

ANNEXURE – 1

Bid / offer for supply and installation of Furniture

At

**Indian Institute of Geomagnetism
Shillong Geophysical Research Centre
Wilton Hall Estate, 3½ Mile, Upper Shillong,
Shillong-793 005**

ANNEXURE-I

REQUIREMENTS AND SCOPE OF WORK

S.No.	Description	Qty.	Rate	Amount
1.	<p>Almirah (small)</p> <p>1. Product Size: 765 mm (W) x 440 mm (D) x 1270* mm (H) *- Height without leveler.</p> <p>2. Construction & Material <input type="checkbox"/>Welded construction. 0.8 mm thk CRCA for Shelf & 0.9 mm thk CRCA for all other components.</p> <p>3. Locking • 3 way locking mechanism with shooting bolt.</p> <p>4. Shelving : • Height wise Adjustable Shelves 3 Nos. • Uniformly Distributed Load Capacity per full shelf is 80 Kg maximum</p> <p>5. Finish : Epoxy Polyester Powder coated to the thickness of 50 microns (+/-10)</p>	12		
2.	<p>Conference Table with 8 Seater</p> <p>Size: W2400 x D 1200 X H750</p> <p>1. Laminate: 32mm Thick (± 1mm), Base Material - 18+12mm MDF board, Post-laminated work-surface with 0.6mm laminate on top and 0.6mm laminate on bottom 2mm Thk PVC edge banding of straight top side edge and Specially designed chamfered T-beading fixed at bottom side edge for sleek look.</p> <p>2. Veil and Cross Member: 18mm Thick (±1mm), Base material - 16mm Plain particle board, Post-laminated with 0.6mm Top laminate on either side, 2mm Thk and 0.8mm Thk PVC edge banding of matching colour on outer edges of Veil, 0.8mm Thk PVC edge banding of matching colour on outer edges of cross member</p> <p>3. Legs : Made from 1.6mm Matt silver Anodized Aluminium extrusion. Legs assembled together with a plastic glide holder at bottom and 5mm thick MS powder coated sheet at top. The Plastic glide holder is having provision for wire entry and glide fixing The wire carrying is facilitated through the hollow space between two leg extrusions and the wires are concealed</p>	1		

	<p>between removable rigid PVC extrusion in the leg</p> <p>4. Access Flap and Switch Mounting Tray: Made from Matt silver Anodized Aluminium extrusion and plastic moulded components to facilitate access of Electrical/Data/Voice sockets access from Top. Powder coated switch mounting tray made from 0.8mm and 1.2mm MS sheet. Switches to be mounted on tray as per requirement. Provision for mounting 8-Module Anchor Roma switch plate on switch mounting tray.</p>			
3.	<p>Conference Chair SEAT/BACK ASSEMBLY: The seat and back are made up of 1.2 cm. thick hot-pressed plywood, upholstered with fabric upholstery covers and moulded Polyurethane foam. The back foam is designed with contoured lumbar support for extra comfort. The seat has extra thick foam on front edge to give comfort to popliteal area. High back size 47.5 cm (W) x 69.5 cm (H) Mid back size 47.5 cm. (W) x 58.0cm. (H) Seat size 47.0 cm. (W) x 48.0 cm. (D) 2) Polyurethane foam: The Polyurethane foam is moulded with density = 45 +/-2 kg/m and Hardness = 20 +/- 2 at 25% compression. 3) Armrests: The one-piece armrests are injection moulded from black Co-polymer Polypropylene. 4) Center Tilt Synchro Mechanism : The mechanism is designed with the following features: <ul style="list-style-type: none"> • 360⁰ revolving type. • Upright position locking. • Tilt tension adjustment. • Seat/back tilting ratio of 1:3 (60 seat tilt/180 back tilt) 5) Tubular Frame: The powder coated tubular frame is cantilever type & made of dia 25.4mm x 2mm thk M.S. ER.W. Tube. 6) Pneumatic Height Adjustment : The pneumatic height adjustment has an adjustment stroke of 12.0 cm. 7) Telescopic Bellow Assembly : The bellow is 3 piece telescopic type and injection moulded in black Polypropylene. 8) Pedestal Assembly: The pedestal is injection moulded in black 30% glass-filled Nylon and fitted with 5 nos. twin wheel castors. The pedestal is 66.0cm pitch-center dia. (76.0 cm with castors.)</p>	8		
4.	<p>ALMIRAH (BIG): Multi bend construction and inter locking design and full length over lapping doors and side. Three-way bolting mechanism. Spot welding & Co2 welding. Anticorrosion treated components oven baked powder coating process. DIMENSION OUTER – 1981 x 916 x 486 1. Top, bottom, LH & RH sides and back material thickness = 0.9 mm 2. Removable RH & LH main door with stiffeners material thickness = 0.9 mm 3. Storvel plain comes with 4 plain adjustable shelf of</p>	3		

<p>thickness = 0.8 mm.</p> <p>4. Net weight (w/o carton) = 73.5 kg. Gross weight (with carton)=78.5 Kg.</p> <p>RAW MATERIAL (MILD STEEL)</p> <p>1) MILD STEEL: - Cold rolled closed annealed steel used for thickness 0.6 to 1.2 mm.</p> <p>Range as per IS-513 1994 (Reaffirmed in 1998). Grade 'D' OR 'DD' quality. Chemical composition, tensile properties, bend test, surface, flatness, hardness as per IS-513 1994.</p> <p>2) MILD STEEL:- Hot rolled steel used for thickness 2.0 TO 3.15 mm range as per IS-1079.1994 'D' quality OR IS-10748. 1995 grade II. Chemical composition, tensile properties, bent test, surface, flatness, hardness as per IS-1079 1994.</p> <p>Surface free from lamination, surface flaws, roll mark, dent and lines etc.</p> <p>B) PRESS SHOP(NOTCHING & BENDING)</p> <p>a. Use of Godrej LVD press brake machine, turret, ABL (auto blanking line) for notching and bending. use of precision tooling for high process capability ensures repeatability of out put. stiffeners & rack strip are roll formed for greater accuracy and productivity.</p> <p>b. First piece inspection is done as per procedure FS/QAD/P/16 & Then random inspection as per work instruction FS/QAD/W/20. ACCEPTANCE</p> <p>C) ASSEMBLY</p> <p>a. Use of CO2 welding & spot welding to give spatter less welding. assembly using standard fixtures to give dimensional accuracy. assembly of product using cell type concepts. All welding process are qualified as per code for welding process Plant-13.</p> <p>D) SPRAY PHOSPHATING</p> <p>a. Eight stage spray phosphating line, followed by drying in oven. no material handling take place. better cleaning & coating uniformity by means of direct spray, faster treatment speed. to increase the corrosion resistance of the powder coated products.</p> <p>b. Iron phosphate deposit on components is 0.3 gm / m² minimum. as per IS-3618 1966 reaffirmed in 1991 and IS-6005 1998.</p> <p>c. Pointage checked 3 times in a shift. Coating weight once in a shift. Records maintained in surface coating dept plant 13 storewel divisions.</p> <p>d. Process qualification is done on monthly basis internally & externally once in three month as per procedure FS/QAD/P/06.</p> <p>E)POWDER COATING</p> <p>1) Epoxy-polyester powder are specially formulated to provide excellent finish, outstanding hardness and high resistance to chemical, thermal and mechanical stress.</p> <p>2) 100% visual inspection as per work instruction. process qualification done once a month internally and once in three month externally. Records maintained in Plant-13.</p> <p>3) It passes following test as per standards.</p>			
--	--	--	--

	<p>NOTE :</p> <ul style="list-style-type: none"> _ BS - BRITISH STANDARD _ DIN- DEUTSCHE INDUSTRIAL NORMEN. _ ASTM – AMERICAN SOCIETY FOR TESTING MATERIALS _ ISO – INTERNATIONAL ORGANIZATION FOR STANDARDIZATION _ IS- INDIAN STANDARD <p>F) FINAL FITTING: (STORWEL PLAIN) all fitting done with help of quality accessories. 100% visual inspection as per procedure FS/QAD/P/19 & work instruction FS/QAD/W/18.</p> <p>a. Locks: (main door & locker lock) 6 lever mazak zinc plated godrej lock.</p> <p>b. FASTNERS: Zinc / Chrome plated standard fasteners used.</p> <p>c. HANGING ROD: Nickel, Chrom plated hanging rod. OF 19 mm OD, length = 909 mm.</p> <p>d. TIE BAR: Powder coated (black) aluminium tie bar.</p> <p>e. Handle: Chrome plated mazack handle.</p> <p>f. Mirrors: 5 mm thick passes xylene rubtest, salt spray test and waviness test as per is-3438 –1977.</p> <p>g. Cartons& poly bags: 5 ply carton used with bursting strength of 10Kg/cm2 Polythene Bag of (HMHD) 100 Gauge.</p>			
5.	Book Rack	6		
6.	<p>Study Table Size : W1200 x D600 x H750 Table should have one drawer on the RH side Top Panel should be made of 18mm Thick pre laminated particle board with PVC lipping. Other panels are made of 18mm thick pre laminated particle board with PVC lipping. Drawer bottom panel made of 9mm thick pre laminated particle board. locking system on drawer.</p>	2		
7.	<p>Chair 1) SEAT/BACK ASSEMBLY: The seat and back are made up of 1.2 cm. thick hot pressed plywood upholstered with fabric and moulded Polyurethane foam together with seat and back covers. The back foam is designed with contoured lumbar support for extra comfort. SEAT SIZE: 45.0cm. (W) X 42.0cm. (D) BACK SIZE: 39.0cm. (W) X 47.0cm. (H) 2) SEAT / BACK COVERS: The seat and back covers are injection moulded in black Co-polymer Polypropylene. 3) POLYURETHANE FOAM: The polyurethane foam is moulded with density = 45 +/-2 kg/m3 and Hardness = 20 +/- 2 on Hampden machine at 25% compression. 4) ARMREST ASSEMBLY: The armrest-assemblies are available in three different types:</p>	10		

	<p>T - TYPE ASSEMBLY: The armrests are made of black integral skin polyurethane with 50-70 Shore 'A' Hardness and reinforced with M.S. insert. The P.U.armrests are then fixed to black powder coated armrest brackets made of 0.5cm. thk. HR steel fitted with claddings made of injection moulded Polypropylene. Approx. size of the armrest is 24.0cm.(L) x 6.4(W).</p> <p>R - TYPE ASSEMBLY: The one-piece armrests are injection moulded from black Nylon. The armrests are fitted to the seat with armrest connecting brackets made of 0.5cm. thk. HR steel.</p> <p>A - TYPE ASSEMBLY: The armrests are made of black integral skin polyurethane with 50-70 Shore 'A' Hardness and reinforced with M.S. insert. The P.U.armrests are then fixed to black powder coated height adjustable armrest brackets made of 0.5cm.thk.HR steel. Approx. size of the armrest is 24.0cm.(L) x 6.4(W).The armrest height can be adjusted up to 5.0cm.</p> <p>5) PERMANENT CONTACT MECHANISM: The permanent contact mechanism is designed with the following features: 360° revolving type. 14° maximum back-tilt only. Tilt tension adjustment.</p> <p>6) PNEUMATIC HEIGHT ADJUSTMENT: The pneumatic height adjustment has an adjustment stroke of 12.5 cm.</p> <p>8) TELESCOPIC BELLOW ASSEMBLY:The bellow is 3 piece telescopic type and injection moulded in black Polypropylene.</p> <p>9) PEDESTAL ASSEMBLY: The pedestal is injection moulded in black 30% glass-filled Nylon and fitted with 5 nos. twin wheel castors (castor wheel dia. 5.0cm.). The pedestal is 54.0 cm. pitch-centre dia. (64.0 cm with castors).</p> <p>10) TWIN WHEEL CASTORS: The twin wheel castors are injection moulded in 30% Glass Filled black</p>			
<p>8.</p>	<p>Office Table Size : W1500 x D750 x H750 Table is provided with 3 drawer attachment on LHS and 1 drawer + hinge drawer unit on the RHS Top panel is made of 18mm thick pre laminated particle board with PVC lipping Other panels: Made of 18mm thick pre laminated particle board with PVC lipping. All drawer bottom panels made up of 9mm thick pre laminated particle board. Locking system on top drawers</p>	<p>8</p>		
<p>9.</p>	<p>Single Bed with Mattress and pillow Overall Size : Length - 2060.0 mm Width - 1131.0 mm Height - 930.0 mm Material : Bed Structure consist of metal frames made of M.S. Channels in 1.0 mm Thickness. Horizontal plinths and bottom plinth are made of 25 mm</p>	<p>5</p>		

	<p>Thick Prelaminated Particle Board. Head board is made of 18 mm thick Prelaminated Particle board with imported H.D.F. foil wrapped decorative trims fixed to it. Tail board is made of 18 mm thick Prelaminated Particle board with imported H.D.F. foil wrapped decorative trims fixed to it. Side rail is made of 18 mm thick Prelaminated Particle board with imported H.D.F. foil wrapped decorative trims fixed on to it. Mattress panels of Bed are made of 18 mm thick Prelaminated Particle Board with all the exposed edges are edge banded with 0.8 mm thick PVC edge banding. Construction : Knock Down construction. Packets : 1 Bed in 1 packets. Finish : 18 mm thick Prelaminated Particle Board is in Walnut shade.Metal frames are powder coated in shade Mat Black to the thickness of 50 microns(+/-10). Mattress Technical Specification (78X36) Quilted, Sandwich Construction : Round Corners, Hilton Density 18 Gm/Dcm, Coir (Both side) 15 MM Thickness, Density 50 Gm/dcm, DRC 22, Quilting combination/Layers : Pilled Foam – (quilting (one side) 12MM Thickness, Filled Foam Density 9Gm/dcm Total mattress thickness 102MM, Fabric 24 GSM, Fabric Poly cotton, * Finish product thickness should be measure from outer to outer surface . Tolerance +5mm Pillow Size in cm :40 x 60, Organic cotton fabric, Anti Fungal& anti allergic</p>			
<p>10.</p>	<p>Queen size bed with Mattress and pillow Length - 2060.0 mm Width - 1731.3 mm Height - 930.0 mm Material : Bed Structure consist of metal frames made of M.S. Channels in 1.0 mm Thickness. Horizontal plinths and bottom plinth are made of 25 mm Thick Prelaminated Particle Board. Head board is made of 18 mm thick Prelaminated Particle board with imported H.D.F. foil wrapped decorative trims fixed to it. Tail board is made of 18 mm thick Prelaminated Particle board with imported H.D.F. foil wrapped decorative trims fixed to it. Side rail is made of 18 mm thick Prelaminated Particle board with imported H.D.F. foil wrapped decorative trims fixed on to it. Mattress panels of Bed are made of 18 mm thick Prelaminated Particle Board with all the exposed edges are edge banded with 0.8mm thick PVC edge banding. Construction : Knock Down construction. Packets : 1 Bed in 1 packets. Finish : 18 mm thick Prelaminated Particle</p>	<p>1</p>		

	<p>Board is in Walnut shade. Metal frames are powder coated in shade Mat Black to the thickness of 50 microns(+/-10). Mattress Technical Specification (78X36) Quilted, Sandwich Construction : Round Corners, Hilton Density 18 Gm/Dcm, Coir (Both side) 15 MM Thickness, Density 50 Gm/dcm, DRC 22, Quilting combination/Layers : Pilled Foam – (quilting (one side) 12MM Thickness, Filled Foam Density 9Gm/dcm Total mattress thickness 102MM, Fabric 24 GSM, Fabric Poly cotton, * Finish product thickness should be measure from outer to outer surface . Tolerance +5mm</p> <p>Pillow Size in cm :40 x 60, Organic cotton fabric, Anti Fungal& anti allergic</p>			
11.	<p>Sofa Set</p> <ul style="list-style-type: none"> • Material : Fabric • Shade : Black/ White and Brown • Thickness : 1 mm • Breaking Load (N) : Warp 1327 Weft 1228 • Elongation at break (%) : Warp 27.5 Weft 34.6 • Colour Fastness to Rubbing (Dry/Wet) (scale 1- 5) :Dry = 4 Wet = 34 <p>Frame :</p> <ul style="list-style-type: none"> • Material : Combination of plywood and pine Wood • Plywood thickness : 12 mm (moisture resistance and termite free) • Pinewood cross section (without knots) <ul style="list-style-type: none"> - 22x64 mm - 34x64 mm - 16x35 mm • Moisture content : 10 -12 % <p>Foam Seat :• Material : Slab stock foam • Density : Base 28 kg/m³ and super soft 32 kg/m³ at top Back :• Material : Slab stock foam • Density : Super soft 32 kg/m³ with a layer of siliconized conjugated polyester fiber of 200 gsm</p> <p>Webbing • S spring of dia. 3.8 mm mounted on seat structure using plastic spring mounting clip.</p> <p>Legs : Rubber wood: Sofa : Overall Height Width 1 Seater 3 ft 3.5ft 3 Seater 3 ft 6.3ft</p>	1		
12.	<p>Bed Side Table Specification for Bed Side Table Overall Size : Depth - 450.0 mm Width - 440.0 mm Height - 510.0 mm Material : Body and drawer panels of Bed side table are made of 18 mm thick Prelaminated Particle Board. All the exposed edges are</p>	2		

	<p>edge banded with 0.8 mm thick PVC edge banding. Side panels are made of 18 mm thick Prelaminated Particle board with imported H.D.F. foil wrapped decorative trim fixed on to it.</p> <p>Hardware : The high quality hardware used like Roller slides, Hinges , minifix, dowels is of make Hettich..</p> <p>Construction : Knock Down construction.</p> <p>Packets : 1 packet.</p> <p>Finish :. 18 mm thick Prelaminated Particle Board is in Walnut shade.PDF created</p>			
13.	<p>Dining Table (Six seater)</p> <p>Material : Wooden Derivative Table Top : MDF with Okume Veneer Table Legs : Solid Wood Finish : Veneer finish Thickness: 19 mm for Table top Colour : Brownish Black Design : Rectangular table with L shaped Legs Seating Capacity : 6 seater</p> <p>Size: Width 3 Ft X Length 5 Ft. X Height 2.5 Ft</p>	1		
14.	<p>Dining Chair:</p> <p>Material : Complete Solid Rubber Wood</p> <p>Coating : PU coated</p> <p>Upholstery : PVC</p> <p>Colour : Dark Coffee</p> <p>Design : Sleek & contemporary look with HiBack support</p> <p>Size: Seat Width 1.4 ± Ft X Chair Height 3 ± Ft</p>	6		
15.	<p>Utensil Stand</p> <p>UTENSIL STAND</p> <p>load carrying capacity.</p> <p>Designed in accordance with IS:800 & IS: 801 standard technology and anti corrosion properties.</p> <p>Size 7 ft in height with 7 panels of 24” each.</p>	2		

Sign and Seal of bidder:

Date: