



भारतीय विमानपत्तन प्राधिकरण AIRPORTS AUTHORITY OF INDIA

संदर्भ सं: भाविप्रा/अयोध्या/इंजी(सि)/एन.टी.बी. /2024-25/कार्य-आदेश संख्या-05
Ref: AAI/AYO/ENGG(C)/NTB/2024-25/W.O. No-05 /166-75

दिनांक: 24.05.2024
Date: 24.05.2024

सेवा में/To,

मैसर्स तरुण इलेक्ट्रिकल्स
M/s Tarun Electricals,
हाउस न. बी-18 सेक्टर न. 6, हनुमानगढ़ जंक्शन
House no B-18, Sector No.6, Hanumangarh Junction
हनुमानगढ़, राजस्थान - 335512
Hanumangarh, Rajasthan -335512
M.No. 9571275877
E-mail- tarunelectricalshmh@gmail.com

विषय: अयोध्या हवाई अड्डे का विकास ।

Sub: Development of Ayodhya Airport.

उपशीर्ष: अंतराष्ट्रीय वाल्मीकि हवाई अड्डे में नवनिर्मित टर्मिनल भवन और अन्य क्षेत्रों में यात्रियों की सुविधा के लिए विविध सिविल और इलेक्ट्रिकल कार्य और अन्य सुधार कार्य ।

SH: Miscellaneous Civil and Electrical Works and other Rectification works for facilitation of passengers at Newly Constructed Terminal Building and other areas at MVI Airport, Ayodhya Dham. (PART-I)

संदर्भ: आपकी ई-निविदा 09.05.2024 को खोली गई
Ref.: Your e-Tender was opened on 09.05.2024

महोदय / Sir,

- उपरोक्त कार्य के लिए आपका ई-निविदा अध्यक्ष, भारतीय विमानपत्तन प्राधिकरण की ओर से आप के द्वारा उद्धृत मद दर जिसकी कुल राशि रु. 41425750.00 (रुपये चार करोड़ चौदह लाख पच्चीस हजार सात सौ पचास मात्र) (जीएसटी अतिरिक्त) जो कि निविदा की लागत रु. 47126048.00 से 12.10 % कम है, स्वीकृत किया जाता है।
- Your E-Tender for the work mentioned above is hereby accepted on behalf of Chairman, Airports Authority of India, at the item rate quoted by you totaling to Rs. 41425750.00 (Rupees Four Crore fourteen lakh twenty-five thousand seven hundred fifty only) (GST exclusive) which is 12.10 % below the estimated cost put to tender of Rs. 47126048.00
- संयुक्त महाप्रबंधक (अभि.- विद्युत), भारतीय विमानपत्तन प्राधिकरण, महर्षि वाल्मीकि हवाई अड्डा अयोध्या इस कार्य के प्रभारी अभिर्यता होंगे। आपसे अनुरोध है कि आप संविदा करार पर हस्ताक्षर करने एवं उसे पूरा करने हेतु इस पत्र के जारी किए जाने के 15 (पन्द्रह) दिनों के भीतर संयुक्त महा प्रबंधक (अभि.- विद्युत), भारतीय विमानपत्तन प्राधिकरण, अयोध्या हवाई अड्डा के कार्यालय में उपस्थित हों। संविदा करार रु 100/- (सौ रुपये मात्र) के न्यायिकेतर (नॉन ज्युडिशियल) स्टाम्प पेपर पर बनाया जाएगा और स्टाम्प पेपर की लागत आपको वहन करनी होगी।
Jt.General Manager Engg (E), AAI, Maharishi Valmiki Ayodhya Airport, Ayodhya shall be the Engineer-in-Charge of the work. You are requested to attend office of Jt. General Manager Engg (E), AAI, Maharishi Valmiki Ayodhya Airport within 15 (Fifteen) days from the date of issue of this letter, to sign and complete the contract agreement. The contract agreement shall be executed on a non-judicial stamp paper of value Rs. 100/- (Rupees One Hundred only) and the cost of the stamp paper shall be borne by you.



भारतीय विमानपत्तन प्राधिकरण AIRPORTS AUTHORITY OF INDIA

4. कृपया इस पत्र के जारी होने के 10 दिन में सुरक्षा जमा के लिए रु 41,42,575.00 (रुपये इकतालीस लाख बयालीस हजार पाँच सौ पचहत्तर केवल) जमा करवा दें, ऐसा नहीं करने पर उक्त रकम संविदा दस्तावेज के पृष्ठ जीसीसी-23 पर दी गई शर्त 1A के अनुसार आपके रनिंग बिल से काट ली जाएगी।
Please deposit Rs. 41,42,575.00 (Rupees Forty-one lakh forty-two thousand five hundred seventy-five only) towards Security Deposit within 10 (Ten) days from the date of issue of this letter, failing which, the same will be deducted from your running bill as per condition of Clause no. 1A on page GCC-23 of the Contract document.
5. आपसे अनुरोध है कि संविदा श्रमिक (विनियमन एवं समापन) अधिनियम 1970 और संविदा श्रमिक (विनियमन एवं समापन) केन्द्रीय नियमावली 1971, अधिन, केन्द्रीय और राज्य सरकार के न्यूनतम मजदूरी अधिनियम और ई.पी.एफ.एक्ट, 1952 एवं ई. एस. आई. एक्ट नियमों का पालन करें।
You are requested to comply with provision of Contract Labour (Regulation and Abolition) Act of 1970 and contract (Regulation and Abolition) Central rules 1971, Minimum Wages Act & Rules, EPF Act, 1952 and ESI act thereof Central & State Governments.
6. आपको निर्देश दिए जाते हैं कि सहायक महाप्रबंधक (अभि.-सिविल) भारतीय विमानपत्तन प्राधिकरण, अयोध्या हवाई अड्डा से तत्काल सम्पर्क करें जो कि आपको कार्यस्थल सुपर्द करने की व्यवस्था करेंगे।
You are also directed to contact Asst. General Manager (Engg-C), AAI, Ayodhya Airport immediately who will arrange to hand over the site to you.
7. कृपया ध्यान दें कि कार्य को करने के लिए अनुमत समय 03 (तीन) महीना होगा जो की इस पत्र के जारी होने के बाद 10 वें दिन या वास्तविक तिथि, जो भी पहले हो, से शुरू हो जाएगा।
Please note that the time allowed for carrying out the work shall be 03 (Three) Months and the same shall be reckoned from the 10th day after issue of this letter or actual date of start whichever is earlier.
8. संविदा के संबंध में आगे किया जाने वाला पत्राचार समान्यतः इंजीनियर प्रभारी से किया जाए।
Any further correspondence in connection with the contract should normally be addressed to the Engineer-in-Charge.
9. कृपया इस पत्र की पावती भेजें तथा साथ में संलग्न इस पत्र की दुसरी प्रति पर स्वीकारोक्ति के रूप विधिवत हस्ताक्षर करके हमें वापस भेजें।
Please acknowledge the receipt and return the duplicate copy of this letter enclosed herewith after duly signing it to the undersigned as a token of acceptance.
10. यदि कोई विसंगति पाई जाती है तो अंग्रेजी भाषा ही मान्य होगी।
In case any discrepancy is found, then English version will be taken as correct.

धन्यवाद/ Thanking you.

भवदीय / Yours faithfully,


24/05/2024

(आर.बी.एस. कुशवाहा)/(R.B.S. Kushwaha)

संयुक्त महाप्रबंधक (अभि. - विद्युत)

Jt. General Manager Engg (E),

भा.वि.प्रा., एम्.वी.आई. अयोध्या हवाई अड्डा, अयोध्या

AAI, M.V.I. Ayodhya Airport, Ayodhya

संलग्न / Encl: अनुसूची "A" / Schedule "A"

Note: As the subject work is to be executed on risk & cost of other agency, any purchase order for any item shall be placed in close coordination with Engineer In-Charge /site visit.



भारतीय विमानपत्तन प्राधिकरण AIRPORTS AUTHORITY OF INDIA

प्रतिलिपि / Copy to:

1. कार्यकारी निदेशक (इंजीनियरिंग), एनआर, सीएचक्यू, एएआई, नई दिल्ली..... कृपया जानकारी के लिए।
2. महाप्रबंधक (इंजीनियरिंग-सी), एनआर, सीएचक्यू, एएआई, नई दिल्ली कृपया जानकारी के लिए।
3. महाप्रबंधक (इंजीनियरिंग-सी), डब्ल्यूआर, सीएचक्यू, एएआई, नई दिल्ली कृपया जानकारी के लिए।
4. महाप्रबंधक (इंजीनियरिंग), एनआर, आरएचक्यू, एनएटीएस, नई दिल्ली..... कृपया जानकारी के लिए।
5. विमानपत्तन निदेशक, भा.वि.प्रा., अयोध्या हवाई अड्डा, अयोध्या कृपया जानकारी के लिए।
6. सहायक महा प्रबंधक (अभि.- सिविल), - I भा.वि.प्रा., अयोध्या हवाई अड्डा, अयोध्या।
7. सहायक महा प्रबंधक (अभि.- सिविल), - II भा.वि.प्रा., अयोध्या हवाई अड्डा, अयोध्या।
8. प्रबंधक, (अभि.- सिविल), भा.वि.प्रा., अयोध्या हवाई अड्डा, अयोध्या।
9. श्रमायुक्त, 209, रीजेंसी प्लाजा अलीगंज लखनऊ
10. ईपीएफओ अधिकारी भविष्य निधि भवन, विभूति खंड, गोमती नगर, लखनऊ - 226 010
11. अनुबंध की प्रति
12. संबंधित फ़ाइल

1. ED (Engg), NR, CHQ, AAI, New Delhi... For information please.
2. GM(Engg-C), NR, CHQ, AAI, New Delhi .. For information please.
3. GM(Engg-C), WR, CHQ, AAI, New Delhi .. For information please
4. GM (Engg), NR, RHQ, NATS, New Delhi.....For information please
5. Airport Director, AAI, Ayodhya Airport, Ayodhya.
6. Asst. General Manager (Engg.-C)- I, AAI, Ayodhya Airport, Ayodhya.
7. Asst. General Manager (Engg.-C) – II, AAI, Ayodhya Airport, Ayodhya.
8. Manager (E-C), AAI, Ayodhya Airport, Ayodhya
9. Labour commissioner 209 regency plaza aliganj Lucknow
10. EPFO Officer Bhavishya Nidhi Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow – 226 010
11. Agreement Copy
12. Concerned file


24/05/2024

(आर.बी.एस. कुशवाहा)/(R.B.S. Kushwaha)

संयुक्त महाप्रबंधक (अभि. – विद्युत)

Jt. General Manager Engg (E),

भा.वि.प्रा., एम्.वी.आई. अयोध्या हवाई अड्डा, अयोध्या

AAI, M.V.I. Ayodhya Airport, Ayodhya

SCHEDULE OF Quantity

Name of Work: Development of Ayodhya Airport. SH: Miscellaneous Civil and Electrical Works and other Rectification works for facilitation of passengers at Newly Constructed Terminal Building and other areas at MVI Airport, Ayodhya Dham (Part-I)

SCHEDULE OF WORK / ITEM(S)						TARUN ELECTRICALS (GSTN-08ANCPM5157F1Z0) BID ID -697792	
SL.No	Description of Work / Item(s)	No.of Qty	Units	Rate	Amount		
1.00	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :a) All kinds of soil i) Pipes, cables etc. exceeding 300 mm dia but not exceeding 600 mm	25.00	Metre	100.00	2500.00		
2.00	Excavating, Supplying and filling of local earth (including royalty) by mechanical transport upto a lead of 5km also including ramming and watering of the earth in layers not exceeding 20 cm in trenches, plinth, sides of foundation etc. complete. Note:-Earth Excavated from within Airport premises on approval from EIC, Amount equivalent to Royalty Charges will be deducted and lead will be paid (add /deduct) as per actual.	7000.00	Cum	450.00	3150000.00		
3.00	Extra for rolling with power roller of minimum 8 tonnes for banking excavated earth in layers not exceeding 20 cm in depth.	7000.00	Cum	125.00	875000.00		
4.00	Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. a) All kinds of soil.	50.00	Cum	100.00	5000.00		
5.00	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : a) 1:4:8 (1 cement : 4 coarse sand (zone-iii) derived from natural sources : 8 graded stone aggregate 40 mm nominal size derived from natural sources)	45.00	Cum	4000.00	180000.00		
6.00	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	150.00	Sqm	650.00	97500.00		
7.00	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level : 1:1.5:3 (1 cement : 1.5 coarse sand (zone-iii) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	15.00	Cum	7000.00	105000.00		



8.00	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement : 1:1.5:3 (1 cement : 1.5 coarse sand(zone-iii) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	10.00	Cum	7000.00	70000.00
9.00	Providing, hoisting and fixing above plinth level up to floor five level precast reinforced cement concrete work in string courses, bands, copings, bed plates, anchor blocks, plain window sills and the like, including the cost of required centering, shuttering but excluding cost of reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand(zone-iii) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).	5.00	Cum	10000.00	50000.00
10.00	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level . (a) Thermo-Mechanically Treated bars of grade Fe-500D or more	2500.00	Kg	65.00	162500.00
11.00	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.a) Thermo-Mechanically Treated bars of grade Fe-500D or more.	2000.00	Kg	65.00	130000.00
12.00	Centering and shuttering including strutting, propping etc. and removal of form for : a) Foundations, footings, bases of columns, etc. for mass concrete	100.00	Sqm	250.00	25000.00
13.00	Centering and shuttering including strutting, propping etc. and removal of form for b) Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	100.00	Sqm	350.00	35000.00
14.00	Centering and shuttering including strutting, propping etc. and removal of form for (c) Lintels, beams, plinth beams, girders, bressumers and cantilevers	100.00	Sqm.	350.00	35000.00
15.00	Centering and shuttering including strutting, propping etc. and removal of form for (d) Columns, Pillars, Piers, Abutments, Posts and Struts	100.00	Sqm.	450.00	45000.00
16.00	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:A)Cement mortar 1:6 (1 cement : 6 coarse sand)	50.00	Cum	5500.00	275000.00
17.00	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : a) Cement mortar 1:6 (1 cement : 6 coarse sand)	25.00	Cum	5500.00	137500.00
18.00	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundations and plinth in : a) Cement mortar 1:4 (1 cement : 4 coarse sand)	50.00	Sqm	600.00	30000.00
19.00	Providing and laying autoclaved aerated cement blocks masonry with 150mm/230mm/300 mm thick AAC blocks in super structure above plinth level up to floor V level with RCC band at sill level and lintel level with approved block laying polymer modified adhesive mortar all complete as per direction of Engineer-in-Charge. (The payment of RCC band and reinforcement shall be made for seperately).	25.00	Cum	10000.00	250000.00



20.00	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing of edges to give high gloss finish etc. complete at all levels. Granite stone slab of colour black, Cherry/Ruby red a) Area of slab over 0.50 sqm	75.00	Sqm	3500.00	262500.00
21.00	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	150.00	Sqm	850.00	127500.00
22.00	Designing, fabricating, testing, installing and fixing in position Curtain Wall with Aluminium Composite Panel Cladding, with open grooves for linear as well as curvilinear portions of the building, for all heights and all levels etc. including (a) Structural analysis & design and preparation of shop drawings for pressure equalisation or rain screen principle as required, proper drainage of water to make it watertight including checking of all the structural and functional design. (b) Providing, fabricating and supplying and fixing panels of aluminium composite panel cladding in pan shape in metallic colour of approved shades made out of 4mm thick aluminium composite panel material consisting of 3mm thick FR grade mineral core sandwiched between two Aluminium sheets (each 0.5mm thick). The aluminium composite panel cladding sheet shall be coil coated, with Kynar 500 based PVDF / Lumiflon based fluoropolymer resin coating of approved colour and shade on face # 1 and polymer (Service) coating on face # 2 as specified using stainless steel screws, nuts, bolts, washers, cleats, weather silicone sealant, backer rods etc. (c) The fastening brackets of Aluminium alloy 6005 T5 / MS with Hot Dip Galvanised with serrations and serrated washers to arrest the wind load movement, fasteners, SS 316 Pins and anchor bolts of approved make in SS 316, Nylon separators to prevent bi-metallic contacts all complete required to perform as per specification and drawing The item includes cost of all material & labour component, the cost of all mock ups at site, cost of all samples of the individual components for testing in an approved laboratory, field tests on the assembled working curtain wall with aluminium composite panel cladding, cleaning and protection of the curtain wall with aluminium composite panel cladding till the handing over of the building for occupation. Base frame work for ACP cladding is payable under the relevant aluminium item.s The Contractor shall provide curtain wall with aluminium composite panel cladding, having all the performance characteristics all complete, as per the Architectural drawings, as per item description, as specified, as per the approved shop drawings and as directed by the Engineer-in-Charge. However, for the purpose of payment, only the actual area on the external face of the curtain wall with Aluminum Composite Panel Cladding (including width of groove) shall be measured in sqm. up to two decimal places.	50.00	Sqm	4000.00	200000.00
23.00	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer at all height (upto 15 mtrs) all complete. (Scaffolding included in item)	1000.00	Kg.	90.00	90000.00
24.00	Welding by gas or electric plant including transportation of plant at site etc. complete.	4000.00	cm	1.50	6000.00



25.00	Providing and fixing stainless steel (Grade 304) railing / Frame made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	3500.00	Kg	550.00	1925000.00
26.00	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete at all height(upto 15 mtrs). Electric resistance or induction butt welded tubes (Scaffolding included in item)	3000.00	Kg	100.00	300000.00
27.00	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required upto all height (Upto 15 mtrs). (Scaffolding included in item.) In stringers, treads, landings etc. of stair cases, including use of chequered plate wherever required, all complete	5000.00	Kg	120.00	600000.00
28.00	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. . In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works.	1500.00	Kg.	90.00	135000.00
29.00	Chequered precast cement concrete tiles 22 mm thick in footpath & courtyard, jointed with neat cement slurry mixed with pigment to match the shade of tiles, including rubbing and cleaning etc. complete, on 20 mm thick bed of cement mortar 1:4 (1 cement : 4 coarse sand). a) Light shade pigment using white cement	150.00	Sqm	1200.00	180000.00
30.00	Providing and laying Vitrified tiles in floor with different sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately). a)Size of Tile 600x600 mm	150.00	Sqm	1100.00	165000.00
31.00	Providing and laying Vitrified tiles in floor with different sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately). a)Size of Tile 800x800 mm	150.00	Sqm	1200.00	180000.00
32.00	Grouting the joints with white cement and matching pigment in the items of fixing of vitrified tiles.	600.00	Sqm	50.00	30000.00
33.00	Providing and laying flamed finish Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge. Flamed finish granite stone slab Jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	50.00	Sqm	4000.00	200000.00

34.00	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-Charge) of total coated thickness 0.50mm (base metal of minimum 0.45mm thickness with total coating thickness of 0.05mm) with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling/ self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	225.00	Sqm	700.00	157500.00
35.00	Providing and fixing precoated galvanised steel sheet roofing accessories of total coated thickness 0.50mm (base metal of minimum 0.45mm thickness with total coating thickness of 0.05mm) with Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete : Ridges plain (500 - 600mm)	20.00	Metre	450.00	9000.00
36.00	Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm (+0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete a)Flashings	50.00	Sqm	500.00	25000.00
37.00	Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on interlocking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm, long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanized butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge. 8 mm thick fully perforated calcium silicate board made with Calcareous & Siliceous materials reinforced with cellulose fiber manufactured through autoclaving process to give stable crystalline structure with minimum compressive strength 225 kg/ sq. cm, bending strength 100 kg/sq. cm, of size 595x595 mm, having perforation of dia. 10 mm with minimum perforated area 18 % with non woven tissue on the back side, having an NRC (Noise Reduction Coefficient) of 0.85, with 50 mm thick rockwool of 48 kg /cum backing.	250.00	Sqm	2500.00	625000.00
38.00	12 mm cement plaster of mix : 1:6 (1 cement : 6 coarse sand)	400.00	Sqm	280.00	112000.00

39.00	Finishing walls with water proofing cement paint of required shade :a) New work (Two or more coats applied @ 3.84 kg/10 sqm)	1500.00	Sqm	50.00	75000.00
40.00	Finishing walls with Acrylic Smooth exterior paint of required shade : New work (Two or more coat applied @ 1.67 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	200.00	Sqm	90.00	18000.00
41.00	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete. On steel work	1000.00	Sqm	250.00	250000.00
42.00	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade : (a) Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	100.00	Sqm	80.00	8000.00
43.00	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.	500.00	Sqm	110.00	55000.00
44.00	Providing and fixing double scaffolding system (cup lock type) on the exterior side, up to seven story height made with 40 mm dia M.S. tube 1.5 m centre to centre, horizontal & vertical tubes joining with cup & lock system with M.S. tubes, M.S. tube challies, M.S. clamps and M.S. staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for the required duration as approved and removing it there after. The scaffolding system shall be stiffened with bracings, runners, connection with the building etc wherever required for inspection of work at required locations with essential safety features for the workmen etc. complete as per directions and approval of Engineer-in-charge .The elevational area of the scaffolding shall be measured for payment purpose .The payment will be made one time only irrespective of duration of scaffolding. Note: This item will be paid with prior permission of EIC for those works only where scaffolding is not included in item and work through Boom lift and Scissor lift can not be performed.	5000.00	Sqm	200.00	1000000.00
45.00	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	150.00	Sqm	40.00	6000.00
46.00	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	100.00	Cum	150.00	15000.00
47.00	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge. (a) Nominal concrete 1:3:6 or richer mix (including equivalent design mix)	30.00	Cum	450.00	13500.00
48.00	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge. (b) Nominal concrete 1:4:8 or leaner mix (including equivalent design mix)	15.00	Cum	450.00	6750.00
49.00	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead. a) For thickness of tiles 10 mm to 25 mm	50.00	Sqm	100.00	5000.00
50.00	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within Airport premises as per instructions of EIC. (a) Standing seam flexlock profile steel sheet roofing	1500.00	Sqm	50.00	75000.00

51.00	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. a) In cement mortar	10.00	Cum	500.00	5000.00
52.00	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earthwith lead upto 50 metres.	1000.00	Sqm.	150.00	150000.00
53.00	Providing and laying design mix cement concrete of M-35 grade/Characteristic Flexural strength of 4.1 Mpa , in roads/taxi tracks/runways, using cement content (OPC 43/53 grade) as per design mix, using coarse sand and graded stone aggregate of 40 mm nominal size in appropriate proportions as per approved & specified design criteria, providing dowel bars with sleeve/ tie bars wherever required, transporting from batching plant & laying at site, spreading and compacting mechanically by using needle and surface vibrators, levelling to required slope/ camber, finishing with required texture, including steel form work with sturdy M.S. channel sections, curing, making provision for contraction/ expansion, construction & longitudinal joints (10 mm wide x 50 mm deep) by groove cutting machine, providing and filling joints with approved joint filler and sealants, complete all as per direction of Engineer-in-charge (Item of joint fillers, sealants, dowel bars with sleeve/ tie bars to be paid separately). Note: - Cement content considered in M-35/Characteristic Flexural strength of 4.1 Mpa is @ 367 kg/cum. Excess/less cement used as per design mix is payable/ recoverable separately based on Tax invoice of cement i/c GST only nothing extra will be provided besides this.	50.00	Cum	8000.00	400000.00
54.00	Providing and laying Bituminous concrete using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction and density as per specification, complete and as per directions of Engineer-in-Charge. 40/50 mm compacted thickness with bitumen of grade VG-30 @ 5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	10.00	Cum	13000.00	130000.00
55.00	Providing and applying 2.5 mm thick road marking strips (retro- reflective) of specified shade/ colour using hot thermoplastic material by fully/ semi automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and accordance with applicable specifications.	500.00	sqm	600.00	300000.00
56.00	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5 mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured to calculate volume for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	5.00	Cum	8000.00	40000.00

57.00	4 cm thick bitumastic sheet with hot bitumen of approved quality . using stone chippings (60% with 12.5 mm nominal size and 40% with 10 mm nominal size) @ 2.60 cum per 100 sqm and coarse sand @ 2.60 cum per 100 sqm of road surface and with bitumen @ 56 kg/cum of stone chippings and @ 128 kg/cum of sand over a tack coat with hot straight run bitumen, including consolidation with road roller of 8 to 10 tonne etc. complete. (tack coat to be paid separately) a)With paving asphalt grade VG - 30 with no solvent	3000.00	Sqm	500.00	1500000.00
58.00	Providing and laying Non Pressure NP-3 class (Heavy duty) R.C.C. pipes including collars/spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete. a) 450 mm dia RCC pipes.	70.00	Metre	2300.00	161000.00
59.00	Providing and laying Non Pressure NP-3 class (Heavy duty) R.C.C. pipes including collars/spigot jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete.b) 600 mm dia RCC pipes. b) 600 mm dia RCC pipes.	70.00	Metre	3000.00	210000.00
60.00	Grading roof for water proofing treatment with a) Cement mortar 1:3 (1 cement : 3 coarse sand)	20.00	Cum	6500.00	130000.00
61.00	Providing and laying integral cement based treatment for water proofing on horizontal surface at all depth below ground level for under ground structures as directed by Engineer-in-Charge and consisting of : (i) Ist layer of 22 mm to 25 mm thick approved and specified rough stone slab over a 25 mm thick base of cement mortar 1:3 (1 cement : 3 coarse sand) including applying of twice (at base and top of mortar) cement slurry @ 2.2kg/m2 (each time) mixed with water proofing compound conforming to IS:2645 in the recommended proportion over the leveling course (leveling course to be paid separately). Joints sealed and grouted with cement slurry mixed with water proofing compound.(ii) 2nd layer of 25 mm thick cement mortar 1:3 (1 cement: 3 coarse sand) mixed with water proofing compound in recommended proportions.(iii) Finishing top with stone aggregate of 10 mm to 12 mm nominal size spreading @ 8 cudm/sqm thoroughly embedded in the 2nd layer.22.1.1Using rough kota stone.	500.00	Sqm	1400.00	700000.00
62.00	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying (a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm.(b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm.(c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around.(d) fourth and final layer of brick tiling with cement mortar (which will be paid for separately For the purpose of measurement the entire treated surface will be measured.	270.00	Sqm	600.00	162000.00
63.00	Providing and supplying aluminium extruded tubular and other aluminium sections as per the architectural drawings and approved shop drawings , the aluminium quality as per grade 6063 T5 or T6 as per BS 1474,including super durable powder coating of 60-80 microns conforming to AAMA 2604 of required colour and shade as approved by the Engineer-in-Charge. (The item includes cost of material such as cleats, sleeves, screws etc. necessary for fabrication of extruded aluminium frame work. Nothing extra shall be paid on this account). The weight of aluminium extruded section shall be taken for purpose of payment.	500.00	Kg	450.00	225000.00



64.00	Designing, providing, installing and fixing factory finished custom designed cold form Light Gauge Steel Framed super structure comprising of steel wall panel, trusses, purlins etc manufactured out of minimum 0.75 mm thick steel sheet as per design requirements. The steel sheet shall be galvanized (AZ-150gms Aluminium Zinc Alloy coated steel having minimum yield strength 300-550 Mpa) conforming to AISI specifications and IBC 2009 for cold formed steel framing and construction and also as per IS: 875-1987, ISO 800- 1984 and IS: 801- 1975. The wind load shall be as per provisions of IS 875 (part -III). LGSFS frame shall be designed as per IS: 801 using commercially available software such as Frame CAD Pro-11.7/ STAAD PRO-V8i/ArchitekV2.5.16/ Revit architecture-2011 or equivalent. Proper usage of Connection Accessories like Heavy Duty Tension Ties, Light Duty Hold-ons, Twist Straps (to connect truss with wall frames), Strong Tie, Tie Rod, H-Brackets, Boxing Sections, L-Shaped Angles for better structural stability. The framing section shall be cold form C-type having minimum web depth 89 mm x 39mm flange x 11mm lip in required length as per structural design requirement duly punched with dimple/slot at required locations as per approved drawings. The slots will be along centre line of webs and shall be spaced minimum 250mm away from both ends of the member. The frame can be supplied in panelized or knock down condition in specific dimensions and fastened with screws extending through the steel beyond by minimum of three exposed threads. All self drilling tapping screws for joining the members shall have a Type II coating in accordance with ASTM B633(13) or equivalent corrosion protection of gauge 10 & 12, TPI 16 & 8 of length 20mm. The frames shall be fixed to RCC slab or Tie beam over Neoprene rubber using self expanding carbon steel anchor bolt of dia as per approved drawings. design subject to minimum 12mm diaMetre and 121mm length conforming to AISI 304 and 316 at 500mm c/c with minimum embedment of 100mm in RCC (RCC to be paid separately) and located not more than 300mm from corners or termination of bottom tracks complete in all respects. The item also includes the submission of stability reports duly examined and issued by any NIT/IT. The rate includes the concept design, detailed design, fabrication of sections, transportation, installation, scaffolding and all required fixing arrangement at site for all height((upto 15 mtrs) as described above.(Scaffolding is also included in item)	1000.00	Kg	200.00	200000.00
65.00	Providing and fixing internal wall panels at all height (Upto 15 mtrs) on Light gauge steel frame work with 12.5 mm thick gypsum plaster board conforming IS 2095:2011 fixed on cement board as per standard sizes fixed with self-drilling / tapping screws / fasteners @ 60 cm c/c of approved make, Screws shall be of counter sunk rib head of 1.60 mm to 4 mm thick or 8 to 10 gauge of length varying from 25 to 45 mm. Proper taping and jointing to be done using fiber mesh tape and epoxy and acrylic based jointing compound for seamless finish.(cost of frame work to be paid for separately) Cement Fiber Board 8 mm thick of Type B, Category III as per IS 14862:2000 (High pressure Steam Cured) (Scaffolding is also included in the item)	100.00	Sqm	1000.00	100000.00
66.00	Supplying and installation of moisture resistant/fire resistant cement board as per standard sizes fixed with self-drilling / tapping screws. Screws shall be of counter sunk rib head of 1.60 mm to 4 mm thick or 8 to 10 gauge of length varying from 25 to 45 mm.a)Cement Bonded particle board 8 mm thick (Termite, Fire & Moisture Resistance), as per IS:14276 : 1995 at all height (Upto 15 mtrs). (Scaffolding is also included in item)	100.00	Sqm	600.00	60000.00
67.00	Supplying and installation of moisture resistant/fire resistant cement board as per standard sizes fixed with self-drilling / tapping screws. Screws shall be of counter sunk rib head of 1.60 mm to 4 mm thick or 8 to 10 gauge of length varying from 25 to 45 mm.a)Cement Bonded particle board 6 mm thick (Termite, Fire & Moisture Resistance), as per IS:14276 : 1995 at all height (Upto 15 mtrs). (Scaffolding is also included in item)	150.00	Sqm	500.00	75000.00

68.00	Providing, assembling and supplying Double-glazed units (DGU) as per ASTM 774 shall consist of 39.52 mm thick Hermetically sealed laminated insulated glass (double glazed) units of size and shape as required and specified, comprising with 15.52 mm thick laminated glass (8 mm Clear Heat Strengthened Glass + 1.52mm PVB Layer + 6 mm Heat Strengthened Low e Glass Planetherm of Saint Gobain or equivalent make) + 18mm air gap + 6 mm thick heat soaked, toughened clear glass, as per specification fixed in precise size on the outer infill panel of make Saint Gobain or equivalent make., including primary seal and secondary seal (structural silicone sealant) etc. all complete for the required performances as per the Architectural drawings, as per the approved shop drawings, as specified and as directed by the Engineer-in-Charge. The IGUs shall be assembled in the factory/ workshop of the glass processor. For payment, only the actual area of glass on face # 1 of the glass panels (excluding the areas of the grooves and weather silicone sealant) provided and fixed in position, shall be measured in sqm. The properties of performance glass shall be as per Technical Specifications. (Scaffolding shall be paid seperately)	50.00	Sqm	6500.00	325000.00
69.00	Supplying and Installation of External Grade Metal False Ceiling (Durlum S7 model) all complete for all height (Upto 15 mtrs height) as per instruction of Engineer In Charge. (Scaffolding is included in the item)	150.00	Sqm	2500.00	375000.00
70.00	Supply, Fabrication, Erection and Installation of single length 0.55 mm BMT color coated standing seam flexlock profile steel sheet roofing by replacing the damaged Top Sheet at all height (Upto 15 mtrs) as and where basis all complete as per satisfaction of EIC (Scaffolding is included in the item)	800.00	Sqm	4500.00	3600000.00
71.00	Supply and fixing of 12 mm thick Toughned Glass in SS railing i/c cost of glass and its fixing complete as per direction of Engineer Incharge. Accessories shall be paid seperately.(Mode of measurement shall be area of glass only)	25.00	Sqm	4500.00	112500.00
72.00	Supply and application of sealant in between DGU glasses of vertical fin glazing system using all weather sealant, masking tape Blisk Gasket complete i/c transportation, installation upto 15 mtrs height all complete as per EIC. (Scaffolding is included in the item)	2000.00	Metre	150.00	300000.00
73.00	Supplying of packed Elastomeric concrete compound (Flex-O-Patch of choksey chemicals/Delpatch of D.S Brown/Shalipatch of STP or equivalent approved make) at site. The one pack of 10 kg Elastomeric concrete shall consist of hardner , base, sand & fibre powder mix in proportion as per manufacturer Specification.	200.00	kg	900.00	180000.00
74.00	Repairing of damaged portion of rigid pavement with Elastomeric concrete compound (Flex-O-Patch of Choksey chemicals/ Delpatch of D.S Brown/Shalipatch of STP or equivalent) after marking, cutting, chipping the pavement up to required size by using mechanical chippers, side locking on the vertical face, cleaning the prepared area by sand blasting with medium grit sand, masking and pouring the compound, finishing & texturing complete as per manufacturer specifications and the direction of EIC with required machines & tools. Note: The rate quoted shall be exclusive of cost of Elastomeric Concrete Compound)	200.00	kg	100.00	20000.00



75.00	Cleaning of existing expansion joints and providing & filling with polysulphide joint sealing compound, pour grade (confirming to grade BS:5212, Part-I, 1990) of Dr. Fixit /Choksey-RLD 941 or equivalent including painting the side of slab with approved primer(RLD- 942 of Choksey/105 of DS Brown or equivalent and filling the groove 25 mm or more in width as per actual joint width status at site x 45mm deep (inc. of backer rod depth) including inserting the backer rod of Supreme or equivalent of appropriate dia (minimum 30mm or more as per actual joint width status at site) of approved make to receive the specified sealing compound, providing and applying bond breaking tape on top edges of joint to prevent accidental spillage of sealant on top surface and to give a neat finish to the sealant has been applied and tooled, all complete as per specification and direction of EIC.	200.00	Metre	150.00	30000.00
76.00	Cleaning of existing dummy/construction joints and providing & filling with polysulphide joint sealing compound, pour grade(confirming to grade BS: 5212, Part-I, 1990) of approved make Dr. Fixit/Choksey-RLD 941 or equivalent including painting the sides of slab with approved primer and filling the groove 10mm or more in width as per actual joint width status at site x 25mm deep (inc. of backer rod depth) including inserting the backer rod of Supreme or equivalent of appropriate dia minimum 12mm or more, of approved make to receive the specified sealing compound, providing and applying bond braking tape on top edges of joint to prevent accidental spillage of sealant on top surface and to give a neat finish to the sealant has been applied and tooled, all complete as per specification and direction of EIC.	15000.00	Metre	100.00	1500000.00
77.00	Extra for Joint cutting in required Depth and Width with Joint cutting machine in Pavement Concrete for Expansion,Dummy and Construction Joint all complete as per Satisfaction Of EIC.	8000.00	Metre	150.00	1200000.00
78.00	Supply of SW-CRETE T-01 or equivalent high performance fast setting repair compound for full depth, distress and other distress in pavement concrete with graded aggregates. Material should be self-flowing having compressive strength 4 hrs.- 20MPA, 1 day - 40 MPA, 28 days - 50MPA, pull strength after - 28 days-2.0 MPA, (minimum) Expansion Rate-0.1% (maximum) should accept traffic within Three hours as per specifications and directions of Engineer-in-Charge	200.00	kg	300.00	60000.00
79.00	Laying of SW-CRETE T-01 or equivalent high performance fast setting repair compound for full depth, distress and other distress in pavement concrete with graded aggregates. Material should be self-flowing having compressive strength 4 hrs.- 20MPA, 1 day - 40 MPA, 28 days - 50MPA, pull strength after - 28 days-2.0 MPA, (minimum) Expansion Rate-0.1% (maximum) Rate inclusive of marking, cutting the old concrete, chiseling for required width & depth, compressed air cleaning, high pressure air/ water jet cleaning, mixing of Swcrete-T01 with aggregates 20mm & 10mm in machine, pouring, finishing texturing cutting the joints, etc. all complete to accept traffic in 3 hrs. after pouring as per specifications and directions of Engineer-in-Charge. Note: a) Rate Excluding material cost for SW CRETE- T01 B) Rate Includes the material aggregate cost for graded aggregates of 10mm (and below) and 20mm.	200.00	kg	50.00	10000.00
80.00	Supply of SW-CRETE T-02 or equivalent high performance thin layer rapid repair compound. Material should be self-flowing having compressive strength after 2 hrs. 20MPA after 1 day - 30 MPA after 28 days 50 MPA. Pull strength after 28 days - 1.0 MPA. (Minimum) Expansion rate 0.10% (maximum). Curing time should be 2 hrs. to accept traffic as per specifications and directions of Engineer-in-Charge.	3000.00	kg	150.00	450000.00

81.00	Laying of SW-CRETE T-02 or equivalent high performance thin layer rapid repair compound. Material should be self-flowing having compressive strength after 2 hrs. 20MPa after 1 day - 30 MPA after 28 days 50 MPA. Pull strength after 28 days - 1.0 MPA. (Minimum) Expansion rate 0.10%. (maximum) . Rate inclusive of milling the old surface area for required depth & matching with the existing profile, cleaning with compressed air, high pressure water jet cleaning, mixing of SW-CRETE T-02 in machine, pouring, finishing, texturing, curing time should be 2 hrs. to accept traffic as per specifications and directions of Engineer-in-Charge. a) Rate Excluding material cost for SW CRETE- T02	3000.00	kg	100.00	300000.00
82.00	Painting of Perimetre road/Car park or other markings of any size, colour and length i/c letter & numeral markings with cold applied water based non-reflective paint conforming to IS-164 with Clear edges and cleaning of the area to be painted of all dirt, dust, stains, oily substances and other foreign material as and when required all complete as per specifications and direction of Engineer-in-Charge. New work (Two or more coats)	450.00	sqm	450.00	202500.00
83.00	Removing the Double-glazed units (DGU) of size and shape as required and specified, comprising of 15.52 mm thick laminated glass (8 mm Clear Heat Strengthened Glass + 1.52mm PVB Layer + 6 mm Heat Strengthened Low e Glass Planetherm of Saint Gobain or equivalent make) + 18mm air gap + 6 mm thick heat soaked, toughened clear glass, all complete as directed by the Engineer-in-Charge. (Scaffolding shall be paid seperately)	50.00	sqm	250.00	12500.00
84.00	Providing Electric Boom Lift with operator, maintenance, fuel etc including transportation to site all complete as per direction of EIC. Boom shall be minimum 23 Mtrs. (Make - Spider BMLDESS23 or equivalent) Note: Deviation in Item quantity is not allowed and 01 Day shall be considered as 08 hours working.For additional hrs in a day and beyond item quantity cost will be born by the agency.	30.00	Day	10000.00	300000.00
85.00	Providing Battery/Electrical operated scissor Lift with operator, maintenance, fuel etc including transportation to site all complete as per direction of EIC. Scissor Lift shall be minimum 16 Mtrs. (Make - SCRELC16 or equivalent) Note: deviation in Item quantity is not allowed and 01 Day shall be considered as 08 hours working.For additional hrs in a day and beyond item quantity cost will be born by the agency.	30.00	Day	10000.00	300000.00
86.00	Supply, Fabrication, Erection and installation of on-site single length 0.55mm bmt color coated Standing Seam Flex-Lok profile, double structural architectural insulated zip standing seam steel roofing system; of nominal 300-450mm effective cover width, 61 65mm rib height, two-three stiffener symmetrically spaced parallel to 61-65mm deep rib, fixed to every purlin by means of structural grade Aluminium clip with UPVC thermal pad at the bottom of clip to reduce or eliminate thermal bridging effect. The panel overlapping shall be mechanically field seamed using electric steamer tool achieve increased weather durability and greater resistance to wind uplift. The profile should be capable to take care of flat, curved or tapered shapes to achieve various architectural requirements as per Technical Specifications and directions of EIC at all height (upto 15 Mtrs). Scaffolding included in the item.	100.00	Sqm	4500.00	450000.00

87.00	FALL PROTECTION SYSETM: Supplying & Fixing of fall protection system of make Kingspan,Kalzip, Latchways, Capital safety, Honeywell, Karam, Kartosar or approved equivalent make over standing seam profile roof system with a seam to seam distance of 450-480 mm as per EN 795 Type C:2012 and TS 16415 with roof anchorage posts suitable for standing seam roof and fall protection equipment (PPE) as required. Including supporting equipment such as Ladder/Elevated Works Platform (EWP) /Lifting tool/Scaffolding etc . The system shall be capable of taking load of minimum 3 users at a time.Six(06) Nos Self Rescue Device (SSD) system shall also provided along with the system.Material is SS 316 steel Marine grade,17/4 ph Stainless steel for cost component , 5084 treated aluminium alloys. Seam Halters made of Aluminium alloy Temper mill finished as per BS EN 755-2.The system should have been tested for minimum 3 users with post spaced at 10.0 mt.The complete system shall be planned and fixed as per design at site to cater all along the roof periphery like louvers,Domes, skylights and gutters of the roof etc., complete the job with all respect as desired and as per the direction of Engineer-in charge.System Certification EN 795 Type C,TS 16415 and ATEX approved. Note : Scaffolding required for shifting of material is included in Item.	420.00	Metre	1500.00	630000.00
88.00	Walkways Sysem: Supplying & Fixing of safe Walkway system of make Kingspan,Kalzip, Latchways, Capital safety, Honeywell, Karam, Kartosar or approved equivalent make for safe walking over the roof on standing seam profile roof system of Jindal Jsw ,Tata bluescope with a seam to seam distance of 450-480 mm. The Walkways are to be made in FRP of width min 500 mm ,length of required size with aluminum accessories, SS nut-bolts and fasteners. The system must confirm BS EN 516-2016. The rate Includes supporting equipment such as Ladder/Elevated Works Platform (EWP)/Lifting tool/Scaffolding etc. The walkways system shall be manufactured from FRP Pultruded Grating Grating is madeup of a mixture of Resin,Roving,woven matt,Pigment,surface veil etc.It consists of I section 38 mm height with bearing bar c/c 40 mm & cross bar 12 mm dia ,Round bar c/c 150mm.FRP grating fulfill the load and deflection condition as per EN-516.Seam Halters made of Aluminium alloy 6063/T6 or 6005/T5 and Aluminium L-angle of thickness 4 mm thick made of Aluminium alloy 6063/T6 Temper mill finished as per BS EN 755-2 specifications.Fastners used are of Stainless steel Grade 316.The complete system shall be planned and fixed as per design at site to cater all along the roof periphery like exhaust fan, louvers, skylights and gutters of the roof etc.,complete the job with all respect as desired and as per the direction of Engineer-Incharge. Note : Scaffolding required for shifting of material is included in Item.	400.00	Metre	1500.00	600000.00
89.00	Step Walkways Sysem: Supplying & fixing of STEP Walkway system of make Kingspan, Kalzip, Latchways, Capital safety, Honeywell, Karam, Kartosar or approved equivalent. The Adjustable steps are made in uncoated cast aluminium alloy AA 231. The system consists of progressively adjustable 2 aluminium brackets with 3 steps per running Metre. Minimum Size -460mm x 250mm and thickness of aluminium tread is minimum 4mm. Minimum Angle Adjustment of brackets - 0 to 45 degrees. The system to be tested and certified to EN 516 and by BIA. Seam Halters made of Aluminium alloy 6063/T6 or 6005/T5 Temper mill finished as per BS EN 755-2 Fastners used are of Stainless steel Grade 316.The rate is including supporting equipment such as Ladder/Elevated Works Platform (EWP) /Lifting tool/Scaffolding etc . The complete system shall be planned, designed and fixed at site to cater all along the roof periphery like louvers, skylights Domes,and gutters of the roof etc., complete the job with all respect as desired and as per the direction of Engineer-In charge. Note : Scaffolding required for shifting of material is included in Item.	120.00	Metre	1500.00	180000.00

90.00	Roof Hatch: Supply and fixing of Roof Hatch (Kingspan, Nystrom or equivalent as approved Make) of Aluminium Mill Finish with fastners to existing structure and provision of Flashing around the perimeter of Roof hatch and sealing of Edges with approved sealant with application of kemprol coating for weathr tight performance all complete as per satisfaction of EIC. The specifications of Roof Hatch are as under: Leaf-Single Leaf Opening Size Min -900 x 900 mm Material-Aluminium Cover & Frame in 11 Gauge (2.3mm thick) Cover-Hollow 25mm, concealed with Fibreglass/polyiso insulation, fully welded at all corners, internally reinforced for 40 psf live load Curb-Height 305mm with integral cap flashing, 25mm Fibre Board/Polyiso Insulation, fully welded at all corners, mounting flange for securing hatch to roof. EPDM Gasket-EPDM gasket fixed to the cover. Hinge-Heavy duty Pintle Hinge with SS-304. Note : Scaffolding required for shifting of material is included in Item.	1.00	each	80000.00	80000.00
91.00	Providing and fixing roof cutout as per layout drawing for sky light/Roof hatch i/c removal of insulation or builtup layers and provision of necessary structural support with closing of builtup opening with designed flashing to fix Sky light/Roof hatch on pre installed M.S.frame structure secured with snap-on connectors at all levels Including all accessories like screws, washers, flashing , trims etc complete to make a water tight cutout for sky light/roof hatch including transportation, lift, scaffolding, etc. conforming to specifications and directions of Engineer-in-Charge. Note 1 -Cost of pre stalled M.S Frame work only will be paid separately. Note 2 : Scaffolding required for shifting of material is included in Item.	1.00	sqm	25000.00	25000.00
92.00	Providing Engineering Consultancy services for a.)Assessment of Defects in Existing standing seam Profile roofing wrt leakage issues ,design, levelling, integration with Sky light and Dome structure for water tight profile , Provision of Gutters , drain pipes , their orientation ,route etc as per available drawings at Roof level and beneath with detailed report. b.)Providing solutions with detailed design/drawings and supervision of Execution done by Agency and issuing certificate on satisfactory completion i/c Water testing at site and performance certificate against wind uplift based on Load/Span data in accordance with IS 801/AS/BS. Note -Consultant to provide all details wrt material specification, design, drawing and Shop drawings etc wherever necessary. All design calculations/drawings are to be vetted by NIT/IIT. During execution any other drawings related to above specified works essential for successful execution of works etc all complete as per satisfaction of EIC. Nothing Extra will be paid on account of visit of Consultant and his supervision work as and when required.	1.00	1 Job	250000.00	250000.00
93.00	Providing Engineering Consultancy services for a.) Assessment for provision of Staircase to access Roof from Terminal building in consultation with EIC with detailed report. b.)Provision of Detailed design/ Drawings for steel structure for stair,cutout in Roof, support structure and Roof hatch i/c foundation/Anchor details all complete. Note -Consultant to provide all details wrt material specification, design, drawing and Shop drawings etc wherever necessary. All design calculations/drawings are to be vetted by NIT/IIT During execution any other drawings related to above specified works essential for successful execution of works etc all complete as per satisfaction of EIC. Nothing Extra will be paid on account of visit of Consultant and his supervision work as and when required.	1.00	1 Job	150000.00	150000.00



94.00	Providing Engineering Consultancy services for a.) Providing detailed drawings in compliance to manufacturer/Item specifications wrt provision of safety line ,Walk way & Step Walkway at roof level based on tender specifications. Note -Consultant to provide all details wrt material specification, design, drawing and Shop drawings etc wherever necessary. All design calculations/drawings are to be vetted by NIT/IIT During execution any other drawings related to above specified works essential for successful execution of works etc all complete as per satisfaction of EIC. Nothing Extra will be paid on account of visit of Consultant and his supervision work as and when required.	1.00	1 Job	150000.00	150000.00
95.00	Providing Engineering Consultancy services for a.)Design/Drawing of Structural glazing at Fire station watch Tower. Note -Consultant to provide all details wrt material specification, design, drawing and Shop drawings etc wherever necessary. All design calculations/drawings are to be vetted by NIT/IIT During execution any other drawings related to above specified works essential for successful execution of works etc all complete as per satisfaction of EIC. Nothing Extra will be paid on account of visit of Consultant and his supervision work as and when required.	1.00	1 Job	75000.00	75000.00
96.00	Providing Engineering Consultancy services for a.)Study of City side Dome design calculations as per available drawings/design ,study of rectification /modification of city side Dome structure as per suggestions provided by Prof of IIT BHU i/c all phases , b.)Develop methodology ,suggest modification if required & supervision till complete rectification i/c removal of temporary support structure and satisfaction of EIC. Note -Consultant to provide all details wrt material specification, design, drawing and Shop drawings etc wherever necessary. All design calculations/drawings are to be vetted by NIT/IIT During execution any other drawings related to above specified works essential for successful execution of works etc all complete as per satisfaction of EIC. Nothing Extra will be paid on account of visit of Consultant and his supervision work as and when required.	1.00	1 Job	250000.00	250000.00
97.00	Designing,Providing, assembling, supplying and installation of Vision glass panels (SGU) of Saint Gobain SCN 145 or Equivalent required size and shape as specified, comprising of an 10 mm thick toughened high performance glass , of approved colour and shade with reflective soft / hard coating on surface , all complete for the required performances. 10 mm thick S.G.U. consisting of high performance 10 mm thick toughened glass (properties shall visible Light transmittance (VLT) of minimum 45%, Light reflection internal 4%, light reflection external 22%, SHGC(NRFC) less than or equal to .45 and U value of less than 4.3 W/m2 degree K etc).	100.00	Sqm	5000.00	500000.00
98.00	Providing and laying polythene sheet 400 micron thick conforming to IS:2508 as antifriction layer over 6 mm thick bed of fine sand on the base course complete as per specification with minimum overlap of 75 mm longitudinally and 75 mm transversely all complete as per specification and direction of Engineer-in-Charge. (Only plan area is to be measured for payment)	300.00	Sqm	100.00	30000.00
99.00	Providing and laying in position for expansion joint, 25mm thick pre-cut Synthetic joint filler board of approved make conforming to IS :1838 (Part-3)-2011, 45mm from top (to be removed at the time of filling of Polysulphide sealant), complete as per particular specifications and direction of Engineer-in-Charge. (Note - Mode of measurement shall be length of joint multiplied by depth of filler board including precut portion).	5.00	Sqm	1500.00	7500.00

100.00	Providing and laying factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc. of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour & pattern over 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand. complete all as per direction of Engineer-in-Charge. a) 80 mm thick CC paver block of M35 Grade with approved colour design and pattern.	100.00	Sqm	850.00	85000.00
101.00	Providing and filling in position rubberized bitumen hot sealing compound for sealing of expansion joints in roads / pavements all complete as per direction of the Engineer-in-Charge. (a) Using grade 'A' sealing compound conforming to IS: 1834.	1000.00	Metre	50.00	50000.00
102.00	Fabrication and manufacturing of solid precast concrete element with provisions of shear keys, connecting loops, dowel tubes and proper lifting accessories for walls, beams, slabs, stairs, column etc, of various thickness, shape and size of different concrete grades manufactured in controlled factory environment with approved methodology including moulds (Pallet system, Tilts form, table moulds, battery moulds, vertical moulds, beam moulds, column moulds, staircase moulds, Facade mould, etc.), mixing, transporting and placing of concrete, vibrating, curing, finishing, making necessary cutout/holes of required sizes for services, yard handling & stacking all complete as per IS 11447:1985 and as per approved shop drawings and design mix as per the direction of Engineer-in-Charge (Cost of reinforcement, Mechanical, Electrical and Plumbing inserts will be paid separately). a) Concrete grade M-35 (Cement content 370 kgs)	20.00	Cum	15000.00	300000.00
103.00	Providing & laying in position Prestressing steel strands (low relaxation) on hollow core bed by using mechanical pulling arrangement like Rabbit/ Bed master including all accessories for Stressing & destressing operations as per approved make conforming to IS 1343 & grade FY-1860 etc, complete as per drawings and direction of Engineer-in-charge.	600.00	Kg	200.00	120000.00
104.00	Transportation of Precast Elements by flat bed Trailer (Double / Triple axle 40ft Length with proper accessories like A frame etc) from factory, including the cost of loading, unloading & stacking at site with the help of required capacity cranes. a) Lead within 15km	50.00	MT	5000.00	250000.00
105.00	Add/Deduct over item 104 for every additional lead of 5 km and part thereof.	1700.00	MT	1500.00	2550000.00
106.00	Removing/Erection & Installation of Precast/Prestressed Concrete elements in correct & final position with proper line level and plumb at site making all arrangements (i.e cranes, push-pull jacks & all another T & P for lifting Placing & Alignment of elements, within erection tolerance all complete as per the direction of Engineer-in-Charge but excluding the cost of sim pads, non shrink grout and steel works i.e hangers. All work up to fifth floor. a) Solid concrete wall elements (Note - Removing or Erection will be considered as one Unit)	6000.00	Each	500.00	3000000.00
107.00	Removing and refixing of concertina coil & RBT/barbed wire on pre cast boundary wall as per direction and satisfaction of EIC. (Note - Damaged coil during removing/refixing to be replaced at the cost of Agency. Measurement will be considered - Removing & refixing as one unit and based on span of removed Coil only.)	500.00	Metre	150.00	75000.00

108.00	Cleaning of existing GRC panel joints and providing & filling with polysulphide ,Gun Grade joint sealing compound (confirming to grade BS: 4254) of approved make Dr. Fixit/Choksey-RLD 910/940/Sika or equivalent including painting the sides of panel with approved primer(Choksey-RLD 942 or equivalent) including inserting the backer rod of Supreme or equivalent of appropriate dia of approved make to receive the specified sealing compound, providing and applying bond braking tape on top edges of joint to prevent accidental spillage of sealant on top surface and to give a neat finish to the sealant being applied and tooled, all complete as per specification and direction of EIC. Note: Work to be executed on Roof top of Terminal building building (approx 15 m height) and item includes the cost of Scaffolding	3000.00	per cm width per cm depth per m length	1.50	4500.00
109.00	Supplying bottle trap 32 mm of Euronics (Model No.EBT32-CP) complete set at Ayodhya Airport .	10.00	Each	1500.00	15000.00
110.00	Supply of spare part for sensor urinal(KUF Model) of Euronics make at Ayodhya Airport.a) KUF-11,Sensor at Ayodhya Airport .	10.00	Each	5000.00	50000.00
111.00	Supply of spare part for sensor urinal(KUF Model) of Euronics make at Ayodhya Airport. b) P-KUF-08,Solenoid Valve at Ayodhya Airport .	10.00	Each	2000.00	20000.00
112.00	Supply of spare part for sensor urinal(KUF Model) of Euronics make at Ayodhya Airport. c) P-KUF-10,Washer at Ayodhya Airport .	25.00	Each	600.00	15000.00
113.00	Supply of spare part for sensor urinal(KUF Model) of Euronics make at Ayodhya Airport.d) P-KUF-03,Flexible Pipe Small at Ayodhya Airport .	10.00	Each	400.00	4000.00
114.00	Supply of spare part for sensor urinal(KUF Model) of Euronics make at Ayodhya Airport. e) Connecting Pipe-KUF at Ayodhya Airport .	5.00	Each	400.00	2000.00
115.00	Supply of spare part for sensor urinal(KUF Model) of Euronics make at Ayodhya Airport.f) P-KUF-02,output Accessories at Ayodhya Airport .	15.00	Each	2000.00	30000.00
116.00	Supply of spare part for sensor urinal(KUF Model) of Euronics make at Ayodhya Airport. g) P-KUF-12,Control Box at Ayodhya Airport .	5.00	Each	1500.00	7500.00
117.00	Replacing of defective parts with spare parts as mentioned at (Item no.108 to item no. 115) to make Sensor Urinal/WC of Euronics company functional in all respect and submission of defective part to AAI store all complete as per Satisfaction of EIC. (Cost of spare part items will be paid separately)	90.00	Each	100.00	9000.00
118.00	Providing ad fixing vitreous china flat back urinal Automatic (Battery Operated) wall mounting white with C.I. Hangers, C.P. spreader with short bent, electronic flush valve comprising of electronic items including Pre & Post Self Flush Infra-Red Sensor, electronically operated solenoid valve, step down equipment, (Battery) concealed piping etc. & any other item required to provide satisfactory functioning 40mm C.P. brass domical waste, and pipe to wall with C.P. flange complete including cutting and making good the walls and floors where required all complete as per satisfaction of EIC. (Euronics Touch-less Urinal Kinox KUF with all accessories)	2.00	Each	15000.00	30000.00
119.00	Execution of items of CPWD schedule of rate(Electrical) 2022 as per requirement upto Rs 1000000/- (Rates shall be quoted in multiples eg. 0.99 for 1% below or 1.01 for 1% above.	1000000.00	Rs	.75	750000.00



120.00	SITC of 20KVA modular online PWM IGBT type UPS with minimum 30 min backup on full load and surge protection facility along with SMF Battery bank ,LCD Panel display and BMS Output,THD<5% at 100% load ,suitable to operate in parallel redundancy etc as required as per specification.	2.00	Job	350000.00	700000.00
121.00	Design ,Supply,Installation ,Testing and Commisioning of Landscape Lighting by providing bollard light for Green Area of dimension approximately 13375SQM(45MX145M,74MX59M and 92MX27M) i/c Cabling ,Earthing work etc complete as required.	1.00	Job	500000.00	500000.00
122.00	SITC of Hybrnd Power Factor Correction Panel (140KVA+200AHF) as per enclosed drawing.	1.00	Job	500000.00	500000.00
123.00	SITC of BMS server,BMS Software,L3 Switch along with required accessories necessary for integration with installed E&M installation like Sub-station Equipments,Fire Pump room,STP and WTP Plant,HVAC System etc as per enclosed I/O summary and balance Cabling work up to BMS Server room to make system operational. 1)BMS Computer System: server grade Pentium i5/7 Core with 3GHz minimum CPU speed, minimum of 2 GB RAM, 512 KB cache, RAM, 512 KB cache, 52X32X52XHDD, optical Mouse, 106 keys keyboard, DVD/CD-RW Drive & 260GB HDD, optical Mouse, 106 keys keyboard, 10/100 Mbps Ethernet card ,USB connection & internal modem--7 Processor (Latest Generation) -8 GB RAM, 2 TB hard disc - 32" disc drive, DVD writer, compatible CDROM 42" flat screen, 1200 2 800, 256 colours (Full HD) Windows 7 and shall have MS Office Installed. 2)BMS System Software: Web Based Graphical Software meeting the requirements in the Given (I/O Summary & technical specifications including configuration and facility to create/provide the graphic mapping for all I/O Summary points,animate the Graphics,Navigation between pages, display of logs, changing the time zones, popup alarms, configurable password protection for Building Mgmt System as per Specifications. Software shall be able to communicate with Lon works, Bacnet,Modbus devices simultaneously, with unlimited user license capacity. 3) L2/L3 Network Switches : L2/L3 network switches of suitable specifications to create the desired LAN for IP based DDCs. The specifications and number of the switches shall be calculated based on the design and DDC configuration 4)All the required Balance Cabling work ,other required accessories and installation ,commisioning of the complete system.	1.00	Job	1000000.00	1000000.00
124.00	SITC of clean Agent Gas based Automatic Fire Suppresion System in Server room(Terminal Building) of size 9.30MX8.10MX3.30M as per latest Fire safety standard NFPA/PESO etc.	1.00	Job	100000.00	100000.00
125.00	SITC Access Control system in Server room(SITC of 2door 2 reader control panel,Access control S/W with T&A S/W,EM Locks,break glass unit, 8Cx0.75sqmm shielded cable,Proximity card ,Biometric reader,Magnetic door contact, emergency door release,Push button and Proximity card reader etc. as per site requirement)	1.00	Job	100000.00	100000.00
126.00	SITC of Signage work(05No of Traffic regulatory signage and rectification of Boarding gate Signage(LED Light) and other pending work.	1.00	Job	200000.00	200000.00

127.00	Setup of In house Test laboratory at site for Sewage treatment plant for monitoring of different parameter as per enclosed specification i/c painting of existing pipe line in STP Plant room for existing sewage Treatment Plant of capacity 100KLD.	1.00	Job	1000000.00	1000000.00
128.00	Supply of 3Cx1.5sqmm Copper conductor PVC Sheathed XLPE insulated Armoured power cable of voltage grade 1.1kv as per IS-7098, Part-1 1988	600.00	Mtr	140.00	84000.00
129.00	Replacement of broken existing Automatic Sliding Glass door Panel of size 1100mmx2100mm of 12mm thickness with the new at Ayodhya Airport and other minor repairing works.	5.00	Job	5000.00	25000.00
130.00	SITC of different capacity modular online UPS with min 30 min backup on full load and surge protection facility along with SMF battery bank, LCD Display suitable to operate in parallel redundancy etc. as required as per specification. 2KVA-Fire Station(1W+1S)	1.00	Job	50000.00	50000.00
131.00	SITC of different capacity modular online UPS with min 30 min backup on full load and surge protection facility along with SMF battery bank, LCD Display suitable to operate in parallel redundancy etc. as required as per specification. 1KVA-ATC Tower and Utility building(1W+1S)	2.00	Job	40000.00	80000.00

Total in Figures

41425750.00

Lowest Amount Quoted BY: TARUN ELECTRICALS(41425750.00)


 24/05/2024
 संयुक्त महाप्रबन्धक (अभि-विद्युत)
 Joint General Manager (Engg-E)
 भारतीय विमानपत्तन प्राधिकरण
 Airports Authority of India
 एम.वी.आई. स्पोर्ट्स जे.ए. नॉकआउट
 M.V.I. Sports J.A. Nockout