

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
	<b>Pre construction activities - A</b>				
1	Preparation and submission of plans based on the concept of plans to the local bodies and get approvals thereof		L.S		
2	Preparation of working drawings and getting approval of clients and issue 'Good for Construction' drawings		L.S		
3	Preparation of Structural design and drawings including proof-checking through Pondichery Engineering College.		L.S		
4	Pondichery Geo-Technical investigation for foundation design		L.S		
5	Preparation of as built drawings including getting occupation certificate (all activities connected with all NOC's included).		L.S		
	<b>Total for Pre construction activities - A</b>				
	<b>CIVIL - B</b>				
<b>I</b>	<b>Earthwork</b>				
1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed.				
	All Kinds of soils.	<b>1731</b>	<b>cu.m</b>		

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2	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 up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
	All Kinds of soils.	740	cu.m		
3	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift up to 1.5 m.	2247	cu.m		
4	Extra for every additional lift of 1.5 m or part there of in excavation / banking excavated or stacked materials.				
	All Kinds of soils.	496	cu.m		
5	Supplying and filling in plinth with Jamuna sand under floors, including watering, ramming consolidating and dressing complete.	395	cu.m		

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6	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared.	2518	100 sq.m		
II	Concrete work				
7	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:				
	1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	280.2	cu.m		
8	Providing and laying damp-proof course 40 mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size).	249	Sq.m		
9	Extra for providing and mixing water proofing material in cement concrete work in doses by weight of cement as per manufacturer's specification.	65	per 50 kg cement		

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Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
10	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 75 mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including finishing the top smooth.	377	Sq.m		
11	Providing and laying in position ready mixed M-25 grade concrete for reinforced cement concrete work, using cement content as per approved design mix, manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for reinforced cement concrete work including pumping of R.M.C. from transit mixer to site of laying , excluding the cost of centering, shuttering finishing and reinforcement including cost of 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 the 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.				

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Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
a	All work upto plinth level	531	cu.m		
b	All work above plinth level upto floor V level	2316	cu.m		
12	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)	61.5	cu.m		
13	Add for using extra cement in the items of design mix over and above the specified cement content therein.	29.35	quintal		
14	Extra for R.C.C. / B.M.C / R.M.C. work above floor V level for each four floors or part thereof.	1001	cu.m		
15	Centering and shuttering including strutting, propping etc. and removal of form for :				
a	Foundations, footings, bases of columns, etc. for mass concrete	659	Sq.m		
b	Walls (any thickness) including attached pilasters, buttresses, plinth and string courses etc.	1979	Sq.m		
c	Suspended floors, roofs, landings, balconies and access platform	6197	Sq.m		
d	Shelves (Cast in situ)	598	Sq.m		

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Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
e	Lintels, beams, plinth beams, girders, bressumers and cantilevers	6962	Sq.m		
f	Columns, Pillars, Piers, Abutments, Posts and Struts	4647	Sq.m		
g	Stairs, (excluding landings) except spiral-staircases	486	Sq.m		
h	Vertical and horizontal fins individually or forming box louvers band, facias and eaves boards	176	Sq.m		
i	Weather shade, Chajjas, corbels etc., including edges	299	Sq.m		
16	Providing precast cement concrete Jali 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) reinforced with 1.6 mm dia mild steel wire including centering and shuttering, roughening cleaning, fixing and finishing in cement mortar 1:3 (1 cement : 3 fine sand) etc. complete excluding plastering of the jambs, sills and soffits.	47	Sq.m		
17	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level				
	Thermo-Mechanically Treated bars	56601	kg		

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18	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
	Thermo-Mechanically Treated bars	<b>265326</b>	<b>kg</b>		
19	Smooth finishing of the exposed surface of RCC work with 6mm thick cement mortar 1:3 (1 cement : 3 fine sand).				
20	Extra for rendering smooth the top of suspended floors, landings and staircases (treads and risers) with cement mortar 1:2 (1 cement : 2 coarse sand) including a floating coat of neat cement and protecting the surface with a layer of 7.5 cm of earth laid over 15 mm of fine sand in case of suspended floor and bricks laid in mud mortar in case of landings and steps including subsequent removal and cleaning of the same.	<b>4793</b>	<b>sq.m</b>		
<b>III</b>	<b>Brick work</b>				
21	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in :				
	Cement mortar 1:6 (1 cement : 6 coarse sand)	<b>247</b>	<b>cu.m</b>		

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Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
22	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 5.0 in superstructure above plinth level up to floor V level in all shapes and sizes in :				
	Cement mortar 1:6 (1 cement : 6 coarse sand)	1782	cu.m		
23	Extra for brick work/ AAC block masonry/ Tile brick masonry in super structure above floor V level, for each four floors or part thereof by mechanical means.	725.5	cu.m		
24	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 5.0 in superstructure above plinth level up to floor V level.				
	Cement mortar 1:4 (1 cement :4 coarse sand)	4545	Sq.m		
25	Extra for half brick masonry in superstructure, above floor V level for every four floors or part thereof by mechanical means.	1887	Sq.m		
26	Extra for providing and placing in position 2 Nos 6 mm dia M.S bars at every third course of half brick masonry.	4545	Sq.m		



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Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
IV	Marble and granite works				
27	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.				
a	Raj Nagar Plain white marble / Udaipur green marble / Zebra black marble				
	Area of slab over 0.50 sqm	53.5	sq.m		
b	Granite of any colour and shade				
	Area of slab over 0.50 sqm	120.4	sq.m		
28	Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/ granite/ stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	39	each		

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Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
29	Marble work gang saw cut (polished and machine cut) of thickness 18 mm for wall lining (veneer work), backing filled with a grout of average 12 mm thick in cement mortar 1:3 (1 cement : 3 coarse sand), including pointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with an admixture of pigment to match the marble shade (To be secured to the backing by means of cramps, which shall be paid for separately).				
	Area of slab over 0.50 sqm				
	Raj nagar plain white marble (table rubbed and polished) 18 mm thick (slab area more than 0.50 sqm)				
	Granite of any colour, 18 mm thick (slab area above 0.50 sqm)	27.72	Sq.m		
30	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length ( hold fast lugs or dash fastener shall be paid for separately).				
	Sal wood	54.21	cu.m		

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Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
31	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows, including ISI marked M.S.pressed butt hinges bright finished of required size with necessary screws, excluding panelling which will be paid for separately, all complete as per direction of Engineer-in-charge.				
	Kiln seasoned and chemically treated hollock wood				
	35 mm thick shutters	1294.7	sq.m		
32	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25 mm to 40 mm thick:				
a	Kiln seasoned and chemically treated hollock wood	18.7	sq.m		
b	Ply wood 5 ply, 9 mm thick				
	Decorative plywood both side decorative veneer (Type - I) conforming to IS 1328 BWR type.	264	sq.m		
c	Particle Board 12 mm thick				

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Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
	Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side, Grade I, Type II, IS : 12823 marked	1036	sq.m		
33	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4 mm thick float glass panes including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws.				
	Kiln seasoned and chemically treated hollock wood				
	30 mm thick	768.2	sq.m		
34	Deduct for providing pin headed glass panes instead of ordinary float glass panes weighing 4 mm thick in doors, windows and clerestory window shutters (Area of opening for glass panes excluding portion inside rebate shall be measured).	71.95	Sq.m		
35	Deduct for not providing hinges in doors, windows and clerestory window shutters with:				
	ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws				
	For 2nd class teak wood and other class of wood shutters	191.2	sq.m		

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Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
36	Providing and fixing Pre-laminated flat pressed 3 layer (medium density) particle board or graded wood particle board IS : 3087 marked, with one side decorative and other side balancing lamination Grade I, Type II exterior grade IS : 12823 marked, in shelves with screws and fittings wherever required, edges to be painted with polyurethane primer (fittings to be paid separately).				
	25 mm thick	105.27	Sq.m		
37	Providing 50x50x50 mm 2nd class teak wood plugs including cutting brick work and fixing in cement mortar 1:3 (1 cement : 3 fine sand) and making good the walls etc.	1737	each		
38	Providing and fixing expandable fasteners of specified size with necessary plastic sleeves and galvanised M.S. screws including drilling holes in masonry work / C.C / R.C.C. and making good etc. complete.				
	50mm long	1737	each		
39	Providing and fixing curtain rods of 1.25 mm thick chromium plated brass plate, with two chromium plated brass brackets fixed with C.P. brass screws and wooden plugs, etc., wherever necessary complete:				

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Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
	25mm dia	826.1	metre		
40	Providing and fixing nickel plated M.S. pipe curtain rods with nickel plated brackets:				
	25 mm dia (heavy type)	226.8	metre		
41	Providing and fixing M.S. grills of required pattern in frames of windows etc. With M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.				
	Fixed to openings/ wooden frames with rawl plugs screws etc	26055	kg		
42	Providing 40x5 mm flat iron hold fast 40 cm long including fixing to frame with 10 mm diameter bolts, nuts and wooden plugs and embeddings in cement concrete block 30x10x15 cm 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	5373	each		
43	Providing and fixing ISI marked oxidised M.S. sliding door bolts with nuts and screws etc. complete :				
	250x16 mm	167	each		
44	Providing and fixing ISI marked oxidised M.S. tower bolt black finish, (Barrel type) with necessary screws etc. complete:				

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Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
a	250x10 mm	167	each		
b	150x10 mm	442	each		
c	100x10 mm	166	each		
45	Providing and fixing ISI marked oxidised MS door latches conforming to IS : 5930 with screws etc. complete.				
	250x20x6 mm	40	each		
46	Providing and fixing ISI marked oxidised M.S. handles conforming to IS :4992 with necessary screws etc. complete:				
a	100mm	334	each		
b	75mm	356	each		
47	Providing and fixing oxidised M.S. hasp and staple (safety type) conforming to IS : 363 with necessary screws etc. complete:	108	each		
48	Providing and fixing oxidised M.S. Safety chain with necessary fixtures for doors, (weighting not less than 450 gms).	66	each		
49	Providing and fixing special quality chromium plated brass cupboard locks with six levers of approved quality including necessary screws etc. complete.				

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Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
	size 50mm	276	each		
50	Providing and fixing chromium plated brass 50 mm cupboard or wardrobe knobs with nuts complete.	324	each		
51	Providing and fixing aluminium sliding door 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 nuts and screws etc. complete:				
	250x16 mm	351	each		
52	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:				
a	250x10 mm	351	each		
b	150x10 mm	1261	each		
c	100x10 mm	1226	each		
53	Providing and fixing aluminium pull bolt lock, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour and shade, with necessary screws bolts, nut and washers etc. complete.	39	each		



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54	Providing and fixing aluminium handles, 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:				
a	100 mm	702	each		
b	75mm	1006	each		
55	Providing and fixing PTMT handles with necessary screws etc. complete.				
	125x34x24 mm weighing not less than 23 gms	204	each		
56	Providing and fixing PTMT Butt hinges with necessary screws etc. complete.				
	100x75x10 mm fitted with 5.5 mm dia MS Bright Bar Rod weighing not less than 53 gms	306	each		
57	Providing and fixing PTMT Tower Bolts with 12 mm one piece rod inside and necessary screws etc., complete.				
	152x42x18 mm weighing not less than 60 gms	204	each		
58	Providing and fixing magnetic catcher of approved quality in cupboard / ward robe shutters, including fixing with necessary screws etc. complete.				
	Double strip (horizontal type)	732	each		

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Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
59	Providing and fixing wire gauge shutters using stainless steel grade 304 wire gauge with wire of dia 0.5 mm and average width of aperture 1.4 mm in both directions for doors, windows and clerestory windows with necessary screws:				
	35 mm thick shutters				
	With ISI marked stainless steel butt hinges of required size				
	Kiln seasoned and chemically treated hollock wood	50.1	Sq.m		
60	Providing and Fixing factory made PVC door frame made of PVC extruded sections of size 75 mm x 53 mm, having wall thickness 2.0 mm ( $\pm 0.2$ mm). Both verticals sides of the frame reinforced with PVC profile of cross section size 28 mm x 30 mm x 2 mm thickness ( $\pm 0.2$ mm) and 75 mm x 200 mm long, including reinforcing both ends of the top frame with PVC profile. PVC Door Frame and PVC reinforcement profile to be mitred cut jointed and fusion welded together, including providing and fixing 3 nos of 125 mm long stainless steel hinges to frame, fixing the frame with jamb with required nos & sizes of anchor dash fastener, all complete as per manufacturer's specification and direction of engineer-in-charge.	799.5	metre		

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Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
61	Providing and fixing 37 mm thick factory made PVC Door shutter, styles and rails made of PVC hollow extruded printed and laminated section having overall dimension 115 mm x 37 mm with wall thickness 2 mm ( $\pm 0.2$ mm) with inbuilt beading on one side, the styles and rails mitred cut and joint at corners by inserting 2 nos PVC profile reinforcement of size 75 mm x 200 mm long with cross section size of 28 mm x 30 mm having wall thickness 2 mm ( $\pm 0.2$ mm). Styles, rails and reinforcements to be fusion welded together. Only hinge side vertical style to be reinforced with PVC profile reinforcement in full length. Printed and laminated PVC lock rail of size 110 mm x 37 mm having wall thickness 2 mm ( $\pm 0.2$ mm) to be welded horizontally with the vertical styles after inserting PVC profile reinforcement as in styles and rails, providing with PVC snap fit beading, panels of 100 x 20 mm printed & laminated and inserting 2 nos 6 mm dia bright steel rod horizontally with both side threaded and tightened with check nuts and washers complete, all as per manufacturer's specification and direction of engineer-in-	255.25	Sq.m		
<b>V</b>	<b>Steel works</b>				
62	Providing and fixing 1 mm thick M.S. sheet door with frame of 40x40x6 mm angle iron and 3 mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.				

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	Using M.S. angels 40x40x6 mm for diagonal braces	64.8	Sq.m		
63	Providing and fixing M.S. fan clamp type I or II of 16 mm dia M.S. bar, bent to shape with hooked ends in R.C.C. slabs or beams during laying, including painting the exposed portion of loop, all as per standard design complete.	309	each		
64	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	5070	kg		
VI	<b>Flooring</b>				
65	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement, including cement slurry, but excluding the cost of nosing of steps etc. complete.				
	40 mm thick with 20 mm nominal size stone aggregate	303	sqm		

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66	52 mm thick cement concrete flooring with concrete hardener topping, under layer 40 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) and top layer 12 mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix : 2 graded stone aggregate 6mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacturer's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	218	sqm		
67	Cement plaster skirting upto 30 cm height, with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement.				
	18 mm thick	67	sqm		
68	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	624.3	sqm		

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69	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.	209.9	sqm		
70	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 @ 3.3 kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	2637	sqm		
71	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS : 15622, of approved make, in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), including pointing the joints with white cement and matching pigment etc., complete.	4943	sqm		

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VII	<b>Roofing</b>				
72	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.				
	110 mm diameter	399.2	metre		
73	Providing and fixing on wall face unplasticised-PVC moulded fittings / accessories for unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion.				
a	Coupler				
	110 mm	36	each		
b	Single tee with door				
	110x110x110 mm	26	each		
c	Bend 87.5°				
	110 mm bend	25	each		
d	Shoe (Plain)				
	110 mm Shoe	25	each		

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74	Providing and fixing unplasticised-PVC pipe clips of approved design to unplasticised-PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.				
	160mm	44	each		
75	Providing and fixing unplasticised-PVC pipe clips of approved design to unplasticised-PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.				
	110 mm	471	each		
76	Providing and fixing PTMT grating of approved quality and colour.				
	Rectangular type with openable circular lid				
	150 mm nominal size square 100 mm diameter of the inner hinged round grating	25	each		
VIII	<b>Finishing</b>				
77	12 mm cement plaster of mix:				



Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
	1:6 (1 cement : 6 fine sand)	14337	sqm		
78	15 mm cement plaster on the rough side of single or half brick wall of mix:				
	1:6 (1 cement : 6 fine sand)	10638	sqm		
79	12 mm cement plaster finished with a floating coat of neat cement of mix:				
	1:3 (1 cement : 3 fine sand)	278	sqm		
80	White washing with lime to give an even shade:				
	New work (three or more coats)	5311	sqm		
81	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade :				
	New work (two or more coats) over and including priming coat with water thinnable cement primer	22439	sqm		
82	Finishing walls with water proofing cement paint of required shade:				
	New work (Two or more coats applied @ 3.84 kg/ 10 sqm)	949	sqm		
83	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)	8624	sqm		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
84	Applying priming coat:				
	With ready mixed pink or Grey primer of approved brand and manufacture on wood work (hard and soft wood)	4972	sqm		
85	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade:				
	Two or more coats on new work	9838	sqm		
86	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:				
	Two or more coats on new work	4661	sqm		
87	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade:				
	Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture.	1790	sqm		
88	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.	9838	sqm		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
89	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C., kitchen and the like consisting of: i) I course of applying cement slurry @ 4.4 Kg/ sqm mixed with water proofing compound conforming to IS : 2645 in recommended proportions including rounding off junction of vertical and horizontal surface. ii) II course of 20 mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface. iii) III course of applying blown or residual bitumen applied hot at 1.7 kg per sqm of area. iv) IV course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 Kg/sqm).	1559	sqm		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
90	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-Charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment. b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-Charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in- Charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs c) After two days of proper curing applying a second coat of cement slurry				
	With average thickness of 120 mm and minimum thickness at khurra as 65 mm	1676	sqm		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
<b>IX</b>	<b>Sanitary Installations</b>				
91	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm Sand Cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:				
	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	<b>78</b>	<b>each</b>		
92	Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required:				
	W.C. pan with ISI marked white solid plastic seat and lid	<b>75</b>	<b>each</b>		
93	Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require:				

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
	White Vitreous China Wash basin size 630x450 mm with a single 15 mm C.P. Brass pillar tap	129	each		
94	Providing and fixing Stainless Steel A ISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required:				
a	Kitchen sink with drain board				
a1	510x1040 mm bowl depth 250 mm	12	each		
a2	510x1040 mm bowl depth 200 mm	27	each		
b	Kitchen sink without drain board				
b1	610x510 mm bowl depth 200 mm	27	each		
95	Providing and fixing P.V.C. waste pipe for sink or wash basin including PVC. waste fittings complete.				
	Flexible pipe				
a	32 mm dia	129	each		
b	40 mm dia	66	each		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
96	Providing and fixing 600x450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	129	each		
97	Providing and fixing 600x120x5 mm glass shelf with edges round off supported on anodised aluminium angle frame with C.P. brass brackets and guard rail complete fixed with 40 mm long screws, rawl plugs etc., complete.	75	each		
98	Providing and fixing toilet paper holder:				
	C.P. brass	36	each		
99	Providing and fixing PTMT Waste Coupling for wash basin and sink, of approved quality and colour.				
a	Waste coupling 31 mm dia of 79 mm length and 62 mm breadth weighing not less than 45 gms	129	each		
b	Waste coupling 38 mm dia of 83 mm length and 77 mm breadth, weighing not less than 60 gms	54	each		
100	Providing and fixing PTMT Bottle Trap for Wash basin and sink.				

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
a	Bottle trap 31 mm single piece moulded with height of 270 mm, effective length of tail pipe 260 mm from the centre of the waste coupling, 77 mm breadth with 25 mm minimum water seal, weighing not less than 260 gms	129	each		
b	Bottle trap 38 mm single piece moulded with height of 270 mm, effective length of tail pipe 260 mm from the centre of the waste coupling, 77 mm breadth with 25 mm minimum water seal, weighing not less than 263 gms	78	each		
101	Providing and fixing PTMT liquid soap container 109 mm wide, 125 mm high and 112 mm distance from wall of standard shape with bracket of the same materials with snap fittings of approved quality and colour, weighing not less than 105 gms.	90	each		
102	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fitting arrangement of approved quality and colour.				
	600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88mm, weighing not less than 190 gms	117	each		



Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
103	Providing and fixing PVC Soil, waste and vent pipe to IS: 13592 of SWR quality 4kg/sq.cm pressure rated upto 110mm dia and 6kg/sq.cm pressure rated agriculture series above 100mm, including all fittings, like EG: Bends, Tees, Elbows, Collars, junction, inspection doors, cowls, offsets, access pipes, jointing with rubber ring/ solvent cement by application of leak proof adhesive like FRP including cutting holes in walls and floors and making good				
a	160mm	178	each		
b	100mm	1284	each		
104	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge. Internal work - Exposed on wall				
a	25 mm nominal outer dia pipes	154.5	metre		
b	32 mm nominal outer dia pipes	259	metre		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
c	40 mm nominal outer dia pipes	74.8	metre		
d	50 mm nominal outer dia pipes	502	metre		
105	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply, including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings, with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer-in-Charge. Concealed work, including cutting chases and making good the wall etc.				
	15 mm nominal outer dia pipes	694	metre		
106	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings. This includes jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineerin-Charge. External work				
a	50 mm nominal outer dia pipes	30	metre		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
b	100 mm nominal inner dia pipes	423	metre		
107	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				
	25 mm nominal bore	78	metre		
108	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete:				
	25 mm nominal bore	27	each		
109	Providing and fixing gun metal non-return valve of approved quality (screwed end) :				
a	25 mm nominal bore	78	each		
b	80 mm nominal bore				
	Vertical	16	each		
110	Providing and fixing C.P. brass shower rose with 15 or 20 mm inlet:				
a	100 mm diameter	54	each		
b	150mm diameter	36	each		
111	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931.				
	15 mm nominal bore	267	each		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
112	Providing and fixing C.P. brass stop cock (concealed) of standard design and of approved make conforming to IS:8931.				
	15 mm nominal bore	193	each		
113	Providing and fixing C.P. brass angle valve for basin mixer and geyser points of approved quality conforming to IS:8931				
	15 mm nominal bore	36	each		
114	Providing and fixing PTMT bib cock of approved quality and colour.				
	15 mm nominal bore, 86 mm long, weighing not less than 88 gms	144	each		
115	Providing and fixing PTMT stop cock of approved quality and colour.				
	15 mm nominal bore, 86 mm long, weighing not less than 88 gms	117	each		
116	Providing and fixing PTMT Ball cock of approved quality, colour and make complete with Epoxy coated aluminium rod with L.P. / H.P.H.D. plastic ball.				
a	15 mm nominal bore, 105 mm long, weighing not less than 138 gms	39	each		
b	25 mm nominal bore, 152 mm long, weighing not less than 440 gms	12	each		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
117	Providing and fixing PTMT swivelling shower, 15 mm nominal bore, weighing not less than 40 gms.	39	each		
118	Providing and fixing PTMT Soap Dish Holder having length of 138 mm, breadth 102 mm, height of 75 mm with concealed fitting arrangements, weighing not less than 106 gms.	54	each		
119	Providing and fixing unplasticised P.V.C. connection pipe with PTMT Nuts, collar and bush of approved quality and colour.				
	15 mm nominal bore with 30 cm length	270	each		
120	Cutting holes up to 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominalize), including finishing complete so as to make it leak proof.	138	each		
121	Making hole up to 20x20 cm and embedding pipes up to 150 mm diameter in masonry and filling with cement concrete 1:3:6 (1 cement : 3 coarse sand 6 graded stone aggregate 20 mm nominal size) including disposal of malba.	240	each		
122	Providing and fixing PVC 'P' or 'S' floor trap self cleansing design with or without vent arm complete including cutting and making good the walls and floors..	363	each		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
<b>X</b>	<b>Drainage</b>				
123	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete:				
a	100 mm diameter	<b>48</b>	<b>metre</b>		
b	150 mm diameter	<b>16</b>	<b>metre</b>		
124	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design:				
a	100 mm diameter S.W. pipe	<b>48</b>	<b>metre</b>		
b	150 mm diameter S.W. pipe	<b>16</b>	<b>metre</b>		
125	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design :				
a	150 x 100 mm size P type				
	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	<b>28</b>	<b>each</b>		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
b	180x150 mm size P type				
	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	8	each		
126	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete:				
	150 mm dia R.C.C. pipe	350	metre		
127	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design:				

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
a	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg):				
	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	20	each		
b	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) :				
	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	14	each		
128	Extra for depth for manholes				
a	Size 90x80 cm				
	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	12	metre		
b	Size 120x90 cm				
	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	9	metre		



Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
129	Constructing brick masonry circular type manhole 0.91m internal dia at bottom and 0.56 m dia at top in cement mortar 1:4 (1 cement : 4 coarse sand), in side cement plaster 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement, foundation concrete 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size), and making necessary channel in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement, all complete as per standard design :				
	0.91m deep with S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560 mm internal diameter conforming to IS:12592, total weight of cover and frame to be not less than 182 kg, fixed in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including centering, shuttering all complete. (Excavation, foot rests and 12 mm thick cement centering, shuttering all complete. (Excavation, foot rests and 12 mm thick cement plaster at the external surface shall be paid for separately) :				

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	2	each		
130	Providing and fixing in position pre-cast R.C.C. manhole cover and frame of				
	required shape and approved quality.				
	Rectangular shape 600x450 mm internal dimensions	80	each		
131	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand) finished with a floating coat of neat cement and making necessary channels for the drain etc. complete:				
	For pipes 100 to 250 mm diameter	11	each		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
XI	Road work				
132	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.	756	sq.m		
133	Supplying and filling gravel/murram, including watering, ramming, consolidating and dressing complete.	227	sq.m		
134	1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	76	cu.m		
135	Cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size) in pavements, laid to required slope and camber in panels as required including consolidation finishing and tamping complete.	76	cu.m		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
136	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 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).	12	cu.m		
137	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.	72	sq.m		
	<b>TOTAL FOR CIVIL - B</b>				

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
	<b>SERVICES - C</b>				
<b>I</b>	<b>WIRING</b>				
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required.				
a	Group A	<b>64</b>	<b>Point</b>		
b	Group B	<b>1988</b>	<b>Point</b>		
c	Group C	<b>64</b>	<b>Point</b>		
2	Wiring for twin control light point with 1.5 sq.mm FR PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required.	<b>158</b>	<b>Point</b>		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
3	Wiring for light/ power plug with 2X4 sq. mm FR PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No 4 sq. mm FR PVC insulated copper conductor single core cable for loop earthing as required.	25100	Metre		
4	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required	0			
a	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	2500	Metre		
b	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	17580	Metre		
c	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	9167	Metre		
d	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	6005	Metre		
e	4 X 2.5 sq. mm + 2 X 2.5 sq. mm earth wire	200	Metre		
f	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	2535	Metre		
g	4 X 10 sq. mm + 2 X 10 sq. mm earth wire	2460	Metre		
h	4 X 16 sq. mm + 2 X 16 sq. mm earth wire	5230	Metre		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
5	Supplying and drawing following pair 0.5 sq mm FR PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.				
	2 Pair	10902	Metre		
6	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm 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.	2946	Metre		
7	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.				
a	20 mm	12336	Metre		
b	25 mm	4380	Metre		
8	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
a	Telephone socket outlet	51	Each		
b	TV antenna socket outlet	78	Each		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
c	Bell push	69	Each		
9	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	300	Each		
10	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	160	Each		
11	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.				
	1 or 2 Module (75mmX75mm)	393	Each		
12	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. (For light plugs to be used in non residential buildings).	971	Each		
13	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.	363	Each		



Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
14	Erection of wall bracket /ceiling fittings of all sizes and shapes containing upto two GLS lamps per fitting, complete with all accessories including connection etc. as required.	834	Each		
15	Supplying and fixing call bell/ buzzer suitable for single phase, 230 volts, complete as required.	69	Each		
16	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable and earthing etc. as required.	493	Each		
17	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FR PVC insulated, copper conductor, single core cable etc. as required.	288	Each		
18	Installation, testing and commisioning of ceiling fan including wiring the downrods of standard length(upto 30cm) with 1.5sq. Mm FR PVC insulated, coppewr conductor, single core cable including providing and fixing Phenolic laminated sheet cover on the fan box. etc.,as required.	12	Each		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
19	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.				
	Upto 450 mm sweep	78	Each		
20	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	78	Each		
<b>II</b>	<b>MCCB, MCB &amp; DB'S</b>				
21	Providing and fixing following capacity TP&N disconnecter fuse switch unit inside the existing panel board with ISI marked HRC fuses including drilling holes in cubicle panel, making connections, etc. as required.				
	100 Amp TP&N	1	Each		
22	Providing and fixing following rating and breaking capacity MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required.				
	100 Amp, 16 KA	70	Each		
23	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 volts, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
a	2 + 4 way, Single door	24	Each		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
b	2 + 12 way, Single door	2	Each		
24	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 bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
a	4 way (4 + 12), Single door	1	Each		
b	4 way (4 + 12), Double door	84	Each		
c	8 way (4 + 24), Double door	81	Each		
25	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 MCB's, with provision of 100 amps TP 16 KA MCCB as incomer, interconnection between incomer MCCB and bus bars (but without MCB's/ MCCB) as required . (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
	4 Way TP	70	Each		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
26	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.				
a	Single pole	2840	Each		
b	Single pole and neutral	80	Each		
c	Double pole	120	Each		
d	Triple pole	120	Each		
e	Triple pole and neutral	121	Each		
27	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	315	Each		
28	Supplying and fixing following rating, double pole, 240 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
	40 amps	14	Each		
29	Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
a	40 amps	128	Each		
b	63 amps	69	Each		
30	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.				
	40 amps	52	Each		
31	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.	0			
a	40 amps	124	Each		
b	63 amps	69	Each		
32	Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32amps 240 volts "C" curve DP MCB complete with connections, testing and commissioning etc. as required.	36	Each		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
33	Supplying and fixing TP sheet steel enclosure on surface/ recess along with 16/25/32amps 415 volts "C" curve TP MCB complete with connections, testing and commissioning etc. as required.	4	Each		
34	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 required.	40	Each		
35	Supplying and fixing 30 amps, 415 volts, TPN industrial type, socket outlet, with 4 pole and earth, metal enclosed plug top alongwith 30 amps "C" curve, TPMCB, 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 required.	58	Each		
36	Providing and fixing M.V. danger notice plate of 200 mm X 150 mm, made of mild steel, at least 2 mm thick, and vitreous enameled white on both sides, and with inscription in single red colour on front side as required.	134	Each		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
III	CABLE TRAYS				
37	Supplying and installing following size of perforated pre-painted M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required.				
	100 mm width X 50 mm depth X 1.6 mm thickness	780	Metre		
38	Supplying and installing following size of perforated pre-painted M.S. cable trays bends with perforation not more than 17.5%, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required.				
	100 mm width X 50 mm depth X 1.6 mm thickness	130	Each		
39	Supplying and installing following size of perforated pre-painted M.S. cable trays reducers with perforation not more than 17.5%, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required.				
	100 mm width X 50 mm depth X 1.6 mm thickness	110	Each		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
40	Supplying and installing following size of perforated pre-painted M.S. cable trays Tee's with perforation not more than 17.5%, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required.				
	100 mm width X 50 mm depth X 1.6 mm thickness	100	Each		
41	Supplying and installing following size of perforated pre-painted M.S. cable trays cross members with perforation not more than 17.5%, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required.				
	100 mm width X 50 mm depth X 1.6 mm thickness	80	Each		
<b>IV</b>	<b>E A R T H I N G</b>				
42	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	55	Each		
43	Earthing with G.I. 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 and salt as required.	28	Set		



Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
44	Earthing with copper earth plate 600 mm X 600 mm X 3 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 and salt as required.	14	Set		
45	Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	415	Metre		
46	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	180	Metre		
47	Providing and fixing 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required.	1620	Metre		
48	Providing and laying earth connection from earth electrode with 6 SWG dia G.I. Wire in 15 mm dia G.I. pipe from earth electrode including connection with G.I. thimble excavation and re-filling as required.	180	Metre		
49	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	80	Metre		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
50	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing as required.	2030	Metre		
<b>V</b>	<b>LIGHTNING CONDUCTOR</b>				
51	Providing and fixing of lightning conductor finial, made of 25 mm dia 300 mm long, G.I. tube, having single prong at top, with 85 mm dia 6 mm thick G.I. base plate including holes etc. complete as required.	96	Each		
52	Fixing of lightning conductor finial (single prong) with base plate including holes etc. complete as required.	96	Each		
53	Jointing copper / G.I. tape (with another copper/ G I tape, base of the finial or any other metallic object) by riveting / nut bolting/ sweating and soldering etc as required.	96	Each		
54	Providing and fixing copper tape 20 mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required.(For horizontal run)	1298	Metre		
55	Providing and fixing copper tape 20 mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required.(For vertical run)	1160	Metre		
56	Providing and fixing testing joint, made of 20 mm X 3 mm thick copper strip, 125 mm long, with 4 nos. of tinned brass bolts, nuts, chuck nuts and spring washers etc. complete as required.	240	Each		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
57	Providing and fixing testing joint, made of 20 mm X 3 mm thick G.I. strip, 125 mm long, with 4 nos. of G.I. bolts, nuts, chuck nuts and spring washers etc. complete as required.	240	Each		
58	Providing and laying copper tape 32 mm X 6 mm from earth electrode directly in ground as required.	1208	Metre		
<b>VI</b>	<b>MV CABLE LAYING</b>				
59	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.				
	Upto 35 sq. mm	1864	Metre		
	Above 35 sq. mm and upto 95 sq. mm	940	Metre		
60	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required.				
a	Upto 35 sq. mm (clamped with 1mm thick saddle)	270	Metre		
b	Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)	230	Metre		
61	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required.				

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
a	Upto 35 sq. mm (clamped with 1mm thick saddle)	70	Metre		
b	Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)	30	Metre		
62	Supplying and making cable route marker with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size ) of size 60 cm X 60 cm at the bottom and 50 cm X 50 cm at the top with a thickness of 10cm including inscription duly engraved as required.	300	each		
<b>VII</b>	<b>MV CABLE JOINTING &amp; END TERMINATION</b>				
63	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.				
a	3 .5X 10 sq. mm (22mm)	2	Each		
b	3½ X 70 sq. mm (38mm)	2	Each		
c	3½ X 95 sq. mm (45mm)	4	Each		
d	3½ X 120 sq. mm (45mm)	6	Each		
e	4 X 10 sq. mm (25mm)	4	Each		
f	4 X 25 sq. mm (28mm)	84	Each		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
VIII	METERING PANEL				
64	METERING PANEL				
	Supply, Installation, Testing & Commissioning of Three phase meter box, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP54, wall / floor mounting, dust and vermin proof, powder coated, outdoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
	SWITCHGEAR & OTHER ACCESSORIES				
	Space provision for accomodating 3 phase CT operated energy meter from EB with all connections, glass view panel, control MCB, lockable compartment etc.				
	9nos. Suitable ratio CT (as per EB) with Acc. Class 0.5, 10VA in locakable compartment.				
	9 nos 125A cutout fuse unit with fuse and 1 no. Neutral link.				
	1 no. 125A, 16kA, FP MCCB adjustable thermal magnetic release for O/L & SC protection.in separate cubical.				
	9 Set of phase indicating lamps, LED type, RYB.				
	1 Set of 2A 10kA C curve SP control MCB				

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
	The meter board shall have 1500 Amp TPN busbars of high conductivity electrolytic quality Aluminium alloy, earth bus of required size, 4P terminal connectors, control wiring with all required accessories complete.	2	Job		
65	<b>METERING PANEL</b>				
	Supply, Installation, Testing & Commissioning of Three phase meter box, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP54, wall / floor mounting, dust and vermin proof, powder coated, outdoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
	<b>SWITCHGEAR &amp; OTHER ACCESSORIES</b>				
	Space provision for accomodating 3 phase CT operated energy meter from EB with all connections, glass view panel, control MCB, lockable compartment etc.				
	28 nos. Suitable ratio CT (as per EB) with Acc. Class 0.5, 10VA in locakable compartment.				
	28 nos 125A cutout fuse unit with fuse and 1 no. Neutral link.				

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
	1 no. 125A, 16kA, FP MCCB adjustable thermal magnetic release for O/L & SC protection.in separate cubical.				
	1 Set of phase indicating lamps, LED type, RYB.				
	1 Set of 2A 10kA C curve SP control MCB				
	The meter board shall have 2500Amp TPN busbars of high conductivity electrolytic quality Aluminium alloy, earth bus of required size, 4P terminal connectors, control wiring with all required accessories complete.	1	Job		
66	<b>METERING PANEL</b>				
	Supply, Installation, Testing & Commissioning of Three phase meter box, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP54, wall / floor mounting, dust and vermin proof, powder coated, outdoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
	<b>SWITCHGEAR &amp; OTHER ACCESSORIES</b>				

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
	Space provision for accomodating 3 phase CT operated energy meter from EB with all connections, glass view panel, control MCB, lockable compartment etc.				
	28 nos. Suitable ratio CT (as per EB) with Acc. Class 0.5, 10VA in locakable compartment.				
	28 nos 125A cutout fuse unit with fuse and 1 no. Neutral link.				
	28 no. 125A, 16kA, FP MCCB adjustable thermal magnetic release for O/L & SC protection.in separate cubical.				
	1 Set of phase indicating lamps, LED type, RYB.				
	1 Set of 2A 10kA C curve SP control MCB				
	The meter board shall have 150 Amp TPN busbars of high conductivity electrolytic quality Aluminium alloy, earth bus of required size, 4P terminal connectors, control wiring with all required accessories complete.	1	Job		



Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
67	<b>METERING PANEL</b>				
	Supply, Installation, Testing & Commissioning of Three phase meter box, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP54, wall / floor mounting, dust and vermin proof, powder coated, outdoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
	<b>SWITCHGEAR &amp; OTHER ACCESSORIES</b>				
	Space provision for accomodating 3 phase CT operated energy meter from EB with all connections, glass view panel, control MCB, lockable compartment etc.				
	12 nos. Suitable ratio CT (as per EB) with Acc. Class 0.5, 10VA in locakable compartment.				
	12 nos 125A cutout fuse unit with fuse and 1 no. Neutral link.				
	1 no. 125A, 16kA, FP MCCB adjustable thermal magnetic release for O/L & SC protection.in separate cubical.				
	1 Set of phase indicating lamps, LED type, RYB.				
	1 Set of 2A 10kA C curve SP control MCB				

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
	The meter board shall have 1500 Amp TPN busbars of high conductivity electrolytic quality Aluminium alloy, earth bus of required size, 4P terminal connectors, control wiring with all required accessories complete.	1	Job		
<b>IX</b>	<b>LT PANEL</b>				
68	LT PANEL				
	Supply and Installation of main LT panel, floor mounted, front operated, dead back, totally enclosed vermin proof, indoor, non-drawout, cubicle type power dist. panel fabricated out of 2mm thick CRCA sheet having gasketed hinged door on each cubicle, fully powder coated, incorporating horizontal and vertical sleeved aluminium busbars 'complete with all internal wiring, danger board, two earthing lugs, cable chamber etc. as required 'housing below mentioned switchgears.				
	Note :- GA & Control Drawing of the panel shall be approved by the consultant before fabrication. (Panel shall be manufactured from as per inspectorate rules.) All test certificates for Panel shall be submitted alongwith the delivery of Panel at site.				
	( MAIN LT PANEL) (Building Main Panel)				
	Incomings :-				
	1no., 630A, 4 Pole ATS switch complete with neutral & accessories as incomer with O/L, E/F, S/C protections				

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
	Outgoings :-				
	12 No., 100A, TP,16 KA, 50Hz FP MCCB complete with neutral & accessories as incomer with O/L, E/F, S/C protections				
	Provision and supply of 6 Nos., of 3-ph 4 wire dual energy meters complete with neutral & accessories connected to 1000A Main busbar including wiring & accessories, etc.				
	1 Set of 1000A TPN tinned Aluminium busbar with PVC sleeving & accessories				
	1 no. of Load manager with voltmeter & ammeter				
	1 Set, LED type RYB, indicating lamps with resistors and fuses	1	job		
69	LT PANEL				
	Supply and Installation of main LT panel, floor mounted, front operated, dead back, totally enclosed vermin proof, indoor, non-drawout, cubicle type power dist. panel fabricated out of 2mm thick CRCA sheet having gasketed hinged door on each cubicle, fully powder coated, incorporating horizontal and vertical sleeved aluminium busbars 'complete with all internal wiring, danger board, two earthing lugs, cable chamber etc. as required 'housing below mentioned switchgears.				

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
	Note :- GA & Control Drawing of the panel shall be approved by the consultant before fabrication. (Panel shall be manufactured from as per inspectorate rules.) All test certificates for Panel shall be submitted alongwith the delivery of Panel at site.				
	( MAIN LT PANEL) (Building Main Panel)				
	Incomings :-				
	1no., 2500A, 4 Pole ATS switch complete with neutral & accessories as incomer with O/L, E/F, S/C protections				
	Outgoings :-				
	28 No., 100A, TP,16 KA, 50Hz FP MCCB complete with neutral & accessories as incomer with O/L, E/F, S/C protections				
	Provision and supply of 6 Nos., of 3-ph 4 wire dual energy meters complete with neutral & accessories connected to 1200A Main busbar including wiring & accessories, etc.				
	1 Set of 3000A TPN tinned Aluminium busbar with PVC sleeving & accessories				
	1 no. of Load manager with voltmeter & ammeter				
	1 Set, LED type RYB, indicating lamps with resistors and fuses	1	job		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
70	LT PANEL				
	Supply and Installation of main LT panel, floor mounted, front operated, dead back, totally enclosed vermin proof, indoor, non-drawout, cubicle type power dist. panel fabricated out of 2mm thick CRCA sheet having gasketed hinged door on each cubicle, fully powder coated, incorporating horizontal and vertical sleeved aluminium busbars 'complete with all internal wiring, danger board, two earthing lugs, cable chamber etc. as required 'housing below mentioned switchgears.				
	Note :- GA & Control Drawing of the panel shall be approved by the consultant before fabrication. (Panel shall be manufactured from as per inspectorate rules.) All test certificates for Panel shall be submitted alongwith the delivery of Panel at site.				
	( MAIN LT PANEL) (Building Main Panel)				
	Incomings :-				
	1no., 1250A, 4 Pole ATS switch omplete with neutral & accessories as incomer with O/L, E/F, S/C protections				
	Outgoings :-				
	9No., 125A, TP,16 KA, 50Hz FP MCCB complete with neutral & accessories as incomer with O/L, E/F, S/C protections				

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
	Provision and supply of 6 Nos., of 3-ph 4 wire dual energy meters complete with neutral & accessories connected to 1200A Main busbar including wiring & accessories, etc.				
	1 Set of 1500A TPN tinned Aluminium busbar with PVC sleeving & accessories				
	1 no. of Load manager with voltmeter & ammeter				
	1 Set, LED type RYB, indicating lamps with resistors and fuses	2	job		
71	LT PANEL				
	Supply and Installation of main LT panel, floor mounted, front operated, dead back, totally enclosed vermin proof, indoor, non-drawout, cubicle type power dist. panel fabricated out of 2mm thick CRCA sheet having gasketed hinged door on each cubicle, fully powder coated, incorporating horizontal and vertical sleeved aluminium busbars 'complete with all internal wiring, danger board, two earthing lugs, cable chamber etc. as required 'housing below mentioned switchgears.				
	Note :- GA & Control Drawing of the panel shall be approved by the consultant before fabrication. (Panel shall be manufactured from as per inspectorate rules.) All test certificates for Panel shall be submitted alongwith the delivery of Panel at site.				

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
	( MAIN LT PANEL) (Building Main Panel)				
	Incomings :-				
	1no., 2500A, 4 Pole ATS switch omplete with neutral & accessories as incomer with O/L, E/F, S/C protections				
	Outgoings :-				
	28 No., 100A, TP,16 KA, 50Hz FP MCCB complete with neutral & accessories as incomer with O/L, E/F, S/C protections				
	Provision and supply of 6 Nos., of 3-ph 4 wire dual energy meters complete with neutral & accessories connected to 2500A Main busbar including wiring & accessories, etc.				
	1 Set of 2500A TPN tinned Aluminium busbar with PVC sleeving & accessories				
	1 no. of Load manager with voltmeter & ammeter				
	1 Set, LED type RYB, indicating lamps with resistors and fuses	1	job		
72	Supply and fixing of 4 pole metal sheel steel enclosure, dust protected duly powder paintedsuitable for 63 A 4P isolator.	51	Each		
<b>X</b>	<b>Cables</b>				
73	Supply of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required.				
a	4 X 10 sq. mm	150	mts		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
b	4 X 25 sq. mm	1890	mts		
c	4 X 95 sq. mm	980	mts		
d	4 X 120 sq. mm	1050	mts		
<b>XI</b>	<b>LIGHT FITTING AND FANS</b>				
74	Supply of 1x28W, indoor surface mountable fluorescent CRCA sheet steel power coated body light fixture, 28W T5 lamp, electronic HPF ballast, lamp holder, prewired complete with all necessary accessories suitable for operation on 230V, 50Hz AC supply as required (Wipro WIF 20128 SG or equivalent)	883	Each		
75	Supply of 300mm sweep exhaust fan, metal blades with safety guard suitable for single phase 230 volt, 50Hz AC supply complete with motor, capacitor and all accessories as required complete. (Make : Usha Turbo or equivalent)	78	Each		
76	Supply of 1200 mm sweep min three star rated ceiling fan complete with motor, double ball bearing, blades, canopy, 30 cm down rod and without speed regulator suitable for 230 V 50 HZ, AC supply confirms to IS 374/1979 as required complete. (Make Usha Technix or equivalent).	300	Each		



Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
77	Supply of 2x11W, indoor surface mountable CFLfitting CRCA sheet steel power coated body light fixture, 11W pin type CFL light fitting, lamp holder, prewired complete with all necessary accessories suitable for operation on 230V, 50Hz AC supply as required	417	Each		
78	Supply of 1x11W, indoor ceiling mounted downlighter CFL lamp CRCA sheet steel power coated body light fixture, 11WCFL lamp, electronic HPF ballast, lamp holder, prewired complete with all necessary accessories suitable for operation on 230V, 50Hz AC supply as required similar to model of Havells Ezee LHDC15136072 or equivalent	192	Each		
79	Supply and fixing of telephone instrument of normal type	51	Each		
80	Supply and fixing of Metal sheet steel enclosure for 100 Amp TP&N capacity TP&N disconnector fuse switch unit inside the existing panel board with ISI marked HRC fuses including drilling holes in cubicle panel, making connections	1	Nos		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
81	Supply, Installation, testing & commissioning of Horizontal Monoblock pump set having CI casing & CI impeller, suitable rated 3 phase electric motor complete with all required accessories for discharge of 200 lpm and head 30m. The system shall have Pressure guage on delivery line with isolation cock, level controller. Pumps should be inclusive of vibration elimination pads,base frames etc. The motor shall be provided with suitable rating DOL starter with O/L relay, single phase preventer, over & under voltage relay.	1	No		
82	Providing and fixing 32mm NB PVC pipe conforming to IS Standards ( pressure 10kg/cm2) complete including all fittings, fixtures, cutting, chasing in walls and making good the walls, testing of joints, concealing the pipes wherever required complete with all required accessories.	450	Metre		
83	Providing and fixing 32mm NB gun metal gate valve with CI wheel of IS marked approved quality (Screwed End) with all required accessories.	60	No		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
<b>XII</b>	<b>YARD LIGHTING</b>				
84	Supply & installation of Hot dipped Galvanised tubular swaged pole of 90 micron zinc coating with tensile strength 410 Mpa of overall length 9 Mtrs long single arm swan neck as per IS 2713. The pole shall have outside dia & thickness as 140x5.40, 115x4.5, 89x3.25mm, & sectional length 5.00+2+2 Mtrs alongwith 300 x 300 x 10 mm MS base plate welded at bottom.The pole shall have planting depth of 1.5 mtr & erected in PCC 1:2:4. The pole shall be provided with suitable size polycarbonate loop in loop out box. The loop in loop out box shall have 3 phase power connector or bus bar of required current rating for loop in loop out of cable, 4A C curve SP MCB. Required dia GI pipe shall be provided in the foundation for taking cable in & out from the pole. The cost of the civil foundation shall be measured along with civil items.	70	each		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
85	Supply & installation of Hot dipped Galvanised tubular swaged pole of 90 micron zinc coating with tensile strength 410 Mpa of overall length 9 Mtrs long double arm swan neck as per IS 2713. The pole shall have outside dia & thickness as 140x5.40, 115x4.5, 89x3.25mm, & sectional length 5.00+2+2 Mtrs alongwith 300 x 300 x 10 mm MS base plate welded at bottom. The pole shall have planting depth of 1.5 mtr & erected in PCC 1:2:4. The pole shall be provided with suitable size polycarbonate loop in loop out box recessed in PCC foundation itself. The loop in loop out box shall have 3 phase power connector or bus bar of required current rating for loop in loop out of cable, 4A C curve SP MCB. Required dia GI pipe shall be provided in the foundation for taking cable in & out from the pole. The cost of the civil foundation shall be measured along with civil items.	10	each		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
86	Supply & installation of integral, IP65, Post top luminaire with diecast aluminium powder coated housing, UV stabilized polyethylene bowl suitable for 1x70W MH lamp. The light fitting shall be mounted on 0.5m length pole, pole base, with all necessary accessories including 70W MH lamp for gate light. The cost of the civil foundation shall be measured along with civil items (Philips HPS360 lxMHNTD70W GR (antique silver) or equivalent)	32	Each		
87	Supply, installation, testing & commissioning of IP66,150W MH street lighting, with die cast aluminium housing, anodised aluminum reflector, toughened glass, stainless steel toggle, heavy duty copper ballast, pf capacitor, 1x150W MH lamp etc as required. The light fitting shall be suitably installed with all required accessories to poles. The item shall include 3C x 1.5 sqmm PVC insulated copper unarmoured cable for connecting between the luminaire and the loop in loop out box. (Similar to Wipro WSH 71150 or equivalent).	80	Nos		
88	Supply and fixing anodised aluminum glass framed shock treatment chart.	4	Job		
89	Supply & laying ISI marked electrical grade chequered type rubber mat of size 2m x 1m x 6 mm suitable for 415V power supply.	16	Nos		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
90	Supplying and fixing following Telephone krone module in box made of plastic including hinged door, krone module with connection etc. as required.				
	50 pair krone module	3	Each		
<b>XIII</b>	<b>SMOKE DETECTION &amp; FIRE ALARM SYSTEM (ADDRESSABLE)</b>				
91	Supply, Installation & Testing of GE / Morley/Honey well make addressable Photoelectric type Smoke detector for below false ceiling with base plate.	202	Nos		
92	Supply, Installation & Testing of GE / Morley/honeywell make addressable photoelectric type Heat detector with base plate	202	Nos		
93	Supply, Installation & Testing of Response Indicator	202	Nos		
94	Supply, Installation & Testing of Addressable typr Electronic Hooter complete with line matching transformer & connected to the main control panel amplifier to produce alter / evacuation tone for public	51	Nos		
95	Supply, Installation & Testing of of Addressable type Manual Call Point with a glass cover marked " IN CASE OF FIRE BREAK GLASS"	35	Nos		
96	Supply, Installation, Testing & commissioning of Fault Isolator module	35	Nos		
97	Supply of Cable (2cx 1.5 Sq mm cu Ar Cable) (Red colour only) with necessary accessories and hardware etc.	16100	Rmt		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
98	Laying of Cable (2cx 1.5 Sq mm cu Ar Cable) on surface with necessary accessories and hardware etc. as required	16100	Rmt		
99	Supply, Installation, Testing & commissioning of Two Loop non - expandable addressable type Fire Alarm Panel with Battery backup with capacity for 99 addressable devices including event logging facility, printing facility, interface feature & including all necessary hardware & accessories, etc. complete as required. ( GE / Morley)	4	Nos		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
<b>XIV</b>	<b>LIFT</b>				
100	Supply, installation, testing & commissioning of electric traction type elevator of following capacity and type suitable for operation on 415 V, 3 phase, 50 Hz AC supply, having AC variable voltage and variable frequency type traction control, with machine room, speed of 1.00 Mtr/sec, electromagnetic brake system, simple operations, operating control panel with luminous buttons, overload warning indicator, battery operated alarm bell, LED type emergency light, intercom suitable for hook up to EPABX, infrared ray sensing door protection for full height, reverse phase relay on controller, fireman's switch at ground floor, digital car positions indicator in car and at all positions indicator in car and at all floors with Up/DOWN direction, all signal fixtures in stainless stell faceplates, light fixtures, ventilation fan, etc complete with all accessories including automatic rescue device in the event of power failure etc., as required.				



Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
	The traction motor placed directly above the hoistway in Machine Room and elevator shall be of geared type with travel height of 21.mtrs. (suitable for lift well size 3000mm (D)X 2350m(W)) complete as per technical specification, simplex full collective operation with/without attendant. Car/Hoistway Entrance, protected by stainless steel hairline doors and clear side(telescopic) opening min 1200mm x 2000mm height. Complete with necessary scaffolding, electrical panel, logic control panel and shaft lighting etc required for the erection of the elevators				
	8 passengers (Minimum) capacity (minimum 940 Kgs) elevator3 stops & 3 openings car size of 1300mm wide x2400mm deep x 2300mm Height Inside dimensions and entrance at front side on all the serving floors, provided with matt finish stainless steel panel on all four side, stainless steel mirror finish ceiling, stainless steel hand rail on three sides complete as per specifications.	2	each		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
101	Supply, installation, testing & commissioning of electric traction type elevator of following capacity and type suitable for operation on 415 V, 3 phase, 50 Hz AC supply, having AC variable voltage and variable frequency type traction control, with machine room, speed of 1.00 Mtr/sec, electromagnetic brake system, simple operations, operating control panel with luminous buttons, overload warning indicator, battery operated alarm bell, LED type emergency light, intercom suitable for hook up to EPABX, infrared ray sensing door protection for full height, reverse phase relay on controller, fireman's switch at ground floor, digital car positions indicator in car and at all positions indicator in car and at all floors with Up/DOWN direction, all signal fixtures in stainless steel faceplates, light fixtures, ventilation fan, etc complete with all accessories including automatic rescue device in the event of power failure etc., as required.				

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
	The traction motor placed directly above the hoistway in Machine Room and elevator shall be of geared type with travel height of 21.mtrs. (suitable for lift well size 3000mm (D)X 2350m(W)) complete as per technical specification, simplex full collective operation with/without attendant. Car/Hoistway Entrance, protected by stainless steel hairline doors and clear side(telescopic) opening min 1200mm x 2000mm height. Complete with necessary scaffolding, electrical panel, logic control panel and shaft lighting etc required for the erection of the elevators				
	8 passengers (Minimum) capacity (minimum 940 Kgs) elevator7 stops & 7 openings car size of 1300mm wide x2400mm deep x 2300mm Height Inside dimensions and entrance at front side on all the serving floors, provided with matt finish stainless steel panel on all four side, stainless steel mirror finish ceiling, stainless steel hand rail on three sides complete as per specifications.	2	each		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
<b>XV</b>	<b>FIRE PUMPS AND EQUIPMENTS</b>				
102	Supplying, installing, testing and commissioning of fully submersible electrical driven, end suction type fire hydrant pump of capacity 2280 LPM at 70 MWC coupled to TEFC electrical motor. The electric motor shall be of rated HP and speed and suitable for operation at 415V, 50Hz. The pump shall be of cast iron construction with bronze impeller, stainless steel shaft, flexible coupling and mechanical seal.	<b>8</b>	<b>Nos.</b>		
103	Supplying, installing, testing and commissioning of fully submersible electric motor driven jockey pump of capacity 180LPM at 70 MWC coupled to TEFC electric motor of adequate HP and speed. The electric motor shall be suitable for operation on 41V, 50Hz. The pump shall be cast iron construction with bronze impeller, stainless steel shaft, flexible coupling and mechnaical seal.	<b>1</b>	<b>No</b>		
104	Supply, Installation, testiing and commissioning of Monoblock Booster Pump capacity 900 LPM. The complete unit shall be mounted on a common structural steel base frame and shall include accessories such as foundation bolts etc.	<b>4</b>	<b>No</b>		
105	Supply and installation of Pressure switches of suitable range for pump sets with Isolation valves.	<b>28</b>	<b>Nos.</b>		
106	Supply, installing & commissioning of MS air cushion tank	<b>4</b>	<b>No.</b>		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
107	Supply & installation dial type (100 mm) Pressure gauge with isolation valve suitable for working pressure of 250 PSI.	28	Nos		
108	Supply & Installing water level indicator.	4	Nos		
109	Supply and installing heavy class MS ERW suction & delivery headers of required length conforming to IS 1239 with welded joints standard MS fittings and with end flanges connectins having inlet & outlets flanged connections including GI supports from wall, floors & ceiling complete as required. Cost should be inclusive of all supports / clamps / brackets. anchor fastner etc.				
a	25 mm dia	120	Mtrs		
b	80 mm dia	108	Mtrs		
c	100 mm dia	180	Mtrs		
110	Supplying, installation of CI Non Rising sluice valve PN (10) with required flanges, nuts, bolts and gaskets etc.				
	100 mm dia	24	Nos		
111	Supplying, instalation of C.I. Non-return valves as per IS:5312( PN 10) Dual Plate C&G Make type with required flanges, nuts, bolts and gaskets etc.	0			
a	80 mm dia	4	Nos.		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
b	100 mm dia	8	Nos.		
112	Supply, installing and commissioning of CI 'Y' strainer with bronze perforated sheet brasket including rubber gasket flanges, nuts, bolts and washers etc complete as required.	0			
a	80 mm dia	4	Nos.		
b	100 mm dia	8	Nos.		
113	Supplying, instalation of Butterfly valves as per IS:5312( PN 10) swing check type with required flanges, nuts, bolts and gaskets etc. ( C G Make)				
a	80 mm dia	24	Nos.		
b	100 mm dia	48	Nos.		
<b>XVI</b>	<b>Electrical panel for Fire Protection System</b>				
114	Design, fabrication, assembling, wiring supply, installation, testing and commissioning of motor control centre.	4	Set		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
<b>XVII</b>	<b>Cable &amp; Cable trays for Fire protection system</b>				
115	Supplying & installing of 1100 volt grade PVC insulated copper conductor armoured cables as per specification in existing trenches, cable trays ducts over bed of sand, clamped to wall with suitable clamps, saddles fixing bolts including connecting testing and commissioning.	4	Lot		
116	Supply & installing of bare copper tapes / wires including all necessary fixing accessories and effecting connections as epr specifications	4	Lot		
117	Copper / Aluminium Conductor Armoured cables from panel to motors & other equipments inside the pump room	4	Lot		
118	Air Release Valve 25nb	8	Nos.		
<b>XVIII</b>	<b>FIRE HYDRANT SYSTEM</b>				
119	Supply, Installing, jointing, testing and commissioning of following sizes of MS/GI EWR Heavy 'C' Class pipes conforming to IS 1239 with painting (Tata / Jindal make)				
	For wet riser system - MS ERW "C" heavy class pipe				
	100 mm dia	120	Mtrs.		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
120	Supply, Installing, jointing, testing in trenches the following sizes of MS / GI ERW class "C" (heavy class) pipes conforming to IS 1239 (Tata / Jindal make) with Wrapping & coating				
	100 mm dia	540	Mtrs.		
121	Providing & fixing of butterfly valve (suitable for test pressure of 15 kg / sqm) with flanges, nut bolts, gaskets and necessary pad locking arrangement complete required				
	100 mm dia	8	No.		
122	Providing & fixing gun metal Fire Hydrant single landing valve with 80 mm N.B. flanged inlet, brass spindle controlled 63 mm dia female instantaneous outlet type. G.M. coupling, blank cap, chain, twist release type lug & all accessories conforming to IS:5290. Including fixing with anchor fastener and flanged tapping from wet riser and providing pressure gauge with gun metal ball valve complete as required.	45	Nos.		
123	Providing and fixing in position 2 nos. flexible canvass rubber lined hose reels 63 mm dia with adapter, branch pipe and nozzle and storing them in metal cabinets with lockable glass shutters and fixing the metal cabinet at ground level in a location where it can be easily spotted including painting etc. complete. (as per IS 636)				
	7.5 m length (Mid landing)	78	Nos.		



Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
124	Supply & installing 63 mm dia instantaneous pattern branch short gunmetal pipe, 20 mm dia nozzle conforming to IS 903, suitable for inter connection to hose pipe coupling complete as required	44	Nos.		
125	Providing & fixing indoor type hose lockable cabinet frames fabricated from 40 x 40 x 5 angle iron sections and 16 gauge MS sheet with full front glass door and locking arrangement, suitable to accommodate landing valves, 15 m long hoses, first-aid hose reel and branch pipe nozzle & fire mans' axe. The cabinet frame shall be painted with one coat of primer and two or more coats of synthetic enamel paint of approved make and shade of as required (Approx 2.1 m (high) x 0.9 m (wide) x 0.6 m (deep) ). The item shall be complete of MS housing with front door.	28	Nos.		
	(Cost shall be inclusive of providing break glass box containing key for the cabinet along with hammer).				
126	M.S. Hose cabinet stand mounted type fabricated out of M.S. sheet of 16 swg. with glass fronted ( 4mm thick glass with rubber beeding) door and size of the cabinet shall be 600mm x 750 mm x 250 mm cabinet shall be painted with paint of P.O. Red and marked on the front as " FIRE HOSE"	18	Nos.		
	(Cost shall be inclusive of providing break glass box containing key for the cabinet along with hammer).				
127	Providing and fixing standard fireman's axe with heavy rubber handle.	45	Nos.		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
128	Providing & fixing swinging type First Aid hose reel in red colour drum with 36 mts long and 20 mm dia heavy duty "DUNLOP"rubber water hose, 20 mm dia globe valve stop cock, terminating with G.M. coupling & nozzle of 6mm outlet with shut off valve conforming to IS 8090 - 1976 complete with MS socket for tap-off, drum and brackets (including painting) for fixing on wall with anchor fastener, bolts & nuts conforming to IS:884-1969 complete as required.	28	Nos.		
129	Supply & installing gun metal fire brigade connection (suction collecting head) consisting of 4 nos. 63 mm dia instantaneous type male coupling with built-in check valves, 1 no. 150 mm dia sluice valve, 1 no. 150 mm dia non-return valve and 150 mm dia flanged outlet complete with bolts, nuts and rubber insertins as required and as per IS 904 1963	4	No.		
130	Supply & installing gun-metal Fire brigade suction hose coupling (draw-out connection) with nut for female coupling as per IS 902-1974 complete with 100 mm dia GI suction pipe and 100 mm dia foot valve (to be connected to static tank). Provision of GI drop pipe and foot valve shall be made in all the fire water static storage tank (4 nos) (GI pipe to be paid separately through appropriate item while cost of foot valve to be included.)	4	No.		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
<b>XIX</b>	<b>PORTABLE CHEMICAL FIRE EXTINGUISHER</b>				
131	Supply, installation, testing and commissioning of following types of extinguisher with provision of wall bracket (fixed with anchor fastner).				
a	ISI marked (IS:940) portable chemical fire extinguisher, water (gas pressure) type capacity 9 litres with gun metal cap and nozzle and complete in all respects including initial fill and wall suspension brackets	28	Nos		
b	ISI marked (IS:2171) Co2 water type fire extinguishers Fire Extinguisher with Gun Metal cap and nozzle and complete in all respects including initial fill and wall suspension bracket				
	2 Kg	28	Nos		
c	Providing and fixing in position ABC type fire extinguishers of 5 liters capacity each.	27	Nos		
132	Supplying and installing at approved location approved make fire buckets of 24 gauge galvanized steel sheet, standard 9 litre capacity and of round bottom shape, painted white inside and red outside and black on the bottom, inscribed with letters "FIRE" in black and gold. Cost shall be inclusive of providing MS stand duly painted over a coat of primer.	9	Nos		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
133	Supply, fabrication and fixing 3 nos MS Fire buckets on suitable fabricated MS angle iron stand with hook, painting with red paint & filled with dry sand as required with all required accessories.	1	set		
134	Supply and installation of ABC Dry Chemical powder type 5 Kg capacity each made of high pressure steel cylinder wall mounting type with hook plate and anchor fastening, ISI marked, complete with wheel type valve internal discharge tube 1 M long high pressure wire braided discharge hose discharge horn, having a jet length of 8m with discharge time of 10 sec fully charged with ABC powder, including all accessories conforming to IS 2171.	1	set		
135	Supply and fixing anodised aluminum glass framed shock treatment chart.	1	job		
136	Supply & laying ISI marked electrical grade chequered type rubber mat of size 2m x 1m x 6 mm suitable for 415V power supply.	4	No.s		
137	Supply, Installation, Testing & commissioning of Two Loop non - expandable addressable type Fire Alarm Panel with Battery backup with capacity for 24 addressable devices including event logging facility, printing facility, interface feature & including all necessary hardware & accessories, etc. complete as required. ( GE / Morley)	1	No.s		

Name of the work: construction of Staff quarters (Type II-27, Type IV-27, Type V-12 with grade and servant. Qrts) at JIPMER, Puduchery, Phase III					
Sl.No	Description of Item	Quantity	Unit	Unit Rate in words & figures	Amount
138	Supplying and fixing following rating, 415 volts, C curve MCB in the existing MCB DB, enclosure complete with connections, testing and commissioning etc. as required.				
	63A TP MCB	27	No.s		
139	Supplying and fixing TP sheet steel enclosure on surface/ recess along with 63 amps 415 volts "C" curve TP MCB complete with connections, testing and commissioning etc. as required.	27	No.s		
	<b>TOTAL FOR SERVICES - C</b>				
	<b>GRAND TOTAL (A+B+C)</b>				