

TENDER DOCUMENT FOR THE PURCHASE LAB
EQUIPMENTS

GOVT. NEW MODEL COLLEGE, DURG 491001(C.G.)

TENDER FORM FEE Rs. 1000/-

INDEX

Sl. No.	Description	Page
1	TENDER NOTICE	3
2	TERMS AND CONDITIONS	4-6
3	INSTRUCTIONS TO BE FOLLOWED BY THE SUPPLIER/TENDERER	7
4	ANNEXURE-I - TENDER APPLICATION FORM	8-9
5	ANNEXURE-II - TECHNICAL BID	10
6	ANNEXURE-III- FORMAT FOR QUOTING THE RATES OF THE INSTRUMENTS/EQUIPMENTS (FINANCIAL BID)	11
7	ANNEXURE-IV-ACCEPTANCE OF TERMS & CONDITIONS OF TENDER	12-13
8	ANNEXURE-V- TECHNICAL SPECIFICATIONS OF ITEMS.	14-23

OFFICE OF THE PRINCIPAL GOVT NEW MODEL COLLEGE, DURG
Website: www.govtsciencecollegedurg.ac.in
SHORT TENDER NOTICE FOR THE PURCHASE OF LAB EQUIPMENTS

TENDER NOTICE No 2506/GVYTPGAC/TENDER/2021

Dt.13-12-2021

Govt New Model College Durg invites sealed tender from reputed manufacturer/authorized dealers for purchase and supply of the following items.

Item Name	Earnest money	Last date/time of submission of tender form	Date/Time of opening of Technical Bids	Date/Time of opening of Financial Bids
<u>LAB EQUIPMENTS</u>	10000/-	13.01.2022 3:00pm	14.01.2022 3:00pm	shall be informed to technically qualified bidder

Interested firm may submit their sealed tender in two bid form as per term and condition of tender documents. The filled-in tender form for each item with **tender fee of Rs. 1000/- and earnest money Rs. 10000/-** both by demand draft in favor of **Principal, Govt. New Model College Durg** should reach to the office upto above date. The tender documents may be downloaded from our website www.govtsciencecollegedurg.ac.in.



Principal

Govt New Model College Durg

Copy to:-

1. Director, Jansampark Chhattisgarh with request to please publish this notice on 02 national level, 02 state level and 02 local news papers. The election code of conduct is not being violated in any way by purchasing laboratory equipment.
2. Convenor, College Website Committee with instruction to upload the notice on college website.
3. Notice Board



Principal

Govt New Model College Durg

Terms and conditions

1. Sealed tender should reach OFFICE OF THE PRINCIPAL GOVT NEW MODEL COLLEGE, Govt. VYTPG College campus GE Road Durgon or before **13-01-2022, 3:00PM.**
2. Suppliers should send their tender through **Registered Post/Speed** post only. No other mode will be accepted.
3. The Tender document may be downloaded from College Website: www.govtsciencecollegedurg.ac.in Bidders using downloaded tender forms from College website must submit cost of tender document by demand draft drawn in favour of Govt. V.Y.T.PG Autonomous College, Durg Payable at Durg along with technical bid. The bid form downloaded through College website submitted without tender fees will not be accepted.
4. The bidders enrolled under MSME are exempted from EMD submission and relevant documents shall be submitted as proof of the same.
5. **The tender without EMD, Less EMD and document fee will summarily be rejected.**
6. The amount of EMD will be refunded in case of unsuccessful tenderer on submission of application with money receipt in original soon after the final decision. In case of successful tender, it will be refunded on production of original receipt after completion of validity period of the agreement to be executed between the tenderer and the college without any interest.
7. Company/firm should be **registered manufacturer/supplier** of the item.
8. The tenderer must enclose adequate documents to prove **their authorization claim**. If not enclosed this college reserve the rights to accept or reject tenders of these agencies. The decision of the college in this regard will be final and shall be binding on tenderer.
9. The College at its discretion may extend the last date of submission of tender and opening of tenders.

10. Late and **delayed tenders will not be considered** and shall be returned unopened to the Bidder.
11. If tenderer give wrong information, college reserves the right to reject such bid at any stage and forfeit the Earnest Money Deposit.
12. Bids submitted without supporting documents bare liable to be rejected.
13. In financial bid the rate of item should be inclusive **of all taxes, packing, forwarding, transit etc.**
14. The rate both in words and figures without any corrections or over writing should be quoted for each individual item separately. **The rates must be valid up to March 31, 2022.**
15. **Quoting merely the lowest price does not confer any right to any bidder for award of supply order.** The Purchase Committee, reserves the right to select the equipment any bid under the grounds of specification compliance, technologically advanced quality, proven performance track record, brand reputation, service backup support & training, offer of additional / special features, compatibility with the existing System, etc.
16. On the acceptance of the rates as per the approved tender, the supply order will be placed by the Head of the office of college.
17. The college will reserve the full right to open/consider the second envelope if and only if the college is satisfied with information contents in envelope No.1.
18. **The college has the right to accept or reject any tender partly or fully without arising any reason thereof.**
19. The items have to be supplied in standard packing at the premises of Govt. New Model College, Durg-491001 Chhattisgarh.
20. In event of any loss, damage, breakage or leakage or any shortage the bidder shall be liable to make good condition such loss and shortage found at the checking/inspection of the supplied Instrument/Equipment. "No extra cost" on such account shall be admissible.
21. Delivery has to be made **within 15 days** from the date of receipt of supply order.

22. **Each item should be strictly as per the specification.** In case of any deviation the college has the right to reject the item.
23. Installation, successful demonstration of equipment in the respective department is obligatory.
24. The training should be provided by the supplying companies for a minimum period of two days from the date of installation with an expert team.
25. If any item covered under warranty fails, the same shall be replaced free of cost including all the applicable charges including shipping cost both ways.
26. Final payment of Instrument/Equipment will be made only after installation and successful demonstration at the respective department of the college.
27. If the tenderer fails to comply with supply order within the specified period his order will be cancelled and EMD will be forfeited.
28. All the Tenders should be addressed to:



Principal
Govt New Model College Durg

Instructions to be followed by the Supplier/Tenderer

(A)Submission of tender bid (sealing and marking of bids)

Bid should be submitted in two envelopes as mentioned below: -

1. Envelope -1 Technical Bid (duly sealed) should contain

- (a) Application form (as per Annexure-I)*
- (b) Tender fee in the form of demand draft of Rs.1000*
- (c) EMD of Rs 10000/-in the form of demand draft for each instrument separately.*
- (d) Technical bid form (as per Annexure-II) duly filled.*
- (e) Copies of all certificate/documents in support of technical Bid.*

NOTE:-Above (a) to (e) not enclosed , The envelope 2 will not be opened.

2. Envelope –2 Financial Bid (Duly Sealed) Should contain

- (a) Financial bid form (as per Annexure-III) duly filled.*
- (b) The supplier should quote the rate inclusive of all expenses, charges, taxes, duties, transportation, packing and forwarding, insurance etc.*
- (c) The rate in both words and figure without any correction or over writing should be quoted in financial bid.*

3. Envelope –3 (Duly Sealed): Should contain

- (a) Both Envelope 1 &2*
- (b) This envelope must bear the following Identifications:*
 - (i) TENDER NOTICE FOR THE PURCHASE OF LAB EQUIPMENTS*
 - (ii) Tender Reference No. 2506 //GVYTPGAC/TENDER/2021*
DT. 13.12.2021
 - (iii) Name & Address of the Tenderer*

TENDER APPLICATION FORM

To,

**Principal
Govt New Model College Durg**

Sir,

With reference to your Notice Reference No. **2506/GVYTPGAC/TENDER/2021 DT. 13.12.2021** I am hereby submitting my tender for the supply, installation and maintenance of *TENDER NOTICE FOR THE PURCHASE LAB EQUIPMENTS* accepting the terms & conditions mentioned in the tender document.

1	Name of the Bidder/Company name	
2	Full Postal Address	
3	Telephone Nos./Mobile Nos./Fax Nos. name of the Person Post Held	
4	Email ID	
5	PAN No.	
6	GST No.	
7	Tender submitted for the Brand (Please specify)	
8	EMD Demand Draft No. & date	
	Issuing Bank Details	
	Amount (in INR)	

Undertaking

I, the undersigned certify that I have gone through the terms & conditions mentioned in the bidding document and undertake to comply them.

The rates quoted by me are valid and binding upon me for the entire validity period and it is certified that the rates quoted are minimum and rational as per existing market rate.

I give the rights to the competent authority of the Office of The Principal, Govt. New Model College, Durg 491001(C.G.) to forfeit the Earnest Money Deposit (EMD)/security Deposit by me/us if any delay occurs on my/agents part or fail to abide by the provision of the bidding document.

I hereby undertake to execute the work/supply order as per direction given in the tender document within stipulated period.

Date :

(Signature of the Bidder)

Place :

Name –

Designation –

Registration No. of supplier/tenderer

(Official seal of the Bidder)

TECHNICAL BID**Instrument/Equipment/ItemName.....**

		Enclosed Yes/No
1	Name of the Tenderer/Company name	
2	Contact address, Telephone No., Mobile No.,	
3	Company/firm Registration No. (Copy to be enclosed)	
4	GST registration certificate(Copy to be enclosed)	
5	Experience Certificate in this field (Attach separate sheet)	
6	Annual Turnover (Copies to be enclosed)	
7	Certificate of Sole Manufacturer/authorized dealers of manufacturers/authorized supplier	
8	EMD Demand Draft No. and date	
	Issuing Bank details	
	Amount (in INR)	
	EMD Exemption certificate (if applicable)	

We agree with all the terms and conditions of the tender.

Name & Signature with Seal of the supplier

Annexure-III

Financial Bid for Instruments

Name of the tenderer

Financial bid submitted for (ItemName.....Item No.....)

Make/Model.....

Sr.No	Price details	Price per Unit
1.	Cost of instrument/equipment with essential accessories	
2.	GST payable	CGST
		SGST
		IGST
3.	Packing and forwarding charge upto station of dispatch	
4.	Transportation and insurance charges upto destination	
5.	Installation, commissioning and training charges if any	
6.	Any other charges, if any	
	Total Price inclusive all charges and tax (Sum of 1 to 6)	

Total Bid price in figures.....

In words.....

(Seal & Signature of the bidder)

Acceptance of terms & conditions of tender(Must be on Letter Head)

Date:

To,

The Principal

Govt. New Model College, Durg (Chhattisgarh) 491001

Subject: Acceptance of Terms & conditions of Tender.

Tender ref. No.: No. 2506//GVYTPGAC/TENDER/2021 DT.13.12.2021

Dear Sir,

1. I/We have downloaded/obtained the tender document(s) for the above-mentioned Tender enquiry no. from the Website: www.govtsciencecollegedurg.ac.in

2. I/We hereby certify that I/we have read entire terms & conditions of the tender documents from Page 01 to 23 (including all documents like annexure, schedules etc.) which form part of the tender document and I/we shall abide by the terms & conditions/clauses contained therein.

3. The corrigendum(s) issued from time to time by Govt. New Model College Durg (Chhattisgarh) to have also been taken into consideration, while submitting this acceptance letter.

4. I/We hereby unconditionally accept the tender conditions of above-mentioned tender document(s)/corrigendum(s) in totality/entirely.

5. In case any provisions of this tender are found violated, Govt. New Model College Durg(Chhattisgarh) shall be at liberty to reject this tender/bid including the forfeiture of the full said earnest money deposit absolutely and we shall not have any claim/right against Govt. New Model College Durg(Chhattisgarh) in satisfaction of this condition.

6. I/We confirm that we or our Proprietor/Director/Partner have not been blacklisted or debarred or declared ineligible for corrupt/fraudulent practices either indefinitely or for a particular period of time by any Government or other agency. I/we further declare that no criminal case is registered or pending against the firm/company or its owner/partners/directors anywhere in India. Also, there are no contractual restrictions or legal disqualifications or other obligations which prohibit the applicant from entering into tender process.

-

(Seal & Signature of the bidder)

List Of Equipments& their technical specification:-

Item serial No	Name of equipment
1	Digital potentiometer
2	Constant temperature water bath
3	Electronic balance top pan
4	Spectrophotometer
5	Digital Conductivity Meter
6	pH Meter
7	Digital HB Meter
8	Laboratory Oven
9	Polarimeter
10	Hot plate
11	Centrifuge Machine
12	Electronic Stirrer
13	Electric bunsen burner
14	Colorimeter
15	Chemical Balance
16	Melting point apparatus
17	Furnace
18	Fume hood
19	Autoclave
20	BOD Incubator
21	Distillation unit
22	Electrophoresis unit
23	Laminar flow
24	Compound Microscope
25	Dissecting Microscope
26	Binocular Microscope
27	Phase contrast Microscope
28	Mortar pastel
29	Lab Refrigerator
30	Water bath
31	Centrifuge Machine 5000RPM

Digital potentiometer

Readout	3½ digit bright red LED display
Key Board	3 soft touch keys
Range	0 to ± 1999 mV
Resolution	1 mV
Accuracy	± 1 mV ± 1 digit
Internal Standard	Available
Operating Temperature	10°C to 50°C

Burette Assembly Option	Available for 2 Burettes
-------------------------	--------------------------

Inbuilt Stirrer	Available at fixed RPM
Power supply	230V $\pm 10\%$ AC, 50 Hz
Dimensions	278 x 248 x 101 mm (LxBxH)
Weight	2.5 Kg
Standard Accessories	Platinum Electrode - 1 No., Reference Electrode - 1 No., Dust Cover - 1 No., Electrode Stand - 1 No., Magnet Capsule - 1 No., Titration Beaker - 1 No., Instruction Manual - 1 No.

Constant temperature water bath

- Double Walled In Construction.
- Inner Chamber And Lid Made Of Stainless Steel. Outer Chamber Made Of Mild Steel With Powder Coating.
- Glass Window Is Fixed On The Front For Both Sides Clear Observations While Immersion Test.
- The Gap Between The Chambers Filled With High Grade Glass Wool To Minimise The Heat Loss.
- Temp. Range From above 5°C Ambient To 98°C And Temp. Controlled By Digital Temp. Indicator Cum Controller With An Accuracy Of $\pm 0.5^\circ\text{C}$.
- A High Speed Stirrer With A Motor Of 1/20 Hp Is Fitted To The Unit For Continuous Stirring And This Can Maintain A Uniform Heating Throughout The Chamber.
- The Heating Mechanism Comprises Of Set Of Heaters Pertaining To Fast Heating To Operated 230 Volts Ac Only.
- Designed For Immersion Requirements And For External Circulation To Maintain Constant Temp.
- To Operated 230 Volts Ac Only.

Size 12"x10"x8" (20Lit)

Electronic balance top pan

Capacity: 220g
Least Count: 0.001g
Repeatability: ± 0.001
Linearity: ± 0.0015
Response time: less than 3 Sec.
Display Type: LCD with Back-Light
Calibration Type : External
Pan Diameter: 110 mm

Spectrophotometer

Single beam, range 340-960nm with facility for auto concentration, %Transmission, absorbance and K Factor measurements. It has 16x2 line alphanumeric LCD for data & wavelength display. Its sample holder accommodates glass cuvettes of 10mm path length. Facility has been provided for 100 sample data storage and interface for any dot matrix centroids printer. A set of two glass Cuvette is provided.

Spectrophotometer

Range 320 -1100 nm. On-screen standard curve display on Graphic LCD, PC connectivity through USB port & direct printer connectivity using parallel port, Auto zero and blank. 0.1nm wavelength resolution supplied with basic PC software. Wavelength Scanning can be done using professional PC Software

Digital Conductivity Meter

Using latest microcontroller, Auto Ranging (6 ranges from 20 μ S to 1000mS), auto temperature compensation, auto cell constant measurement, touch keys along with Conductivity Cell of 0.1 cell constant and Temperature Probe. (Table Model)

pH Meter

With 128x64 dots graphic LCD display showing pH, mV, Temperature, having auto temperature compensation, auto buffer recognition along with accessories. Data storage facility up to 1000 samples & external serial printer attachment facility available.

Digital HB Meter

3-digit LED display with soft touch keys, auto calibration. Direct reading in Hb units. Sample size 1 ml.

Laboratory Oven

- Construction: Double walled construction outer body made of Mild Steel powder coated, & Inner Body made of Stainless Steel grade S.S 304.
- Insulation: Glass wool insulation between two walled.
- Temp range: 50 °C to 250°C.
- Accuracy: +/- 1 °C.
- Temp controlled by: controlled by PID Micro process controller with dual display
- With S.S. selves
- Supplied with air circulation motor with blower for uniform temperature throughout chamber.

Heater: special Nicrome heater designed for long life & saving of power consumption.

Size 18"x18"x24"

Polarimeter

Measuring Range -180° to +180°

Scale Value 1°

Vernier $\pm 0.05^\circ$

Magnifier 3X

Light Source Sodium Lamp

Wavelength 589.44nm

Test Tube 50 / 100 / 200mm

Hot plate

- Construction of body made of M.S powder Coated & top made of heavy cast iron plate for long lasting life.
- Special spring type of beaded coil fitted in plate for uniform temperature on plate.
- Maximum Surface temperature up to 300°C.
- Size 12"x18"
- Digital temperature controller

Centrifuge Machine

The units are fitted with resiliently mounted motor for vibration free performance having built in 5 step speed regulator. Available with Angle rotor.

Capacity	ml	24 x 5
Type of Head		Angle
No. of Tubes		24
Max. Speed	RPM	4000
Max. RCF	'g'	4760
W x D x M	mm	210 x 210 x 250
0-60 minutes built-in countdown timer		

Centrifuge Machine

Compact model for routine work in medical and industrial laboratories has digital speed indicator and 0-60 minute digital countdown timer.

Salient Features:

- Stepless speed regulator
 - Safety Lid interlock to prevent cover opening during centrifugation
- 8 x 15 ml. swing out head with graduated glass tubes.

Max Speed	rpm	4400
Max. RCF	'g'	2350
Max. Capacity	ml	200
W x D x H	mm	330 x 370 x 295
Supply: 220-240 Volts 50 Hz. Single Phase		

Electronic Stirrer

Ultra – flat compact magnetic stirrer, guaranteed with modern magnet coil technology. Wear- free with no moving parts. To ensure better mixing, the lab disc can reverse direction of rotation automatically every 30 seconds.

- No moving parts – truly maintenance free
- Low aspect ratio (just 12 mm thick)
- Software driven gradual acceleration
- Adjustable speed (15 to 1500 RPM) with digital display
- Microprocessor controlled with last run memory feature
- Stirring cap. 800 ml – set up place of 100 mm
- Pulse mode – reverses the direction every 30 secs for proper mixing
- Universal power supply – small wall mount adaptor
- IP 65 compliant design (Water spill resistant)
- Corrosion resistant SS top surface to fight harsh chemicals
- Recommended Stir bar length 25 mm
- Supplied with 1 (one) high strength stir bar

Electric bunsen burner

Supplied with body of base made of M.S Powder coated & top body made of S.S with energy regulator to control temperature. Maximum surface temperature up to 700° C

Colorimeter

Microprocessor Photo Colorimeter with 8 glass filters covering range of 400-700 nm with facility for auto concentration, %Transmission, Absorbance and K factor measurement. It has 16x2 line LCD data display. Its sample holder accommodates glass test tubes of 10mm path length. Facility has been provided for 100 sample data storage and interface for any centroids printer

Chemical Balance

Double pan, Max. Capacity 200gm with Wt. box

Melting point apparatus

Melting point of any substance up to 300°C. It consists with aluminum cylindrical block for heating and radial holds a thermometer and glass capillary.

Furnace

- Construction: Outer Body made of Mild Steel powder coated. Inner Body made of ceramic Muffle Kumar make.
- Insulation: Special type ceramic Insulation between body for Insulation.
- Coil: Kanthal A1 swaden make coil for long lasting.
- Temp Range: 400 C to max 1150C.
- Accuracy: +/- 3 deg.
- Temp Controlled by: PID Dual display to view set & current temp.
- Electronic Digital Timer
- Safety: Special type thermocouple fuses to protect overheating.
- Sensor: 'K' type calibrated sensor.
- Size 6"x6"x12"

Fume hood

Fume Hood Made of 19mm thick Ply board covered with sun mica & Epoxy painted from inside. Granite working platform, Polypropylene Sink, Water Tap & Exhaust System.
Size 90x60x60CM

Autoclave

- Double walled complete body made of S.S.304.
- Double safety valve 1 working valve set on 15 PSI & extra safety valve set on 20 PSI to control pressure in autoclave.
- Analogue pressure guage to check pressure.
- Supplied with S.S. Basket.
- Inner size 12" Dia x 20" Ht.

Optional Accessories

Digital Temperature indicator cum controller with timer

Water level cut off

Pressure cut off switch

BOD Incubator

- Construction : Double walled Construction Outer Body made of Mild steel powder Coated & Inner body made of stainless steel.
- Insulation : Puff Insulation between two walled
- Temp Range : 5°C to 60°C. deg

- Temp Accuracy : +/- 0.5°C. deg
- Temp controlled by : PID Micro process controller with dual display to view set & Current temp.
- Air circulation By : Air circulation fan motor with blower to maintain uniform temp
Motor of 1/12 HP 1440 RPM
- Door : Inner Acrylic door to view sample & outer metal door powdercoated.
- Gasket : Magnetic Gasket for door.
- Cooling System : By thematically sealed compressor kirlosker make with CFC free Gas.
- Wheel: Castor wheel in bottom for easy movably.
- Inner Size 45x45x50 CM

Accessories

Voltage Stabilizer

Distillation unit

Water stills are carefully designed to produce high purity pyrogen free distilled water. The water still made from 3.3 exp. borosilicate glass comprises of horizontal type boiler, condenser, constant level device, silica sheathed (Quartz) heater, along with stand and clamps.

Features

- Borosilicate condenser and boiler are fitted with a removable silica sheathed heater and screw threaded connectors for ease of cleaning.
- Distillate temperature is approx. between 25° to 45° C which is ensured by an efficient condenser.
- The stand is powder coated for rust free operation and lustrous appearance.
- The unit automatically switches off if water level in the boiler falls below heater.
- Cooling water from the condenser is re-circulated into the boiling chamber, hence saving energy.
- Drain nozzle / Teflon Stop Cork is provided for easy cleaning and maintenance.
- **Electrical Power** : 220/240 V, 50/60Hz, Single Phase Supply.

Unique Feature

This model is equipped with in-built water level sensor to protect the Glass parts in case of water failure or overheating and buzzer is provided when user attention is required.

Output Capacity 2.00Lit/Hour

Power 1.5KW

Electrophoresis unit

Submarine Gel Electrophoresis apparatus

Mini - Gels 10x7; 5x7 cm

Basic unit with Platinum electrode assembly (2),

Gel platforms: 10x7 cm (1); 7x5 cm (2), 8-well comb, 1.5 mm (2) and Power cord (1).

Size (lbh): 21 x 10 x 6.5 cm;

Power pack for Electrophoresis

Mini

Output: 50, 100, 150, 200, 250 V DC

Operation - Fixed Constant Voltages

Laminar flow

Horizontal made of Mild Steel duly epoxy powder coated, and Workbench covered with 304 grade S.S. Sheet. Microprocessor control digital display for Blower, U.V. Light (with timer) and LED Light. Digital Manometer with filter failure alarm.

Working chamber size 90x60x60cm

Compound Microscope

Stand	Stable & Robust, traditional Horse Shoe base.
Body	Inclined through 90°, standard tube length of 160mm Separate coarse and fine focusing knobs with
Focusing	graduation on one side. Coarse movement by screw lever mechanism.
Nosepiece	Triple revolving Nosepiece is provided with Positive click stop for proper centering.
Stage	Fixed square stage 125 X 125mm with stage Clips to hold the slide.
Illumination	Illumination through a 50 mm diameter Plano concave mirror mounted on gimbals mount.
Objectives	Two Achromatic Objectives of 10x & 40x (SL), 100x (Oil, SL)
Eyepieces	Two Huygenian Eyepiece of 6x, 10x, or 15x
Condenser	Moveable condenser is provided with iris diaphragm having 1.2 N.A.

Dissecting Microscope

Stand	Stable & Robust with round base.
Body	Equipped with joint revolving arm for the magnifying lens over the stage.
Focusing	Coarse motion coarse movement by r

Binocular Microscope

Frame	All aluminum pressure die casted body.
Paint	Powder coated, available in various desired shades.
Nose piece	Quadruple ball bearing nosepiece.
Observation head	360° rotate able and 45° inclined head with all Anti-fungus coated prisms.
Focusing systems	Separate knobs for cores and fine motion having Least count of 0.002mm.
Mechanical stage	CXL mechanical stage works on dovetail. slides (other stages also available).
Eyepieces & Objectives	Set of 4x, 10x, 40x and 100x and a paired set of 10x wide field eyepieces.
Illumination	6V/20W halogen lamp needs 220V and 50Hz supply.

Phase contrast Microscope

Stand: Single mould Sturdy stand with anti-rust materials. Extended base with hand rests for enhanced stability and comfort.

Viewing Bodies: Siedentopf Trinocular tube 30° inclined, 360° rotatable, Interpupillary distance adjustable 48-75mm. Vacuum coated Prism for better transmission and anti-fungus character.

Eyepieces: Wide Field focusable paired eyepiece WF10x/22mm, with foldable eye guard, anti-fungus coating. Graduated ring for setting of individual Eye Diopter.

Nosepiece: Reverse angle Quadruple nosepiece (Ball bearing type) with click stops and rubber grip, anti-fungus coating. PAR-CENTERED & PARFOCAL on CNC Machines.

Objectives: RP series DIN Infinity Corrected Phase Plan Achromatic objectives 10x, 20x, 40x (spring loaded), 100x Oil (spring loaded) anti-fungus coating.

Mechanical Stage: RACKLESS X-axis, double plate mechanical stage size 200 x 160mm X/Y travel range 78 x 54mm. Low drive movement controls. Hard coated surface for scratch resistance. Slide holder to accommodate up-to two slides.

Sub-Stage Universal Condenser: *The Universal BF/DF condenser allows observation of bright field, phase contrast and dark-field images without exchanging condensers. Compressing of phase telescope, Adapter for phase telescope, centerable phase turret, green and blue filter. Phase Contrast observation 10x to 100x and Dark-Field Observation 10x to 40x.*

Focusing: Co-axial coarse and fine focusing on ball drive system for extremely smooth operation.

Illumination: LED illumination with variable illumination control. Rechargeable Lithium Ion Battery Provide long Hours of Battery Backup in case of electricity failure OR Halogen 6V-20W illumination with variable illumination control.

Mortar pastel

Made of agate Size 4-5Inch

Lab Refrigerator

Designed for storage applications in pharmaceutical, microbiology, biotechnology, chemical, clinical diagnostic, hospitals & research institutions. The unit is supplied with a glass door for convenient sample

viewing, forced air circulation system ensures uniform temperature throughout the chambers. Digital controller is provided for display of internal temperature along with alarm systems.

Salient Features

- Plastic inner chamber; Outer body pre painted G.I.
- Energy efficient
- Uniform cooling by forced air circulation
- Adjustable Plastic coated wire mesh shelves
- Clear product visibility with dual glass
- High / low temperature alarm

Capacity (Litres)	300
Temperature Range	1° C ~ 10° C
No. of Door (Glass)	1
Baskets / Shelves	4
External Dimensions (mm)	
Width	584
Depth	584
Height	1702

Supply: 220-240 Volts 50 Hz Single Phase.

Water bath

Double Walled filled with high grade glass wool insulation between the two chambers. Outer Chamber made of M.S with powder coating and Inner chamber made of Stainless Steel. Temp. Controlled by thermostatic. Temp. Range 5°C above ambient to 99°C. Supplied with 7.5 cm concentric Ring.

Inner working size of Water bath Size in inches	Rating watts	No. of Holes
35 x 25 x 10 cm	1000	6 Hole

Optional Accessories for Water bath:

- a) Microprocessor PID controller (for accuracy +/- 1 deg)

