, Round base calibrated at 27°C)   10 ml   10   (plastic, Round base calibrated at 27°C)   10 ml   10   (plas	6	Glass rods	-	30	10-15 cm
Securate measurement   10 ml   20   Borosilicate glass with accurate measurement   10   Conical Flask   250 ml   30   85X145 mm   O.D.Y   Height, 34 mm   neck suitable for mixing   11   Beaker   250 ml   30   Made from high quality borosilicate glass   uniform wall thickness and ideal for heating liquid   12   Beaker   500 ml   20   Made from high quality borosilicate glass   uniform wall thickness and ideal for heating liquid   13   Beaker   100ml   20   Made from high quality borosilicate glass   uniform wall thickness and ideal for heating liquid   14   Measuring Cylinder   10 ml   5   Borosilicate glass, round base, calibrated at 27°C   15   Measuring Cylinder   10 ml   10   (plastic   capacity, Round base, calibrated at 27°C)   17   Measuring Cylinder   10 ml   10   (plastic   Round base   calibrated at 27°C)   17   Measuring Cylinder   10 ml   10   (plastic   Round base   calibrated at 27°C)   17   Measuring Cylinder   10 ml   10   (plastic   Round base   calibrated at 27°C)   17   Measuring Cylinder   10 ml   10   (plastic   Round base   calibrated at 27°C)   17   Measuring Cylinder   10 ml   10   (plastic   Round base   calibrated at 27°C)   17   Measuring Cylinder   10 ml   10   (plastic   Round base   calibrated at 27°C)   17   Measuring Cylinder   10 ml   10   (plastic   Round base   calibrated at 27°C)   17   Measuring Cylinder   10 ml   10   (plastic   Round base   calibrated at 27°C)   18   Measuring Cylinder   10 ml   10   (plastic   Round base   calibrated at 27°C)   18   Measuring Cylinder   10 ml   10   (plastic   Round base   calibrated at 27°C)   18   Measuring Cylinder   10 ml   10   (plastic   Round base   calibrated at 27°C)   19   Measuring Cylinder   10 ml   10   (plastic   Round base   calibrated at 27°C)   18   Measuring Cylinder   10 ml   10   (plastic   Round base   calibrated at 27°C)   19   Measuring Cylinder   10 ml   10   (plastic   Round base   Calibrated at 27°C)   18   Measuring Cylinder   10 ml   10   (plastic   Round base   Calibrated at 27°C)   18   Measuring Cylinder	7	Watch glass	(75 mm)	20	75 mm
accurate measurement	8	•		20	accurate measurement,
Height, 34 mm neck suitable for mixing		•			accurate measurement
borosilicate glass , uniform wall thickness and ideal for heating liquid  12 Beaker 500 ml 20 Made from high quality borosilicate glass , uniform wall thickness and ideal for heating liquid  13 Beaker 100ml 20 Made from high quality borosilicate glass uniform wall thickness and ideal for heating liquid  14 Measuring Cylinder 10 ml 5 Borosilicate glass, round base, calibrated at 27°C  15 Measuring Cylinder 10 ml 10 (plastic, capacity, Round base, calibrated at 27°C)  16 Measuring Cylinder 10 ml 10 (plastic, Round base calibrated at 27°C)  17 Measuring Cylinder 10 ml 10 (plastic Round base calibrated at 27°C)	10	Conical Flask	250 ml	30	Height, 34 mm neck, suitable for mixing
borosilicate glass, uniform wall thickness and ideal for heating liquid  13 Beaker 100ml 20 Made from high quality borosilicate glass uniform wall thickness and ideal for heating liquid  14 Measuring Cylinder 10 ml 5 Borosilicate glass, round base, calibrated at 27°C  15 Measuring Cylinder 10 ml 10 (plastic, capacity, Round base, calibrated at 27°C)  16 Measuring Cylinder 10 ml 10 (plastic , Round base calibrated at 27°C)  17 Measuring Cylinder 10 ml 10 (plastic Round base	11	Beaker	250 ml	30	borosilicate glass, uniform wall thickness and ideal for heating
borosilicate glass uniform wall thickness and ideal for heating liquid  14 Measuring Cylinder  10 ml  5 Borosilicate glass, round base, calibrated at 27°C  15 Measuring Cylinder  10 ml  10 (plastic, capacity, Round base, calibrated at 27°C)  16 Measuring Cylinder  10 ml  10 (plastic , Round base calibrated at 27°C)  17 Measuring Cylinder  10 ml  10 (plastic Round base calibrated at 27°C)	12	Beaker	500 ml	20	borosilicate glass, uniform wall thickness and ideal for heating
base, calibrated at 27°C  15 Measuring Cylinder  10 ml  10 (plastic, capacity, Round base, calibrated at 27°C)  16 Measuring Cylinder  10 ml  10 (plastic , Round base calibrated at 27°C)  17 Measuring Cylinder  10 ml  10 (plastic , Round base calibrated at 27°C)  10 ml  10 (plastic Round base)	13	Beaker			uniform wall thickness and ideal for heating liquid
base, calibrated at 27°C)  16 Measuring Cylinder  10 ml  10 (plastic , Round base calibrated at 27°C)  17 Measuring Cylinder  10 ml  10 (plastic Round base calibrated at 27°C)	14	Measuring Cylinder	10 ml	5	Borosilicate glass, round base, calibrated at 27°C
calibrated at 27°C)  17 Measuring Cylinder 10 ml 10 (plastic Round base	15	Measuring Cylinder	10 ml	10	
17 Measuring Cylinder 10 ml 10 (plastic Round base	16	Measuring Cylinder	10 ml	10	
	17	Measuring Cylinder	10 ml	10	(plastic Round base,

	1			,
18	Measuring Cylinder	25 ml	5	Borosilicate glass, round base, calibrated at 27°C)
19	Measuring Cylinder	100 ml	5	Borosilicate glass, round base, calibrated at 27°C)
20	Test Tubes with Rim	10 ml	1pck	(15 X 125 mm)  Made from borosilicate, uniform wall thickness, and excellent heat transfer.
21	Gravity bottle	10 ml	2	with Teflon stopper
22	Oswald viscometer	0.9 to 3.0	2	0.9 to 3.0 viscosity range,
	Sawara visconiciei	viscosity range	2	ideal for transparent liquid certified at 40 °C - 100°C)
23	Teflon magnetic bid		5	15 mm X 8 mm PTFE coated )
24	Buckner funnel	75 mm	1	(Ceramic) 75mm with Rubber cork
25	Tubing (High pressure pipe)	-	20 meter length	For Buckner funnel use ,resistant to light acid & light alkaline,
26	Tubing (natural rubber pipe)	pkt-10 mt	4	For condenser use ,resistant to normal temperature
27	Platinum electrode (for Potentiometer)	-	2	Used for potentiometer
28	Bunsen burner	-	20	(12 mm diameter, cast iron, brass pipe, chrome-plated)
29	tripod stand	-	20	(Height - 20 cm, cast iron, black painted)
30	burette stand	-	20	Rectangular stand, cast iron, chrome plated
31	Spatula	-	20	6 inch length) (Stainless steel, one end spoon and end flat)
32	Universal clamp	-	20	(Aluminium epoxy coated) with boss head
33	Burette clamp	-	20	Fischer type with boss head
34	Dropping Bottle	60 ml	10	(60 ml capacity, Made from low density polyethylene, small uniform drops of liquid when pressed lightly)
35	Dropper Glass	5ml	10	small uniform drops of liquid when pressed lightly)
36	Dropper plastic	5ml	10	small uniform drops of liquid when pressed lightly)
37	Spray bottle	100 ml	10	Use for chromatography, solvent spring
38	mortar and pestle (Big size)	8 mm	1	use in compound mixing
		· · · · · · · · · · · · · · · · · · ·		

No.	Name of consumables	Unit	QTY	Specification/ Purpose
1	Red litmus paper	1 pkt-200 leaves	1	For pH determination
2	Blue litmus paper	1 pkt-200 leaves	1	For pH determination
3	capillary	1 pkt 100 nos.	1	Microcapilary. Melting point tube
4	Cotton roll	1 packet	2	Non absorptive quality
5	Fusion tube	1 pkt-100 nos.	1	For boiling point purpose
6	pH capsule (4,9 and 7)	1 bottle-10 capsules	3	4 pH ,9 pH and 7 pH
7	Hand gloves	1 pkt-100 nos.	5	Disposable nitrile gloves
8	Filter Paper	1pkt-500 sheets	1	(Kalpi) 46 x 57 cm
9	Filter Paper	1 pkt-100 sheets	1	(Sonar)46 x 57 cm
No.	Name of Instrument	Unit	QTY	Specification
1	Digital weighing balance	each	2	Accuracy 500g x 10mg (0.1g) Analytical Balance Weighing Scale with Direct Electricity Supply Adapter & AAA Batteries)