

# Notice Inviting Quotation

Date: 22-11-2017

Sealed quotations are invited from Firms/Suppliers under RUSA scheme to supply equipment and chemicals to laboratories of the college, the detailed list of which is attached herewith.

Last date of submission of quotation: 8/12/17 at 4.00 PM



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## Lab. Items required for the Department of Chemistry

PRODUCT DESCRIPTION	QUANTITY	PRODUCT DESCRIPTION	QUANTITY
METALLIC SODIUM		INORGANIC SALTS -	
IGNITION TUBE		Cu <sub>2</sub> O, Pb <sub>3</sub> O <sub>4</sub> , HgI <sub>2</sub> , FeCl <sub>3</sub> , Fe(NO <sub>3</sub> ) <sub>2</sub> , CuCl <sub>2</sub> , Cr(3), Fe(2),	
SODIUM BICARBONATE		Ni(2) ,	
FERROUS SULPHATE		CHARCOAL BLOCK	
FERRIC CHLORIDE		COBALT NITRATE	
SODIUM NITROPRUSSIDE		GLASS ROD	
NITRIC ACID		PLATINUM WIRE	
SILVER NITRATE		BORAX****	
NH <sub>4</sub> OH		K <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub>	
H <sub>2</sub> SO <sub>4</sub>		CaF <sub>2</sub>	
KMnO <sub>4</sub>		SILICA	
CCl <sub>4</sub>		BaCl <sub>2</sub>	
LITMUS PAPER BLUE		HNO <sub>3</sub>	
NaHCO <sub>3</sub>		AQUA REGIA	
ACETONE		(NH <sub>4</sub> ) <sub>2</sub> CO <sub>3</sub>	
Na <sub>2</sub> CO <sub>3</sub>		Na <sub>2</sub> HPO <sub>4</sub>	
BROMINE SOLUTION		KI Solution	

NaNO <sub>2</sub> ****		UREA	
p-NITROANILINE		PHTHALIMIDE	
PHTHALIC ANHYDRIDE		BENZALDEHYDE	
METHANOL		IODOFORM ( CHI <sub>3</sub> )	
BRADY'S REAGENT ( C <sub>6</sub> H <sub>6</sub> N <sub>4</sub> O <sub>4</sub> )			
SCHIFF'S REAGENT			
TOLLENS REAGENT			
FEHLING'S SOLUTION (A+B)			
KOH			
PHENOLPHTHALEIN SOLUTION****			
CERRIC AMMONIUM NITRATE			
GLACIAL ACETIC ACID**			
BETA- NAPHTHOL			
SnCl <sub>2</sub>			
NH <sub>4</sub> Cl			
ZINC			
FeCl <sub>3</sub>			
LEAD ACETATE			
BENZOIC ACID			
PCl <sub>5</sub>			

## Lab. Items required for the Department of Zoology

### Mesum Specimens:-

1. Balanoglossus
2. Herdmania
3. Amphioxus
4. Petromyzon
5. Myxine
6. Torpedo ( Electric Ray)
7. Pirstis ( Saw Fish)
8. Hippocampus ( Sea Hourse)
9. Syngantus ( Pipe Fish)
10. Monopterus ( Kuchia)
11. Teradon
12. Cyprinus( Common Carp)
13. Hypophthalmichthys ( Silver Carp)
14. Ctenopharyngodn ( Grasscarp)

15. Claris ( Magur)
16. Mystus
17. Ichthyothis
18. Necturus
19. Ambystoma
20. Axolotl Larva
21. Alytes
22. Kachuga
23. Draco
24. Chameleon
25. Varanus
26. Naja
27. Hydrophis
28. Alcedo ( King Fisher)
29. Pisu ( Wood packer)

### **Skeleton:-**

1. Human Skeleton
2. Axial and Appendicular Skeleton of fowl, Guinea pig/ Rat.
3. Different types of skull in birds

### **Permanent Slide :-**

1. Salpa
2. Doliolum
3. T.S through Pharyngeal region of Amphioxus
4. T.S of Skin, Stomach, Intestine, Liver Pancreas, kidney, testis, Ovary of Mammals.
5. Epithelial ( Simple, squamous, cuboidal, columnar, compound, stratified, transitional, muscular, bone, cartilage, areolar, tendon, adipose, reticular and nervous)

### **Instruments:-**

1. Hot air Oven
2. Weight Machine (Electric)
3. Aquarium
4. Chart ( Mitosis, meiosis, cell cycle, eye, brain, frog,)

### **Glasswares:-**

1. Test tube ( 50 pc) test tube stands (10 pc)
2. Test tube Holder (30pc)
3. Spirit Lamp (10pc)
4. Burette (10pc)
5. Burette stand (10pc)
6. Filter Paper (5 Pack)
7. Funnel (10pc)

8. Pipette 10ml ( 5pc)
9. Litmus paper ( 2 pack)
10. Plain slide (5 box)
11. Cover slip ( 10 box)

**Chemicals :**

1. Ethanol (5 litre)
2. Absolute Alcohol (5 litre)
3. Haematoxylin stain
4. Acetocarmine stain
5. Metylineblue stain

**Lab. Items required for the Department of Botany**

**Specimen list:-**

<b>Sl No.</b>	<b>Items</b>
<b>1</b>	Leaves of Cycas
<b>2</b>	Leaves and cones of Pinus
<b>3</b>	Leaves and cones of Cryptomeria
<b>4</b>	Leaves and cones of Gnetum
<b>5</b>	Leaves and cones of Thuja
<b>6</b>	Stems of Mirabilis
<b>7</b>	Stems of Boerhaavia
<b>8</b>	Stems of Bougainvillea
<b>9</b>	Stems of Amaranthus
<b>10</b>	Stems of Nyctanthes
<b>11</b>	Stems of Dracaena
<b>12</b>	Petiole and roots of Eichhornia
<b>13</b>	Petiole and roots of Nymphaea
<b>14</b>	Petiole and roots of Hydrilla
<b>15</b>	Leaves of Nerium
<b>16</b>	Onion roots
<b>17</b>	Onion buds

**Permanent slides:**

<b>Sl No.</b>	<b>Items</b>
<b>1</b>	Permanent slide Rhynia
<b>2</b>	Permanent slide Lepidodendron
<b>3</b>	Permanent slide Sphenophyllum
<b>4</b>	Permanent slide Lyginopteris
<b>5</b>	Permanent slide Williamsonia
<b>6</b>	Permanent slide Cordaites

**Apparatus:-**

<b>Sl No.</b>	<b>Items</b>	<b>Qty.</b>
<b>1</b>	Spirit lamp	5
<b>2</b>	Cover slip	50 boxes
<b>3</b>	Plain slides	200 nos.
<b>4</b>	Blotting paper	20
<b>5</b>	Filter paper	20
<b>6</b>	Watch glass	10
<b>7</b>	Tripod stand	10
<b>8</b>	Wax block	5
<b>9</b>	Tong	5
<b>10</b>	Capillary tube	20
<b>11</b>	Mortar and pestle	10
<b>12</b>	Burette 50 ml	5
<b>13</b>	Pipette 10 ml	5
<b>14</b>	BOD bottles 300 ml	5
<b>15</b>	Funnels	5
<b>16</b>	Quadrate 1m*1m	5
<b>17</b>	Conical flask	5

**Instruments:-**

<b>Sl No.</b>	<b>Items</b>
<b>1</b>	Camera lucida
<b>2</b>	Microtomy
<b>3</b>	TLC plates
<b>4</b>	Paper chromatogram

5	Hot air oven
6	Incubator
7	Autoclave
8	Laminar air flow
9	Centrifuge
10	Lux meter
11	pH meter
12	Magnetic shaker
13	Electric weight machine

**Chemicals:**

Sl No.	Items
1	Starch indicator
2	Na <sub>2</sub> SO <sub>3</sub>
3	Iodine reagent
4	MnSO <sub>4</sub>
5	Copper turnings
6	Conc. H <sub>2</sub> SO <sub>4</sub>
7	Tartaric acid
8	Ammonium molybdate
9	Dil Nitric acid
10	Silica gel powder
11	Dist H <sub>2</sub> O
12	Glycerine
13	Ethanol
14	Formaldehyde
15	Acetocarmine stain
16	Glacial acetic acid

**Lab. Items required for the Department of Physics**

Sl. No.	Item	Specification	Qty
1	Convex Mirror	Diameter- 50 MM, 75 MM of any focal length	1 Dozen
2	Concave Mirror	Diameter- 50 MM, 75 MM of any focal length	1 Dozen
3	Double Convex Lens	Diameter- 50 MM, 75 MM Focal lengths- (i) 5cm, (ii) 10 cm, (iii) More than 10 cm	1 Dozen
4	Double Concave Lens	Diameter- 50 MM, 75 MM Focal lengths- (i) 5cm, (ii) 10 cm, (iii) More than 10 cm	1 Dozen
5	Optical Bench	Double rod, with full accessories	3 set
6	Meter Scale	(i) One meter, (ii) Half meter	3 nos. each
7	Joule's calorimeter	With stirrer and coil	3 nos.
8	Battery Eliminator(DC regulated power supply)	1 to 15 V range, 25 mA	10 nos.
9	Rheostats		12 nos.
10	Thermometer	Long	8 nos.
11	Ammeter	Ranges (1A, 3A, 5A)	5 nos. each range
12	Micro ammeter	Ranges(50 $\mu$ A, 100 $\mu$ A, 250 $\mu$ A, 500 $\mu$ A )	5 nos. each range
13	Milli ammeter	Ranges (100 mA, 250 mA, 500 mA)	5nos. each range
14	DC Voltmeter	Ranges( 3V, 5V, 10V)	5 nos. each range
15	Milli voltmeter	All available ranges	5 nos. each range
16	Physical balance	With weight box	2 sets
17	Simple Pendulum Stand		4 nos
18	Plane Mirror		4 nos
19	Copper Wire coil	Double cotton covered(D.C.C)	4 coils
20	Leclanche Cell		10 nos
21	Galvanometer		10 nos.
22	Pohl's commutator		8 nos
23	Potentiometer	10 wire	8 sets
24	Distilled water		4 galons
25	Ammonium Chloride salt		5 containers
26	Thermistor	PTC and NTC type	6 nos.
27	Flask	1 litre capacity	1 no
28	Beaker	500 ml	5 nos.
29	Glass slab	75x50x12 MM	4 nos.
30	Standard resistance box(circular box)	1 $\Omega$ , 2 $\Omega$ , 3 $\Omega$ , 4 $\Omega$ , 5 $\Omega$ , etc	3 nos. each
31	Precision standard resistance	Range(0.01 to 100 $\Omega$ , )	8 nos.
32	Tangent Galvanometer	Export quality preferably	3 nos.
33	Copper Voltmeter		4 nos.
34	Copper sulphate salt		3 containers
35	One way plug key		10 nos

36	Two way plug key		10 nos.
37	Three way plug key		10 nos.
38	Four way plug key		10 nos.
39	Six way plug key		10 nos.
40	Resistance box	Range(0.1 to 5, 0.1 to 10, 0.1 to 50, 0.1 to 100, 0.1 to 500, 1 to 10, 1 to 50, 1 to 100, 1 to 500, 1 to 1000, 1 to 5000, 1 to 10000) $\Omega$ ,	4 boxes each range
41	Reversing key		10 nos.
42	Tapping key(Morse key)		10 nos.
43	Bar magnets		10 boxes
44	Vibration magnetometer		3 nos
45	Deflection magnetometer		3 nos
46	Capacitors(electrolytic)	500 $\mu F$ , 700 $\mu F$ , 1000 $\mu F$ ,	5 nos. each
47	Meter bridge		5 sets
48	Melde's Apparatus		3 nos
49	Spring Constant Apparatus		2 nos.
50	Inertia Table		2 nos.
51	Barton's apparatus	Vertical pattern	1 no.
52	Searle's apparatus	Young's modulus apparatus	1 no.
53	Slotted weights	1 kg each plate	3 sets
54	Battery	Accumulator mass type of 6 Volts	8 nos.
55	Parallax pin		6 nos.
56	Wire striper		6 nos
57	Analog multimeter	Export quality	2 nos
58	Digital multimeter	Export quality	2 nos
59	Vernier callipers	In velvet box	4 nos.
60	Screw Gauge	In velvet box	2 nos.