

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.						
Subject :- Schedule-B Market Rate Items						12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount
			General Notes : All the works are to be carried out as per latest specifications of CPWD/MES/Indian Railways/State PWD, and relevant IS Codes unless otherwise specified in BOQ. Measurements of all the items shall be taken as per detailed specifications of the various items mentioned in CPWD specifications. In the absence of such specifications mode of Measurements as per IS 1200 with its latest revisions will be followed. Unless otherwise specified, the rates of various items will be for all heights, leads and lifts. It is deemed that tenderer has understood the intent of the item of work to be completed and cost(s) of item quoted, is worked out to include the cost of all labour & materials and to complete the item of work irrespective of completeness of the description.			
			Note: A) In case any specific method of measurement for any item is not mentioned, IS 1200 shall be followed for the purpose of measurement and certification. B) This BOQ shall be read in conjunction with Technical Specification.			
			General Notes: All levels mentioned in tender/GFC drawing are with respect to existing ground level at site or, for trenches and pits, the bottom of mass excavation, whichever deeper. At the time of handing over the site to the Contractor, if in case, any variation, discrepancy between Good For Construction(GFC)/tender drawings and existing site conditions is noticed, the same should be brought to the notice of Engineer-in Charge/ Architects/Consultants in writing.			
			Levels are to be taken before and after excavation and as directed by Engineer-in-charge for calculating the depth of excavation.			
			Rate shall include marking the areas to be excavated, setting up the reference datum bench mark, establishing interim and final excavation levels with appropriate survey instruments, carrying out excavation in the specified type of soil, inclusive of de-watering to keep the area clear from water ponding at all times to the required depth and profile . Rate shall include for breaking and removing old foundations with or without reinforcement, underground tanks, floor concrete, sewers, pipelines etc. and carting away the debris. Rate shall be inclusive of shoring, strutting, removal of slurry, dewatering, including stacking of good excavated earth anywhere within site premises and backfilling in layers of 300mm to achieve 95 % MDD as approved by Engineer in charge, include all other incidental charges. (Note: Working space and extra space for side slope soil stabilization will not be measured and paid for). Payments will be made only on the volume of earth excavated as per GFC drawings.			
			Contractor shall use the latest mechanical means of excavation suitable to achieve the required excavation level within the agreed time period. All such equipment mobilized on the site shall be in perfectly working condition, well maintained, ensuring no down time during the entire agreed working period. A list of all such equipment, manpower, machinery and the proposed infrastructure that the contractor is going to mobilize for the work shall be submitted to the Engineer in charge before start of work for his approval.			
			The final approved founding strata shall be left absolutely clean by removing loose, slushy soil, murrum and weathered rock with necessary tools & tackles, cleaning the surface by wire brush and carting away debris, dewatering to keep site dry at all times etc. all complete to the approval of Engineer in charge.			
			Contractor's rates shall include fees for all statutory sanction and royalties for any kind of disposal.			
			Quoted rate shall include for cost of materials, labour, loading and unloading charges, hire of machinery, tools & plants, shoring, strutting, dewatering, removal of slurry, fuel charges, transportation, scaffolding and all other incidental charges etc., with all leads and lifts as specified in respective items of work, complete and as directed by the Engineer-in-charge at all levels.			
			If the Excavation for foundation is done to a depth greater than that shown in the drawings or as required by the Engineer -In- Charge, the excess depth shall be made good by the contractor at his own cost with the concrete of the mix used for levelling / bed concrete for foundations. No Payment shall be made to contractor for the cost of Additional Concrete required to fill up the extra depth of excavation in such cases.			
	<b>1.0</b>		<b><u>Pile work</u></b>			
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	<b>2.0</b>		<b><u>Earth work</u></b>			
2.001	MR 2.001	8631	Supplying and Filling the approved good quality earth brought from outside the premises in layers not exceeding 20 cm in depth, breaking clods, watering, rolling each layer with 1/2 tonne roller, or wooden or steel rammers, and rolling every 3rd and top-most layer with power roller of minimum 8 tonnes and dressing up including all lead and lift.	Cum	787.84	67,99,832.65
2.002	MR 2.002	1500	Carriage of Lime, Murrum, Building rubbish By Mechanical Transport- Disposal up to 5 Km. lead outside campus premises	Cum	250.98	3,76,462.84
2.003	MR 2.003	29534	Providing and Laying Separation Membrane of impermeable plastic sheeting 125 micron thick.	Sqm	24.10	7,11,785.47

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2.004	MR 2.004	188	Providing & Laying HDPE made empty cement bags and stitching these in periphery so as to make a flexible barricade up to an height of 4 Metre above ground level and erecting with 50 to 60 mm diameter bamboos in frame work of 2400 mm X 1330 mm size including embedding of 600 mm lower part of vertical bamboos in ground as per direction of Engineer in charge	Sqm	203.65	38,184.56		
2.005	MR 2.005	9	Providing & Laying HDPE made empty cement bags and filling with clod free available excavated earth and stitching the bags manually and placing these filled up bags in form of toe wall to protect the stacked earth as per direction of Engineer-in-charge. (Volume of filled up bags shall be measured for payment purposes)	Cum	1,605.81	14,452.28		
2.006	MR 2.006	90	Providing & Laying barricading with three rows of enamel painted G.I. Sheets of about 750 mm wide nailed or bolted with wooden poles 80 mm to 100 mm dia spaced 2.4 meter centre to centre. The poles will be embedded in mobile iron pedestal rings suitably framed for giving stable support as per direction of the Engineer-in-charge. All management (including watch and ward) of barricades shall be the full responsibility of the contractor. The barricades shall be removed only after completion of the work or part of the work. After completion of work barricading will be contractor's property	Sqm	224.03	20,162.63		
2.007	MR 2.007	13	Removing from one location, a tree of girth not more than 60 Cms. Including the roots by excavating earth around the root, lifting the tree along with earth around the roots by suitable equipment, transporting the tree from old location to the new location, making a pit of required diameter and depth in earth at new location, and replanting the tree in to the pit, back filling the soil around the roots of the tree, including necessary manure, watering the tree for required time till the roots gets hold in the earth at new location complete as directed by Engineer In charge.	Nos	904.79	11,762.31		
7			<b>Subtotal of Earth Work</b>			<b>79,72,642.75</b>		
	<b>3.0</b>		<b>Concrete work</b>					
3.001	MR 3.001	34	Providing and laying in position Plum cement concrete of specified grade 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) using plums of 160 mm and more of reasonable size up to a maximum of 20% by volume of Concrete excluding the cost of centering and shuttering. The Plums should be evenly distributed in concrete and minimum space between two plums should be not less than 200 mm and the plums should not be closure than 150 mm from the surface.	Cum	3,974.59	1,34,142.55		
1			<b>Subtotal of Concrete Work</b>			<b>1,34,142.55</b>		
	<b>4.0</b>		<b>Reinforced Cement Concrete work</b>					
4.001	MR 4.001	37600	(l) Form work for Waffle slabs with intermediate rib beams	Sqm	816.68	307,07,355.48		
4.002	MR 4.002	70703	(m) : Extra for Shuttering (over DSR items no. 5.9.3, 5.9.4, 5.9.6 & 5.9.7) in sloping slabs, beams, columns and walls for chhatris, gopurams, etc. including the edge beams etc. at all levels.	Sqm	233.34	164,97,736.74		
4.003	MR 4.003	32723	Extra for staging for additional height in shuttering where ever required with adequate bracing, propping etc., including cost of de-shuttering and decentring at all levels over a height of 3.6 m, for every additional height of 3.6 m or part thereof for Suspended roofs, sloping slabs, slabs in curved shape, landing, beams and balconies etc. (only Plan area of staging to be measured and paid for. Staging for vertical walls, columns pardies etc. will not be paid for in any case.)	Sqm	326.67	106,89,753.12		
4.004	MR 4.004	250	Extra Labour for leaving hollow spaces in Burnt brick Masonry/CSE block masonry for RCC Vertical mullions & horizontal transoms (ties) of required size, providing reinforcement bar for mullions & transoms (ties) as per structural drawing corners bars and concreting the same with M25 concrete grade concrete including removal of mortar, dust, etc. from the hollow spaces before doing the concreting complete as per drawing & instruction of engineer- in- charge. Reinforcement concrete & Burnt brick Masonry/CSE block masonry will be paid separately in their respective items.	Metre	206.21	51,552.69		
4.005	MR 4.005	13171	Providing & laying Non shrink, free flow, self levelling, cementations grout of Conbextra GP2 of Fosroc or equivalent approved make including making holes if necessary in concrete ,curing etc. complete as per the manufacture specifications as per approved drawings and as instructed by engineer in charge.	Kg	25.17	3,31,546.14		
4.006	MR 4.006	7	Providing & fixing premoulded compressible filler board of approved make conforming to as per manufacturer specification, including cost of primer in expansion joints as per drawing, specification and sample approved and as directed by engineer in charge.	Cum	73,176.11	5,12,232.77		
4.007	MR 4.007	200	Providing and laying polysulphide sealant for expansion joints of approved make Including surface preparation, applying primer, backer rod, sealant, curing make as per drawing, manufacturer specification to give water tightness & as directed by engineer in charge.	Sq.Cm x Rmt.	126.51	25,301.69		

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4.008	MR 4.008	8	Providing and fixing expansion joint flexible strip with polyurethane sealant of approved make flush mounted expansion /seismic joint system with +/-25mm joint movement design as per the joint manufacturer specification complete as per drawing, specification and sample approved and as directed by engineer in charge.	Sqmt	13,890.54	1,11,124.32		
4.009	MR 4.009	58	Making core cutting for fixing pipe 50 mm to 100 mm dia in RCC slab/wall/beam up to 350 mm wide (length of Core cutting) for drainage line fittings as per detailed drawing and as directed by engineer in charge.	Nos	1,402.51	81,345.65		
4.010	MR 4.010	94	Making core cutting for fixing pipe 150 mm dia in RCC slab/wall/beam up to 350 mm wide (length of Core cutting) for drainage line fittings as per detailed drawing and as directed by engineer in charge.	Nos	1,707.41	1,60,496.07		
4.011	MR 4.011	63	Making core cutting for fixing pipe 230 mm dia in RCC slab/wall/beam up to 350 mm wide (Length of Core cutting) for drainage line fittings as per detailed drawing and as directed by engineer in charge.	Nos	2,683.07	1,69,033.10		
<b>11</b>			<b>Subtotal of Reinforced Cement Concrete Work</b>			<b>593,37,477.77</b>		
	<b>5.0</b>		<b>Brick work</b>					
5.001	MR 5.001	909	Extra rate over DSR item no. 6.1.2 for Brick work with burnt clay (non modular) bricks of 230 mm x 110 mm x 50 mm size instead of size 230 mm x 110 mm x 70 mm of class designation 7.5 in foundation and plinth in: Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	1,819.77	16,54,175.25		
5.002	MR 5.002	908	Extra rate over DSR item no. 6.4.2 for Brick work with burnt clay (non modular) bricks of 230 mm x 110 mm x 50 mm size instead of size 230 mm x 110 mm x 70 mm and class designation 7.5 in superstructure above plinth level for all levels in all shapes and sizes in : Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	1,977.15	17,95,255.52		
5.003	MR 5.003	8323366	Manufacturing the Compressed Stabilized Earth (CSE) Blocks of size 230 mm x 110 mm x 100 mm, from the selected soil available from excavation at site within premises including providing and installing, operating and maintaining necessary machinery by the contractor at his own cost for the production of CSE blocks. Rates includes required quantity of Selected soil for the production of CSE blocks will be excavated from the site from the Water bodies and transported to the location of CSE blocks manufacturing facility by the contractor. The contractor shall provide necessary Cement, sand and Surkhi etc. at his cost including the supply, transportation to site, royalties etc. The proportion of materials will be as follows (1) Soil/Earth 30 to 40% by weight (2) Sand 30 to 40% by weight (3) Finely ground surkhi which is obtained by gridding well burnt red brick bats available as wastage from red bricks manufacturing kilns, 30 to 40% (4) Cement 8 to 10% by weight but in no case less than 8%. (5) Hydrated Lime 5% The blocks must be cured with moist air or by covering with water soaked gunny bags over the stake of earth blocks for four weeks. The Blocks are allowed to dry for at least 10 days under the shade. The Cured earth blocks are to be staked neatly at the storage yard which will be covered with Ploythene sheets to retain the moisture inside the Earth blocks. Compressive strength of the CSEBs manufactured will be minimum 7.5 mpa. Rate also includes the cost of making the frog for mortar key in the block of required design as suggested by NU and the cost of Necessary testing of blocks as per detailed specifications.	Nos	9.89	823,10,909.59		
5.004	MR 5.004	22450	Brick work with Compressed Stabilized Earth (CSE) Blocks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : Cement mortar 1:4 (1 cement : 4 coarse sand) Rates to include transportation of Compressed Earth blocks from storage yard to the site of work. (Supply of CSE block will be paid separately in relevant items)	Cum	3,272.80	734,74,309.25		
5.005	MR 5.005	16676	Half brick masonry with Compressed Stabilized Earth (CSE) Blocks of class designation 7.5 in superstructure above plinth level up to floor V level in: Cement mortar 1:4 (1 cement :4 coarse sand) Rates to include transportation of Compressed Earth blocks from storage yard to the site of work. (Supply of CSE block will be paid separately in relevant items)	Sqm	382.82	63,83,905.93		
5.006	MR 5.006	27449	Extra rates over DSR item no. 6.4.2 for providing exposed masonry with common burnt clay bricks of size 230 mm x 110 mm x 70 mm including raking horizontal and vertical joints 10 mm wide 12 mm deep to receive pointing complete. The Exposed surface area only of the Brick work will be measured for payment.	Sqm	73.75	20,24,228.86		
5.007	MR 5.007	3865	Extra rates over MR item no. 5.002 for providing exposed masonry work for Brick masonry with common burnt clay bricks of size 230 mm x 110 mm x 50 mm instead of size 230 mm x 110 mm x 70 mm , including raking horizontal and vertical joints 10 mm wide 12 mm deep to receive pointing complete in cement mortar 1:4 (1 cement : 4 coarse sand). The Exposed surface area only of the Brick work will be measured for payment.	Sqm	12.13	46,875.81		
5.008	MR 5.008	87618	Extra rates over MR item no. 5.004 for providing exposed masonry with Compressed Stabilized Earth (CSE) Blocks including raking horizontal and vertical joints 10 mm wide 12 mm deep to receive pointing complete. The Exposed surface area only of the Brick work will be measured for payment.	Sqm	60.81	53,27,992.51		

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8			<b>Subtotal of Brick Work</b>					<b>1730,17,652.72</b>
	<b>6.0</b>		<b>Stone work</b>					
6.001	MR 6.001	1218	Providing and fixing wet cladding in (wall lining) any shape at all heights with 18 to 20 mm thick gang saw cut stone with (machine cut edges) of uniform colour and size, backing filled with a grout of average 12 mm thick cement mortar 1:3 (1 cement : 3 coarse sand) mixed with adhesive in proportion as per manufacture's specification, including pointing in white cement mortar 1:2 (1 white cement : 2 stone dust) with an admixture of pigment matching the stone shade at all levels including cutting, making recesses in stone slab, drilling holes, rubbing, polishing, curing, and scaffolding etc. complete in the required pattern as per drawing and as directed by engineer in charge. (a) : Red Mandana stone	Sqm	2,385.24	29,05,227.54		
6.002	MR 6.002	30	(b) : Granite stone	Sqm	4,603.06	1,38,091.68		
2			<b>Subtotal of Stone Work</b>					<b>30,43,319.22</b>
	<b>7.0</b>		<b>Marble &amp; Granite Work</b>					
7.001	MR 7.001	120	Providing and laying Mirror polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineering- Charge. (a) : Granite Stone of approved shade	Sqm	3,974.00	4,76,880.53		
7.002	MR 7.002	51	Providing and fixing 18mm thick gang saw cut, mirror polished, pre moulded and pre polished, machine cut stone for tread and risers of steps, dedo, jambs, lintels, partition, seat, landing, parapet top, shelves, chajja, sill, divider, and similar locations of required size, machine cut edges, approved shade, colour and texture laid over 20mm thick base cement mortar 1:3(1 cement : 3 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing edges give high gloss finish etc. complete at all levels as per detailed drawing and as directed by engineer in charge. (a) : Granite Stone of approved shade	Sqm	4,608.43	2,35,030.01		
2			<b>Subtotal of Marble &amp; Granite Work</b>					<b>7,11,910.54</b>
	<b>8.0</b>		<b>Wood &amp; PVC Work</b>					
8.001	MR 8.001	122	Providing wood work in frames of panelled shutters for doors, window, clerestory windows and other similar frames, and fixed to the Existing wooden frames with approved make Hinges as per detailed drawings and as directed by the Engineer - in - Charge. The various components of Panelled shutter like vertical stiles, Top, Bottom & lock rails and intermediate transoms & mullions, in the shutter shall be measured, only in volume of teakwood used and shall be paid for. The rates shall include all the required materials like, nails, screws, wooden nails, Adhesive Glue etc. and labour for preparation of shutter frame and fixing the same with Door frames complete. Approved quality Hinges, Wooden/ Glass/Ply wood panels including the necessary Teak wood beading, nails & screws etc. for fixing hinges/panels shall be paid under relevant items as the case may be. (a) : Second class teak wood	Cum	1,35,743.01	165,60,647.68		
8.002	MR 8.002	367	Providing wood work in frames of Partitions with Glass/Wooden panels/Plywood Panels. Wooden members are to be fixed to cover the Rectangular/ Square M.S. Tube sections of the main partition frames from all sides as per the detailed drawings including fixing the wooden members with necessary screws, nuts, bolts etc. in such a way that the M.S. Sections are covered on all sides and is concealed behind the wooden members. Wooden members of Shutters frame if any and wooden beadings for fixing Glass panels, wooden panels, plywood panels of the partition with wooden members of the frames will also be paid under this same item. The work to be carried out as per the detailed drawings and as directed by Engineer In charge. ( hold fast lugs or dash fastener shall be paid for separately) (a) : Second class teak wood	Cum	1,19,367.31	438,07,804.11		
8.003	MR 8.003	5290	Providing and fixing 5.0 mm thick toughened glass fixed with wooden bedding including the cost of wooden beadings, glass and necessary cutting finishing for Partitions, doors, windows etc. complete as per drawing and as directed by Engineer-in-charge.	Sqm	2,564.16	135,64,424.12		

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8.004	MR 8.004	21	Providing & fixing 4.0 mm thick glass vision panel not exceeding 0.2 sqmt fixed with teak wood beading of 5 mm thick both side in the opening and fixing the same in flush door at required location as per drawing and as directed by engineer-in-charge.	Nos	677.34	14,224.15
8.005	MR 8.005	45	providing and fixing frosted glass panes 5.0 mm thick in doors, windows and clerestory window shutters. (Area of opening for glass panes excluding portion inside rebate shall be measured).	Sqm	1,036.25	46,631.26
8.006	MR 8.006	1299	Extra rate over DSR item no 9.7.7.2 for providing single glazing 5.0 mm thick clear cosmos (ET 125) of approved make (in place of 5.0 mm thick clear float glass) having properties like light transmission 28%,external reflection 28%, internal reflection 9%, 28%, solar factor 0.3, shading coefficient 0.34, U value (W/Sqm-k) 3.9 Light instead of 5.0 mm thick sheet float glass as per drawing and as directed by Engineer-in-Charge.	Sqm	1,320.48	17,15,309.36
8.007	MR 8.007	2926	Providing and fixing 12 mm thick plane toughened glass fixed with wooden beading including the cost of wooden beadings ,glass and necessary cutting finishing for Partitions, doors, windows etc. complete as per drawing and as directed by Engineer-in-charge.	Sqm	4,393.68	128,55,901.73
8.008	MR 8.008	150	Providing and fixing in position frameless partition with 12 mm thick clear toughened float glass with appropriate stainless steel grade 304 patch fittings as per manufacturer's specifications and as per design and as directed by Engineer - in - Charge. All joints of the glass to glass and glass to wall/floor/ceiling shall be filled with RTV silicon sealant of structural grade and weathering grade of approved make , to make the partition leak proof, complete . Rates to include the cost of all installation charges and materials like glass, all SS patch fittings, wall Rails, hardware and RTV Silicon sealants etc. Installed glass are shall be measured and paid for. The contractor shall submit the detailed shop drawing showing all junction details and get the same approved from Engineer - in - Charge before executing this item.	Sqm	15,371.74	23,05,760.76
8.009	MR 8.009	20	Providing and fixing within the frameless partition, floor spring operated openable single or double leaf shutter of 12 mm clear toughened float glass of approved make with appropriate stainless steel grade 304 patch fittings as per manufacturer's specifications, Stainless steel 316 Handles 38 mm dia and 600 mm long ,floor springs, Locks, Pivots and other fixing accessories of approved makes and all other incidentals complete as per detailed drawings and approved shop drawings as directed by Engineer - in - Charge.	Sqm	29,370.18	5,87,403.53
8.010	MR 8.010	2537	Providing and fixing 12 mm thick Plane Toughened glass for the sky lights at terrace levels/ roof levels of Gopurams and the sky lights at the top level of the chhatris and Roof level of 60 seater class rooms etc. as per detailed design drawings and instructions of Engineer In charge. The glass will be fixed with 3M or equivalent type two way adhesive tapes of necessary thickness. 10 to 12 mm wide joints will be kept between two glass sheets abutting each other over the steel sections of the frame and the joint will be sealed with RTV silicon sealant of approved make to make the entire sky light water tight complete as directed .	Sqm	5,980.56	151,70,493.50
8.011	MR 8.011	546	Providing and Fixing in position in proper line and level 18 mm thick Marine plywood panels for panels for shutters to windows/partitions conforming to IS: 710 fixed to wooden/steel frame with necessary accessories ,lipping with 2nd class teak wood battens 12 mm thick on all edges of plywood as per drawing and as directed by Engineer-in-Charge. (Frames for shutter and/or fixed frames to be paid separately)	Sqm	2,775.32	15,16,158.79
8.012	MR 8.012	61	Providing, Fabricating and Fixing in position in proper line and level with 12 mm thick Plywood Marine plywood panels for shutters to windows/partitions conforming to IS: 710 fixed to wooden/steel frame with necessary accessories ,lipping with 2nd class teak wood battens 12 mm thick on all edges of plywood as per drawing and as directed by Engineer-in-Charge. (Frames for shutter and/or fixed frames to be paid separately)	Sqm	2,627.92	1,59,514.61
8.013	MR 8.013	287	Providing & fixing wooden patta 130 mm wide made from 18 mm thick marine plywood conforming to IS: 710 with each side 5 mm thick teakwood beading and fixed to supporting second class teakwood patti 35X 35 mm which is fixed to wall as per drawing and as directed by engineer- in- charge	Metre	803.78	2,30,684.03
8.014	MR 8.014	72	Providing wooden louvers of Second class teak wood 10 mm thick and up to 150 mm wide as required including fixing at 50 mm center to center distance at required location in frames/shutters of door/windows including cutting finishing and beading as per drawing and as directed by engineer-in-charge. Frames will be paid separately in relevant items. Area of Lovers in elevation Excluding the frame will be measured and paid for.	Sqm	3,061.76	2,20,446.92

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8.015	MR 8.015	44	Providing and fixing exterior grade non asbestos cement fiber board of approved make with necessary s.s. screws etc. for the covering of Pipe shafts, Cable shafts etc. Complete in pattern with grooves as per drawing and as directed by engineer in-charge. Framing will be paid in relevant items. (a) : 6 mm thick Cement Boards	Sqm	907.92	39,585.29		
8.016	MR 8.016	313	(b) : 8 mm thick Cement Boards	Sqm	1,113.78	3,48,836.52		
8.017	MR 8.017	87	(c) : 12 mm thick Cement Boards	Sqm	1,424.43	1,24,210.13		
8.018	MR 8.018	57	Providing and fixing of Hollow metal fire rated doors of approved make as per IS 3614 part-1 & part-2 for stability and integrity. Pressed Galvanized steel conforming to IS 277 with the following specification. Recommended fire door shall have doors tested at CBRI or ARAI for maximum rating of 2hrs with vision panel. Door frame shall be double rebate profile of size 143 x 57 mm made out of 1.60mm (16gauge) minimum thick galvanized steel sheet. Frames should be provided with back plate bracket and anchor fasteners for installation on a finished wall opening. Door leaf shall be 46mm thick fully flush double skin door with vision light. Door leaf shall be manufactured from 1.2mm (18gauge) minimum thick galvanized steel sheet. The internal construction of the door should be rigid reinforcement pads for receiving appropriate hardware. The infill material shall be resin bonded honeycomb core. All doors shall be factory prepped for receiving appropriate hardware and provided with necessary reinforcement for hinges, locks, and door closers of approved make. The edges should be interlocked with a bending radius of 1.4mm. The glass should be 5.5 mm clear borosilicate fire rated glass of relevant rating of the door. All doors and frames shall be finished with etched primer coating, stove zinc phosphate primer and thermosetting polyurethane aliphatic grade paint of approved colour complete as per drawing and as directed by Engineer-in-Charge. The door leaf and frame shall have passed minimum 250 hours of salt spray test. (a) : 2Hrs Fire Rated Door Single leaf of size : with vision panel & Standard Door Hardware Such as Hinges (CE 4330) , Dead Lock (CL 5302) , Handle (PH 1250), And Door Closer (TS 68 STD ARM) set or equivalent make	Sqm	13,399.06	7,63,746.65		
8.019	MR 8.019	128	(b) 2Hrs Fire Rated Door Single leaf of size : with vision panel & Standard Door Hardware Such as Hinges (CE 4330), Panic (1211 + 1185) Bar And Door Closer (TS 68 STD ARM) set equivalent make	Sqm	18,339.97	23,47,516.01		
8.020	MR 8.020	12	Providing and fixing sliding folding Top & Bottom Track set of approved make suitable for wooden sliding folding door of total weight up to 100 kg. with all hardware as per architectural drawing and as directed by engineer in charge. ( Including Top Pivot , bottom Pivot - wall Pivot- Hinges -100x32x3 min weight 300gm; Hinge Cum Handle - min weight 768 gm; Top Roller -,Bottom Roller -,Heavy duty aluminium top track profile of suitable size for the door up to Rigid aluminium flush bottom track profile 25x19x3;concealed bottom guide 100x32x3;concealed intermediate hanger 100x32x3 with roller made of wool pile; end bottom guide 100x32x3;aluminium drop bolt 200x36x2 spender dia 10 mm; end carrier set 100x32x3; etc.	Metre	17,303.32	2,07,639.82		
8.021	MR 8.021	94	Providing & Fixing Zinc Material Combination Finish Door Safety Chain, minimum weight 190 grm. with necessary nickel Plated screws for doors as per drawing and as directed by Engineer-in-charge.	Nos	293.29	27,568.96		
8.022	MR 8.022	84	Providing & Fixing S.S. 316 Grade C Shaped Handles in Satin Finish, 10 mm dia and centre to centre minimum 150 mm size, minimum weight 140 grm with necessary screws etc. complete of approved make as per drawing and as directed by engineer-in-charge.	Nos	119.82	10,064.61		
8.023	MR 8.023	7144	Providing & Fixing S.S. 316 Grade Fire resistance BSEN 1634:1:2000 Certified & Mechanically tested BSEN 1935:2002 Satin Finish S.S. 316 Grade 4 ball bearings Hinges approximate size 102mm X 76mm X 3 mm minimum Weight 260 grm of approved make with AISI 316 Grade ball Bearing S.S. Pin, Cap, and with necessary S.S. Self Tapping Phillips Cross Head Screws etc. complete as specified as per drawing and as directed by engineer-in - charge.	Nos	489.08	34,94,022.21		
8.024	MR 8.024	2420	Providing & Fixing S.S. 316 Grade Satin Finish Fire resistance BSEN 1634:1:2000 Certified & Mechanically tested BSEN 1935:2002 Hinges without bearings approximate size 76mm X 65mm X 2 mm minimum weight 100 grm of approved make with AISI 316 Grade S.S. Pin, Cap, and with necessary S.S. Self Tapping Phillips Cross Head Screws etc. complete as specified as per drawing and as directed by engineer-in -charge.	Nos	273.74	6,62,457.47		
8.025	MR 8.025	4043	Providing & Fixing S.S. 304 Grade Stainless Steel Satin Finish Round Tower bolt of overall length (excluding Bracket) 300 mm and inner bolt of dia meter 12mm and outer barrel dia meter 16 mm, minimum weight 430 grm. of approved make with necessary Nickel Plated Screws complete as per specified as per drawing and directed by Engineer in charge.	Nos	590.77	23,88,500.02		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
8.026	MR 8.026	2020	Providing & Fixing S.S. 304 Grade Stainless Steel Satin Finish Round Tower bolt of overall length (excluding Bracket) 100 mm and inner bolt of diameter 12mm and outer barrel diameter 16 mm, minimum weight 150 grm of approved make with necessary nickel Plated Screws complete as per specified as per drawing and directed by Engineer in charge.	Nos	230.28	4,65,160.46		
8.027	MR 8.027	1255	Providing & Fixing AISI S.S. 316 Grade Solid Window Casement stay/adjustor with minimum weight 280 grm of size diameter 14 mm, length 200 mm with necessary fixing screws as specified as per drawing & as directed by engineer-in-charge.	Nos	656.18	8,23,501.23		
8.028	MR 8.028	164	Providing & Fixing Satin Finish Brass Parliamentary Hinges with the Size of 100 X 75 X 4 mm of approved make with necessary fixing screws as specified as per drawing & as directed by engineer-in-charge.	Nos	785.78	1,28,867.66		
8.029	MR 8.029	1803	Providing & Fixing Fire resistance BSEN 1634:1:2000 Certified & mechanically tested BSEN 1906:2010 Pair of AISI S.S. 316 Grade Satin Finish hollow Pipe or solid design Mortise Handle with the minimum weight 620 grm key hole for Mortise Pin Cylinder, high grade brass bushing for extra fixing strength for intensive use of door with back to back fixing screws system of approved make with both side active mortise handle and spindle, High Quality Stainless Steel Wood Screws (8 PCS.) for minimum door thickness 30 mm as per drawing and as directed by engineer in charge. The Inner and Outer Rose of Mortise handle and Escutcheons must be of AISI 316 grade only.	Pair	1,667.00	30,05,601.00		
8.030	MR 8.030	1392	Providing & Fixing Fire resistance BSEN 1634:1:2000 Certified & mechanically tested BSEN 1906:2010 Pair of AISI S.S. 316 Grade Satin Finish hollow Pipe or solid design Mortise Handle with the minimum weight 930 grm with S.S. 316 Grade euro profile escutcheons key hole for Mortise Pin Cylinder, high grade brass bushing for extra fixing strength for intensive use of door with back to back fixing screws system. of approved make with both side active mortise handle and spindle, High Quality Stainless Steel Wood Screws (8 PCS.) for minimum door thickness 30 mm as per drawing and as directed by engineer in charge. The Inner and Outer Rose of Mortise handle and Escutcheons must be of AISI 316 grade only.	Pair	2,231.00	31,05,552.00		
8.031	MR 8.031	973	Providing & Fixing Satin Finish Double Door Lock body , 26 mm brass latch. 52 mm lock with Back Set centre of approximate size 85 X 45 mm, of approved make, minimum Weight 0.880 grm suitable for minimum 30 mm thick Double Door Shutter with necessary fixing screw as specified as per drawing and as per directed by engineer in charge.	Nos	1,432.01	13,93,341.84		
8.032	MR 8.032	734	Providing & Fixing Fire resistance BSEN 1634:1:2000 Certified Satin Finish Mortise Lock body approximate size of back set 45 mm X 85 mm, with 52 mm Lock and 26 mm brass latch , Stainless steel main & Strike plate & including back to back fixing feature suitable for minimum door thickness 30 mm Single door shutter with necessary fixing screw as per specified as per directed by engineer in charge.	Nos	710.54	5,21,534.14		
8.033	MR 8.033	395	Providing & Fixing Fire resistance BSEN 1634:1:2000 Certified Satin Finish Mortise Latch body with back set approximate size of 45 mm, Stainless Steel main & Strike Plate of approved make suitable for minimum 30 mm thick Single door Shutter with necessary fixing screw as specified as per drawing and as directed by engineer in charge.	Nos	548.01	2,16,464.11		
8.034	MR 8.034	463	Providing & Fixing Satin Finish 6 pin Mechanism, high Quality brass body Mortise Pin Cylinder with 5 high accuracy Computerized Dotted keys of approved make one side key & one side knob suitable for minimum door thickness 30 mm with necessary Fixing Screw as specified and as per drawing and as per directed by engineer in charge.	Nos	703.99	3,25,946.39		
8.035	MR 8.035	1142	Providing & Fixing Fire resistance BSEN 1634:1:2000 Certified Satin Finish Secure Standard 5 pin Mechanism Mortise Pin Cylinder with both Side Keys, high accuracy Brass keys of approved make suitable for minimum door thickness 30 mm with necessary fixing screw as per specified and as per drawing and as per directed by engineer in charge.	Nos	595.12	6,79,627.59		
8.036	MR 8.036	497	Providing & Fixing Fire resistance BSEN 1634:1:2000 Certified Satin Finish Secure Standard 5 pin Mechanism half Mortise Pin Cylinder with high accuracy Brass keys of approved make one side key suitable for minimum door thickness 30 mm with necessary fixing screw as per specified and as per drawing and as per directed by engineer in charge.	Nos	519.75	2,58,316.12		
8.037	MR 8.037	395	Providing & Fixing high Quality Zinc Material Satin Finish baby latch/Indicator Bolt inner Only with the size 87 mm of approved make with necessary SS Screw etc. complete as specified as drawing as directed by engineer-in- charge	Nos	387.00	1,52,864.47		
8.038	MR 8.038	160	Providing & Fixing Satin Finish S.S. Door Magnet length of 75 mm of approved make, minimum Weight 150 grm with necessary nickel plated screw complete, as specified, as per drawing and as directed by engineer in charge.	Nos	186.00	29,760.00		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.						
Subject :- Schedule-B Market Rate Items						12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount
8.039	MR 8.039	368	Providing & Fixing high Quality Zinc Material Door Stopper length of 150 mm including Rubber of approved make minimum Weight 260 grm with necessary Screws etc. complete as specified, as per drawing as directed by engineer-in-charge.	Nos	367.46	1,35,225.37
8.040	MR 8.040	1170	Providing & Fixing S.S. 316 Grade C Shaped Handles in Satin Finish, 10 mm dia and centre to centre minimum 100 mm size, minimum weight 94 grm with necessary screws etc. complete of approved make as per drawing and as directed by engineer-in-charge.	Nos	119.82	1,40,185.70
8.041	MR 8.041	1297	Providing & Fixing AISI S.S. 316 Grade Satin Finish Wall/Floor mounted Door Stop with the length of 75 mm to 100 mm including Rubber, minimum Weight 150 grm of approved make with necessary SS screws etc. complete as specified as per drawing and as directed by engineer-in-charge.	Nos	366.97	4,75,965.82
8.042	MR 8.042	1241	Providing & Fixing heavy duty Satin Finish pivot pair (Top Pivot & Bottom Patch) of approved make, Suitable for Door thickness minimum 45 mm as specified as per drawing as directed by engineer-in-charge.	Nos	1,184.13	14,69,503.80
8.043	MR 8.043	193	Providing & Fixing Zinc Material Door Eye Viewer of Dia. 36mm approved make with wide angle vision and fixing accessories as specified as per drawing as directed by engineer-in-charge.	Nos	180.82	34,899.15
8.044	MR 8.044	11	Providing & Fixing Brass finish Special Shaped Handles of special design as per drawing in matt Finish made out of 5 mm thick brass plate and having approximate weight 5 kg per pair of handles with necessary brass screws etc. complete of approved make as per drawing and as directed by engineer-in-charge.	Pair	10,895.97	1,19,855.70
8.045	MR 8.045	35	Supply and carpentry of chemically seasoned 2nd class teak wood for creation of trellis & pergola rafters, columns, seat backs, railing tops, playground equipment parts like climbing wall steps, seats of see-saws, swings, etc. to be installed in exterior areas complete with all material, labour, equipment and accessories like screws, nuts, bolts, adhesive, etc.	Cum	1,35,266.35	47,34,322.23
45			<b>Subtotal of Wood &amp; PVC Work</b>			<b>1373,86,047.01</b>
	<b>9.0</b>		<b>Steel work</b>			
9.001	MR 9.001	156192	Steel work in built up tubular ( round, square or rectangular hollow hot finished welded type tubes etc.) for supporting frame work of Partitions with fixed glazing/fixing wooden/ plywood panels/ openable glazed doors/windows etc. all as per the detailed drawings and instructions of Engineer In charge , including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete. Steel sections if required for Architectural aesthetic looks, may be covered with wooden members as per detailed design drawings. Weight of Steel sections only will be measured and paid for. Glazing, wooden/ply wood panels, shutters etc. will be paid separately under relevant items.	Kg	135.20	211,16,935.79
9.002	MR 9.002	54753	Steel work in single section or built up section or tubular ( round, square or rectangular hollow tubes etc.)sections for frame work of sky lights at terrace levels/ roof levels of Gopurams / chhatries / class rooms etc. as per detailed drawings and direction of Engineer In charge , including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete. Weight of Steel sections only will be measured and paid for. Glazing, Poly carbonate sheets or Fiberglass Plastic sheets of the skylight will be paid separately under relevant items.	Kg	129.00	70,62,967.08
9.003	MR 9.003	18230	Providing and fixing stainless steel AISI 316 Grade Stainless Steel Knock Down railing system of approved make with satin finish and loading tested as per International load Testing Criteria with EXOVA Certification (Without any welding, Fabrication and Buffing on site) made of Hollow tubes, channels, plates , special glass holding fixtures etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, on the top of the floor or the side of waist slab with suitable arrangement as per drawing and as directed by engineer in charge. The balustrade would be fixed onto floor/waist slab with casted base plate of S.S 316 with High Strength 2 NOS Anchor fasteners and whenever required, joints to be filled with bushings for extra strength. (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	Kg	1,341.53	244,56,137.48
9.004	MR 9.004	3168	Providing and fixing 12 mm thick toughened glass with fixing of translucent polyester film on glass to give it a look of Frosted glass in the design as per detailed drawing to be fixed with Stainless steel railing in stairs/ passages etc. with necessary full length and designs stainless steel nuts etc. including making required size holes for bolts etc. for fixing the glass sheet with railing members complete. Sample of the railing will be prepared by the contractor and got approved by the Architect Before taking up the job at full scale. Stainless steel railing should be paid in relevant items.	Sqm	3,587.29	113,64,538.22



Name of Work :- Development Of Permanent Campus Of Nu Rajgir.						
Subject :- Schedule-B Market Rate Items						12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount
9.005	MR 9.005	68	Supplying and installing 4.3 m high 4mm GI Wire Chain Link Fencing PVC coated, of approved shade & colour on structure composed of 60.3 mm diameter MS CHS columns at 3 m centre to centre, & frame composed of 10mm MS bars, 40x25x5 ISA & 40x5 MS Flats, all MS items painted with approved paints, fixed in ground complete as per drawing and as directed by engineer in charge.(excluding cost of RCC Foundation)	metre	6,930.91	4,71,301.73
5			<b>Subtotal of Steel Work</b>			<b>644,71,880.29</b>
	<b>10.0</b>		<b>Flooring work</b>			
10.001	MR 10.001	25814	Extra rate over DSR item no. 11.26.1 in flooring for using Red Mandana stone slabs in place of Kota stone slabs	Sqm	302.21	78,01,315.11
10.002	MR 10.002	731	Extra rate over DSR item 11.26.1 in flooring for using Brown Bundi stone slabs in place of Kota stone slabs	Sqm	1,015.09	7,41,926.82
10.003	MR 10.003	6326	Extra rate over DSR item 11.27 in risers of steps, skirting, dado and pillars for using Sand stone slabs in place of Kotah stone slabs	Sqm	571.87	36,17,546.06
10.004	MR 10.004	77	Extra rate over DSR item 11.27 in risers of steps, skirting, dado and pillars for using Brown Bundi stone slabs in place of Kota stone slabs	Sqm	1,776.62	1,37,155.10
10.005	MR 10.005	2550	Kota stone slab 25 mm thick approved colour, shade & texture with machine cut edges in Kitchen platforms, vanity counters, facia, sills, jams, lintels, partition, seat, landing, parapet top , shelves, chajja and similar locations of required size and in full length, over 20 mm (average) thick cement mortar 1:3 (1 cement 3 coarse sand) laid to line and level and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete as per drawing and as directed by engineer in charge.	Sqm	1,927.32	49,14,669.80
10.006	MR 10.006	1995	Extra rate over MR item no. 10.005 in Kitchen platforms, vanity counters, facia, sills, jams, lintels, partition, seat, landing, parapet top , shelves, chajja and similar locations for using Red Mandana stone slabs in place of Kota stone slabs	Sqm	520.64	10,38,521.06
10.007	MR 10.007	272	Extra rate over MR item no. 10.005 in Kitchen platforms, vanity counters, facia, sills, jams, lintels, partition, seat, landing, parapet top , shelves, chajja and similar locations for using Brown Bundi stone slabs in place of Kotah stone slabs	Sqm	1,237.46	3,36,961.37
10.008	MR 10.008	19145	Rough Kota stone slab 25 mm thick approved colour, shade & texture in flooring over 20 mm (average) thick over base of cement mortar 1 : 4 (1 cement : 4 coarse sand) laid to line and level and jointed with grey cement slurry mixed with pigment to match the shade of the slab including cleaning complete as directed by the Engineer-in-charge.	Sqm	1,046.77	200,40,197.21
10.009	MR 10.009	18753	Extra rate over above DSR item no. 10.008 in Rough Red Mandana stone slab 25 mm thick approved colour, shade & texture in flooring over 20 mm (average) thick over base of cement mortar 1 : 4 (1 cement : 4 coarse sand) laid to line and level and jointed with grey cement slurry mixed with pigment to match the shade of the slab including cleaning complete as directed by the Engineer-in-charge.	Sqm	161.29	30,24,608.43
10.010	MR 10.010	41	Rough Kota stone slabs 20 mm thick of approved colour, shade & texture in risers of steps, skirting, dado and pillars similar locations of required size with machine cut edges over 12 mm (average) thick cement mortar 1:3 (1 cement 3 coarse sand) laid to line and level and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including nosing, rubbing and polishing of Machine cut edges, cleaning complete as per drawing and as directed by engineer in charge.	Sqm	1,459.93	60,222.20
10.011	MR 10.011	26	Rough Kota stone slab 25 mm thick approved colour, shade & texture with machine cut edges in Kitchen platforms, vanity counters, facia, sills, jams, lintels, partition, seat, landing, parapet top , shelves, chajja and similar locations of required size and in full length, over 20 mm (average) thick cement mortar 1:3 (1 cement 3 coarse sand) laid to line and level and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete as per drawing and as directed by engineer in charge.	Sqm	1,903.69	49,971.85
10.012	MR 10.012	286	Extra for River-washed finish polishing in place of normal polishing on marble/Granite/stone where ever required to give rough finish complete as per drawing and as directed by engineer in charge.	Sqm	310.18	88,711.44
10.013	MR 10.013	1255	Extra for Sand blasted finish/lather finish polishing in place of normal polishing on marble/Granite/stone where ever required to give rough finish complete as per drawing and as directed by engineer in charge.	Sqm	383.66	4,81,496.66
10.014	MR 10.014	2449	Extra for Kota stone/ Red Mandana/ Sand Stone in treads and risers of steps for using single stone of length from 1.05 metre to 1.50 metre.	Sqm	131.08	3,21,018.06
10.015	MR 10.015	4983	Extra for providing 3 nos. grooves of size 5 mm x 5 mm in the treads of steps as per detailed drawings to make the surface of treads non slippery.	Rmt.	33.64	1,67,642.34

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Subject :- Schedule-B Market Rate Items						12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount
10.016	MR 10.016	941	Extra over DSR item no. 11.53 for providing and fixing 25 mm x25 x4 mm or 50 mm x 50 x4 mm Glass Mosaic /Shon tiles or equivalent in place of 20 mm x 20 mm x 4mm glass mosaic tiles as per detailed Architectural Design pattern and shade of tiles.	Sqm	20.60	19,392.08
10.017	MR 10.017	4389	Providing and laying Terracotta colored vitrified floor tiles of Endura Make or equivalent in different sizes (having thickness 12 mm to 15 mm as specified by the manufacturer) with water absorption less than 0.08% and conforming to IS : 15622, of approved make, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete. (a) : 300x300 mm	Sqm	1,478.39	64,88,663.94
10.018	MR 10.018	185	Providing and laying Terracotta colored Vitrified tiles of Endura make or equivalent in different sizes ( having thickness 12 mm to 15 mm as specified by the manufacturer), with water absorption less than 0.08% and conforming to IS: 15622, of approved colours and shade, in skirting, tread & riser of steps, dado and pillar over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete as per drawing and as directed by engineer in charge. (a) : 300x300 mm	Sqm	1,502.24	2,77,913.61
10.019	MR 10.019	410	Providing and laying Glazed/Mat finished Terracotta clay tiles of approved make in flooring in different sizes (having thickness 12 mm to 15 mm as specified by the manufacturer) with water absorption less than 1%, in all colours and shades, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc., complete. (a) 300x300 mm	Sqm	3,909.80	16,01,063.46
10.020	MR 10.019 A	137	(b) 200x200 mm	Sqm	3,653.37	4,98,685.35
10.021	MR 10.020	67	Providing and laying Glazed/Mat finished Terracotta clay tiles of approved make in skirting, tread & riser of steps, dado and pillar in different sizes ( having thickness 12 mm to 15 mm as specified by the manufacturer), with water absorption less than 0.08% , of approved colours and shade, in skirting, tread & riser of steps, dado and pillar over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete as per drawing and as directed by engineer in charge. (a) 300x300 mm	Sqm	3,949.81	2,63,649.48
10.022	MR 10.020 A	22	(b) 200x200 mm	Sqm	3,690.10	82,104.82
10.023	MR 10.021	344	Providing and laying Terracotta clay tiles of approved make in flooring laid on 20 mm thick cement mortar 1:4 (1 cement : 4 coarse sand), including grouting the joints with white cement and matching pigments etc. for terraces & exteriors areas complete. , as per architectural drawing as directed by engineer-in-charge. (a) 300x300 mm	Sqm	1,158.44	3,98,504.36
10.024	MR 10.022	9885	Providing and laying 40 mm thick Terracotta clay paver of approved size, design & shape, laid in required colour and pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge. (a) : 200x200 mm	Sqm	1,317.07	130,19,214.18
10.025	MR 10.023	1558	(b) : 100x200 mm	Sqm	1,347.79	20,99,851.77
10.026	MR 10.024	1039	(c) : 100x100 mm	Sqm	1,397.21	14,51,701.54
10.027	MR 10.025	16220	Providing and laying 50 mm thick sand blasted Red Mandana stone pavers of approved size, design & shape, laid in required pattern over and including 50 mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge. (a) : 200x200 mm	Sqm	1,756.51	284,90,589.58
10.028	MR 10.026	1622	(b) : 100x100 mm	Sqm	1,787.23	28,98,885.27

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.						
Subject :- Schedule-B Market Rate Items						12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount
10.029	MR 10.027	8485	Providing and laying 60mm-70mm thick Red Mandana cobble stone of 100mm x 100mm size, design & shape, laid in required pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with Cement etc. all complete as per the direction of Engineer-in-charge.	Sqm	1,481.63	125,71,594.58
10.030	MR 10.028	2320	Extra Rates for leaving gap between two tiles in flooring, skirting and wall dado of size 3 mm width and depth up to 6 mm and Grouting the joints of flooring & wall tiles having joints of 3 mm width, using Cementations grout mix of desired shade including filling /grouting and finishing complete as per drawing and as directed by Engineer-in-charge. (a) :Size of Tile 300x300 mm	Sqm	203.90	4,73,041.82
10.031	MR 10.029	4184	(b) : Size of Tile 300x600 mm	Sqm	155.93	6,52,393.31
10.032	MR 10.030	953	(c) : Size of Tile 600x600 mm	Sqm	107.95	1,02,880.31
10.033	MR 10.031	5552	Extra over item no. MR 10.017, MR 10.018, MR 10.019, MR 10.020 for providing and filling 5 mm x 5mm groove in flooring with cementations grout to match the shade of the slab, including rubbing and cleaning complete as per drawing as directed by engineer in charge.	Sqm	162.66	9,03,061.59
10.034	MR 10.032	238	Extra over item no. MR 10.010 for providing and filling 12 mm x 5 mm groove in flooring with cementations grout to match the shade of the slab, including rubbing and cleaning complete as per drawing as directed by engineer in charge.	Sqm	230.82	54,991.70
10.035	MR 10.033	172	Crazy pattern in terracotta clay tiles pieces for flooring for terraces & exteriors areas of approved shape & size 20 mm thick in flooring, including filling the gaps with light shade pigment with white cement marble powder mixture (3 parts of white cement : 1 part of marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 white, black, chocolate, grey, yellow or green marble chips of sizes from 1 mm to 4 mm nominal size by volume), with under layer 20 mm thick cement mortar 1:6 (1 cement : 6 course sand ),. including rubbing and polishing complete, as per architectural drawing as directed by engineer-in-charge. (use of wastage of terracotta clay tiles at site for crazy terracotta clay tiles flooring)	Sqm	983.74	1,69,203.16
10.036	MR 10.034	586	Crazy pattern in Red Mandana Sand stone pieces of approved shape & size 20 mm thick in flooring , including filling the gaps with light shade pigment with white cement marble powder mixture (3 parts of white cement : 1 part of marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 white, black, chocolate, grey, yellow or green marble chips of sizes from 1 mm to 4 mm nominal size by volume), with under layer 20 mm thick cement mortar 1:6 (1 cement : 6 course sand ),. including rubbing and polishing complete, as per architectural drawing as directed by engineer-in-charge. (use of wastage of Red Manadana sand stone at site shall be used for crazy sand stone flooring)	Sqm	983.74	5,76,471.22
10.037	MR 10.035	258	Crazy pattern in Kota stone pieces of approved shape & size 20 mm thick in flooring, including filling the gaps with light shade pigment with white cement marble powder mixture (3 parts of white cement : 1 part of marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 white, black, chocolate, grey, yellow or green marble chips of sizes from 1 mm to 4 mm nominal size by volume), with under layer 20 mm thick cement mortar 1:6 (1 cement : 6 course sand ),. including rubbing and polishing complete, as per architectural drawing as directed by engineer-in-charge. (use of wastage of kota stone at site for crazy kota stone flooring)	Sqm	832.02	2,14,660.03
10.038	MR 10.036	20248	Providing and laying China Mosaic Top finish with all sides of vata using pieces of white glazed tiles of size (max) 4 to 8 sq.cm over 20 mm base of cement mortar 1:4 ( 1 cement : 4 Fine sand) with cement slurry @ 2.75 Kg of cement per Sqm, mixing of water proofing material including filling up the joints with grey cement rounding of edges and corners all complete as per the direction of Engineer in charge.	Sqm	660.39	133,71,641.61
10.039	MR 10.037	35	Providing and laying approved Light weight filler material wastage of AAC Blocks up to 100mm size in required thickness to level or in slope by using insulating material in 1:5:10 prop (1 cement: 5: Sand: 10 wastage of AAC Block material) as per approved manufacturers specification including scaffolding, compacting, finishing ,curing etc. complete as per drawing as directed by engineer in charge.	Cum	3,744.36	1,31,052.50

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
10.040	MR 10.038	846	Providing and fixing of any colour Wonder floor PVC Cushioned BRAVO 4.0 mm thick Sports and multi utility flooring, roll manufactured with coating process , Glass fibre tissue impregnation for dimensional stability , 0.50 mm thick solid colour wear layer, unique TW anti-skid surface texture, total wt./sq. approx. 2930 gm./sq. Metre ,residual indentation 0.12, dimensional stability (%) 0.09 , tear strength 6.0 N/MM2 ,tensile strength 28 Kg/CM2,flammability IS 15061 , having abrasion resistance 0.16%, tensile stress 28Kg/CM2 & tear strength of 6.0N/mm2 according to IS:34 – 1 Method A. The flooring should have specially formulated abrasion resistant wear layer over a Glass fiber tissue reinforcement layer to have dimensional stability of the flooring. There should be a sufficient superior shock absorbing cushion base layer to provide foot comfort for the player. It should have acoustical property > 18DB. The flooring should have anti-bacterial property. The flooring roll be installed with rubber based adhesive Fevicol SR 505 on the clean & perfectly levelled floor & joints are to be treated & finished with PVC hot welding process to provide joint less flooring.	Sqm	1,256.16	10,62,713.26		
10.041	MR 10.039	311	Providing & laying of silento 3 mm thick vinyl flooring with 0.5 mm PU coating layer as per manufactures specification and the direction of Engineer in charge. There should be a sufficient superior shock absorbing cushion base layer to provide foot comfort for the player. It should have acoustical property > 18DB. The flooring should have anti-bacterial property. The flooring roll be installed with rubber based	Sqm	2,532.98	7,87,756.61		
<b>41</b>			<b>Subtotal of Flooring Work</b>			<b>1314,83,644.62</b>		
	<b>11.0</b>		<b>Roofing</b>					
11.001	MR 11.001	2857	Providing and fixing false ceiling grid made out of anodised aluminium (with 15 micron anodic coating) T-sections 35 x15x1.5 mm size main runners, cross runners 23.5x19x1.5 mm fixed to main runners placed 600 mm centre to centre both ways so as to form a grid of 600 mm square. The frame work shall be suspended from ceiling by level adjusting hangers of 6 mm dia M.S rod fixed to roof slab by means of ceiling cleats and dash fastener. The suspenders shall be placed 600 x 1200 mm centre to centre including fixing to the frame with C.P brass screws and applying a priming coat of zinc chromate yellow primer  (a) :8mm thick non asbestos fiber cement board - moisture resistant board	Sqm	899.06	25,68,625.53		
11.002	MR 11.002	340	Providing and fixing 75 mm diameter and 60 cm long rain water spout in cement mortar 1:4 (1 cement : 4 fine sand) PVC pipe 4 Kg/cm 2	Nos	111.21	37,809.76		
11.003	MR 11.003	766	Providing and fixing extruded polystyrene insulation board of approved make having density 36kg/m3, K value 0.028 at 25 deg, green, pink or blue in colored by spot application over slab surfaces as per manufacturer specifications and as directed by engineer-in-charge.	Cum	14,556.59	111,50,349.59		
11.004	MR 11.004	3758	Providing and laying of 10 mm thick Polycarbonate Multiwall sheet as per drawing and as directed by engineer in charge having density of 1.2 g/m3 and 66 Mpa Yield stress. The sheet Should have linear thermal expansion of 0.000065 /K & thermal conductivity 0.20 w (m-k). Sheet shall be remain stable between - 40C to 120C. Length & width of the sheet should be as per detailed drawings & design. polycarbonate sheet should be available with co-extruded UV barrier applied on it. Poly carbonate sheet shall not remove any toxic fumes and hence pose no hazard to human life in case of fire. The sheet shall be fixed with 3mm thick Aluminium flat on the longitudinal joint & applied with a layer of EPDM rubber over the sheet. The joint between sheet & the Aluminium Joint shall be fully filled with RTV silicon sealant of approved make to avoid water leakage from the joint complete as per drawing and as directed by engineer in charge. The sheet shall be fixed to the structure with help of SDST screws.(Structural steel should be paid in relevant item)	Sqm	1,914.15	71,93,383.22		
11.005	MR 11.005	816	Providing and fixing 3 mm thick, both side UV resistant Polycarbonate sheets easy to mould/bent to required shape and size for the sky lights at terrace levels/ roof level of Gopurams /chhatris / class rooms etc. as per detailed design drawings and instructions of Engineer In charge. The Polycarbonate sheet will be fixed to MS framing by necessary Galvanised steel bolts of self drilling type with crown head and necessary rubber washers etc. including minimum 100 mm of side overlap in the sheets. Overlapped joints will be sealed with RTV silicon sealant of approved make to avoid water leakage from the joint., complete as per drawing and as directed by engineer in charge. (Structural steel should be paid in relevant item)	Sqm	2,512.32	20,50,056.79		
<b>5</b>			<b>Subtotal of Roofing Work</b>			<b>230,00,224.89</b>		
	<b>12.0</b>		<b>Finishing work</b>					

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
12.001	MR 12.001	85620	Pointing on brick work or brick flooring on non Modular bricks with cement mortar 1:3 (1 cement : 3 fine sand) as per directions of Engineer-in-Charge. (a) : Flush / Ruled/ Struck or weathered pointing on bricks of size 230 mm x 110 mm x 100 mm	Sqm	96.46	82,58,916.30		
12.002	MR 12.002	3298	Extra rate over above DSR item 13.31.1 for Pointing on brick work or brick flooring on non Modular bricks with cement mortar 1:3 (1 cement : 3 fine sand) as per directions of Engineer-in-Charge. (a) : Flush / Ruled/ Struck or weathered pointing on bricks of size 230 mm x 110 mm x 50 mm instead of size 230 mm x 110 mm x 75 mm	Sqm	32.11	1,05,873.29		
12.003	MR 12.003	26076	Providing and applying Melamine polishing with including preparation of surface and staining to the approved colour and shade as per the manufacturers specifications including scaffolding, curing, cleaning the surfaces and other incidental work to be done etc. complete at all floors for any height as directed by engineer in charge.	Sqm	487.51	127,12,337.29		
12.004	MR 12.004	350	Providing and applying low pigmented textured wall finish with marble chips and minerals aggregate, giving Natural plast/Random star effect of approved shade of approved make, finishing with i) 1st coat of Low VOC cement primer 0.80 Lt/10 Sqm ii) 2nd coat of stone finish highly dense smooth appearance with trowel @ 2.2 Kg/Sqm and iii) 3rd coat of stone finish by gun spraying, coverage 1.1 Kg/Sqm, Overall minimum 1.50 mm thickness as per manufacturer's specification including scaffolding, curing, cleaning the surfaces and other incidental work to be done etc. complete at all levels as directed by engineer in charge.	Sqm	758.86	2,65,601.97		
12.005	MR 12.005	183198	Providing and applying breathable, non-reactive, antifungal, and water repellent Silane/ Siloxane chemical as approved by Engineer-in-charge, of approved make, diluted with solvent mineral Turpentine oil in the ratio of 1:12 (One part of approved chemical :12 Part of Turpentine oil), on the existing stone masonry surface or Stone cladding or RCC surfaces with two or more coats to give uniform application of chemical on the surface, including scaffolding, curing, cleaning the surfaces and other incidental work to be done etc. complete at all levels as directed by engineer in charge.	Sqm	104.95	192,25,917.92		
12.006	MR 12.006	172609	Extra for expose shuttering over ordinary shuttering for exposed concrete elements using special sized of approved quality steel plates formwork / 12 mm waterproof plywood formwork / wood grain finish formwork with definite pattern as per approved drawing, Including providing and fixing necessary sleeves, grooves & Drip moulds for all shapes, at all levels and as directed by engineer in charge. Same kind of shuttering material should be used for standard and residual sizes. ( no separate payment for small qty. in Metre )	Sqm	436.24	752,98,780.99		
6			<b>Subtotal of Finishing Work</b>			<b>1158,67,427.76</b>		
	<b>13.0</b>		<b>Water proofing work</b>					
	<b>14.0</b>		<b>SANITARY WORK</b>					
14.001	MR 14.001	135	Supply, installation, testing & commissioning white vitreous china extended wall mounting water closet of approved make including Supply, installation, testing & commissioning of dual plate concealed cistern with flushing capacity 2 litre/ 4 litre (Low Flow), cost shall be inclusive of providing and fixing of accessories i.e. wall plate for flushing cistern, seat cover, and cistern fittings, nuts, bolts and gasket, SS rack bolt /anchor bolts / fasteners for EWC hanging, and providing protection cover over cistern, cutting and making good the walls wherever required complete as per manufacturer recommendation Water closet- Jaquar KUS WHT 35951,Cistern - JCS-WHT-2400, Flushing Cistern Wall Plate JCP-CHR-852415,Rack Bolt - Jaquar ZPS SNS RB01 OR EQUIVALENT FROM BASKET	each	29,217.38	39,44,346.14		
14.002	MR 14.002	141	Supply, installation, testing & commissioning white vitreous china extended wall mounting water closet of approved make including Supply, installation, testing & commissioning of dual plate concealed cistern with flushing capacity 2 litre/ 4 litre (Low Flow), cost shall be inclusive of providing and fixing of accessories i.e. wall plate for flushing cistern, seat cover, and cistern fittings, nuts, bolts and gasket, anchor bolts / fasteners for EWC hanging, and providing protection cover over cistern, cutting and making good the walls wherever required complete as per manufacturer recommendation Water closet- Jaquar VGS-WHT-81951,Cistern - JCS-WHT-2400, Flushing Cistern Wall Plate JCP-CHR-852415, Rack Bolt - Jaquar ZPS SNS RB01 OR EQUIVALENT FROM BASKET	each	26,833.98	37,83,591.29		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
14.003	MR 14.003	55	Supply, installation , testing & commissioning white vitreous china extended wall mounting water closet of approved make including Supply, installation , testing & commissioning of dual plate concealed cistern with flushing capacity 2 litre/ 4 litre (Low Flow), cost shall be inclusive of providing and fixing of accessories i.e. wall plate for flushing cistern ,seat cover, and cistern fittings, nuts, bolts and gasket, anchor bolts / fasteners for EWC hanging, and providing protection cover over cistern, cutting and making good the walls wherever required complete as per manufacturer recommendation Water closet- Jaquar FLC WHT 5951,Cistern - JCS-WHT-2400 , Flushing Cistern Wall Plate JCP-CHR-852415 ,Rack Bolt - Jaquar ZPS SNS RB01 OR EQUIVALENT FROM BASKET	each	19,695.70	10,83,263.71		
14.004	MR 14.004	142	Supply, installation , testing & commissioning first quality white vitreous china under rim counter top washbasins, 32 mm CP brass waste and CP brass cast bottle trap and pipe to wall with CP brass flange and rubber adopter for waste connection complete including filling gap between counter and wash basin with approved type poly sulphide sealant, cutting and making good the walls wherever required as per manufacturer recommendation Wash Basin-Jaquar CNS -WHT 701, ALD-705( waste Coupling), ALD-769L ( Bottle Trap) OR EQUIVALENT FROM BASKET	each	5,202.65	7,38,775.77		
14.005	MR 14.005	58	Supply, installation , testing & commissioning first quality white vitreous china under rim counter top washbasins, 32 mm CP brass waste and CP brass cast bottle trap and pipe to wall with CP brass flange and rubber adopter for waste connection complete including filling gap between counter and wash basin with approved type poly sulphide sealant, cutting and making good the walls wherever required as per manufacturer recommendation Wash Basin-Jaquar CNS -WHT 703, ALD-705( waste Coupling), ALD-769L ( Bottle Trap) OR EQUIVALENT FROM BASKET	each	4,845.14	2,81,017.92		
14.006	MR 14.006	10	Supply, installation , testing & commissioning first quality white vitreous china wall mounted washbasin with 32 mm CP brass waste and CP brass cast bottle trap and pipe to wall with CP brass flange and rubber adopter for waste connection complete including filling gap between counter and wash basin with approved type poly sulphide sealant, cutting and making good the walls wherever required as per manufacturer recommendation Wash Basin-Jaquar CNS -WB04, ALD-705( waste Coupling), ALD-769L ( Bottle Trap) OR EQUIVALENT FROM BASKET	each	4,737.88	47,378.84		
14.007	MR 14.007	194	Supply, installation , testing & commissioning first quality white vitreous china under rim counter top washbasins, 32 mm CP brass waste and CP brass cast bottle trap and pipe to wall with CP brass flange and rubber adopter for waste connection complete including filling gap between counter and wash basin with approved type poly sulphide sealant, cutting and making good the walls wherever required as per manufacturer recommendation Wash Basin-Jaquar CNS -WHT 705, ALD-705( waste Coupling), ALD-769L ( Bottle Trap) OR EQUIVALENT FROM BASKET	each	6,156.01	11,94,265.06		
14.008	MR 14.008	35	Supply, installation , testing & commissioning Stainless Steel AISI 304 (18/8) kitchen sink as per IS 13983 with C.I. brackets, bottle trap, waste coupling and stainless steel plug 40 mm, including painting of fittings and brackets, cutting and making good the walls wherever required. Kitchen sink with drain board 510x1040 mm bowl depth 200 mm , MODEL NIRALI MAKE OLYMPIA, OR EQUIVALENT FROM BASKET	each	15,715.21	5,50,032.46		
14.009	MR 14.009	35	Providing, Fixing of CP Brass wall mounted sink tap with wall flange, extended operating lever, swinging spout complete with all accessories as per approved specifications and making good the walls wherever required. Sink mounted sink tap ARI-CHR-39347 OR EQUIVALENT FROM BASKET	each	2,834.02	99,190.78		
14.010	MR 14.010	137	Providing, Fixing of CP Brass Wall Mounted washbasin mixer with concealed & wall flange, extended operating lever, complete with all accessories as per approved specifications and making good the walls wherever required. Washbasin Mixer -JAQUAR SOL -CHR-6233K & CONCEALED ALD-CHR-233 OR EQUIVALENT FROM BASKET	each	9,054.12	12,40,414.10		
14.011	MR 14.011	254	Providing, Fixing of CP Brass Pressmatic pillar tap to be fixed on washbasin/counter top complete with all accessories as per approved specifications and making good the walls wherever required. Wash basin- JAQUAR PRS-CHR-031L65 OR EQUIVALENT FROM BASKET	each	3,694.69	9,38,452.22		
14.012	MR 14.012	341	Supply, installation , testing & commissioning of C.P. brass dual coat robe hook with all accessories as per approved specifications and making good the walls wherever required. JAQUAR ACN-CHR-1161N OR EQUIVALENT FROM BASKET	each	717.35	2,44,615.24		
14.013	MR 14.013	839	Supply, installation , testing & commissioning of C.P Braided Copper connection 450 mm long including nuts and washers and making connection to fixtures and fittings complete as per manufacturer recommendation JAQUAR ALD-805B OR EQUIVALENT FROM BASKET	each	465.79	3,90,801.91		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.						
Subject :- Schedule-B Market Rate Items						12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount
14.014	MR 14.014	343	Supply, installation, testing & commissioning of CP finish Health Faucet with regulator ( angle valve) of approved quality with CP braided flexible pipe 1 m long, wall hooked complete as per manufacturer recommendation. Jaquar ALD-CHR-579 OR EQUIVALENT FROM BASKET	each	2,535.20	8,69,574.84
14.015	MR 14.015	759	Supply, installation , testing & commissioning Heavy class SS grating with Cockroach proof SS strainer of approved design including setting in floor with cement motor to match with floor finish as per architectural requirement suitable for waste and FT. a) Size 100 mm x 100 mm , Make - Chilly( CCTL - SMHC-150 )/GMGR	each	4,812.56	36,51,770.94
14.016	MR 14.016	839	Supply, installation , testing & commissioning C.P. brass angle valve with wall flange of approved quality conforming to IS:8931complete as per approved specifications. a) 15mm nominal bore JAQUAR ARI-CHR-39053 OR EQUIVALENT FROM BASKET	each	1,439.04	12,07,358.56
14.017	MR 14.017	336	Supply, installation , testing & commissioning of C.P Toilet paper roll holder with all accessories as per approved specifications and making good the walls wherever required. Model Jaquar ACN-1151N OR EQUIVALENT FROM BASKET	each	1,584.72	5,32,466.87
14.018	MR 14.018	137	Supply, installation , testing & commissioning of C.P Towel rack with all accessories as per approved specifications and making good the walls wherever required. Model No. JAQUAR AKP-CHR-35781P OR EQUIVALENT FROM BASKET	each	3,840.64	5,26,167.47
14.019	MR 14.019	142	Supply, installation , testing & commissioning of Soap Dish with all accessories as per approved specifications and making good the walls wherever required. Jaquar CAN-1131N OR EQUIVALENT FROM BASKET	each	744.20	1,05,676.46
14.020	MR 14.020	201	Supply, installation , testing & commissioning of C.P Towel ring , cost inclusive of CP flange, fasteners, complete as per manufacturer recommendation. Model No. Jaquar CAN -1121N OR EQUIVALENT FROM BASKET	each	1,112.02	2,23,515.13
14.021	MR 14.021	53	Supply, installation , testing & commissioning C.P. brass Two way bib tap with wall flange of approved quality conforming to IS:8931 with all accessories as per approved specifications and making good the walls wherever required. a) 15 mm nominal bore. a 15mm nominal bore Jaquar ARI 39041 OR EQUIVALENT FROM BASKET	each	2,149.61	1,13,929.58
14.022	MR 14.022	133	Supply, installation , testing & commissioning of 15mm CP brass single lever concealed bath and shower wall mixer with diverter with 3 way shower head, spout, OH shower with adjustable type arm with wall flange with slip fit connection & hand shower with flexible pipe with bracket. Diverter Jaquar ARI 39079K with ALD -079, OHS-1757 140mm diameter with Shower arm: Jaquar SHA-477, HANDSHOWER : HSH 5541 , JAQUAR FLEXIBLE TUBE WITH SUPPORT : JAQUAR SHA CHR 549D8, SPOUT - JAQUAR SPJ-CHR-5463 OR EQUIVALENT FROM BASKET	each	16,972.64	22,57,361.29
14.023	MR 14.023	69	Supply, installation , testing & commissioning C.P. brass bib tap with wall flange of approved quality conforming to IS:8931 a) 15 mm nominal bore. A) 15mm nominal bore Model Jaquar CON 107KN OR EQUIVALENT FROM BASKET	each	1,315.43	90,764.36
14.024	MR 14.024	144	Providing & fixing white vitreous china large flat back urinal and sensor battery based infrared sensor operated urinal having pre & post flushing with water (250 ml & 500 ml consumption), having water inlet from back side, infrared sensor with necessary concealed box and cover with cells, in-built solenoid valve, suitable brackets complete as per manufacturers specification and direction of Engineer-in-charge. Urinal -JAQUAR CAT NO: URS-WHT-13253 , JAQUAR SENSOR SNR-STL-51077 OR EQUIVALENT FROM BASKET	each	26,581.25	38,27,699.44
14.025	MR 14.025	142	Supply, installation , testing & commissioning of Soap Dispenser with all accessories as required and making good the walls wherever required. Jaquar1137N OR EQUIVALENT FROM BASKET	each	3,035.81	4,31,085.38

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.						
Subject :- Schedule-B Market Rate Items						12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount
14.026	MR 14.026	103	Supply, installation , testing & commissioning of Soap Dispenser with all accessories as required and making good the walls wherever required. JAQUAR SDR WHT DJ0010F OR EQUIVALENT FROM BASKET	each	1,842.60	1,89,788.17
14.027	MR 14.027	103	Supply, installation , testing & commissioning of Auto operated fully hygienic Hand dryer Stainless steel body Satin Finish , cost inclusive of fasteners and accessories required for fixing on wall, complete as per manufacturer recommendations. Jaquar HDR -SAP- M06ACS OR EQUIVALENT FROM BASKET	each	35,081.95	36,13,440.44
14.028	MR 14.028	104	Supply, installation , testing & commissioning of Paper Towel Dispenser Stainless steel body Satin Finish with fixing on wall with fasteners and supports as per manufacturer recommendation and making good the walls wherever required. Model No. Jaquar PTD-SAP- DT0196CS OR EQUIVALENT FROM BASKET	each	8,897.09	9,25,297.36
14.029	MR 14.029	86	Supply, installation , testing & commissioning of wall mounted Pressmatic tap for drinking water station with all accessories as required and making good the walls wherever required. Model - JAQUAR PRS 061 OR EQUIVALENT FROM BASKET	each	3,933.16	3,38,252.12
14.030	MR 14.030	29	Providing and Fixing 2 Nos. CP support arms and backrest of 35 mm dia to be mounted on the track (vertically and laterally) for handicap toilet complete as required. Model : Parryware T6608A1 or equivalent from Basket	each	4,278.97	1,24,090.01
14.031	MR 14.031	29	Providing and Fixing Grab Bar 600mm long for handicap toilet. Model - JAQUAR AHS-1507 /Parryware T660A1 or Equivalent from basket	each	2,109.89	61,186.85
<b>31</b>			<b>Subtotal of Sanitary work</b>			<b>336,25,570.71</b>
	<b>15</b>		<b>INTERNAL DRAINAGE</b>			
15.001	MR 15.001	179	Providing, fixing , Testing and Commissioning of Type B Ring fit UPVC SWR pipes for vent, soil, waste, confirming to IS 13592 and Fittings confirming IS 14735. Cost shall be inclusive of providing and fixing of all fittings (plain or door) e.g. bends, junctions, cowls, offsets, access pieces in pipes, & G.I. clamps spaced at 1.0 m centre to centre for wall and roof, jointing with solvent cement joints including cutting chase or making holes in walls and floors and making good as per specification and directed by Engineer In charge a) 75 mm Outer Dia	metre	334.78	59,841.37
15.002	MR 15.002	4512	b) 110mm Outer dia	metre	418.46	18,87,977.31
15.003	MR 15.003	42	Supply, installation , testing & commissioning in position SWR PVC P trap of self cleaning design of following sizes. Making proper connection with Cutting chase / hole in floors /slabs and bringing the same in proper condition in cement concrete 1:2:4 mix complete as per specifications. including cost of cutting and making good the walls and floors after installation of P traps wherever required. a) 100mm inlet and 75mm outlet	each	400.12	16,884.87
15.004	MR 15.004	575	b) 100mm inlet and 100 mm outlet	each	561.22	3,22,871.51
15.005	MR 15.005	587	Supply, installation , testing & commissioning PVC saddle for connecting two or three inlet waste connection of 32/40 and 50mm nominal dia , including cutting and chasing as per approved specifications	each	532.93	3,13,041.99
15.006	MR 15.006	281	Supply, installation , testing & commissioning 100mm x 63 mm PVC waste reducing elbow including cutting chases, making holes in the floor / slab, restoring the same after installation complete as per approved specifications and connection to pvc pipes	each	264.41	74,167.62
15.007	MR 15.007	9	Supply, installation , testing & commissioning upvc floor/ceiling clean out plug with suitable inlet key for opening male threaded joint with UPVC pipe & socket. Including socketed joint complete as per approved specifications. a ) For 75 mm dia pipe	each	216.56	2,014.00
15.008	MR 15.008	168	b) For 110 mm dia pipe	each	311.80	52,413.88
15.009	MR 15.009	782	Supplying, installation , testing & commissioning of uPVC pipes and fittings ( For Internal drainage & roof drainage) confirming to IS 4985 for drain in wall / floor / open, pressure rating 6 kg/cm2 tested to IS 2556 (XIII), seals to traps as per IS 5329, including all accessories, breaking / chasing walls, making necessary holes in floor, walls etc. as per approved specifications and making good etc., Cement mortar encasing under floor within toilets. a ) 32 mm dia OD waste pipe.( 8kg/cm2)	metre	127.87	99,990.84
15.010	MR 15.010	279	b) 40 mm dia OD waste pipe.	metre	136.75	38,103.46
15.011	MR 15.011	430	c) 63 mm dia OD waste pipe.	metre	280.53	1,20,564.98
15.012	MR 15.012	6933	d) 110 mm dia OD waste pipe.	metre	693.07	48,05,287.53



Name of Work :- Development Of Permanent Campus Of Nu Rajgir.						
Subject :- Schedule-B Market Rate Items						12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount
15.013	MR 15.013	400	d) 160 mm dia OD waste pipe.	metre	1,497.68	5,99,073.01
15.014	MR 15.014	159	Providing, fixing, jointing, testing and commissioning centrifugally cast 150 mm Diameter C.I. pipe for soil, waste & vent pipes (For Kitchen Drainage in Hotels and dining hall) installation conforming to IS:3989 cut to required lengths including providing and fixing all necessary supports, fittings and specials such as Bends, junctions, offsets, access pieces (plain or door) & vent cowl. Fixing at wall/ceiling level supported by galvanized steel clamps & hangers etc. duly epoxy coated. Making proper connection with drip seal PJS joint of required depth as per manufacturer recommendation and as per approved specifications	metre	2,754.75	4,36,627.38
15.015	MR 15.015	159	Painting of Exposed CI pipes and fittings (after installation) of 150 mm dia with two coats of synthetic enamel paint of approved shade over a coat of primer, all as per pipe colour code including painting of legends with direction arrows as per the approval of Project Manager / consultant.	metre	66.73	10,576.44
15.016	MR 15.016	70	Providing and fixing in position CI full bore P / S trap (IS : 3989) of 150 mm dia for locations under slab including providing necessary galvanized steel support and as per Specification and duly epoxy coated. Making proper connection with drip seal joints, cutting chase / hole in floors / slabs and bringing the same in proper condition and shape after placing the trap in right position complete by supporting by GI clamps / hangers as required. 150x150 mm	each	2,399.33	1,67,713.40
15.017	MR 15.017	10	Providing and fixing Brass floor clean out plug comprising of GI pipe ( Medium duty), socket, elbow, extension piece caulked to pipe and cast brass plug with suitable inlet key for opening male threaded joint with GI class B pipe & socket. Including lead / drip seal caulked to CI pipes or CI class LA pipes complete as required. For 150 mm dia pipe	each	3,287.05	32,870.49
15.018	MR 15.018	576	Providing and fixing GI pipes ( Medium duty) conforming to IS 1239 Part 1 complete with GI fitting conforming to IS 1879 part I to X, complete with clamps, supports, fasteners, cutting in wall complete as required Internal work - Exposed on wall 80 mm dia. nominal bore	metre	1,042.60	6,00,017.74
15.019	MR 15.019	153	100 mm dia. nominal bore	metre	1,701.15	2,59,424.89
15.020	MR 15.020	550	150 mm dia. nominal bore	metre	2,361.13	12,98,622.91
15.021	MR 15.021	279	g) 65 mm nominal inner dia pipes ( Sch 80 )	metre	1,794.45	5,01,369.33
15.022	MR 15.022	32	h) 80 mm nominal inner dia pipes ( Sch 80)	metre	2,561.11	81,699.52
15.023	MR 15.023	1092	Supply, installation, testing & commissioning of Nitrile Rubber Insulation on Hot/ cold water having thermal conductivity .038 W/mok 0.212 BTU / (Hr-ft2-oF/inch) at an average temperature of 30oC ,temperature range of -40oC to 105oC,Density of material shall not be less than 0.06 gm/cm3, class O type, complete as per manufacturer recommendation a ) 15 mm nominal outer dia Pipes ( 9mm insulation thickness)	metre	43.00	46,943.06
15.024	MR 15.024	428	b)20 mm nominal outer dia Pipes ( 9mm insulation thickness)	metre	52.64	22,542.01
15.025	MR 15.025	430	c) 25 mm nominal outer dia Pipes ( 9mm insulation thickness)	metre	56.40	24,257.63
15.026	MR 15.026	233	d) 32 mm nominal outer dia Pipes ( 13mm insulation thickness)	metre	105.30	24,555.62
15.027	MR 15.027	44	e) 40 mm nominal outer dia Pipes ( 13mm insulation thickness)	metre	148.37	6,528.32
15.028	MR 15.028	138	f) 50 mm nominal outer dia Pipes ( 13mm insulation thickness)	metre	168.72	23,198.44
15.029	MR 15.029	33	g) 62.5 mm nominal outer dia Pipes ( 13mm insulation thickness)	metre	198.63	6,554.74
15.030	MR 15.030	1092	Providing and fixing proprietary polyshield outer mechanical protection over nitrile rubber insulation comprising of wrapping with poly glass tape helically wound and subsequently applying 2 coats of polyshield material (resin & hardener) as per manufacturers specification a ) 15 mm nominal outer dia Pipes	metre	28.80	31,441.64
15.031	MR 15.031	428	b)20 mm nominal outer dia Pipes	metre	34.53	14,788.65
15.032	MR 15.032	430	c) 25 mm nominal outer dia Pipes	metre	40.27	17,319.87
15.033	MR 15.033	233	d) 32 mm nominal outer dia Pipes	metre	48.28	11,258.34
15.034	MR 15.034	44	e) 40 mm nominal outer dia Pipes	metre	57.45	2,527.96
15.035	MR 15.035	138	f) 50 mm nominal outer dia Pipes	metre	68.90	9,474.16
15.036	MR 15.036	33	g) 65 mm nominal outer dia Pipes	metre	86.11	2,841.57

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.						
Subject :- Schedule-B Market Rate Items						12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount
15.037	MR 15.037	74	Supplying & fixing full way lever operated forged brass ball valve of brass body with forged brass hard chrome plated steel ball tested to a pressure not less than 25 Kg / sqcm with threaded joints complete with nuts, bolts, male threaded adaptor, washers union etc. a) 15 mm nominal dia	each	812.45	60,121.01
15.038	MR 15.038	330	b) 20 mm nominal dia	each	1,090.32	3,59,806.68
15.039	MR 15.039	192	c) 25 mm nominal dia	each	1,701.88	3,26,760.24
15.040	MR 15.040	97	d) 32 mm nominal dia	each	2,843.07	2,75,778.10
15.041	MR 15.041	37	e) 40 mm nominal dia	each	3,650.41	1,35,065.12
15.042	MR 15.042	28	f) 50 mm nominal dia	each	5,964.58	1,67,008.28
15.043	MR 15.043	25	Supply, Installation, Testing and commissioning of slim seal type C.I. Butterfly valve (Body : Grey Cast Iron, shaft : SS, Disc : SG Iron (Rilson coated), Liner : HT - EPDM) of approved make with PN 10 rating flange dimensions shall be confirming to IS 6392, washer, nuts & bolts. Rated to temperature of 85 Deg C and tested to a pressure not less than 15 Kg/Sq.cm. a) 65mm nominal dia	each	4,979.26	1,24,481.44
15.044	MR 15.044	15	b) 80mm nominal dia.	each	5,361.37	80,420.52
15.045	MR 15.045	4	c) 100mm nominal dia.	each	7,667.41	30,669.64
15.046	MR 15.046	10	c) 150mm nominal dia.	each	10,270.05	1,02,700.53
15.047	MR 15.047	65	Supply, installation , testing & commissioning Gun metal float valve with cast brass lever arm and plastic ball of adequate size confirming to IS 1703 of approved quality complete as per specifications and as directed by Engineer - in - Charge. a) 32 mm nominal dia	each	2,361.41	1,53,491.91
15.048	MR 15.048	65	b)40 mm nominal dia	each	3,155.88	2,05,132.20
<b>48</b>			<b>Subtotal of Internal Plumbing work</b>			<b>140,46,822.13</b>
	<b>16.0</b>		<b>EXTERNAL PLUMBING WORK</b>			
16.001	MR- 16.001 .	1515	Sewer Drainage - Providing and fixing of uPVC SDR pipes as Under ground Sewerage Pipes as per IS 15328-2003 for underground non pressure applications , placing in trench , jointing the pipes with solvent cement as per manufacturer's specifications complete as per specifications and as directed by the Engineer - in - Charge. Make of the pipe: Supreme/Finolex SN4 (SDR 41, Stiffness Class 4KN/m2). PCC for bedding, haunching or all round the pipe, excavation and backfilling shall be payable separately under relevant head, a) 160 mm nominal dia	metre	1,076.71	16,31,431.75
16.002	MR- 16.002 .	750	b) 200 mm nominal dia	metre	1,289.89	9,67,419.16
16.003	MR- 16.003 .	850	c) 250 mm nominal dia	metre	2,034.81	17,29,587.33
16.004	MR- 16.004 .	50	d) 315 mm nominal dia	metre	2,915.16	1,45,757.80
16.005	MR- 16.005 .	3	Constructing Desilting chamber ( roof water desilting) with coarse sand, aggregate & nelton mesh, chamber will be constructed ( as shown in drawing ) of brick work with bricks of class 75 with cement mortar 1:5 (1 cement:5 fine sand) plastering internal face with cement mortar 1:3 (1 cement: 3 fine sand and rough plaster on outer face with a floating coat of neat cement. R.C.C top slab with medium duty HD -20 SFRC manhole cover and frame of 600 mm dia. The weight of cover & frame not be less than182 Kg as per standard design. Including excavation, dewatering, refilling, watering, ramming and removing the surplus excavated material complete as per approved specifications and indicated tender drawing. (All sizes are clear internal sizes). a Size 2000 x 2000 x 1500 mm deep	each	23,166.21	69,498.64
16.006	MR- 16.006 .	20	Providing and fixing G.I. pipes B Class, confirming to IS 1239 Part 2 with G.I. fittings as per IS 1879 Part 1 to X , including painting of pipes, excavation up to 1m depth laying of pipes, backfilling complete as per specifications and directed by Engineer - in - Charge. Excavation, painting and backfilling shall be paid separately under relevant head External work a) 32 mm nominal inner dia Pipes	metre	492.18	9,843.55
16.007	MR- 16.007 .	20	b)40 mm nominal inner dia Pipes	metre	497.89	9,957.89
16.008	MR- 16.008 .	20	c)50 mm nominal inner dia Pipes	metre	678.93	13,578.58
16.009	MR- 16.009 .	20	d)65 mm nominal inner dia Pipes	metre	855.85	17,117.02

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
16.010	MR- 16.010 .	250	e)80 mm nominal inner dia Pipes	metre	1,042.60	2,60,650.63		
16.011	MR- 16.011 .	350	f)100 mm nominal inner dia Pipes	metre	1,701.15	5,95,401.38		
16.012	MR- 16.012 .	2280	g)150 mm nominal inner dia Pipes	metre	2,678.15	61,06,185.08		
16.013	MR- 16.013 .	350	f)100 mm nominal inner dia Pipes	metre	53.73	18,805.85		
16.014	MR- 16.014 .	2280	g)150 mm nominal inner dia Pipes	metre	66.97	1,52,696.37		
16.015	MR- 16.015 .	3	Constructing Grease Trap of size as mentioned below of 1200 liquid depth in brick work of class 75 with cement mortar (1:6), inside plastering 16 mm thick with cement mortar 1:3 with floating coat of neat cement and rough plaster on outside. Including aluminium bucket as per detail to collect the grease. RCC top slab with 2 nos. 600 x 600 mm dia medium duty hinged type cover with epoxy coating, double seal manhole covers with frame (weight of covers & weight of frame 75 Kg), necessary 150 mm thick foundation concrete (1:2:4). 2000mm x 1500mm as per detailed drawings and specifications.	Lot	59,584.95	1,78,754.85		
15			<b>Subtotal of External Plumbing work</b>					<b>119,06,685.85</b>
	<b>17.0</b>		<b>PUMPS,SWIMMING POOL, TREATMENT SYSTEM &amp; EQUIPMENTS</b>					
17.001	MR- 17.001 .	2	Hydro pneumatic Booster system for maintaining pressure in rooms - Domestic Water Supply Supply Installation , Testing & Commissioning of suitable hydro pneumatic system consisting of horizontal/vertical multistage centrifugal pump having stainless steel (SS304) impellers, shaft and housing, with single mechanical seal and pressurised tank of 100 Liter capacity, complete with all standard accessories including pressure switch, pressure gauges, non-return & isolating valves, with necessary protection and operational devices i.e. alternate pumping operation and shut-off during dry running conditions etc. with suitable electrical motor to be operated on 210/220 OR 400/440 volt 50 cycle AC supply, suitable for following duty parameters and with set of pumps - 2 nos.(1 working+1standby) complete with Control Unit Panel, manifolds & chassis, including fixing on foundation, complete as required. Construction of foundation and Foundation bolts shall be paid separately under relevant items. No. of Pumps per Set : 2 (1 Working + 1 Stand by ) Capacity : app 200 lpm per pump Head : app. 30 m	set	1,99,618.53	3,99,237.05		
17.002	MR- 17.002 .	1	STP ACADEMIC SPINE- Design , Construction, Testing and Commissioning of Sewage Treatment plant of 96 cum per day capacity including settler, Anaerobic baffle Reactor + Anaerobic Filter & plant gravel filter ( DEWAT Technology), and finishing pond. The cost shall be inclusive of design , submission and approval of drawings, testing and commissioning of complete system The work should be completed as specified in Technical specification.	Lot	76,22,128.00	76,22,128.00		
17.003	MR- 17.003 .	1	STP AMENITIES- Design , Construction, Testing and Commissioning of Sewage Treatment plant of 20 cum per day capacity including settler, Anaerobic baffle Reactor + Anaerobic Filter & plant gravel filter ( DEWAT Technology), and finishing pond. The cost shall be inclusive of design , submission and approval of drawings, testing and commissioning of complete system The work should be completed as specified in Technical specification.	Lot	32,24,800.00	32,24,800.00		
17.004	MR- 17.004 .	1	Sewage Water Transfer Pump- Submersible Centrifugal pump - Supply, installation , testing & commissioning compact monoblock dry motor submersible pumps for suitable rating, with non-clog free flow open impeller, suitable for operation on 415 volts + 5% -15%, 50 C/s , speed 960/1440R&M including oil chamber, guide wire for lifting & lowering of pump, M.S. galvanized lifting chain, duck foot bend with following specifications: (a) Set of Total 2 nos. of Pumps (Both operating in cyclic operation) with minimum solid handling capacity of 100 mm.(b) Necessary cables from pump set to control panel including termination as required (position of panel marked on enclosed drawings).-- 1 Set (b) Electrical switch panel having all necessary accessories & safety devices of standard specifications. (Panels with sump pumps near each sump as per site conditions). Panel shall be compatible for integration with Building Management / Automation system with adequate potential free contacts etc.--1 Set (c) Automatic water level controller with necessary length of cable up to control panel, complete as required a) Flow rate : 20m3/hr. Head : 15 Mts Solid Handling : 15-20 MM Location : Collection chamber to STP MOC : CI body; SS Impeller & Shaft	Set	2,25,700.30	2,25,700.30		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
17.005	MR- 17.005 .	1	b) Flow rate 30m3/hr. Head 15 M	Set	2,25,475.75	2,25,475.75		
17.006	MR- 17.006 .	1	Submersible Centrifugal pump - Supply, installation, testing and commissioning of continuous duty submersible centrifugal non-clogging drainage pumps complete with 3 phase motor with all necessary protection and mechanical seal etc. complete with all ancillaries including float type level controllers, electrical control panels fabricated from 14 gauge CRCA sheet volt meter ammeter with selector switch, TPMPCB, 5 VA CL : CTs, phase indicating lamps protected by 2 amp SP MCB, DOL starter, necessary wiring, cable alleys, earthing, interlocking, starter with Automatic float type level controller, provision of high level alarm, sequence timer, potential free contact to starter for connection to BAS, both pumps may run simultaneously at pre determined level. (1 Working + 1 Standby) - Flushing water Transfer from polishing pond a) Flow rate : 20m3/hr. Head : 15 Mts Solid Handling : 15-20 MM Location : Polishing Pond to transfer sewage to STP collection tank : MOC : CI body; SS Impeller & Shaft	Set	2,25,992.15	2,25,992.15		
17.007	MR- 17.007 .	1	b) Flow rate 30m3/hr. Head 15 M	Set	2,25,475.75	2,25,475.75		
17.008	MR- 17.008 .	2	Supply, installation , testing & commissioning vertical, inline multistage centrifugal pumping set with stainless steel SS-304 stage casing and SS-304 impellers with stainless steel shaft and suction & discharge casing as per IEC standards , connected to TEFC ventilated induction motor of 2 pole, 2900 RPM, suitable for 400/440 Volts, 3 phase, 50 Hz A.C. supply with pressure gauge and with gunmetal isolation cocks, vibration elimination pads etc. complete with base and frame, nuts and bolts and necessary RCC foundations as per requirement as per instructions and pump shall have following duty: No. of Pumps: 2(1Working + 1Stand by) Capacity : 25 m3/Hour each Head : 30Meters	Set	2,75,650.39	5,51,300.77		
17.009	MR- 17.009 .	1	SUMP PUMPS FOR BALANCING PONDS - Supply, installation , testing & commissioning compact monoblock dry motor submersible pumps for suitable rating, with non-clog free flow open impeller, suitable for operation on 415 volts + 5% -15%, 50 C/s , speed 960/1440R&M including oil chamber, guide wire for lifting & lowering of pump, M.S. galvanized lifting chain, duck foot bend with following specifications: (a) Total 2 nos. of Pumps (Both operating in cyclic operation) with minimum solid handling capacity of 46mm. (b) Necessary cables from pump set to control panel including termination as required (position of panel marked on enclosed drawings).-- 1 Set (c) Electrical switch panel having all necessary accessories & safety devices of standard specifications. (Panels with sump pumps near each sump as per site conditions). Panel shall be compatible for integration with Building Management / Automation system with adequate potential free contacts etc. --1 Set. (d) Automatic built-up water level controller with necessary length of cable up to control panel. Discharge - 20 cum/hr. Each Total head - 35 Meters Solid handling - 20-25mm MOC - COMPLETE SS -316 INLCUDING, BODY, SHAFT & IMPELLER (Complete set including all items as above)	Set	8,98,146.14	8,98,146.14		
17.010	MR- 17.010 .	1	Submersible Centrifugal pump - Supply, installation, testing and commissioning of continuous duty submersible centrifugal non-clogging drainage pumps complete with 3 phase motor with all necessary protection and mechanical seal etc. complete with all ancillaries including float type level controllers, electrical control panels fabricated from 14 gauge CRCA sheet volt meter ammeter with selector switch, TPMPCB, 5 VA CL : CTs, phase indicating lamps protected by 2 amp SP MCB, DOL starter, necessary wiring, cable alleys, earthing, interlocking, starter with Automatic float type level controller, provision of high level alarm, sequence timer, potential free contact to starter for connection to BAS, both pumps may run simultaneously at pre determined level. (2 Working + 1 Standby) - a) Flow rate : 10m3/hr. Head : 15 Mts Solid Handling : 15-20 MM Location : Amphitheatre : MOC : CI body; SS Impeller & Shaft	Set	1,53,515.87	1,53,515.87		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
17.011	MR- 17.011 .	1	Submersible Centrifugal pump - Supply, installation, testing and commissioning of continuous duty submersible centrifugal non-clogging sewage pumps complete with 3 phase motor with all necessary protection and mechanical seal etc. complete with all ancillaries including float type level controllers, electrical control panels fabricated from 14 gauge CRCA sheet volt meter ammeter with selector switch, TPMPCB, 5 VA CL : CTs, phase indicating lamps protected by 2 amp SP MCB, DOL starter, necessary wiring, cable alleys, earthing, interlocking, starter with Automatic float type level controller, provision of high level alarm, sequence timer, potential free contact to starter for connection to BAS, both pumps may run simultaneously at pre determined level. (1 Working + 1 Standby) - a) Flow rate : 40 LPM. Head : 15 Mts Solid Handling : 15-20 MM Location : Amphitheatre: MOC : CI body; SS Impeller & Shaft	Set	1,61,576.85	1,61,576.85		
17.012	MR- 17.012 .	310	Supply, installation , testing & commissioning M.S. puddle flanges fabricated of 750 mm long pipe pieces to R.C.C. water tanks wall / slab. The entire fitting shall be hot dipped galvanised (Flanges shall confirm to BS10 Table E) . a) 32 mm dia (Screwed ends MS plate 6 mm thick; 100 mm x 100 mm plus dia of pipe).	each	2,276.54	7,05,727.40		
17.013	MR- 17.013 .	310	b) 40 mm dia (Screwed ends MS plate 6 mm thick; 100 mm x 100 mm plus dia of pipe).	each	2,938.60	9,10,964.45		
17.014	MR- 17.014 .	6	c) 50 mm dia (Screwed ends MS plate 6 mm thick; 250 mm x 250 mm plus dia of pipe).	each	3,600.65	21,603.90		
17.015	MR- 17.015 .	10	d) 80 mm dia (Flanged ends MS plate 6 mm thick; 250 mm x 250 mm plus dia of pipe).	each	4,924.76	49,247.60		
17.016	MR- 17.016 .	10	e) 100 mm dia (Flanged ends MS plate 6 mm thick; 300 mm x 300 mm plus dia of pipe).	each	5,586.82	55,868.15		
17.017	MR- 17.017 .	10	f) 150 mm dia(Flanged ends MS plate 6 mm thick; 300 mm x 300 mm plus dia of pipe).	each	6,910.93	69,109.25		
17.018	MR- 17.018 .	4	g) 200 mm dia(Flanged ends MS plate 6 mm thick; 300 mm x 300 mm plus dia of pipe).	each	8,897.09	35,588.36		
17.019	MR- 17.019 .	11	Supply, installation , testing & commissioning dial type (100 mm) pressure gauge ( glycerine filled) with isolation ball valve suitable for working pressure of 250 PSI. Cost shall be inclusive of providing any short pieces, nipples, elbows etc. as per approved specifications.	each	2,276.54	25,041.94		
17.020	MR- 17.020 .	20	Supply, installation , testing & commissioning dial type (100 mm) pressure gauge ( glycerine filled) working range 0 to 5 kg/cm2 with isolation ball valve suitable for working pressure up to 80 PSI. Cost shall be inclusive of providing any short pieces, nipples, elbows etc. as per approved specifications.	each	2,276.54	45,530.80		
17.021	MR- 17.021 .	4	Supply, installation , testing & commissioning of brass Y strainer confirming to IS 778 , including cutting of pipe, jointing, complete as per approved specifications a) 25mm nominal dia	each	1,837.49	7,349.97		
17.022	MR- 17.022 .	4	b) 40mm nominal dia	each	2,555.70	10,222.81		
17.023	MR- 17.023 .	4	c) 50mm nominal dia	each	3,660.94	14,643.74		
23			<b>Subtotal of Pumps, Treatment System &amp; Equipment's</b>			<b>158,64,246.99</b>		
	<b>18.0</b>		<b>FIRE FIGHTING WORKS</b>					

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
18.001	MR- 18.001 .	1	<p>Fire Pump &amp; Equipment Supply, installation, testing and commissioning of electrically driven high pressure centrifugal fire hydrant pump, suitable for automatic operation consisting of the following:</p> <p>(a). Horizontal, split casing centrifugal pump, suitable for operation on 415 volts <math>\pm</math> 6%, 3 phase, 50 HZ AC supply. The installation shall be complete with flexible coupling and coupling guard as required. Fire pump shall have CI casing, CS diffusers, bronze impeller (hard finished and dynamically balanced) and SS (304) shaft with mechanical seal, capable for delivering 2280 LPM at outlet head of 80 mts to ensure a minimum pressure of 3.5 Kg/Sqcm at the farthest or topmost hydrant / sprinkler. The installation shall be complete with necessary pressure gauge with gun metal shut off cock on delivery side (The pump should be tested for bench make at factory and shall be gotten approved by the Local fire Authority). Pump shall be capable of furnishing not less than 150% of rated capacity at a head of not less than 65% of the rated head. The shut off head shall not exceed 120% of rated head.</p> <p>(b). Squirrel cage induction motor, TEFC type suitable for operation on 415 volts, 3 phase 50 HZ A.C supply, for the above pump with synchronous speed of 1450 RPM, conforming to IP 55 protection &amp; class F insulation. The motor shall conform to IS 325-1978 (up to date) with flexible coupling and coupling guard, complete as required.</p> <p>(c). The pump and motor shall be mounted on Common base plate made out of M.S. Channel for required size and painted with approved colour shade, fixed to RCC foundation complete with anti-vibration arrangement of cushy foot mountings. Suitable RCC foundation with cement concrete plaster (design and drawing to be provided by the Contractor), the construction of foundation along with foundation bolts will be paid separately under relevant items.</p>	each	3,64,566.97	3,64,566.97		
18.002	MR- 18.002 .	1	<p>Supply, installation, testing and commissioning of electrically driven high pressure centrifugal fire hydrant pump, suitable for automatic operation consisting of the following:</p> <p>(a). Horizontal, end suction/split casing centrifugal pump, suitable for operation on 415 volts <math>\pm</math> 6%, 3 phase, 50 HZ AC supply. The installation shall be complete with flexible coupling and coupling guard as required. Fire pump shall have CI casing, CS diffusers, bronze impeller (hard finished and dynamically balanced) and SS (304) shaft with mechanical seal, capable for delivering 1620 LPM at outlet head of 55 mts to ensure a minimum pressure of 3.5 Kg/Sqcm at the farthest or topmost hydrant / sprinkler. The installation shall be complete with necessary pressure gauge with gun metal shut off cock on delivery side (The pump should be tested for bench make at factory and shall be gotten approved by the Local fire Authority). Pump shall be capable of furnishing not less than 150% of rated capacity at a head of not less than 65% of the rated head. The shut off head shall not exceed 120% of rated head. (b). Squirrel cage induction motor, TEFC type suitable for operation on 415 volts, 3 phase 50 HZ A.C supply, for the above pump with synchronous speed of 1450 RPM, conforming to IP 55 protection &amp; class F insulation. The motor shall conform to IS 325-1978 (up to date) with flexible coupling and coupling guard, complete as required.</p> <p>(c). The pump and motor shall be mounted on Common base frame made out of M.S. Channel for required size and painted with approved colour shade, fixed to RCC foundation complete with anti-vibration arrangement of cushy foot mountings. Suitable RCC foundation with cement concrete plaster (design and drawing to be provided by the Contractor), the construction of foundation along with foundation bolts will be paid separately under relevant items.</p>	each	3,52,951.97	3,52,951.97		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
18.003	MR- 18.003 .	1	<p>Supply, installation, testing and commissioning of Diesel Engine driven fire pump suitable for automatic operation comprising of the following and conforming to BS 649/IS 10002 all amended up to date.</p> <p>(a). Horizontal, split casing centrifugal pump, suitable for operation on 415 volts <math>\pm</math> 6%, 3 phase, 50 HZ AC supply. The installation shall be complete with flexible coupling and coupling guard as required. Fire pump shall have CI casing, CS diffusers, bronze impeller (hard finished and dynamically balanced) and SS (304) shaft with mechanical seal, capable for delivering 2280 LPM at outlet head of 80 mts to ensure a minimum pressure of 3.5 Kg/Sqcm at the farthest or topmost hydrant / sprinkler. The installation shall be complete with necessary pressure gauge with gun metal shut off cock on delivery side (The pump should be tested for bench make at factory and shall be gotten approved by the Local fire Authority). Pump shall be capable of furnishing not less than 150% of rated capacity at a head of not less than 65% of the rated head. The shut off head shall not exceed 120% of rated head.</p> <p>(b). Heat exchanger cooled (secondary cooling) diesel engine of speed 1500 RPM suitable for the above pump with automatic starting mechanism and other accessories including fuel tank (fabricated from 3mm MS sheet, painted with two coats of synthetic enamel paint over a coat of primer) of adequate capacity to sustain pump operation for 8 hours continuous working. The tank shall be fitted with Magnetic oil level indicator, MH with cover, drain valve, air vent including structural supports (painted with approved shade), 2 Nos. x 12 volt battery, heat exchanger with necessary piping connections &amp; fittings, flexible coupling, coupling guard &amp; exhaust pipe connection complete as required.</p> <p>(c). The pump and motor shall be mounted on Common base frame made out of M.S. Channel for required size and painted with approved colour shade, fixed to RCC foundation complete with anti-vibration arrangement of cushy foot mountings. Suitable RCC foundation with cement concrete plaster (design and drawing to be provided by the Contractor), the construction of foundation along with foundation bolts will be paid separately under relevant items.</p>	each	6,16,338.36	6,16,338.36		
18.004	MR- 18.004 .	1	<p>Supply, installation, testing and commissioning of Diesel Engine driven fire pump suitable for automatic operation comprising of the following and conforming to BS 649/IS 10002 all amended up to date.</p> <p>(a). Horizontal , split casing/end suction centrifugal pump, suitable for operation on 415 volts <math>\pm</math> 6%, 3 phase, 50 HZ AC supply. The installation shall be complete with flexible coupling and coupling guard as required. Fire pump shall have CI casing, CS diffusers, bronze impeller (hard finished and dynamically balanced) and SS (304) shaft with mechanical seal, capable for delivering 1620 LPM at outlet head of 55 mts to ensure a minimum pressure of 3.5 Kg/Sqcm at the farthest or topmost hydrant / sprinkler. The installation shall be complete with necessary pressure gauge with gun metal shut off cock on delivery side (The pump should be tested for bench make at factory and shall be gotten approved by the Local fire Authority). Pump shall be capable of furnishing not less than 150% of rated capacity at a head of not less than 65% of the rated head. The shut off head shall not exceed 120% of rated head.</p> <p>(b). Heat exchanger cooled (secondary cooling) diesel engine of speed 1500 RPM suitable for the above pump with automatic starting mechanism and other accessories including fuel tank (fabricated from 3mm MS sheet, painted with two coats of synthetic enamel paint over a coat of primer) of capacity adequate to sustain pump operation for 8 hours continuous working. The tank shall be fitted with Magnetic oil level indicator, MH with cover, drain valve, air vent including structural supports (painted with approved shade), 2 Nos. x 12 volt battery, heat exchanger with necessary piping connections &amp; fittings, flexible coupling, coupling guard &amp; exhaust pipe connection complete as required.</p> <p>(c). Common base plate for (a) and (b) from M.S. channel of required sized. Suitable cement concrete foundation with plaster, (design and drawing to be provided by the Contractor while the foundation will be done by others) complete with antivibration arrangement of cushy foot mountings.</p>	each	7,12,510.56	7,12,510.56		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.						
Subject :- Schedule-B Market Rate Items						
						12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount
18.005	MR- 18.005 .	1	<p>Supply, installation, testing and commissioning of jockey pump (pressurisation pump) comprising of the following: (a). Vertical centrifugal pump, suitable for operation on 415 volts <math>\pm</math> 6%, 3 phase, 50 HZ A.C supply. The installation shall be complete with Flexible coupling and coupling guard, complete as required. The pump casing shall be CI, shaft shall be SS &amp; impeller/ shaft sleeve/casing wearing ring shall be bronze. The pump shall be provided with mechanical seal The system shall be complete with necessary pressure gauge with gun metal shut off cock on delivery side. (The pump should meet the condition and shall be gotten approved by the Local fire Authority).</p> <p>(b). Squirrel cage induction motor TEFC type for operation on 415 V, 3 phase 50 Hz AC supply for the above pump with a synchronous speed of 2900 RPM with flexible coupling and coupling guard etc. as required.</p> <p>(c). Common base plate for (a) and (b) from M.S. channel as required sized. Common base plate for (a) and (b) from M.S. channel of required sized. Suitable cement concrete foundation with plaster, (design and drawing to be provided by the Contractor while the foundation will be done by others) complete with antivibration arrangement of cushy foot mountings.</p> <p>For pump defined above &amp; of duty as follows : Flow : 180 LPM, Head : 80 mts</p>	each	85,018.32	85,018.32
18.006	MR- 18.006 .	1	<p>Supply, installation, testing and commissioning of jockey pump (pressurisation pump) comprising of the following: (a). Vertical centrifugal pump, suitable for operation on 415 volts <math>\pm</math> 6%, 3 phase, 50 HZ A.C supply. The installation shall be complete with Flexible coupling and coupling guard, complete as required. The pump casing shall be CI, shaft shall be SS &amp; impeller/ shaft sleeve/casing wearing ring shall be bronze. The pump shall be provided with mechanical seal The system shall be complete with necessary pressure gauge with gun metal shut off cock on delivery side. (The pump should meet the condition and shall be gotten approved by the Local fire Authority).</p> <p>(b). Squirrel cage induction motor TEFC type for operation on 415 V, 3 phase 50 Hz AC supply for the above pump with a synchronous speed of 2900 RPM with flexible coupling and coupling guard etc. as required.</p> <p>(c). Common base plate for (a) and (b) from M.S. channel as required sized. Common base plate for (a) and (b) from M.S. channel of required sized. Suitable cement concrete foundation with plaster, (design and drawing to be provided by the Contractor while the foundation will be done by others) complete with antivibration arrangement of cushy foot mountings.</p> <p>For pump defined above &amp; of duty as follows : Flow : 180 LPM, Head : 55 mts</p>	each	85,018.32	85,018.32
18.007	MR- 18.007 .	5	<p>Supply, installation, testing and commissioning of booster pump comprising of the following:</p> <p>(a). Horizontal mono-block centrifugal pump, suitable for operation on 415 volts <math>\pm</math> 6%, 3 phase, 50 HZ A.C supply. The pump casing shall be CI, shaft shall be CS &amp; impeller /shaft sleeve / casing wearing ring shall be bronze. The system shall be complete with necessary pressure gauge with gun metal shut off cock on delivery side. (The pump should meet the condition and shall be gotten approved by the Local fire Authority).</p> <p>(b). Squirrel cage induction motor TEFC type for operation on 415 V, 3 phase 50 HZ AC supply for the above pump with a synchronous speed of 2900 R.P.M. with flexible coupling and coupling guard etc. as required.</p> <p>(c). Common base plate for (a) and (b) from M.S. channel as required sized. Common base plate for (a) and (b) from M.S. channel of required sized. Suitable cement concrete foundation with plaster, (design and drawing to be provided by the Contractor while the foundation will be done by others) complete with antivibration arrangement of cushy foot mountings.</p> <p>For pump defined above &amp; of duty as follows : a) Flow :900 LPM Head : 30 mts</p>	each	53,521.92	2,67,609.60



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Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
18.008	MR- 18.008 .	11	Supply, installation , testing & commissioning of pressure switch for auto cut in & cut out of pump. The pressure switch shall decide maximum pressure at which the switch has to changeover , On-OFF differential, maximum/minimum changeover pressure . Pressure switch shall be mounted on pipe with electrical contact , connection from fire panel, Cost shall be inclusive of providing any short pieces, nipples, elbows etc. as per approved specifications.	each	5,617.59	61,793.54		
18.009	MR- 18.009 .	58	Supply, installation , testing & commissioning dial type (100 mm) pressure gauge ( glycerine filled) with isolation ball valve suitable for working pressure of 250 PSI. Cost shall be inclusive of providing any short pieces, nipples, elbows etc. as per approved specifications.	each	2,276.54	1,32,039.32		
18.010	MR- 18.010 .	156	Providing, laying, jointing, testing and commissioning of following sizes of pipes conforming to IS-1239 with all accessories like all fittings (standard MS fitting with welded joint shall be used on the pipes) including tees, elbows, reducers, union, flanges, rubber gaskets, GI nuts bolts, washer including supporting/fixing the pipe on floor / wall /ceiling with clamps, hangers (using anchor fasteners) as per specification. G.I. pipe sleeve of suitable higher size shall be provided and fixed wherever the pipes are crossing the walls/floors and sealing the sleeves with glass wool in between & fire sealant compound at either end all as directed by Engineer - in - Charge / mandatory requirements including cutting holes and chases in brick, RCC work and making good the same to original conditions complete in all respects. All hangers, clamps, brackets etc. shall be of galvanized iron unless specified otherwise and the supply of the same shall also be included in the quoted rates under this head. (Welding of any kind on the galvanized support / hanger shall not be permitted.) Synthetic enamel paint of approved shade over a coat of zinc primer will be applied as required by Engineer - in - Charge/mandatory requirement, without extra cost.. a) 25mm nominal dia.	metre	360.14	56,056.35		
18.011	MR- 18.011 .	373	b) 65 mm nominal dia	metre	868.77	3,23,966.18		
18.012	MR- 18.012 .	993	c) 80 mm nominal dia	metre	1,069.51	10,62,344.41		
18.013	MR- 18.013 .	125	d) 100 mm nominal dia	metre	1,480.49	1,85,060.98		
18.014	MR- 18.014 .	61	e) 150 mm nominal dia	metre	2,102.86	1,28,274.25		
18.015	MR- 18.015 .	10	f) 32 mm nominal dia	metre	490.25	4,657.38		
18.016	MR- 18.016 .	10	g) 40 mm nominal dia	metre	546.93	5,195.88		
18.017	MR- 18.017 .	15	h) 50 mm nominal dia	metre	714.97	10,724.58		
18.018	MR- 18.018 .	15	Providing, laying, jointing and testing in trenches the following sizes of MS class `C' (heavy class) pipes conforming to IS:1239 with accessories like fittings including tees, elbows, reducers, flanges, rubber gaskets, GI nuts, bolts and washers including excavation in all kind of soil, refilling, ramming, shoring, removing the excavated surplus material, providing adequate support to the pipe and making good the same complete as per approved specifications. Rate shall include for dewatering, if required, while excavation, laying of pipes and the wrapping coating operations are being executed. The pipe shall not be less than 1.0 m below ground level at any point. Pipes shall be embedded all around 150mm thick compacted silver sand. embedded MS pipes and fittings will be provided anti corrosion protection by applying pyp kote primer (@ 100 gm/sqm) and thereafter wrapping 4 mm thick pyp kote (AW 4 mm) protection coating by thermo fusion process. Overlap shall be maintained at 15 mm. The application process shall be strictly according to manufacturer's specification. a) 65mm nominal dia'	metre	915.79	13,736.80		
18.019	MR- 18.019 .	20	b) 80mm nominal dia	metre	1,074.05	21,480.94		
18.020	MR- 18.020 .	50	c) 100mm nominal dia	metre	1,503.66	75,182.99		
18.021	MR- 18.021 .	1240	d) 150mm nominal dia	metre	2,126.03	26,36,275.35		
18.022	MR- 18.022 .	78	Supply, installation , testing & commissioning forged brass ball valve with forged brass ball suitable for test pressure of not less than 15 kg / sq.cm of the 25mm nominal dia (Cost shall be inclusive of providing necessary union / flange connection).	each	1,176.48	91,765.25		
18.023	MR- 18.023 .	2	b) 40 mm nominal dia	each	1,838.53	3,677.07		
18.024	MR- 18.024 .	2	c) 50 mm nominal dia	each	2,368.18	4,736.35		
18.025	MR- 18.025 .	1	Providing and fixing inspectors test assembly complete with test valve, sight glass sectional drain valve, union with corrosion resistant orifice all complete strictly as per drawing. 50 mm dia	each	2,964.03	2,964.03		
18.026	MR- 18.026 .	33	Providing & fixing brass quartzoid sprinklers (UL approved) of 15 mm dia size, suitable for sustaining the pressure on the seat & water hammer effect. Spray recessed (adjustable) rossette (68 deg.C) sprinkler quick response (Pendant / Upright Type)	each	779.24	25,715.07		

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Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
18.027	MR- 18.027 .	113	Supply, installation , testing & commissioning swinging type First Aid hose reel in red colour drum with 36 mts long and 20 mm dia heavy duty 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 per approved specifications.	each	10,734.26	12,12,971.13		
18.028	MR- 18.028 .	113	Supply, installation , testing & commissioning standard fireman's axe with heavy rubber handle.	each	1,422.98	1,60,796.39		
18.029	MR- 18.029 .	41	Supply, installation , testing & commissioning GM fire hydrant single landing valve with 80 mm N.B. flanged inlet, brass spindle controlled 63 mm dia female instantaneous outlet type. GM coupling, blank cap, chain, twist release type lug & all accessories Conforming to IS standards. Including fixing with anchor fastener and flanged tapping from wet riser and providing pressure gauge with gun metal ball valve complete as required.	each	11,166.86	4,57,841.43		
18.030	MR- 18.030 .	41	Supply, installation , testing & commissioning GM 63 mm dia instantaneous pattern branch short pipe, 20 mm dia nozzle conforming to IS 903, suitable for inter connection to hose pipe coupling complete as required.	each	3,408.22	1,39,736.96		
18.031	MR- 18.031 .	82	Supply, installation , testing & commissioning non-percolating rubber reinforced lined fire hose pipe (as per IS : 8423) of 63 mm dia and length as described below. The hose shall be rated for burst pressure of 35.7 Kg/sqcm. Hose shall be complete with ISI marked brass male & female coupling (IS:903) bound & riveted to hose pipe with copper rivets & 1.5 mm copper wire (Location : Internal fire hydrant) 15 m length	each	7,206.76	5,90,954.24		
18.032	MR- 18.032 .	2	Supply, installation , testing & commissioning GM fire brigade connection (suction collecting head) consisting of 4 Nos. 63 mm dia instantaneous type male couplings with built-in check valves, 1 No. 150 mm dia butterfly, (1 No. 150 mm dia non-return valve) and 150 mm dia flanged outlet complete with bolts, nuts and rubber insertions as required and as per IS standards ( cost of butterfly valve and check valve shall be paid separately under relevant head)	each	56,201.80	1,12,403.60		
18.033	MR- 18.033 .	2	Supply, installation , testing & commissioning MS cabinet (to enclose above FB connection) fabricated from 16g MS sheet with full front glass door and locking arrangement duly painted with one coat of primer and two or more coats of synthetic enamel paint of approved make and shade and suitably mounted on a raised masonry platform as required (Approx. 0.6m x 0.6m x 0.45m)	each	7,290.18	14,580.36		
18.034	MR- 18.034 .	2	Supply, installation , testing & commissioning GM fire brigade suction hose coupling (draw-out connection) with nut for female coupling as per IS standards 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 tanks (1 Nos) (GI pipe to be paid separately through appropriate item while cost of foot valve to be included).	each	28,634.92	57,269.85		
18.035	MR- 18.035 .	37	Supply, installation , testing & commissioning MS cabinet (to enclose draw-out connection as per Item above) fabricated from 16 g MS sheet with full front glass door and locking arrangement duly painted with one coat of primer and two or more coats of synthetic enamel paint of approved make and shade and suitably mounted on a raised masonry platform as required (Approx. 0.6 m x 0.6 m x 0.45 m)	each	7,464.40	2,76,182.91		
18.036	MR- 18.036 .	5	Supply, installation , testing & commissioning of spring loaded relief commissioning of spring loaded relief valve suitable for pressure of 15 Kg / sqcm including flanges nuts bolt and washer etc. complete as required. 25 mm dia	each	3,295.05	16,475.27		
18.037	MR- 18.037 .	78	Fire duct Shutter fabricated out of M.S.sheet of 16swg and frame, door shall be 900mm x 1200 mm min. & fixed with 4 mm thick Glass, suitable Rubber beading and Locking arrangement. Quoted rate shall include all fasteners etc., and complete shutter shall be powder coated of approved colour both inside and out side etc., complete.	each	7,464.40	5,82,223.43		
18.038	MR- 18.038 .	2	Providing, fixing, testing and commissioning of precharged air vessel (size 450 mm dia & 2000 mm height) for pressurization of hydrant system complete with adequate pressure switches (as per design/requirement) with valves to operate as per operating sequences including 25 mm dia drain valve, air release valve with stop cock on the top, 25 mm dia inlet with isolating valve duly painted from inside and outside complete as required.	each	86,067.15	1,72,134.30		

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Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
18.039	MR- 18.039 .	10	Mechanical Foam type Fire Extinguisher. In HP Mild Steel Cylinders ISI marked TAC approved fitted with pressure indicating gauge, internal tube, squeeze lever type valve fully charged complete in all respects including wall suspension bracket / trolley mounted and conforming to IS:910 a) 50 Litres (trolley mounted)	each	21,633.33	2,16,333.32		
18.040	MR- 18.040 .	139	Supply, installation, testing and commissioning of following types of extinguisher with provision of wall bracket (fixed with anchor fastener).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 ( As approved by IS 15683)	each	6,135.51	8,52,835.56		
18.041	MR- 18.041 .	262	ISI marked (IS:15683) ABC Dry Powder fire of clean agent Fire extinguisher, flat base including valve, discharge hose and wall suspension bracket. - 6 Kgs	each	27,418.37	71,83,612.68		
18.042	MR- 18.042 .	18	ISI marked (IS:15683) ABC (Powder Type) Fire Extinguisher. In HP Mild Steel Cylinders ISI marked TAC approved fitted with pressure indicating gauge, internal tube, squeeze lever type valve fully charged with ABC powder (Mono Ammonium Phosphate) pressured by Nitrogen complete in all respects including wall suspension bracket and conforming to IS:1349-1993 6 Kgs	each	3,584.39	64,519.00		
18.043	MR- 18.043 .	12	ISI marked (IS:2878) Fire Extinguisher, Carbon-di-oxide type capacity 4.5 Kg. Flat base including valve, discharge hose of not less than 10 mm dia, 1M long and complete in all respects including initial fill with CO2 gas conforming to IS:307-1966 filled to a filling rate of not more than 0.667 and wall suspension bracket.	each	11,893.76	1,42,725.12		
18.044	MR- 18.044 .	60	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- Set of 6 Buckets/Stand.	set	5,082.72	3,04,963.44		
18.045	MR- 18.045 .	6	Supply, installation , testing & commissioning pre fabricated indoor type lockable hose 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 SS housing with front door.	each	7,968.96	47,813.75		
18.046	MR- 18.046 .	40	ELECTRICAL SYSTEM, INSTRUMENTATIONS & MCC CONTROLS FOR FIRE PROTECTION SYSTEM CABLES AND END TERMINATIONS Supply, Installation, Testing and Commissioning of following armoured cables from main panel to sub panels and from sub panels to final DBs. All the below mentioned cables shall be 1.1kV grade, XLPE insulated, FRLS type armoured cables of Al / Cu, whichever applicable with inner and outer PVC sheath. The said cables shall confirm IS 7098-1, BS 5467, IEC 60502-1, BS 7889 all supplementary. The rate shall include complete Supply, Installation, Testing and Commissioning rates including cost of fire retardant sealant all tools and accessories required to Complete the job in full respect. 4C X 16 sq.mm 2XWY	metre	1,083.94	43,357.56		
18.047	MR- 18.047 .	40	3C X 6 sq.mm 2XWY	metre	389.68	15,587.15		
18.048	MR- 18.048 .	100	4C X 25 sq.mm Cu. 2XWY	metre	2,771.48	2,77,147.84		
18.049	MR- 18.049 .	50	3.5C X 50 sq.mm Cu. 2XWY	metre	3,753.97	1,87,698.40		
18.050	MR- 18.050 .	200	2C X 2.5 sq.mm. 2XY for instrumentation	metre	161.66	32,332.04		

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Subject :- Schedule-B Market Rate Items								
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
18.051	MR- 18.051 .	4	Design, fabrication, assembling, wiring, supply, installation, testing and commissioning of motor control centre fabricated out of 14 gauge CRCA sheet steel in form in 3b formation with reinforcement of suitable size angle iron, channel 'T' sections irons and /or flats wherever necessary. MCC-1 for Fire Fighting equipment Incoming 63 amps TPN MCCB with the following accessories: a.) 0-500 volts 96 x 96 mm square voltmeter with selector switch protected by 2 amps TP MCB. 1 Set b.) Phase indicating lamps protected by 2 amp SP MCB 3 Sets Outgoings a.) 1 Nos. 32 amps TPN MPCB, 5.5 KW DOL starter, replay range 13.5 - 20.0 A with single phase preventer and outgoing feeder to terrace pump motor. The compartment shall contain CT operated ammeter of 0-63 amps and indicating lamps with MCBs for 'ON'/OFF'TRIP' status of pump motors. b.) Necessary cable alleys, internal wiring, and interlocking, earthing for all equipment shall also included. c.) Necessary cable alleys space for spare switches, internal wiring and copper earthing of all equipment shall also be included. All switch gears/control gears shall be motor duty rating. d) Complete Auto Start and stop of pumps at set pressure as per specifications Provision shall be made for providing potential free contacts to all pumps starters for connection to building automation system.	each	1,00,307.95	4,01,231.81		
18.052	MR- 18.052 .	1	Design, fabrication, assembling, wiring, supply, installation, testing and commissioning of motor control centre fabricated out of 14 gauge CRCA sheet steel in form in 3b formation with reinforcement of suitable size angle iron, channel 'T' sections irons and /or flats wherever necessary. MCC-1A for Fire Fighting equipment Incoming 63 amps TPN MCCB with the following accessories: a.) 0-500 volts 96 x 96 mm square voltmeter with selector switch protected by 2 amps TP MCB. 1 Set b.) Phase indicating lamps protected by 2 amp SP MCB 3 Sets Outgoings a.) 1 Nos. 63 amps TPN MPCB, 25 KW DOL starter, relay range 28-40 A with single phase preventer and outgoing feeder to terrace pump motor. The compartment shall contain CT operated ammeter of 0-63 amps and indicating lamps with MCBs for 'ON'/OFF'TRIP' status of pump motors. b.) 1 Nos. 5 amps TPN MPCB, 3 KW DOL starter, suitable relay range with single phase preventer and outgoing feeder to terrace pump motor. The compartment shall contain CT operated ammeter of 0-63 amps and indicating lamps with MCBs for 'ON'/OFF'TRIP' status of pump motors. d.) Necessary cable alleys, internal wiring, and interlocking, earthing for all equipment shall also included. e). Necessary cable alleys space for spare switches, internal wiring and copper earthing of all equipment shall also be included. All switch gears/control gears shall be motor duty rating. f) Complete Auto Start and stop of pumps at set pressure as per specifications Provision shall be made for providing potential free contacts to all pumps starters for connection to building automation system.	each	4,03,621.25	4,03,621.25		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.						
Subject :- Schedule-B Market Rate Items						12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount
18.053	MR- 18.053 .	1	Design, fabrication, assembling, wiring, supply, installation, testing and commissioning of motor control centre fabricated out of 14 gauge CRCA sheet steel in form in 3b formation with reinforcement of suitable size angle iron, channel 'T' sections irons and/or flats wherever necessary. Cable gland plates shall be provided on top as well as at the bottom of the panels. Panels shall be treated with all anticorrosive process before painting as per specifications with 2 coats of red oxide primer and final approved shade of powder coated paint. 2 Nos. earthing terminals shall be provided for 3 phase, 4 wire, 50 Hz supply system. Lifting hooks shall also be provided in case of large panels. Approval shall be taken for each panel before fabrication. Cadmium Plated hardware shall be used in fabrication of panels. Quoted rates shall inclusive of cables (in accordance to specification) with earthing from panel to each motor / equipment. MCC-2 for fire fighting Incoming a. 2 Nos. 125 amps 4 pole mechanical interlocked incoming MCCB complete with the following i. 0-500 volts 96 x 96mm square voltmeter with selector switch shall be protected by 2 amps TP MCB 1 Set ii. 0-125 amps 96 x 96 mm square ammeter and selector switch 1 Set iii. Phase indicating lamps shall be protected by 2 amps SP MCB 6 Sets b. Aluminium bus bar sleeves type, rated at 800 amps for three phase & neutral phase bus bar shall have maximum current density of 1 amps per sq.cm. and the neutral bus bar of not less than 50% capacity.	each	3,90,658.91	3,90,658.91
			Outgoing: a. 1 Nos. 100 amps TPN MCCB outgoing feeders with 75 KW DOL starters out going feeders to Hydrant pump motor. The compartment shall contain CT operated ammeter of 0-100 amps range with selector switch auto / manual selector switch and indicating lamp with MCBs for 'ON/OFF/TRIP' status of motor. b. 1 Nos. 25 amps TPN MCCB, 5.5 KW Direct online starter with single phase preventer and outgoing feeder to jockey pump and terrace pump motor. The compartment shall contain CT operated ammeter of 0-25 amps and indicating lamps with MCBs for 'ON/OFF/TRIP' status of pump motors. c. 1 No. 16 Amp Outgoing Feeder for Sump started panel c. Supply, installation , testing & commissioning 1 No. auto start panel activated with pressure switch for diesel engine complete with all accessories, batteries, battery charger of suitable rating, MCB timers, push buttons, microprocessor based alarm annunciator, wiring and cabling including connection to diesel engine complete as required ready for working. All MCCB's to be suitable for motor duty and shall be of 25 KA breaking capacity. MCC-2 as described above			
53			<b>Subtotal of Fire fighting work</b>			<b>216,87,668.53</b>
	<b>19.0</b>		<b>ELECTRICAL WORK</b>			

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Subject :- Schedule-B Market Rate Items						12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount
19.001			<p>General Notes :</p> <p>Chapter-1 Wiring (As per CPWD DSR 2014 E &amp; M)</p> <ol style="list-style-type: none"> <li>This section covers Items of Sub mains and point wiring for all internal areas.</li> <li>Switchboards, power plugs, switches for power plugs, GI Modular boxes and cover plates and its accessories are included in this chapter.</li> <li>GI box, sockets, cover plates for TV and telephone are included in this chapter.</li> <li>Point wiring for light/bell/fan/exhaust fan - wiring including termination from switch boxes to the point outlet including Concealed/surface conduits, the GI box, modular cover plate and switches are included in the rates of point wiring.</li> <li>Sub mains wiring includes wiring including termination from distribution boards to respective switchboards and power outlets for all internal areas. wiring for DB controlled light points are also considered in sub mains wiring.</li> <li>All tools and accessories required to complete the job in full respect and as per engineer in charge shall be included.</li> </ol> <p>Chapter-2 MCCBs, MCBs &amp; DBs:</p> <ol style="list-style-type: none"> <li>Items under this section covers Distribution boards considered for all internal and common areas.</li> <li>Switchgears used inside the distribution boards and its accessories are covered under this chapter.</li> <li>All internal wirings including neutral and earthing connections inside DB has to be fully completed.</li> <li>External earthing for DB is considered under earthing section and shall be paid under relevant items.</li> <li>Minimum Breaking capacity for all switchgears inside DB shall be 10kA with Ics=Icu.</li> </ol> <p>Chapter-3 Cables &amp; End terminations:</p> <ol style="list-style-type: none"> <li>Items under this section covers Armoured / Unarmoured / flexible AL/Cu. cables &amp; their end terminations from Substation to different feeder pillars , from feeder pillars to metering panels / Main LT Panel of different buildings and therefrom to different distribution boards and HVAC Panels.</li> <li>Armoured cables are to be laid on cable trays / underground as per relevant design drawing and specifications. All flexible cables shall be laid</li> </ol>			
19.002	MR 19.001	29872	Wiring of circuit / submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable inside existing metallic adaptable raceways as required. (a) 2 x 2.5 sq.mm. + 1 x 2.5 sq.mm. earth wire	Metre	86.92	25,96,315.40
19.003	MR 19.002	19184	(b) 2 x 4 sq.mm. + 1 x 4 sq.mm. earth wire	Metre	127.23	24,40,865.31
19.004	MR 19.003	1356	(c) 2 x 6 sq.mm. + 1 x 6 sq.mm. earth wire	Metre	186.04	2,52,275.11
19.005	MR 19.004	1426	Supplying and fixing shuttered type, UTP CAT6 compatible, RJ-45 data connectors suitable for fixing in existing 1M (75 mm x 75 mm) modular plate and complete as required.	Each	653.03	9,31,215.53
19.006	MR 19.005	1247	(c) : Universal 6/16 amp switch & socket outlet	Each	382.05	4,76,418.23
19.007	MR 19.006	59	(i): 25A switch & socket	Each	559.18	32,991.45
19.008	MR 19.007	14	(i): 32A switch	Each	383.45	5,368.34
19.009	MR 19.008	46	(n) : Supplying and fixing 32 amp, 240 Volts, SPN industrial type, splash proof , IP-67 for kitchen socket outlet with 2 pole and earth, metal enclosed plug top along with 32 amps "C curve", SP , MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for socket outlet and complete with connections , testing commissioning etc. as required.	Each	2,801.28	1,28,858.91
19.010	MR 19.009	34	(o) : Supplying and fixing 63 amp, 240 Volts, SPN industrial type, splashproof , IP-67 for kitchen socket outlet with 2 pole and earth, metal enclosed plug top along with 63 amps "C curve", SP , MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for socket outlet and complete with connections , testing commissioning etc. as required.	Each	5,600.59	1,90,420.00
19.011	MR 19.010	8	Supplying and fixing 40 amp, 415 Volts, TPN industrial type, IP 44 for kitchen socket outlet with 4 pole and earth, metal enclosed plug top along with 40 amps "C curve", TP , MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for socket outlet and complete with connections , testing commissioning etc. as required.	Each	6,109.28	48,874.25
19.012	MR 19.011	9	Supplying and fixing 63 amp, 415 Volts, waterproof TPN industrial type, IP 67 for kitchen socket outlet with 4 pole and earth, metal enclosed plug top along with 63 amps "C curve", TP , MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for socket outlet and complete with connections , testing commissioning etc. as required.	Each	7,290.58	65,615.23
19.013	MR 19.012	50	Supplying and fixing IP 66 rated adaptor with transparent flap suitable for any 3 modules switch/socket assembly complete with fixing, making drills , concealing etc. as required but excluding the cost of switch/socket.	Each	4,068.98	2,03,448.98
19.014	MR 19.013	43	Supply and installation of 3 Module pop-up type flush mounting boxes complete as required, but excluding switch, sockets.	Each	2,667.29	1,14,693.44

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Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.015	MR 19.014	109	Supply and installation of 4 Module pop-up type flush mounting boxes complete as required, but excluding switch, sockets.	Each	3,162.90	3,44,756.25		
19.016	MR 19.015	343	Supply and installation of 8 Module pop-up type flush mounting boxes complete as required , but excluding switch, sockets.	Each	6,758.97	23,18,326.23		
19.017	MR 19.016	95	Supply and installation of floor mounted Ega box for housing 2 x 6A switch socket, 1 x 6/16A switch socket, 1 x data & 1 TV / Telephone point boxes complete as required. The cost of switch socket and data and TV / Telephone point and their receptacles shall be paid separately under relevant items.	Each	7,692.79	7,30,815.45		
19.018	MR 19.017	11	Supply, Installation, Testing and Commissioning of following three phase and neutral (TPN), MS powder coated with thickness 1.6 mm, horizontal , double door (IP 43), recessed mounting type, MCB distribution boards complying to IS 8623:1977, IS 2675: 1983, IEC 439-3 and BS EN 60439-3 including all supplements. The distribution boards shall have protection against mechanical impact index of minimum IK08. Supplier should provide the testing certificate for Ingress protection and mechanical impact tested at third party location. outer door shall be hinged type, inner door shall be fixed up with screws with cut-outs for MCB operation, copper bus bar of 100 Amp rating, along with din bars, neutral bars, earth bars, lockable door arrangement including all internal connections as required. The board shall have adequate space for termination of incoming and outgoing cables, and also a separate space with proper partition of same material or better material and thickness as specified for distribution board , to accommodate a TV splitter and a 5 pair telephone terminal block, removable un drilled top & bottom gland plates, should be suitable for wall, column mounting type B. (a) 4 Way TPN DB with 12 modules for SP MCBs in outgoing ,2 modules per phase for RCCB, min 4 modules for placing incoming switchgear, space to accommodate a TV splitter and a 5 pair telephone terminal block complete with earth bar, neutral bars, din rails, connections but excluding the cost of switchgear	Each	2,647.32	29,120.55		
19.019	MR 19.018	70	(b) 6 Way TPN DB with 18 modules for SP MCBs in outgoing , 2 modules per phase for RCCB, min 4 modules for placing incoming MCB/RCDs, space to accommodate a TV splitter and a 5 pair telephone terminal block complete with earth bar, neutral bars, din rails, connections but excluding the cost of	Each	3,914.29	2,74,000.08		
19.020	MR 19.019	73	(c) 8 Way TPN DB with 24 modules for SP MCBs in outgoing , 2 modules per phase for RCCB, min 4 modules for placing incoming MCB/RCDs, space to accommodate a TV splitter and a 5 pair telephone terminal block complete with earth bar, neutral bars, din rails, connections but excluding the cost of MCCB/MCB/RCDs.	Each	4,801.02	3,50,474.64		
19.021	MR 19.020	66	(d) 12 Way TPN DB with 36 modules for SP MCBs in outgoing , 2 modules per phase for RCCB, min 4 modules for placing incoming MCB/RCDs, space to accommodate a TV splitter and a 5 pair telephone terminal block complete with earth bar, neutral bars, din rails, connections but excluding the cost of MCCB/MCB/RCDs.	Each	6,699.94	4,42,195.75		
19.022	MR 19.021	173	Supply, Installation, Testing and Commissioning of MCB distribution boards complying to IS 8623:1977, IS 2675: 1983, IEC 439-3 and BS EN 60439-3 including all supplements, MS powder coated with thickness 1.6 mm, horizontal , double door (IP 43), recessed mounting type, for following single phase and neutral (SPN) DB. The distribution boards shall have protection against mechanical impact index of minimum IK08. Supplier should provide the testing certificate for Ingress protection and mechanical impact tested at third party location. outer door shall be hinged type, inner door shall be fixed up with screws with cut-outs for MCB operation, copper bus bar of 100 Amp, along with din bars, neutral bars, earth bars, lockable door arrangement including all internal connections as required. The board shall have adequate space for termination of incoming and outgoing cables, and also a separate space with proper partition of same material specification as distribution board or better to accommodate a TV splitter and a 5 pair krone connector, removable un drilled top & bottom gland plates, should be suitable for wall, column mounting type B. (a) 6 Way SPN DB with 6 modules for SP MCBs in outgoing , 2 modules for placing incoming MCB/RCDs, space to accommodate a TV splitter and a 5 pair telephone terminal block complete with earth bar, neutral bars, din rails, connections but excluding the cost of MCCB/MCB/RCDs.	Each	1,736.17	3,00,357.92		
19.023	MR 19.022	60	(b) 8 Way SPN DB with 8 modules for SP MCBs in outgoing , 2 modules for placing incoming MCCB/MCB/RCDs, space to accommodate a TV splitter and a 5 pair telephone terminal block complete with earth bar, neutral bars, din rails, connections but excluding the cost of MCCB/MCB/RCDs.	Each	2,005.55	1,20,332.88		

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Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.024	MR 19.023	96	(c) 12 Way SPN DB with 12 modules for SP MCBs in outgoing , 2 modules for placing incoming MCCB/MCB/RCDs, space to accommodate a TV splitter and a 5 pair telephone terminal block complete with earth bar, neutral bars, din rails, connections but excluding the cost of MCCB/MCB/RCDs.	Each	2,260.43	2,17,001.05		
19.025	MR 19.024	24	Supply, Installation, Testing and Commissioning of MCB distribution boards complying to IS 8623:1977, IS 2675: 1983, IEC 439-3 and BS EN 60439-3 including all supplements , MS powder coated with thickness minimum 1.6 mm, horizontal , double door (IP 43), recessed mounting type, for following configuration vertical three phase and neutral (VTPN) DB . The vertical TPN DB shall be recessed mounted vertically with modules suitable to draw out both single phase and three phase outgoing. The distribution boards shall have protection against mechanical impact index of minimum IK08. Supplier should provide the testing certificate for Ingress protection and mechanical impact tested at third party location. outer door shall be hinged type, inner door shall be fixed up with screws with cut-outs for MCB operation, copper bus bar of 200 Amp. along with din bars, neutral bars, earth bars including all internal connections as required. The board shall have adequate space for termination of incoming and outgoing cables, and also a separate space with proper partition of same material specification as distribution board or better to accommodate a TV splitter and a 5 pair krone connector, removable un drilled top & bottom gland plates, should be suitable for wall, column mounting type B.  (a) 6 Way VTPN DB with 18 modules suitable for both SP and TP MCBs in outgoing , (min 4 modules for placing incoming MCB/RCDs, or required modules for MCCB) along with space to accommodate a TV splitter and a 5 pair telephone terminal block complete with earth bar, neutral bars, din rails, connections but excluding the cost of MCCB/MCB/RCDs.	Each	8,922.58	2,14,141.97		
19.026	MR 19.025	15	(b) 8 Way VTPN DB with 24 modules suitable for both SP and TP MCBs in outgoing , (min 4 modules for placing incoming MCB/RCDs, or required modules for MCCB) along with space to accommodate a TV splitter and a 5 pair telephone terminal block complete with earth bar, neutral bars, din rails, connections but excluding the cost of MCCB/MCB/RCDs.	Each	11,065.35	1,65,980.28		
19.027	MR 19.026	3	(c) 12 Way VTPN DB with 36 modules suitable for both SP and TP MCBs in outgoing , (min 4 modules for placing incoming MCB/RCDs, or required modules for MCCB) along with space to accommodate a TV splitter and a 5 pair telephone terminal block complete with earth bar, neutral bars, din rails, connections but excluding the cost of MCCB/MCB/RCDs.	Each	13,897.41	41,692.24		
19.028	MR 19.027	25	Supplying and fixing 40 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) Double pole	Each	885.64	22,141.08		
19.029	MR 19.028	71	(b) Triple pole	Each	1,373.18	97,495.94		
19.030	MR 19.029	103	(c) Four pole	Each	1,711.18	1,76,251.42		
19.031	MR 19.030	4	Supplying and fixing 63 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) Double pole	Each	885.64	3,542.57		
19.032	MR 19.031	92	(b) Four pole	Each	1,711.18	1,57,428.45		
19.033	MR 19.032	139	Supplying and fixing 32 amps rating, 415 volts, four pole, "C" curve, miniature circuit breaker suitable for inductive load in the existing MCB DB complete with connections, testing and commissioning etc. as required.	Each	1,127.82	1,56,766.42		
19.034	MR 19.033	169	Supplying and fixing following rating, 240 volts, double pole, "C" curve, residual current break over (RCBO) suitable for inductive load of following capacities in the existing MCB DB complete with connections, testing and commissioning etc. as required. (a) 25A, 30mA, 10 kA DP RCBO	Each	2,072.73	3,50,291.50		
19.035	MR 19.034	119	(b) 40A, 30mA, 10 kA DP RCBO	Each	3,127.84	3,72,212.65		



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Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.036	MR 19.035	5333	CHAPTER- 3 : CABLES AND END TERMINATIONS : Supply, Installation, Testing and Commissioning of following armoured / flexible / unarmoured cables. All the below mentioned cables shall be 1.1kV grade, XLPE insulated, FRLS type armoured cables of Al / Cu, with inner and outer PVC sheath. The said cables shall confirm IS 7098-1, BS 5467, IEC 60502-1, BS 7889 with all supplementary. The rate shall include complete cost of Supply, laying/installation, testing and commissioning including cost of conduits (wherever specified for flexible cables only), fire retardant sealant and all tools and accessories required to Complete the job in full respect. (a) 3.5C X 300 Sqmm A2XFY.	Metre	1,946.64	103,81,441.92		
19.037	MR 19.036	3879	(b) 3.5C X 240 Sqmm A2XFY.	Metre	1,804.62	70,00,102.60		
19.038	MR 19.037	1074	(c) 3.5C X 185 Sqmm A2XFY.	Metre	1,445.37	15,52,328.56		
19.039	MR 19.038	918	(d) 3.5C X 150 Sqmm A2XFY.	Metre	1,148.31	10,54,147.21		
19.040	MR 19.039	2055	(e) 3.5C X 120 Sqmm A2XFY.	Metre	974.53	20,02,668.58		
19.041	MR 19.040	1803	(f) 3.5C X 95 Sqmm A2XFY.	Metre	779.44	14,05,324.55		
19.042	MR 19.041	1153	(g) 3.5C X 70 Sqmm A2XFY.	Metre	633.23	7,30,117.39		
19.043	MR 19.042	684	(h) 3.5C X 50 Sqmm A2XFY.	Metre	475.33	3,25,127.39		
19.044	MR 19.043	741	(i) 3.5C X 35 Sqmm A2XFY.	Metre	367.12	2,72,037.11		
19.045	MR 19.044	29476	(j) 4C X 25 Sqmm A2XFY.	Metre	322.84	95,16,110.71		
19.046	MR 19.045	1408	(k) 4C X 16 Sqmm 2XWY.	Metre	1,083.94	15,26,186.15		
19.047	MR 19.046	1945	(l) 4C X 10 Sqmm 2XWY.	Metre	758.95	14,76,154.60		
19.048	MR 19.047	1629	(m) 4C X 6 Sqmm 2XWY.	Metre	494.95	8,06,266.53		
19.049	MR 19.048	904	(n) 4C X 4 Sqmm 2XWY.	Metre	361.27	3,26,591.20		
19.050	MR 19.049	1523	(o) 4C X 16 Sqmm Cu. YY (PVC flexible cable) in a 32 mm dia medium duty PVC conduit	Metre	641.20	9,76,553.91		
19.051	MR 19.050	2520	(p) 4C X 10 Sqmm Cu. YY (PVC flexible cable)in a 32 mm dia medium duty PVC conduit	Metre	455.73	11,48,449.43		
19.052	MR 19.051	2312	(q)4C X 6 Sqmm Cu. YY (PVC flexible cable) in a 32 mm dia medium duty PVC conduit	Metre	320.39	7,40,743.42		
19.053	MR 19.052	1928	(r)4C X 4 Sqmm Cu. YY (PVC flexible cable) in a 32 mm dia medium duty PVC conduit	Metre	257.73	4,96,907.08		
19.054	MR 19.053	5117	(s) 3C X 10 Sqmm 2XWY	Metre	593.53	30,37,087.76		
19.055	MR 19.054	1079	(t) 3C X 6 Sqmm 2XWY	Metre	389.68	4,20,463.42		
19.056	MR 19.055	1049	(u) 3C X 4 Sqmm 2XWY	Metre	288.59	3,02,730.03		
19.057	MR 19.056	1280	(v) 3C X 6 Sqmm Cu. YY (PVC flexible cable) in a 25 mm dia medium duty PVC conduit	Metre	248.91	3,18,604.66		
19.058	MR 19.057	11125	(w) 3C X 4 Sqmm Cu. YY (PVC flexible cable) in a 25 mm dia medium duty PVC conduit	Metre	202.96	22,57,930.58		
19.059	MR 19.058	120	(x) 3C X 2.5 Sqmm Cu. YY (PVC flexible cable) in a 25 mm dia dia medium duty PVC conduit	Metre	168.68	20,241.72		
19.060	MR 19.059	1090	(y) 1C X 70 Sqmm 2XY	Metre	1,060.98	11,56,472.52		
19.061	MR 19.060	66	(z) 1C X 120 Sqmm 2XY	Metre	1,781.58	1,17,584.33		
19.062	MR 19.061	1729	(aa) 1C X 35 Sqmm 2XY	Metre	550.09	9,51,097.82		
19.063	MR 19.062	573	Control Cables : (bb)2C x 2.5 sqmm cu. control cables	Metre	161.66	92,631.30		
19.064	MR 19.063	310	(cc)4C x 2.5 sqmm cu. control cables	Metre	244.46	75,782.42		
19.065	MR 19.064	3225	(dd) 6C x 2.5 sqmm cu. control cables	Metre	330.99	10,67,437.36		
19.066	MR 19.065	70	Supplying and making and termination with double compression brass gland and aluminium lugs for following size of PVC insulated and PVC sheathed /XLPE aluminium conductor cable of 1.1 KV grade of the following sizes as required (a)3.5 X 300 Sq mm (70mm)	Each	3,100.05	2,17,003.30		
19.067	MR 19.066	40	(b) 3.5C X 240 Sqmm (62mm).	Each	2,444.09	97,763.41		
19.068	MR 19.067	12	(c) 3.5C X 185 Sqmm (57mm).	Each	2,587.52	31,050.28		
19.069	MR 19.068	6	(d) 3.5C X 150 Sqmm (50mm).	Each	1,958.52	11,751.13		
19.070	MR 19.069	38	(e) 3.5C X 120 Sqmm (45mm).	Each	1,221.58	46,420.13		
19.071	MR 19.070	26	(f) 3.5C X 95 Sqmm (45mm).	Each	1,200.77	31,219.97		
19.072	MR 19.071	32	(g) 3.5C X 70 Sqmm (38mm).	Each	1,113.41	35,629.22		
19.073	MR 19.072	20	(h) 3.5C X 50 Sqmm (35mm).	Each	908.43	18,168.67		

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19.074	MR 19.073	30	(i) 3.5C X 35 Sqmm (32mm).	Each	808.31	24,249.25
19.075	MR 19.074	127	(j) 4C X 25 Sqmm (28mm).	Each	753.47	95,690.87
19.076	MR 19.075	50	Supplying and making and termination with double compression brass gland and copper lugs for following size of PVC insulated and PVC sheathed /XLPE copper conductor cable of 1.1 KV grade of the following sizes are required. (k) 4C X 16 Sqmm 2XWY.	Each	485.49	24,274.70
19.077	MR 19.076	88	(l) 4C X 10 Sqmm 2XWY.	Each	475.69	41,860.81
19.078	MR 19.077	92	(m) 4C X 6 Sqmm 2XWY.	Each	444.84	40,925.42
19.079	MR 19.078	38	(n) 4C X 4 Sqmm 2XWY.	Each	436.43	16,584.43
19.080	MR 19.079	82	(o) 4C X 16 Sqmm Cu. YY (PVC flexible cable) in a 32 mm dia medium duty PVC conduit	Each	485.49	39,810.51
19.081	MR 19.080	128	(p) 4C X 10 Sqmm Cu. YY (PVC flexible cable) in a 32 mm dia medium duty PVC conduit	Each	475.69	60,888.44
19.082	MR 19.081	126	(q) 4C X 6 Sqmm Cu. YY (PVC flexible cable) in a 32 mm dia medium duty PVC conduit	Each	444.84	56,050.03
19.083	MR 19.082	94	(r) 4C X 4 Sqmm Cu. YY (PVC flexible cable) in a 32 mm dia medium duty PVC conduit	Each	436.43	41,024.63
19.084	MR 19.083	124	(s) 3C X 10 Sqmm 2XWY	Each	467.91	58,020.71
19.085	MR 19.084	56	(t) 3C X 6 Sqmm 2XWY	Each	438.67	24,565.74
19.086	MR 19.085	68	(u) 3C X 4 Sqmm 2XWY	Each	432.37	29,400.96
19.087	MR 19.086	238	(v) 3C X 6 Sqmm Cu. YY (PVC flexible cable) in a 25 mm dia medium duty PVC conduit	Each	438.67	1,04,404.40
19.088	MR 19.087	546	(w) 3C X 4 Sqmm Cu. YY (PVC flexible cable) in a 25 mm dia medium duty PVC conduit	Each	432.37	2,36,072.39
19.089	MR 19.088	12	(x) 3C X 2.5 Sqmm Cu. YY (PVC flexible cable) in a 25 mm dia medium duty PVC conduit	Each	432.37	5,188.40
19.090	MR 19.089	62	(y) 1C X 70 Sqmm 2XY	Each	483.04	29,948.67
19.091	MR 19.090	12	(z) 1C X 120 Sqmm 2XY	Each	556.22	6,674.60
19.092	MR 19.091	150	(aa) 1C X 35 Sqmm 2XY	Each	388.87	58,329.94
19.093	MR 19.092	36	Control Cables : (bb) 2C x 2.5 sqmm cu. control cables	Each	379.18	13,650.54
19.094	MR 19.093	28	(cc) 4C x 2.5 sqmm cu. control cables	Each	328.12	9,187.42
19.095	MR 19.094	54	(dd) 6C x 2.5 sqmm cu. control cables	Each	336.25	18,157.64
19.096	MR 19.095	530	CHAPTER- 4 : CABLE TRAYS AND RACEWAYS : Supplying and installing following size of perforated hot dip galvanized G.I cable tray, with galvanizing thickness of 65 micron with perforations not more than 17.5%, in convenient sections, joined with connectors, suspended from ceiling with G.I suspenders including bolts and nuts, etc. as required. (a) 100 mm width x 50 mm depth x 1.6 mm thickness	Metre	344.93	1,82,815.22
19.097	MR 19.096	854	(b) 150 mm width x 50 mm depth x 1.6 mm thickness	Metre	384.63	3,28,279.39
19.098	MR 19.097	694	(C) 300 mm width x 50 mm depth x 1.6 mm thickness	Metre	539.87	3,74,671.75
19.099	MR 19.098	268	(d) 600 mm width x 50 mm depth x 2 mm thickness	Metre	1,022.44	2,73,503.12
19.100	MR 19.099	58	(e) 900 mm width x 62.5 mm depth x 2 mm thickness	Metre	1,437.50	83,375.13
19.101	MR 19.100	85	Supply and fixing of factory fabricated GI ladder type hot dip galvanised G.I cable trays, with radial bends, suspenders and supports as per specification and of the following sizes. (a) : 450 mm width X 50 mm depth X 2 mm thickness	Metre	517.74	44,007.50
19.102	MR 19.101	2557	Supply, Installation testing and commissioning of metallic adaptable raceway system, compartmentalised into two sections of required sizes as per drawing. of below mentioned sizes suitable for passing through walls and floors as per the layout ,suitable for FRLS wires confirming to IS:694 and extra low voltage cables for data /AV/telephone. The raceway shall be MS powder coated, have Z- section, hole with thread for cover screw, coupler plate, cover, junction box, fly cover , inspection box flushed to the finished floor at suitable distances etc. as required. The screw for cover fixing shall be counter sunk type. The cover shall have a thickness of 2mm.The cost shall also include the cost of bends couplers and any other supporting accessories. (a) : 50 mm x 40 mm x 1.6 mm	Metre	203.55	5,20,477.35
19.103	MR 19.102	818	(b) : 75 mm x 40 mm x 1.6 mm	Metre	247.25	2,02,250.50
19.104	MR 19.103	4843	(c) : 100 mm x 40 mm x 1.6 mm	Metre	373.18	18,07,099.94

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19.105	MR 19.104	1293	(d) : 150 mm x 40 mm x 1.6 mm	Metre	466.33	6,02,818.33		
19.106	MR 19.105	1412	(e) : 200 mm x 40 mm x 1.6 mm	Metre	561.78	7,93,338.66		
19.107	MR 19.106	2330	(f) : 300 mm x 40 mm x 2 mm	Metre	772.23	17,99,593.14		
19.108	MR 19.107	211	CHAPTER- 5 : EARTHING AND LIGHTNING PROTECTION Supply, installation, connections, testing & commissioning of 17.2 mm dia. rod of 3 meter length having copper bonding of 250 micron, along with 5 kg of maintenance free ground enhancing compound & shall comply as per IEEE 80:2000 Clause 14.5d with fused rod to tape clamp for interconnection of strip from earth pit to equipment.	Each	8,222.50	17,34,947.50		
19.109	MR 19.108	1640	Supplying and laying 32mm x 6 mm GI strip at at 0.50 metre below ground as strip earth electrode including connections / terminating with GI nut, bolts, spring, washer etc. as required (Joining shall be done by overlapping and with 2 set of G.I nut bolt and spring washer spaced at 50mm).	Metre	145.14	2,38,037.51		
19.110	MR 19.109	6	CHAPTER- 6 : UPS Design, supply, Installation testing and commissioning of following size and configuration IGBT based UPS system as per the said specifications with inbuilt isolation transformer as per kVA rating with a battery backup of 30 minutes. (12 volt battery comprising of 2 V cells) (a) 7.5kVA three phase input three phase output	Set	3,87,124.50	23,22,747.00		
19.111	MR 19.110	1	(b) 10kVA three phase input three phase output	Set	4,13,971.25	4,13,971.25		
19.112	MR 19.111	5	(c) 20kVA three phase input three phase output	Set	5,66,202.50	28,31,012.50		
19.113	MR 19.112	3	(d) 60kVA three phase input three phase output	Set	12,77,247.50	38,31,742.50		
19.114	MR 19.113	2	(f) 5kVA single phase input single phase output	Set	2,00,847.50	4,01,695.00		
19.115	MR 19.114	2	(g) 5kVA Three phase input three phase output	Set	3,51,572.25	7,03,144.50		
19.116	MR 19.115	135	CHAPTER- 7 : CIVIL AND MISC WORKS Providing all materials and constructing required clear sized cable trench as per detailed drawings including necessary excavation, 230 mm thick rubble soling, 100 mm thick PCC 1:4:8, RCC M25 base slab and Walls and precast RCC cover 100 mm mm thick as per drawing, inclusive of necessary Formwork and Reinforcement complete as directed by Engineer - in Charge. (a) 1.5 M Wide x 1 M Depth	Rmt.	19,944.53	26,92,511.33		
19.117	MR 19.116	450	(b) 1.2 M Wide x 1 M Depth	Rmt.	18,105.97	81,47,684.39		
19.118	MR 19.117	1193	(c) 1.0 M Wide x 1 M Depth	Rmt.	16,880.26	201,38,146.15		
19.119	MR 19.118	290	(d) 0.8M Wide x 1 M Depth	Rmt.	15,654.55	45,39,818.90		
19.120	MR 19.119	120	(e) 0.6 M Wide x 1 M Depth	Rmt.	14,428.84	17,31,460.71		
19.121	MR 19.120	136	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 : Inside size 90x90 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	Nos.	13,728.34	18,63,621.82		
19.122	MR 19.121	6310	Supplying and laying of following size flexible high density polyethylene (HDPE) corrugated pipes along with water tight joints at a depth of 450 mm from ground level. 100mm thick PCC all around the pipes , excavation, refilling of the trenches shall be paid separately under relevant items. (a) 100 mm diameter	Metre	308.97	19,49,577.42		
19.123	MR 19.122	580	(b) 300 mm diameter	Metre	460.58	2,67,134.60		

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Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.124	MR 19.123	115	Providing & laying of following 100mm dia PVC pipe (medium duty Sleeve) including chasing, coupler / socket, and sealing of both ends in an approved manner complete as required. 100mm thick PCC all around the pipes , excavation, refilling of the trenches shall be paid separately under relevant items.		682.82	78,524.82		
19.125	MR 19.124	277	Supply & Erection of metallic pole of following length over existing foundation with required foundation bolts along with loop in loop out fibre boxes made up of 1.6 mm thick fibre (300mm x 300mm) suitable for Al armoured cable complete with 50A aluminium bus bar inside the box. The box shall have lockable doors made up of fibre. The poles shall be octagonal made up of 3mm thick MS complete with base plates, nut and bolts and bracket arm suitable for mounting the selected fixture etc. complete as required. Cost of foundation and foundation bolts will be paid separately under relevant items. (a) Above 4.5 metre and up to 6.5 metre Base plate size : 200mm x 200mm x 12mm Top dia :70mm Bottom dia : 130mm single sided bracket arm suitable for fixture to be mounted.	Each	8,329.00	23,07,133.73		
19.126	MR 19.125	784	(b) Above 6.5 metre and up to 8 metre. Base plate size : 225mm x 225mm x 16mm Top dia :70mm Bottom dia : 135mm single sided bracket arm suitable for fixture to be mounted.	Each	15,654.30	122,72,968.72		
19.127	MR 19.126	8	(c) Above 8 metre and up to 10 metre. Base plate size : 275mm x 275mm x 16mm Top dia :70mm Bottom dia : 175mm single sided bracket arm suitable for fixture to be mounted.	Each	19,988.61	1,59,908.85		
19.128	MR 19.127	217	Providing & fixing in position 1000 mm wide , Electrical Insulating Rubber Mats as per IS 15652:2006, 2 mm thick, suitable up to 1.1 KV , fire retardant, no effect of acids, alkalis and transformer oils, moisture proof, high tensile strength and texture finish / cloth impression (Anti slip , marking on top)	Each	1,500.00	3,25,500.00		
19.129	MR 19.128	45	Supply & fixing in position approved shock treatment chart written in English Hindi and Local language. These charts shall be framed in wooden frame & covered with clear glass	Each	123.04	5,536.93		
19.130	MR 19.129	23	Supply of Tool & First Aid Box with all necessary tools for maintenance of electrical installation & First aid.	Each	575.21	13,229.94		
19.131	MR 19.130	25	(a1) 1x12W Underwater Light	Each	120.84	3,020.94		
19.132	MR 19.131	733	(d1) 65W LED Pole Mounted Light (IP65) (12M Pole)	Each	151.05	1,10,717.45		
19.133	MR 19.132	824	(e1) 45W LED Post Top Light (IP65)	Each	135.94	1,12,016.46		
19.134	MR 19.133	1207	(o) Supplying Ceiling Fan 1200mm sweep complete with capacitor starting assembly, stiff pendent for hanging and wiring from connector / ceiling rose to fan complete with good finish and well painted from factory.	Each	1,864.08	22,49,943.19		
19.135	MR 19.134	93	(o) Supplying Wall Fan complete with all accessories suitable for wall hanging and wiring from connector / ceiling rose to fan complete with good finish and well painted from factory.	Each	1,788.34	1,66,315.63		
19.136	MR 19.135	110	(p) Supplying installation testing and commissioning of hotel key card switch complete with its 230V single pole and latching realy. The relay and switch shall be 230V,50HZ, ac actuated to be connected before Main incomer to control the power supply of the room through key card complete with a bypass arrangement to by-pass the supply in case the key tag fails. The switch shall be compatible with any key fobe. The cost of key fobe is exclusive	Each	9,328.75	10,26,162.43		
19.137	MR 19.136	110	(q) Supplying installation testing and commissioning of 2 Gang Full-Flat Switch with Illuminated "Do not Disturb" & "Please Clean Up" Symbols complete with wiring , fixing and connections as required.	Each	3,208.14	3,52,895.57		

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Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.138	MR 19.137	2	<p>CHAPTER- 9 : LT PANELS, SWITCHGEARS AND METERS : All LT Panels shall be Type Tested Assembly -TTA Panels.            Design , fabrication, wiring, Supply, Installation, Testing and Commissioning of following Wall mounted / Floor mounted(including base stand), 415V,3PH, 50Hz extensible and fully compartmentalized panels complying to IS 8623/93. The indoor panels shall be IP 42 and outdoor panels shall be IP 66 type. The Panel shall have proper space with required clearance for cables, incoming / outgoing switchgear, CTs, PTs, Ammeter, Voltmeter, selector switches, Phase wise indicating lamps, and shall be Insulated and properly supported compartmentalized bus bars with heat shrinkable sleeves along with the other control circuit accessories within the panel and any other electrical component mentioned in the Panel SLD. The panel shall be fabricated out of CRCA sheet not less than 2.0 mm thick for load bearing members and 1.6mm for the doors of LT panel. The Panel shall undergo seven tank pre treatment process comprising of degreasing, rinsing, de-rusting, rinsing, phosphatising, rinsing and passivation followed by powder coat painting having a paint thickness of 60 microns or as specified. The Panel shall be Dust/Vermin proof with earth studs as per the SLD and specifications</p> <p>Feeder Pillar - 01 (Outdoor Type)            Incomer : 1 Nos. x 63A, 16kA, FP MCCB            1 Nos Astronomical switch            Bus bar : 150A Al bus bar            Outgoing : 9Nos x 16A , 10 kA, FP, MCB</p>	Set	1,95,196.40	3,90,392.80		
19.139	MR 19.138	1	<p>MLTP ACAD (Indoor Type)            Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.            R,Y,B LED indication lamp with 2A control MCB.            0-500V Analogue type voltmeter with selector switch.            2500 Amp, FP, 36kA, EDO type ACB along with 1 No. ACB trolley            4 x 2500/5A, CL-1, 15VA CTs            3 x 2500/5A, CL-5P10, 15VA CTs            Relay module with overvoltage and over/under frequency protection available.            Load Manager with RS-485 and two DI/DO ports.            Bus bar: 3000A, FP, 36kA, Al bus bar.            Outgoings : 1 x ( 1000 Amp, FP, 36kA, EDO type ACB with 4Nos. 1000/5A, CL-1            3 x ( 800 Amp, 36kA, FP, MCCB with 3 x 800/5A,CL-1, 15VA CTs and 0-800A,500V Multifunction meter with inbuilt selector switch ).            1 x ( 630 Amp, 36kA, FP, MCCB with 3 x 600/5A,CL-1, 15VA CTs and 0-600A,500V, Multifunction meter with inbuilt selector switch ).            2 x ( 400 Amp, 36kA, FP, MCCB with 3 x 400/5A,CL-1, 15VA CTs and 0-400A,500V, Multifunction meter with inbuilt selector switch ).            3 x ( 200 Amp, 36kA, FP, MCCB with 3 x 200/5A,CL-1, 15VA CTs and 0-200A,500V, Multifunction meter with inbuilt selector switch ).            3 x ( 160 Amp, 36kA, FP, MCCB with 3 x 160/5A,CL-1, 15VA CTs and 0-160A,500V, Multifunction meter with inbuilt selector switch ).            1 x 2500 Amp, FP, 36kA, EDO type ACB</p>	Set	21,72,120.00	21,72,120.00		

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Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.140	MR 19.139	1	<p>PHE Panel ACAD Zone (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  400 Amp, 36kA, FP, MCCB  3 x 400/5A,CL-1, 15VA CTs.  0-400A,500V, Multifunction meter with inbuilt selector switch.  Bus bar: 600A, FP, 36kA, Al bus bar.  Outgoings :  2 x ( 200 Amp, 36kA, FP, MCCB with 3 x 200/5A,CL-1, 15VA CTs and 0-200A,500V Multifunction meter with inbuilt selector switch ).  2 x ( 100 Amp, 36kA, FP, MCCB with 3 x 100/5A,CL-1, 15VA CTs and 0-100A,500V Multifunction meter with inbuilt selector switch ).  4 x ( 63 Amp, 36kA, FP, MCCB with 3 x 60/5A,CL-1, 10VA CTs and 0-60A,500V, Multifunction meter with inbuilt selector switch ).  1 x 400 Amp, 36kA, FP, MCCB</p>	Set	3,79,500.00	3,79,500.00		
19.141	MR 19.140	1	<p>L&amp;P Panel-1-ACAD (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  800 Amp, 36kA, FP, MCCB  3 x 800/5A, CL-1, 15VA CTs  0-800A,500V, Multifunction meter with inbuilt selector switch  Bus bar: 1000A, FP, 36kA, Al bus bar.  Outgoings : 2 x ( 400 Amp, 36kA, FP, MCCB with 3 x 400/5A,CL-1, 15VA CTs and 0-400A,500V Multifunction meter with inbuilt selector switch ).  2 x ( 250 Amp, 36kA, FP, MCCB with 3 x 200/5A,CL-1, 15VA CTs and 0-200A,500V, Multifunction meter with inbuilt selector switch ).  2 x ( 100 Amp, 36kA, FP, MCCB with 3 x 100/5A,CL-1, 10VA CTs and 0-100A,500V, Multifunction meter with inbuilt selector switch ).  1 x 800 Amp, 36kA, FP, MCCB</p>	Set	7,81,770.00	7,81,770.00		
19.142	MR 19.141	1	<p>L&amp;P Panel-2-ACAD (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  1000 Amp, 36kA, FP, EDO Type ACB  1 x ( 1000 Amp, FP, 36kA, EDO type ACB with 4Nos. 1000/5A, CL-1, 15VA CTs &amp; 3 Nos. 1000/5A, CL-5P10, 15VA CTs  Relay module with overvoltage and over/under frequency protection available.  0-1000A,500V, Multifunction meter with inbuilt selector switch  Bus bar: 1200A, FP, 36kA, Al bus bar.  Outgoings : 2 x ( 630 Amp, 36kA, FP, MCCB with 3 x 600/5A,CL-1, 15VA CTs and 0-600A,500V Multifunction meter with inbuilt selector switch ).  3 x ( 320 Amp, 36kA, FP, MCCB with 3 x 320/5A,CL-1, 15VA CTs and 0-320A,500V, Multifunction meter with inbuilt selector switch ).  4 x ( 100 Amp, 36kA, FP, MCCB with 3 x 100/5A,CL-1, 10VA CTs and 0-100A,500V, Multifunction meter with inbuilt selector switch ).</p>	Set	8,35,130.00	8,35,130.00		

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Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.143	MR 19.142	1	Sub Distribution Panel-1A-00-ACAD (Indoor Type) Incomer : R,Y,B LED indication lamp with 2A control MCB. 0-500V Analogue type voltmeter with selector switch. 250 Amp, 25kA, FP, MCCB 3 x 250/5A, CL-1, 15VA CTs 0-250A,500V, Multifunction meter with inbuilt selector switch Bus bar: 300A, FP, 25kA, Al bus bar. Outgoings : 2 x ( 160 Amp, 25kA, TPN, MCCB with 3 x 125/5A,CL-1, 15VA CTs and 0-125A,500V Multifunction meter with inbuilt selector switch ). 2 x 63A, 10kA,"C Curve" TPN MCB. 7 x 40A, 10kA,"C Curve" TPN MCB. 9 x 16-25A , 10kA,"C Curve" DP MCB. 1 x 16 A , 10kA,"C Curve" TPN MCB. 1 x 250 Amp, 25kA, FP, MCCB	Set	3,79,845.00	3,79,845.00		
19.144	MR 19.143	1	Sub Distribution Panel-1B-00-ACAD (Indoor Type) Incomer : R,Y,B LED indication lamp with 2A control MCB. 0-500V Analogue type voltmeter with selector switch. 400 Amp, 25kA, FP, MCCB 3 x 400/5A, CL-1, 15VA CTs 0-200A,500V, Multifunction meter with inbuilt selector switch Bus bar: 600A, FP, 25kA, Al bus bar. Outgoings : 6 x 63A , 10kA,"C Curve" TPN MCB. 2 x 40A , 10kA,"C Curve" TPN MCB. 3 x 25A , 10kA,"C Curve" TPN MCB. 3 x 16A , 10kA,"C Curve" TPN MCB. 1 x 400 Amp, 25kA, FP, MCCB	Set	1,87,378.70	1,87,378.70		
19.145	MR 19.144	1	Sub Distribution Panel-1D-00-ACAD (Indoor Type) Incomer : R,Y,B LED indication lamp with 2A control MCB. 0-500V Analogue type voltmeter with selector switch. 400 Amp, 25kA, FP, MCCB 3 x 400/5A, CL-1, 15VA CTs 0-200A,500V, Multifunction meter with inbuilt selector switch Bus bar: 600A, FP, 25kA, Al bus bar. Outgoings : 5 x ( 125Amp, 25kA, TPN, MCCB with 3 x 125/5A,CL-1, 15VA CTs and 0-125A,500V Multifunction meter with inbuilt selector switch ). 4 x 63A , 10kA,"C Curve" TPN MCB. 2 x 40A , 10kA,"C Curve" TPN MCB. 4 x 25A , 10kA,"C Curve" TPN MCB. 1 x 400 Amp, 25kA, FP, MCCB	Set	1,84,079.35	1,84,079.35		

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Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.146	MR 19.145	1	Sub Distribution Panel-1E-00-ACAD (Indoor Type) Incomer : R,Y,B LED indication lamp with 2A control MCB. 0-500V Analogue type voltmeter with selector switch. 320 Amp, 25kA, FP, MCCB 3 x 320/5A, CL-1, 15VA CTs 0-320A,500V, Multifunction meter with inbuilt selector switch Bus bar: 500A, FP, 25kA, Al bus bar. Outgoings: 1 x ( 200 Amp, 25kA, FP, MCCB with 3 x 200/5A, CL-1, 15VA CTs and 0-200A,500V Multifunction meter with inbuilt selector switch ). 2 x ( 100 Amp, 25kA, FP, MCCB with 3 x 100/5A,CL-1, 15VA CTs and 0-100A,500V, Multifunction meter with inbuilt selector switch ). 9 x 40A , 10kA,"C Curve" TPN MCB. 9 x 25A , 10kA,"C Curve" DP MCB. 1 x 320 Amp, 25kA, FP, MCCB	Set	4,15,725.00	4,15,725.00		
19.147	MR 19.146	1	UPS output panel-1-ACAD (Indoor Type) Incomer : 3 x R,Y,B LED indication lamp with 2A control MCB. 3 x 0-500V Analogue type voltmeter with selector switch. 3 x 250 Amp, 36kA, FP, MCCB 9 x 250/5A, CL-1, 15VA CTs 3 x (0-250A,500V, Multifunction meter with inbuilt selector switch) Bus bar: 500A, FP, 36kA, Cu. bus bar. Outgoings: 2 x ( 200 Amp, 36kA, FP, MCCB with 3 x 200/5A,CL-1, 15VA CTs and 0-200A,500V Multifunction meter with inbuilt selector switch ). 2 x 63A , 10kA,"D Curve" TPN MCB. 3 x 16A , 10kA,"D Curve" TPN MCB. 10 x 25A , 10kA,"D Curve" TPN MCB.	Set	3,81,363.00	3,81,363.00		
19.148	MR 19.147	1	UPS output panel-2-ACAD (Indoor Type) Incomer : 1 x R,Y,B LED indication lamp with 2A control MCB. 1 x 0-500V Analogue type voltmeter with selector switch. 1 x 200 Amp, 36kA, FP, MCCB 3 x 200/5A, CL-1, 15VA CTs 3 x (0-200A,500V, Multifunction meter with inbuilt selector switch) Bus bar: 400A, FP, 36kA, Cu. bus bar. Outgoings : 3 x ( 100 Amp, 36kA, FP, MCCB with 3 x 100/5A,CL-1, 10VA CTs and 0-100A,500V Multifunction meter with inbuilt selector switch ). 6 x 63A , 10kA,"D Curve" TPN MCB.	Set	1,22,360.00	1,22,360.00		



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Subject :- Schedule-B Market Rate Items						12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount
19.149	MR 19.148	1	<p>APFC-ACAD (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  630 Amp, 36kA, TP, MCCB  3 x 600/5A, CL-1, 15VA CTs  0-600A,500V, Multifunction meter with inbuilt selector switch  12 Stage APFC relay  Bus bar: 1000A, FP, 36kA, Al bus bar.  Outgoings :  5 x (125 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 50kVAR capacitor)  (rated at 480V with min 63.78 kVAR @ 480V)  4 x (63 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 25kVAR capacitor)  (rated at 480V with min 31.89 kVAR @ 480V)  3 x (32 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 10kVAR capacitor)  (rated at 480V with min 12.76 kVAR @ 480V)  1 x (32 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 5kVAR capacitor)  (rated at 480V with min 6.38 kVAR @ 480V)</p>	Set	13,96,790.00	13,96,790.00
19.150	MR 19.149	1	<p>MLTP - CC (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  250 Amp, FP, 36kA,MCCB  4 x 250/5A, CL-1, 15VA CTs  3 x 250/5A, CL-5P10, 15VA CTs  Relay module with overvoltage and over/under frequency protection available.  Load Manager with RS-485 and two DI/DO ports.  Bus bar: 400A, FP, 36kA, Al bus bar.  Outgoings : 1 x ( 160 Amp, 36kA, TP, MCCB with 3 x 800/5A,CL-1, 15VA CTs and 0-800A,500V Multifunction meter with inbuilt selector switch ).  2 x ( 63 Amp, 36kA, FP, MCCB with 3 x 60/5A,CL-1, 10VA CTs and 0-60A,500V, Multifunction meter with inbuilt selector switch ).  2 x ( 125 Amp, 36kA, FP, MCCB with 3 x 125/5A,CL-1, 15VA CTs and 0-125A,500V, Multifunction meter with inbuilt selector switch ).  5 x ( 100 Amp, 36kA, FP, MCCB with 3 x 100/5A,CL-1, 15VA CTs and 0-100A,500V, Multifunction meter with inbuilt selector switch ).  250 Amp, FP, 36kA,MCCB</p>	Set	9,00,362.60	9,00,362.60

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Subject :- Schedule-B Market Rate Items						12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount
19.151	MR 19.150	1	UPS output panel-CC (Indoor Type) Incomer : 2 x R,Y,B LED indication lamp with 2A control MCB. 2 x 0-500V Analogue type voltmeter with selector switch. 2 x 100 Amp, 36kA, FP, MCCB 6 x 100/5A, CL-1, 15VA CTs 2 x (0-100A,500V, Multifunction meter with inbuilt selector switch) Bus bar: 150A, FP, 36kA, Al bus bar. Outgoings : 3 x 63A , 10kA,"D Curve" FP MCB. 3 x 32A , 10kA,"D Curve" DP MCB.	Set	1,73,522.35	1,73,522.35
19.152	MR 19.151	1	APFC-CC (Indoor Type) Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter. R,Y,B LED indication lamp with 2A control MCB. 0-500V Analogue type voltmeter with selector switch. 160 Amp, 36kA, TP, MCCB 3 x 160/5A, CL-1, 15VA CTs 0-160A,500V, Multifunction meter with inbuilt selector switch 6 Stage APFC relay Bus bar: 300A, FP, 36kA, Al bus bar. Outgoings : 2 x (63 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 15kVAr capacitor) (rated at 480V with min 19.13 kVAr @ 480V) 2 x (32 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 10kVAr capacitor) (rated at 480V with min 12.76 kVAr @ 480V) 1 x (32 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 5kVAr capacitor) (rated at 480V with min 6.38 kVAr @ 480V)	Set	4,38,725.00	4,38,725.00
19.153	MR 19.152	1	MLTP ADMIN (Indoor Type) Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter. R,Y,B LED indication lamp with 2A control MCB. 0-500V Analogue type voltmeter with selector switch. 800 Amp, FP, 36kA, EDO type ACB 4 x 800/5A, CL-1, 15VA CTs 3 x 800/5A, CL-5P10, 15VA CTs Relay module with overvoltage and over/under frequency protection available. Load Manager with RS-485 and two DI/DO ports. Bus bar: 1200A, FP, 36kA, Al bus bar. Outgoings : 1 x ( 400 Amp, 36kA, FP, MCCB with 3 x 400/5A,CL-1, 15VA CTs and 0-400A,500V, Multifunction meter with inbuilt selector switch ). 4 x ( 250 Amp, 36kA, FP, MCCB with 3 x 250/5A,CL-1, 15VA CTs and 0-250A,500V, Multifunction meter with inbuilt selector switch ). 4 x ( 125 Amp, 36kA, FP, MCCB with 3 x 125/5A,CL-1, 15VA CTs and 0-125A,500V, Multifunction meter with inbuilt selector switch ). 3 x ( 100 Amp, 36kA, FP, MCCB with 3 x 100/5A,CL-1, 15VA CTs and 0-100A,500V, Multifunction meter with inbuilt selector switch ). 1 x 800 Amp, FP, 36kA, MCCB	Set	14,19,560.00	14,19,560.00

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Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.154	MR 19.153	1	<p>APFC-ADMIN (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  400 Amp, 36kA, TP, MCCB  3 x 400/5A, CL-1, 15VA CTs  0-400A,500V, Multifunction meter with inbuilt selector switch  8 Stage APFC relay  Bus bar: 600A, FP, 36kA, Al bus bar.  Outgoings :  4 x (125 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 50kVAR capacitor)  (rated at 480V with min 63.78 kVAR @ 480V)  2 x (63 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 25kVAR capacitor)  (rated at 480V with min 31.89 kVAR @ 480V)  2 x (32 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 10kVAR capacitor)  (rated at 480V with min 12.76 kVAR @ 480V)  1 x (32 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 5kVAR capacitor)  (rated at 480V with min 6.38 kVAR @ 480V)</p>	Set	10,40,520.00	10,40,520.00		
19.155	MR 19.154	1	<p>L&amp;P Panel-1-ADMIN (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  125 Amp, 36kA, FP, MCCB  3 x 125/5A, CL-1, 15VA CTs  0-125A,500V, Multifunction meter with inbuilt selector switch  Bus bar: 250A, FP, 36kA, Al bus bar.  Outgoings :  2 x ( 100 Amp, 36kA, FP, MCCB with 3 x 100/5A,CL-1, 15VA CTs and 0-100A,500V, Multifunction meter with inbuilt selector switch ).  5 x ( 63 Amp, 36kA, FP, MCCB with 3 x 60/5A,CL-1, 15VA CTs and 0-60A,500V, Multifunction meter with inbuilt selector switch ).  1 x 125 Amp, 36kA, FP, MCCB</p>	Set	5,62,695.00	5,62,695.00		
19.156	MR 19.155	1	<p>L&amp;P Panel-2-ADMIN (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  250 Amp, 36kA, FP, MCCB  3 x 250/5A, CL-1, 15VA CTs  0-250A,500V, Multifunction meter with inbuilt selector switch  Bus bar: 400A, FP, 36kA, Al bus bar.  Outgoings :  3 x ( 100 Amp, 36kA, FP, MCCB with 3 x 100/5A,CL-1, 15VA CTs and 0-100A,500V, Multifunction meter with inbuilt selector switch ).  7 x ( 63 Amp, 36kA, FP, MCCB with 3 x 60/5A,CL-1, 15VA CTs and 0-60A,500V, Multifunction meter with inbuilt selector switch ).  1 x 250 Amp, 36kA, FP, MCCB</p>	Set	7,87,175.00	7,87,175.00		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.157	MR 19.156	2	UPS output panel-Admin (Indoor Type) Incomer : 3 x R,Y,B LED indication lamp with 2A control MCB. 3 x 0-500V Analogue type voltmeter with selector switch. 3 x 100 Amp, 36kA, FP, MCCB 9 x 100/5A, CL-1, 15VA CTs 3 x (0-100A,500V, Multifunction meter with inbuilt selector switch) Bus bar: 150A, FP, 36kA, Al bus bar. Outgoings : 2 x 63A , 10kA, "D Curve" FP MCB. 8 x 40A , 10kA, "D Curve" FP MCB.	Set	2,40,271.80	4,80,543.60		
19.158	MR 19.157	2	MLTP-IC (Indoor Types) Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter. R,Y,B LED indication lamp with 2A control MCB. 0-500V Analogue type voltmeter with selector switch. 630 Amp, 25kA, FP, MCCB 4 x 630/5A, CL-1, 15VA CTs 3 x 600/5A, CL-5P10, 15VA CTs Relay module with overvoltage and over/under frequency protection available. Load Manager with RS-485 and two DI/DO ports. Bus bar: 800A, FP, 36kA, Al bus bar. Outgoings : 2 x ( 400 Amp, 25kA, FP, MCCB with 3 x 400/5A,CL-1, 15VA CTs and 0-400A,500V Multifunction meter with inbuilt selector switch ). 1 x ( 200 Amp, 25kA, FP, MCCB with 3 x 200/5A,CL-1, 15VA CTs and 0-6200A,500V, Multifunction meter with inbuilt selector switch ). 6 x ( 100 Amp, 25kA, FP, MCCB with 3 x 100/5A,CL-1, 15VA CTs and 0-100A,500V, Multifunction meter with inbuilt selector switch ). 3 x ( 63 Amp, 25kA, FP, MCCB with 3 x 60/5A,CL-1, 10VA CTs and 0-60A,500V, Multifunction meter with inbuilt selector switch ) 2 x ( 40 Amp, 25kA, FP, MCCB with 3 x 40/5A,CL-1, 10VA CTs and 0-40A,500V, Multifunction meter with inbuilt selector switch ). 0-500V Analogue type voltmeter with selector switch. 630 Amp, 25kA, FP, MCCB	Set	11,67,586.95	23,35,173.90		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.						
Subject :- Schedule-B Market Rate Items						12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount
19.159	MR 19.158	1	<p>APFC-IC (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  200 Amp, 36kA, TP, MCCB  3 x 200/5A, CL-1, 15VA CTs  0-600A,500V, Multifunction meter with inbuilt selector switch  6 Stage APFC relay  Bus bar: 300A, FP, 36kA, Al bus bar.  Outgoings :  1 x (125 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 50kVAR capacitor)  (rated at 480V with min 63.78 kVAR @ 480V)  1 x (63 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 25kVAR capacitor)  (rated at 480V with min 31.89 kVAR @ 480V)  2 x (32 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 10kVAR capacitor)  (rated at 480V with min 12.76 kVAR @ 480V)  1 x (32 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 5kVAR capacitor)  (rated at 480V with min 6.38 kVAR @ 480V)</p>	Set	5,29,460.00	5,29,460.00
19.160	MR 19.159	1	<p>Room Panel-IC (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  100 Amp, 25kA, FP, MCCB  3 x 100/5A, CL-1, 10VA CTs  0-100A,500V, Multifunction meter with inbuilt selector switch  Bus bar: 200A, FP, 36kA, Al bus bar.  Outgoings :  9 x 63A , 10kA,"C Curve" 4P MCB.  100 Amp, 25kA, FP, MCCB</p>	Set	2,19,995.00	2,19,995.00
19.161	MR 19.160	1	<p>UPS output panel-IC (Indoor Type)  Incomer :  2 x R,Y,B LED indication lamp with 2A control MCB.  2 x 0-500V Analogue type voltmeter with selector switch.  2 x 40 Amp, 10kA, FP, MCCB  6 x 40/5A, CL-1, 10VA CTs  2 x (0-100A,500V, Multifunction meter with inbuilt selector switch)  Bus bar: 150A, FP, 36kA, Al bus bar.  Outgoings :  10 x 40A , 10kA,"D Curve" DP MCB.</p>	Set	1,65,604.60	1,65,604.60

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.162	MR 19.161	1	<p>Common Area Panel-I.C (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  100 Amp, 36kA, FP, MCCB  3 x 100/5A, CL-1, 15VA CTs  0-100A,500V, Multifunction meter with inbuilt selector switch  Bus bar: 200A, FP, 36kA, Al bus bar.  Outgoings :  4 x 63A , 10kA,"C Curve" 4P MCB.  7 x 40A , 10kA,"C Curve" 4P MCB.  12 x 32A , 10kA,"C Curve" 4P MCB.  4 x 16A , 10kA,"C Curve" DP MCB.</p>	Set	1,89,866.15	1,89,866.15		
19.163	MR 19.162	1	<p>MLTP-C.I. (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  630 Amp, 36kA, FP, MCCB  3 x 600/5A, CL-1, 15VA CTs  0-600A,500V, Multifunction meter with inbuilt selector switch  Bus bar: 800A, FP, 36kA, Al bus bar.  Outgoings : 2 x 400 Amp, 36kA, FP, MCCB with 3 x 400/5A,CL-1, 15VA CTs and 0-400A,500V Multifunction meter with inbuilt selector switch ).  3 x ( 200 Amp, 36kA, FP, MCCB with 3 x 250/5A,CL-1, 15VA CTs and 0-200A,500V, Multifunction meter with inbuilt selector switch ).  3 x ( 125 Amp, 36kA, FP, MCCB with 3 x 125/5A,CL-1, 15VA CTs and 0-125A,500V, Multifunction meter with inbuilt selector switch ).  3 x ( 63 Amp, 36kA, FP, MCCB with 3 x 60/5A,CL-1, 15VA CTs and 0-60A,500V, Multifunction meter with inbuilt selector switch ).  3 x ( 40 Amp, 36kA, FP, MCCB with 3 x 60/5A,CL-1, 15VA CTs and 0-40A,500V, Multifunction meter with inbuilt selector switch ).  630 Amp, 36kA, FP, MCCB</p>	Set	11,24,010.00	11,24,010.00		
19.164	MR 19.163	1	<p>Room Panel-C.I (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  200 Amp, 36kA, FP, MCCB  3 x 200/5A, CL-1, 15VA CTs  0-200A,500V, Multifunction meter with inbuilt selector switch  Bus bar: 300A, FP, 36kA, Al bus bar.  Outgoings :  12 x 63A , 10kA,"C Curve" 4P MCB.  200 Amp, 36kA, FP, MCCB</p>	Set	2,25,647.25	2,25,647.25		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.165	MR 19.164	1	<p>Common Area Panel-C.I (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  125 Amp, 36kA, FP, MCCB  3 x 125/5A, CL-1, 15VA CTs  0-125A,500V, Multifunction meter with inbuilt selector switch  Bus bar: 200A, FP, 36kA, Al bus bar.  Outgoings :  4 x 63A , 10kA,"C Curve" 4P MCB.  2 x 40A , 10kA,"C Curve" 4P MCB.  12 x 32A , 10kA,"C Curve" 4P MCB.  3 x 32A , 10kA,"C Curve" DP MCB.  5 x 16A , 10kA,"C Curve" DP MCB.  125 Amp, 36kA, FP, MCCB</p>	Set	2,28,923.60	2,28,923.60		
19.166	MR 19.165	1	<p>UPS output panel-C.I (Indoor Type)  Incomer :  1 x R,Y,B LED indication lamp with 2A control MCB.  1 x 0-500V Analogue type voltmeter with selector switch.  2 x 40 Amp, 25kA, FP, MCCB  1 x 40/5A, CL-1, 10VA CTs  3 x (0-40A,500V, Multifunction meter with inbuilt selector switch)  Bus bar: 100 A, FP, 36kA, Cu. bus bar.  Outgoings :  15 x 32A , 10kA,"D Curve" TPN MCB.</p>	Set	1,27,062.35	1,27,062.35		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.167	MR 19.166	1	APFC-CI (Indoor Type) Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter. R,Y,B LED indication lamp with 2A control MCB. 0-500V Analogue type voltmeter with selector switch. 200 Amp, 36kA, TP, MCCB 3 x 200/5A, CL-1, 15VA CTs 0-600A,500V, Multifunction meter with inbuilt selector switch 6 Stage APFC relay Bus bar: 300A, FP, 36kA, Al bus bar. Outgoings : 1 x (125 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 50kVAr capacitor) (rated at 480V with min 63.78 kVAr @ 480V) 1 x (63 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 25kVAr capacitor) (rated at 480V with min 31.89 kVAr @ 480V) 1 x (63 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 15kVAr capacitor) (rated at 480V with min 19.13 kVAr @ 480V) 1 x (32 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 10kVAr capacitor) (rated at 480V with min 12.76 kVAr @ 480V) 1 x (32 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 5kVAr capacitor) (rated at 480V with min 6.38 kVAr @480V)	Set	5,35,440.00	5,35,440.00		
19.168	MR 19.167	3	KITCHEN Panel-I.C & C.I. (Indoor Type) Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter. R,Y,B LED indication lamp with 2A control MCB. 0-500V Analogue type voltmeter with selector switch. 400 Amp, 36kA, FP, MCCB 3 x 400/5A, CL-1, 15VA CTs 0-400A,500V, Multifunction meter with inbuilt selector switch Bus bar: 600A, FP, 36kA, Al bus bar. Outgoings : 4 x ( 100 Amp, 36kA, FP, MCCB with 3 x 100/5A,CL-1, 10VA CTs and 0-100A,500V Multifunction meter with inbuilt selector switch ). 4 x 63A , 10kA,"C Curve" 4P MCB. 3 x 40A , 10kA,"C Curve" 4P MCB. 4 x 32A , 10kA,"C Curve" 4P MCB. 3 x 25A , 10kA,"C Curve" 4P MCB. 16 x 32A , 10kA,"C Curve" DP MCB. 400 Amp, 36kA, FP, MCCB	Set	2,81,457.90	8,44,373.70		



Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.169	MR 19.168	1	<p>MLTP-SCH (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  250 Amp, 36kA, FP, MCCB  3 x 250/5A, CL-1, 15VA CTs  0-250A,500V, Multifunction meter with inbuilt selector switch  Bus bar: 400A, FP, 36kA, Al bus bar.  Outgoings : 3 x 160 Amp, 36kA, FP, MCCB with 3 x 160/5A,CL-1, 15VA CTs and 0-160A,500V Multifunction meter with inbuilt selector switch ).  2 x ( 125 Amp, 36kA, FP, MCCB with 3 x 125/5A,CL-1, 15VA CTs and 0-125A,500V, Multifunction meter with inbuilt selector switch ).  3 x ( 125 Amp, 36kA, FP, MCCB with 3 x 125/5A,CL-1, 15VA CTs and 0-125A,500V, Multifunction meter with inbuilt selector switch ).  1 x ( 63 Amp, 36kA, FP, MCCB with 3 x 60/5A,CL-1, 15VA CTs and 0-60A,500V, Multifunction meter with inbuilt selector switch ).  2 x ( 40 Amp, 36kA, FP, MCCB with 3 x 60/5A,CL-1, 15VA CTs and 0-40A,500V, Multifunction meter with inbuilt selector switch ).  250 Amp, 36kA, FP, MCCB</p>	Set	8,63,765.00	8,63,765.00		
19.170	MR 19.169	2	<p>APFC-SCH (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  125 Amp, 36kA, TP, MCCB  3 x 125/5A, CL-1, 15VA CTs  0-125A,500V, Multifunction meter with inbuilt selector switch  6 Stage APFC relay  Bus bar: 200A, FP, 36kA, Al bus bar.  Outgoings :  1 x (63 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 25kVAr capacitor)  (rated at 480V with min 31.89 kVAr @ 480V)  2 x (63 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 15kVAr capacitor)  (rated at 480V with min 19.13 kVAr @ 480V)  1 x (32 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 10kVAr capacitor)  (rated at 480V with min 12.76 kVAr @ 480V)  1 x (32 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 5kVAr capacitor)  (rated at 480V with min 6.38 kVAr @ 480V)</p>	Set	5,06,000.00	10,12,000.00		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.171	MR 19.170	2	L&P Panel-SCH (Indoor Type) Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter. R,Y,B LED indication lamp with 2A control MCB. 0-500V Analogue type voltmeter with selector switch. 160 Amp, 36kA, FP, MCCB 3 x 160/5A, CL-1, 15VA CTs 0-160A,500V, Multifunction meter with inbuilt selector switch Bus bar: 200A, FP, 36kA, Al bus bar. Outgoings : 5 x ( 100 Amp, 36kA, FP, MCCB with 3 x 100/5A,CL-1, 15VA CTs and 0-100A,500V, Multifunction meter with inbuilt selector switch ). 4 x 63A , 10kA,"C Curve" 4P MCB. 1 x 160 Amp, 36kA, FP, MCCB	Set	4,52,410.00	9,04,820.00		
19.172	MR 19.171	1	UPS output panel-SCH (Indoor Type) Incomer : 1 x R,Y,B LED indication lamp with 2A control MCB. 1 x 0-500V Analogue type voltmeter with selector switch. 2 x 40 Amp, 25kA, FP, MCCB 1 x 40/5A, CL-1, 10VA CTs 3 x (0-40A,500V, Multifunction meter with inbuilt selector switch) Bus bar: 100 A, FP, 36kA, Cu. bus bar. Outgoings : 3 x 40A , 10kA,"D Curve" DP MCB. 6 x 63A , 10kA,"D Curve" DP MCB. 3 x 40A , 10kA,"D Curve" 4P MCB.	Set	1,85,125.85	1,85,125.85		
19.173	MR 19.172	1	MAIN PANEL-INFIRMARY (Indoor Type) Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter. R,Y,B LED indication lamp with 2A control MCB. 0-500V Analogue type voltmeter with selector switch. 630 Amp, FP, 16kA, MCCB 3 x 630/5A, CL-1, 15VA CTs Relay module with overvoltage and over/under frequency protection available. Load Manager with RS-485 and two DI/DO ports. Bus bar: 700A, FP, 16kA, Al bus bar. Outgoings : 1 x ( 250 Amp, 16kA, FP, MCCB with 3 x 250/5A,CL-1, 10VA CTs and 0-250A,500V Multifunction meter with inbuilt selector switch ). 2 x ( 200 Amp, 16kA, FP, MCCB with 3 x 200/5A,CL-1, 10VA CTs and 0-200A,500V, Multifunction meter with inbuilt selector switch ). 1 x ( 160 Amp, 16kA, TP, MCCB with 3 x 160/5A,CL-1, 10VA CTs and 0-160A,500V, Multifunction meter with inbuilt selector switch ). 2 x ( 100 Amp, 16kA, FP, MCCB with 3 x 100/5A,CL-1, 10VA CTs and 0-100A,500V, Multifunction meter with inbuilt selector switch ). 3 x ( 40 Amp, 16kA, FP, MCCB with 3 x 40/5A,CL-1, 10VA CTs and 0-40A,500V, Multifunction meter with inbuilt selector switch ).	No	7,48,995.00	7,48,995.00		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.174	MR 19.173	1	UPS OUTPUT PANEL-INFIRMARY (Indoor Type) Incomer : 3 x R,Y,B LED indication lamp with 2A control MCB. 3 x 0-500V Analogue type voltmeter with selector switch. 3 x 40 Amp, 10kA, DP, MCB 3 x 40/5A, CL-1, 5VA CTs 3 x (0-0A,500V, Multifunction meter with inbuilt selector switch) Bus bar: 100A, FP, 10kA, Al bus bar. Outgoings : 8 x ( 40 Amp, 10kA, DP, MCB, D-CURVE). 9 x 16A , 10kA,"D Curve" TPN MCB. 2 x 25A , 10kA,"D Curve" TPN MCB.	No	1,37,232.95	1,37,232.95		
19.175	MR 19.174	1	APFC-INFIRMARY (Indoor Type) Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter. R,Y,B LED indication lamp with 2A control MCB. 0-500V Analogue type voltmeter with selector switch. 160 Amp, 16kA, TP, MCCB 3 x 160/5A, CL-1, 10VA CTs 0-160A,500V, Multifunction meter with inbuilt selector switch 6 Stage APFC relay Bus bar: 200A, FP, 16kA, Al bus bar. Outgoings : 2 x (63 Amp, 16kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 15kVAR capacitor) (rated at 480V with min 19.13 kVAR @ 480V) 2 x (32 Amp, 16kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 10kVAR capacitor) (rated at 480V with min 12.76 kVAR @ 480V) 2x (32 Amp, 16kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 5kVAR capacitor) (rated at 480V with min 6.38 kVAR @ 480V)	No	4,78,630.00	4,78,630.00		
19.176	MR 19.175	1	HVAC PANEL-INFIRMARY (Indoor Type) Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter. R,Y,B LED indication lamp with 2A control MCB. 0-500V Analogue type voltmeter with selector switch. 200 Amp, FP, 16kA,MCCB 3 x 200/5A, CL-1, 10VA CTs Relay module with overvoltage and over/under frequency protection available. Load Manager with RS-485 and two DI/DO ports. Bus bar: 200A, FP, 10kA, Al bus bar. Outgoings : 10 x ( 63 Amp, 10kA, FP, MCB with 3 x 60/5A,CL-1, 10VA CTs and 0-60A,500V, Multifunction meter with inbuilt selector switch ) 2 x ( 40 Amp, 10kA, FP, MCB with 3 x 40/5A,CL-1, 10VA CTs and 0-40A,500V, Multifunction meter with inbuilt selector switch )	No	4,54,362.70	4,54,362.70		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.						
Subject :- Schedule-B Market Rate Items						12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount
19.177	MR 19.176	1	<p>MAIN PANEL - CLUB HOUSE (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  250 Amp, FP, 16kA, MCCB  3 x 250/5A, CL-1, 15VA CTs  Relay module with overvoltage and over/under frequency protection available.  Load Manager with RS-485 and two DI/DO ports.  Bus bar: 250A, FP, 16kA, Al bus bar.  Outgoings : 1 x ( 160 Amp, 16kA, FP, MCCB with 3 x 160/5A,CL-1, 10VA CTs and 0-160A,500V Multifunction meter with inbuilt selector switch ).  1 x ( 100 Amp, 16kA, FP, MCCB with 3 x 100/5A,CL-1, 10VA CTs and 0-100A,500V, Multifunction meter with inbuilt selector switch ).  1 x ( 100 Amp, 16kA, TP, MCCB with 3 x 100/5A,CL-1, 10VA CTs and 0-100A,500V, Multifunction meter with inbuilt selector switch ).  3 x ( 63 Amp, 16kA, FP, MCCB with 3 x 60/5A,CL-1, 10VA CTs and 0-60A,500V, Multifunction meter with inbuilt selector switch ).</p>	No	5,78,220.00	5,78,220.00
19.178	MR 19.177	1	<p>APFC-CLUB HOUSE (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  100 Amp, 16kA, TP, MCCB  3 x 100/5A, CL-1, 10VA CTs  0-100A,500V, Multifunction meter with inbuilt selector switch  5 Stage APFC relay  Bus bar: 100A, FP, 16kA, Al bus bar.  Outgoings :  1 x (63 Amp, 16kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 15kVAR capacitor)  (rated at 480V with min 19.13 kVAR @ 480V)  2 x (32 Amp, 16kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 10kVAR capacitor)  (rated at 480V with min 12.76 kVAR @ 480V)  2x (32 Amp, 16kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 5kVAR capacitor)  (rated at 480V with min 6.38 kVAR @ 480V)</p>	No	4,14,690.00	4,14,690.00
19.179	MR 19.178	1	<p>HVAC PANEL-CLUB HOUSE (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  160 Amp, FP, 16kA,MCCB  3 x 160/5A, CL-1, 10VA CTs  Relay module with overvoltage and over/under frequency protection available.  Load Manager with RS-485 and two DI/DO ports.  Bus bar: 200A, FP, 10kA, Al bus bar.  Outgoings : 10 x ( 63 Amp, 10kA, FP, MCB with 3 x 60/5A,CL-1, 10VA CTs and 0-60A,500V, Multifunction meter with inbuilt selector switch )</p>	No	4,02,865.70	4,02,865.70

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.180	MR 19.179	1	<p>MLTP - DINNING (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  800 Amp, FP, 36kA, MCCB  3 x 800/5A, CL-1, 15VA CTs  Relay module with overvoltage and over/under frequency protection available.  Load Manager with RS-485 and two DI/DO ports.  Bus bar: 1000A, FP, 36kA, Al bus bar.  Outgoings : 3 x ( 400 Amp, 25kA, FP, MCCB with 3 x 400/5A,CL-1, 15VA CTs and 0-400A,500V Multifunction meter with inbuilt selector switch ).  2 x ( 250 Amp, 25kA, FP, MCCB with 3 x 250/5A,CL-1, 15VA CTs and 0-250A,500V, Multifunction meter with inbuilt selector switch ).  3 x ( 100 Amp, 25kA, TP, MCCB with 3 x 100/5A,CL-1, 10VA CTs and 0-100A,500V, Multifunction meter with inbuilt selector switch ).  2 x ( 40 Amp, 25kA, FP, MCCB with 3 x 60/5A,CL-1, 10VA CTs and 0-60A,500V, Multifunction meter with inbuilt selector switch ).  1x630 Amp, FP, 36kA, MCCB</p>	No	9,77,560.95	9,77,560.95		
19.181	MR 19.180	1	<p>APFC-DINNING (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  250 Amp, 36kA, TP, MCCB  3 x 250/5A, CL-1, 15VA CTs  0-250A,500V, Multifunction meter with inbuilt selector switch  6 Stage APFC relay  Bus bar: 300A, FP, 36kA, Al bus bar.  Outgoings :  1 x (125 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 50kVAR capacitor)  (rated at 480V with min 63.78 kVAR @ 480V)  1 x (63 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 25kVAR capacitor)  (rated at 480V with min 31.89 kVAR @ 480V)  2 x (63 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 15kVAR capacitor)  (rated at 480V with min 19.13 kVAR @ 480V)  1 x (32 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 10kVAR capacitor)  (rated at 480V with min 12.76 kVAR @ 480V)  1 x (32 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 5kVAR capacitor)  (rated at 480V with min 6.38 kVAR @480V)</p>	No	6,36,295.00	6,36,295.00		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.182	MR 19.181	1	FEEDER PILLAR-A (OUTDOOR TYPE)- CAMPUS AMENITIES Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter. 0-500V Analogue type voltmeter with selector switch. 125 Amp, 25kA, FP, MCCB 3 x 125/5A, CL-1, 10VA CTs 0-125A,500V, Multifunction meter with inbuilt selector switch Bus bar: 125A, FP, 25kA, Al bus bar. Outgoings : 20 x 40A , 10kA,"C Curve" DP MCB. 10 x 63A , 10kA,"C Curve" FP MCB.	No	1,90,017.95	1,90,017.95		
19.183	MR 19.182	1	FEEDER PILLAR-B (OUTDOOR TYPE) - CAMPUS AMENITIES Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter. 0-500V Analogue type voltmeter with selector switch. 125 Amp, 25kA, FP, MCCB 3 x 125/5A, CL-1, 10VA CTs 0-125A,500V, Multifunction meter with inbuilt selector switch Bus bar: 125A, FP, 25kA, Al bus bar. Outgoings : 22 x 40A , 10kA,"C Curve" DP MCB. 8 x 63A , 10kA,"C Curve" FP MCB.	No	1,88,697.75	1,88,697.75		
19.184	MR 19.183	40	KWH METERS FOR SHOPS Supply, installation & wiring single phase electronic dual source meter suitable for 240 Volts, 50 Hz, 2 to 5KW connection with display of LCD backlite, Measurements of kWh / kW and Time of Day feature for two sources. (The rate shall also include the item required for fixing meter i.e. wooden ply, nuts, bolts and all other accessories required to complete the job in full respect.)	No	11,500.00	4,60,000.00		
19.185	MR 19.184	3	KWH METERS FOR SHOPS Supply, installation & wiring Three phase electronic dual source meter suitable for 415 Volts, 50 Hz, 6 to 13 KW connection with display of LCD backlite, Measurements of kWh / kW and Time of Day feature. (The rate shall also include the item required for fixing meter i.e.. wooden ply, nuts, bolts and all other accessories required to complete the job in full respect.)	No	14,950.00	44,850.00		
19.186	MR 19.185	2	KWH METERS FOR IC & CI Supply, installation & wiring Three phase electronic CT Operated dual source meter suitable for 415 Volts, 50 Hz, up to 150 KW connection with display of LCD backlite, Measurements of kWh / kW and Time of Day feature. (The rate shall also include the item required for fixing meter i.e.. wooden ply, nuts, bolts and all other accessories required to complete the job in full respect.)	No	26,910.00	53,820.00		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.187	MR 19.186	1	<p>MLTP - SPORTS (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  320 Amp, FP, 36kA, MCCB  3 x 320/5A, CL-1, 15VA CTs  Relay module with overvoltage and over/under frequency protection available.  Load Manager with RS-485 and two DI/DO ports.  Bus bar: 500A, FP, 36kA, Al bus bar.  Outgoings : 2 x ( 200 Amp, 25kA, FP, MCCB with 3 x 200/5A,CL-1, 15VA CTs and 0-200A,500V Multifunction meter with inbuilt selector switch ).  2 x ( 160 Amp, 25kA, FP, MCCB with 3 x 160/5A,CL-1, 15VA CTs and 0-160A,500V, Multifunction meter with inbuilt selector switch ).  1 x ( 100 Amp, 25kA, TP, MCCB with 3 x 100/5A,CL-1, 10VA CTs and 0-100A,500V, Multifunction meter with inbuilt selector switch ).  2 x ( 63 Amp, 25kA, FP, MCCB with 3 x 60/5A,CL-1, 10VA CTs and 0-60A,500V, Multifunction meter with inbuilt selector switch ).  1 x ( 40 Amp, 25kA, FP, MCCB with 3 x 40/5A,CL-1, 10VA CTs and 0-40A,500V, Multifunction meter with inbuilt selector switch ).</p>	No	7,42,564.20	7,42,564.20		
19.188	MR 19.187	1	<p>APFC-SPORTS (Indoor Type)  Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.  R,Y,B LED indication lamp with 2A control MCB.  0-500V Analogue type voltmeter with selector switch.  250 Amp, 36kA, TP, MCCB  3 x 250/5A, CL-1, 15VA CTs  0-250A,500V, Multifunction meter with inbuilt selector switch  6 Stage APFC relay  Bus bar: 300A, FP, 36kA, Al bus bar.  Outgoings :  1 x (63 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 15kVAR capacitor) (rated at 480V with min 19.13 kVAR @ 480V)  2 x (32 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 10kVAR capacitor) (rated at 480V with min 12.76 kVAR @ 480V)  2 x (32 Amp, 36kA, TP, MCCB +Thyristor switching module+ 7% detuned reactor + 5kVAR capacitor) (rated at 480V with min 6.38 kVAR @480V)</p>	No	4,76,445.00	4,76,445.00		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.189	MR 19.188	1	<p>MAIN FEEDER PILLAR (OUTDOOR TYPE) - COMMERCIAL MARKET</p> <p>Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.</p> <p>0-500V Analogue type voltmeter with selector switch.</p> <p>160 Amp, 25kA, FP, MCCB</p> <p>3 x 160/5A, CL-1, 15VA CTs</p> <p>0-160A,500V, Multifunction meter with inbuilt selector switch</p> <p>Bus bar: 250A, FP, 25kA, Al bus bar.</p> <p>Outgoings :</p> <p>4 x ( 100 Amp, 25kA, TP, MCCB with 3 x 100/5A,CL-1, 10VA CTs and 0-100A,500V, Multifunction meter with inbuilt selector switch ).</p> <p>4 x ( 63 Amp, 25kA, TP, MCCB with 3 x 60/5A,CL-1, 10VA CTs and 0-60A,500V, Multifunction meter with inbuilt selector switch ).</p> <p>3 x 40A , 10kA,"C Curve" FP MCB.</p> <p>1 x 63A , 10kA,"C Curve" DP MCB.</p>	No	5,35,670.00	5,35,670.00		
19.190	MR 19.189	1	<p>L &amp; P PANEL-PAVILION</p> <p>Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.</p> <p>R,Y,B LED indication lamp with 2A control MCB.</p> <p>0-500V Analogue type voltmeter with selector switch.</p> <p>125 Amp, 16kA, FP, MCCB</p> <p>3 x 125/5A, CL-1, 10VA CTs</p> <p>0-125A,500V, Multifunction meter with inbuilt selector switch</p> <p>Bus bar: 125A, FP, 10kA, Al bus bar.</p> <p>Outgoings :</p> <p>2 x ( 100 Amp, 16kA, FP, MCCB with 3 x 100/5A,CL-1, 10VA CTs and 0-100A,500V, Multifunction meter with inbuilt selector switch ).</p> <p>2 x 63A , 10kA,"C Curve" FP MCB.</p>	No	2,29,195.00	2,29,195.00		
19.191	MR 19.190	1	<p>FEEDER PILLAR-A (OUTDOOR TYPE)</p> <p>Incomer : Surge arrester 1.6kVp, 75kA with both lightning and switching surge protection protected by MCCB of suitable rating and response with a surge counter.</p> <p>R,Y,B LED indication lamp with 2A control MCB.</p> <p>0-500V Analogue type voltmeter with selector switch.</p> <p>100 Amp, 16kA, FP, MCCB</p> <p>3 x 100/5A, CL-1, 10VA CTs</p> <p>0-100A,500V, Multifunction meter with inbuilt selector switch</p> <p>Bus bar: 100A, FP, 10kA, Al bus bar.</p> <p>Outgoings :</p> <p>12 x 40A , 10kA,"C Curve" DP MCB.</p> <p>4 x 63A , 10kA,"C Curve" FP MCB.</p>	No	1,62,965.35	1,62,965.35		



Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.192	MR 19.191	1	<p>MAIN LT PANEL - OUTREACH CENTRE (Indoor Type)</p> <p>Incomer : 1 Nos. x 4kVp, 75kA, Surge arrester</p> <p>Incomer : 1 Nos. x 400 A, Four pole , MCCB, 25kA, Microprocessor based</p> <p>Incomer : 1 set. x R,Y,B indication lamp with 2A control MCB</p> <p>Incomer : 1 Nos. x Digital Voltmeter, 0-500V, with inbuilt selector switch and 2A control MCB</p> <p>Incomer : 1 Nos. x Load manager with RS-485 port</p> <p>Incomer : 7 Nos. x CT 400/5A, CL:1, 15VA, Ring type</p> <p>Incomer : 1 Nos. x Digital Ammeter, 0-160A, with inbuilt selector switch.</p> <p>Bus bar : 1 set. x 415V, 50HZ, 500 A, Four pole , 25kA aluminium bus bar</p> <p>Outgoing : 1 Nos. x 250 A, Four pole , MCCB, 25kA, Microprocessor based</p> <p>Outgoing : 3 Nos. x125 A, Four pole , MCCB, 25kA, Microprocessor based</p> <p>Outgoing : 5 Nos. x 63 A, Four pole , MCCB, 25kA, Microprocessor based</p> <p>Outgoing : 3 Nos. x 32 A, Four pole , MCCB, 25kA, Microprocessor based</p> <p>Outgoing : 12 Nos. x Multi functioning meter</p> <p>Outgoing : 3 Nos. x CT 250/5A, CL:1, 15VA, Ring type</p> <p>Outgoing : 9 Nos. x CT 125/5A, CL:1, 15VA, Ring type</p> <p>Outgoing : 15 Nos. x CT 63/5A, CL:1, 10VA, Ring type</p> <p>Outgoing : 9 Nos. x CT 32/5A, CL:1, 5VA, Ring type</p>	No	8,24,665.00	8,24,665.00		
19.193	MR 19.192	1	<p>APFC Panel (Outreach Centre) --OUTREACH CENTRE (Indoor Type)</p> <p>Incomer : 1 Nos. x 2kVp, 50kA, Surge arrester</p> <p>Incomer : 1 Nos. x 250 A, Three pole , MCCB, 25kA, Microprocessor based</p> <p>Incomer : 1 set. x R,Y,B indication lamp with 2A control MCB</p> <p>Incomer : 1 Nos. x Digital Voltmeter, 0-500V, with inbuilt selector switch and 2A control MCB</p> <p>Incomer : 3 Nos. x CT 250/5A, CL:1, 15VA, Ring type</p> <p>Incomer : 1 Nos. x Digital Ammeter, 0-250A, with inbuilt selector switch.</p> <p>Incomer : 1 Nos. x 240V, actuated APFC relay (numeric type)</p> <p>Bus bar : 1 set. x 415V, 50HZ, 300 A, Four pole , 25kA aluminium bus bar</p> <p>Outgoing : 6 set. x R,Y,B indication lamp with 2A control MCB</p> <p>Outgoing : 6 Nos. x 100 A, High speed semiconductor fuse</p> <p>Outgoing : 6 Nos. x 63 A, High speed semiconductor fuse</p> <p>Outgoing : 6 Nos. x 32 A, High speed semiconductor fuse</p> <p>Outgoing : 6 Nos. x Thyristor switching module</p> <p>Outgoing : 6 Nos. x 7% Reactors</p> <p>Outgoing : 2 Nos. x Delta connected , 480V rated capacitor bank , 25kVAR</p> <p>Outgoing : 2 Nos. x Delta connected , 480V rated capacitor bank , 15kVAR</p> <p>Outgoing : 2 Nos. x Delta connected , 480V rated capacitor bank , 10kVAR</p>	No	6,02,140.00	6,02,140.00		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.194	MR 19.193	1	LDP (Lighting Distribution Panel) -OUTREACH CENTRE (Indoor Type) Incomer : 1 Nos. x 2kVp, 50kA, Surge arrestor Incomer : 1 Nos. x 63 A, Four pole , MCCB, 25kA, Microprocessor based Incomer : 1 set. x R,Y,B indication lamp with 2A control MCB Incomer : 1 Nos. x Digital Voltmeter, 0-500V, with inbuilt selector switch and 2A control MCB Incomer : 3 Nos. x CT 60/5A, CL:1, 10VA, Ring type Incomer : 1 Nos. x Digital Ammeter, 0-60A, with inbuilt selector switch. Incomer : 1 Nos. x Dual source meter Bus bar : 1 set. x 415V, 50HZ, 200 A, Four pole , 25kA aluminium bus bar Outgoing : 1 set. x R,Y,B indication lamp with 2A control MCB Outgoing : 6 Nos. x 32 A, Four pole , MCCB, 25kA, Microprocessor based	No	2,69,195.45	2,69,195.45		
19.195	MR 19.194	1	PDP (Power Distribution Panel)-OUTREACH CENTRE (Indoor Type) Incomer : 1 Nos. x 2kVp, 50kA, Surge arrestor Incomer : 1 Nos. x 125 A, Four pole , MCCB, 25kA, Microprocessor based Incomer :1 set. x R,Y,B indication lamp with 2A control MCB Incomer : 1 Nos. x Digital Voltmeter, 0-500V, with inbuilt selector switch and 2A control MCB Incomer : 3 Nos. x CT 125/5A, CL:1, 15VA, Ring type Incomer : 1 Nos. x Digital Ammeter, 0-125A, with inbuilt selector switch. Incomer :1 Nos. x Dual source meter Bus bar : 1 set. x 415V, 50HZ, 200 A, Four pole , 25kA aluminium bus bar Outgoing : 1 set. x R,Y,B indication lamp with 2A control MCB Outgoing : 4 Nos. x 63 A, Four pole , MCCB, 25kA, Microprocessor based Outgoing : 2 Nos. x 40 A, Four pole , MCCB, 25kA, Microprocessor based	No	3,62,480.00	3,62,480.00		
19.196	MR 19.195	1	UDP (UPS Distribution Panel)-OUTREACH CENTRE (Indoor Type) 1 Nos. x 2kVp, 50kA, Surge arrestor Incomer : 1 Nos. x 63 A, Four pole , MCCB, 25kA, Microprocessor based Incomer : 1 set. x R,Y,B indication lamp with 2A control MCB Incomer : 1 Nos. x Digital Voltmeter, 0-500V, with inbuilt selector switch and 2A control MCB Incomer : 3 Nos. x CT 60/5A, CL:1, 10VA, Ring type Incomer : 1 Nos. x Digital Ammeter, 0-60A, with inbuilt selector switch. Incomer : 1 Nos. x Dual source meter Bus bar : 1 set. x 415V, 50HZ, 200 A, Four pole , 25kA aluminium bus bar Outgoing : 1 set. x R,Y,B indication lamp with 2A control MCB Outgoing : 6 Nos. x 32 A, Four pole , MCCB, 25kA, Microprocessor based	No	3,57,995.00	3,57,995.00		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.197	MR 19.196	2	LIFT DISTRIBUTION PANEL -OUTREACH CENTRE (Indoor Type) Incomer : 1 Nos. x 2kVp, 50kA, Surge arrester Incomer : 1 Nos. x 63 A, Four pole , MCCB, 25kA, Microprocessor based Incomer : 1 Set. x R,Y,B indication lamp with 2A control MCB Incomer : 1 Set. X Digital Voltmeter, 0-500V, with inbuilt selector switch and 2A control MCB Incomer : 6 Nos. X CT 60/5A, CL:1, 10VA, Ring type Incomer : 1 Nos. x Digital Ammeter, 0-60A, with inbuilt selector switch. Incomer : 1 Nos x Dual source meter Bus bar : 1 set. x 415V, 50HZ, 100 A, Four pole , 25kA aluminium bus bar Outgoing : 1 set. x R,Y,B indication lamp with 2A control MCB Outgoing : 5 Nos. x 32 A, Four pole , MCCB, 25kA, Microprocessor based. Outgoing : 3 Nos. x 16 A, Dual pole , MCB, 10kA, B type	No	3,25,335.00	6,50,670.00		
19.198	MR 19.197	1	HVAC DISTRIBUTION PANEL - OUTREACH CENTRE (Outdoor Type) Incomer : 1 Nos. x 2kVp, 50kA, Surge arrester Incomer : 1 Nos. x 125 A, Four pole , MCCB, 25kA, Microprocessor based Incomer : 1 Set. x R,Y,B indication lamp with 2A control MCB Incomer : 1 Nos. x Digital Voltmeter, 0-500V, with inbuilt selector switch and 2A control MCB Incomer : 6 Nos. x CT 125/5A, CL:1, 15VA, Ring type Incomer : 1 Nos. x Digital Ammeter, 0-125A, with inbuilt selector switch. Incomer : 1 Nos. x Dual source meter Bus bar : 1 Set. x 415V, 50HZ, 200 A, Four pole , 25kA aluminium bus bar Outgoing : 6 Set. x R,Y,B indication lamp with 2A control MCB Outgoing : 4 Nos. x 63 A, Four pole , MCCB, 25kA, Microprocessor based Outgoing : 5 Nos. x 40 A, Four pole , MCCB, 25kA, Microprocessor based	No	4,93,120.00	4,93,120.00		
19.199	MR 19.198	1	FEEDER PILLAR -OUTREACH CENTRE (Outdoor Type) Design, Supply, Installation, Testing , internal wiring and Commissioning of following Feeder pillars suitable for outdoor application IP66 made up of CRCA sheet 1.6mm thickness with following accessories : M.2.1 Supplying, installation, testing and commissioning of Astronomical time switch of following configuration to be mounted in feeder pillars / Lighting DBs for automatic switching On & OFF of street lights at sun set & sun rise or twilight(Auto ON, Auto OFF, Auto modes) with manual override facility with 12/24 hour display format with suitable battery and indication for relay status i/c programming at site complete as required. 3 output (1 output per phase) and suitable for three phase supply. 1 set x 100A, FP, Al bus bar 1 set x Phase indication lamp 8 Nos. x Outgoing switchgear 20A, FP, MCB, 10kA 6 Nos. x Outgoing switchgear 40A, FP, MCB, 10kA	No	1,09,249.40	1,09,249.40		
19.200	MR 19.199	3	Feeder Pillar - 02 (Outdoor Type) Incomer : 1 Nos. x 63A, 16kA, FP MCCB 1 Nos Astronomical switch Bus bar : 150A Al bus bar Outgoing : 11 Nos x 16A , 10 kA, FP, MCB	No	1,09,249.40	3,27,748.20		
19.201	MR 19.200	7	Feeder Pillar - 03 (Outdoor Type) Incomer : 1 Nos. x 63A, 16kA, FP MCCB 1 Nos Astronomical switch Bus bar : 150A Al bus bar Outgoing : 10 Nos x 16A , 10 kA, FP, MCB	No	1,09,006.75	7,63,047.25		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.								
Subject :- Schedule-B Market Rate Items								12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount		
19.202	MR 19.201	1	Feeder Pillar - 04 (Outdoor Type) Incomer : 1 Nos. x 63A, 16kA, FP MCCB 1 Nos Astronomical switch Bus bar : 150A Al bus bar Outgoing : 14Nos x 16A , 10 kA, FP, MCB	No	1,11,551.70	1,11,551.70		
19.203	MR 19.202	10	Supplying and fixing IP-55 rated, CRCA enclosure 2mm thick for load bearing members and 1.6 mm thick for doors, suitable for fixing MCCBs of following frame size and Isolators, complete with making cut outs and holes in the enclosure, fixing with nut, bolts, TNC switch for breaker operation, making enclosure air tight, fixing supports etc. as required but excluding the cost of MCCB and Isolator (a) 125 Amp Frame size Microprocessor based MCCB	Set	4,715.00	47,150.00		
19.204	MR 19.203	40	Supplying and fixing 400mm x 400mm x 150 mm IP-55 rated, CRCA enclosure 2mm thick, for load bearing members and 1.6 mm thick for doors, suitable for fixing earth bus bars of size 32 x 6 mm GI, complete with making cut outs and holes in the enclosure, fixing with nut, bolts, making enclosure air tight, fixing supports etc. as required.	Set	6,536.60	2,61,464.00		
19.205	MR 19.204	943	Supplying and fixing 100mm x 100mm x 50 mm GI adapter box, with cover plate made up of same finish to be used as a junction between raceways and conduits, bus bars and cables, conduits and conduits complete with making cut outs and holes in the box, fixing with nut, bolts, fixing supports etc. as required.	Set	5,635.00	53,13,805.00		
<b>208</b>			<b>Subtotal of ELECTRICAL Work</b>			<b>1887,83,515.50</b>		
	<b>20</b>		<b>Elevators</b>					
20.001	MR 20.001	8	Supply, installation, testing and commissioning of vertical transportation system (Passenger Lift, refer technical specs) with machine of capacity as mentioned in technical specifications (13 passengers / persons) Duplex and at a speed of a 1.0 mp, including all necessary ancillaries and accessories as specified in the tender documents. It shall complying with all Statutory requirements of the local competent Authorities and IS-14665. The lift / elevator shall be suitable for landing at total 3 stops and 3 opening .(approximate travel distance 5.4 Mt.) Academic Building	Nos	24,54,392.00	196,35,136.00		
20.002	MR 20.002	8	Supply, installation, testing and commissioning of vertical transportation system (Passenger Lift, refer technical specs) with machine of capacity as mentioned in technical specifications (13 passengers / persons) Duplex and at a speed of a 1.0 mp, including all necessary ancillaries and accessories as specified in the tender documents. It shall complying with all Statutory requirements of the local competent Authorities and IS-14665. The lift / elevator shall be suitable for landing at total 3 stops and 3 opening .(approximate travel distance 10.8 Mt.) Academic Building	Nos	26,41,790.00	211,34,320.00		
20.003	MR 20.003	2	Supply, installation, testing and commissioning of vertical transportation system (Passenger Lift, refer technical specs) with machine of capacity as mentioned in technical specifications (13 passengers / persons) Duplex and at a speed of a 1.0 mp, including all necessary ancillaries and accessories as specified in the tender documents. It shall complying with all Statutory requirements of the local competent Authorities and IS-14665. The lift / elevator shall be suitable for landing at total 3 stops and 3 opening .(approximate travel distance 7.2Mt.) Admin. Building	Nos	24,64,285.00	49,28,570.00		
20.004	MR 20.004	2	Supply, installation, testing and commissioning of vertical transportation system (Passenger Lift, refer technical specs) with machine of capacity as mentioned in technical specifications (13 passengers / persons) Duplex and at a speed of a 1.0 mp, including all necessary ancillaries and accessories as specified in the tender documents. It shall complying with all Statutory requirements of the local competent Authorities and IS-14665. The lift / elevator shall be suitable for landing at total 2 stops and 2 opening .(approximate travel distance 3.6Mt.) Admin Building	Nos	23,36,996.00	46,73,992.00		
20.005	MR 20.005	1	Supply, installation, testing and commissioning of vertical transportation system (Passenger Lift, refer technical specs) with machine of capacity as mentioned in technical specifications (13 passengers / persons) Simplex and at a speed of a 1.0 mp, including all necessary ancillaries and accessories as specified in the tender documents. It shall complying with all Statutory requirements of the local competent Authorities and IS-14665. The lift / elevator shall be suitable for landing at total 3 stops and 3 opening .(approximate travel distance 6.0Mt.) International Center	Nos	24,72,071.00	24,72,071.00		

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.						
Subject :- Schedule-B Market Rate Items						
						12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount
20.006	MR 20.006	2	Supply, installation, testing and commissioning of vertical transportation system (Passenger Lift, refer technical specs) with machine of capacity as mentioned in technical specifications (8 passengers / persons) Duplex and at a speed of a 1.0 mp, including all necessary ancillaries and accessories as specified in the tender documents. It shall complying with all Statutory requirements of the local competent Authorities and IS-14665. The lift / elevator shall be suitable for landing at total 3 stops and 3 opening .(approximate travel distance 6.0Mt.) International Center	Nos	21,22,859.00	42,45,718.00
20.007	MR 20.007	1	Supply, installation, testing and commissioning of vertical transportation system (Passenger Lift, refer technical specs) with machine of capacity as mentioned in technical specifications (13 passengers / persons) Simplex and at a speed of a 1.0 mp, including all necessary ancillaries and accessories as specified in the tender documents. It shall complying with all Statutory requirements of the local competent Authorities and IS-14665. The lift / elevator shall be suitable for landing at total 4 stops and 4 opening .(approximate travel distance 9.0Mt.) Campus Inn	Nos	26,11,451.00	26,11,451.00
20.008	MR 20.008	2	Supply, installation, testing and commissioning of vertical transportation system (Passenger Lift, refer technical specs) with machine of capacity as mentioned in technical specifications (8 passengers / persons) Duplex and at a speed of a 1.0 mp, including all necessary ancillaries and accessories as specified in the tender documents. It shall complying with all Statutory requirements of the local competent Authorities and IS-14665. The lift / elevator shall be suitable for landing at total 4 stops and 4 opening .(approximate travel distance 9.0Mt.) Campus Inn	Nos	22,02,246.00	44,04,492.00
20.009	MR 20.009	2	Supply, installation, testing and commissioning of vertical transportation system (Passenger Lift, refer technical specs) with machine of capacity as mentioned in technical specifications (13 passengers / persons) Simplex and at a speed of a 1.0 mp, including all necessary ancillaries and accessories as specified in the tender documents. It shall complying with all Statutory requirements of the local competent Authorities and IS-14665. The lift / elevator shall be suitable for landing at total 2 stops and 2 opening .(approximate travel distance 5.4 Mt.) Dining Hall	Nos	24,00,641.00	48,01,282.00
20.010	MR 20.010	2	Supply, installation, testing and commissioning of vertical transportation system (Passenger Lift, refer technical specs) with machine of capacity as mentioned in technical specifications (8 passengers / persons) Simplex and at a speed of a 1.0 mp, including all necessary ancillaries and accessories as specified in the tender documents. It shall complying with all Statutory requirements of the local competent Authorities and IS-14665. The lift / elevator shall be suitable for landing at total 2 stops and 2 opening .(approximate travel distance 3.6Mt.) Faculty Club & Infirmary	Nos	20,02,555.00	40,05,110.00
20.011	MR 20.011	1	Supply, installation, testing and commissioning of vertical transportation system (Goods Lift 500 kgs, refer technical specs) with machine of capacity as mentioned in technical specifications and at a speed of a 1m/sec. Including all necessary ancillaries and accessories as specified in the tender documents. It shall complying with all Statutory requirements of the local competent Authorities and IS-14665. The lift / elevator shall be suitable for landing at total 2 stops and 2 opening.(approximate travel distance 5.4 Mt.) Dinning Hall	Nos	21,22,859.00	21,22,859.00
20.012	MR 20.012	1	Preparation of necessary Drawings, getting approval from the statutory authorities before taking up work and to furnish Completion Report arranging for Inspection, giving trial run on with load, obtaining approval for commissioning the sets by paying necessary fee for inspection, etc., complete for all passengers and goods lifts. (Necessary statutory fees will be re-imbursed to the Contractor after producing the receipts).	Nos	10,45,350.00	10,45,350.00
<b>12</b>			<b>Subtotal of Elevators Work</b>			<b>760,80,351.00</b>
	<b>21</b>		<b>Horticulture &amp; Landscaping</b>			
21.001	MR 21.001	1215	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes vertically in tree-pits complete as directed by EIC including supply of all material, labour and equipment up to any lead and lift, 900mm dia RCC pipe	Rmt	2,030.95	24,67,607.11
21.002	MR 21.002	14612	Supply & application of bentonite clay lining with average thickness of 75mm to bottom & sides surfaces of water bodies, clearing and levelling the surface before application of bentonite using a 500kg roller such that no part of the surface extends out from surroundings by more than 100mm, rolling & compacting after application with 500kg roller, checking for leaks by local filling of water and sealing the same with bentonite complete, including supply of all material, labour and equipment as required, up to any lead and lift; as directed by Engineer-in-Charge	Cum	4,473.86	653,71,997.91

Name of Work :- Development Of Permanent Campus Of Nu Rajgir.						
Subject :- Schedule-B Market Rate Items						12-Sep-16
Sr.no	MR Item Nos.	Total Quantity	Description	Unit	Rate	Total Amount
21.003	MR 21.003	3076	Supply & spreading of graded murrum up to 300 mm for play areas, in layers not exceeding 100mm thick and compacting with 8 tonne roller, complete including supply of all material, labour and equipment, up to any lead and lift as directed by EIC	Cum	263.09	8,09,268.04
21.004	MR 21.004	4154	Supply & application of minimum 2mm thick PU surface on minimum 8mm thick SBR sub-base for sports surfaces as per manufacturer's specifications including supply of necessary labour, material and equipment complete with carting, loading, storage, stacking of debris and casting up to any lead and lift	Sqm	3,240.59	134,60,682.35
21.005	MR 21.005	3	Supply, fabrication and installation of play structure comprising of SS 304 slide for children, wooden deck, ladders, Nylon rope climbing net, Pergola house and the supporting structure of all the components as per final detailed drawing. The rate to include necessary painting of MS structures with approved colour Epoxy paint and all wooden members to be applied with PU coating etc. complete including all labour, equipment, material, up to any lead and lift as directed by EIC	nos	2,99,439.35	8,98,318.06
5			<b>Subtotal of Landscape Work</b>			<b>830,07,873.47</b>
	<b>22.0</b>		<b>MoRTH/SOR - 2016 OF ROAD CONSTRUCTION DEPARTMENT GOVERNMENT OF BIHAR</b>			
22.001	MR 1	5050	Carriage of Lime, Murrum, Building rubbish By Mechanical Transport- Disposal up to 5 Km. lead outside campus premises	Cum	250.98	12,67,428.92
1			<b>Sub Total of Road Work</b>			<b>12,67,428.92</b>
529.0						<b>11626,96,533.22</b>