

**OFFICE OF THE PRINCIPAL, GOVERNMENT POLYTECHNIC, NAYAGARH**

AT- GHASADEIPUR, PO-NANDIGHORE, PS-ODAGAON, DIST-NAYAGARH, PIN-752081

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No. 955/GPNYG/Dtd. 13/08/26**Quotation call notice**

Sealed quotations are hereby invited from reputed, experienced and authorized suppliers/ firms for the supply of **APPLIED CHEMISTRY LABORATORY ITEMS** mentioned below to Govt. Polytechnic, Nayagarh.

Details of Items with specification

Preparation of standard solution of Oxalic acid or Potassium permanganate		
Sl. No.	Instruments	Specification
1	Electronic Digital Balance	0.001 g sensitivity
Estimate gravimetrically the moisture and ash contents in the given coal sample (Proximate Analysis)		
Sl. No.	Instruments	Specification
1	Electric Oven	Size-18" X 18" X 18", 40 litre capacity, temperature upto 250 degree celcius
2	Muffle Furnace	(4" X 4" X 4") temp -1000 C
3	Silica Crucible	25ml
4	Oven Gloves	L size
Determine the conductivity of given water sample.		
Sl. No.	Instruments	Specification
1	Conductivity Meter	Range- 0 to 20 ,200 μ s /cm
2	Magnetic Stirrer with Hotplate	250-1250 rpm
Determination of Iron content in the given cement sample using Colorimeter.		
Sl. No.	Instruments	Specification
1	Photo Colorimeter	wavelength range 400-700 nm
2	Hot water bath	6 hole and 4 rings
Determination of calorific value of solid or liquid fuel using Bomb calorimeter		
Sl. No.	Instruments	Specification
1	Bomb calorimeter	8000 to 10000 cal/g, 0.5 to 1.5 sample weight
Determination of viscosity of lubricating oil using Redwood viscometer.		
Sl. No.	Instruments	Specification
1	Redwood Viscometer	IP 70 or IS 1448, 47mm diameter 88mm depth of cylinder

2	Kohlrausch Flask	50ml-flask with marking upto 50ml
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Determination of flash and fire point of lubricating oil using Abel's flash point apparatus.

Sl. No.	Instruments	Specification
1	Abel's Standard apparatus	Flash point range 30 to 400 degree celcius, width bellow 300 mm
2	Brass Oil Cup	50 ml efflux volume
3	Wire Gauze	Iron wire gauze for lab with frame(15x15cm)

To verify the first law of electrolysis of copper sulphate using copper electrode.

Sl. No.	Instruments	Specification
1	Copper Plates	15 cm X 5 cm X 1mm
2	Iron Spoon	6"
3	Ammeter	0-10 A
4	Rheostat	Standard range- 5 A, 8.5 Ohm
5	Plug Key	9 mm to 12 mm thickness with brass head
6	Battery	6 volt 4.5Ah lead acid battery
7	Connecting Wires	Aligator clips at two ends
8	Polish Paper	A4 size

Construction and measurement of emf of electro chemical cell (Daniel Cell).

Sl. No.	Instruments	Specification
1	Multimeter	2000 counts
2	Voltmeter	analog type with range 0-10 V
3	Connecting Wires	highly pure cu wire with PVC coat
4	Salt Bridge	U shaped

Determination of amount of dissolved oxygen present in a water sample

Sl. No.	Instruments	Specification
1	BOD bottle	300ml borosilicate
2	Burette (Borosilicate)	50ml
3	Pipette (Borosilicate)	10ml
4	Bulb pipette	20ml

Determination of amount of BOD present in water sample

Sl. No.	Instruments	Specification
1	BOD incubator	5 to 60 degree celcius, 112ltr
2	DO meter	Measurement range from 0 to 20 mg/ltr with accuracy +/- 1.5% to +/- 2%

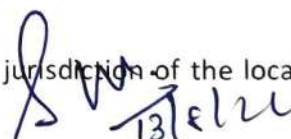
Determination of amount of COD present in water sample

Sl. No.	Instruments	Specification
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1	COD digester	6 holes, 180 degree celcius, 230 v
2	Reflux flask	100 ml
3	Condenser	300mm, 24/29 socket /cone
4	Glass cuvette	3.5ml 10mm length
Determination of amount of turbidity present in a water sample		
Sl. No.	Instruments	Specification
1	Nephelometer	0 to 1000 NTU
Determination of amount of TDS present in a water sample		
Sl. No.	Instruments	Specification
1	Digital TDS meter	0-9990 ppm

Terms and conditions

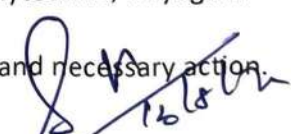
1. The quotation should be submitted in a sealed envelope superscribed "Quotation for Supply of APPLIED CHEMISTRY LABORATORY items".
2. The quotation must reach the office of the undersigned on or before **31.08.26 by 12PM**.
3. The quotation will be opened on **31.08.26 at 4PM** in the presence of the bidders or their authorized representatives, if they wish to attend.
4. The quoted rates should be inclusive of all taxes, transportation, loading, unloading, installation (where applicable) and other incidental charges.
5. The materials supplied must conform to the prescribed specifications and be of standard quality.
6. The supplier shall complete the delivery within **15 days** from the date of issue of the purchase order.
7. Payment will be made only after satisfactory supply, inspection and acceptance of the materials.
8. The undersigned reserves the right to accept or reject any or all quotations without assigning any reason thereof.
9. Any dispute arising out of the supply shall be subjected to the jurisdiction of the local court.


Principal

Memo. No. 956 /GPNYG/Dtd. 13/08/26

Copy to HOD Humanities & Science Department for information and necessary action.

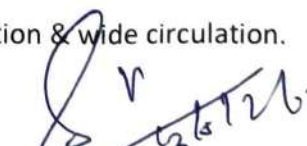

Govt. Polytechnic, Nayagarh


Principal

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Copy to institution notice board/ Institution website for information & wide circulation.


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