

**STORE AND PURCHASE SECTION  
NATIONAL INSTITUTE OF TECHNOLOGY  
KURUKSHETRA, HARYANA -136119**

**NOTIFICATION**

**No. Store/2024/**

**Dated:13.12.2024**


**Subject: Common specifications of generic nature related to the purchase of furniture for office rooms and laboratories.**

The competent authority has approved the attached specification (Annexure A & B) related to the subject matter with the following instructions:

1. Furniture should be aesthetically good and ergonomically suitable and long lasting.
2. Green compliance should be adhered to
3. Furniture should be fitting to room size and as per the norms of faculty (i.e. A.P/ Assoc. Prof/ Prof. or equivalent officers and Staff).

The same is hereby circulated for processing the procurement files related to furniture items.

This is for information and further necessary action at your end please.

  
13-12-24  
Assistant Registrar (Stores)

To,

Head of all Departments/ Sections/ Coordinator of Schools.

Copy to:-

1. Assistant Registrar to Director for kind information of the Director.
2. PA to Registrar

## Technical Specification of furniture for office rooms

	Specification
1	<p><b>Executive Table</b></p> <p>Primary Work Surface shall be Made of 25mm thick MDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top soft closing access flap with in-build power box are provided on work surface for wire management.</p> <p>Secondary Work Surface shall Made of 25mm thick MDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top. Modesty Panel shall be Made of 25mm thick MDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top.</p> <p>Under structure shall be Made of 25mm Thick Pre-laminated twin board of E1-P2 grade and approved shade confirming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping. Integrated Pedestal shall be Made of 25mm Thick Pre-laminated twin board of E1-P2 grade and approved shade confirming to IS-12823:1990, Edge banded with matching 2 mm thick PVC lipping.</p> <p>Drawer fronts shall be made of 25mm thick MDF one side pre-laminate board confirming to IS-14587:1998 with 0.4mm PVC membrane pressed on to top. Pedestal construction shall be BOX-BOX-FILE type which Uses powder coated 400 MM long metal. Panel Drawer Slides. Drawer extension shall be 325 MM. Drawers shall have a soft closing &amp; anti slam mechanism. Handles shall be provided for ease of opening. Pedestals shall be provided with lock for security.</p> <p>Overall size of table shall be 1800Wx1800Dx750H mm.</p>
2	<p><b>Steel Almirah</b></p> <p>Construction Type : Welded</p> <p>Shelf thickness of 0.7 mm</p> <p>Back thickness of 0.8mm</p> <p>Door thickness of 0.8mm (high yield strength)</p> <p>All other components thickness of 0.9mm. It shall be Made of CRCA 'D' grade high yield strength as per IS:513.</p> <p>Handle Type: Mazak handle and Three-way locking mechanism with Shooting Bolts.</p> <p>Shelf Type: Adjustable</p> <p>Uniformly Distributed Load Capacity of shelf : max 40 Kg.</p> <p>Finishing shall include Epoxy powder coated to the thickness of 50 microns (+/- 10).</p> <p>Overall size of Almirah shall be 916mm (W) x 486mm (D) x 1981mm (H)</p>
3	<p><b>High Back Chair</b></p> <p>Seat/Back Assembly: The Cushioned seat shall be made of Injection molded Plastic outer &amp; inner. Plastic Inner shall be upholstered with leatherette and moulded High Resilience (HR)</p>



Polyurethane foam of Density  $45 \pm 2$  kg/m<sup>3</sup>, and hardness load  $16 \pm 2$  kgf as per IS:7888 for 25% compression. The Cushioned back shall be made of PU Foam with insitu molded MS E.R.W Round Tube of size  $1.9 \pm 0.03$  cm x  $0.16 \pm 0.0128$  cm. It shall be upholstered with Leatherette. Seat SIZE shall be 47.0 cm. (W) x 48.0 cm. (D). HIGH BACK SIZE shall be 47.7 cm. (W) x 76.4 cm

Armrest: The armrest top shall be moulded from polyurethane (PU) and mounted on to a drop lift adjustable type tubular armrest support made of  $03.81 \pm 0.03$  cm x  $0.2 \pm 0.01$  cm thk M.S. E.R.W tube having chrome plated finish. The armrest height shall be adjustable up to  $6.5 \pm 0.5$  cm in 5 steps.

Active Bio- Synchro Mechansim:

The adjustable tilting mechanism with the following features:

360° revolving type.

Front-pivot for tilt with feet resting on ground and continuous lumbar support ensuring more comfort.

Tilt tension adjustment shall be operated in seating position.

5-position Tilt limiter shall giving option of variable tilt angle to the chair.

Seat/back tilting ratio of 1: 2.

The mechanism housing shall be made up of HPDC Aluminium black powder coated.

Seat Depth Adjustment: Seat depth adjustment shall be integrated in the seat through a sliding mechanism. Seat depth adjustment range shall be of  $6.0 \pm 0.5$  cm.

Back Support: Back Frame shall be connected to the Up/Dn mechanism housed in Plastic T spine. It shall be adjusted in the range of  $7.42 \pm 0.5$  cm for the comfortable back support to suit individual need.

Pneumatic Ht. Adjustment: The pneumatic ht adjustment shall have an adjustment stroke of  $10.0 \pm 0.3$  cm.

Pedestal Assembly: High Pressure Die cast polished Aluminium and fitted with 5 nos. twin wheel castors. The pedestal shall be  $65.0 \pm 0.5$  cm. pitch-center dia. ( $75.0 \pm 1.0$  cm. With castors.)

Castors: The twin wheel castors shall be injection molded in black PP having  $6.0 \pm 0.1$  cm wheel Diameter

Overall Dimensions of Chair:

Seat Height -43.1-53.1cm,

Height -112.7-130.2cm.

Width-76.1 cm and Depth-76.1 cm.

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Steel Bookcase

Overall size shall be 914mm (W) x 320mm (D) x 1742mm (H).

The Bookcase shall be made from prime quality CRCA steel with anti-rusting treatment.

Construction Type: Rigid Knock Down Construction.

Top Pannel thickness: 0.7mm

Back Pannel thickness : 0.7mm

Side Pannel thickness : 0.7mm high yield CRCA

other components shall be made from 0.8mm CRCA.

Each door shall have a 6 Lever Cam Lock with Common Key.

3mm thick glass should be used in each door for clear inside vision which shall be secured in a metal frame through a rubber gasket.

Scissor Mechanism should be provided in each door for receding inside the top of every compartment.

Each door should be provided with plastic side end caps as handle.

Each compartment shall have a storage shelf with a UDL capacity of max 80 Kg.

The Bookcase shall have 18mm PLB Top straight edge with PVC lipping.

The finishing shall include Epoxy powder coated to the thickness of 50 microns (+/- 10).

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**Visitor Chair**

The seat shall be cushioned seat made of injection molded plastic outer & inner.

Plastic inner shall be upholstered with leatherette and molded high resilience polyurethane foam of density  $45 \pm 2 \text{ kg/m}^3$ , & hardness load of  $16 \pm 2 \text{ kgf}$  as per IS:7888 for 25% compression.

Seat Size shall be 47.0 W cm x 48.0 D cm.

The back shall be cushioned made of PU foam with insitu molded M.S. ERW round tube of size  $1.9 \pm 0.03 \text{ cm} \times 0.16 \pm 0.0128 \text{ cm}$ , upholstered with leatherette.

The back size shall be 47.7 W cm x 76.4 D cm.

The tubular frame shall be cantilever type and made of  $\text{Ø}2.54 \pm 0.03 \text{ cm} \times 0.2 \pm 0.016 \text{ cm}$  thick SS 202 tube. The back connected to frame shall be through chrome plated high pressure die casted connector pipe.

Overall size of visitor chair shall be 60.9 W cm x 64.2 D cm x 98.2 H cm x 44.8 Seat Height cm.

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**Computer Chair**

Seat/Back Assembly: The cushioned seat assembly shall consists of seat base moulded in glass-filled Poly-amide, moulded Polyurethane foam & upholstered with high stretch knitted polyester fabric.

The cushioned back assembly shall consists of back inner moulded in Polypropylene in-situ moulded with Polyurethane foam & upholstered with high stretch knitted polyester fabric

Back Size: 45.5 cm. (W) x 53.0 cm. (H) Seat Size : 48.5 cm. (W) x 49.0 cm. (D).

High Resilience (HR) Polurethane Foam : The HR polyurethane foam shall be used in seat and back cushion is moulded in Density Min 48 kg/m<sup>3</sup>, and hardness load  $15 \pm 2$  kgf as per IS:7888 for 25% compression.

Tilt Mechanism, Spines & Spine Connector:

The seat and back shall be firmly connected to the base frame and shall be cantilevered in such a way that it gives a multi-dimensional movement possibility just with a simple lean on the sides or back, without need for complex manual adjustments.

The cantilevered seat shall offers impact cushioning while sitting and synchronises with the back movement during posture changes.

The "S" shaped spines moulded in high strength glass-filled Poly-amide and the spine connector moulded in glass-filled Poly-amide form the back-spine structure involved in multi-dimensional recline motion.

The variable tilt angle recline shall be adjusted with 3 position Tilt Limit feature which should be inbuilt in seat base and the tension (return force) should be user weight dependent.

Armrests:

The assembly shall consists of armrest housing sliding over the armrest structure, both moulded in glass-filled Poly-amide:

The height adjustment feature should be button operated having adjustment of  $6.6 \pm 0.5$  cm. The Armrest Top should be made up of integral skin PU moulded over plastic inner moulded in glass-filled Poly-amide.

Pneumatic Height Adjustment :

The seating height shall be adjusted with a pneumatic gas-lift having an adjustment stroke of  $9.2 \pm 0.3$  cm.

Pedestal Assembly:

The pedestal shall be injection moulded in glass-filled Poly-amide and fitted with 5 nos. twin wheel castors. The pedestal shall be  $66.0 \pm 0.5$  cm. pitch centre diameter and  $76.0 \pm 1.0$  cm. with castors.

Castors: 5 nos. twin wheel castos shall be injection moulded in Poly-amide having  $5.0 \pm 0.1$  cm wheel diameters assembled to the pedestal.

Overall Dimensions of Chair :

Seat Height - min 44.5 to max 53.8 cm. Height - min 99.5 to max 108.8 cm.

Width-76.0 cm and Depth-76.0 cm.

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### Computer Table

Overall Size of the table shall be 1200 W x 600 D mm x 750 H mm.

*[Handwritten signatures]*

<p>Worksurface shall be made of 18 mm thk Pre-laminated particle board.</p> <p>All the edges shall be sealed with 2 mm thick PVC edge band all around. One drawer and wooden KBPT shall be providing in the table.</p> <p>Load bearing capacity: Table Top: 35 Kg. Shelf: 15 Kg. Drawer: 5.0 Kg. Construction : Knock down type.</p>
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**Other conditions:**

1. To ensure quality of furniture, the firms should possess at least Seven of the following prevalent certifications related to quality & safety possessed by furniture certification manufacturers ISO 9001, ISO 14001, BIFMA Level 2, UL Greenguard, ISO 18001, ISO 45001/50001, AIOTA and IGBC



**Technical Specification of furniture for Laboratories**

1	COMPUTER TABLE WITH SCREEN	<p>Worktop: Worktop shall be made of 25MM thick Pre-Laminated Board conforming to IS: 12823. All the edges of work surface shall be provided with machine pressed 2 mm thick PVC lipping glued with hot melt EVA glue. The worktop shall be complete with provisions for screen mounting as well as for wire management.</p> <p>Wire Management: It shall be a part of the understructure and can be in the form of enclosed metal tray or 2 level enclosed channel to provide concealed wire management throughout the cluster formation. Wire riser leg or independent wire risers shall be provided.</p> <p>Understructure : The slanted legs shall be connected to the understructure with the help of PDC Connectors to provide a stable and sturdy base for the worktops. Modesty panel shall be of Metal 1.2 mm thick CRCA.</p> <p>Screen: The screen shall be made of 3mm thick MDF Board + batten made of 12 mm thick MDF Board + 3 mm thick MDF Board. Honey comb blocks shall be used to fill in the void space. Groove of 3 mm shall be provided on the periphery to accomodate the fabric pasted on either side to be tucked in and allow a PVC flexible T-Mould to give clean edge. The screen shall be of 300 mm Height.</p> <p>Overall size of the table shall be 900 W mm x 600 D mm x 750 H mm.</p>
2	COMPUTER TABLE W/O SCREEN	<p>Worktop: Worktop shall be made of 25MM thick Pre-Laminated Board conforming to IS: 12823. All the edges of work surface shall be provided with machine pressed 2 mm thick PVC lipping glued with hot melt EVA glue. The worktop shall be complete with provisions for screen mounting as well as for wire management.</p> <p>Wire Management: It shall be a part of the under structure and can be in the form of enclosed metal tray or 2 level enclosed channel to provide concealed wire management throughout the cluster formation. Wire riser leg or independent wire risers shall be provided.</p> <p>Understructure : The slanted legs shall be connected to the understructure with the help of PDC Connectors to provide a stable and sturdy base for the worktops. Modesty panel shall be of Metal 1.2 mm thick CRCA.</p> <p>Overall size of the table shall be 900 W mm x 600 D mm x 750 H mm.</p>

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3	COMPUTER CHAIR	<p>The single piece seat back shell shall be made up of injection moulded high impact strength glass filled polypropylene polymer compound. Shell size shall be 44.0 cm. (W) x 50.2 cm. (D) x 40.5 cm. (H).</p> <p>The Base plate mechanism shall be 360° revolving type with height adjustment feature. The pneumatic seat height adjustment shall have an stroke of 12.0±0.3 cm.</p> <p>Pedestal : The pedestal shall be injection moulded in black glass-filled Poly-amide and fitted with 5 nos. twin wheel castors. The pedestal shall be 61.0±0.5 cm. pitch-center dia.(71.0±1.0 cm. With castors). The twin wheel castors shall be injection moulded in Black Nylon.</p> <p>Overall size of the chair shall be 71 W cm x 71 cm D x 75.5-87.5 H cm with seat height of 41.5-53.5 cm.</p>
4	TEACHER TABLE	<p>Worktop: Worktop shall be made of 25MM thick Pre-Laminated Board conforming to IS: 12823. All the edges of work surface shall be provided with machine pressed 2 mm thick PVC lipping glued with hot melt EVA glue. The worktop shall be complete with provisions for screen mounting as well as for wire management.</p> <p>Wire Management : It shall be a part of the understructure and can be in the form of enclosed metal tray or 2 level enclosed channel to provide concealed wire management throughout the cluster formation. Wire riser leg or independent wire risers shall be provided.</p> <p>Understructure : The slanted legs shall be connected to the understructure with the help of PDC Connectors to provide a stable and sturdy base for the worktops. Modesty panel shall be of Metal 1.2 mm thick CRCA.</p> <p>Overall size of the table shall be 1350 W mm x 600 D mm x 750 H mm</p>
5	TEACHER CHAIR	<p>The seat shall be made up of 1.5 ±0.1cm. thick hot-pressed plywood and upholstered with fabric upholstery covers and moulded Polyurethane foam.The seat shall have extra thick foam on front edge to give comfort to popliteal area.</p> <p>The Back shall be injection moulded in glass filled Polypropylene which shall be upholstered with Mesh fabric. The back consist of adjustable lumbar support made of injection moulded Polypropylene having an adjustment of 5.0 ±0.1 cm.</p> <p>Seat size shall be 53.5 cm W x 51 cm D.</p> <p>Back size shall be 51 cm W x 70 cm H.</p>

*Signature*

*Signature*



		<p>The HR polyurethane seat foam shall be moulded with density <math>45 \pm 2</math> kg/m<sup>3</sup> and hardness <math>16 \pm 2</math> kgf as per IS:7888 for 25% compression.</p> <p>Armrest : The adjustable armrest is designed with the following features : · Up-Down adjustment– 6 steps (<math>7.2 \pm 0.5</math>cm range), · Armrest top is mounted on Armrest structure made of glass filled Nylon, · Armrest Top is PU moulded over glass filled Nylon insert.</p> <p>Pedestal : The pedestal shall be injection moulded in glass-filled Nylon and fitted with 5 nos. twin wheel castors. The pedestal shall be <math>66.1 \pm 0.5</math>cm. pitch-center dia. (<math>76.1 \pm 1.0</math>cm with castors). The twin wheel castors are injection moulded in Black Nylon.</p>
6	ALMIRAH	<p>Construction Type : Welded</p> <p>Shelf thickness of 0.7 mm</p> <p>Back thickness of 0.8mm</p> <p>Door thickness of 0.8mm (high yield strength)</p> <p>All other components thickness of 0.9mm. It shall be Made of CRCA 'D' grade high yield strength as per IS:513.</p> <p>Handle Type: Mazak handle and Three-way locking mechanism with Shooting Bolts.</p> <p>Shelf Type: Adjustable</p> <p>Uniformly Distributed Load Capacity of shelf : max 40 Kg.</p> <p>Finishing shall include Epoxy powder coated to the thickness of 50 microns (+/- 10).</p> <p>Overall size of Almirah shall be 916mm (W) x 486mm (D) x 1981mm (H)</p>

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