

Birla Industrial & Technological Museum
(A Unit of NCSM)
19A, Gurusaday Road, Kolkata - 700019

PART-I

Sub: Bill of Quantities for the work of making temporary exhibition stalls together with other associated works at BITM, Kolkata during Eastern India Science Fair & Science and Engineering Fair 2025 on hire charges basis w.e.f. 07.01.2025 to 10.01.2025.

Item No.	Description of Item	Unit	Qty.	Rate	Amount
1	<p>Stalls (As per layout drawing):</p> <p>a) Super Structure (7 ft. wide) Construction of exhibition stall structures with Sal post, framed with bamboo, top to be covered with SRF (Fire retardant) tarpaulin as per the instruction of the Engineer and rules imposed by the W.B. Fire service Dept.</p> <p>b) Interior walls, ceiling, frontal and side facia Interior back wall, false ceiling up to a height of 8 ft. w.r.t. Gr. Level with a frontal projection of 1ft. and facia of 4 ft. high all-round the frontal and side faces of the stalls shall be covered with 4 mm. thick commercial ply on soft wood frame with 2 coats of approved make and shade of plastic emulsion paint over a coat of primer and treated by fire retardant solution as per the rules imposed by W.B. Fire Service Dept. and as per instruction of the Engineer.</p> <p>c) Running Display Table Running display table of 3 ft. high and 3 ft. wide with one shelf in between is to be fabricated by 6 mm. thick commercial play on soft wood frame for covering top, sides and front to withstand the weight of the display/models/ related materials as per the instruction of the Engineer and as per rules imposed by W.B. Fire Service Dept.</p> <p>d) Frontal Pillars All the exposed frontal post of the stalls must be covered up to a height of ceiling (up to 8 ft. height w.r.t. Gr. Level) with 8 inch. X 8 inch. Size (each) pillar with 4 mm. thick commercial ply on soft wood frame including two coats of plastic emulsion paint over a coat of primer of approved make and shade as per instruction of the Engineer and rules imposed by W.B. Fire Service Dept.</p>	Sq.ft.	4600	91.05	4,18,830.00
2	<p>Dais & structure (as per layout drawing):</p> <p>a) Fabrication of structure Construction of 20 ft. X 15 ft. size Dais structure with Sal post, framed with bamboo, top to be covered with SRF (Fire retardant) tarpaulin as per the instruction of Engineer and rules imposed by the W.B. Fire Service.</p> <p>b) False ceiling and facia False ceiling of the structures may be made at 16 ft. height w.r. to Gr. Level with 4 mm. thick commercial ply on soft wood frame as per the instruction of the Engineer and rules imposed by the W.B. Fire Service. Facia projected with 1 ft outward with 4 ft. wide shall be made all-round the stall with 4 mm. thick commercial ply on soft wood frame as per instruction of the Engineer and rules imposed by WBFS. The entire ply must be painted with 2 coats of approved make and shade of plastic emulsion over a coat of primer and treated by Fire retardant solution.</p> <p>c) Frontal Pillars All the frontal posts of the structure of Dais must be covered upto a height of ceiling i.e. 16 ft. w.r. to Gr. Level with 8 inch. X 8 inch size (each) pillar with 4 mm. thick commercial ply and soft wood frame including 2 coats of approved make and shade of plastic emulsion paint over a coat of primer as per instruction and rules imposed by W.B. Fire Service Dept.</p> <p>d) Dais Fabrication of Dais of size 20 ft. (long) X 15ft. (wide) X 2.0 ft. (high) with Sal posts and proper hard wood bracing, top to be covered with 19 mm. thick commercial board. Such board will again be covered with new jute mat of approved colour with proper support. Back side will be covered with 4 mm. thick commercial ply on soft wood frame work by doing 2 coats of plastic emulsion paint of approved make and shade over a coat of primer, complete with two no. of detachable steps as per drawing, layout, instruction and rules imposed by W.B Fire Service Dept. Stage back wall must be of decorative paints of approved colour as per drawing & direction of Engineer.</p>	Sq.ft.	300.00	121.58	36,474.00
3	Walling with approved coloured cloth and with fire retardant SRF tarpaulin at other end supported with bamboo or Salballi post upto a height of 8ft. w.r.t. Gr. Level wherever necessary. Bamboo and cloths must be treated with Fire retardant solution as per W.B. Fire Service Dept's rules 2628.	R.ft.	370.00	10.51	3,888.70
4	Supplying and laying new coir/jute matting of approved colour including labour charges and transportation etc. and to be laid inside Camp and Stalls (Rate should be quoted in Sq. ft. basis) & pathways.	Sq.ft.	7000.00	10.51	73,570.00

5	Construction of a structure as per Sl. No. (1) and covered it all sides with SRF (Fire retardant) tarpaulin with provision of 1 no. of Door with shutters made of dark blue/black curtains for Dark Room facilities of size (16 ft. X 10 ft.) as per instruction of the Engineer and rules imposed by W.B Fire Service Dept. (RATE ONLY)	Sq.ft.	NIL	8.41	0.00
6	Supplying the following furniture on hire for the total exhibition period.				
	a) Garden chairs	Each.	750	22.41	16,807.50
	b) Table size 5 ft. X 3 ft.	Each.	25	114.85	2,871.25
	c) Table size 8 ft. X 1.5 ft. (RATE ONLY)	Each.	NIL	115.56	0.00
	d) Table size 2 ft. X 2 ft. (RATE ONLY)	Each.	NIL	101.56	0.00
	e) Water drum (to be used for drinking water) of 100 liters. Capacity each with 0.5 inch. dia tap)	Each.	3	134.47	403.41
7	Providing bamboo barricade with 1 no. bamboo all along the exhibition stalls should be placed and tied up with the posts as per the instruction of the Engineer with suitable size of bamboo (not less than 75 mm. dia). All bamboos must be covered with treated cloth with fire retardant solution as per rules imposed by W.B. Fire Service Dept.	R.ft.	500	9.81	4,905.00
8	Constructing of shed covered with SRF tarpaulin on top of roof supported by bamboo structures structure with suitable size of bamboo frame structures or sal balli structure within the campus of the Museum or wherever suggested. The sides should be covered by the cloth as required and as per instruction and rules imposed by W.B. Fire Service Dept., keeping view for safety of the roof of the Bldg. All bottom of vertical Bamboo poles must be supported on wooden plank or plastic bowl or something similar to the same.	Sq.ft.	200	31.52	6,304.00
9	Fabricating and erecting of two nos. of decorative gates with Pine wood frame work with necessary pipes and structure of suitable size supported by Sal balli and Bamboo frame as per the attached drawing and technical data. The Gate must be done as per instruction of Engineer, Arts Section of BITM and rules imposed by W.B. Fire Service Dept. following the attached drawings (one gate at main entrance & another gate at Plot - 4 ground).				
	i) Main gate to be installed on or before 05.01.2025.	No.	1	35475.00	35,475.00
	ii) Gate for Plot - 4	No.	1	23650.00	23,650.00
10	Supply of 8 nos. of decorative wooden throne V.V.I.P for four days from 07.01.2025 to 10.01.2025 on hire charges basis to be supplied at BITM, Kolkata during E.I.S.F. & S.E.F.-2025	No.	8	1019.91	8,159.28
11	Supply of 5 nos sofa set for VIP's for four days from 07.01.2025 to 10.01.2025 on hire charges basis to be supply at BITM, Kolkata during E.I.S.F. & S.E.F.-2025.	No.	5	2039.81	10,199.05
12	Supplying & Fixing good quality bamboo post in the soil up to a depth of 1 ft 6 inch including packing / ramming for purpose of hanging bunting flags for giving decorative look during fair. (The height of bamboo post should be 10 ft. from Gr. Level).	Each.	30	159.68	4,790.40
13	Providing, Fabrication, Erection and Installation of Banner Stands each size 4 ft. 6 inches X 3 ft. or as approved by the department made of 2 inches X 1½ inches wooden frame work at several location in the B.I.T.M premises as per drawing, instruction of Engineer - in - charge & Arts Section of BITM.	Each.	20	1323.64	26,472.80

Total estimated cost in part -I= 6,72,800.39

Part-II

Sub: Bill of Quantities for Electrical works for temporary exhibition stalls together with other associated works at BITM,

Item No.	Description of Item	Unit	Qty.	Rate	Amount
				(Rs.)	(Rs.) P.
1	40 watts tube light or 20 Watt LED tube with complete fittings (single) with tube, starter, choke etc. power the fixtures to be drawn in different ckt.s and controlled by suitable fuses and hang from ceiling with P.V.C. pipe and switches as per instruction.	No.	150	63.03	9,454.50
2	Power board consisting of 2no. 5 pin 5 amp sockets with 2no. 5 amp piano switches, 1 no. 15 amp kit kat fuse set, to be fixed at a gap of about 3 feet and distributed through different ckt.s controlled by suitable switches and MCB with proper EARTHING.	No.	60	186.28	11,176.80
3	2 nos. 15 amp 5 pin plug base with 15 amp fuse with 2 no. 15 amp switches.	No.	18	217.88	3,921.84
4	Emergency/Security lamps in different places (100 watts lamps) to be controlled through five switches in different ckt.s as per Engineer's instruction.	No.	5	38.5	192.50
5	Halogen lamp 1000watt/100Watt LED flood with holders and shades to be controlled from two or three switches with ckt.s wire (2.5 sq. mm. stranded) from suitable places through proper fuses as per instruction of the Engineer.	No.	4	572.87	2,291.48
6	Metal halide 400 watt /200 watt led with complete set to be controlled from two or three switches with ckt.s wire minimum 2.5 Sq. mm. stranded copper wire from suitable places through proper fuses as per Engineer's instruction. Two fixture to be fixed opposite side of BITM Gate i.e. across the road with suitable wire connection approx 20 ft. high from the road so that vehicle passing through the road should not arise any problem.	No.	40	1109.39	44,375.60
7	COLOUR Led flood light (Minimum 200 watt blue/ green colour) with complete set to be controlled from two or three switches with ckt.s wire Minimum 2.5 sq. mm. stranded copper wire from suitable places through proper fuses as per Engineer's instruction.	No.	14	1588.35	22,236.90
8	Rope light (L.E.D) i.e min 130 lux at 1 mt height complete with fixing in the tree (5 Mt. high) by the contractor's own person with ckt.s wire minimum 2.5 sq. mm. stranded copper wire from suitable places through proper fuses as per instruction of the Engineer.	Mt.	10	63.05	630.50
9	Drawing of power lines from main and sub-main switch board to exhibition stalls with proper phase distribution 3 phase with distribution board with main switches/MCB of suitable rating and wiring complete and necessary connection through proper switching and fusing C.K.Ts. All electrical wiring and fitting in the temporary structure/pandal shall be FR(Fire Resistive) type. All joints shall be made with porcelain insulator. Conductors twisted and tapped joint shall be avoided in pandal and structure. Proper earthing must be made wherever necessary as per existing Indian Electricity Rules. Power board connection with minimum 2.5 sq. mm. PVC copper wire stranded, no insulation breakage or black tape will be permitted. Power line will be drawn over ground/underground and in some places overhead with minimum 16 sq. mm. all cables for power line, and minimum 10 sq. mm. all cables for light line to all pandal. All power line cable and light line cable should be individual 2 no. of L.T. panel for two different location. L.T. panel should consist of one 100 Amp m/s, Busbar chamber for 200 Amp, 6 no. 4 pole 32 AMP MCB, 10no. SPN 10 Amp, 4no. SPN 6 Amp./ 4no. 32 Amp 3 phase main switch, 3no. 32 Amp 1 phase main switch. For 9 pandals each should have 5 ft height, dia 1 1/2 to 2 1/2 inch. Earthing pipe should be connected as per drawing cable laying would be carried out as per instruction of the Engineer.	Location	1	5210.5	5,210.50
9a	Drawing of power lines from main and sub-main switch board to exhibition stalls with proper phase distribution 3 phase with distribution board with main switches/MCB of suitable rating and wiring complete and necessary connection through proper switching and fusing C.K.Ts. All electrical wiring and fitting in the temporary structure/pandal shall be FR(Fire Resistive) type. All joints shall be made with porcelain insulator. Conductors twisted and tapped joint shall be avoided in pandal and structure. Proper earthing must be made wherever necessary as per existing Indian Electricity Rules. Power board connection with minimum 2.5 sq. mm. PVC copper wire stranded, no insulation breakage or black tape will be permitted. 415 volt min 4 way distribution box for other ground.	location	1	1150	1,150.00
10	40 watt tube light/ LED tube light complete fittings (double) with tube etc. as per Item No. 1.	No.	6	190.49	1,142.94
11	100 watt lamp with individual switches with suitable fuses for dark room.	No.	2	67.22	134.44
12	Earthing the installation as per IS in two separate grounds.	Set.	8	112.05	896.40
13	Spot lamp fixture including electrical connection with 20Watt LED warm white	No.	10	186.28	1,862.80

14	Rope light (L.E.D)/led fixed colour complete with fixing on the tree trunk and for 30 mts building ht by the contractor's own person with ckt.s wire minimum 1.0 sq. mm.stranded coppere wire form sutable places through proper fuse as per instruction of the Engineer.	Mt	1900	11.5	21,850.00
14a	Rope light (L.E.D)/led continious changing colour complete with fixing on the tree trunk and for 30 mts building ht by the contractor's own person with ckt.s wire minimum 1.0 sq. mm.stranded coppere wire form sutable places through proper fuse as per instruction of the Engineer.	MT	300	23.8	7,140.00
15	Supply and fixing above (round) 10 feet rain drop led light coloured ckt.s wire minimum 1.0 sq. mm. stranded copper wire from sutable places through proper fuse as per instruction of the engineer.	No	150	140.07	21,010.50

Total estimated cost in part -II= 1,54,677.70

Total estimated cost in part -I= 6,72,800.39

Gross Value in Part-1 + Part II= 8,27,478.09

Add GST @ 18% on total gross value= 148946.06

Total amount including GST= 976424.15

Add Labour Cess @ 1%= 9,764.24

Total estimated cost including GST & LWC= 986188.39

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SUMMERY

Sub.: Bill of Quantities for the erection of Exhibition Stalls and other associated works during Eastern India Science Fair 2025 and Science & Engineering Fair 2025 to be held at BITM, Kolkata with effect from 07.01.2025 to 10.01.2025 on hire charges basis at BITM, Kolkata.

Part-I Estimated amount for EISF & SEF-2025 (at plot-IV of BITM campus) including 2 decorative gates near plot - 4 and main entrance. **=6,72,800.39**

Part-II Electrification and illumination work of EISF-2025 and S&EF-2025 **=1,54,677.70**

Total Amount =8,27,478.09

Add GST@18% on estimated cost including GST =1,48,946.06

Total amount including GST =9,76,424.15

Add for Labour Welfare Cess @1% =9,764.24

Total estimated cost including GST & LWC =9,86,188.39

SPECIAL TERMS AND CONDITIONS

Sub.: Erection of Exhibition Stalls and other associated works during Eastern India Science Far 2025 and Science & Engineering Fair 2025 to be held at BITM, Kolkata with effect from 07.01.2025 to 10.01.2025 on hire charges basis at BITM, Kolkata.

Decorators may please note the following points before submission of their e-tender document with their quoted offers:

1) Decorators will be awarded on the basis of lowest quoted offer on submission of Part-I, Part-II. Decorators must quote their offers on % basis on the prescribed format (Rate Quote Sheet) as enclosed in the tender document.

2) Decorators must submit their Earnest Money Deposit (EMD) @2.5% on total sum of Part-I & Part-II which amounts to Rs.25,000.00, either in the form of Demand Draft/ banker's Cheque, drawn in favour of **Birla Industrial and Tehcnological Museum, Kolkata** or NEFT/RTGS/online. Scanned copy of Demand Draft/ Pay order/ Banker's Cheque of any Nationalised/ Scheduled Bank/ proof of online payment to BITM Account as per detail below towards Earnest Money Deposit (EMD) in pdf format in favour of "**Birla Industrial and Technological Museum**" payable at Kolkata. Details of Bank account is as under: -

Name of the Beneficiary: **Birla Industrial and Technological Museum**

Name of Beneficiary's Bank: **State Bank of India**

Address of Beneficiary's Bank branch: **Syed Amir Ali Avenue, Park Circus, Kolkata-700017**

Beneficiary's Bank Account No.: **10513451673**

Beneficiary's Bank IFSC Code : **SBIN0001749**

MICR Code: **700002077**

3) Decorators must engage two separate groups of workers simultaneously for executing the works at two separate locations of the campus and the works must be completed well within 05th January evening 2025. Dismantling of all the pandals including electrical items, after ending of EISF & SEF-2025, to be done and clearing of all the materials from the BITM campus before **15.01.2025**

4) It is mandatory for the successful decorator to obtain necessary Fire clearance/permission from the West Bengal Fire Service Authority (W.B.F.S.) prior to/during erection and installation of exhibition stalls at BITM during E.I.S.F. and S&EF -2025. Such permission is essential from the safety and security point of view. Necessary changes/fees if required to be paid to W.B.F.S. by the decorator, the said amount will be borne by BITM on production of Money Receipt supported with relevant claim/bill of W.B.F.S. in original.

5) Decorators must go through the tender specification drawings, Terms & Conditions, other relevant instructions and inspect the site physically before submission of their tenders.

6) If any decorator is willing to execute the above work with the tubular structure or any kind of M.S Structure for covering the stall and pandal, no extra rate will be considered. The decorator will be awarded as per the lowest quoted offer basis.

Notes: All the decorators are requested to go through the following instructions properly & submit their e-tenders:-

A. Erection of stalls/pandal (civil)

1. The decorators selected for this work must ensure that all the materials used by them should be as per norms as imposed by West Bengal Fire Service Dept. and a copy of such norms is enclosed herewith for their reference please.
2. Decorators are requested to quote their % offer on the prescribed sheet as enclosed in the tender document.

3. The decorator who will be awarded for this job must submit an application to the local Fire Authority along with other relevant documents for obtaining statutory clearance from the Fire Dept. for installation of the stalls at BITM during EISF-2025 and S&EF-2025.

4. All the decorators must submit their tenders after physical inspection of the site and going through the specifications, drawings and layout properly.

5. Technical data for erection of 1 no. of gate at BITM Science Fair Ground (near plot-iv campus) are specified below:

- a) The gate has to be erected in line with the enclosed drawing and instruction of the Engineer-in-charge and Arts Section of BITM.
- b) The gate has to be erected with the help of Poles, Ply and Soft Wood frame work from the structural safety point of view and aesthetic point of view.
- c) Frame work must be done perfectly so that no problem is arisen to fix the **Flex**.
- d) All Flex and Logo matter etc. will be supplied by Arts Section of BITM to the decorator and the same to be fixed in position by the decorator as per the instruction of Arts Section and direction of Engineer-in-Charge.
- e) All the exposed fascia of ply and wooden frame work are required to be painted as per approved colour and make of paint.
- f) Flags in multi-colour are to be made of Satin cloths and PVC and to be fitted as per instruction of the Engineer-in-charge/Art Section/Drawing.

6. Technical data for erection of another gate near main entrance of BITM campus will be as follows:

- a) It will be erected in line with the enclosed drawing and instruction of the Arts Section and the Engineer-in-Charge of Birla Industrial & Technological Museum.
- b) The gates have to be structurally erected with the help of Sal balli/Bamboo poles, ply and soft wood frame work at two identified locations of the campus.
- c) The gates must be erected in such a way that they look aesthetically descent & decorative.
- d) The necessary Flex and Logo materials etc. will be provided by the Arts Section of BITM just prior to finishing work, but the other finishes like flags etc. in multi-colour made of sation cloths and PVC etc. are to be done by the decorator.
- e) The decorator must ensure that no holes are to be made on the concrete road of the premises for erection of the gates structure.
- f) If any changes are to be made in the design of the gates, the decorator is bound to fabricate and erect the same with the changed design of the gate within their quoted price.
- g) All the exposed fascia of ply and wooden frame work are required to be painted as per approved colour shade and make of print.
- h) All Flex and Logo matter etc. will be supplied by Arts Section of BITM to the decorator and the same to be fixed in position by the decorator as per the instruction of Arts Section and direction of Engineer-in-Charge.

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B- For Electrification & Illumination Work relating to EISF-2025 and S & EF-2025

1. Rates must be inclusive of the cost of wiring from point to point and extensions.
2. Number of fixture to be installed may be increased or decreased by about 25% of the B.O.Q.
3. For maintenance, the agency must depute four (4) skilled electricians who will remain present at the site in two grounds, where fair will be held, during fair hours at his own expenditure and the rate may be quoted accordingly, maintaining child labour act. If the contractor failed to depute 4 experienced electrician during fair, necessary deduction @ Rs. 996.00 per day per person will be deducted from the total bill amount.
4. Separate switchings, fusing circuits, indication lamps and proper earthings must be provided in each section of the running stalls.
5. Precautions must be taken against fire from electric circuits. All wiring joints, lamps etc. must be kept away from clothings or any metal structure for decorations to avoid any fire hazards. Agency is liable to issue any kind of certificate required to obtain clearance from the fire agency, if required.
6. Proper earthings must be done wherever necessary as per standard Indian Electricity Rules.
7. The museum will not be responsible at all for any loss or damage of electrical installations undertaken by the contractor.
8. Tube light and power board, circuits inside running stalls must be separated.
9. Load must be balanced by distributing it in three phases.
10. The contractor shall work as per instructions of the Museum officials on duty at the site.
11. For all extra items (if required) separate bill must be submitted with rate analysis after prior permission and approval of the Museum authority.
12. The contractor and his workmen must have proper license to carry out Electrical installations.
13. Rate must be inclusive of carrying charges and other charges as may be required to electrical installation jobs. The contractor must also undertake necessary action for the power connection from C.E.S.C. supply, if required.
14. Necessary insurance coverage against any loss, theft, fire etc. has to be made at contractor's cost and this office will not be responsible, in any way, on the above account.
15. Contractors are requested to visit the site before submitting their tenders.
16. All electrical wires, tube light sets, Power Boards L.T. panel and other necessary fittings and fixtures must be brought at BITM 5 (five) days prior to the inaugural date of Science Fair, failing which the second lowest bidder will be considered to carry out the said work.
17. The electrical work must be carried out by the competent licenced electrical person as per the norms as laid down in the Indian Electricity Rules.
18. Drawing of cable (armoured equal to or above 16 sq. mm. for main line and equal to or above 10 sq. mm. for light load) to be drawn underground and over ground as per requirement from L.T. Panel to individual single phase D. B. Box.
19. Drawing of powerline with 7/20 copper wire without any joint or black tape except power board connection with proper earthing must be done.
20. Specified P.V.C. copper wire must be laid outside the cloth by maintaining minimum lighting load.
 - 6 inch. gap between phase and neutral.
 - 3 inch. gap between neutral and earth.
 - 6 inch. gap from cloth from any P.V.C wire.
21. For 9 pandals, 9 no. earth electrode of 5 ft. height of minimum 1 1/2" dia GI pipe is required.
22. Per circuit not more than 1kw load for inside pandal.
23. Additional Metal halide lamps (2 no) of appropriate wattage must be in readystock and it may be needed as per requirement.
24. Electrification work will be carried out in two separate places i.e. in two locations of BITM premises.
25. Selected contractor has to provide a letter in their Letter Head Pad by writing a specific content as desired by BITM while submission of application to W.B. Fire Service Department in regard to obtain statutory Fire clearance from the Dept.
26. Contractor must complete all his electrical works in all aspect with 05.01.2025 evening positively.
27. On completion of the fair, the contractor must dismantle all fixtures/fittings of electrical work immediately on the next day after the fair is over and the materials to be taken away from the campus on production of proper gate passes at the main gate within one week time.
28. Contractor must have electrical supervisory license or he should give a letter stating that he has permanent electrical supervisor license holder in his company. Without this, his tender will not be accepted (Part A).
29. Underground wiring must be done by armoured cable.
