## NATIONAL COUNCIL OF SCIENCE MUSEUMS (MINISTRY OF CULTURE, GOVT OF INDIA) 33, BLOCK GN, SECTOR V BIDHAN NAGAR KOLKATA – 700091

## Tender No. I-18012/10/21(86)

Name of Work: FABRICATION, SUPPLY AND INSTALLATION OF EXHIBIT CABINETS/STRUCTURES
INCLUDING INTERIOR DEVELOPMENT, FLOORING, ELECTRICAL FITTINGS OF
"GALLERY ON THE LIFE OF CHANDRASEKHAR AZAD— REVOLUTIONARY INDIA" IN
THE AZAD HALL AND LOBBY AREA at ALLAHABAD MUSEUM, ALLAHABAD

## Cost Break-up Sheet/ Bill of Quantity (BoQ)

SI.	Description	Unit	Qty.	Unit Rate	GST	Amount with
No.				(To be	Percentage	GST (To be
				entered by bidder)	(To be entered by	entered by bidder
				bluder	bidder)	biddei
1	Providing and fixing of wooden panels having	Sq.	505.00		,	
	teakwood frame of Cross Section 2" X 1", in a grid					
	of 2' X 2' and covered with 12 mm BWP Ply (IS					
	710) on one side.					
2	Providing and fixing of wooden panels having	Sq.	65.00			
	teakwood frame of Cross Section 2" X 1" in a grid	Mtr.				
	of 2' X 2' and covered with 6 mm BWP Ply (IS 710)					
	on one side.					
3	Fixing of wooden panels having teakwood frame	Sq.	110.00			
	of Cross Section 2" X 1" in a grid of 2' X 2' and	Mtr.				
	covered with 25/12/6 mm BWP Ply (IS 710) on					
	one side (excluding the raw materials i.e.					
	plywood, teak wood etc.).					
4	Fabrication of curved partition, floor mounted/	Sq.	20.00			
	wall mounted as per the given drawing at site and	Mtr.				
	fixing of same, having frame made of Cross					
	Section 2" X1" teakwood vertical member and					
	19mm thick x 2" x 2" mm wide BWP ply (IS 710)					
	horizontal curved member in a grid size of 24" X					
	24" covered on one side with 2 layers of 6mm					
	flexi ply (IS 303) on front surface and 6mm ply on					
	back surface of Green/Century make including					
	cost of all materials.					

Date:

5	Fabrication of platform / base, floor mounted as per the given drawing at site and fixing of same, having frame made of Cross Section 2" X3" teakwood and 19mm thick BWP ply (IS 710) covered on top surface of Green/Century make including cost of all materials.	Sq. Mtr.	95.00		
6	Providing and fixing of 8mm thick toughened glass of approved make for low height / full height partition with polished teakwood beading / fixture / adhesive etc.	Sq. Mtr.	15.00		
7	Providing and fixing 12mm thick Rigid PVC Foam Board for content display and finished with approved paint, as per artwork which will be provided by CRTL with necessary beading etc. at site.  Technical Parameters of Rigid PVC Foam Board: Surface Finish: Matt finish with hard surface coating Mechanical Properties: Tensile Strength ≥15 Mpa (DIN 53455) Elongation at break ≥15% (DIN 53455) Modulus of Elasticity 900-1500 Mpa (DIN 53457) Impact Strength ≥9.0 KJ/m2 (ISO 179) Physical Properties: Density 0.5 to 0.6 g/cc (DIN 53479) Hardness ≥55 Shore D (ASTM D 2240) Water Absorption ≥1.0 % (DIN 53495) Flammability Self Extinguishing Thermal Properties: Vicat Softening ≥73 °C (DIN 53460) Electrical Properties: Dielectric Strength ≥90 KV/cm (DIN 53481)	Sq. Mtr.	160.00		
8	Providing and fixing 12mm thick Rigid PVC Foam Board with CNC cut design for letters / patterns and finished with approved paint, as per artwork which will be provided by CRTL with necessary beading etc. at site.	Sq. ft.	120.00		
9	Providing and fixing 12mm thick Rigid PVC Board (High Density) for content display and finished with approved paint, as per artwork which will be provided by CRTL with necessary beading etc. at	Sq. Mtr.	20.00		

Date:

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	Site.  Tochnical Parameters of Rigid DVC Board:				
	Technical Parameters of Rigid PVC Board: Surface Finish: Matte finish with hard surface				
	coating				
10	Providing and fixing 8mm thick Clear /	Sq.	120.00		
	Transparent Acrylic Sheet for exhibit display	ft.			
	cabinets and approved make, as per design which				
	will be provided by CRTL with necessary beading /				
	adhesives etc. at site.				
11	Providing and fixing of Laser Engraved 6mm thick	Sq.	90.00		
	Clear / Transparent Acrylic Sheet for exhibit	ft.			
	display cabinets and approved make, as per				
	design which will be provided by CRTL with				
	necessary beading / adhesives etc. at site.				
12	Providing and fixing 6mm thick Acrylic Solid	Sq.	250.00		
	Surface (approved color shade) with CNC cut	ft.			
	design, as per artwork which will be provided by				
	CRTL with necessary beading etc. at site.				
	Technical Parameters:				
	Tensile Strength 5400 – 6000 psi				
	Tensile Modulus 1.4 x 106psi to 1.6 x 106psi				
	Flexural Strength 8040 – 10200 psi				
	Flexural Modulus 1.2 x 106psi to 1.4 x 106psi				
	Compressive Strength 14000 to 16000psi				
	Elongation 0.4 – 0.9 %				
	Specific Gravity 1.6 - 1.8 g/cm3				
	Hardness 85 to 95 (Rockwell)				
	Thermal Expansion 3 x 10-5 to 3.9 x 10-5 m/m 0C				
	Colours should be homogenous throughout the				
	entire thickness of material.				
	Toxicity - Non-toxic				
	Fungal Resistance - Resistant (No fungal growth				
	on surface)				
	Boiling Water Resistance - Resistant				
13	Providing and fixing of 1mm thick laminate sheet	Sq.	420.00		
	of Green/Century/ approved make (IS 2046) of	Mtr.			
	desired shade on wooden surface.				
14	Providing and fixing of vineer sheet of	Sq.	20.00		
	Green/Century/approved make of desired	Mtr.			
	pattern / shade on wooden or panel surface.				

15	Finishing of surface (plywood/metal) with two or more coats of Asian/ICI make NC spray paint of desired shade after surface preparation (applying surface and NC putty etc.)	Sq. Mtr.	100.00		
16	Wall painting with premium acrylic emulsion / easy clean emulsion / paint of specific shade and manufacturer and grade (Berger / Asian Paints color / equivalent) to give an even shade. Two or more shades on new surface.	Sq. Mtr.	150.00		
17	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content. With water thinnable cement primer on wall/ ceiling surface having VOC content less than 50 grams/liter.	Sq. Mtr.	150.00		
18	Painting with silicon & acrylic emulsion based water thinnable sealer of approved brand and manufacture on wet or patchy portion of plastered surfaces. Two coats	Sq. Mtr.	100.00		
19	Finishing walls with textured exterior grade paint of required shade. New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/10 sqm Asian Paints Royale Play Antico from Asian Paints (Texture wall) Linea Top coat Taupe tan M025 or as approved.	Sq. Mtr.	300.00		
20	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	Sq. Mtr.	300.00		
21	Fabrication and installation of Stainless Steel (Brushed Finish) frame / railing including Sections/Tubing	kg	150.00		
	Electrical Requirements:				
22	Supply & fixing of power point wiring with 1.1 KV Grade unsheathed FR PVC insulated multi strand copper conductor wires of following sizes in 25mm Dia bore rigid PVC conduit including S&F of PVC conduit, bends, junction boxes & required accessories, mostly laid in RCC slab and partly concealing of conduit in brick wall including				

	cutting of brick wall and making good the damages, making connections, testing etc. as required.				
	a) Power point wiring from MCB SDB to 16/6A Socket outlet with 2 Nos. 1Cx4sq.mm. + 1 No. 1Cx2.5sqmm, rate being inclusive of concealed PVC conduit with bends, junction boxes, etc. as required. (two plug sockets to be connected in one circuit.)	RM	150.00		
	b) Power point wiring from 16/6A socket outlet to the adjacent 16/6A socket outlet with 2 nos 1Cx2.5 sqmm + 1 no 1Cx1.5sqmm. Rate inclusive of concealed PVC conduit, bends, junction boxes etc. as required	RM	150.00		
	c) Supply and fixing of 1 no. of 6/16A combined modular type socket outlet with modular type switch incl. recessed mounted GI box, modular base, cover plate & all required materials including internal connections and testing.	Nos.	40.00		
	Flooring:				
23	Providing and fixing of accessories for SPC (Stone Plastics Composite) Flooring or Rigid Core Luxury Vinyl flooring - skirting including the requisite pre-installation treatment of the existing floor as under:	Sq. Mtr.	378.00		
	a) SPC rigid core luxury vinyl flooring should be comprised of primarily 4 layers i.e. Backing Layer, SPC Core, Printed Vinyl Layer, Wear Layer, etc. (The nomenclature of the layers may vary from one manufacturer to another.)				
	b) Flooring features include Waterproof, Flame Resistant, Stain Resistant, Scratch Resistant, Dimension Stability etc.				
	c) Technical Properties: Size: 6" x 36" / 7"X48" / 9" x 48" Thickness: 4.0mm / 5.0mm Wear Layer: 0.5mm / 20MIL or higher Abrasion Resistance Rating: AC7 Surface Treatment: UV Coating	RM			

entered by bidder)	
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Note: 1) The Total Amount including GST should tally with column M of price bid BoQ in Annexure E format provided in separate excel sheet.

2) The above cost break up sheet should be entered by bidder duly signed with official stamp on each page and uploaded in Cover II only.