भारतीय प्रौद्योगिकी संस्थान रोपड़
INDIAN INSTITUTE OF TECHNOLOGY ROPAR
रूपनगर, पंजाब-140001/ Rupnagar, Punjab-140001
Ph. 01881-230142, e-mail: purchase@iitrpr.ac.in

No: 1452-19/PH-10041/ISIRD/PS/ 18/12/2019

**NOTICE INVITING QUOTATION**

Sealed tenders are invited from the manufacturers/authorized dealers for the purchase of following items. You are, therefore, requested to send your sealed offer in TWO BID System i.e. Technical bid and Financial bid should be sealed in separate covers duly superscribed and both these sealed covers are to be put in a bigger cover which should also be sealed and duly superscribed on the cover of the envelope: (i) Name of the item, (ii) Reference no. of this letter; and (iii) Last date & time of receipt of tenders.

| Sl. No. | Description | Qty |
|---|---|---|
| 1. | **Lab Consumables**<br>(Detailed specification as per annexure - A) | 89 |

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|---|---|
| a). Last date of receipt of tender: | **09.01.2020 up to 03:00 PM** |
| b). Opening of tenders on: | **09.01.2020 at 03:30 PM** |
| c). EMD (In shape of DD/FDR/BG in the favour of "IIT Ropar Revenue Account" payable at Ropar to be submitted in Technical Bid"): | **₹26,000.00** |
| d). Place of submission of tenders: | **Addressed to "The Registrar" IIT Ropar on the following address:**<br><br>**The Deputy Registrar (S&P),**<br>**M. Visvesvaraya Block, IInd Floor**<br>**Indian Institute of Technology Ropar,**<br>**Permanent Campus, Rupnagar-140001** |
| e). Place of opening of bids : | **M. Visvesvaraya Block** |

**NB:**

(i) Please take note of the instructions overleaf before submitting your offer.

(ii) Tenders received late shall not be considered.

(iii) Tenders will be opened as per the above schedule in the presence of bidders, if any.

**Registrar**

## INSTRUCTIONS

**1) FOR IIT Ropar**

Rates offered should be on FOR IIT Ropar basis. Comparison will be made on Net price (including everything i.e. installation/freight/taxes etc.)

**2) Payment**

30 days credit – 100% payment will be made within 30 days from the date of successful installation of material at IIT Ropar.

OR

30 days credit – 90% payment will be made within 30 days from the date of receipt of material and inspection at IIT Ropar and balance 10% after successful installation of software/equipment and submission of performance bank guarantee valid for the warranty period plus 3 months.

**3) Warranty**

Warranty period would be as per annexures from the date of successful installation of equipment.

**4) Customs Duty**

IIT Ropar is exempted from the payment of Customs Duty. CDEC with DSIR certificate will be provided along with the purchase order (If applicable).

**5) Validity of offer**

The offer submitted should have the validity of atleast 90 days from the date of opening of bids.

**6) Opening of Bids:**

Tender will be opened as per the above schedule in the presence of bidders or their authorized representatives whosoever may wish to attend the opening. In case the due date of receipt/opening of the tender is declared a holiday in the Institute, then, the due date of receipt/opening of the tender shall be the next working day at the same time.

**7) Parts of Machine:**

Where the machine is composed of several subunits/components, the rate should be quoted for each subunit/component. The Institute reserves the right to increase or decrease the number of subunits/components and number of machine according to its requirements. The rates in ambiguous terms will render the quotation liable to rejection. The words "Not quoting" should be clearly written against any item of machines for which the tenderer is not quoting.

**8) Service Manual/Curcuit Diagram**

It is specifically required that the bidders will supply all the operating & service manuals and circuit diagrams alongwith the machines.

**9) Power Supply:**

The machines should be quoted only for 220 volts and 50Hz electricity supply. The extra requirement of line voltage, current rating etc. and the optimum climate and environment required for the machines must be stated precisely. Voltage stabilizers/isolation transformers/CVT/UPS etc., as may be required shall be listed separately. The full technical specifications and literature in respect of the voltage stabilizer etc., must be furnished.

**10) Customs Duty or Excise Duty:**

IIT Ropar is exempted from the payment of Customs Duty/Excise Duty. CDEC/EDEC with DSIR certificate will be provided along with the order (If applicable).

**11) Service Facility**

Supplier should mention about the service set up in India and how capable they are to provide after sales service.

**12) Training:**

If required, should be included as an optional item in your offer without any extra cost.

**13) Banker's details:**

Name and address of the banker of your company should be mentioned as per RTGS form attached.

**14) Reference of supply:**

It is specifically required that the bidders will supply all the operating & service manuals and circuit diagrams alongwith the machines

**15) Brochure/Templates**

The suppliers must support the quoted specifications with the help of original printed manuals of the equipments and must highlight the specification details in the original manual

**16) Liquidated Damages**

In case the firm fails to execute the supply as per the purchase order in whole or in part as per the terms and conditions of PO, IIT Ropar can impose the penalty @1% per week of the undelivered stores, subject to a maximum of 10%. It will also be open to the institute to procure the required item(s) from any other source at the risk and expense of the firm.

**17) Jurisdiction:**

The Courts of Ropar alone will have the jurisdiction to try any matter, dispute or difference between the parties arising out of this tender/contract. It is specifically agreed that no Court outside and other than Ropar court shall have jurisdiction in the matter.

**18) Force Majuere:**

Any failure of omission or commission to carry out the provision of this contract by the supplier shall not give rise to any claim by one party, one against the other, if such failure of omission or commission arises from an act of God; which shall include all acts of natural calamities such as fire, flood, earthquake, hurricane, or nay pestilence or from civil strikes, compliance with any statute and/or regulations of the Government, lockouts and strikes, riots, embargoes or from any political or other reason beyond the supplier's control including war (whether declared or not) civil war or stage of insurrection, provided that notice of the occurrence of any event by either party to the other shall be given within two weeks from the date of occurrence of such an event which could be attributed to Force Majuere conditions.

**19) Risk & Cost**

In the event of failure to carry out the contractual obligations, within the stipulated period or extended period and determination of the contract for any reason, violation of warranties etc. the IIT Ropar shall have the right to carry out the unfinished obligation at the exclusive cost and risk of the bidder/firm, after due notice and the difference so accrued shall be recoverable from the bidder/firm.

**20)** The material found defective upon opening by the supplier representative in presence of Central stores personnel/indenter of IIT Ropar or not as per tendered specifications will be lifted back at the cost and risk of the supplier. The material lying in the IIT Ropar premises would be at supplier's risk and cost.

**21) Relocation:**

It is specifically required that the bidders will supply all the operating & service manuals and circuit diagrams alongwith the machines.

**Note: The Director, IIT Ropar reserves the right to accept/reject any or all tenders without assigning any reasons thereof and also to reject the material if the same is not found conforming to the specifications, with further right to affect risk and cost of the purchases.**

**Annexure-A**

## Technical Specification of items:

| S. No. | Items specification | Qty. (Nos.) |
|---|---|---|
| 1 | Plano-Convex Lens, Ø2", f = 100.0 mm, AR Coating: 1050 - 1700 nm, Lens material: N-BK7 Glass | 2 |
| 2 | Plano-Convex Lens, Ø1", f = 50.0 mm, AR Coating: 1050 - 1700 nm, Lens material: N-BK7 Glass | 5 |
| 3 | Plano-Convex Lens, Ø1", f = 150.0 mm, AR Coating: 1050 - 1700 nm, Lens material: N-BK7 Glass | 2 |
| 4 | Plano-Convex Lens, Ø1", f = 300.0 mm, AR Coating: 1050 - 1700 nm, Lens material: N-BK7 Glass | 2 |
| 5 | Plano-Convex Lens, Ø1", f = 100.0 mm, AR Coating: 1050 - 1700 nm, Lens material: N-BK7 Glass | 5 |
| 6 | Plano-Convex Lens, Ø1", f = 200.0 mm, AR Coating: 1050 - 1700 nm, Lens material: N-BK7 Glass | 2 |
| 7 | Plano-Convex Lens, Ø1", f = 30.0 mm, AR Coating: 1050 - 1700 nm, Lens material: N-BK7 Glass | 5 |
| 8 | Plano-Convex Lens, Ø1", f = 25.4 mm, AR Coating: 1050 - 1700 nm, Lens material: N-BK7 Glass | 4 |
| 9 | Plano-Convex Lens, Ø2", f = 150.0 mm, AR Coating: 1050 - 1700 nm, Lens material: N-BK7 Glass | 2 |
| 10 | f = 10.0 mm, H = 10.0 mm, L = 20.0 mm, Plano-Convex Cylindrical Lens, Antireflection Coating: 1050-1700 nm, Lens material: N-BK7 Glass | 2 |
| 11 | Ø1" Broadband Dielectric round Mirror, 750 - 1100 nm, material: fused silica substrates, Reflectivity $R_{avg}$>99 % for S- and P- Polarization for angle of incidence from 0 to 45º or more. Designed for both CW and pulsed lasers. | 10 |
| 12 | Fixed Ø1" Mirror Mount, Metric, M4 Tapped holes. Nylon-Tipped locking setscrew. Clear aperture: Ø23.9 mm. | 5 |
| 13 | Around 48.6 mm x 48.6 mm Kinematic Platform Mount, Metric. Tapped holes: M4 (5 or more places). Adjuster thread: 1/4"-80. Angular range: ±4° or better. Post mounting: M4 counterbore (3 or more places). | 2 |
| 14 | Adjustable Clamping Arm, Metric, M4 Threaded Post. Holds optics up to 91.7 mm Tall. | 5 |
| 15 | Around 73.7 mm x 73.7 mm Kinematic Platform Mount, metric. Tapped holes: M4 (4 or more places), M6 (5 or more places). Clearance holes: M4 (4 or more places). Adjuster thread: 1/4"-80. Angular range: ±3° or better. Post mounting: M4 counterbore (7 or more places). | 2 |
| 16 | Compact Kinematic Mount for 25.4 mm Tall Rectangular Optics, Metric, M4 Taps. Tip/Tilt adjustment range: ± 4° or more. Resolution: 15 mrad per adjuster revolution or better. | 4 |
| 17 | Mirror Holder for Ø1" Optics 6.0 - 10.0 mm Thick. | 5 |
| 18 | Compact Kinematic Mirror Mount, Metric, M4 Tapped holes for vertical/Horizontal Post Mounting. Compact profile: 25.4 mm x 28.7 mm x 33.0 mm or smaller. Angular range: ± 4° or more. Removable Knobs for Smooth, Long-Term Operation. 4-40 Tapped Hole on Front Plate for Attachment of Mirror Holder. | 5 |
| 19 | Kinematic Mirror Mount for Ø1" optics with thickness ≥ 3 mm. Angular range: ± 4° or more. Resolution: 8 mrad/rev or better. Two counterbored M4 through holes allow for left or right-handed orientation. | 4 |
| 20 | Ø1" Precision Kinematic Mirror Mount with 3 Adjusters. Type of adjusters: removable knobs. Angular adjustment: ±4°, Resolution: 7.4 mrad/rev or better. Clear aperture: Ø23.9 mm or more. Mounting: #8 (M4) Counterbored Holes, 2 Places. | 4 |
| 21 | Metric M4 Setscrew and Hardware Kit. Items: M4 x 0.7 Setscrew, 4 mm Long (Qty. 495 or more). M4 x 0.7 Setscrew, 5 mm Long (330 or more). M4 x 0.7 Setscrew, 6 mm Long (330 or more). M4 x 0.7 Setscrew, 10 mm Long (185 or | 1 |

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| | more). M4 x 0.7 Setscrew, 12 mm Long (165 or more). M4 x 0.7 Setscrew, 16 mm Long (100 or more). M4 x 0.7 Setscrew, 20 mm Long (55 or more). M4 x 0.7 Setscrew, 25 mm Long (55 or more). 2 mm Hex Key for M4 Setscrews (10 or more). | |
| 22 | Metric M4 Cap Screw and Hardware Kit. Items: M4 x 0.7 Cap Screw, 6 mm Long (Qty. 80 or more). M4 x 0.7 Cap Screw, 10 mm Long (60 or more). M4 x 0.7 Cap Screw, 12 mm Long (45 or more). M4 x 0.7 Cap Screw, 20 mm Long (30 or more). M4 x 0.7 Cap Screw, 25 mm Long (28 or more). M4 x 0.7 Cap Screw, 30 mm Long (22 or more). M4 x 0.7 Cap Screw, 40 mm Long (25 or more). M4 Nut (95 or more). M4 Washer (250 or more) | 1 |
| 23 | Metric Screw Thread Adapter Kit. Items: External M4 x 0.7 and External M6 x 1.0 (Qty. 5 or more). Internal M4 x 0.7 and External M6 x 1.0 (5 or more). External M6 x 1.0 and External 1/4"-20 (5 or more). External 8-32 and External M6 x 1.0 (5 or more). Internal M4 x 0.7 and External M6 x 1.0 (10 or more). External 8-32 and External M4 x 0.7 (5 or more). External M4 x 0.7 and External M3 x 0.5 (5 or more). External M4 x 0.7 and Internal M6 x 1.0 (5 or more). Internal M3 x 0.5 and External M6 x 1.0 (5 or more). | 1 |
| 24 | Metric M6 Cap Screw and Hardware Kit. Items: M6 x 1.0 Cap Screw, 10 mm (Qty. 60 or more). M6 x 1.0 Cap Screw, 12 mm Long (55 or more). M6 x 1.0 Cap Screw, 16 mm Long (87 or more). M6 x 1.0 Cap Screw, 20 mm Long (75 or more). M6 x 1.0 Cap Screw, 25 mm Long (62 or more). M6 x 1.0 Cap Screw, 30 mm Long (51 or more). M6 x 1.0 Cap Screw, 35 mm Long (50 or more). M6 x 1.0 Cap Screw, 45 mm Long (43 or more). M6 x 1.0 Setscrew, 12 mm Long (150 or more). M6 x 1.0 Setscrew, 20 mm Long (65 or more). M6 x 1.0 Nut (120 or more). 1/4" Washer (M6 Compatible) (220 or more). | 1 |
| 25 | Metric M6 Setscrew and Hardware Kit. Items: M6 x 1.0 Setscrew, 6 mm Long (Qty. 140 or more). M6 x 1.0 Setscrew, 10 mm Long (86 or more). M6 x 1.0 Setscrew, 12 mm Long (66 or more). M6 x 1.0 Setscrew, 16 mm Long (46 or more). M6 x 1.0 Setscrew, 20 mm Long (35 or more). M6 x 1.0 Setscrew, 25 mm Long (34 or more). M6 x 1.0 Setscrew, 30 mm Long (33 or more). M6 x 1.0 Setscrew, 35 mm Long (28 or more). 3 mm Hex Key for M6 Setscrews (10 or more). | 1 |
| 26 | Benchtop Organizer with Balldriver Set and Dropper Bottles, Metric. Balldrivers: 1.5 mm, 2 mm, 2.5 mm, 3 mm, 4 mm, 5mm. | 1 |
| 27 | 9-Piece Color-Coded Hex Key Set, Metric. Hex key Size: 5mm, 4mm, 3mm, 2.5mm, 2mm, 1.5mm, 1.3mm, 0.9mm, 0.7mm. | 1 |
| 28 | IR Detector Card, 700 - 1400 nm. | 1 |
| 29 | 12" (305 mm) Magnetic Beam Height Measurement Tool, Numbered graduations: every 1" and 10 mm, graduations: 1/16" and 1.0 mm. Damage threshold: > 350 J/cm$^2$ | 1 |
| 30 | Complete 16-Position Tapped Indexing Mounting Base, Metric, M4 Taps. Indexed with 16 Positions at 22.5° Increments. Top Plate has a M4 Tap for Component Mounting. | 2 |
| 31 | 16-Position Indexing Mount for Ø1" Optics, Metric, M4 Taps. Indexed with 16 positions at 22.5° Increments. | 1 |
| 32 | Rotation Mount for Ø1" (Ø25.4 mm) Optics up to 12.9 mm (or more) thick with Adjustable Zero, Metric, M4 Tap. Dial Face Can Be Rotated Independently of Mounted Optics. 5 arcmin Vernier Scale. | 2 |
| 33 | Rotation Mount for Ø1" (Ø25.4 mm) Optics up to 12.7 mm (or more) thick, Metric, 360° Continuous or 22.5° Indexed Rotation, M4 Tap. Scale can be Rotated Independently of Mounted Optic for Alignment. 5 arcmin Vernier Scale is Ideal for Polarization Optics | 2 |
| 34 | Lens Mount with Retaining Ring for Ø1" Optics, Metric, M4 Tap, internally threaded. Compatible Retaining Ring for Mounting Optics. | 5 |
| 35 | Standard Retaining Ring for Ø1" Lens Tubes and Mounts. | 10 |
| 36 | Spanner Wrench for SM1-Threaded Retaining Rings, Graduated Scale with 0.1" (2.5 mm) Increments, Length = 3.88" | 1 |

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| 37 | Flip Mount Adapter, Metric. Rotates 90° to Clear Beam Path. Mounting options: 3 or more M4 mounting holes, one #8 counterbored hole, and Post Mountable via 1/4" (M6) Counterbore. | 2 |
| 38 | Adjustable Flip Platform, Metric, M4 Taps. 90° Angular Adjustment Range when Mounted Horizontally. 180° Angular Adjustment Range when Mounted Vertically. Side-Located Locking Cap Screw with 3/16" (5 mm) Hex. Mounting platform with 11 or more M4 tapped holes. M4 Mounting Tap on the Side of Each Plate. Four or more 8-32 Tapped Holes on the Bottom Plate for Additional Mounting Option. Engraved Tick Marks Show 15° Increments. | 2 |
| 39 | Kinematic Mount Centering Plate, Metric, M4 Nut attaches with mount. Positioning range of ~8 mm. | 4 |
| 40 | Ø25.0 mm Pillar Post, Metric, M6 Taps on both ends, L = 25 mm, M4 Adapter Included. | 2 |
| 41 | Ø25.0 mm Pillar Post, Metric, M6 Taps on both ends, L = 50 mm, M4 Adapter Included. | 2 |
| 42 | Ø25.0 mm Pillar Post, Metric, M6 Taps on both ends , L = 100 mm, M4 Adapter Included. | 2 |
| 43 | Ø25.0 mm Pillar Post, Metric, M6 Tapped holes on both ends, L = 150 mm, M4 Adapter Includes. | 1 |
| 44 | Adjustable Height Post Base for Ø25 mm Post Extensions, Metric. Convenient Vertically Accessed Locking Screw. | 4 |
| 45 | Ø12.7 mm Optical Post, Metric, Non-magnetic stainless steel material, M4 Setscrew at top, M6 Tapped hole at base, L = 50 mm | 10 |
| 46 | Ø12.7 mm Optical Post, Metric, Non-magnetic stainless steel material, M4 Setscrew at top, M6 Tapped hole at base, L = 100 mm | 10 |
| 47 | Ø12.7 mm Optical Post, Metric, Non-magnetic stainless steel material, M4 Setscrew at top, M6 Tapped hole at base, L = 20 mm | 10 |
| 48 | Ø12.7 mm Optical Post, Metric, non-magnetic stainless steel material,, M4 Setscrew at top, M6 Tap, L = 30 mm | 10 |
| 49 | Ø12.7 mm Optical Post, Metric, Non-magnetic stainless steel material, M4 Setscrew at top, M6 Tapped hole at base, L = 40 mm. | 10 |
| 50 | Right-Angle Clamp for Ø1/2" Posts, 5 mm Hex | 5 |
| 51 | Right-Angle End Clamp for Ø1/2" Posts, M6 Stud and 5 mm Hex, Metric. | 5 |
| 52 | Slip-On Post Collar for Ø1/2" Posts, M6 Thumbscrew | 5 |
| 53 | Ø12.7 mm Post Holder, Metric, Spring-Loaded Hex-Locking Thumbscrew, L=100 mm. M6 tapped hole on bottom. | 5 |
| 54 | Ø12.7 mm Post Holder, Metric, Spring-Loaded Hex-Locking Thumbscrew, L=20 mm, M6 tapped hole on bottom. | 5 |
| 55 | Ø12.7 mm Post Holder, Metric, Spring-Loaded Hex-Locking Thumbscrew, L=30 mm, M6 tapped hole on bottom. | 5 |
| 56 | Ø12.7 mm Post Holder, Metric, Spring-Loaded Hex-Locking Thumbscrew, L=40 mm, M6 tapped hole on bottom | 5 |
| 57 | Ø12.7 mm Post Holder, Metric, Spring-Loaded Hex-Locking Thumbscrew, L=75 mm, M6 tapped hole on bottom | 5 |
| 58 | Table Clamp, L-Shape | 10 |
| 59 | Table Clamp, L-Shape, Rounded Lip | 10 |
| 60 | Mounting Base, Metric, Dimension: ~25mm x 58mm x 10mm, Slots: 1, slot type: straight, slot length: ~28 mm. Mounting holes (M6): 1 or more. | 10 |
| 61 | Mounting Base, Metric, Dimension: ~25mm x 75mm x 10mm, Slots: 2 or more, Slot type: Straight, slot length: ~20 mm. Mounting holes (M6): 1 | 5 |
| 62 | Mounting Base, Metric, Dimension: ~ 50mm x 75mm x 10mm, Slots: 2 or more, Slot type: straight. Slot length: ~31.8 mm. Mounting holes (M6): 3 or more. | 5 |
| 63 | Standard Iris, Ø20.0 mm Max Aperture, Black spring steel leaves. Continually variable iris diaphragms. | 5 |
| 64 | Right-Angle Ø25.0 mm to Ø1/2" Post Clamp, Metric. | 2 |
| 65 | Ø12.7 mm Pedestal Post Holder, Metric, Spring-Loaded Hex-Locking Thumbscrew, L=54.7 mm, three high strength magnets in base to provide holding force prior to fastening. | 2 |

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| 66 | Polaris® Ø1" Mirror Mount, 3 Hex Adjusters with Side Holes, Monolithic Optic Retention, Adjuster pitch: 100 TPI Matched Actuator/Body Pairs, Mechanical Angular Range: ±4°, Mechanical resolution per adjuster: 5 µrad or less (Typical); 2 µrad or less (Achievable) Adjustment per revolution: ~7.7 mrad/rev. Less than 1 µrad Deviation after Temperature Cycling. Long-term alignment stability. Vacuum compatibility: Yes. Operating temperature range: -30 to 200 degree Celsius. | 2 |
| 67 | Polaris® Removable Knob for 1/4"-100 Adjusters with Side Holes for mirror mount (S. No. 31). | 6 |
| 68 | Post V-Clamp Mount, Metric, includes PM4/M Clamping Arm. Allows ±10° of Coarse Pitch Control. Accepts Cylindrical Objects Ranging in Diameter from 6.5 mm to 51.9 mm. Includes Quick-Release Handle for Easy Mounting to Ø1.5" Posts. | 1 |
| 69 | Dovetail Optical Rail, Metric: Width: ~19 mm. Length: 75 mm. Many M6 tapped holes for mounting flexibility. Engraved Scale for Precision Alignment of Optical Elements | 2 |
| 70 | Dovetail Optical Rail, 150 mm, Metric: Width: ~19 mm. Length: 150 mm. Many M6 tapped holes for mounting flexibility. Engraved Scale for Precision Alignment of Optical Elements | 2 |
| 71 | Dovetail Rail Carrier, Metric, 1.00" x 1.00" (25.4 mm x 25.4 mm), 1/4" (M6) Counterbored. Thumbscrew clamps with rounded, spring-loaded plastic taps. | 4 |
| 72 | Dovetail Rail Carrier, Metric, 50.8 mm x 25.4 mm, M6 Counterbored hole and two M4 Tapped holes for mounting. | 4 |
| 73 | Rail Carrier, Perpendicular Dovetail, Metric. Perpendicular travel: ~30 mm or more. | 4 |
| 74 | XYZ Translation Stage with Standard Micrometers (metric type), Travel: 25 mm. M6 Taps (Qty. 16 or more). Resolution: 500 µm Translation per Revolution or better. Vertical load capacity (max) ≥ 4 Kg. Horizontal load capacity (max) ≥ 41 Kg. Standard micrometer: 25 mm Travel Micrometer Head with 10 µm (or less) Graduations. | 1 |
| 75 | 25 mm Translation Stage with Standard Micrometer (metric type), M6 Taps ≥ 16 mounting holes. Standard micrometer: 25 mm Travel Micrometer Head with 10 µm (or less) Graduations. Resolution: 500 µm Translation per Revolution or better. Travel: 25 mm. Vertical load capacity (max) ≥ 4 Kg. Horizontal load capacity (max) ≥ 41 Kg. | 2 |
| 76 | Base Plate for above 25 mmTranslation Stages (S.Nos. 20 & 21), M6 Mounting Holes on the side that enable obstruction-free mounting onto an optical table. | 2 |
| 77 | Linear Translation Stage (Metric type), End-Mounted Micrometer, M6 Taps. Travel: 50 mm. XY stacked orthogonality < 25 µrad. Angular deviation: <150 µrad. **Platform Size:** ≤ 75.7 mm x 140.0 mm. Mounting holes: ≥ 26 M6 Taps. Vertical load capacity (max) ≥ 4 Kg. Horizontal load capacity (max) ≥ 60 Kg. Micrometer: Resolution: 500 µm Per Revolution, Travel: 50 mm. | 1 |
| 78 | Baseplate for Stages with 3" Wide Dovetails (for S. No. 23), Metric Slot Spacing: allows for coarse rotational or translational alignment of stages with table hole matrix. | 1 |
| 79 | 1/2" Zero-Order Half-Wave Plate, with Ø1" Mount, design wavelength:1064 nm. Retardance accuracy: <λ/300. Beam deviation: <10 arcsec. Surface quality: 20-10 Scratch-Dig or better. Reflectance at design wavelength (per surface) <0.25%. Damage threshold: ≥10 J/cm$^2$ (1064 nm, ≤ 10 ns, ≥ 10 Hz, ≤ Ø0.433 mm). Material: Crystalline quartz. | 1 |
| 80 | Ø1/2" Zero-Order Quarter-Wave Plate, with Ø1" Mount, design wavelength:1064 nm. Retardance accuracy: <λ/300. Beam deviation: <10 arcsec. Surface quality: 20-10 Scratch-Dig or better. Reflectance at design wavelength (per surface) <0.25%. Damage threshold: ≥10 J/cm$^2$ (1064 nm, ≤ 10 ns, ≥ 10 Hz, ≤ Ø0.433 mm). Material: Crystalline quartz. | 1 |
| 81 | 1" Polarizing Beamsplitter Cube, Boradband AR-coating (all four surfaces): 700 - 1300 nm (AR coating reflectance < 1%). Extinction ratio: $T_P$:$T_S$ ≥ 1000:1. Transmission efficiency: $T_P$> 90%, Reflection efficiency: $R_S$: > 99.5%. Transmitted beam deviation: < 5 arcmin. Reflected beam deviation: 90°±5 arcmin or less. Clear | 4 |

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| | aperture: >80% of dimension. Surface flatness: ≤ λ/4. Dimension tolerance: ≤ ±0.25 mm. High damage threshold: Damage threshold: ≥10 W/cm$^2$ (CW) and ≥0.25 J/cm$^2$ (pulse). | |
| 82 | 1" 50:50 Non-Polarizing Beamsplitter Cube, Boradband AR-coating (all four surfaces):700 - 1100 nm (AR coating reflectance < 1%). Broadband beamsplitter coating on internal diagonal surface. Clear aperture: >80% of entrance face. Material: N-BK7 Glass. Dimension tolerance: +0.0/-0.2 mm or small. Transmitted beam deviation: ≤ 5 arcmin. Surface quality: ≤ λ/10. Damage threshold: ≥10 W/cm$^2$ (CW) and ≥0.25 J/cm$^2$ (pulse). Overall performance: $T_{abs}$ = 47 ± 10%, $R_{abs}$ = 47 ± 10%, and $T_{abs}$ + $R_{abs}$ > 90%, $\|T_s - T_p\|$ < 10% and $\|R_s - R_p\|$ < 10%. | 4 |
| 83 | 3-Axis MicroBlock Compact Flexure Stage, Differential Micrometers, Metric Taps, Travel range: ≥ 4 mm (coarse) and ≥ 300 µm (Fine), Coarse adjustment: ≤ 500 µm/rev, Fine adjustment (with Vernier scale): 50 µm/rev. Deck height ≤ 62.5 mm, optical axis height ≤ 75 mm, Crosstalk: <20 µm/mm, Thermal stability: 1 µm/°C or better. Long-term stability. | 2 |
| 84 | Metric Adapter Plate with M6 and M4 Taps. Array of ≥13 (M6) and ≥ 12 (M4) tapped mounting holes | 2 |
| 85 | Replacement Mounting Plate for Flexure Stages with M4, M3, and M2 Taps (metric type). Two 3 mm wide central keyways for aligning multi-axis stage accessories. M3 taps ≥16, M2 taps ≥4, and M4 taps ≥9. | 2 |
| 86 | Adjustable Kinematic mount for rectangular optics up to 1.3" (33 mm) tall (right-handed type). Mounts optics ≥ 65 mm wide. Tip/Tilt adjustment range of ≥ ±4°, less or equal to 8 mrad per Adjuster Revolution. | 2 |
| 87 | Translating Lens Mount for Ø1" Optics, Metric, Includes retaining ring. High Resolution Adjusters Provide 250 µm/rev or better for Micron Sensitivity. Tip/Tilt Deviation: <100 µrad. Include bottom-Located M4 Tap for Direct Mounting to a Ø1/2" Post. | 2 |
| 88 | Ø2" Precision Kinematic Mirror Mount, 3 Adjusters. Type of adjusters: removable knobs. Angular adjustment: ±4°, Resolution: 4.8 mrad/rev or better. Clear aperture: Ø49.3 mm or more. Mounting: #8 (M4) Counterbored Holes, 6 Places. Adjuster thread: 1/4"-80. | 2 |
| 89 | Clamping Fork (Secures pedestal-style mount to optical table) with captive screws for Ø1/2" Post Holders and Ø1" Posts. 44.8 mm long Counterbored Slot, Clamping with M6 x 1.0 Captive Screw. | 5 |

**Acceptance Criteria:**

1. The components should be from any standard company with good quality.
2. A well-documented compliance report should be submitted by the vendor.
3. Items quoted should be warranted against manufacturing defects for a period of 12 months.
4. Quote for a partial list of items will not be accepted.
5. The specifications of product are very critical for the use, so these things should be clearly mentioned by the vendor.
6. The components should be delivered in six weeks after issuing purchase order.

**Annexure-B**

**COMPLIANCE SHEET**

| Sl. No. | Specifications as per tender (point wise) | Compliance of the quoted model | Compliance of alternate model, if any | Remarks (Deviations) |
|---|---|---|---|---|
| | | | | |
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**Annexure: C**

**FORMAT FOR THE SUBMISSION OF RATES – PRICE BID**

(To be submitted on the letterhead of the company/firm)

Name of the Manufacturer _____

Make of the Product _____

Model Number (If any) _____

County of Origin _____

| Sl. No. | Particulars | Rate/Unit |
|---|---|---|
| 1 | Cost of the Product (FOB value including Indian Agency Commission) | |
| 2 | Air freight, Insurance charges etc. (In case of import item) | |
| 3 | Total CIF value up to New Delhi Airport (In case of import item)/ Total FOR IIT Ropar value (In case of indigenous item) | |
| 4 | Percentage of Indian Agency Commission (IAC) payable to the Indian Agent, if any (In case of import item). | |
| 5 | FOR charges in Rupees including clearance, loading & unloading, transportation and insurance from New Delhi Airport to IIT Ropar (In case of import item) | |

This is certified that the rates quoted above are not more than the rates charged from any other Institute/ Department/Organization.

**Note:**
**1. Taxes and other levies, if any are to be clearly specified in the bid.**