

Supply, Installation, Testing & Commissioning of Interior & MEPE Services at Lecture Theatre

ELECTRICAL WORKS

Sl.No	ITEM DESCRIPTION	UOM	QTY	UNIT RATE	TOTAL AMOUN
A	MAIN FEEDER DISTRIBUTION				
A1	LT SWITCH BOARDS				
	415V, 3phase, 4wire floor mounting, free standing / wall mounting, Cubicle type, Compartmentalized construction of LT Switchboards conforming to enclosed technical				
A1.1	MAIN SWITCH BOARD				
1	Main LT Panel (415V) (As Per SLD Drawing)	Nos.	2		
2	Lift & Escallator Panel	Nos.	2		
	MAKE - Havells, L & T, Schneider,Siemens,ABB				
A2	LT CABLES				
	Supply & Laying of 1.1kV grade XLPE insulated and PVC sheathed Aluminium/ Copper				
A2.1	XLPE insulated conductor cables				
1	3.5C 300 sq.mm. Al. Armoured (From Extention to Main Panel)	Mtr.	1000		
2	3.5C 300 sq.mm. Al. Armoured (From Extention to Main Panel)	Mtr.	800		
	MAKE - Finolex, PolyCab, KEI Cable				
A3	LT CABLE BRASS CABLE GLANDS				
	Supply & Cable termination using DOUBLE compression glands for cable sizes of 70 Sqmm and above and SINGLE compression brass cable glands				
A3.1	XLPE insulated conductor cables				
1	3 & 1/2 core 300 Sq. mm	Nos.	5		
2	3 & 1/2 core 300 Sq. mm	Nos.	4		
	MAKE - Comet, Dowell, 3M				
A4	LT CABLE ALUMINIUM LUGS				
A4.1	XLPE insulated conductor cables				
1	3 & 1/2 core 300 Sq. mm	Nos.	30		
2	3 & 1/2 core 150 Sq. mm	Nos.	10		
2	3 & 1/2 core 300 Sq. mm	Nos.	24		
2	3 & 1/2 core 150 Sq. mm	Nos.	8		
	MAKE - Comet, Dowell, 3M				
A5	LT CABLE TERMINATION WORK				
	Supply & Cable termination using DOUBLE compression glands for cable sizes of 70 Sqmm and above and SINGLE compression brass cable glands				
A5.1	XLPE insulated conductor cables				
1	3 & 1/2 core 300 Sq. mm	Nos.	10		
2	3 & 1/2 core 300 Sq. mm	Nos.	8		
	MAKE - Comet, Dowell, 3M				
A6	EARTHING SYSTEM				
A6.1	GI EARTHING CONDUCTOR				
1	50mm x 6mm GI flat	Mtr.	10		
2	25mm x 6mm GI flat	Mtr.	80		
3	50x6mm GI. 600mm Long Bus bar with FRP Supporting insulator with suitable size of Brass coated Bolts and Nuts and suitable size of Grip Bolts	Nos.	5		
A7	MISCELLANEOUS ITEMS				
a	ISMC channels/angles supporting structure.	Kg.			
A8	EXCAVATED TRENCH WORKS FOR HUMPIPE / PVC PIPE				
a	300mm W x 600mm D excavation and Buried	Mtr.	200		
b	LT cable route marker grouted in earth	Nos.			
A8	MEDIUM DUTY CABLE PULL CHAMBER				
a	1000x1000x1000mm Cable pull chambers.	Nos.			
B	MAIN LIGHTING / POWER AND MECHANICAL DISTRIBUTION PANELS				
B1	MAIN LIGHTING / POWER DISTRIBUTION PANELS				
B1.1	415V, 3phase, 4wire floor mounting, free standing / wall mounting Panel				

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Sl.No	ITEM DESCRIPTION	UOM	QTY	UNIT RATE	TOTAL AMOUN
1	Lecture Room Lighting LDBS (As Per SLD Drawing)	Nos.	10		
2	Lecture Room PDBS (As Per SLD Drawing)	Nos.	6		
3	Lecture Room HVAC DBS (As Per SLD Drawing)	Nos.	6		
4	Common DB GF & GF MEZ FL Front side (As Per SLD Drawing)	Nos.	2		
5	Common DB FF & FF MEZ FL Front side (As Per SLD Drawing)	Nos.	2		
6	Common DB SF & SF MEZ FL Front side (As Per SLD Drawing)	Nos.	2		
7	Common DB TF & TF MEZ FL Front side (As Per SLD Drawing)	Nos.	2		
8	Common DB 4TH F & 4TH F MEZ FL Front side (As Per SLD Drawing)	Nos.	2		
9	Common DB 2 GF Back side (As Per SLD Drawing)	Nos.	1		
	MAKE - Havells, L & T, Schneider,Siemens,ABB				
B2	CABLE TRAY				
B2.1	Perforated Type Cable trays - MS Painted				
1	300mm (W) x 50mm (H) x 1.6 mm (T)	Mtr.	70		
2	75mm (W) x 50mm (H) x 1.6 mm (T)	Mtr.	200		
	MAKE - MK Legrand, INDIANA, OBO Betterment				
B3	EARTHING SYSTEM				
B3.1	GI EARTHING CONDUCTOR				
1	25mm x 3mm GI flat	Mtr.	10		
C	SECONDARY WIRING FROM PANELS				
C1	LT CABLES				
	Supply & Laying of 1.1kV grade XLPE insulated and PVC sheathed Aluminium/ Copper				
C1.1	XLPE insulated conductor cables				
1	4C 16 sq.mm. Al. Armoured (Used in PDBs)	Mtr.	65		
2	4C 10 sq.mm. AL. Armoured (Used in LIFTs)	Mtr.	130		
3	4C 4 sq.mm. AL. Armoured (Used in Common DBs, ACDBs & ODU's)	Mtr.	365		
4	3C 4 sq.mm. AL. Armoured (Used in Common LDBs & Classroom LDBs)	Mtr.	590		
	MAKE - Finolex, PolyCab, KEI Cable				
C2	LT CABLE BRASS CABLE GLANDS				
	Supply & Cable termination using DOUBLE compression glands for cable sizes of 70 Sqmm and above and SINGLE compression brass cable glands				
C2.1	XLPE insulated conductor cables				
1	2 to 4 core 16 Sq. mm	Nos.	6		
2	2 to 4 core 10 Sq. mm	Nos.	2		
3	2 to 4 core 2.5/4 Sq. mm	Nos.	51		
	MAKE - Comet, Dowell, 3M				
C3	LT CABLE ALUMINIUM LUGS				
	Supply & Cable termination using DOUBLE compression glands for cable sizes of 70 Sqmm and above and SINGLE compression brass cable glands				
C3.1	XLPE insulated conductor cables				
1	2 to 4 core 16 Sq. mm	Nos.	48		
2	2 to 4 core 10 Sq. mm	Nos.	16		
3	2 to 4 core 2.5/4 Sq. mm	Nos.	368		
	MAKE - Comet, Dowell, 3M				
C4	LT CABLE TERMINATION WORK				
	Supply & Cable termination using DOUBLE compression glands for cable sizes of 70 Sqmm and above and SINGLE compression brass cable glands				
C4.1	XLPE insulated conductor cables				
1	2 to 4 core 16 Sq. mm	Nos.	12		
2	2 to 4 core 10 Sq. mm	Nos.	4		
3	2 to 4 core 2.5/4 Sq. mm	Nos.	102		
C5	GI EARTHING CONDUCTOR				
1	8 SWG GI Wire (Uesd in all DBs)	Mtr.	100		
D	LIGHTING SYSTEM WORK				
D1	POINT WIRING				
D1.1	Point wiring of light points complete with all wiring materials such as 1100V, FRLS grade multi strand flexible copper wire of 2RX2.5+1RX1.5 Sqmm				

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Sl.No	ITEM DESCRIPTION	UOM	QTY	UNIT RATE	TOTAL AMOUN
1	Single Light Control Point using 1 Sq.mm Copper Flexible Ckt Wiring, Switches, Switch Plate, Back Box, Accessories & Connections etc. Complete as per EIC. (5 Mtr)	Nos.	110		
2	Looped Light Control Point using 1 Sq.mm Copper Flexible Ckt Wiring, Switches, Switch Plate, Back Box, Accessories & Connections etc. Complete as per EIC. (2 Mtr)	Nos.	282		
3	FAN Control Point using 1 Sq.mm Copper Flexible Ckt Wiring, Switches, Switch Plate, Back Box, Accessories & Connections etc. Complete as per EIC. (5 Mtr)	Nos.	6		
4	JB for Light fixtures	Nos.	368		
5	JB for Fan fixtures with Hook (Used in Offices)	Nos.	6		
6	Supply and installation of 2 meters length, 3mm thick GI Chain with 6mm GI 'S' hook and 6mm GI wire for providing additional support to high bay light fixtures.	Nos.	6		
D2	LIGHTING CIRCUIT MAIN				
D2.1	Providing all materials, accessories and labour for wiring for light / fan circuit main using FRLS insulated stranded copper conductor wires of 1100V grade				
1	2 x 2.5sqmm + 1 x 1.5sqmm wires.	Mtr.	730		
2	2 x 1.5sqmm + 1 x 1.5sqmm wires.	Mtr.	280		
3	3C x 2.5sqmm Cu Flexible Cable	Mtr.	300		
	MAKE - Finolex, PolyCab, Havells				
D3	CONDUIT:				
1	20mm PVC Conduite Pipe Laying with Zari work in brick masonry wall 18 using electrical cutter/braker. Finish zari work using chicken mess, single coat finish plaster with line & level etc. complete as per EIC.	Mtr.	277		
2	25mm PVC Conduite Pipe Laying with Zari work in brick masonry wall 18 using electrical cutter/braker. Finish zari work using chicken mess, single coat finish plaster with line & level etc. complete as per EIC.	Mtr.	505		
D4	LIGHT FIXTURE				
1	1 x 45W High Quality LED LOWbay light, Surface mounted industrial fixture (used in front passage)	Nos.	6		
2	2' X 2' 36W, Surface / Raceway Mounted LED type Light fixture (used in front classroom) MAKE - Philips, Havells, LT	Nos.	210		
3	1 x 70W flood light wall Mounted LED type Light fixture (used in outer side of building) MAKE - Philips, Havells, LT, Delta	Nos.	10		
4	1 x 10W LED WALL mounted luminaire (used in lift) MAKE - Philips, Havells, LT	Nos.	2		

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Sl.No	ITEM DESCRIPTION	UOM	QTY	UNIT RATE	TOTAL AMOUN
5	1 x 20W Recess mounted pressure die-cast aluminium luminaire (used in toilet, offices, front passage & back passage) MAKE - Philips, Havells, LT	Nos.	158		
6	1 x 20W LED TUBELIGHT WALL mounted luminaire (used in toilets & offices) MAKE - Philips, Havells, LT	Nos.	24		
7	1200mm, ceiling mounted FAN & fix with necessary clamps/support, connection etc. complete (used in offices) MAKE - Crompton Greaves, Havells, Almonard	Nos.	6		
8	250mm PVC, Wall mounted Air EX.FAN & fix with necessary clamps/support, connection etc. complete (used in toilets) MAKE - Crompton Greaves, Havells, Almonard	Nos.	12		
D5	TIMER & CONTECTOR				
1	12-24 Hour Timer	Nos.	12		
2	Two-Pole Contector	Nos.	12		
	MAKE - L & T, Schneider,ABB,Legrand				
E	SOCKET OUTLET WORK				
E1	RACEWAYS				
E1.1	FLOOR RACEWAYS - MS				
1	150mm wide x 38mm depth	Mtr.	843		
2	350mm wide x 38mm depth	Mtr.	348		
3	150mm wide x 150mm high x 60mm depth	Mtr.	144		
4	350mm wide x 350mm high x 60mm depth	Mtr.	114		
	MAKE - MK Legrand, INDIANA, OBO Betterment				
E1.2	CONDUIT:				
1	25mm PVC Conduite Pipe Laying with Zari work in brick masonry wall 18 using electrical cutter/braker. Finish zari work using chicken mess, single coat finish plaster with line & level etc. complete as per EIC.	Mtr.	726		
E2	SUBMAINS AND CIRCUIT MAINS				
1	2 x 2.5sqmm + 1 x 1.5sqmm wires.	Mtr.	2174		
2	2 x 1.5sqmm + 1 x 1.5sqmm wires.	Mtr.	2210		
	MAKE - Finolex, PolyCab, Havells				
E3	SOCKET OUTLETS (MAKE - HIFI, Legrand (Artier Series), Schneider (Neo C metroSeries))				
1	On Borad 6Amp Power point with Switches, Sockets, Switch Plate, Back Box with Accessories & 1.5Sq.mm Wire Connections etc. Complete as per EIC. (5 Mtr) (Used in	Nos.	8		
2	On Borad 16Amp Power point with Switches, Sockets, Switch Plate, Back Box with Accessories & 2.5Sq.mm Wire Connections etc. Complete as per EIC. (5 Mtr) (Uesd in	Nos.	6		
3	Power Point using Separate 2Nos. 6Amp Switch & Socket, Backbox, Single Phase Three Wire, 2.5 Sqmm (PN) x 1.5 Sqmm (EH), Copper Copper Flexible Wire Circuit Wiring with Accessories & Connections etc. Complete as per EIC. (5 Mtr) (Uesd in Classrooms for	Nos.	918		
4	Power Point using Separate 3Nos. 6Amp Switch & Socket, Backbox, Single Phase Three Wire, 2.5 Sqmm (PN) x 1.5 Sqmm (EH), Copper Copper Flexible Wire Circuit Wiring with Accessories & Connections etc. Complete as per EIC. (5 Mtr) (Uesd in offies for Work	Nos.	12		
5	Power Point using Separate 6Amp Switch & Socket, Backbox, Single Phase Three Wire, 1.5 Sqmm (PN) x 1.5 Sqmm (EH), Copper Copper Flexible Wire Circuit Wiring with Accessories & Connections etc. Complete as per EIC. (5 Mtr) (Uesd in offices, drink water	Nos.	72		
6	Power Point using Separate 16Amp Switch & Socket, Backbox, Single Phase Three Wire, 2.5 Sqmm (PN) x 1.5 Sqmm (EH), Copper Copper Flexible Wire Circuit Wiring with Accessories & Connections etc. Complete as per EIC. (5 Mtr) (Uesd in offices, drink water,	Nos.	204		
E4	INDUSTRIAL TYPE POWER SOCKETS & ISOLATORS				
E4.1	INDUSTRIAL TYPE POWER SOCKETS				
1	1 No.16A / 20A / 32A 415V, Three phase, TP+NE industrial type Metal Clad power socket in Powder coated MS enclosure controlled by 20A / 32A 4P MCB with all fixing accessories (Indoor type-IP52). (Place at GF Mezenine Floor & FF Mezenine Floor) MAKE - Havells, L & T, Schneider, Siemens, ABB, Legrand	Nos.	12		
E4.2	ISOLATORS in Powder Coated MS Enclosure				
1	32A TP + NL MCB Type Isolator in IP-52 Powder coated MS enclosure. MAKE - Havells, L & T, Schneider,Siemens,ABB	Nos.	24		

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Sl.No	ITEM DESCRIPTION	UOM	QTY	UNIT RATE	TOTAL AMOUN
F	LA SYSTEM				
1	SITC of Vertical Air Termination Solid aluminium with Base - 10 mm dia. and 1000 mm long. Air Termination Base tested for conditioning, Ageing Test & Lightning impulse current withstand test: 100 kA of 10/350 μ s waveform in an accredited. Third party laboratory as per 6.3 & 6.4 of IEC 62561-1 2017 with appropriate MAST 34 mm dia. 3000mm long-cold galvanized as per EIC.(OBBO,JEE,CAPE,DHEN ,Axis, SSS MAKE)	Mtr.	4		
2	SITC of 8 mm dia solid Aluminium Conductor for roof top mesh grid and tested as per IEC 62561- 2 conducted in the Govt. accredited thirty party laboratory to meet the requirement of IS/IEC 62305 with Required Accessories - Aluminium Holding clamp at every 1 mtr distance, Aluminium/SS cross splicer at every crossing of Alu. conductor, Expansion piece with connectors at every 20 mtr distance, Aluminium straight Splicer to connect conductors. All Accessories should be tested as per IEC 62561-1 2018 Cl. 6.3 for conditioning & Ageing Test & 6.4 for Lightning impulse current withstand test: 100 kA of 10/350 μ s waveform (Ageing & Electrical test) conducted in a sequence manner & tested in the Govt.	Mtr.	120		
3	SITC of Galvanized Steel Flat 25 x 6 mm thickness from earth electrode directly in ground as required. Zinc coating: 500 g/m square (Approx: 70 micron coating) tested and used exclusively for lightning protection earthing system and ring equipotential bonding.	Mtr.	276		
4	SITC of 14.2 mm dia. 3 mtr. long Earth electrode of High tensile steel electrode with 250 micron copper bonding & 1 bag of Carbon fill Based environment friendly backfill tested as per IEC 62561-7 in NABL accredited Laboratory and suitable stainless Steel double sided clamp. Eco Friendly rust proof heavy duty weather proof Polyethylene Earth Pit Chamber with following dimensions: 254 mm dia. (top), 330 mm dia. (bottom) & 260 mm (height).	Mtr.	4		
Basic Amaount in Rs.					
GST					
Total Amount in Rs.					