

HLL INFRA TECH SERVICES LIMITED  
A Government of India Enterprise

Tender Document for Civil, Electrical LT  
works and Air conditioning work at Lecture  
and Administrative Complexat Karaikal,  
Puduchery

PART-IV

**Price Bid**

TENDERNO. HITES/IDS/16/12/JIPMER-II/KIK-09

June 2016

INFRASTRUCTURE DEVELOPMENT DIVISION

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## **1 COMMERCIAL CONDITIONS**

1.0.1 The tendered rate shall inter alia be deemed to include for the provision of all materials, process, operation and special requirements detailed in the particular specification irrespective of whether these are mentioned in the description of equipment schedule and Bill of quantities or not. It is an express condition of the contract that the tendered rates for various items in the Bill of Quantities shall be deemed to include for the full, entire and final condition of the contractor respective items of the works in accordance with the provision of the contract.

1.0.2 The tendered rate shall include for all taxes, duties, etc. as applicable and shall be quoted on the works contract basis for the Civil, Electrical LT works and Air conditioning work at Lecture and Administrative Complex at Karaikal, Puduchery

1.0.3 .The tendered rate shall remain firm and free from variation due to rise in the cost of materials/equipment, labour or any other reasons whatsoever during the contract period and valid extension on the case may be.

1.0.4 The quantum of excise duty included in the tendered price, the rate at which they were assumed etc. shall be indicated in the tender.

### **1.1 UNIT RATES**

1.12 Only approved work will be measured on completion and priced as per rates quoted against the respective items.

### **1.2 BRIEF DESCRIPTION OF PRICING**

1.2.1. Unforeseen difficulties for which provision has not been made in the tender will in no way relieve the successful tenderer from the full execution of the work.

1.2.2 The price quoted shall be the final amount for this finished work.

1.2.3 The quoted price shall be inclusive of all taxes and duties whether payable by the contractor or to be deducted at source. This shall include those applicable among VAT, Sales Tax, Income Tax, Customs Duty, Excise Duty, Turnover Tax, Service Tax, Work Contract Tax, Octroi, Labour Welfare Cess or any other Taxes and Duties prevailing in respect of this contract. **ANY BID STATING THAT TAXES ARE EXTRA WILL BE SUMMARILY REJECTED.**

### **1.3 INCOME TAX**

Any payment to the contractor as per contract will be made after deducting income tax as per the rules and regulations.

### **1.4 SALES TAX AND EXCISE DUTY**

The tenderer shall clearly indicate sales tax, Excise and other duties as applicable in his offer for carrying out this work.

## **1.6. SUBMISSION OF BILL**

- 1.6.1. The contractor shall from time to time prepare and submit interim bills of the work executed and on completion of the contract, he shall prepare and submit the final bill. The measurements sheets in support of the interim and final bills shall be prepared by the contractor on the basis of measurements taken by him jointly with the project engineer and the said measurement sheets shall be submitted by him with the relevant bill.
- 1.6.2. Within the above frame work of the terms of payment the contract's interim bills will have to be of a minimum value of Rs.50.00 Lakhs only.

## **1.7. EXTRA ITEMS**

The contractor is bound to carry out any items of work necessary for the completion of the job even though such items may not have been included in the schedule of probable quantities or rates, such items being necessary or essential for completing the job. Variation order in respect of such additional items and their quantities will be issued in writing by the employer.

- 1.7.1 All shavings, cuttings and other rubbish as it accumulates from time to time during the progress of work and on completion including that of the sub-contractors and special tradesman and all materials condemned by the project engineer shall be cleared and removed from the site by the contractor without any extra charge.
- 1.7.2 All measuring steel taps, scaffolding, ladders instruments and tools that may be required for taking measurements shall be supplied by the contractor.

## **1.8. OVER TIME WORK**

If the contractor is required to work night or on holidays in order to maintain the time schedule he shall take prior approval from the Engineer-in-charge. He should also provide and maintain at his own cost sufficient lights as may be necessary to enable the work to proceed satisfactorily during the night.

- 1.8.1. The contractor shall give full facilities to all other contractors working on site. He shall also arrange his programme of work so as not hinder the progress of other trades. The decision of the Engineer-in-charge on any point of dispute between the various parties shall be final and binding.
- 1.8.2. It is specifically pointed out that the contractor shall not be entitled to any compensation whatsoever on account of delay in procurement or supply of controlled materials and the rates quoted in the contract are fixed till the completion of the contract.
- 1.8.3. The contractor shall co-operate with other agencies appointed by the owners for the work to proceed smoothly with the least possible delay and to the satisfaction of the owners, architects and the consultants.
- 1.8.4. The owners shall provide a source for power supply at one convenient point at site. The contractor shall at his own cost install a separate meter at the said source and lay additional cables from the said source also at his own cost. For the electricity consumed by the contractor he shall pay the owner the actual cost at the rate charged by the local authority for power for constructional purposes. The contractor shall also obtain the necessary permit for utilizing power for constructional purposes.

## **2. SPECIAL CONDITIONS**

### **2.1. EXECUTION OF WORK**

- 2.1.1. The whole of the work as described in the contract (including bills of materials, specification and all drawings pertaining thereto) and as advised by the Engineer-in-charge from time to time is to be carried out and completed in all parts to the entire satisfaction of the Employer. Any minor details of construction which are obviously and fairly intended, or which may not have been definitely referred to in this contract, but which are usual construction practice and essential to the work, shall be included in this contract.

### **2.2. CERTIFICATE OF COMPLETION**

- 2.2.1 The contractor shall intimate to the Engineer-in-charge in writing as and when the works are completed and put into beneficial use in order to enable the consultants to check certify to the owners to take over the plants.

- 2.2.2 The work shall not be considered as completed and put into beneficial use until the consultants have certified in writing that the same has been completed and put into beneficial use.
- 2.2.3 The defects liability period shall commence from date of such completion or any specific date mentioned therein.

**THE ABSTRACT OF BILL OF QUANTITIES IN THE PRICE BID SHALL BE INVARIABLY FILLED. THOSE WHO BIDDERS DO NOT FILL WILL BE NON-RESPONSIVE AND WILL BE DISQUALIFIED FROM EVALUATION AND WILL BE TREATED AS TECHNICALLY NOT QUALIFIED.**

**ALL ROWS SHALL BE FILLED, THIS IS MANDATORY  
(IF NIL OR NA, THAT MAY ALSO BE SHOWN)**

**BILL OF QUANTITIES**

**ABSTRACT**

Civil & Electrical work		
Sl No	Name of work	Amount in Rs
1	<b>Part I:</b> Arasalar – Roof Work	
2	<b>Part II:</b> Arasalar – Repair and Finishing works	
3	<b>Part III:</b> Arasalar –Internal Road Works	
4	<b>Part IV:</b> Arasalar – Common Facility	
5	<b>Part V:</b> Arasalar – Electrical-LT(Shed 4,5,6& electrical lighting)	
6	<b>Part VI:</b> Arasalar – Air Conditioning Works	
	Service tax component to be paid by the bidder	
	Service tax component to be directly paid by the HITES in case the bidder is a Proprietary firm	
	<b>GRAND TOTAL</b>	

**Project: JIPMER II at Karaikal**

**Construction of Sheds at Arasalar Complex**

**Part I: Civil - Roof Sheeting Works**

<b>Sl no</b>	<b>DSR item ref no</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate in figures &amp; words(in Rs.)</b>	<b>Amount in Rs.</b>
1	15.28.2	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of : Asbestos sheet	sqm	1000		
2	12.5	Providing and fixing pre-coated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness 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 Engineerin-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.	sqm	1175		

3	12.51.1	Providing and fixing pre-coated 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 : Ridges plain (500 - 600mm)	m	100		
4	12.51.6	Providing and fixing pre-coated 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 : Gutter .(600 mm over all girth)	m	195		
5	13.52.1	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	sqm	100.00		
		<b>Total Amount</b>				

**Project: JIPMER II at Karaikal**

**Construction of Sheds at Arasalar Complex**

**Part II: Civil - Repair and finishing works**

<b>Sl no</b>	<b>DSR item ref no</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate in figures &amp; words( in Rs.)</b>	<b>Amount in Rs.</b>
		<b>I. Demolition Works</b>				
1	15.3	Demolishing R.C.C. work manually/ by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in- charge.	cum	26		
2	15.7.4	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. In cement mortar	cum	79		
3	15.57	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge.	sqm	840		
		<b>II. Repair Works</b>				

4	14.1.1	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq. meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground within 50 metres lead : With cement mortar 1:4 (1 cement : 4 fine sand)	sqm	4170		
5	14.4.1	Making the opening in brick masonry including dismantling in floor or walls by cutting masonry and making good the damages to walls, flooring and jambs complete, to match existing surface i/c disposal of mulba/ rubbish to the nearest municipal dumping ground. For door/ window/ clerestory window	sqm	180		
		<b>III. Painting</b>				
6	14.43	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	sqm	5335		
7	13.80	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	sqm	2100		

8	13.43.1	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface : Water thinnable cement primer	sqm	2285		
9	13.83.2	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour. two coats	sqm	2285		
10	13.47.1	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade : 13.47.1 New work (Two or more coats applied @ 1.43 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	sqm	3260		
		<b>IV. Doors and Windows</b>				
11	PSR 9.1.1B	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position - Burma Teak wood	cum	1.00		

12	PSR 9.5.1.1B	Providing and fixing panelled or panelled and glazed shutters for doors , windows and clerestory windows including ISI marked black enamelled M.S butt hinges with necessary screws excluding panelling which will be paid for separately. - Burma Teak wood - 35mm thick shutter	sqm	80.00		
13	PSR 9.14	Extra for providing ISI marked stainless steel buitt hinges instead of black enamelled M.S. butt hinges with necessary Screws. (Shutter area to be measured)	sqm	100.00		
14	13.68.1	French spirit polishing : Two or more coats on new works including a coat of wood filler	sqm	155.00		
15	9.53	Providing 40x5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 30x10x15cm 1:3:6 mix (1 cement : 3 coarse sand: 6 graded stone aggregate 20mm nominal size).	each	100.00		

16	9.84	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete	each	50.00		
17	9.97.1	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868 ) transparent or dyed to required colour or shade, with necessary screws etc. complete : 300x10 mm	each	50.00		
18	9.92.1	Providing and fixing chromium plated brass handles with necessary screws etc. complete: 125 mm	each	17.00		
19	9.88	Providing and fixing chromium plated brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc. complete.	each	15.00		

20	21.1.1.2	<p>Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing/ paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling to be paid for separately): Powder coated aluminium (minimum thickness of powder coating 50 micron)</p>	kg	1105.00		
21	21.1.2.2	<p>For shutters of doors, windows &amp; ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber/ neoprene gasket required (all fittings included) Powder coated aluminium (minimum thickness of powder coating 50 micron)</p>	kg	330.00		
22	21.3.2	<p>Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber/ neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 5.5 mm thickness</p>	sqm	365.00		

23	21.16.2	Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. complete as per direction of Engineer-in-charge Powder coated minimum thickness 50 micron aluminium	each	110.00		
24	9.82	Providing and fixing bright finished brass hanging type floor door stopper with necessary screws, etc. complete	each	20.00		
25	21.8.1	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete. Upto 5mm depth and 5 mm width	m	170.00		
		<b>XI. Flooring/ Granite Works</b>				
26	11.41.2	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete. Size of Tile 600x600 mm	sqm	1030		

27	11.46.2	<p>Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours &amp; shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement &amp; matching pigments etc. complete.</p>	sqm	130		
		<b>X. False Ceiling</b>				

28	12.53	<p>Providing and Fixing 15 mm thick densified tegular edged eco friendly light weight calcium silicate false ceiling tiles of approved texture spintone/ cosmos/ Hexa or equivalent of size 595 x 595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanising @ 120 grams per sqm including both side) consisting of main 'T' runner suitably spaced at joints to get required length and of size 24x38 mm made from 0.33 mm thick (minimum) sheet, spaced 1200 mm centre to centre, and cross "T" of size 24x28 mm made out of 0.33 mm (Minimum) sheet, 1200 mm long spaced between main'T' at 600 mm centre to centre to form a grid of 1200x600 mm and secondary cross 'T' of length 600 mm and size 24 x28 mm made of 0.33 mm thick (Minimum) sheet to be inter locked at middle of the 1200x 600 mm panel to form grid of size 600x600 mm, resting on periphery walls/ partitions on a Perimeter wall angle pre-coated steel of size (24x24X3000 mm made of 0.40 mm thick (minimum) sheet with the help of rawl plugs at 450 mm centre to centre with 25 mm long dry wall screws @ 230 mm interval and laying 15 mm thick densified edges calicum silicate ceiling tiles of approved texture (Spintone/ Cosmos/ hexa) in the grid,</p>				
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		<p>including, cutting/ making opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc., wherever required. Main 'T' runners to be suspended from ceiling using G.I. slotted cleats of size 25x35x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm G.I. adjustable rods with galvanised steel level clips of size 85 x 30 x 0.8 mm, spaced at 1200 mm centre to centre along main 'T', bottom exposed with 24 mm of all Tsections shall be pre-painted with polyster baked paint, for all heights, as per specifications, drawings and as directed by engineer-in-charge.</p> <p>Note :- Only calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be made for exposed frames/ opening (cut outs) having area less than 0.30 sqm. The calcium silicate ceiling tile shall have NRC value of 0.50 (Minimum), light reflection &gt; 85%, noncombustible as per B.S. 476 part IV, 100% humidity resistance and also having thermal conductivity &lt;0.043 w/m 0 KC</p>	sqm	1090		
		<b>Total Amount</b>				

**Project: JIPMER II at Karaikal**

**Construction of Internal Road at Arasalar Complex**

**Part III: Road works**

<b>Sl no</b>	<b>DSR item ref no</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate in figures &amp; words( in Rs.)</b>	<b>Amount in Rs.</b>
1	16.1	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 earth with lead upto 50 metres	sqm	2105.00		
2	16.78.1	Construction of granular sub-base by providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Engineer in-Charge. With material conforming to Grade-I (size range 75 mm to 0.075 mm) having CBR Value-30	cum	445.00		

3	16.68	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.	sqm	2215.00		
4	16.69	Providing and laying at or near ground level factory made kerb stone of M25 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 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	cum	10.00		
		<b>Total Amount</b>				

**Project: JIPMER II at Karaikal**

**Construction of Common Facilities (DG+Transformer Room, Driver Room, Security Room etc) at Arasalar Complex**

**Part IV:Civil works**

SI no	DSR item ref no	Item Description	Unit	Quantity	Rate in figures & words( in Rs.)	Amount in Rs.
		<b>I. Earth Works</b>				
1	2.6.1	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means over areas (exceeding 30cm in depth. 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed. 2.6.1 All kinds of soil	cum	85.00		
2	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	cum	90.00		
		<b>II. PCC</b>				
3	4.1.3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	cum	20.00		
4	4.17	Making plinth protection 50 mm 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 finishing the top smooth	sqm	60.00		

		<b>III. RR Masonry</b>				
5	7.1.1	Random rubble masonry with hard stone in foundation and plinth including levelling up with cement concrete 1:6:12 (1 cement : 6 coarse sand : 12 graded stone aggregate 20 mm nominal size) upto plinth level with : Cement mortar 1:6 (1 cement : 6 coarse sand)	cum	55.00		
		<b>IV. RCC</b>				
6	5.33.2	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. (Note :- Cement content considered in this item is @ 330 kg/cum. Excess/ less cement used as per design mix is payable/recoverable separately). All works above plinth level upto floor V level	cum	63.00		
7	5.34.1	Extra for providing richer mixes at all floor levels. Note:- Excess/ less cement over the specified cement content used is payable/ recoverable separately. Providing M-30 grade concrete instead of M-25 grade BMC/ RMC. (Note : Cement content considered in M-30 is @ 340 kg/ cum)	cum	63.00		
8	5.35	Add for using extra cement in the items of design mix over and above the specified cement content therein.	quintal	30		
		<b>V. Shuttering</b>				

9	5.9.3	Centering and shuttering including strutting, propping etc. and removal of form for: Suspended floors, roofs, landings, balconies and access platform	sqm	75.00		
10	5.9.5	Centering and shuttering including strutting, propping etc. and removal of form for: Lintels, beams, plinth beams, girders, bressumers and cantilever	sqm	85		
11	5.9.19	Centering and shuttering including strutting, propping etc. and removal of form for: Weather shade, Chajjas, corbels etc., including edges	sqm	15		
12	5.9.6	Centering and shuttering including strutting, propping etc. and removal of form for : Columns, Pillars, Piers, Abutments, Posts and Struts	sqm	105		
13	5.9.1	Centering and shuttering including strutting, propping etc. and removal of form for : Foundations, footings, bases of columns, etc. for mass concrete	sqm	35		
		<b>VI. Reinforcement</b>				
13	5.22.6	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete at all levels Thermo-Mechanically Treated bars	kg	7940.00		
		<b>VII. Anti termite treatment</b>				
15 A	2.35.3.1	Diluting and injecting chemical emulsion for POSTCONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) : Treatment of soil under existing floors using chemical emulsion @ one litre per hole, 300 mm apart including drilling 12 mm diameter holes and plugging with cement mortar 1 :2 (1 cement : 2 Coarse sand) to match the existing floor : With Chlorpyriphos/Lindane E.C. 20% with 1% concentration	sqm	110.00		

15 B	2.34.1	Supplying chemical emulsion in sealed containers including delivery as specified. 2.34.1 Chlorpyriphos/ Lindane emulsifiable concentrate of 20%	lit	115.00		
		<b>VIII. Brick Work</b>				
16	6.4.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 5 in superstructure above plinth level up to floor V level in all shapes and sizes in : 6.4.1 Cement mortar 1:4 (1 cement : 4 coarse sand)	cum	65.00		
		<b>IX. Plastering</b>				
17	13.8.2	15 mm cement plaster on rough side of single or half brick wall finished with a floating coat of neat cement of mix : 1:4 (1 cement: 4 fine sand)	sqm	245.00		
18	13.7.2	Providing and applying 12 mm cement plaster finished with a floating coat of neat cement of mix : 1:4 (1 cement: 4 fine sand)	sqm	245.00		
19	13.16.1	Providing and applying 6 mm cement plaster of mix : 1:3 (1 cement : 3 fine sand)	sqm	60.00		
		<b>X. Structural Steel Works</b>				
20	10.16.3	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 10.16.3 Electric resistance or induction butt welded tubes	kg	1340.00		

21	12.50	Providing and fixing precoated galvanised iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness 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 Engineerin-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.	sqm	70		
22	12.51.1.	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 : Ridges plain (500 - 600mm)	m	10		
23	12.51.6	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 : Gutter .(600 mm over all girth)	m	20		
		<b>XI. Painting</b>				

24	13.80	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	sqm	260.00		
25	13.43.1	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface : Water thinnable cement primer	sqm	260.00		
26	13.83.2	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour. Two coats	sqm	260.00		
27	13.47.1	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade : 13.47.1 New work (Two or more coats applied @ 1.43 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	sqm	260.00		
28	13.52.1	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	sqm	75.00		
		<b>XII. Flooring/ Granite Works</b>				
29	11.26.1	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) : 25 mm thick	sqm	110.00		

30	11.27	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete	sqm	16.00		
31	8.2.2.2	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 to edges to give high gloss finish etc. complete at all levels. Granite of any colour and shade. Area of slab over 0.50 sqm	sqm	10.00		
		<b>XIII. Rolling Shutter</b>				
32	10.6.1	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 part 1 and M.S. top cover of required thickness for rolling shutters. 80x1.25 mm M.S. laths with 1.25 mm thick top cover	sqm	10		

33	10.9	Extra for providing grilled rolling shutters manufactured out of 8 mm dia M.S. bar instead of laths as per design approved by Engineer-in- charge, (area of grill to be measured).	sqm	3		
34	10.7	Providing and fixing ball bearing for rolling shutters	each	5		
		<b>XIV. Doors and Windows</b>				
35	PSR 9.1.1B	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position - Burma Teak wood	cum	0.30		
36	PSR 9.5.1.1B	Providing and fixing panelled or panelled and glazed shutters for doors , windows and clerestory windows including ISI marked black enamelled M.S butt hinges with necessary screws excluding panelling which will be paid for separately. - Burma Teak wood - 35mm thick shutter	sqm	10.00		
37	PSR 9.14	Extra for providing ISI marked stainless steel buitt hinges instead of black enamelled M.S. butt hinges with necessary Screws. (Shutter area to be measured)	sqm	8.00		
38	13.68.1	French spirit polishing : Two or more coats on new works including a coat of wood filler	sqm	15.00		
39	9.53	Providing 40x5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 30x10x15cm 1:3:6 mix (1 cement : 3 coarse sand: 6 graded stone aggregate 20mm nominal size).	each	8.00		

40	9.84	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete	each	5.00		
41	9.97.1	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete : 300x10 mm	each	8.00		
42	9.92.1	Providing and fixing chromium plated brass handles with necessary screws etc. complete: 125 mm	each	5.00		
43	9.88	Providing and fixing chromium plated brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles of approved quality with necessary screws etc. complete.	each	5.00		
44	21.1.1.2	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling to be paid for	kg	285.00		

		separately) : Powder coated aluminium (minimum thickness of powder coating 50 micron)				
45	21.1.2.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (all fittings included) Powder coated aluminium (minimum thickness of powder coating 50 micron)()	kg	190.00		
46	21.3.2	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge.(Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 5.5 mm thickness	sqm	30.00		
47	21.16.2	Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. complete as per direction of Engineerin-charge Powder coated minimum thickness 50 micron aluminium	each	20.00		
48	9.82	Providing and fixing bright finished brass hanging type floor door stopper with necessary screws, etc. complete	each	5.00		
49	21.8.1	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete. Upto 5mm depth and 5 mm width	m	70.00		
		<b>XV. Tube Well</b>				

50	24.12	Development of tube well in accordance with IS : 2800 (part I) and IS: 11189, to establish maximum rate of usable water yield without sand content (beyond permissible limit), with required capacity air compressor, running the compressor for required time till well is fully developed, measuring yield of well by "V" notch method or any other approved method, measuring static level & draw down etc. by step draw down method, collecting water samples & getting tested in approved laboratory, i/c disinfection of tubewell, all complete, including hire & labour charges of air compressor, tools & accessories etc., all as per requirement and direction of Engineer-in-charge.	hour	100.00		
51	24.8	Gravel packing in tubewell construction in accordance with IS: 4097, including providing gravel fine/ medium/ coarse, in required grading & sizes as per actual requirement, all complete as per direction of Engineerin-charge.	cum	25.00		
52	24.13	Providing and fixing suitable size threaded mild steel cap or spot welded plate to the top of bore well housing/ casing pipe, removable as per requirement, all complete for borewell of: 200mm dia	each	2.00		
53	24.14	Providing and fixing M.S. clamp of required dia to the top of casing/housing pipe of tubewell as per IS: 2800 (part I), including necessary bolts & nuts f required size complete. 200mm dia	each	2.00		
54	24.15	Providing and fixing Bail plug/ Bottom plug of required dia to the bottom of pipe assembly of tubewell as per IS:2800 (part I). 200mm dia	each	2.00		
		<b>Total Amount</b>				

**Project: JIPMER II at Karaikal**

**Construction of Sheds at Arasalar Complex**

**Part V: Electrical LT works (Shed 4,5,6,7 and external lighting)**

<b>Sl no</b>	<b>DSR item ref no</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate in figures &amp; words( in Rs.)</b>	<b>Amount in Rs.</b>
1	1.10.3	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.	Each	105		
2	1.11	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.	Each	2		
3		Wiring for circuit/submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface medium class PVC conduit as required.				

3.1	1.14.1	2 x 1.5 sq.mm + 1 x 1.5 sq.mm earth wire	m	625		
3.2	1.14.2	2 x 2.5 sq.mm + 1 x 2.5 sq mm earth wire	m	1660		
3.3	1.14.3	2 x 4.0 sq.mm + 1 x 4.0 sq mm earth wire	m	810		
3.4	1.14.4	2 x 6.0 sq. mm + 1 x 6.0 sq. mm earth wire	m	50		
4	1.18.2	Supplying and drawing 2 pair 0.5 sq mm FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.	m	710		
5	1.19	Supplying and drawing co-axial TV cable RG-6 grade 0.7mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface / recessed steel / PVC conduit as required.	m	60		
6		Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
6.1	1.21.1	20 mm	m	710		

6.2	1.21.2	25 mm	m	1375		
6.3	1.21.3	32 mm	m	80		
7	1.22.12	Supplying and fixing metal box of 200 x 250 x 100 mm deep (nominal size) on surface or in recess with suitable size of phenolic laminated sheet cover in front including painting etc as required.	Each	10		
8		Supplying and fixing following modular switch / socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
8.1	1.24.6	Telephone socket outlet	Each	30		
8.2	1.24.7	TV antenna socket outlet	Each	4		
9	1.25	Supplying and fixing stepped type electronic fan regulator-modular on the existing modular plate switch box including connections but excluding modular plate etc. as required.	Each	24		

10	1.26	Supply and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	Each	35		
11		Supplying and fixing following size / modules, GI box alongwith modular base & cover plate for modular switches in recess / surface etc as required.				
11.1	1.27.1	1 or 2 module	Each	30		
12	1.31	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc. as required.	Each	98		
13	1.32	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch, connection etc. as required.	Each	15		
14	1.33	Supplying and fixing 3 pin, 5 amp ceiling rose on the existing junction box/ wooden block including connection etc as	Each	65		

		required.				
15	1.41	Installation, testing and commissioning of prewired, fluorescent fittings / compact fluorescent fitting / LED of all types, complete with all accessories and tube etc. directly on ceiling /wall, including connections with 1.5 sq.mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each	50		
16	1.44	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable etc. as required.	Each	24		
17	1.48	Supplying and fixing extra conduit down rod of 20 cm length GI pipe 15 mm dia, heavy guage including painting etc as required.( Note: More than 5 cm length shall be rounded to the nearest 10 cm and 5 cm or less shall be ignored).	Each	24		
18		Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.				

18.1	1.50.1	Upto 450 mm sweep	Each	2		
19	1.53	Supplying and drawing of UTP 4 pair CAT 6 LAN cable in the existing surface / recessed steel / PVC conduit as required.	m	1375		
20		Providing and fixing Following rating and breaking capacity and pole MCCB existing cubicle panel board including drilling holes in cubicle panel, making connections etc as required.				
20.1	2.2.1	100 Amp ,16 KA,TP MCCB	Each	1		
20.2	2.2.2	125 Amp ,16 KA,TP MCCB	Each	1		
21		Supplying and fixing following way single pole and neutral, sheet steel, MCB distribution board, 240 volts on surface / recess complete with tinned copper busbar, neutral busbar, earth bar, din bar, interconnections, powder painted including earthing etc as required (But without MCB/RCCB/Isolator).				

21.10	2.3.6	8 way double door	Each	2		
22		Supplying and fixing following way horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 volts on surface / recess complete with tinned copper busbar, neutral busbar, earth bar, din bar, interconnections, powder painted including earthing etc as required (But without MCB/RCCB/Isolator).				
22.1	2.4.4	4 way double door	Each	3		
22.2	2.4.5	6 way double door	Each	4		
22.3	2.4.6	8 way double door	Each	3		
23		Supplying and fixing following ways surface / recess mounting, vertical type, 415 volts, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 amps tinned copper busbar, common neutral link, earth bar, din bar, for mounting MCBs,(but without MCB's and incomer) as required. (Note: Vertical type MCB TPDB is normally used where 3 phase outlets are required).				

23.1	2.5.4	4 way double door	Each	3		
24		Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
24.1	2.10.1	Single pole	Each	165		
24.2	2.10.4	Triple pole	Each	2		
24.3	2.10.5	Triple pole and neutral	Each	4		
25	2.11	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	Each	30		
26		Supplying and fixing following rating, double pole, 240 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				

26.1	2.12.1	40 amps	Each	2		
27		Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
27.1	2.13.1	40 amps	Each	10		
27.2	2.13.2	63 amps	Each	6		
28		Supplying and fixing following rating, double pole, (single phase and neutral), 240 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
28.1	2.14.2	40 amps	Each	2		
29		Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current upto 300 milliamperes in the existing MCB DB complete with connections, testing and				

		commissioning etc. as required.				
29.1	2.15.1	25 amps	Each	2		
29.2	2.15.2	40 amps	Each	8		
29.3	2.15.3	63 amps	Each	5		
30	2.16	Supply and fixing DP sheet steel enclosure on surface recess along with 16/25/32/ amps 240V "C" curve DP MCB complete with connections, testing and commissioning etc as required.	Each	2		
31	2.17	Supply and fixing TP sheet steel enclosure on surface recess along with 16/25/32/ amps 415V "C" curve TP MCB complete with connections, testing and commissioning etc as required.	Each	2		
32	2.18	Supplying and fixing 20 amps, 240 volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 amps "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as	Each	35		

		required.				
33	5.2	Earthing with GI earth pipe 3.0 m long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke as required.	Each	8		
34	5.4	Earthing with GI earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke as required.	Each	1		
35	5.7	Supplying and laying 6 SWG GI wire at 0.5m below ground level for conductor earth electrode, including connection / termination with GI thimble etc as required.	m	720		
36	5.8	Supply and laying 25mm x 5mm copper strip at 0.5m below ground as strip earth electrode, including connection / terminating with nut, bolt, spring, washer etc as required (Jointing shall be done by overlapping and with 2 sets of brass nut bolt &	m	40		

		spring washer spaced 50mm).				
37	5.9	Supply and laying 25mm x 5mm GI strip at 0.5m below ground as strip earth electrode, including connection / terminating with nut, bolt, spring, washer etc as required (Jointing shall be done by overlapping and with 2 sets of GI nut bolt & spring washer spaced 50mm).	m	90		
38	5.14	Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required.	m	60		
39	5.16	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	m	140		
40	5.17	Providing and fixing 4 mm dia copper wire on surface or in recess for loop earthing as required.	m	110		
41		Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as				

		required.				
41.1	7.1.1	Upto 35 sq. mm	m	510		
42		Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required.				
42.1	7.7.1	Upto 35 sq. mm (clamped with 1mm thick saddle)	m	390		
43		Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.				
43.1	9.1.33	4 x 16 sqmm	Each	6		
43.2	9.1.32	4 x 10 sqmm	Each	8		

43.3	9.1.32	4 x 6 sqmm	Each	30		
44		Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Aluminium conductor power cable confirming to IS 7098 (part 1) ammended upto date.				
44.1		4 x 16 sqmm cable	m	145		
44.2		4 x 10 sqmm cable	m	220		
44.3		4 x 6 sqmm cable	m	480		
45		Supply of 20W LED Batten surface mounting luminarire with Decorative box type fitting with high efficiency PMMA diffuser including all necessary accessories complete. (Crompton DMLN1LT8-16/LTT8-20/ LTT8-20 /Philips -BN150W LED 20S-6500-PSE OD GR /Wipro - LL20-221-XXX-60-XX ).	Nos	50		

46		Supply and installation of compact Recess mounted 36W LED luminaire with High translucent diffuser gives soft glare free light & complete with electronic driver including all required mounting accessories complete. (Crompton LCTLR36-FO- CDL / Philips -Full glow RC 380B LED-35-6500-PSE OD WH / Wipro -CRCO 10R036HP57)	No	86		
47		Supply of 20 W LED tube light Surface mounting industrial type corrosion resistant IP65 luminaire with polycarbonate body, polycarbonate cover, SS toggles etc including all necessary accessories complete. (Crompton LPFC111LT8-16/ Philips/Wipro)	Nos	4		
48		Supply of 1x11W surface mounted luminaire with diffuser and decorative end cap complete with all electrical accessories like electronic ballast, lamp holder, 11W CFL lamp etc. complete with all mounting accessories etc as required. (Wipro WRP 21111 /Crompton/Philips)	Each	2		
49		Supplying and fixing ISI marked PVC angle battern with 15 W LED lamp including all connections as required.	Nos	4		

50		Supply of ceiling fan 1200mm sweep, double ball bearing, approved colour and quality with original down rod,suspension shackle,canopy etc with out regulator complete with all accessories as required. (Usha Technix Decorative (5 star rating) / Crompton High Breeze plus (5 star) / Orient Energy star)	Each	24		
51		Supply & installation of 400mm sweep,Wall fan powder coated guard suitable for single phase 230 volt, 50Hz AC supply complete with motor, capacitor and all accessories as required complete. (Make : Usha Max Air white or equivalent)	Each	38		
52		Supply of ventillating fan 250 mm sweep of approved colour, for single phase 230 volt, 50Hz AC supply complete with motor, capacitor, auto close and open grill cover and all accessories as required complete.	Each	2		

53	<p>Supply &amp; installation of Hot dipped Galvanised (internally and externally), seamless, octagonal pole of overall length 5M with single arm bracket of 1.5m length 48mm dia x 3.25mm thick with standard arm cap. The pole shall have inbuilt cable loop in loop out with flush door and locking facility. The bottom dia of the pole shall be 135mm and top 70mm with 3mm sheet thickness. The pole shall be with base plate of 225x225x16mm and 4nos required size of foundation bolt. The pole shall be mounted on suitable size foundation (design to be got approved) with baseplate arrangement and provided with 4A SP C curve MCB, loop in loop out terminals block, required dia GI / PVC pipe shall be provided in the foundation for taking cable in &amp; out from the pole, 3Cx1.5sqmm unarmoured PVC insulated round copper cable from loop in loop out to light fixture etc with all required accessories. The cost of the civil foundation is not considered in this item. The design of the foundation to be got approved from Engineer-in-charge before execution.</p>	Nos	16		

54		<p>Supply &amp; installation of Hot dipped Galvanised (internally and externally), seamless, octagonal pole of overall length 5M with double arm bracket of 1.5m length 48mm dia x 3.25mm thick with standard arm cap. The pole shall have inbuilt cable loop in loop out with flush door and locking facility. The bottom dia of the pole shall be 135mm and top 70mm with 3mm sheet thickness. The pole shall be with base plate of 225x225x16mm and 4nos required size of foundation bolt. The pole shall be mounted on suitable size foundation (design to be got approved) with baseplate arrangement and provided with 4A SP C curve MCB, loop in loop out terminals block, required dia GI / PVC pipe shall be provided in the foundation for taking cable in &amp; out from the pole, 3Cx1.5sqmm unarmoured PVC insulated round copper cable from loop in loop out to light fixture etc with all required accessories. The cost of the civil foundation is not considered in this item. The design of the foundation to be got approved from Engineer-in-charge before execution.</p>	Nos	8		
55		<p><b>Supply, installation</b>, testing &amp; commissioning of IP66, 24W LED street light fixture, with die cast aluminium housing, stainless steel toggle, electronic driver etc as required. The light fitting shall be suitably installed with all required accessories to the street light pole. (Similar to Philips BRP</p>	Nos	32		

		320 lx24 LED / Wipro LR01-025-XXX-WH-XX				
56		Supply and installation of 30W LED, IP66, flood light luminaire with high pressure die cast housing, high power LED including all accessories like driver, installation accessories etc as required. (Make: Crompton LFLE 30 CDL /Philips-BVP 120 LED35W FGS1PSUGR/ Wipro - LF06-211-XXX-30-XX)	Nos	6		
57		Supply and Installation of 20 pair MDF box, back mount frame and original krone connectors with all accessories.	Each	2		
58		Supply and Installation of 10 pair MDF box, back mount frame and original krone connectors with all accessories.	Each	1		
59		Supply & fixing modular type computer outlet (RJ-45) with modular base and cover plate, GI box complete with all accessories, connection etc. complete as required.	Each	55		

60		Supply and installation of 9 U wall mounted Network Rack made of steel, powder coated, front glass cover with PDU's, cable manager and cooling fans including all required accessories.	nos	2		
61		Supplying and fixing 40A / 63A TP MCB, 415 Volts, "C" series, miniature circuit breaker in the existing MCB DB complete with connections, testing and commissioning etc as required.	Each	18		
62		Supplying and fixing FP weather proof cabinets with IP 65 rating on surface/ recess along with 16/25/32amps 415 volts "C" curve TPN MCB complete with connections, testing and commissioning etc. as required.	Each	2		
63		Supplying and fixing following ways surface / recess mounting vertical type, 415 volts, TPN MCB distribution board of sheet steel, dust protected, duly powder painted. Inclusive of 200 amps tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs with 100 amps TP 16kA MCCB as incomer interconnection between incomer MCCB and busbar (but without MCBs/MCCB) as required. (Note vertical type MCB TPDB is normally used where 3 phase outlets are required).				

63.1		4 way	Each	1		
63.2		6 way	Each	2		
64		Providing and fixing 10 SWG copper wire on surface or in recess for loop earthing along with existing surface / recessed conduit / submain wiring / cable etc as required.	m	310		
65		Wiring for two light point with 1.5sq.mm FRLS PVC insulated copper conductor singlecore cable in surface/ recessedPVC conduct, one modular switch, modular plate, suitable GI box and earthing the point with 1.5 Sq mm FRLS PVC insulated copper conductor single core cable etc as required	Point	21		
66		Wiring for three light point with 1.5sq.mm FRLS PVC insulated copper conductor singlecore cable in surface/ recessed PVC conduct, One modular switch, modular plate, suitable GI box and earthing the point with 1.5 Sq mm FRLS PVC insulated copper conductor single core cable etc as required	Point	21		

67		Dismantling the existing light fixing (indoor), ceiling fan, exhaust fan,DB etc with least damage and storing the same to the place as per the direction of engineer in charge.	Each	26		
68		Dismantling of existing electrical conduits / cassing & capping, switches, switch boards, junction boxes, wires, angle batten including all accessories in a total floor area (under renovation) and storing in space as directed by Engineer-in-charge	Job	4		
	-	<b>Total Amount in Rs</b>				
	-					

**Project: JIPMER II at Karaikal**

**13.1 RENOVATION OF ARASALAR COMPLEX**

**Part VI: AIR CONDITIONING WORKS**

<b>Sl no</b>	<b>DSR item ref no</b>	<b>Item Description</b>	<b>Unit</b>	<b>Quantity</b>	<b>Rate in figures &amp; words(in Rs.)</b>	<b>Amount in Rs.</b>
1	LMR	Supply, installation, testing and commissioning of Air Cooled High Wall mounted Split Air Conditioner of following capacity consisting of high wall mounted type room unit (fan coil) with cordless remote control and one number outdoor condensing unit comprising of energy efficient suitable rotary compressor for operation on single phase, 230 V, 50Hz supply, fixing the outdoor unit on a raised platform as per manufacturers recommendation and fixing of room (fan coil) unit on wall, standard 4 m distance refrigerant copper piping with 13mm nitrile rubber insulation, providing and making interconnection between room & condenser as per site conditions, comprising of 1" dia drain PVC pipe with insulation 4m, canvas connections, full electrical cabling from power plug near indoor unit and to outdoor unit, ODU MS stand, first charge refrigerant gas, suitable stabilizer etc complete as required.				
1.1		2 TR 5 star rated as per BEE	Nos	12.00		

1.2		1.5 TR 5 star rated as per BEE	Nos	50.00		
1.3		1TR 5 star rated as per BEE	Nos	5.00		
1.4.		Additional Copper Piping Beyond 4M	Rmt	280.00		
		<b>Total Amount</b>				