



Ministry of Culture
Government of India



NATIONAL COUNCIL OF SCIENCE MUSEUMS
SECTOR-V, BLOCK-GN, BIDHANNAGAR,
KOLKATA: 700 091.

S.No.	Description of specification of item(s)/work(s)/Particulars	Unit	Qty
1	<p>Dismantling and Shifting of existing wooden partition panels & Temporary Exhibition setup:</p> <p>1. Dismantling of the existing wooden partition walls complete in all respects, including removal of all attached, fixtures, fittings, and any other connected components, as per the requiremnet from 3rd and 5th floor of NCSM Building. The dismantled materials shall be carefully taken down without causing damage to the adjoining structure or surrounding areas, and shall be transported and stacked properly at the location as designated by the Officer-in-Charge in the same premises. The rate shall include all labour, tools and tackles, loading, unloading, transportation within the premises, segregation of serviceable and unserviceable materials, clearing of debris, cleaning of the site after completion of work, and all incidental charges required to complete the work as per site condition and as directed. The work shall be carried out strictly under the supervision and to the full satisfaction of the Officer-in-Charge.</p> <p>2. The work involves dismantling and shifting the existing temporary exhibition panels and showcased items, which are fabricated from aluminum sections. The total number of panels is 30 Nos. (each exhibition panel measures 8'x4'x2' as shown in attached reference images). These panels are currently installed on the 3rd floor of the NCSM building and will be re-erected on the 5th floor of the same building. The detailed scope of works are as follows: Dismantling: Carefully dismantling the panels and associated components without causing damage to any materials at 3rd floor of the NCSM Building. Shifting: Safe handling and shifting of the exhibition panels and associated components within the building premises, from the 3rd floor to the 5th floor of the NCSM Building. Reinstallation: Reinstalling the complete Exhibition setup and its components at the designated location on the 5th floor, ensuring proper alignment and stability. This includes reinstating all associated exhibits, fixtures, components, display elements, and accessories, following the original configuration and as directed by the Officer-in-Charge. Scrap Handling: Shifting and disposal of scrap items, unserviceable materials, debris and other associated hardware materials from 3rd floor and 5th floor of the buidling to designated space in the same building premises as instructed by the Officer-in-Charge. Cleaning: After shifting and installation of the entire Exhibition setup at designated place. The 3rd floor and 5th must be neatly cleaned.</p> <p>All the exhibition components must be safely handled keeping utmost care</p>	1 lot	1

	<p>protecting existing building finishes and any other elements during the dismantling, shifting, and reinstallation process. The cost must include all possible consumable items, machines, tools etc. including labour charges to execute the above mentioned works. (Note: The reference images of the designated spaces on the 3rd and 5th floors are attached for assessment of works).</p>		
2	<p>Fabricating, supply and installation of full-height wooden partition walls comprising 75 mm x 50 mm CP teak wood framework in grid formation at 600 mm c/c, finished on both sides with 6 mm thick plywood of Century/Green make conforming to IS:710, BWP grade, and fire-retardant/fire-proof specification, and further finished with 1 mm thick decorative laminate of approved shade and colour of Century/Green make on exposed faces, including beading, polishing/painting wherever required, and all necessary stainless steel screws, nuts, bolts, nails, cleats, jointing tape, adhesive, fittings, fixtures, labour, and incidental charges, complete as per design, drawing and under the supervision, advise and satisfaction of the officer-in-Charge.</p> <p><u>Mode of measurement:</u> one side of the covered area of full partition walls with above mentioned finishing work to be measured and no extra measurement shall be considered for opening area, door & window cut-outs.</p>	Sqm	120.82
3	<p>Fabricating, supply and installation of semi-height wooden partition walls consisting of a framework of 50 mm x 50 mm (horizontal) and 75mm x 75mm (vertical) CP teak wood, arranged in a grid pattern of 600x500 mm, finished on both sides with 6 mm thick plywood of Century/Green make conforming to IS:710, BWP grade, and fire-retardant/fire-proof specification, and further finished with 1 mm thick decorative laminate of approved shade and colour of Century/Green make on exposed faces, including a moulded wooden handrail on top and finished wooden legs complete as per design, drawing and under the supervision, advise and satisfaction of the officer-in-Charge.</p> <p><u>Mode of measurement:</u> one side of the covered area of semi partition wall on finished work with above mentioned finishing work to be measured and no extra measurement shall be considered for opening area, door & window cut-outs.</p>	Sqm	39.96
4	<p>Supply and fixing of 8mm toughened glass window panes in full-height wooden partition walls, as per approved design and dimensions, complete with all necessary fittings, including wooden moulded beads on both sides of the glass, fixtures, and all requisite consumables under the supervision, advise and satisfaction of the Officer-in-Charge.</p> <p><u>Mode of measurement:</u> one side of the cutout area for the fixation of glass panes on the full partition wall on finished work is to be measured and no extra measurement shall be considered.</p>	Sqm	14.87

5	<p>Fabricating, supply and fixing of full-height wall-mounted wooden cabinet/storage units at designated locations, as per approved design and drawings, with 50mm x 50mm (verticle) and 50mm x 25mm (horizontal) CP teak wood frame in 600 mm c/c grid formation on walls, finished with 9 mm thick plywood on wall side, 12 mm thick plywood on remaining sides, and 19 mm thick plywood on shutters/doors, of Century/Green make conforming to IS:710, BWP grade and fire-retardant/fire-proof specifications, complete with 1 mm thick decorative laminate of approved shade and colour on all exposed exterior surfaces, and 1 mm thick white laminate on all interior surfaces, including Godrej make locks, stainless steel door handles, hinges, beading, polishing/painting wherever required, and all necessary screws, nuts, bolts, nails, cleats, adhesives, jointing tape, fittings, fixtures, labour, installation and incidental charges, complete in all respect as per attached design and drawings, under the supervision, advise and satisfaction of the Officer-in-Charge.</p> <p><u>Mode of measurement:</u> front side of the covered area with above mentioned finishing work as per design and drawings to be measured and no extra measurement shall be considered.</p>	Sqm.	33.46
6	<p>Fabrication, supply and fixing in position MS powder-coated collapsible gate for the front opening of the goods lift, including all structural members, supporting frame, top and bottom rail/track system, guide arrangement, locking device, handles, rollers, stoppers, anchor fasteners, fixing hardware and all accessories required for proper and complete installation, as per attached design and approved drawings. The rate shall include all labour, materials, tools and plants, consumables, transportation, loading/unloading, welding, cutting, finishing, powder coating, erection, testing and commissioning, together with all necessary civil and masonry works, making good the disturbed portions, and completion of the work in all respects, under the supervision and to the entire satisfaction of the Officer-in-Charge.</p> <p>(Note: Tentative dimensions of the installation space is attched in Layout-2)</p>	1 lot	1
7	<p>Fabrication, supply and fixing in position the teak wood door frame with side beadings and wooden plywood doors of size 2000mm x 1200mm x 32mm approx. as per design & drawings and requirement including door lock with key with both side handles, foot stoper with rubber cushion, suitable hydraulic door closer (make-Godrej), hinges, door frame with all accessories, and consumables. All the doors must be installed, fixed and finished on a teak wood door frame with side beading, as per requirement. The work shall be completed in all respects, under the supervision and to the entire satisfaction of the Officer-in-Charge. The door must be fabricated using IS:710, BWP grade and fire-retardant/fire-proof specifications, complete with 1 mm thick decorative laminate of approved shade and colour on all exposed exterior surfaces.</p> <p><u>Mode of measurement:</u> The requirement and positioning of doors has been mentioned in attached drawings (Layout-01 and Layout-02). (Note: The slight variation in door sizes may be acceptable considering the actual installation requirement and the space availability.)</p>	Per set	4

8	<p>Fabrication, supply and fixing in position the wooden plywood doors of size 2000mm x 1000mm x 32mm approx. as per design & drawings and requirement including door lock with key with both side handles, foot stoper with rubber cushion, suitable hydraulic door closer (make- Godrej), hinges, door frame with all accessories, and consumables. All the doors must be installed, fixed and finished on a teak wood door frame with side beading, as per requirement. The work shall be completed in all respects, under the supervision and to the entire satisfaction of the Officer-in-Charge. The door must be fabricated using IS:710, BWP grade and fire-retardant/fire-proof specifications, complete with 1 mm thick decorative laminate of approved shade and colour on all exposed exterior surfaces.</p> <p><u>Mode of measurement:</u> The requirement and positioning of doors has been mentioned in attached drawings (Layout-01 and Layout-02). <u>(Note:</u> The slight variation in door sizes may be acceptable considering the actual installation requirement and the space availability.)</p>	Per set	4
9	<p>Supply and installation of high-performance, best quality Stone Polymer Composite (SPC) flooring sheets. The SPC flooring material shall be homogeneous in composition, with an overall thickness ranging between 4.0 mm to 4.5 mm, incorporating a minimum 2.0 mm high-density foam underlayer (IXPE or EVA) for effective shock absorption, walking comfort, and acoustic insulation. The surface layer shall include a wear-resistant topcoat of not less than 0.7 mm thickness, offering long-term protection against abrasion, scuffing, surface damage and scratches from footfall and equipment movement. The flooring must possess essential safety and performance characteristics including anti-slip properties with a minimum R10 slip resistance rating, complete waterproofing, dimensional stability, and fire-retardant compliance as per international standards such as EN 13501-1 or ASTM E648. The visual surface finish shall be in matte texture of approved shade/colour. The installation is to be carried out over the existing floor surface, following thorough site preparation which includes cleaning and mechanical levelling to achieve a smooth, even, dust-free substrate and necessary skirting must be provided at the walls as per requirement in the all edges. Where undulations are present, suitable self-leveling compounds shall be used to correct surface irregularities. The SPC sheets shall be installed using either a click-lock interlocking mechanism or a uniform layer of approved adhesive- strictly as recommended by the flooring manufacturer. During adhesive application, care must be taken to ensure proper coverage, and subsequent laying must be followed by mechanical rolling using floor rollers to remove trapped air and ensure full adhesion. All joints, terminations, and perimeter zones shall be neatly finished using matching SPC skirting/beadings, reducers, and edge profiles to provide a clean, durable, and secure transition between flooring and vertical surfaces. The material must be sourced from reputed brands such as Welspun Floorings, Floorrex, Floormonk or best equivalent ISI-certified products, with prior sample approval to be obtained from the officer in-charge.</p>	Sqm	18.59
10	<p>Painting and finishing of all exposed walls and ceiling surfaces of 3rd and 5th floor of NCSM building, using premium-grade, low-VOC emulsion paint (with VOC content less than 50 grams/liter) from approved colour/shade and brands such as Asian Paints Royale, Berger Silk, Nerolac Impressions. The paint system shall provide a uniform, matte or eggshell finish, free from visible brush strokes, lap marks, bubbles, or colour mismatches. The surface preparation shall include minor ceiling repairs such as crack filling, edge smoothing, and joint levelling, followed by the application of one or two coats of compatible wall putty (2 mm) as per requirement, sanding and cleaning, then application of primer and two or more coats of topcoat paint- all from the same manufacturer to ensure material compatibility and bonding integrity. Adequate curing time between each coat, as per the paint manufacturer's technical</p>	Sqm	743.49

	specifications, must be maintained to ensure optimal adhesion and long-lasting results.		
11	<p>Supply and installation of vertical flip-type curtains to cover the glass windows (size: 1200mm x 1200mm approx.) of partition walls at the 3rd and 5th floors of the NCSM building, as per the direction and advice. The curtain shall be made of 100% high-quality block-out fabric (coated polyester/cotton) in an approved color and shade. The fabric should be flame-retardant and treated for shrinkage control, ensuring it retains its shape and durability over time. The curtains shall be operated via a vertical flip mechanism mounted on an aluminum track, allowing smooth, manual adjustment of each panel for light control and privacy, with a two-way chain for flip adjustment. The headrail shall be constructed from powder-coated aluminum with an integrated track system to ensure easy operation and alignment. The fabric panels will be weighted at the bottom to prevent undue movement and maintain a straight, neat appearance when fully extended. The overall size of the Curtain must be slightly bigger (2"-3") on all sides than the actual standard glass window sizes. The installation shall include all necessary hardware, including brackets, fasteners, and control rods or chains, in compliance with safety standards. The curtain shall be custom-fitted to the dimensions of the window, ensuring seamless installation with a high-quality finish.</p> <p><u>(Note:</u> The slight variation in sizes may be acceptable considering the actual installation requirement and the space availability.)</p>	Per set	6
12	<p>Supply and installation of vertical flip-type curtains to cover the glass windows (size: 900mm x 600mm approx.) of partition walls at the 3rd and 5th floors of the NCSM building, as per the direction and advice. The curtain shall be made of 100% high-quality block-out fabric (coated polyester/cotton) in an approved color and shade. The fabric should be flame-retardant and treated for shrinkage control, ensuring it retains its shape and durability over time. The curtains shall be operated via a vertical flip mechanism mounted on an aluminum track, allowing smooth, manual adjustment of each panel for light control and privacy, with a two-way chain for flip adjustment. The headrail shall be constructed from powder-coated aluminum with an integrated track system to ensure easy operation and alignment. The fabric panels will be weighted at the bottom to prevent undue movement and maintain a straight, neat appearance when fully extended. The installation shall include all necessary hardware, including brackets, fasteners, and control rods or chains, in compliance with safety standards. The curtain shall be custom-fitted to the dimensions of the window, ensuring seamless installation with a high-quality finish.</p> <p><u>(Note:</u> The slight variation in sizes may be acceptable considering the actual installation requirement and the space availability.)</p>	Per set	14

13	<p>Supply and installation of roller blind curtains with chain mechanisms to cover the wall windows and doors on the main wall side of the buildings at the 3rd and 5th-floor new partition halls/rooms, as per directions and specifications. The curtains must be fully opaque (block-out) with an approved color/shade, made from high-quality, flame-retardant fabric (coated polyester/cotton). The roller blind mechanism shall feature a smooth chain operation, with the casing made of rust-resistant, powder-coated aluminum, and a top-mounted frame. The blinds will be mounted on corrosion-resistant brackets and rollers to ensure durability. The fabric should be treated for shrinkage control, ensuring it retains its shape and durability over time. The curtains will be operated via a two-way chain mechanism mounted on an aluminum track, allowing for smooth, manual height adjustment of each panel to control light and provide privacy. The headrail shall be constructed from powder-coated aluminum with an integrated track system, ensuring ease of operation and alignment. The fabric panels will be weighted at the bottom to prevent excessive movement and maintain a straight, neat appearance when fully extended. The overall size of the Curtain must be slightly bigger (2"-3") on all sides than the actual standard glass window sizes. Installation will include all necessary hardware such as brackets, fasteners, control rods or chains, and will comply with relevant safety standards. The curtains shall be custom-fitted to the window dimensions, ensuring seamless installation with a high-quality finish.</p> <p>(Note: The requirement and positioning of windows (wall sides) has been mentioned in attached drawings: Layout-01 and Layout-02).</p>	Sqm	83.64
14	<p>Fabrication, supply and installation of file storage Rack (Type-1) units as per attached detailed drawings and design using 50mm x 50mm (vertical) and 50mm x 25mm (horizontal) CP teak wood frame grid formation, finished with 9 mm thick plywood on wall side, 12 mm thick plywood on remaining sides, and 6 mm thick plywood on shutters/doors, of Century/Green make conforming to IS:710, BWP grade and fire-retardant/fire-proof specifications, complete with 1 mm thick decorative laminate of approved shade and colour on all exposed exterior surfaces, and 1 mm thick white laminate on all interior surfaces, including premium quality flush type opening handles, door shutters must be equipped with best quality smooth roller mounted on top and bottom sides of the doors slidable in an powder coated aluminium track channel, beading, polishing/painting wherever required, and all necessary screws, nuts, bolts, nails, cleats, adhesives, jointing tape, fittings, fixtures, labour, installation and incidental charges, complete in all respect strictly as per attached design and drawings, under the supervision, advise and satisfaction of the Officer-in-Charge.</p> <p><u>Mode of measurement:</u> front side area of the finished racks as mentioned above are to be measured and no extra measurement shall be considered.</p>	Sqm	23.23
15	<p>Fabrication, supply and installation of storage Rack units (Type-2) at ground floor mechanical workshop (curator's cabin) as per attached detailed drawings and design using 50mm x 50mm (vertical) and 50mm x 25mm (horizontal) CP teak wood frame grid, finished with 9 mm thick plywood on wall side, 12 mm thick plywood on remaining sides, and 19 mm thick plywood on doors of Century/Green make conforming to IS:710, BWP grade and fire-retardant/fire-proof specifications, complete with 1 mm thick decorative laminate of approved shade and colour on all exposed exterior surfaces, and 1 mm thick white laminate on all interior surfaces, including Godrej make locks with keys, stainless steel door handles, hinges, beading, polishing/painting wherever required, and all necessary screws, nuts, bolts, nails, cleats, adhesives, jointing tape, fittings, fixtures, labour, installation and incidental charges, complete in all respect as per attached design and drawings, under the supervision, advise and satisfaction of the Officer-in-Charge.</p>	Sqm	5.11

	<u>Mode of measurement</u> : front side area of the finished racks as mentioned above are to be measured and no extra measurement shall be considered.		
16	Fabrication, supply and installation of Office Tables with storage drawer box units, sliding tray for key board and circular opening/cutout for passing of electrical cables at marked positions in the drawings. The tables must be fabricated using Century/Green make plywoods conforming to IS:710, BWP grade and fire-retardant/fire-proof specifications, finished with 1 mm thick decorative laminate of approved shade and colour on all surfaces, including Godrej make locks with keys, stainless steel handles, hinges, slider tracks/channel with all fittings, beading, polishing/painting wherever required, and all necessary screws, nuts, bolts, nails, cleats, adhesives, jointing tape, fittings, fixtures, labour, installation and incidental charges, complete in all respect as per attached design and drawings. All edges must be moulded and the fabrication must be strictly as per attached detailed drawings and design with best finishing and quality under the supervision, advise and satisfaction of the Officer-in-Charge.	Per set	8
17	Supply, Installation, Testing and Commissioning of Inverter Split Air Conditioning systems (2 Ton each) at designated spaces in NCSM building as per the advise and instructions of the Officer in-charge. The Machine with all its integral components must be supplied strictly as per the attached specification sheet.	Per set	10

Signature of the Bidder / Constituted Attorney

Specification of Inverter Split Type Air Conditioning system - 09 Nos.

S. No.	Specification/particular	Description
1.	Product type	Inverter Split Air Conditioning System
2.	Make/model	Voltas, 245V Vectra Plus or equivalent
3.	Type	Split AC (Inverter type)
4.	Capacity	2 Ton
5.	Energy Efficiency Rating	5 Star (BEE 2025)
6.	ISEER Value	~5.0 W/W
7.	Cooling Capacity	~6200 Watts
8.	Compressor Type	BLDC Rotary Inverter
9.	Adjustable Cooling Modes	Multi Adjustable (4-in-1 or 6-in-1)
10.	High Ambient Cooling	Yes, up to 52°C
11.	Refrigerant Type	R-32 (Eco-Friendly)
12.	Special Features	<ul style="list-style-type: none">• Anti Dust, Antimicrobial Protection, Anti-Corrosive Coating, Self-Diagnosis, Sleep Mode, Anti-Fungal, Auto Restart, Energy Saver mode.• Stabilizer free operation within 110~285 voltage range; Digital Temperature LED Display; Noise Level: IDU - 51 / 49 / 46 / 44 (db)• Variable speed compressor which adjusts power depending on heat load. Convertible / adjustable with 4 cooling modes through remote control to operate in different tonnages for different cooling needs
13.	Coil Material	100% Copper
14.	Indoor Unit Dimensions (W×H×D)	Approx. 1100 mm × 330 mm × 250 mm
15.	Indoor Unit Weight	Approx. 13.7 kg
16.	Outdoor Unit Dimensions (W×H×D)	Approx. 900 mm × 650 mm × 365 mm
17.	Outdoor Unit Weight	Approx. 34.6 kg
18.	Power Supply	230 V / 50 Hz / Single Phase
19.	Power Consumption (Rated)	~959 Watts
20.	Operating Voltage Range	Wide voltage operation
21.	Dehumidification Function	Yes (Super dry mode)
22.	Turbo Cooling Mode	Yes
23.	Sleep Mode	Yes
24.	Auto Restart Function	Yes
25.	Self-Diagnosis Feature	Yes

26.	Warranty	<ul style="list-style-type: none"> • 1 Year on Product • 10 Years on Compressor • 5 Years on PCB
27.	In-the-Box Contents	Indoor Unit, Outdoor Unit, Remote, Installation Kit, User Manual, Warranty Card
28.	Standard installation accessories to be included	Copper pipe- upto 10ft, Nitrile rubber insulation, aluminium tape inclusive of control cable, PVC drain pipe to be fixed along with copper pipe, Iron Angle mounting bracket set for fixing outdoor unit, wrapping tape, clip, rubber pad etc.

Signature of the Bidder / Constituted Attorney