GUJARAT BIOTECHNOLOGY UNIVERSITY



BILL OF QUANTITIES

GBU Gujrat Construction of Housing Block ,Hostel Block, Director Residence and Student activity Centre - Package B

Architect: Suresh Goel & Associates C-85, Shivalik, New Delhi – 110017



Abstract of Cost

GBU Gujrat - Detailed estimate for Construction of Housing BI	lock ,Hostel
Block, Director Residence and Student activity Centre - Package	B

SI. No	Description	Total
1	Earth Work	4256597
2	Concrete Work	5166871
3	R.C.C. Work	255049962
4	Brick Work	22304271
5	Marble Work	14810432
6	Wood Work & PVC Work	26803724
7	Steel Work	25254388
8	Flooring	59052718
9	Roofing	14166760
10	Finishing	24496392
11	Aluminium Work	52009136
12	Waterproofing	12202829
13	Ext development	75082441
14	Plumbing work	25404325
15	Fire Fighting Work	15551197
16	MEP Work	247357461
	Total	878969504
	Add GST @ 18%	158214511
	Total	1037184014
	add 1% Labour Cess	10371840
	Add 3% Contingencies	31115520
	Add 1% for third Party quality Assurance	10371840
	Total	1089043215



MEP Work	
Part A	
1 Sub Head - I - Point Wiring	15590791
2 Sub-Head - II - Panels & DB'S	4484515
3 Sub Head - III - Cables	829174
4 SH - IV - Supply & Installation of Light Fitting, F	9707697
5 Sub-Head - V - Earthing & Lightning Conducto	1390165
6 Sub Head - VI - Passive Cabling & LAN Syster	12224955
7 Sub Head - VII - IPABX SYSTEM	1464556
8 Sub Head - VIII - Fire Detection & PA System	5350598
9 Sub Head - IX - CCTV System	10368110
10 Sub Head - X - LIFTS	25026569
11 SUB HEAD-XI-SUB-STATION EQUIPMENT	41845552
12 SUB HEAD-XII-EXTERNAL LIGHTING	4327218
13 SUB HEAD-XIII-DG SET	6564634
14 SUB HEAD - XIV - SOLAR POWER GENERA	11286430
15 HVAC Work	45225406
Part B - Maintenance Elerctrical	36265341
Maintenance HVAC	15387149
TOTAL	247338861



Bill Of Quantities

GBU Gujrat - Construction of Housing Block ,Hostel Block, Director Residence and Student activity Centre - Package B

5.140.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
		Sub- Head - I , Earth Work				
1	26117D	Clearing and grubbing road including uprooting rank vegetation grass bushes, shrubs, sapling and trees girth upto 300mm removal stumps of trees cut earlier and disposal of unserviceable (D) By mechanical means in				
		area of thorny jungle.	3	Hect	34451.77	103355
2	AR	Excavation for foundation upto 1.5m depth including sorting out and stacking of useful materials, back filling in sides of sides of foundations etc. in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering etc and disposing off the excavated stuff upto any lead and lift. Dense or hard soft soil	9531	cum	174.00	1658394
3	AR	Excavation for foundation for a depth from 1.5m to 3.0m depth including sorting out and stacking of useful materials back filling in sides of sides of foundations etc. in layers not exceeding 20cm in depth consolidating each deposited layer by ramming and watering etc and disposing off the excavated stuff upto any lead . (D)Dense or hard soft soil . Quantity for excavation shall be paid based on actual dimensions in the drawings				
		Excavation for foundation for a depth from 3.0m to 5.0m	5703	cum	186.58	1064066
		depth including sorting out and stacking of useful materials back filling in sides of sides of foundations etc. in layers not exceeding 20cm .in depth consolidating each deposited layer by ramming and watering etc and disposing off the excavated stuff upto any lead . (D)Dense or hard soft soil . Quantity for excavation shall be paid based on actual dimensions in the drawings				
5	04007A	Filling in plinth with (good quality) sand under floors including watering, ramming, consolidating and dressing	3704	cum	198.31	734540
		etc. complete.	602	cum	455.53	274229
6	22007	Carring out plinth treatment to post construction / during construction by spraying chemical solution for termite control treatment including labour and material consistment with I.S.I specification. Using Chlordene and Chiorpurfiles 20 EC. As Per 6131_paret-II Concentration Weight one percent is recommended i.e one litre 20EC chemical emulsion with 19 liter give 1% concentration inclusive of one litre chemical emulsion appication at the rate of 5Litre chemical / Sqm of surface is recommended as per I.S. Plinth area only shall be measured for payment purpose. TOTAL	4023	sqm	104.90	422013 4256597
		Sub - Head - II , Concrete Work				4230397
7	05003A	Providing & laying cement concrete 1:3:6 (1: cement: 3 coarse sand: 6 machine crust stone aggregates 40 mm nominal size) for all depths below and up to plinth level in foundations and curing etc. complete including cost of formwork in Footings & Ground, Plinth Beams & below				& ASc

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
8	05004A	Providing and laying cement concrete 1:4:8 (1- Cement : 4- coarsesand : 8- hand broken stone aggregates 40 mm nominal size) and curing complete excluding cost of formwork in (A) Foundation and Plinth	1134	cum	2643.91	2998194
9	05010AA	Providing and laying cement concrete 1:2:4 (1 Cement :2-coarse sand :4-crushed stone aggregates 20 mm nominal size) In Foundation & plinth and curing complete including cost of form work, dewatering etc. Rates are incl. shoring & strutiing and dewatering. No extra payment will be made for Shoring, Strutting and dewatering	56	cum	3616.90	202546
10	05021A	Providing and laying damp proof course 100 mm thick cement concrete 1:2:4 (1- Cement: 2coarse sand: 4stone aggregate 10 mm nominal size) and curing complete including providing and mixing water proofing material in cement concrete in mix proportion recommended by the manufacturers.	19	sqm	778.22	14786
11	MR	Providing and filling in Aereated block bats (broken pieces) in single or multiple layers in super structure , filling the joints with sand mortar (not more than 20%)20mm thick cement sand mortar screed in proportion of 1:6 shall be laid asper drawing. Crushing strength of aerated concrete block /bats shall not be less than 40 kg/sqcm, minimum density in dry oven condition between 651 to 750 kg /cum, thermal conductivity shall not exceed 0.3W / mk, fire resistance 4 hours , in line and plumb , cleaning the surface with tools and tackles , at all level, all height , all floors including curing , scaffolding , complete as per specifications , drawings and directed by engineer in charge.	346		1675.00	570550
12	MR	Making plinth protection 50mm thick of cement concrete 1:3:6 (1cement:3 coarse sand:6 graded stone aggregate 20mm nominal size over 75mm thick bed of dry brick ballast 40mm nominal size , well rammed and consolidated and grouted with fine sand , including necessary excavation, levelling and dressing & finishing the top smooth, including toe wall 230mm wide and 450mm deep on the edge to plinth protection with common burnt clay bricks including grouted with cement mortar 1:4 (1cement:4 fine sand)				579550
		TOTAL	782	sqm	788.93	616946 5166871
		Sub - Head - III , RCC Work				0100071
13	RA	Providing TMT Bar FE 500D reinforcement for RCC work including bending, binding with G.I Binding wire and placing in position complete at all heights, all lifts and				
		all levels as shown in the drawing	######	kg	81.25	165105150



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
14	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Footing/Raft/grade slab upto plinth level.				
15	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for plinth beam / beam upto Plinth level	319	cum	4693.71 6907.33	2206760
16	RA	Providing and laying in position machine batched and machine mixed design mix M-400grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440 kg) for Columns, pillars Post Struts upto Plinth level	131	cum		978074



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
17	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440 kg) for Wall / shear wall upto Plinth level	1082	cum	6537.34	7071570
18	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Lintels/beams/Cantilevers Girders Bressumers at Ground Floor	1002	cum	0007.04	1011310
19	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Lintels/beams/Cantilevers Girders Bressumers at First Floor	375	cum	6907.33	2590433
		Bressumers at First Fioor	303	cum	6941.87	2103565



ma reir as aut in t mix gra trar cen exc rec reta imp Eng as 410	roviding and laying in position machine batched and lachine mixed design mix M-300 grade concrete for einforced cement conctere work, using cement content is per approved Design Mix manufactured in fully utomatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated hixer, manufactured as per mix design of specified rade for RCC work including pumping of RMC from ansit mixer to site of laying including the cost of entering shuttering (height upto 4.2M) finishing and xcluding reinforcement including cost of admixtures in ecommended proportions as per IS: 9103 to accelerate/ etard setting of concrete, improve workability without mpairing strength and durability as per direction of the ngineer - in - charge. Without Fly Ash (Min cement level is per latest IS 456 shall be maintained) (Cement level 10 kg) for Lintels/beams/Cantilevers Girders ressumers at Second Floor			GST	
	ressumers at Second Tibor	279	0.100	6976.58	1945965
ma reir as aut in t mix gra trar cen exc rec reta imp Eng as 410	roviding and laying in position machine batched and hachine mixed design mix M-300 grade concrete for einforced cement conctere work , using cement content is per approved Design Mix manufactured in fully utomatic batching plant and transported to site of work transit mixer for any lead having continuous agitated hixer , manufactured as per mix design of specified rade for RCC work including pumping of RMC from ansit mixer to site of laying including the cost of entering shuttering (height upto 4.2M) finishing and kcluding reinforcement including cost of admixtures in ecommended proportions as per IS: 9103 to accelerate/ etard setting of concrete, improve workability without hpairing strength and durability as per direction of the ngineer - in - charge. Without Fly Ash (Min cement level is per latest IS 456 shall be maintained) (Cement level 10 kg) for Lintels/beams/Cantilevers Girders ressumers at Third Floor	279	cum	7011.46	1945965
ma reir as aut in t mix gra trar cen exc rec reta imp Eng as 410	roviding and laying in position machine batched and pachine mixed design mix M-300 grade concrete for einforced cement conctere work , using cement content is per approved Design Mix manufactured in fully utomatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated pixer , manufactured as per mix design of specified rade for RCC work including pumping of RMC from ansit mixer to site of laying including the cost of entering shuttering (height upto 4.2M) finishing and kcluding reinforcement including cost of admixtures in ecommended proportions as per IS: 9103 to accelerate/ etard setting of concrete, improve workability without maining strength and durability as per direction of the ngineer - in - charge. Without Fly Ash (Min cement level is per latest IS 456 shall be maintained) (Cement level 10 kg) for Lintels/beams/Cantilevers Girders ressumers at Fourth Floor	103	cum		SEL 8 ASS 26867
					HE OF TROHITES

23 RA Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work, using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous glatted mixer , manufactured as per mix design disting and the second of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M), finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410kg) for Lintelsbeams/Cantilevers Girders Bressumers at Fifth Floor 83 cum 7081.75 58555: 24 RA Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement concret work, using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous aglited mixer , manufactured as per mix design of specified grade for RCC work including pumping of SPC(from transit mixer to site of laying in locability without impairing strength and durability as per direction of the Engineer - in -charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level as per latest IS 456 shall be maintained) (Cement level as per latest IS 456 shall be maintained) (Cement level as per latest IS 456 shall be maintained) (Cement level as per approved Design Mix manufactured as per approved Design Mix M	S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
24 RA Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work, using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per lis 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without FIV Ash (Min cement level 410 kg) for Lintels/beams/Cantilevers Girders Bressumers at Sixth Floor 83 cum 7117.16 58848: 25 RA Providing and laying in position machine batched and machine mixer do sign mix M-300 grade concrete for reinforced cement conctere work, using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without FIY Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level as per latest IS 456 shall be maintained) (Cement level as per latest IS 456 shall be maintatined) in transit mixer to	23	RA	machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) , finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410kg) for Lintels/beams/Cantilevers Girders	83	aum	7091 75	595552
25 RA Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Lintels/beams/Cantilevers Girders Bressumers at seventh Floor	24	RA	machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Lintels/beams/Cantilevers Girders				
83 cum 7152.75 391423	25	RA	machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Lintels/beams/Cantilevers Girders	83			OEL & ASSO

26	RA				GST	
		Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M)finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 475 kg) for Lintels/beams/Cantilevers Girders Bressumers at Eightth Floor	83	cum	7188.51	594380
27	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Lintels/beams/Cantilevers Girders Bressumers at Ninth Floor	83	cum	7224.45	597352
28	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Lintels/beams/Cantilevers Girders Bressumers at Tenth Floor	83	cum	7260.57	SEL 8 AS SOC

 29 RA Providing and laying in position macmachine mixed design mix M-300 greinforced cement conctere work, using as per approved Design Mix manautomatic batching plant and transport in transit mixer for any lead having comixer, manufactured as per mix degrade for RCC work including pump transit mixer to site of laying inclucentering shuttering(height upto 4.2 excluding reinforcement including cost recommended proportions as per IS: 9 retard setting of concrete, improved impairing strength and durability as p Engineer - in - charge. Without Fly Ash as per latest IS 456 shall be maintain 410 kg) for Lintels/beams/Car Bressumers at Eleventh Floor 30 RA Providing and laying in position macmachine mixed design mix M-300 greinforced cement conctere work, using as per approved Design Mix manautomatic batching plant and transport in transit mixer for any lead having comixer, manufactured as per mix degrade for RCC work including pump transit mixer to site of laying inclucentering shuttering(height upto 4.2 excluding reinforcement including cost recommended proportions as per IS: 9 retard setting of concrete, work as per approved Design Mix manautomatic batching plant and transportin transit mixer for any lead having comixer, manufactured as per mix degrade for RCC work including pump transit mixer to site of laying inclucentering shuttering(height upto 4.2 excluding reinforcement including cost recommended proportions as per IS: 9 retard setting of concrete, improved impairing strength and durability as p Engineer - in - charge. Without Fly Ash as per latest IS 456 shall be maintain 410 kg) for Lintels/beams/Car 	grade concrete for ng cement content hufactured in fully ted to site of work continuous agitated esign of specified bing of RMC from uding the cost of 2M) finishing and at of admixtures in 9103 to accelerate/ workability without ber direction of the in (Min cement level ned) (Cement level ntilevers Girders 83 cum 7296.88 603341 chine batched and grade concrete for ng cement content hufactured in fully ted to site of work continuous agitated esign of specified bing of RMC from uding the cost of
machine mixed design mix M-300 g reinforced cement conctere work, usin as per approved Design Mix man automatic batching plant and transpor in transit mixer for any lead having c mixer, manufactured as per mix de grade for RCC work including pump transit mixer to site of laying inclu- centering shuttering(height upto 4.2 excluding reinforcement including cos recommended proportions as per IS: 9 retard setting of concrete, improve impairing strength and durability as p Engineer - in - charge. Without Fly Ash as per latest IS 456 shall be maintain 410 kg) for Lintels/beams/Car	chine batched and grade concrete for ng cement content hufactured in fully ted to site of work continuous agitated esign of specified bing of RMC from uding the cost of
Bressumers at Twelveth Floor	st of admixtures in 9103 to accelerate/ workability without ber direction of the n (Min cement level ned) (Cement level ntilevers Girders
31 RA Providing and laying in position mac machine mixed design mix M-300 g reinforced cement conctere work, usin as per approved Design Mix man automatic batching plant and transpor in transit mixer for any lead having c mixer , manufactured as per mix de grade for RCC work including pump transit mixer to site of laying inclu- centering shuttering(height upto 4.2 excluding reinforcement including cos recommended proportions as per IS: 9 retard setting of concrete, improve impairing strength and durability as p Engineer - in - charge. Without Fly Ash as per latest IS 456 shall be maintain 410 kg) for Lintels/beams/Car Bressumers at Thirteenth Floor	chine batched and grade concrete for ng cement content nufactured in fully rted to site of work continuous agitated esign of specified bing of RMC from uding the cost of 2M) finishing and st of admixtures in 9103 to accelerate/ workability without ber direction of the n (Min cement level hed) (Cement level

ARCHIT

32 RA Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conclere work, using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without FIP Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Lintels/beams/Cantilevers Girders Bressumers at Fourtheenth Floor 83 cum 33 RA Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conclere work, using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer to site of laying including the cost of centering shuttering(height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per Si 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without FIY Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) or Lintels/beams/Cantilevers Girders Bressumers at Terrace level 34 RA Providing and laying in position machine batched and machine mixed design mix M-400 g	S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
33 RA Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering(height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Lintels/beams/Cantilevers Girders Bressumers at Terrace level 28 cum 34 RA Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified	32	RA	machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Lintels/beams/Cantilevers Girders	00		7400.00	642426
34 RA Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified	33	RA	machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering(height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Lintels/beams/Cantilevers Girders			7406.88	206613
transit mixer to site of laying including pulliping of twice from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Columns, pillars Post Struts at Ground Floor Level 146 cum	34	RA	machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Columns,				1089848

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
35	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Columns, pillars Post Struts at First Floor Level	108	aum		806791
36	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Columns, pillars Post Struts at Second Floor Level	99	cum	7499.25	806781
37	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Columns, pillars Post Struts at Third Floor Level	95	cum	7574.43	718647



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
38	AR	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Columns, pillars Post Struts at Fourth Floor Level	95	aum	7612.30	722240
39	RA	Providing and laying in position machine batched and machine mixed design mix M- 400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440 kg) for Columns, pillars Post Struts at Fifth Floor Level		cum	7650.36	101214
40	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440 kg) for Columns, pillars Post Struts at Sixth Floor Level	13	cum	7688.62	101720



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
41	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440 kg) for Columns, pillars Post Struts at Seventh Floor Level	10		7727.06	102220
42	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Columns, pillars Post Struts at Eightth Floor Level	13	cum	7727.06	102229
43	AR	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440 kg) for Columns, pillars Post Struts at Ninth Floor Level	13	cum	7804.52	103254



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
44	RA	Providing and laying in position machine batched and machine mixed design mix M-400grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Columns, pillars Post Struts at Tenth Floor Level	13	aum	7843.54	103770
45	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Columns, pillars Post Struts at Eleventh Floor Level	13	cum	7882.76	103770
46	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440 kg) for Columns, pillars Post Struts at Twelvth Floor Level	13	cum	7922.18	104810



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
47	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440 kg) for Columns, pillars Post Struts at Thirteenth Floor Level	13		7961.79	105334
48	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Columns, pillars Post Struts at Fourteenth Floor Level	13	cum	8001.60	105334
49	RA	Providing and laying in position machine batched and machine mixed design mix M-400grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Columns, pillars Post Struts at Terrace Floor Level	0	cum	8041.60	0



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
50	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Wall / shear wall Ground Floor level	131	aum	6537.34	859516
51	RA	Providing and laying in position machine batched and machine mixed design mix M-400grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Wall / shear wall First Floor level	187	cum	6570.03	1227898
52	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Wall / shear wall Second Floor level	187	cum	6602.88	1234038



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
53	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Wall / shear wall Third Floor level	101			1201085
54	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Wall / shear wall Fourth Floor level	241	cum	6635.89	1201985
55	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Wall / shear wall Fifth Floor level	119	cum	6702.41	795443



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
56	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Wall / shear wall Sixth Floor level	119	cum	6735.93	799420
57	AR	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Wall / shear wall Seventh Floor level	119	cum	6769.61	803417
58	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg)for Wall / shear wall Eightth Floor level	119	cum	6803.45	807434



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
59	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg)for Wall / shear wall Ninth Floor level	140		0027.47	044474
60	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Wall / shear wall Tenth Floor level	119	cum	6837.47	811471
61	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Wall / shear wall Eleventh Floor level	119	cum		819606



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
62	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Wall / shear wall Twelveth Floor level	110	aum		822704
63	RA	Providing and laying in position machine batched and machine mixed design mix M-350 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 425 kg) for Wall / shear wall Thirteenth Floor level	119	cum	6940.55	823704
64	RA	Providing and laying in position machine batched and machine mixed design mix M-400 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 440kg) for Wall / shear wall Fourteenth Floor level	119	cum	7010.13	831962



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
65	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410kg) for Wall / shear wall Terrace Floor level				440004
66	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering(height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Slab /Shelves/ landing balconies, access platform , staircase at Ground Floor Level	63	cum	6335.17	
67	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering(height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Slab /Shelves/ landing balconies, access platform , staircase at First Floor Level	456	cum	6366.85	2900271
	1	1		Cum	0000.00	

68	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content			GST	
		as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Slab /Shelves/ landing balconies, access platform , staircase at Second Floor Level				
69	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work, using cement content	387	cum	6398.68	2476239
		as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Slab /Shelves/ landing balconies, access platform , staircase at Third Floor Level	368	cum	6430.67	2368190
70	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Slab /Shelves/ landing balconies, access platform , staircase at Fourth Floor Level				OEL & ASSQ
			212	cum	6462.83	1372673

71		Description	Qty	Unit	Rate excl GST	Amount
, ,	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level 410 kg) for Slab /Shelves/ landing balconies, access platform , staircase at Fifth Floor Level	170			4445700
72	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Slab /Shelves/ landing balconies, access platform , staircase at Sixth Floor Level	172	cum	6495.14	1115723
73	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level 410 kg) for Slab /Shelves/ landing balconies, access platform , staircase at Seventh Floor Level	172	cum		0EL 8 ASS 1126908

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
74	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Slab /Shelves/ landing balconies, access platform , staircase at Eightth Floor Level				
75	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Slab /Shelves/ landing balconies, access platform , staircase at Ninth Floor Level	172	cum		1132543
76	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Slab /Shelves/ landing balconies, access platform , staircase at Tenth Floor Level	172	cum		90EL&ASSO 1143897

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
77	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Slab /Shelves/ landing balconies, access				
		platform , staircase at Eleventh Floor Level	172	cum	6692.45	1149616
78	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Slab /Shelves/ landing balconies, access platform , staircase at Twelveth Floor Level	172			
79	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Slab /Shelves/ landing balconies, access platform , staircase at Thirteenth Floor Level	172	cum		1155364

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
80	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level 410 kg) for Slab /Shelves/ landing balconies, access platform , staircase at Fourteenth Floor Level	170			1166047
81	RA	Providing and laying in position machine batched and machine mixed design mix M-300 grade concrete for reinforced cement conctere work , using cement content as per approved Design Mix manufactured in fully automatic batching plant and transported to site of work in transit mixer for any lead having continuous agitated mixer , manufactured as per mix design of specified grade for RCC work including pumping of RMC from transit mixer to site of laying including the cost of centering shuttering (height upto 4.2M) finishing and excluding reinforcement including cost of admixtures in recommended proportions as per IS: 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer - in - charge. Without Fly Ash (Min cement level as per latest IS 456 shall be maintained) (Cement level 410 kg) for Slab /Shelves/ landing balconies, access platform , staircase at Terrace Floor Level	46	cum		<u>1166947</u> 317046
82	RA	Extra for Additional height of proping and centering where the height of propping and centering exceeds 4.2 m between supporting floor to ceilling upto 8.4 M.	05			
		TOTAL	25	sqm	573.30	14333 255049962
83	06002B A	Sub- Head IV - Brick Work Brick work using common burnt clay building bricks having minimum crushing strength not less than 35 kg/ sq cm in foundation and plinth in cement mortar 1 : 6 (1 cement : 6 fine sand)	60	cum	3980.99	238859
84	6014	Masonary work using Aerated light weight concrete block having crushing strength not less than 35 kg/sqcm for super structure above plinth level laid with approved block laying polymer modified adhesive mortar all complete as per direction of engineer in charge and Technical Specification . Ground Floor	238	cum		1066354
85	RA	Masonary work using Aerated light weight concrete block having crushing strength not less than 35 kg/sqcm for super structure above plinth level laid with approved block laying polymer modified adhesive mortar all complete as per direction of engineer in charge and Technical Specification. 1st Floor	443	cum		2004405

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
86	RA	Masonary work using Aerated light weight concrete block having crushing strength not less than 35 kg/sqcm for super structure above plinth level laid with approved block laying polymer modified adhesive mortar all complete as per direction of engineer in charge and Technical Specification. 2nd Floor	393	cum	4573.84	1796201
87	RA	Masonary work using Aerated light weight concrete block having crushing strength not less than 35 kg/sqcm for super structure above plinth level laid with approved block laying polymer modified adhesive mortar all complete as per direction of engineer in charge and Technical Specification. 3rd Floor	371	cum	4619.58	1714257
88	RA	Masonary work using Aerated light weight concrete block having crushing strength not less than 35 kg/sqcm for super structure above plinth level laid with approved block laying polymer modified adhesive mortar all complete as per direction of engineer in charge and Technical Specification. 4th Floor	301	cum	4665.78	1405448
89	RA	Masonary work using Aerated light weight concrete block having crushing strength not less than 35 kg/sqcm for super structure above plinth level laid with approved block laying polymer modified adhesive mortar all complete as per direction of engineer in charge and Technical Specification. 5th Floor	282	cum	4712.43	1328411
90	RA	Masonary work using Aerated light weight concrete block having crushing strength not less than 35 kg/sqcm for super structure above plinth level laid with approved block laying polymer modified adhesive mortar all complete as per direction of engineer in charge and Technical			1750.50	10 11 00 5
91	AR	Specification. 6th Floor Masonary work using Aerated light weight concrete block having crushing strength not less than 35 kg/sqcm for super structure above plinth level laid with approved block laying polymer modified adhesive mortar all complete as per direction of engineer in charge and Technical Specification. 7th Floor	282 282	cum	4759.56 4807.15	1341695 1355112
92	RA	Masonary work using Aerated light weight concrete block having crushing strength not less than 35 kg/sqcm for super structure above plinth level laid with approved block laying polymer modified adhesive mortar all complete as per direction of engineer in charge and Technical Specification. 8th Floor	282	cum	4855.23	1368663
93	RA	Masonary work using Aerated light weight concrete block having crushing strength not less than 35 kg/sqcm for super structure above plinth level laid with approved block laying polymer modified adhesive mortar all complete as per direction of engineer in charge and Technical	274		4903.78	1345586
94	RA	Specification. 9th Floor Masonary work using Aerated light weight concrete block having crushing strength not less than 35 kg/sqcm for super structure above plinth level laid with approved block laying polymer modified adhesive mortar all complete as per direction of engineer in charge and Technical Specification. 10th Floor	274			1359042



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
95	RA	Masonary work using Aerated light weight concrete block having crushing strength not less than 35 kg/sqcm for super structure above plinth level laid with approved block laying polymer modified adhesive mortar all complete				
		as per direction of engineer in charge and Technical				
96	RA	Specification. 11th Floor Masonary work using Aerated light weight concrete block	274	cum	5002.34	1372633
90		having crushing strength not less than 35 kg/sqcm for super structure above plinth level laid with approved block laying polymer modified adhesive mortar all complete as per direction of engineer in charge and Technical Specification. 12th Floor	274	cum	5052.37	1386359
97	RA	Masonary work using Aerated light weight concrete block having crushing strength not less than 35 kg/sqcm for super structure above plinth level laid with approved block laying polymer modified adhesive mortar all complete as per direction of engineer in charge and Technical Specification. 13th Floor	274	cum	5102.89	1400222
98	RA	Masonary work using Aerated light weight concrete block having crushing strength not less than 35 kg/sqcm for super structure above plinth level laid with approved block laying polymer modified adhesive mortar all complete as per direction of engineer in charge and Technical				
99	RA	Specification. 14th Floor Masonary work using Aerated light weight concrete block	274	cum	5153.92	1414225
		having crushing strength not less than 35 kg/sqcm for super structure above plinth level laid with approved block laying polymer modified adhesive mortar all complete as per direction of engineer in charge and Technical Specification. Terrace	51	cum	5205.46	266520
100	RA	Provinding and fixing chicken wire mesh of gauge	01	oum	0200.10	200020
		0.18mm and 200 mm wide with necessary screws and nail at joints cracks of brick work R.C.C work as per drawing and specification and direction of Engineer incharge.	646	sqm	217.15	140279
		TOTAL Sub-Head - V Marbla/stana Wark				22304271
101	RA	Sub Head - V Marble/stone Work Providing and fixing 18mm thick gang saw cut mirror polished premoulded and prepolished) Granite of any colour and shade as per selection of client for wall lining (veneer work), /bands 200mm wide backing filled with a grout of average 12 mm thick in polymer modified adhesive mortar including secured to the backing by means of cramps, hold fastners ,copper pins 7.5 cm long 6 mm diameter for securing adjacent stones in stone wall lining in adhesive mortar including making the necessary chases complete in all respect.	2423	sqm	5500.00	13325532
102	MR /DSR 8.2	Providing and fixing 18mm thick gang saw cut mirror polished premoulded and prepolished) machine cut Granite of any colour and shade as per selection of client for kitchen platforms, vanity counters, window sills, facias and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 coarse sand) with joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish, providing				OEL & ASSO
		opening of required size & shape for wash basin/sink				



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
107	NS	Providing and fixing Hollow metal fire rated doors shutter with frame and hardware fittings etc complete as per specifications.Door frame shall be double rebate profile of minimum size 154mm X 77 mm made out of 1.60mm minimum thick galvanized steel sheet. The frames should be finished with Thermosetting Powder Coating in desired RAL Shade. All provision should be mortised, drilled and tapped for receiving appropriate hardware. Frames should be provided with back plate bracket and anchor fasteners for installation on a finished plastered masonry wall opening. Door leaf shall be minimum 49mm thick fully flush double skin door with or without vision lite. All doors NSD 12049 shall be factory prepped for receiving appropriate hardware and provided with necessary reinforcement for hinges, locks, and door closers. For pair of doors astragals has to be provided on the meeting stile for both active and inactive leaf.				
108		Providing and fixixng of 6mm thick decorative compact HPL laminate as per EN 438-6Type EDS (Exterior Durable Standard)/ EGS(External General Standard) external wall clading using specially treated acrylic resins under high pressure and temperature and hardened into sheets, thus providing all weather protection and UV resistance on an aluminium powder coated sub structure of aluminium cube chanel having thickness 50x25x1.6mm at corner and 75x25x1.6mm at junction of two panels complete as per manufacturers specifications	297	<u>sqm</u>	10474.00	3110778
		and direction of engineer in charge. TOTAL	706	sqm	4500.00	3177000 26803724
109	11002AA	Sub- Head - VII, Steel Work Providing, supplying, fixing, fabricating, erecting, aligning the structural steel like pivot ,tubular 'T','I" section, angle, plate ,beam, channel section, Bar , hollow box or Z purlins , for built up purlins, roof trusses, columns, side runners, tie beams, sag rods, base plates gusset plates, cap plates, bearing bracing, gantry girders, rails, require support,pipes, including all welded or bolted steel structures of various types with approved I.S.I.mark electrodes, bolts, anchor bolts including cost of thread, Anchor plate cleats etc. in RCC or masonry work, including cutting, bending, welding ,fixing, supplying , Fabricating Decorative fevisted section or any structured member required to complete the job for Trusses, Canopy, doors, Frame, Railing, Entrance gate, pergola, Decorative hanging light , for Electrical, water supply and HVAC structure New window, parking shed or space frame or any other required specified area as shown on drawing and detailed specification or as per design incl. three coats of approved brand primer and two coats of paints, necessary scaffolding, tools tolerance etc. complete as directed by Engineer In Charge. (Payment will be made for weight of metal used in the work) (Work for all the floors/all heights)	41645	kg	83.33	3470278
	1	1		кy	00.00	

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
110	NS	Design, manufacture and installation of 12 mm dpi system, a complete assembly of extruded Multi / Micro cellular profile UV extruded/protected polycarbonate panels incorporated into a complete system. The Polycarbonate panel system consists coextruded UV protected Multi / Micro cellular structure polycarbonate panel with width of 1040 mm to ensure best performance for wind uplift, vibration, oil canning and visual appearance. Panels shall be manufactured with vertical standing seam with standing seam height of 10 - 15mm at both sides of the panel. Panels shall be fixed on Purlins with the Z - Type Stainless Steel Fastener/retention clips and connectors. Each fastener shall be min 1mm thick of SS 304 Grade and secured to supporting frame/structure with min 3 numbers of self-drilling screws so that the Pull Out Load of Fastener exceeds 7000 N (7 KN) when tested as per ISO 6892: 1998 and IS 1608: 2005. Snap-on connectors to interlock the panels shall have 2- 4 teeth grip-lock locking mechanism to ensure maximum uplift capability. Panel shall be fixed over structural steel / MS purlin (paid separately) by trained & factory authorised installer under direct supervision to complete entire project installation according to the detail technical specifications as per approved architectural drawings.				
			630	sqm	2255.00	1420650
111	DSR 10.28	Providing and fixing stainless steel (Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railingwith necessary accessories & stainless steel dash fasteners, stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts,fasteners etc.	31109	kg	654.58	20363460
		TOTAL				25254388
112	14012AA	Sub- Head - VIII Flooring Providing and laying mirror polished Kota stone slab flooring over 20mm (Average) thick base of cement mortar1:6 (1-cement:6-coarse sand)laid over and jointed with grey cement slurry mixed with pigment to match the shade of slab including rubbing and mirror polishing etc.complete.(A) 25mm thick(work for all the floors)	1991	sqm	982.83	1957060
113	14013A	Providing and laying mirror polished kota stone slab 25mm thick in risers of steps, skirting Dado and pillars laid on10mm thick cement mortar 1:3 (1-Cement :3 coarses and) and jointed with gray cement slury mixed with pigment to match the shade of slab including rubbing and mirror polishing etc. complete.(work for all the floors)	130	sqm	1176.03	0EL & ASS 152884

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
114	RA	Providing & laying Light & Dark Colored Polisehd Granite slab (16-18mm thick) flooring For Staircase Tread,Landing over 20 mm (average) thick base of Cement Mortar (1-Cement : 6-Sand) using cementitious Adhesive Materials as per EIC instruction. Granite slab shall be laid and jointed with grey cement slurry. The size of granite should be in full leght of Riser and Tread as per design. Rates are including rubbing, polishing Moulding /Rounding of edges, making two lines of Grooves on each tread for antisleep, laying and removing of floor protection sheet etc. complete. (work for all the floor Staircase	4705	sqm	2603.00	12247115
115	RA	Providing & laying Granite slab (16-18mm thick - river wash) in riser of steps dedo, Skirting and pillars laid 15 mm thick Cement Mortar 1:3 (1Cement:3 Coarse Sand) using cementitious Adhesive Materials as per EIC				
		instruction. Granite slab shall be jointed with the Grey Cement Slurry Rates are including rubbing, polishing Moulding / Rounding of edges, laying and removing of floor protection sheet etc. complete.(work for all the				
116	RA	floors) Providing and laying Glazed Vitrified tiles Matt/Antiskid finish of size 600mmx600mm in floor / skirting (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6 mm thickness, including grouting of joints The tiles must be cut with the zero chipping diamond cutter only . Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily.	763	sqm	2603.00	1986089
			9255	sqm	1421.23	13153484
117	RA	Providing and laying Glazed Vitrified tiles Matt/Antiskid finish of size 800mmx800mm in floor / skirting (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6 mm thickness, including grouting of joints The tiles must be cut with the zero chipping diamond cutter only . Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, leveling system and rubber mallet for placing the tiles gently and easily.	1703	sqm	1587	2702661
118	14008AA	Providing and laying Ceramic tiles 6mm thick in flooring treads of steps and landing laid on a bed of 12mm thick cement mortar 1:3 (1- cement : 3-coarse sand) finishing				
119	14009AA	with flush pointing in white cement. Providing and laying Ceramic tiles 6mm thick in skrting risers of steps and dedo on 10mm thick cement plaster 1:3 (1-cement : 3- coarse sand) and jointed with white	2470	sqm	908.17	2243180
120	RA	cement slurry Providing and laying under floor screeding Cement	8832	sqm	1063.27	9390801
		mortar 1:4 (1cement : 4 coarse sand)	603	cum	5027.00	3031281

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
121	RA	Providing and laying C.C. pavement of mix M-25 with ready mixed concrete from batching plant. The ready mixed concrete shall be laid in panels and finished with screed board vibrator, vacuum dewatering process and finally finished by floating, brooming with wire brush etc. complete as per specifications and directions of Engineer- in charge.Cement content considered in this item is @				
122	NS	380 kg/cum. Providing & laying of ITF Certified Acrylic Synthetic sports surfaces including 7MM SBR with single component PU binder, manually laying on the existing concrete surface, sealer of PU material for sealing of vide in SBR layer, 2	638	cum	8325.00	5311350
		layers of top coat ITF classified Techno Court, White Line marking	2882	sqm	2227	6419136
123	NS	Supply and installation fixed poles & net for Basket Ball Court of approved quality Sundek Sports System or equivalent	1	r court	130000	130000
124	RA	Providing and fixing Glass mossaic tiles on finished plain wall surface of size 20 mm x 20 mm x 4 mm in all colour, design , fixing in customize design as per direction of Engineer-in- Charge. The glass mosaic tiles to be fixed on the wall surface with the help of approved adhesive applied at the rate of 2.5 kg per sqm and grouting of the same. The rate is inclusive of all operation, material and required pattern approved by Engineer-in-Charge:	14	sqm	3298	46172
125	RA	Cutting holes in RCC wall, slab by diamond core cutting machine upto 150mm dia for passing drain pipes etc and repairing the hole after insertion of drain pipe etc				
		with GP2 grout.	735	each	383	281505
		TOTAL Sub- Head - IX Roofing				59052718



S.No.	SOR No	Description	Qty	Unit	Rate e GST	xcl	Amount
126	16006	Providing and fixing eco-friendly light weight calcium silicate false ceiling tiles having Tegular edge & 15 mm Thick Densified edges on the Tile					
		Periphery for Extra Strength The Light weight calcium silicate ceiling tiles					
		shall have , light reflection 85% non-combustible as per B.S. 476 part IV,					
		100% humidity resistance and also having thermalconductivity0.043°					
		w/m KC.for the best thermal Insulation . The Light weight calcium Silicate					
		tile shall be of approved texture Fine fissured/ Spintone /Cosmos having					
		NRC value of 0.5 & Globe having NRC value of 0.75 NRC or equivalent					
		of size 595 X 595 mm to be laid on true horizontal level suspended inter					
		locking metal grid of hot dipped galvanized steelsections (galvanizing @120 grams per sqm including both side) consisting of main 'T'runner					
		suitably spaced at joints to get required length and size of 24X38mm					
		made from 0.30 mm thick (minimum) sheet, 1200mm centre to centre,					
		and cross 'T' of size 24X28mm made out of 0.33mm (Minimum) sheet					
		spaced 1200mm along space etc. An additional 4mm thick PVC strip of					
		40mm width is to be stuck on the interior side of the C channel using					
		PVC solvent adhesive complete as per direction of Engineer in					
		charge, manufactures.s at the back side so that 'L' shape outer PVC					
		beading can be removed whenrequired for replacement of broken glass					
		etc. complete as per direction of etc. complete as per direction of					
		Engineer in charge and manufactuture's specification.icationntre with					
		25mm long dry wall screws @ 230mm interval and laying 15mm thick					
		Densified edges light weight calcium silicate ceiling tiles of approved texture (Fine Fissured /Cosmos /Spintone) in the grid including, cutting					
		/making opening for services like diffusers, grills, light fittings, fixtures,					
		smoke detectors etc., wherever required, Main 'T' runners to be					
		suspended from ceiling using G.I. slotted cleats of size 25X35X1.6mm					
		fixed to ceiling with 12.5mm dia and 50mm long dash fasteners, 4mm					
		G.I. adjustable rods with galvanized steel level clips of size					
		85X30X0.8mm, spaced at 1200mm centre to centre long main 'T'bottom					
		exposed with 24mm of all T-sections shall be pre-painted with polyester					
		baked paint, for all heights, as per specifications, drawings and as					
		directed by engineer-in charge.Note:- Only calcium silicate false ceiling					
		area will be measured from wall to wall. No deduction shall be made for					
		exposed frames/opening (cut outs) having area less than 0.30 sqm. The					
		calcium silicate ceiling tiles shall have NRC. Value of 0.50 (Minimum) for					
		Fine fissured/Spintone/Cosmos and 0.75 NRC for Globe, light reflection					
		85% non-combustible as per B.S. 476 part IV, 100% humidity resistance	992	e am	10	333	1619569
		and also having thermal conductivity.0.043° w/m KC.for the best thermal	392	sqm		555	1019309



	SOR No	Description	Qty	Unit	Rate excl GST	Amount
127	RA	Providing & fixing false ceiling at all height including providing & fixing of framework made of special section, power pressed from M.S. sheets and galvanised with zinc coating of 120 gms/ sqm (both side inclusive) as per IS : 277 and consisting of angle cleat of size 25mm wide x 1.6mm thick with flanges of 27mm and 37mm, at 1200mm c/c, one flange fixed to the ceiling with dash fastener 12.5mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25 x10 x0.50mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I chanels 45 x15 x 0.90mm running at the spacing of 1200 mm c/c, to which the ceiling section 0.5mm thick bottom wedge of 80mm with tapered flanges of 26 mm each having lips of 10.5mm, at 450mm c/c, shall be fixed in a direction perpendicular to G.I intermediate channel with connecting clip made out of 2.64mm dia x 230mm long G.I wire at every junction, including fixing perimeter channels 0.50mm thick 27mm high having flanges of 20mm and 30mm long, the perimeter of ceiling fixed to wall/ partitions with the help of Rawl plugs at 450mm centre, with 25mm long dry wall screws @ 230mm interval, including fixing of Calcium Silicate Board to ceiling section and perimeter channels with the help of dry wall screws of size 3.5 x25mm at 230mm c/c, including jointing & finishing to a flush finish of tapered and square edges of the board with recommended jointing compounds, jointing tapes,finishing with jointing compounds in three layers covering up to 150mm on both sides of joints and two coats of primer suitable for boards, all as per manufacture's specification and also including the cost of making opening for light fittings, grills, diffusers, cut outs made with frame of perimeter channels suitably fixed, all complete as per drawings, specificaton and direction of the Engineer in charge but excluding the cost of painting with: 8 mm thick Calcium Silicate Board made with Calcareous & Siliceous materials reinforced with c				
128		Providing & fixing Armstrong Vertical Linear Baffle Ceiling	1241	sqm	1516.48	1881952
120		made out of Aluminum Extrusion in Aluminum alloy grade 6063. The baffle blade shall be in size of 100x 50mm in WHITE/BLACK/WOOD GRAIN finish – Pradoo & Cabrueava. The baffle blade shall be suspended using Slotted U-profile at on-center spacing. Longer lengths of Baffle to be connected by Baffle Joiner and the ends to be fixed with End caps.				
L		Baffle Ceiling 200mm c/c.	1792	sqm	5085	9112320



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
129		Providing and fixing mineral fibre false ceiling tiles at all heights of size 595X595mm of approved texture, design and pattern. The tiles should have Humidity Resistance (RH) of 99%, Light Reflectance ? 85%,Thermal Conductivity k = 0.052 - 0.057 w/m K, Fire Performance as per (BS 476 pt - 6 &7)in true horizontal level suspended on interlocking T-Grid of hot dipped all round galvanized iron section of 0.33 mm thick (galvanized @120 gsm) comprising of main T runners of 15x32 mm of length 3000 mm, cross T of size 15x32mm of length 1200 mm and secondary intermediate cross T of size 15x32 mm of length 600 mm to form grid module of size 600x600 mm suspended from ceiling using galvanized mild steel item (galvanised@80gsm) 50 mm long 8mm outer diameter M-6 dash fasteners, 6 mm diameter fully threaded hanger rod up to 1000 mm length and L-shape level adjuster of size 85x25x2 mm, spaced at 1200 mm centre to centre along main 'T'. The system should rest on periphery walls /partitions with the help of GI perimeter wall angle of size24x24X3000 mm made of 0.40 mm thick sheet, to be fixed to the wall with help of plastic rawl plug at 450 mm centre to centre & 40 mm long dry wall S.S. screws. The exposed bottom portion of all T-sections used in false ceiling support system shall be pre-painted with polyester baked paint, for all heights. The work shall be carried out as per specifications, drawings and as per directions of the engineer-in-charge. With 20 mm thick beveled tegular mineral fibre false ceiling tile (NRC 0.7)				
			686	sqm	2263.73	1552919
		TOTAL				14166760
130	RA	Sub- Head - X Finishing Providing 10 mm thick Cement Plaster in single coat on brick/concrete Ceiling for interior plastering finished even and smooth in(i) Cement mortar 1:3 (1-cement :3- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - Ground Floor	6672	sqm	152.15	1015205
131	RA	Providing 10 mm thick Cement Plaster in single coat on brick/concrete Ceiling for interior plastering finished even and smooth in(i) Cement mortar 1:3 (1-cement :3- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line,				
132	RA	plumb .etc - First Floor Providing 10 mm thick Cement Plaster in single coat on brick/concrete Ceiling for interior plastering finished even and smooth in(i) Cement mortar 1:3 (1-cement :3- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - Second Floor	3006 2563	sqm sqm	159.76	480229 429910
133	RA	Providing 10 mm thick Cement Plaster in single coat on brick/concrete Ceiling for interior plastering finished even and smooth in(i) Cement mortar 1:3 (1-cement :3- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - Third Floor	2438	sqm	176.14	429413

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
134	RA	Providing 10 mm thick Cement Plaster in single coat on brick/concrete Ceiling for interior plastering finished even and smooth in(i) Cement mortar 1:3 (1-cement :3- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - 4th Floor	1325	sqm		245042
135	RA	Providing 10 mm thick Cement Plaster in single coat on brick/concrete Ceiling for interior plastering finished even and smooth in(i) Cement mortar 1:3 (1-cement :3- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - 5th Floor	1128		194.20	219057
136	RA	Providing 10 mm thick Cement Plaster in single coat on brick/concrete Ceiling for interior plastering finished even and smooth in(i) Cement mortar 1:3 (1-cement :3- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - 6th Floor	1128	sqm	203.91	230010
137	RA	Providing 10 mm thick Cement Plaster in single coat on brick/concrete Ceiling for interior plastering finished even and smooth in(i) Cement mortar 1:3 (1-cement :3- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - 7th Floor	1128		214.11	241515
138	RA	Providing 10 mm thick Cement Plaster in single coat on brick/concrete Ceiling for interior plastering finished even and smooth in(i) Cement mortar 1:3 (1-cement :3- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line,	1128	sam	224.82	253596
139	RA	plumb .etc - 8th Floor Providing 10 mm thick Cement Plaster in single coat on brick/concrete Ceiling for interior plastering finished even and smooth in(i) Cement mortar 1:3 (1-cement :3- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - 9th Floor	1128		236.06	266275
140	RA	Providing 10 mm thick Cement Plaster in single coat on brick/concrete Ceiling for interior plastering finished even and smooth in(i) Cement mortar 1:3 (1-cement :3- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - 10th Floor	1128		247.86	279585
141	RA	Providing 10 mm thick Cement Plaster in single coat on brick/concrete Ceiling for interior plastering finished even and smooth in(i) Cement mortar 1:3 (1-cement :3- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - 11th Floor	1128		260.25	293561
142	RA	Providing 10 mm thick Cement Plaster in single coat on brick/concrete Ceiling for interior plastering finished even and smooth in(i) Cement mortar 1:3 (1-cement :3- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - 12th Floor	1128		273.26	308236



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
143	RA	Providing 10 mm thick Cement Plaster in single coat on brick/concrete Ceiling for interior plastering finished even and smooth in(i) Cement mortar 1:3 (1-cement :3- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - 13th Floor	1128	sqm		323645
144	RA	Providing 10 mm thick Cement Plaster in single coat on brick/concrete Ceiling for interior plastering finished even and smooth in(i) Cement mortar 1:3 (1-cement :3- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - 14th Floor	1128		301.27	339832
145	RA	Providing 10 mm thick Cement Plaster in single coat on brick/concrete Ceiling for interior plastering finished even and smooth in(i) Cement mortar 1:3 (1-cement :3- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - Terrace Floor	243	sqm	316.33	76843
146	RA	Providing 15 mm thick Cement Plaster in single coat on brick/concrete wall/ for interior plastering finished even and smooth in(i) Cement mortar 1:4 (1-cement :4- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - Ground Floor	6854		155.61	1066495
147	RA	Providing 10 mm thick Cement Plaster in single coat on brick/concrete wall/ for interior plastering finished even and smooth in(i) Cement mortar 1:4 (1-cement :4- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line,	2965	ogm	163.39	484420
148	RA	plumb .etc - First Floor Providing 15 mm thick Cement Plaster in single coat on brick/concrete wall/ for interior plastering finished even and smooth in(i) Cement mortar 1:4 (1-cement :4- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - Second Floor	2603	sqm sqm	171.56	446501
149	RA	Providing 15 mm thick Cement Plaster in single coat on brick/concrete wall/ for interior plastering finished even and smooth in(i) Cement mortar 1:4 (1-cement :4- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - 3rd Floor	2392	sqm	180.14	430875
150	RA	Providing 15 mm thick Cement Plaster in single coat on brick/concrete wall/ for interior plastering finished even and smooth in(i) Cement mortar 1:4 (1-cement :4- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - 4th Floor	2060		189.15	389615
151	RA	Providing 15 mm thick Cement Plaster in single coat on brick/concrete wall/ for interior plastering finished even and smooth in(i) Cement mortar 1:4 (1-cement :4- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line,				
		plumb .etc - 5th Floor	2015	sqm	198.61	400280



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
152	RA	Providing 15 mm thick Cement Plaster in single coat on brick/concrete wall/ for interior plastering finished even and smooth in(i) Cement mortar 1:4 (1-cement :4- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc -6th Floor	1735	sqm		361834
153	RA	Providing 15 mm thick Cement Plaster in single coat on brick/concrete wall/ for interior plastering finished even and smooth in(i) Cement mortar 1:4 (1-cement :4- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - 7th Floor	1735		218.97	379930
154	RA	Providing 15 mm thick Cement Plaster in single coat on brick/concrete wall/ for interior plastering finished even and smooth in(i) Cement mortar 1:4 (1-cement :4- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - 8th Floor	1735	sqm	229.92	398930
155	RA	Providing 15 mm thick Cement Plaster in single coat on brick/concrete wall/ for interior plastering finished even and smooth in(i) Cement mortar 1:4 (1-cement :4- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - 9th Floor	1735		241.42	418883
156	RA	Providing 15 mm thick Cement Plaster in single coat on brick/concrete wall/ for interior plastering finished even and smooth in(i) Cement mortar 1:4 (1-cement :4- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line,	4705		252.40	420025
157	RA	plumb .etc - 10th Floor Providing 15 mm thick Cement Plaster in single coat on brick/concrete wall/ for interior plastering finished even and smooth in(i) Cement mortar 1:4 (1-cement :4- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - 11th Floor	<u>1735</u> 1735	sqm sqm	253.49 266.16	439825 461809
158	RA	Providing 15 mm thick Cement Plaster in single coat on brick/concrete wall/ for interior plastering finished even and smooth in(i) Cement mortar 1:4 (1-cement :4- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc -12th Floor	1735		279.47	484903
159	RA	Providing 15 mm thick Cement Plaster in single coat on brick/concrete wall/ for interior plastering finished even and smooth in(i) Cement mortar 1:4 (1-cement :4- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - 13th Floor	1735		293.44	509142
160	RA	Providing 15 mm thick Cement Plaster in single coat on brick/concrete wall/ for interior plastering finished even and smooth in(i) Cement mortar 1:4 (1-cement :4- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb.etc - 14th Floor	1735			534595



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
161	RA	Providing 15mm thick Cement Plaster in single coat on brick/concrete wall/ for interior plastering finished even and smooth in(i) Cement mortar 1:4 (1-cement :4- sand) as required to receive specified architectural finish (like Grooves, pattern if any, drip mould etc.) to correct line, plumb .etc - Terrace Floor	256	sqm	323.52	82821
162	17009	20mm thick Double coat Sand Faced / Mala cement plaster on Exterior walls at for various floors, levels and height as below and shown in the drawing consisting of 12mm thick backing coat of C.M. 1:3 (1-cement :3-sand) and 8mm thick finishing coat of C.M. 1:2 (1-cement :2-sand) etc. complete. as required to receive specified architectural finish like Vata, Grooves, pattern if any, drip mould etc. to correct line, level and plumb .	10467	sqm	297.68	3115948
163	RA	Providing 20mm thick cement plaster in single coat on single wall for basement wall/ under plinth exterior surface in cement mortar 1:3 (1cement: 3sand) including providing and mixing water proofing material in cement mortar work in doses by weight of cement as per manufacturer specifications	874	sqm	181.24	158386
164	19032	Applying two coats of putty & two coats of primer of approved brand and manufacture on new wall surface to give an even shade including thoroughly brushing the surface free from mortar dropping and other foreign matter and sand papered smooth.	53268	sqm	40.19	2140850
165	18031	Wall painting (Three coats) with plastic emulsion paint of approved brand & manufacture on under coated wall surface to give an even shade including thoroughly brushing the surface free from mortar dropping and other foreign matter and sand papered smooth.	53268	sqm	78.44	4178359
166	19005	Painting two coats (excluding priming coat) on new steel and other metal surface with syntheticenamel paint, brushing to give an even shade including cleaning the surface of all dirt, dust and other foreign matter.	4401	sqm	65	284569
167	RA	Finishing walls with textured exterior paint of required shade :New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including priming coat of exterior primer applied @ 2.20kg/10 sqm.	10003	sqm	189.49	1895468
		TOTAL			100110	24496392
		Sub- Head - XI , Aluminium Work				



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
168	RA	Providing and fixing of Anodised Aluminium (Matt finish) frame work as per IS 1868 (1996)(Horizontal and verticals , Styles and rails, ball bearing) for Doors/ window/ventilation/alluminum partition with required Domal sections including fixing all items and hinged / pivoted arrangements for operation of shutters and labour cost for fixing of door fittings and locks including all items and contingencies described above complete (Aluminium beadings and glazing clips & section measured under this item only) NOTE : All fitting works shall be carried out as per I.S. specifications including cost of necessary rivets, screws, lugs, scaffolding, rubber gaskets etc., complete all generally as per drawings. The sizes of the components should confirm as per details in drawings. Providing and fixing at all heights / in all floors with all leads. Colour Anodised Aluminium doors / windows / partitions manufactured from best extruded Aluminium sections confirming to ISI cut to length, joints mitred and corners grinded with joints water proof the outer frame and shutter frame stiffened with corner angle and strips provided for in the frame for fixing the frame to R.C.C Columns / masonry/Granite Frame on sides, R.C.C lintels/Granite Frame on top and P.C.C sills or floor at bottom, the frame work fixed with standard approved fastenings all generally as per details shown in drawings and specification with all the sections pretreated for removal of any rust & scales and prevention of further rust/scale formation and coated with greasy materials for non-adherence of mortar or any other sticky materials and this coat to be removed after installations 1)Sheet metal screws, wool pile and aluminium angle corner cleat of required thickness and of full width, etc. for assembling the frame and shutter; 2)Glazing clips for receiving infill panel for Double Glazed Unit (DGU), any type of Glass, Compact Sheet, Louvers; 3) Best quality wool pile where ever shutter touches the frame; 4) Anchor fasteners for fixing the frame assembly to the RC	30368	kg	419.53	12740480
169	RA	Providing and fixing Clear Float Glass of any size, any shape and specified thickness and SHGC velue 86 % in frame and shutter work with necessary cutting of glass as per drawing & specifications including providing and fixing EPDM quality rubber/silicon sealant/structural sealant of 3M tape on the periphery of the glass as per the required thickness etc. complete a tall floors/all levels/all heights as per the directions of Architect. Actual installed quantity shall be measured and paid. Rate shall be inclusive of all type of wastage. (a) 6 mm thick				
			3057	sqm	1275.64	3899563
170	RA	Providing and fixing fly proof stainless steel grade 304 wire gauge, to windows and clerestory windows using wire gauge with average widthof aperture 1.4 mm in both directions with wire of dia. 0.50 mm all complete.with Aluminium beading	1518	sqm	1040.68	1579811



171 NS Supply of Aluminium Ventilated Façade / Louver System of approved colour consisting of panel 50 mm wide x 50 mm depth x 0.6mm thick panel length up to 5mtrs coil coated on a continuous paint line double baked and roll formed from enameled corrosion Resistance Aluminum Alloy AA3005 / AA5050 for higher strength and good Roll forming characteristics. Panels shall be mounted in a module of 100 mm on a mullion profile grooved (Slotted Fastening Profile) by means of Clamp, Locking Pop and Pop Rivet (Gap will be 50 mm between two panels). Slotted Fastening Profile shall be fixed to a suitable sub-structure by means of Square Brackets.Paint Finish:Panel shall be stove enamelled and finished with Luxacote, a patented special three layered coating system (consisting of first a conversion layer of thickness 800-2000mg/sq mtr, a polyurethane basecoat of 16-20 microns, and a special top coat of polyamide particles of 8-12 microns thick to provide excellent abrasion and damage resistance) in a continuous coil coating process of the approved colour on the exposed side and the reverse side with epoxy. 172 Designing, fabricating, testing, protection, installing and fixing in position semi(grid) unitized system of structural glazing with IGUs comprising of hermetically sealed 6-12 6 mm insulated glass (double Glazed) and Aluminium section complete as per specification 2434 sqm 8584.15 20893821	S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
fixing in position semi(grid) unitized system of structural glazing with IGUs comprising of hermetically sealed 6-12. 6 6 mm insulated glass (double Glazed) and Aluminium section complete as per specification 2434 sqm 8584.15 20893821 TOTAL Sub-Head - XII , Water Proofing 173 RA Providing and applying integral crystalline slurry of hydrophilic innature for waterproofing treatment to the RCC structures like retainingwalls of the basement, water tanks, roof slabs, podiums, reservior, sewage & water treatment plant, tunnels / subway and bridge decketc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI 212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50m. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years by Specialized agency against any leakage.	171	NS	of approved colour consisting of panel 50 mm wide x 50mm depth x 0.6mm thick panel length up to 5mtrs coil coated on a continuous paint line double baked and roll formed from enameled corrosion Resistance Aluminum Alloy AA3005 / AA5050 for higher strength and good Roll forming characteristics. Panels shall be mounted in a module of 100 mm on a mullion profile grooved (Slotted Fastening Profile) by means of Clamp, Locking Pop and Pop Rivet (Gap will be 50 mm between two panels). Slotted Fastening Profile shall be fixed at 150 mm from panel ends and at a distance of maximum 1200 mm center to center across the panel span and Slotted Fastening Profile shall be fixed to a suitable sub-structure by means of Square Brackets.Paint Finish:Panel shall be stove enamelled and finished with Luxacote, a patented special three layered coating system (consisting of first a conversion layer of thickness 800-2000mg/sq mtr, a polyurethane basecoat of 16-20 microns, and a special top coat of polyamide particles of 8-12 microns thick to provide excellent abrasion and damage resistance) in a continuous coil coating process of the approved colour on	2547	sqm	5063.00	12895461
TOTAL 52009136 Sub- Head - XII , Water Proofing 52009136 173 RA Providing and applying integral crystalline slurry of hydrophilic innature for waterproofing treatment to the RCC structures like retainingwalls of the basement, water tanks, roof slabs, podiums, reservior,sewage & water treatment plant, tunnels / subway and bridge decketc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI 212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm. The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years by Specialized agency against any leakage.	172		fixing in position semi(grid) unitized system of structural glazing with IGUs comprising of hermetically sealed 6-12- 6 mm insulated glass (double Glazed) and Aluminium	2434	sam	8584 15	20893821
173 RA Providing and applying integral crystalline slurry of hydrophilic innature for waterproofing treatment to the RCC structures like retainingwalls of the basement, water tanks, roof slabs, podiums, reservior,sewage & water treatment plant, tunnels / subway and bridge decketc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI 212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm.The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years by Specialized agency against any leakage.			TOTAL	2404	Juli	0004.10	52009136
1322 sqm 400.76	173	RA	Providing and applying integral crystalline slurry of hydrophilic innature for waterproofing treatment to the RCC structures like retainingwalls of the basement, water tranks, roof slabs, podiums, reservior, sewage & water treatment plant, tunnels / subway and bridge decketc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI 212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm.The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years by Specialized agency against any leakage.	1322	sqm	400.76	<u>529765</u>

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
174	RA	Providing and applying integral crystalline slurry of hydrophilic innature for waterproofing treatment to the RCC structures like retainingwalls of the basement, water tanks, roof slabs, podiums, reservior, sewage & water treatment plant, tunnels / subway and bridge decketc., prepared by mixing in the ratio of 5 : 2 (5 parts integral crystalline slurry : 2 parts water) for vertical surfaces and 3 : 1 (3 parts integral crystalline slurry : 1 part water) for horizontal surfaces and applying the same from negative (internal) side with the help of synthetic fiber brush. The material shall meet the requirements as specified in ACI 212-3R-2010 i.e by reducing permeability of concrete by more than 90% compared with control concrete as per DIN 1048 and resistant to 16 bar hydrostatic pressure on negative side. The crystalline slurry shall be capable of self-healing of cracks up to a width of 0.50mm.The work shall be carried out all complete as per specification and the direction of the engineer-in-charge. The product performance shall carry guarantee for 10 years against any leakage. For horizontal surface one coat @1.10 kg per sqm.				
175	22.3	Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C kitchen and the like consisting of : i) Ist course of appying cement slurry @ 4.4 Kg/sqm mixed with water proofing compound conforming to IS 2645in recommended proportions including rounding off junction of vertical and horizontal surface.ii) IInd course of 20 mm cement plaster 1: 3 (1 cement :3 coarse sand) mixed with water proofing compound in recommended proportion including roundign off junction of vertical and horizontal surface. iii) IIIrd course of applying blown or residual bitument applied hot at 1.7 kg. per sqm of area.iv) IVth course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitument @ 1.7 kg/sqm.)	2868	sqm		881642



S.No.	SOR No	Description	Qty	Unit	Rate exc GST	Amount
176	RA	Providing and laying water proofing treatment on roofs of slabs by applying cement slurry mixed with water proofing cement compound consisting of applying: (a) after surface preparation, first layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. (b) laying second layer of Fibre glass cloth when the first layer is still green. Overlaps of joints of fibre cloth should not be less than 10 cm. (c) third layer of 1.5 mm thickness consisting of slurry of cement @ 1.289 kg/sqm mixed with water proofing cement compound @ 0.670 kg/sqm and coarse sand @ 1.289 kg/sqm. This will be allowed to air cure for 4 hours followed by water curing for 48 hours. The entire treatment will be taken upto 30 cm on parapet wall and tucked into groove in parapet all around. (d) fourth and final layer of Crazy ceramic tile flooring, with under layer 12 mm thick cement mortar 1:4 (1 cement: 4 coarse sand), with joints not exceeding 5 mm, including filling the gaps with ordinary cement mixture & mixing with synthetic polyester fibre, triangular in shape having specific gravity of 1.34 to 1.40, cross section size ranging from 10 to 40 micron & length upto 6 mm , mixing fibre @ 125 grams per 50 kg of cement in cement mortar, including providing and mixing water proofing material in mortar @ 1 kgper 50 kg of cement, all complete as per direction of Engineer-in-charge. (10 year Warranty to be given by Specialized agency for any defects)				
177	NS	Terrace Waterproofing Works : Providing and applying single component PU based cold applied seamless waterproofing membrane over the primed surface with PU/Epoxy primer Layer on RCC mother slab, Insulation Layer: Spray applying an average minimum 65mm thick GRIHA enlisted CFC & HCFC free spray applied polyurethane foam and 2 coats of a single component PU based cold applied seamless waterproofing membrane over PU foam , 150 gsm Geotextile (non-woven polyester) over the entire membrane on horizontal areas maintaining proper overlaps and an avg of 100 mm thick M20 grade PP fiber reinforced concrete screed with Min. 75 mm thick at the rain water outlets, laid to a slope of 1 : 120, including saw cuting (approx 6mm W x 30mm D) at 3MX4M pannels within 24 hours of concrete placement and filling the groove on the top after 28 days of concrete placement with PU sealant or equivalent, and making angle fillet of 100mmX100mm using M20 grade concrete at the corners, compaction , curing for 7 days etc complete	2288	Sqm	2868.00	



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
		TOTAL				12202829
		Sub Head XIII - External development				
178	RA	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavation earth to an average of 22.5cm depth dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth lead upto any lead.	14980	sqm	185.51	2778940
179	RA	Construction of granular Sub base providing coarse graded material, spreading in uniform layers with motor grader on prepared surface mixing by mix in place method with front end loader at OMC and compacting with vibratory roller to achieve the desired density, complete as per specification and direction of engineer in charge- With material conforming to Grade - I (size range 75mm to 0.075mm) having CBR Value -30.				
			2247	cum	2359.32	5301392
180	RA	Construction of dry lean cement concrete sub base over a prepared sub-grade with coarse and fine aggregate conforming to IS:383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per specifications, cement content not to be less than 150 Kg/cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, for all leads & lifts, laid with a mechanical paver, compacting with 8-10 tonne vibratory roller, finishing and curing etc. complete as per direction of Engineer in- charge.	2247	cum	3515.81	7900025
181	14033	Providing and fixing pre-cast Rubber Dye/ steel Dye interlocking concrete block 60mm thick with grade of concrete M300 pnumatic compressed/ vibrated mechanically and as per approved design Confirming to IS15658:2006 including 35mm Sand layer for levelling and filling the joint with sand in proper line and level as per guidlines of IRC : SP 63-2018 etc. Complete.	9558	sqm	680.07	6500109
182	14023A	Providing and ixing pre-cast concrete kerb stone of gray cement based concrete block 30cm length,30cm height and 15cm thick of M200 grade concret as per approved design and including excavation for fixing in proper line and level ,filling the joint with C:M 1:3(1cement:3 fine sand) etc complete.	162			60726



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
183	RA	Providing and laying design mix cement concrete of M-30 grade, in roads/ taxi tracks/ runways, using cement content as per design mix, using coarse sand and graded stone aggregate of 40 mm nominal size in appropriate proportions as per approved & specified design criteria, providing dowel bars with sleeve/ tie bars wherever required,laying at site, spreading and compacting mechanically by using needle and surface vibrators, levelling to required slope/ camber finishing with required texture, including steel form work with sturdy M.S. channel sections, curing, making provision for contraction / expansion, construction & longitudinal joints (10 mm wide x 50 mm deep) by groove cutting machine, providing and filling joints with approved joint filler and sealants, complete all as per direction of Engineer-in-charge (Item of joint fillers, sealants, dowel bars with sleeve/ tie bars to be paid separately). Cement concrete manufactured in automatic batching plant (RMC plant) i/c transportation to site in transit mixer	2903	cum	9248.45	26848250
184	26096A	Parking Signs :-Providing and fixing sing boards made out of 2mm aluminium sheet; size 60 x 60cms. sequare plus 60 x 20cms rectangular additional plate as as per the design of IRC-67-1977 pre treated with phospheting process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint;reflectorised with retro refiective sheeting as per latest M.O.S.T.Specifications; 3.1m long stand post and frame fabricated from suitable size iron angle of 35 x 35 x 3mm 75x75x6mm as required;painted with best quality epoxy coatings in black and white bends.the details of symbol for each board shall be as per the instruction of engineer in charge. The fixing at site shall be in 1:2:4 CC block of size 45 x 45 x 60cms. for each leg. including excavation curing etc.complete under the supervision of engineer in charge.(A) Engineer Grade(VR)	4	each	3795.75	15183
185	26090	Providing and fixing retro Reflective Engineering grade Board using C.R.C. (M.S.) Sheet 2mm, angle iron 75 x 75 x 6mm. Descaling and degreasing the board as per requirement using epoxyprimer epoxy paint and carrying retro reflactive process by screen painting as directed etc. complete including transporting and fixing in C.C. 1:4:8 with necessary excavation curing etc. complete as per I.R.C type design.(A) Engineer Grade	6		8646.75	51881



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
186	26093C	Facility Informatory Sign :-Providing and fixing sign boards made out of 2mm aluminium sheet / 4mm ACP (Aluminum composite Panel); size 80 x 60 cms rectangular as per design of IRC-67-2012.Pre treated with phospheting process & acid etching; coated with one coat of epoxy primer and two coats of best quality epoxy paint ;reflectorised with Micro Prismatic Grade retro refiectivesheeting of Type-11 as per ASTM D-4956 and latest M.O.S.T.Specifications; 3.6mtr long stand post of 75 x 75 x 6mm / 65NB Circular MS Pipe as required and frame fabricated from suitable size iron angle of 35 x 35 x 3mm; painted with bestquality epoxy coatings in black and white bends. The details of symbol foreach board shall be as per theinstruction of engineer in charge. The fixing at site shall be in 1:2:4 CC blockof size 45 x 45 x 60 Cms. for each leg.including excavation, curing etc.complete under the supervision of engineer in charge. A warranty for 10 years for the Retro reflective sheeting from original manufacturer & a certified copy of 3 year outdoor exposure test report from third party test lab for the product offered shall be submitted by contractor. (A) Class-C Type-11 Retro Reflective sheeting				
			6	each	5848.00	35088
187	RA	Painting road surface marking with adequate nos of coats to give uniform finish with ready mixed road marking paint conforming to IS : 164, on bituminous surface in white/yellow shade, including cleaning the surface of all dirt, scales, oil, grease and foreign material etc.complete. New work (Two or more coats)	390	sqm	159.49	62201
188	26004EA	Earthwork for embankment including breaking clods,dressing with all lead and lift and including watering rolling and consolidation of subgrade in layers at O.M.C.to required dry density including filling the depression which occur during the process using power roller 8Tto10T. (E) From Borrow area within all lead.	61950	cum		24330863
189	RA	Supplying and stacking at site dump manure from approved source, including carriage (manure measured in stacks will be reduced by 8% for payment) : Screened through sieve of I.S. designation 20mm	431	cum	226.92	97803
190	RA	Fine dressing of the ground	11500	sqm	3.00	34500
191	RA	Spreading of sludge, dump manure and / or good earth in required thickness as per direction of Engineer -in-charge (Cost of sludge, dump manure and / or good earth to be paid separately).	3881	cum	47.00	182407
192	RA	Mixing earth and sludge or manure in the required proportion specified or directed by the Engineer -in-charge.	3881	cum	33.00	128073
193	RA	Grassing with selection No.1 grass including watering and maintenance of the lawn for 30 days or more till the grass forms a thick lawn, free from weeds and fit for mowing including supplying good earth, if needed -With grass Turf	11500	sqm	12.00	138000



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
194	RA	Preparation of beds for hedging and shrubbery by excavating 60 cm deep and trenching the excavated base to a further depth of 30 cm, refilling the excavated earth after breaking clods and mixing withsludge or manure in the ratio of 8:1 (8 parts of stacked volume of earth after reduction by 20% : one part of stacked volume of sludge or manure after reduction by 8%), flooding with water, filling with earth if necessary, watering and finally fine dressing, leveling etc.including stacking and disposal of materials declared unserviceable and surplus earth by spreading and leveling as directed, within a lead of 50 m, lift up to 1.5 m complete (cost of sludge, manure or extra earth to be paid for separately).				
195	RA	Supplying & Stacking of Selection No.1 doob grass turf at site fresh & free from weeds having proper roots in green including loading, unloading, carriage and all taxes paid etc.and as per direction of Engineer - in -charge.		cum	199.00	99500
		TOTAL	11500	sqm	45.00	517500 75082441



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
		Sub Head XIV Plumbing work				
196	23055	Providing & fixing concealed centre point to wall ceiling & floor CPVC SDR-13.5 PIPE having National Sanitation Foundation (NSF) seal for potable water of 15 mm dia nominal bore tube fittings and clamps including making				
		good the wall, ceiling and floor etc complete.15 mm dia	3010	metre	165.21	497282
197	23056	Providing & fixing concealed centre point to wall ceiling & floor CPVC SDR-13.5 PIPE having National Sanitation Foundation (NSF) seal for potable water of 25 mm dia nominal bore tube fittings and clamps including making good the wall, ceiling and floor etc complete.20mm dia	810		202.97	164406
198	23057	Providing & fixing concealed centre point to wall ceiling & floor CPVC SDR-13.5 PIPE having National Sanitation Foundation (NSF) seal for potable water of 25 mm dia nominal bore tube fittings and clamps including making good the wall, ceiling and floor etc complete.25mm dia				
100	00050	Providing and fining concerted O DVO size ODD 405	785	metre	247.25	194091
200	23058	Providing and fixing concealed C-PVC pipe SDR - 13.5 ISI mark of approved make and specials,clamps, Tube fitting with all required fittings such as reducing coupler, Union, bend plug, end cap, pipe clip, tee, hex nipple, elbow, coupler etc. complete with using bonding material including cutting and making good the walls and ceiling with necessary fittings, connections etc complete and as directed by the Engineer-in-Charge. 32 mm dia Providing and fixing concealed C-PVC pipe SDR - 13.5	1705	metre	330.36	563264
200	23059	ISI mark of approved make and specials, clamps, Tube fitting with all required fittings such as reducing coupler, Union, bend plug, end cap, pipe clip, tee, hex nipple, elbow, coupler etc. complete with using bonding material including cutting and making good the walls and ceiling with necessary fittings, connections etc complete and as directed by the Engineer-in-Charge. 40 mm dia	705		107.00	200550
201	23060	Providing and fixing concealed C-PVC pipe SDR - 13.5 ISI mark of approved make and specials, clamps, Tube fitting with all required fittings such as reducing coupler, Union, bend plug, end cap, pipe clip, tee, hex nipple, elbow, coupler etc. complete with using bonding material including cutting and making good the walls and ceiling with necessary fittings, connections etc complete and as directed by the Engineer-in-Charge. 50 mm dia	465		647.30	308550 300995
202	NS	Providing and fixing concealed C-PVC pipe SDR - 13.5 ISI mark of approved make and specials,clamps, Tube fitting with all required fittings such as reducing coupler, Union, bend plug, end cap, pipe clip, tee, hex nipple, elbow, coupler etc.complete with using bonding material including cutting and making good the walls and ceiling with necessary fittings, connections etc complete and as directed by the Engineer-in-Charge. 63 mm dia	465		710.00	312400

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
203	NS	Providing and fixing concealed C-PVC pipe SDR - 13.5 ISI mark of approved make and specials,clamps, Tube fitting with all required fittings such as reducing coupler, Union, bend plug, end cap, pipe clip, tee, hex nipple, elbow, coupler etc.complete with using bonding material including cutting and making good the walls and ceiling with necessary fittings, connections etc complete and as directed by the Engineer-in-Charge. 80 mm dia	195	metre	791.00	154245
204	23063	Providing laying and jointing in true line and level 32mm dia.U.P.V.C.Pipe (SCH-40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	600	metre	117.97	70782
205	23065	Providing laying and jointing in true line and level 50mm dia.U.P.V.C.Pipe (SCH-40) for cold water including fittings as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	518		193.73	100352
206	23066	Providing, laying and jointing in true line and level 160 diametre U.P.V.C (TypeB) conforming to IS13592-1992 with one end plain and othe rend socketed with rubberring, & fittings conforming to ISI14735-1999 of approved make for drainage system pipe line, pipe shall be jointed with each other with rubber lubricant, pipe shall be fixed on wall using of PVC clamp of the size 110 mm diametre x149mm length x145mm heigh at every 2000 mm center to center or shall be concealed in walls as directed including necessary fittings such as bends, shoes etc.including testing of pipes and joints and jointed with adhesive solvent cement including cost of all	2304			1896169
207	AR	materials. Providing, laying and jointing in true line and level 110 diametre U.P.V.C (TypeB) conforming to IS13592-1992 with one end plain and othe rend socketed with rubberring, & fittings conforming to ISI14735-1999 of approved make for drainage system pipe line, pipe shall be jointed with each other with rubber lubricant, pipe shall be fixed on wall using of PVC clamp of the size 110 mm diametre x149mm length x145mm heigh at every 2000 mm center to center or shall be concealed in walls as directed including necessary fittings such as bends, shoes etc.including testing of pipes and joints and jointed with adhesive solvent cement including cost of all materials.	4262		822.99 551.25	2349648



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
208	AR	Providing, laying and jointing in true line and level 75 diametre U.P.V.C (TypeB) conforming to IS13592-1992 with one end plain and othe rend socketed with rubberring, & fittings conforming to ISI14735-1999 of				
		approved make for drainage system pipe line, pipe shall be jointed with each other with rubber lubricant, pipe shall be fixed on wall using of PVC clamp of the size 75 mm				
		diametre x149mm length x145mm heigh at every 2000 mm center to center or shall be concealed in walls as directed including necessary fittings such as bends, shoes etc.including testing of pipes and joints and jointed				
		with adhesive solvent cement including cost of all materials.	1675	metre	439.00	735325
209	23068	Providing and fixing PVC SWR nahni trap IS 14735 FOR DRAIN-100 mm dia meter with jalli of the following nominal diameter of self cleaning design with C.I. screwed down of hinged grating incl. cost of cutting and making good the walls & floors	420	each	565.43	237481
210	23069	Providing and fixing PVC SWR nahni trap IS 14735 FOR DRAIN-75 mm dia meter with jalli of the following nominal diameter of self cleaning design with C.I. screwed down of hinged grating incl. cost of cutting and making good the				
211	24006B	walls & floors providing & fixing S.W gully trap with CI grating brick masnoary chamber & water tight CI cover with frame of 300 x 300mm size inside of standard weight with Squre mouth traps @ 150 x 100mm Size P or R type	840		552.83	464377
212	24016AA	Construction of BRICK MASONRY CHAMBER for under Ground C.I. inspection chamber and bends with bricks having crushing strength not less than 35 Kg / Cm2 in Cement Mortar (1:5) C.I cover with frame (light duty) 455x610 mm internal dimension, total weight of cover with frame to be not less than 38 kg (wight of cover 23 kg and wt of frame 15 kg) R.C.C top slab with 1:2:4 mix (1 cement :2 coarse sand;4 graded stone aggregate 20 mm nominal size)with RCC top slab with CC (1:2:4) mix (1 cement : 2 corse sand : 4 gradded aggregate 20 mm nominal size) Foundation concrete 1:5:10, inside plaster 15 mm thick with C:M (1:3) finished smooth with a floating coat of neat cement slurry on walls & bedconcrete etc, complete. Inside dimension of chamber 455 mm x 610 mm x 450 mm deep for single pipe.	11	each	2903.89	31943
213	24017A	Extra over item above item for every additional depth of 0.1 meter or part thereof beyond 450mm depth for brick				
214	24002B	masonary chamber (I) for 455mmx610mm ProvidingandlayingCementconcrete1:5:10(1-Cement :5 - Fine sand :10 -Graded stone aggregate 40 mm nominal size) bedding for stone ware pipes of following internal diameters with necessary form work and curing complete.(B) 150mm dia. (166mm Ave. bed thickness	11	each	239.99	2640
215	24007BA	Providinglaying (to level or slopes) and jointing reinforced concrete Light duty non- pressure pipes I.S.class NP2 of the following internal diameter with collars and butt ends prepared for collar joints including testing of joints	270	metre	211.59	57129
		complete. (B) 150mm	270	metre	246.21	66477

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
216	24007DA NS	Providing laying to level or slopes)and jointing reinforced concrete Light duty non-pressure pipes I.S.class NP2 of the following internal diameter with collars and butt ends prepared for collar joints including testing of joints complete.(D) 300mm Providing and fixing Wash Basin with C.I or M.S. bracket painted with including cutting holes and making good the same but including fitting (A) Vitreous chaina :(II) Flat back wash basin 550mm x 400mm size in white colour .	450	metre	658.89 4018.00	296501
218	NS	Providing and fixing Oval or round shape Counter Wash Basin with C.I or M.S. bracket painted with including cutting holes and making good the same but including fitting (A) Vitreous chaina : size and color selected by architect or as per detail.	365	each	4018.00	1466570
219	NS	Providing and fixing wash down water closet EUROPEAN TYPE W/C PAN with conceled flush tank with intergral "P" or "S" trap including jointing the trap with soil pipe in cement mortar (1:1) (1 cement;1 fine sand) vitereous china. Rate inclusive of providing and fixing seat cover of		aaab		2002272
220	NS	the same make. Providing and fixing 15mm dia wall mounted basin tap (auto closing) code: PRS:061 jaquar make or equvivelant . Including all related material etc. complete.	<u>347</u> 365	each each	8076.00	2802372
221	NS	Providng and fixing screw down bib tap of 15 mm dia 9a) Brass screw down bib tap polished bright jaquar make, florentine series, code: FLR 5047N or equvivelant with all related material etc. complete	347	each	1388.00	481636
222	NS	Providng and fixing C.P. brass Anglular cock of approved quality. (a) 15mm dia make jaquar florentine series, code: FLR-5053N or equvivelant with all ralted material etc. complete.	1721	each	1284.00	2209764
223	NS	Providing and fixing S. S. Bottle Tap with necessary concealed fitting and cover panels. All the damages incurred while fixing shall be repaired to the satisfaction of the engineer in-charge . S. S. Bottle Tap shall be as approved by engineer in-charge .make jaquar or equvivelant	365		288.00	105120
224	NS	Providing and fixing Pillar Tap for Sink, capstan head, screw down high pressure with screws,shanks and back nuts (I) 15 mm dia jaquar make or equvivelant with all related material etc. complete.	73	each	2411.00	176003
225	NS	Providing & Fixing magnifying mirror of approved make. Including providing & fixing screws, washers, cutting & making good the walls.size as per architecture detail.	164	sqm	848.00	139284
226	NS	Providing & fixing C.P. brass towel ring fixed to rawl plug with C.P. brass screws.	366	each	1002.00	366732
227	NS	Supply,Installing, testing and commissioning C.P single lever concealed diverter for bath and shower complete with making good the walls & floor wherever required as per technical specifications, drawings and directed by the Project Manager.Single Lever Concealed Divertor ,Shower Head incl. shower arm,Bath spout 235 mm with wall flange	307	each	2500.00	767500
228	NS	Providing and fixing 15mm C.P brass hand held ablution fitting (health faucet) with one meter long flexible tube and wall hook, all complete of following make or equivalent (CAT No. ALD-585 of Jaguar).	347	each	1017.00	352899

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
229	NS	Supply, instalation, testing & commissioning of gunmetal, male or female threaded isolation control valve (Balll Valve), confirming to IS 778, PN 1.0, with necessary specials, union, nipples etc., to complete the job. (Internal Toilet Control Valve+ Shaft Area) -15 mm dia		each		0
230	NS	Supply, instalation, testing & commissioning of gunmetal, male or female threaded isolation control valve (Balll Valve), confirming to IS 778, PN 1.0, with necessary specials, union, nipples etc., to complete the job. (Internal Toilet Control Valve+ Shaft Area) -20mm dia.	556	each	1129.00	627724
231	NS	Supply, instalation, testing & commissioning of gunmetal, male or female threaded isolation control valve (Balll Valve), confirming to IS 778, PN 1.0, with necessary specials, union, nipples etc., to complete the job. (Internal Toilet Control Valve+ Shaft Area) - 25mm dia.	18		1402.00	25236
232	NS	Supply, instalation, testing & commissioning of gunmetal, male or female threaded isolation control valve (Balll Valve), confirming to IS 778, PN 1.0, with necessary specials, union, nipples etc., to complete the job. (Internal Toilet Control Valve+ Shaft Area) -32mm dia.	29	each	1671.00	48459
233	NS	Supply, instalation, testing & commissioning of gunmetal, male or female threaded isolation control valve (Balll Valve), confirming to IS 778, PN 1.0, with necessary specials, union, nipples etc., to complete the job. (Internal Toilet Control Valve+ Shaft Area) -40mm dia.				
234	NS	Supply, instalation, testing & commissioning of gunmetal, male or female threaded isolation control valve (Balll Valve), confirming to IS 778, PN 1.0, with necessary specials, union, nipples etc., to complete the job. (Internal Toilet Control Valve+ Shaft Area) -50mm dia.	<u>34</u> 6	each	2701.00	<u>91834</u> 25140
235	NS	Supply, instalation, testing & commissioning of gunmetal, male or female threaded isolation control valve (Balll Valve), confirming to IS 778, PN 1.0, with necessary specials, union, nipples etc., to complete the job. (Internal Toilet Control Valve+ Shaft Area) -63mm dia.	0		4643.00	83574
236	NS	Supply, instalation, testing & commissioning of butterfly valve with dual plat flanze joint , isolation control valve confirming to latest IS , PN 1.0, with necessary specials, bolt and nuts , EPDM gasket all etc., to complete the job.(External Vertical Shaft Riser Control + Ring Main Works) a. 50mm Dia	7	each	1871.00	13097
237	NS	Supplying, fitting & fixing Non return valve (Spring type Dual plate type) as per API 594/598, tested to 10 kg/sq.cm etc. complete. 50mm dia		each	1808.00	0
238	NS	Supplying, fitting & fixing Non return valve (Spring type Dual plate type) as per API 594/598, tested to 10 kg/sq.cm etc. complete. 75mm dia.		each		0



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
239	NS	Constructing manhole with RCC top slab in 1:2:4 mix (1 cement:2 coarse and :4 graded stone aggregate 20 mm nominal size) foundation concrete 1:3:6 mix (1 cement :3 coarse sand : 6 brick bats 40 + 50 mm size) inside plastering 15mm th.with cement mortar 1:5 (1 cement :5 coarse sand) finished with a floating coast of neat cement and making channel in cement concrete 1:2:4 mix				
		(1 cement: 2 Coarse sand :4stone aggregate 20mm nominal size) inside size 900 mm x1200 mm & 1.5 m deep incl C.I.cover with frme size 1)A-type depth 0.90 m for 150 mm, 250(required dia) sewer or Storm Water				
		Drain	51	each	10920.76	556959
240	NS	Extra rate for constructing B.B masonry for every additional depth 0.10meter or part thereof for depth from 1.50 meter to 2.25 meter.	20	metre	3159.00	63180
241	NS	Supplying & erecting approved make motor control cubical panel (Direct - on - line) made from 16 G. CRCA sheet duly epoxy powder painted inside and outside with hinged doors and locking, arrangement consisting of suitable size of ON- OFF isolator (AC - 3/23duty) main fuses, single phasing preventer, indicating lamps for R- Y - B phases, overload relay, Automatic water level controller, Ammeter, Voltmeter each with two way selector switch incoming, wires duly socket crimped, main contactor & overload relay, start - stop push buttons, to be erected on angle iron frame grouted on wall as directed. The isolator, overload relay & contactors will be of L & T, Siemens or BCH make only. (b) DOL for 7.5 H.P.		each	11161.00	0
242	NS	Drilling 215mm dia bore in over burden strata including lowering and fixing of 175mm nominal dia UPVC Pipes up to required depth and further drilling of 165 mm dia bore hole in rocky strata by DTH Rig including fitting of bore		Cacin		
243	NS	plug. Providing / supplying of 175mm nominal dia Plain casing UPVC Pipe CS-Type at store of site of standard length with necessary couplers,cement solvant, joint alongwith required cement solvant including and tests shall be conforming to IS 12818 / 1992 with latestfreight/Insurance/Octroi / Taxes etc. complete detailed specifications amendment.	150		301.00	45150 88050
244	NS	Lowering of Submersible pumpset complete with required nos and size of Column pipe (GI / HDPE pipe) erected by means of proper chain pulley block & pipe wrenches after checking of threads of eachpipe with coupling to take the load of the pumpset and pipe assembly filled up with water with trail testing, wiring GEB test report.	1	metre	3241.00	3241
245	NS	Supplying submersible pump set for bore of 150 mm. dia. Or more having 3 phase motor capacity not more than 12.5 H.P. and having (12 Stage) 390 to 350 L.P.M. discharge at the head about 95 to 107 mtrs. suitable for 50 mm dia. Delivery pipe Cat.II	1	each		42835
246	NS	Flat PVC cable size 4.0 sq.mm	10	metre	80.00	800
247	NS	Supplying & Fixing 50 mm dia UPVC column pipe approved make with necessary fittings like long threaded couplins, bend, T, Elbow, etc. required as per directed	150	metre	414.00	62100
					V	ARCHITEC
		56				

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
248	NS	Providing best quality of well sorted `sevalia` gravel of size 4 mm to 6 mm including loading, unloading, carting upto site of work stacking etc complete as directed.	5	cum	1869.00	9345
249	NS	Design, Construction ,Supplying, installing, testing & commissioning of Sewage Treatment Plant of 120 KLD	5	cum	1869.00	9345
		based on MBR technology Complete as per specifications. TOTAL	1	pkg	5227580.0	5227580 25404325
250	AR	Sub Head : XV Fire Fighting System Supply, installation, testing & commissioning of electric driven main fire pump suitable for automatic operation and consisting of following: complete in all respect as required. 1) Horizontal type, multistage, centrifugal, split casing pump of cast iron body & bronze impeller with stainless steel shaft, mechanical seal conforming to IS 1520. 2)Suitable HP Squirrel cage induction motor, TEFC, synchronous speed 1500 RPM, suitable for operation on 415 volts, 3 phase 50 Hz, AC supply with IP 55 protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325. 3) M.S. fabricated Common base plate, coupling, coupling guard, foundation bolts etc. as required. 4) Suitable cement concrete foundation duly plastered with anti vibration pads 2280				
251	AR	Ipm at 70 m Head Supplying, installation, testing and commissioning of diesel engine driven main fire pump suitable for automatic operation and consisting of following, complete in all respects, as required : (Diesel Driven Pump) Horizontal type, multistage, centrifugal pump of cast of iron body and bronze impeller with stainless steel shaft, mechanical seal conforming to IS 1520.Suitable HP, 1500 RPM water cooled with radiator, diesel engine conforming to relevant IS standard complete with auto starting mechanism, 12 /24 volts electric starting equipment, diesel tank, exhaust pipe extended upto 10 m outside pump house duly insulatedwith 50 mm thick glass wool with 1.0 mm thick aluminium sheet cladding, residential silencer, instruments and protection as per standard specification, stop solenoid for auto stop in the event of fault with audio indications, painted with post office red colour etc. as required 2280 lpm at 70 m Head	1	Set		329521
252	AR	Supplying, installation, testing and commissioning of electric driven pressurisation pump suitable for automatic operation and consisting of following, complete in all respects, as required : (Jockey Pump) ,Horizontal type, multistage, centrifugal pump of cast iron body and bronze impeller with stainless steel shaft, mechanical seal conforming to IS : 1520. Suitable HP squirell cage induction motor TEFC type suitable for operation on 415 volts, 3 phase 50 Hz AC supply with IP 55 class of protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS : 325 180 lpm at 70 m Head	1	each	92236.0	55- ⁸ 92236
		·				
						ACHILE

253 AR Designing. Supply. Installation. Testing and commissioning of system controller to controllore to controller to contreler to contrece to the contre to the controller to con	S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
254 AR Supplying and making end termination with brass compression gland & Allugs for following sizes of PVC insulated, PVC sheathed/XLPE Al.conductor cables of 1.1 2 each 525.00 1055 255 AR Supplying and making end termination with brass compression gland & Allugs for following sizes of PVC insulated, PVC sheathed/XLPE Al.conductor cables of 1.1 2 each 333.00 666 256 AR Supplying and making end termination with brass compression gland & Allugs for following sizes of PVC insulated, PVC sheathed/XLPE Al.conductor cables of 1.1 2 each 333.00 666 257 AR Supplying and making end termination with brass torm gland & Allugs for following sizes of PVC insulated, PVC sheathed/XLPE Alconductor cables of 1.1 2 each 241.00 48: 257 AR Earthing with GL Earth plate 600 mm x 600 mm x 6 mm thin cloting accessories and providing masony enclosure with cover plate having locking arrangement and watering pipe with charceal or coke and salt complete as required. 2 Set 6332.00 1266- 258 AR Providing & fixing 25 mm x 5 mm G.I. Strip in 40 mm dia GI pipe from earth electrode including connections with 61 mut. bolt, spring, washer excavation and re-filling etc. as required. 10 metre 598.00 598.00 259 AR Providing a fixing 25 mm x 5 mm G.I. Strip i	253	AR	commissioning of system controller to control operation of main electric fire pump, diesel pump, Pressurization pump, Terrace pump in sequence as per specification consisting of relays, timers. Sensors, annunciation				
compression gland & Alugs for following sizes of PVC 2 each 525.00 1050 255 AR Supplying and making end termination with brass compression gland & Alugs for following sizes of PVC insulated, PVC sheathed/XLPE Al.conductor cables of 1.1 2 each 333.00 660 256 AR Supplying and making end termination with brass compression gland & Alugs for following sizes of PVC insulated, PVC sheathed/XLPE Al.conductor cables of 1.1 2 each 333.00 660 256 AR Supplying and making end termination with brass compression gland & Alugs for following sizes of PVC insulated, PVC sheathed/XLPE Al.conductor cables of 1.1 2 each 241.00 480 257 AR Earthing with GI Earth plate 600 mm x 60 mm x 6 mm th.including accessories and providing masonry enclosure with cover plate having locking arrangement and watering pipe with charcoal or coke and salt complete as required. 2 Set 6332.00 1266 258 AR Providing & fixing 25 mm x 5 mm G.I. Strip in on surface or in recess for connections et as required. 10 metre 598.00 598.00 598.00 260 AR Providing & fixing 25 mm x 5 mm G.I. Strip in on surface or in recess for connections et as required. 20 metre 64.00 <				1	Set	219402.0	219402
256 AR Supplying and making end termination with brass compression gland & Alugs for following sizes of PVC insulated, PVC sheathed/XLPE Al conductor cables of 1.1 2 each 333.00 660 256 AR Supplying and making end termination with brass compression gland & Alugs for following sizes of PVC insulated, PVC sheathed/XLPE Al conductor cables of 1.1 2 each 241.00 483 257 AR Earthing with GI Earth plate 600 mm x 60 mm x 6 mm th.including accessories and providing masonry enclosure with cover plate having locking arrangement and watering pipe with charcoal or coke and salt complete as required. 2 Set 6332.00 1266 258 AR Providing & fixing 25 mm x 5 mm G.I. Strip in 40 mm dla GI pipe from earth electrode including connections with GI earth electrode including connections with GI earth electrode including connections with GI earth electrode including conductor and re-filling etc. as required. 50 metre 598.00 598 259 AR Providing and fixing 5 SWG dia G.I wire on surface or in recess for connections etc as required. 50 metre 58.00 598 260 AR Supplying and installing following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nu			compression gland & Al.lugs for following sizes of PVC insulated, PVC sheathed/XLPE Al.conductor cables of 1.1 KV grade as required - 3.5x95 sq.mm	2	each	525.00	1050
267 AR Earthing with GI Earth plate 600 mm x 600 mm x 6 mm th.including accessories and providing masony enclosure with cover plate having locking arrangement and watering pipe with charcoal or coke and salt complete as required. 2 Set 6332.00 12667 258 AR Providing & fixing 25 mm x 5 mm G.I. Strip in 40 mm dia G i pipe from earth electrode including connections with GI nut, bolt, spring, washer excavation and re-filling etc. as required. 2 Set 6332.00 12667 258 AR Providing & fixing 25 mm x 5 mm G.I. Strip in 40 mm dia G i pipe from earth electrode including connections with GI nut, bolt, spring, washer excavation and re-filling etc. as required. 10 metre 598.00 5988 259 AR Providing & fixing 25 mm x 5 mm G.I. Strip in on surface or in recess for connections etc as required. 50 metre 218.00 10900 260 AR Providing and fixing 6 SWG dia G.I wire on surface or in recess for loop earthing along with existing conduit/cable as required. 50 metre 62.00 1244 261 AR Supplying and installing following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc. as required. 10 metre 694.00 34700 34700 34700	255	AR	compression gland & Al.lugs for following sizes of PVC insulated, PVC sheathed/XLPE Al.conductor cables of 1.1	2	each	333.00	666
1 th.including accessories and providing masonry enclosure with cover plate having locking arrangement and watering pipe with charcoal or coke and salt complete as required. 2 Set 6332.00 1266- 258 AR Providing & fixing 25 mm x 5 mm G.I. Strip in 40 mm dia Gl pipe from earth electrode including connections with Gl nut, bolt, spring, washer excavation and re-filling etc. as required. 10 metre 598.00 5988 259 AR Providing & fixing 25 mm x 5 mm G.I. Strip in on surface or in recess for connections etc as required. 50 metre 218.00 10900 260 AR Providing and fixing 6 SWG dia G.I wire on surface or in recess for loop earthing along with existing conduit/cable as required. 50 metre 62.00 1244 261 AR Supplying and installing following size of perforated painted with power coating M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting size Y-Strainer of ductile Cl body flanged ends with stainless steel strainer as specified150 mm dia 1 each 9950.00 9950 263 AR Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of	256	AR	compression gland & Al.lugs for following sizes of PVC insulated, PVC sheathed/XLPE Al.conductor cables of 1.1	2	each	241.00	482
GI pipe from earth electrode including connections with GI nut, bolt, spring, washer excavation and re-filling etc. as required. 10 metre 598.00 598.00 259 AR Providing & fixing 25 mm x 5 mm G.I. Strip in on surface or in recess for connections etc as required. 50 metre 218.00 10900 260 AR Providing and fixing 6 SWG dia G.I wire on surface or in recess for loop earthing along with existing conduit/cable as required. 20 metre 62.00 1244 261 AR Supplying and installing following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc. as required300 mm (W) x 50 mm (D) x 1.6 mm (T) 50 metre 694.00 34700 262 AR Supplying, fixing, testing and commissioning of following size Y-Strainer of ductile CI body flanged ends with stainless steel strainer as specified150 mm dia 1 each 9950.00 9950 263 AR Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with wo or more coats of synthetic enamel paint of required shade complete as required25 mm dia 2586 metre <td>257</td> <td>AR</td> <td>th.including accessories and providing masonry enclosure with cover plate having locking arrangement and watering</td> <td>2</td> <td>Set</td> <td>6332.00</td> <td>12664</td>	257	AR	th.including accessories and providing masonry enclosure with cover plate having locking arrangement and watering	2	Set	6332.00	12664
Init, bolt, spring, washer excavation and re-filling etc. as required.10metre598.00259ARProviding & fixing 25 mm x 5 mm G.I. Strip in on surface or in recess for connections etc as required.50metre218.0010900260ARProviding and fixing 6 SWG dia G.I wire on surface or in recess for loop earthing along with existing conduit/cable as required.20metre62.001240261ARSupplying and installing following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5%, in convenient sections, ioined with connectors, supended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc. as required300 mm (W) x 50 mm (D) x 1.6 mm (T)50metre694.0034700262ARSupplying, fixing, testing and commissioning of following size Y-Strainer of ductile CI body flanged ends with stainless steel strainer as specified 150 mm dia1each9950.009950263ARProviding, laying, testing & commissioning of 'C' class 	258	AR	• •				
259ARProviding & fixing 25 mm x 5 mm G.I. Strip in on surface or in recess for connections etc as required.50metre218.0010900260ARProviding and fixing 6 SWG dia G.I wire on surface or in recess for loop earthing along with existing conduit/cable as required.20metre62.001244261ARSupplying and installing following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc. as required300 mm (W) x 50 mm (D) x 1.6 mm (T)50metre694.0034700262ARSupplying, fixing, testing and commissioning of following size Y-Strainer of ductile CI body flanged ends with stainless steel strainer as specified 150 mm dia1each9950.009950263ARProviding, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as required25 mm dia2586metre664.00171710-264ARProviding, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as required25 mm dia <t< td=""><td></td><td></td><td>nut, bolt, spring, washer excavation and re-filling etc. as</td><td>10</td><td>motro</td><td>E08.00</td><td>5090</td></t<>			nut, bolt, spring, washer excavation and re-filling etc. as	10	motro	E08.00	5090
or in recess for connections etc as required.50metre218.0010900260ARProviding and fixing 6 SWG dia G.I wire on surface or in recess for loop earthing along with existing conduit/cable as required.20metre62.001240261ARSupplying and installing following size of perforated painted with powder coating M.S. cable trays with metroation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc. as required300 mm (W) x 50 mm (D) x 1.6 mm (T)50metre694.0034700262ARSupplying, fixing, testing and commissioning of following size Y-Strainer of ductile Cl body flanged ends with stainless steel strainer as specified 150 mm dia1each9950.009950263ARProviding, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as required 25 mm dia2586metre664.00171710-264ARProviding, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as required 25 mm dia2586metre664.00171710-264AR	259	AR		10	metre	596.00	5960
recess for loop earthing along with existing conduit/cable as required.20metre62.001244261ARSupplying and installing following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders etc. as required300 mm (W) x 50 mm (D) x 1.6 mm (T)50metre694.0034700262ARSupplying, fixing, testing and commissioning of following size Y-Strainer of ductile CI body flanged ends with stainless steel strainer as specified 150 mm dia1each9950.009950263ARProviding, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as required25 mm dia2586metre664.001717100264ARProviding, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as required25 mm dia2586metre664.001717100264ARProviding, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with <b< td=""><td></td><td></td><td>or in recess for connections etc as required.</td><td>50</td><td>metre</td><td>218.00</td><td>10900</td></b<>			or in recess for connections etc as required.	50	metre	218.00	10900
261 AR Supplying and installing following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc. as required300 mm (W) x 50 mm (D) x 1.6 mm (T) 50 metre 694.00 34700 262 AR Supplying, fixing, testing and commissioning of following size Y-Strainer of ductile Cl body flanged ends with stainless steel strainer as specified 150 mm dia 1 each 9950.00 9950 263 AR Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as required25 mm dia 2586 metre 664.00 171710- 264 AR Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as required25 mm dia 2586 metre 664.00 171710- 264 AR Providing, laying, testing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required sh	260	AR	recess for loop earthing along with existing conduit/cable	20	metre	62.00	1240
262 AR Supplying, fixing, testing and commissioning of following size Y-Strainer of ductile CI body flanged ends with stainless steel strainer as specified 150 mm dia 1 each 9950.00 9950 263 AR Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as required 25 mm dia 2586 metre 664.00 1717104 264 AR Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as Image: Association of the second s	261	AR	Supplying and installing following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc. as required300 mm (W) x 50 mm (D) x	50			0.1700
Image: constraint of the constra	262	AR	Supplying, fixing, testing and commissioning of following size Y-Strainer of ductile CI body flanged ends with	50	metre	694.00	34700
 heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as required 25 mm dia 2586 metre 664.00 171710- 264 AR Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as 			stainiess steel strainer as specified 150 mm dia	1	each	9950.00	9950
AR Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as	263	AR	heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as				
	264	AR	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of	2586	metre	664.00	1717104
				851	metre	760.00	646760

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
265	AR	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as				
266	AR	required40mm dia Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as	573		824.00	472152
267	AR	required50mm dia Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as	478		1144.00	546832
268	AR	required65mm dia Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as required 80mm dia	229		1441.00	178684 385407
269	AR	Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as	626		2281.00	1427906
270	AR	required100mm dia Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589 and 1239 including fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc., fixing the pipe on the wall/ceiling with suitable clamps and painting with two or more coats of synthetic enamel paint of required shade complete as				
271	AR	required150mm dia Providing laying, testing & commissioning of 'C' class heavy duty MS Pipe conforming to IS 1239/3589 i/c fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. in ground including excavation & providing cement concrete blocks as supports, anticorrosive treatment with coaltar/asphalt tape as per IS 10221, refilling the trench etc. of following sizes complete as	700		3191.00	2233700
272	AR	required -150 mm dia Providing laying, testing & commissioning of 'C' class heavy duty MS Pipe conforming to IS 1239/3589 i/c fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. in ground including excavation & providing cement concrete blocks as supports, anticorrosive treatment with coaltar/asphalt tape as per IS 10221, refilling the trench etc. of following sizes complete as required -80 mm dia	218		3396.00	740328

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
273	AR	Supplying and fixing single headed internal hydrant valve with instantanous Gun metal couplings of 63mm dia with cast iron wheel ISI marked conforming to IS 5290 (Type- A) with black Cupmetal cap and obein as required				
		A) with blank Gunmetal cap and chain as required - Single headed Gunmetal	66	Set	6827.00	450582
274	AR	Supplying, fixing, testing and commissioning of following size butterfly valve (manual) with CI body SS disc nitrile sheet & O-ring & PN 16 pressure rating as specified150	_			40000
275	AR	mm dia Supplying, fixing, testing and commissioning of following	5	each	8000.00	40000
		size butterfly valve (manual) with CI body SS disc nitrile sheet & O-ring & PN 16 pressure rating as specified100 mm dia	52	each	5953.00	309556
276	AR	Supplying, fixing, testing and commissioning of following size butterfly valve (manual) with CI body SS disc nitrile sheet & O-ring & PN 16 pressure rating as specified80 mm dia	9	each		40032
277	AR	Supplying, fixing, testing and commissioning of following size butterfly valve (manual) with CI body SS disc nitrile sheet & O-ring & PN 16 pressure rating as specified50				
278	AR	mm dia Supplying, fixing, testing and commissioning of following size double flanged sluice valveof rating PN 16 with non rising spindle bronze/GM seat ISI marked complete withnut bolts washer gaskets and conf.to IS780 as	2	each	3379.00	6758
		required150 mm dia	1	each	20323.00	20323
279	AR	Supplying and fixing orifice plate made of 6 mm thick stainless steel with orifice of required size in between flange & landing value of external and internal hydrant to reduce pressure to working pressure of 3.5 kg/cm2				
280	AR	complete as per specifications as required. Supplying, fixing, testing and commissioning of following	66	each	1179.00	77814
200		size non return valve with dual plate of CI body SS plates vulcanized NBR seal flanged end & PN 16 pressure rating				
281	AR	as specified.150 mm dia Supplying, fixing, testing and commissioning of following size non return valve with dual plate of CI body SS plates vulcanized NBR seal flanged end & PN 16 pressure rating	3	each	15880.00	47640
		as specified. 100 mm dia	54	each	9866.00	532764
282	AR	Supplying, fixing, testing and commissioning of following size non return valve with dual plate of CI body SS plates vulcanized NBR seal flanged end & PN 16 pressure rating				
283	AR	as specified. 80 mm dia Supplying and fixing 63mm dia, 15mtr. Long RRL hose pipe with 63mm dia Male and Female Gun metal	4	each	6867.00	27468
		couplings duly binded with GI wire, rivets etc. conforming to IS 636 (type-A) as required Gun Metal	84	each	4645.00	390180
284	AR	Supplying and fixing first-aid Hose Reel with MS construction spray painted in post office red, conforming to IS 884 complete with the following as required.Drum and brackets for fixing the equipments on wall. 20 mm nominal internal dia gun metal globe valve & nozzle. 20 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS: 12585 .20 mm nominal internal dia gun metal globe valve & nozzle.Connections from riser with 25 mm dia stop gun metal valve & M.S.				OEL&ASSO
		Pipe and socket 30 M	66	each	7746.00	511236
					(L	ARCHITEC

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
285	AR	Supplying & fixing 63 mm dia gun metal short branch pipe with 20 mm nominal internal diameter size nozzle conforming to IS 903 suitable for instantaneous				
		connection to interconnect hose pipe coupling as required :Gun Metal	66	each	2157.00	142362
286	AR	Supplying and fixing of fire brigade connection of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS pipe connection conforming to IS 904 as required : - 4 way-100 mm dia M.S. Pipe	1	each		12477
287	AR	Supplying and fixing of fire brigade connection of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS pipe connection conforming to IS 904 as required : - 2 way-100 mm dia M.S. Pipe	2	each		12040
288	AR	Supplying and fixing air vessel made of 250 mm dia, 8 mm thick MS sheet, 1200 mm in height with air release valve on top and flanged connection to riser, drain arrangement with 25 mm dia Gun metal wheel valve, with required accessories, pressure gauge and painting with synthetic enamel pain of approved shade as required.	4	each	16289.00	65156
289	AR	Providing, fixing, testing & commissioning of installation control valve of cast iron body, brass/bronze working parts comprising of water motor alarm, bronze seat clapper, clapper arm andhydraulically driven mechanical gong bell to sound continuous alarm when the wet riser/sprinkler system activates, pressure gauges, emergency releases, strainer, pressure switch, cock valve complete with drain valve and bypass, test control box, ball valves, MS pipe of required size, flanges, orifice plate, gasket etc of follwing sizes as required : -100 mm dia				1005-10
290	AR	Providing & fixing of pressure switch in M.S. pipe line	3			120540
291	AR	including connection etc. as required. Providing & fixing flow switch in following sizes M.S. pipe	1	each		1380
292	AR	including connection etc as required 100mm dia Providing, fixing, testing & commissioning of 15mm dia quartzoid bulb type sprinklers of rating 68 degree centigrade with required accessories : A) Pendent	1	each		6709
293	AR	Sprinkler Providing, fixing, testing & commissioning of 15mm dia quartzoid bulb type sprinklers of rating 68 degree centigrade with required accessories : B) Horizontal side	536	each	466.00	249776
294	AR	wall sprinkler Supplying, installation, testing & commissioning of sprinkler flexible pipe (UL Listed) of stainless steel complete with 15 NPT on reducer thread with maximum working pressure of 175 PSI test pressure of 875 PSI (Burst) with branch line (Inlet) 25mm NPT male thread to sprinkler head (Outlet) 15mm NPT female thread with reducer, nipple, 2 side brackets, center bracket, stockbar of following sizes complete as required. A) 700mm	22			23389
295	AR	Supplying, installation, testing & commissioning of deluge valve (to be used for water curtains) UL listed with wet pilot basic trim assembly for DVA with test and alarm, drip and drain valve with water motor gong complete as required A) 150 mm				
		required. A) 150 mm	1	each	103066	RCHITE

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
296	AR	Providing, installation, testing & commissioning of electric release trim assembly for deluge valve with tro way solenoid valve, weatherproof operation on 24 volts DC supply complete as required	1	each	6579.00	6579
297	AR	Laying of one number PVC insulated and PVC sheathed / XLPEpower cable of 1.1 kV grade of following size direct in groundincluding excavation, sand cushioning, protective covering and refilling the trench etc. as required. A) Above 35 sq. mm and upto 95 sq. mm	15			
298	AR	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 kV grade of following sizeon wall surface as required. A) Upto 35 sq. mm	15	metre	309.00	4635
299	AR	(clamped with 1mm thick saddle) Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 kV grade of following sizeon wall surface as required. B) Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)	10	metre	49.00	490
300	AR	Supplying of XLPE insulated, PVC sheathed alluminium conductor 1.1 KV grade armoured U.G Cable as required	95		116.00	11020
301	AR	A) 3.5x95 sq.mm Supplying of XLPE/PVC insulated stranded copper conductor 1.1 KV grade (un-armoured) of following size as required 3 core 50.mm	100		414.00	41400
302	AR	Supplying of XLPE/PVC insulated stranded copper conductor 1.1 KV grade (un-armoured) of following size as required 3 core 16 sq.mm	10		755.00	7550
303	AR	Supplying and fixing of hose cabinet of 750W x 600H x 250D mm made of 18 gauge M.S. sheet with 6mm thick glazed glass door including necessary locking arrangment suitable to accomodate external hydrant with butterfly valve, 2 nos. 15 mtr. long hose pipe, 1 no. branch pipe mounted on wall or raised brick platform and duly painted with post office red externally and white internally with synthetic enamel paint complete in all respect for external hydrant as required.				
304	AR	Providing & fixing angle iron (40 mmx 40mm x 5 mm) door frame and M.S. sheet 18 guage cum glass shutter of size 2.1 mtr. X 1.2mtr. (N.S) with 25mm x 25mm x 3mm angle frame all around & stiffened in between i/c hinges, handle, locking arrangement, painting with approved synthetic enamel paint i/c sign writing on glass at internal hydrant including providing & fixing M.S. sheet 2 mm thick on remaining portion above door to close opening i/c painting etc. as required.	<u>16</u> 62		7580.00	121280
305	AR	Providing and fixing of ABC modular powder type fire extinguisher consisting of welded MS cylindrical body squeeze lever discharge valve fitted with pressoer indicating guage, internal discharge tube 30 cms long high pressor discharge hose, discharge nozzle, suspension (confirming to IS 13949 finished externally with red enamel paint and fix to wall with (complete with	02	Caul	5241.00	90EL&ASSO

ARCHITE

S.No.	SOR No	Description	Qty	Unit	Rate exc GST	Amount
306	AR	Providing and fixing Carbon-di-oxide fire extinguishers consisting of welded M.S cylinderical body,squeeze lever discharge valve fitted with internal dischargetube, 30cms long high pressure discharge hose, discharge nozzle, suspension bracket, confirming to IS : 934 finished externally with red enamel paint and fixed to wall with brackets with rawl plug/dash fasteners complete with internal charge. a) Capacity 4.5 kg. I.S.I. Marked.				
		internal charger af capacity no rigi nem marica	66	each	13694.00	903804
		Total				15551197
		Sub Head - I - Point Wiring				
307	1.2.1	Point wiring for light/bell /Exhaust Fan with 2X1.5 sq. mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length in below type of pipe erected with 6A Modular type switch/bell push & accessories and earth continuity of following type erected on PVC/metallic/wooden Box single mounting base frame, covered with textured/metalic white front plate modules erected on / in wall / ceiling as per pipe erected with necessary lamp holder/ ceiling rose/ H.D Connector as directed.(f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete-	445	point	4230	1882350
308	1-1-4.	Point wiring for Tissino / Modular secondary light point with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires, in below type of pipe to be erected complete with earth continuity and necessary connection with primary light with accessories erected on Metal / PVC / wooden box covered with 3 mm thick PC(Polycarbonate) / Acrylic sheet for open / concealed wiring. with necessary Lamp holder / ceiling rose / H.D.Connector as directed.Note:- Maximum up to 6 mtrs length, excess will be considered as Mains for Secondary Point.(f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete.	150	point	1364	204600
309	1.2.2	Point wiring for Fan with 2X1.5 sq. mm & earth wire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length in below type of pipe erected with 6A Modular type switch and num free EME four or more step type electronic fan regulator with separately mounted and accessories with earth continuity of following type erected on PVC/ metallic /wooden Box single mounting base frame, covered with textured/ metalic white front plate modules erected on / in wall / ceiling as per pipe erected with necessary ceiling rose/ H.D Connector as directed.(f) with medium class Rigid PVC pipe and accessories erected concealed in wall/ceiling complete-Cat III	623			



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
310	1.2.5	Point wiring for Two Way Controlled Light Point with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (green) both are of .ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires erected in below type of pipe with 6A					
		Modular type switches and following type of accessories erected on PVC / Metallic/Wooden box, single mounting base frame covered with textured / metallic/white front					
		plate modules erected on / in wall / ceiling as per pipe erected. with necessary batten/angle holder or ceiling rose or H.D.Connector as directed.(f) with medium class Rigid PVC pipe and accessories erected concealed in					
		wall/ceiling complete-Cat -III	555	point		2	1110
311	1.2.6.a	Providing following type of Modular type Accessories mounted with PVC/metallic.wooden box, single mounting base frame covered with textured / metallic / white front plate, modules erected with necessary connections as per site situation directed by Engineer in charge. (1)One No.					
		SP 6 Amp.Cat III	143	each		1757	251251
312	1.2.6.b	Providing following type of Modular type Accessories mounted with PVC/metallic.wooden box, single mounting base frame covered with textured / metallic / white front plate, modules erected with necessary connections as per site situation directed by Engineer in charge. (2) One No 5	110				
313	1.2.6.c	pin plug-Cat III Providing following type of Modular type Accessories mounted with PVC/metallic.wooden box, single mounting base frame covered with textured / metallic / white front plate, modules erected with necessary connections as per site situation directed by Engineer in charge. (9) 16 Amp.	143	each		1757	251251
		SP one way switch-Cat III	171	each		1210	206910
314	1.2.6.d	Providing following type of Modular type Accessories mounted with PVC/metallic.wooden box, single mounting base frame covered with textured / metallic / white front plate, modules erected with necessary connections as per site situation directed by Engineer in charge. (10)					
045	400	6/16Amp. Universal socket -Cat III	189	each		1210	228690
315	1.2.6.e	Providing following type of Modular type Accessories mounted with PVC/metallic.wooden box, single mounting base frame covered with textured / metallic / white front plate, modules erected with necessary connections as per site situation directed by Engineer in charge. (14) 20 A Double pole Modular MCB switch-Cat II					
040		Description & constitute Maine with 4.4 (/)/ and to EDLO DV/O	387	each		799	309213
316	1.4.1.A	Providing & erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked standard copper conductor wire in following type of pipe to be erected concealed in / flushed on wall / ceiling, with 1.5 sq.mm copper conductor FRLS PVC insulated standard wire of green colour for earth continuity of following size. (A) With medium class Rigid PVC pipe and accessories -(A) 2 wire 1.5 sq.mm					
217	1424:	Providing & precting Mains with 1.1 KV grade EDLS DVC	59	metre		7600	448400
317	1.4.2.A.I	Providing & erecting Mains with 1.1 KV grade FRLS PVC insulated ISI marked standard copper conductor wire in following type of pipe to be erected in / on wall / ceiling, with 2.5 sq.mm copper conductor FRLS PVC insulated standard wire of green colour for earth continuity of following size.(A) with medium class Rigid PVC pipe and accessories-(a) 2 wire 4 sq. mm	106	metre		3300	3529800
L	1						RCHITE

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
318	1.4.2.A.ii	Providing & erecting Mains with 1.1 KV grade FRLS PVC				
		insulated ISI marked standard copper conductor wire in				
		following type of pipe to be erected in / on wall / ceiling,				
		with 2.5 sq.mm copper conductor FRLS PVC insulated				
		standard wire of green colour for earth continuity of				
		following size.(A) with medium class Rigid PVC pipe and				
		accessories-(b) 2 wire 6 sq. mm	139	metre	13980	1943220
319	1.4.2.A.iii	Providing & erecting Mains with 1.1 KV grade FRLS PVC				
		insulated ISI marked standard copper conductor wire in				
		following type of pipe to be erected in / on wall / ceiling,				
		with 2.5 sq.mm copper conductor FRLS PVC insulated				
		standard wire of green colour for earth continuity of				
		following size.(A) with medium class Rigid PVC pipe and				
		accessories-(g) 4 wire 4 sq. mm	171	metre	11600	1983600
320	1.4.2.A.iv	Providing & erecting Mains with 1.1 KV grade FRLS PVC				
		insulated ISI marked standard copper conductor wire in				
		following type of pipe to be erected in / on wall / ceiling,				
		with 2.5 sq.mm copper conductor FRLS PVC insulated				
		standard wire of green colour for earth continuity of				
		following size.(A) with medium class Rigid PVC pipe and				
		accessories-(H) 4 wire 6 sq. mm	246	metre	1450	356700
321	1.4.2.A.v	Providing & erecting Mains with 1.1 KV grade FRLS PVC				
		insulated ISI marked standard copper conductor wire in				
		following type of pipe to be erected in / on wall / ceiling,				
		with 2.5 sq.mm copper conductor FRLS PVC insulated				
		standard wire of green colour for earth continuity of				
		following size.(A) with medium class Rigid PVC pipe and				
		accessories-(I) 4 wire 10 sq. mm (use earth wire of 4 sq.				
		mm)	401	metre	3120	1251120
322	1.2.3.a	Point wiring for individual Plug with & earth wire of 1.5				
		sq.mm (Green) both are of ISI marked 1.1 KV grade				
		FRLS PVC insulated multi strand copper wires up to 10				
		mtr length, in below type of pipe erected complete with				
		Modular type switch & 5 pin plug erected on				
		PVC/metallic/wooden box covered with appropriate front				
		plate modules erected on / in wall / ceiling as per pipe				
		erected with following type of accessories. (I) For 6A Plug				
		and 6A switch with 2X1.5 sq.mm Cu wire from nearby				
		switchboard/MCB DB board(f) with medium class Rigid				
		PVC pipe and accessories erected concealed in				
		wall/ceiling complete-Cat III	469	point	1757	824033
323	1.2.3.b	Point wiring for individual Plug with & earth wire of 1.5				
		sq.mm (Green) both are of ISI marked 1.1 KV grade				
		FRLS PVC insulated multi strand copper wires up to 10				
		mtr length, in below type of pipe erected complete with				
		Modular type switch & 5 pin plug erected on				
		PVC/metallic/wooden box covered with appropriate front				
		plate modules erected on / in wall / ceiling as per pipe				
		erected with following type of accessories. For 16A Plug				
		and 16A switch with 2X4 sq.mm cU wire with 2.5 sq.mm				
		(Green) earthing wire from MCB DB Board.(f) with				
		medium class Rigid PVC pipe and accessories erected				
		concealed in wall/ceiling complete-Cat III	<i></i>	-		
			810	point	1210	980100



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
324	1-3-2.	Providing and erecting ISI mark Medium class RIGID PVC PIPES of following size complete to be erected on/in wall or ceiling erected with necessary PVC fittings & Junction boxes fixed with adhesive solution & Clamps with following dia of pipes, in approved manner as directed (b) 25 mm	32	metre	4620	147840
325	1.2.6.a	Providing following type of Modular Type Accessories mounted with PVC / metallic/wooden box, single mounting base frame covered with textured/metallic / white front plate, modules erected with necessary connectors as per site situation directed by Engineer In Charge. TV Coaxial socket outlet-Cat -III	152		196	29792
326	1.2.6.b	Providing following type of Modular Type Accessories mounted with PVC / metallic/wooden box, single mounting base frame covered with textured/metallic / white front plate, modules erected with necessary connectors as per site situation directed by Engineer In Charge. Modular Buzzer-Cat -III	142	each	89	12638
327	1.4.6	Providing & Erecting approved make RG-6 TV Co axial flexible cable comprising inner condutor of solid bare copper insulated with foam PE & secondary conductor made of poly-aluminium film bonded AI braces suitable				
		coverage overall sheathed with black PVC insulation.	37	meter	5050	186850 15590791
		TOTAL OF SH - I Sub-Head - II - Panels & DB'S				15590791
328	MR	Fabrication, supply, installation, testing and commissioning of wall/floor maounted cubicle type LT panels suitable for 415 V 3 phase, 4 wire, 50 Hz AC supply system (IP 42 degree of protection) fabricated in compartmentalized design from CRCA sheet made out of 2 mm thick for frame work & covers 3mm thick for gland plates including cleaning & finishing complete with 7 tank process for powder coating in approved shade, having TPN AI alloy bus bars of high conductivity, DMC/SMC bus bar supports with short circuit withstand capacity of 31 MVA for 1 sec, bottom base channel of MS section. : MDB - L- (HOSTEL) - Incoming: 315 A, FP MCCB 36 KA - 1 No. with 500 A TPN AL. bus bar with coloured heat shrinkable PVC sleeve -1 Set Outgoings:63 A TPN MCCB, 25 KA - 2 Nos., 100 A TPN MCCB, 25 KA - 4 Nos., 63 A FP MCCB, 36 KA - 1 Nos., Instruments: Multi Function Meter (MFM) with CTs & Fuses/MCB/selecter Switch -1 Set , Indication lamp RYB with Fuses/MCB etc.				
		as req.	202620	each	1	202620



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
329	MR	Fabrication, supply, installation, testing and commissioning of wall/floor maounted cubicle type LT panels suitable for 415 V 3 phase, 4 wire, 50 Hz AC supply system (IP 42 degree of protection) fabricated in compartmentalized design from CRCA sheet made out of 2 mm thick for frame work & covers 3mm thick for gland plates including cleaning & finishing complete with 7 tank process for powder coating in approved shade, having TPN AI alloy bus bars of high conductivity, DMC/SMC bus bar supports with short circuit withstand capacity of 31 MVA for 1 sec, bottom base channel of MS section. MDB - P- (HOSTEL) with Incoming: 1000 A, FP ACB 50 KA - 1 No., 1200 A TPN AL. bus bar with coloured heat shrinkable PVC sleeve -1 Set, Outgoings: 400 A TPN MCCB, 36 KA - 1 Nos., 200 A TPN MCCB, 25 KA - 15 Nos., Instruments: Multi Function Meter (MFM) with CTs & Fuses/MCB/selecter Switch -1 Set , Indication lamp RYB with Fuses/MCB etc. as req.	400500				400500
330	MR	Fabrication, supply, installation, testing and commissioning of wall/floor maounted cubicle type LT panels suitable for 415 V 3 phase, 4 wire, 50 Hz AC supply system (IP 42 degree of protection) fabricated in compartmentalized design from CRCA sheet made out of 2 mm thick for frame work & covers 3mm thick for gland plates including cleaning & finishing complete with 7 tank process for powder coating in approved shade, having TPN AI alloy bus bars of high conductivity, DMC/SMC bus bar supports with short circuit withstand capacity of 31 MVA for 1 sec, bottom base channel of MS section. MDB - E (Res. Block 2BHK) with Incoming: 250 A, TPN MCCB 36 KA - 1 No., 300 A TPN AL. bus bar with coloured heat shrinkable PVC sleeve -1 Set, Outgoings: 100 A TPN MCCB, 25 KA - 3 Nos., 63 A TPN MCCB, 25 KA - 3 Nos., 40 A DP MCB, 10 KA - 3 Nos., 1nstruments: Multi Function Meter (MFM) with CTs & Fuses/MCB/selecter Switch -1 Set , Indication lamp RYB with Fuses/MCB etc. as req.	483590	each		1	483590
			106355	each		1	106355



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
331	MR	Fabrication, supply, installation, testing and commissioning of wall/floor maounted cubicle type LT panels suitable for 415 V 3 phase, 4 wire, 50 Hz AC supply system (IP 42 degree of protection) fabricated in compartmentalized design from CRCA sheet made out of 2 mm thick for frame work & covers 3mm thick for gland plates including cleaning & finishing complete with 7 tank process for powder coating in approved shade, having TPN AI alloy bus bars of high conductivity, DMC/SMC bus bar supports with short circuit withstand capacity of 31 MVA for 1 sec, bottom base channel of MS section. MDB - N (Res. Block 2BHK) with Incoming: 250 A, TPN MCCB 36 KA - 1 No, 300 A TPN AL. bus bar with coloured heat shrinkable PVC sleeve -1 Set, Outgoings: 100 A TPN MCCB, 25 KA - 3 Nos., 63 A TPN MCCB, 25 KA - 1 Nos., Instruments: Multi Function Meter (MFM) with CTs & Fuses/MCB/Selecter Switch -1 Set , Indication lamp RYB with Fuses/MCB etc. as req.					
332	MR	Fabrication, supply, installation, testing and	82285	each		1	82285
552		commissioning of wall/floor maounted cubicle type LT panels suitable for 415 V 3 phase, 4 wire, 50 Hz AC supply system (IP 42 degree of protection) fabricated in compartmentalized design from CRCA sheet made out of 2 mm thick for frame work & covers 3mm thick for gland plates including cleaning & finishing complete with 7 tank process for powder coating in approved shade, having TPN AI alloy bus bars of high conductivity, DMC/SMC bus bar supports with short circuit withstand capacity of 31 MVA for 1 sec, bottom base channel of MS section. FDB - L&P (Housing-First Floor) with Incoming: 63 A, FP MCCB 25 KA - 1 No., 200 A TPN AL. bus bar with coloured heat shrinkable PVC sleeve -1 Set, Outgoings: 40 A DP MCB - 6 Nos., Instruments: Multi Function Meter (MFM) with CTs & Fuses/MCB/Selecter Switch -1 Set , Indication lamp RYB with Fuses/MCB etc. as req.					
333	MR	Fabrication, supply, installation, testing and commissioning of wall/floor maounted cubicle type LT panels suitable for 415 V 3 phase, 4 wire, 50 Hz AC supply system (IP 42 degree of protection) fabricated in compartmentalized design from CRCA sheet made out of 2 mm thick for frame work & covers 3mm thick for gland plates including cleaning & finishing complete with 7 tank process for powder coating in approved shade, having TPN AI alloy bus bars of high conductivity, DMC/SMC bus bar supports with short circuit withstand capacity of 31 MVA for 1 sec, bottom base channel of MS section. FDB - L&P (Housing-Second Floor) with Incoming: 100 A, FP MCCB 25 KA - 1 No., 200 A TPN AL. bus bar with coloured heat shrinkable PVC sleeve -1 Set, Outgoings:40 A DP MCB - 10 Nos., Instruments: Multi Function Meter (MFM) with CTs & Fuses/MCB/Selecter	17205	each		1	17205
		Switch -1 Set, Indication lamp RYB with Fuses/MCB etc.	21145	each		1	21145
333	MR	Fabrication, supply, installation, testing and commissioning of wall/floor maounted cubicle type LT panels suitable for 415 V 3 phase, 4 wire, 50 Hz AC supply system (IP 42 degree of protection) fabricated in compartmentalized design from CRCA sheet made out of 2 mm thick for frame work & covers 3mm thick for gland plates including cleaning & finishing complete with 7 tank process for powder coating in approved shade, having TPN AI alloy bus bars of high conductivity, DMC/SMC bus bar supports with short circuit withstand capacity of 31 MVA for 1 sec, bottom base channel of MS section. FDB - L&P (Housing-Second Floor) with Incoming: 100 A, FP MCCB 25 KA - 1 No., 200 A TPN AL. bus bar with coloured heat shrinkable PVC sleeve -1 Set, Outgoings:40 A DP MCB - 10 Nos., Instruments: Multi Function Meter (MFM) with CTs & Fuses/MCB/Selecter	21145				

S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
334	MR	Fabrication, supply, installation, testing and commissioning of wall/floor maounted cubicle type LT panels suitable for 415 V 3 phase, 4 wire, 50 Hz AC supply system (IP 42 degree of protection) fabricated in compartmentalized design from CRCA sheet made out of 2 mm thick for frame work & covers 3mm thick for gland plates including cleaning & finishing complete with 7 tank process for powder coating in approved shade, having TPN AI alloy bus bars of high conductivity, DMC/SMC bus bar supports with short circuit withstand capacity of 31 MVA for 1 sec, bottom base channel of MS section. FDB - L&P (Housing-Third & Fourth Floor) with Incoming:100 A, FP MCCB 25 KA - 1 No., 200 A TPN AL. bus bar with coloured heat shrinkable PVC sleeve -1 Set, Outgoings: 40 A DP MCB - 11 Nos., Instruments: Multi Function Meter (MFM) with CTs & Fuses/MCB/Selecter Switch -1 Set, Indication lamp RYB with Fuses/MCB etc. as req.	21705	opph			42440
335	MR	Fabrication, supply, installation, testing and commissioning of wall/floor maounted cubicle type LT panels suitable for 415 V 3 phase, 4 wire, 50 Hz AC supply system (IP 42 degree of protection) fabricated in compartmentalized design from CRCA sheet made out of 2 mm thick for frame work & covers 3mm thick for gland plates including cleaning & finishing complete with 7 tank process for powder coating in approved shade, having TPN AI alloy bus bars of high conductivity, DMC/SMC bus bar supports with short circuit withstand capacity of 31 MVA for 1 sec, bottom base channel of MS section. MDB L&P (Director Residence) with Incoming: 100 A, FP MCCB 25 KA - 1 No., 200 A TPN AL. bus bar with coloured heat shrinkable PVC sleeve -1 Set, Outgoings: 63 A TPN MCB, 10 KA - 2 Nos., 63 A DP MCB, 10 KA - 3 Nos., Instruments: Multi Function Meter (MFM) with CTs & Fuses/MCB/Selecter Switch -1 Set , Indication lamp RYB with Fuses/MCB etc. as req.	21705	each		2	43410
336	MR	Fabrication, supply, installation, testing and commissioning of wall/floor maounted cubicle type LT panels suitable for 415 V 3 phase, 4 wire, 50 Hz AC supply system (IP 42 degree of protection) fabricated in compartmentalized design from CRCA sheet made out of 2 mm thick for frame work & covers 3mm thick for gland plates including cleaning & finishing complete with 7 tank process for powder coating in approved shade, having TPN AI alloy bus bars of high conductivity, DMC/SMC bus bar supports with short circuit withstand capacity of 31 MVA for 1 sec, bottom base channel of MS section. LIFT PANEL FOR HOTEL BLOCKS (2 Lifts) - Incoming: 100 A, FP MCCB 25 KA - 1 No., 200 A TPN AL. bus bar with coloured heat shrinkable PVC sleeve-1 Set, Outgoings: 63 A TPN MCCB, 25 KA - 2 Nos., 32 A DP MCB - 2 Nos., Instruments: Multi Function Meter (MFM) with CTs & Fuses/MCB/Selecter Switch -1 Set , Indication lamp RYB with Fuses/MCB etc. as req.	37450	each		3	21445

337		Description	Qty	Unit	GST	excl	Amount
	MR	Fabrication, supply, installation, testing and commissioning of wall/floor maounted cubicle type LT panels suitable for 415 V 3 phase, 4 wire, 50 Hz AC supply system (IP 42 degree of protection) fabricated in compartmentalized design from CRCA sheet made out of 2 mm thick for frame work & covers 3mm thick for gland plates including cleaning & finishing complete with 7 tank process for powder coating in approved shade, having TPN AI alloy bus bars of high conductivity, DMC/SMC bus bar supports with short circuit withstand capacity of 31 MVA for 1 sec, bottom base channel of MS section. MDB - L- (SAC Block) with Incoming: 400 A, FP MCCB 36 KA - 1 No., 500 A TPN AL. bus bar with coloured heat shrinkable PVC sleeve -1 Set, Outgoings:63 A TPN MCCB, 25 KA - 7 Nos., 100 A TPN MCCB, 25 KA - 3 Nos., 200 A TPN MCCB, 25 KA - 1 Nos., 32/40 A TPN MCB - 3. Nos., Instruments: Multi Function Meter (MFM) with CTs & Fuses/MCB/Selecter Switch -1 Set , Indication lamp RYB with Fuses/MCB etc. as req.					
338	MR	Fabrication, supply, installation, testing and commissioning of wall/floor maounted cubicle type LT panels suitable for 415 V 3 phase, 4 wire, 50 Hz AC supply system (IP 42 degree of protection) fabricated in compartmentalized design from CRCA sheet made out of 2 mm thick for frame work & covers 3mm thick for gland plates including cleaning & finishing complete with 7 tank process for powder coating in approved shade, having TPN AI alloy bus bars of high conductivity, DMC/SMC bus bar supports with short circuit withstand capacity of 31 MVA for 1 sec, bottom base channel of MS section. MDB - P- (SAC Block) with Incoming: 630 A, FP MCCB 50 KA - 1 No., 800 A TPN AL. bus bar with coloured heat shrinkable PVC sleeve -1 Set, Outgoings: 250 A TPN MCCB, 36 KA - 2 Nos., 100 A TPN MCCB, 25 KA - 6 Nos., 63 A TPN MCCB, 25 KA - 1 Nos., 63 A TPN MCCB Selecter Switch -1 Set , Indication lamp RYB with Fuses/MCB etc. as req.,	197520	each		1	197520



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
339	MR	Fabrication, supply, installation, testing and commissioning of wall/floor maounted cubicle type LT panels suitable for 415 V 3 phase, 4 wire, 50 Hz AC supply system (IP 42 degree of protection) fabricated in compartmentalized design from CRCA sheet made out of 2 mm thick for frame work & covers 3mm thick for gland plates including cleaning & finishing complete with 7 tank process for powder coating in approved shade, having TPN AI alloy bus bars of high conductivity, DMC/SMC bus bar supports with short circuit withstand capacity of 31 MVA for 1 sec, bottom base channel of MS section. Kitchen Panel - (SAC Block) with Incoming: 250 A, FP MCCB 36 KA - 1 No., 300 A TPN AL. bus bar with coloured heat shrinkable PVC sleeve -1 Set, Outgoings: 40 A TPN MCCB, 25 KA - 3 Nos., 63 A TPN MCCB, 25 KA - 4 Nos., 100 A TPN MCCB, 25 KA - 3 Nos., 25 A TPN MCB - 3. Nos., 20 A TPN MCB - 5 Nos., Instruments: Multi Function Meter (MFM) with CTs & Fuses/MCB/Selecter Switch -1 Set , Indication lamp RYB with Fuses/MCB etc. as req.					
340	MR	Fabrication, supply, installation, testing and commissioning of wall/floor maounted cubicle type LT panels suitable for 415 V 3 phase, 4 wire, 50 Hz AC supply system (IP 42 degree of protection) fabricated in compartmentalized design from CRCA sheet made out of 2 mm thick for frame work & covers 3mm thick for gland plates including cleaning & finishing complete with 7 tank process for powder coating in approved shade, having TPN AI alloy bus bars of high conductivity, DMC/SMC bus bar supports with short circuit withstand capacity of 31 MVA for 1 sec, bottom base channel of MS section. AHU Panel - (SAC Block) with Incoming: 200 A, FP MCCB 36 KA - 1 No., 300 A TPN AL. bus bar with coloured heat shrinkable PVC sleeve -1 Set, Outgoings: 63 A TPN MCCB, 25 KA - 9 Nos., Instruments: Multi Function Meter (MFM) with CTs & Fuses/MCB/Selecter Switch -1 Set , Indication lamp RYB with Fuses/MCB etc. as req.	162770	each		1	162770
			126480	each		1	126480



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
341	MR	Supply, installation,testing and commissioning of LT Distribution and Meter Board of 2 mm thick sheet steel cubical design for indoor mounting factory fabricated suitable for operation on 440 V 3 phase, 50 Hz, A.C. supply with MCCBs/MCB and other accessories, all in compartmentalised, cubical construction complete in all respects including mounting plate for KWH Meter, hinged lockable cover with window for Meter reading and internal wiring, labels, ferrules, cable termination gland plates, earth terminals, painting etc. conforming to specifications. Distribution and Meter Board-1 for 11 Three phase Meters with Incoming: 315 A FP MCCB, 36 KA - 1 Nos., 200 A FP MCCB, 25 KA - 1 Nos., Bus Bar:-1 Set of 500 Amps. TPN busbars of aluminium alloy with colour coded heat PVC shrinkable sleeves., Outgoing:- Provision for Meter cubicals for Three phase KWH Meter -11 Nos, 63 A TPN MCB, - 10 Nos., Indication and Metering, Three (3) Nos. LED type Phase indicating lamps with protection 2A SP MCBs1 set, SITC of Distribution and meter board described as above.					
342	MR	Supply, installation,testing and commissioning of LT Distribution and Meter Board of 2 mm thick sheet steel cubical design for indoor mounting factory fabricated suitable for operation on 440 V 3 phase, 50 Hz, A.C. supply with MCCBs/MCB and other accessories, all in compartmentalised, cubical construction complete in all respects including mounting plate for KWH Meter, hinged lockable cover with window for Meter reading and internal wiring, labels, ferrules, cable termination gland plates, earth terminals, painting etc. conforming to specifications. Distribution and Meter Board-2 for 11 Three phase Meters with Incoming: 200 A FP MCCB, 25 KA - 1 Nos., Bus Bar:- 1 Set of 300 Amps. TPN busbars of aluminium alloy with colour coded heat PVC shrinkable sleeves., Outgoing:-Provision for Meter cubicals for Three phase KWH Meter -11 Nos., 63 A TPN MCB, - 10 Nos., Indication and Metering, Three (3) Nos. LED type Phase indicating lamps with protection 2A SP MCBs1 set, SITC of Distribution and meter board described as above.	102600	set		1	102600
343	3.10.5	Providing & erecting 415 V MCB Four Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity -(c)63 Amp cat III	45015 730	set each		1	45015 10220
344	3.4.1	Providing and erecting approved make Four pole moulded case circuit breaker having breaking capacity ICU of 25 KA at 415 V, having normal current rating up to 25A to 100A, with fixed thermal & magnetic release suitable to work on AC supply 50c/s with all internal connections & cpomplete erected in existing 16 G.M.S housingcat III	6112	each		37	226144



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
345	3.11.5.(iii)	Providing & erecting sheet steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, confirms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for (A) Single phase incoming and horizontal single phase outgoing (b) sheet steel double door (IP-43)-8 way Double door	1141	each		4	4564
346	3.11.5.(iv)	Providing & erecting sheet steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, confirms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for (A) Single phase incoming and horizontal single phase outgoing (b) sheet steel double door (IP-43)-12 way Double door	1478			22	
347	3.11.5.(v)	Providing & erecting sheet steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, confirms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for (A) Single phase incoming and horizontal single phase outgoing (b) sheet steel double door (IP-43)-16 way Double door	1664	each		12	<u>32516</u> 19968
348	3.11.5.B. (i)	Providing & erecting sheet steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, confirms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for Three phase incoming and single phase horizontal type outgoing per phase isolation type (PPI) (b) sheet steel double door-4 way Double door	2316	each		3	6948
349	3.11.5.B. (ii)	Providing & erecting sheet steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, confirms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for Three phase incoming and single phase horizontal type outgoing per phase isolation type (PPI) (b) sheet steel double door-6 way Double door	2885			30	86550
350	3.11.5.B. (iii)	Providing & erecting sheet steel powder coated MCB distribution board - flush / surface mounted fitted with busbar, neutral link, earth bar and DIN rail, confirms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house appropriate nos. of MCBs.(The DBs should be used of same company of MCB to be used) suitable for Three phase incoming and single phase horizontal type outgoing per phase isolation type (PPI) (b) sheet steel double door-8 way Double door	3379			33	111507



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
351		Providing & erecting sheet steel powder coated MCB					
	(iv)	distribution board - flush / surface mounted fitted with					
		busbar, neutral link, earth bar and DIN rail, confirms to IS 8623-1 & 3, IEC 61439-1 & 3 without MCB to house					
		appropriate nos. of MCBs.(The DBs should be used of					
		same company of MCB to be used) suitable for Three					
		phase incoming and single phase horizontal type outgoing					
		per phase isolation type (PPI) (b) sheet steel double door-					
		12 way Double door	3836	each		56	214816
352	3.11.10	Providing and erecting Sheet Steel powder coated					
		Vertical MCB distribution board (VTPN) - flush / surface					
		mounted double door (IP54) fitted with copper insulated					
		busbar, isolated neutral bar, earth bar and DIN rail,					
		Conforms to IS 8623-1 & 3, IEC 61439-1 & 3, suitable for					
		63/100 AMP TPN MCCB + RCCB as incomer and three					
		phase outgoing as per following .(The DBs should be					
		used of same company of MCB to be used) -(A) 4 way					
		outgoing	5760	each		36	207360
353	3.11.6.a	supplying & erecting sheet steel powder coated cable end					
		termination Box to be mounted on Top or Bottom of MCB					
		Distribution Box for housing / Covering Extra wires &					
		cables suitable for following size of MCB Db Box -(C)	323	oach		28	9044
354	2116h	Single phase 8 way supplying & erecting sheet steel powder coated cable end	323	each		20	9044
554	3.11.0.0	termination Box to be mounted on Top or Bottom of MCB					
		Distribution Box for housing / Covering Extra wires &					
		cables suitable for following size of MCB Db Box-(D)					
		Single phase 12 way	386	each		22	8492
355	3.11.6.c	supplying & erecting sheet steel powder coated cable end					0.01
		termination Box to be mounted on Top or Bottom of MCB					
		Distribution Box for housing / Covering Extra wires &					
		cables suitable for following size of MCB Db Box-(E)					
		Three Phase 4 Way	492	each		3	1476
356	3.11.6.d	supplying & erecting sheet steel powder coated cable end					
		termination Box to be mounted on Top or Bottom of MCB					
		Distribution Box for housing / Covering Extra wires &					
		cables suitable for following size of MCB Db Box-(F)					
-		Three phase 6 way	577	each		30	17310
357	3.11.6.e	supplying & erecting sheet steel powder coated cable end					
		termination Box to be mounted on Top or Bottom of MCB					
		Distribution Box for housing / Covering Extra wires &					
		cables suitable for following size of MCB Db Box-(G)	<u> </u>	aaab		22	22520
250	21165	Three phase 8 way supplying & erecting sheet steel powder coated cable end	683	each		33	22539
358	3.11.0.1	termination Box to be mounted on Top or Bottom of MCB					
		Distribution Box for housing / Covering Extra wires &					
		cables suitable for following size of MCB Db Box-(H)					
		Three phase 12 way	789	each		56	44184
359	3 10 1 (B)	Providing & erecting Miniature circuit breaker single pole	100	Caon			+
		6A to 25A suitable to operate on 240 V A.C system and					
		having breaking capacity 10 KA to be erected in existing					
		box confirming to IS 8826/1996 with ISI markcat III					
		~ ~	111	each		2990	331890



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
360	3.12.1.(ii)	Providing & erecting approved make ELCBs / RCCBs confirming to IS : 12640 and having sensitivity of 30 mA and short circuit withsatnd capacity of 10KA and suitable for operation on single phase 240 V, 50 Hz having characterstic of quick action & tripping with all advance				
		feature & do not incorporate any electronic component for following Max rating erected as directed-40 Amps DP-cat III	2213	each	165	365145
361	3.12.1.(iii)	Providing & erecting approved make ELCBs / RCCBs confirming to IS : 12640 and having sensitivity of 30 mA and short circuit withsatnd capacity of 10KA and suitable for operation on single phase 240 V, 50 Hz having characterstic of quick action & tripping with all advance feature & do not incorporate any electronic component for following Max rating erected as directed-63 Amps DP-cat III	2628	each	240	630720
362	3.10.7	Providing & erecting double pole Miniature Isolator A.C.22 duly confirms to IS 13947-3 240 V 40 A in existing box cat III	310		38	
363	3.10.9.a		484	each	42	
364	3.10.9.b	•	590		80	
365	3.10.6.a	Providing & erecting 415 V MCB three pole for motor & inductive Load (C curve) having 10KA breaking capacity & confirms to IS 8828 in existing box having following				
366	3.10.6.b	inductive Load (C curve) having 10KA breaking capacity & confirms to IS 8828 in existing box having following	641	each	72	
367	3.13.1	capacity-(c) 63 amps -cat III Providing & erected metallic vitrified danger notice board as per language suggested by Engineer Incharge for MEDIUM VOLTAGE installation to be erected as per IS-	709 69		72 196	
		TOTAL OF SH - II	09	each	190	4484515
368	4.11.1.3	Sub Head - III - Cables Providing & fixing approved make Perforated C type Cable tray, made from sheet steel. The cable tray should be single or double bended as per required and as per IS 2062 / 1079 and shall be coated with hot dip galvanizing as per IS 2629/4759 with max 17.5% perforation with coupler plate / fish plate and GI hardware like nut - bolt and washers etc. erection with necessary support included) as per specification and as per instruction of Engineer In charge(3) 150 x 50 x 1.6 mm thick	420	metre	360	151200
369	4.11.1.5	Providing & fixing approved make Perforated C type Cable tray, made from sheet steel. The cable tray should be single or double bended as per required and as per IS 2062 / 1079 and shall be coated with hot dip galvanizing as per IS 2629/4759 with max 17.5% perforation with coupler plate / fish plate and GI hardware like nut - bolt and washers etc. erection with necessary support included) as per specification and as per instruction of Engineer In charge(5) 300 x 50 x 2.0 mm thick				GOEL & ASSOC
			616	metre	180	110880

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
370	4.3.3.a 4.3.3.b	Providing and erecting XLPE (IS:7098) - BB ISI armoured cable multistrand aluminium conductor for 1.1 KV . To be laid on wall with necessary clamps or in existing trench / pipe of following size of cables(C) 3.5 core 50 sq. mm (25 sq. mm 0.5 core) Providing and erecting XLPE (IS:7098) - BB ISI armoured cable multistrand aluminium conductor for 1.1 KV . To be laid on wall with necessary clamps or in existing trench / pipe of following size of cables(D) 3.5 core 70 sq. mm	279		940	262260
070	100	(35 sq. mm 0.5 core)	369	metre	300	110700
372	4.3.3.c	Providing and erecting XLPE (IS:7098) - BB ISI armoured cable multistrand aluminium conductor for 1.1 KV . To be laid on wall with necessary clamps or in existing trench / pipe of following size of cables(F) 3 1/2 core 120 Sq. mm (70 Sq. mm 1/2 core)	529	metre	20	10580
373	4.3.5.a	Providing and erecting XLPE (IS:7098) - BB ISI armoured cable multistrand aluminium conductor for 1.1 KV . To be laid on wall with necessary clamps or in existing trench / pipe of following size of cables(A) 4 core 16 Sq. mm	150	metre	770	115500
374	4.3.5.b	Providing and erecting XLPE (IS:7098) - BB ISI armoured cable multistrand aluminium conductor for 1.1 KV . To be laid on wall with necessary clamps or in existing trench / pipe of following size of cables(B) 4 core 25 Sq. mm	187	metre	300	56100
375	4.6.1	Providing and, fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with out going tails, insulating tape etc for following size of cables(D) 2 to 4 core 16 Sq. mm	47	each	28	1316
376	4.6.3.a	Providing & fixing heavy duty flange type brass double compression type cable gland with rubber ring for PVC insulated armoured cable complete with outgoing tails insulating tape etc. for following size of cables(A) 3.5 / 4 core 25 Sq. mm	66	each	34	2244
377	4.6.3.b	Providing & fixing heavy duty flange type brass double compression type cable gland with rubber ring for PVC insulated armoured cable complete with outgoing tails insulating tape etc. for following size of cables(B) 3.5 core 35/50 sq. mm	75	each	64	4800
378	4.6.3.c	Providing & fixing heavy duty flange type brass double compression type cable gland with rubber ring for PVC insulated armoured cable complete with outgoing tails insulating tape etc. for following size of cables(C) 3.5 core 70 sq. mm	102	each	8	816
379	4.6.3.d	Providing & fixing heavy duty flange type brass double compression type cable gland with rubber ring for PVC insulated armoured cable complete with outgoing tails insulating tape etc. for following size of cables(E) 3 & 1/2 core 120 Sq. mm	139	each	2	278
380	4.7.1.a	Solder less crimping type Aluminium lugs confirming to IS suitable for cable of following size evenly climped with high pressure tool & connected to switchgear terminals with brass / cadmium plated nut bolts in an approved manner(C) 16/25 Sq.mm.	15	each		930
	1			2001		OEL & ASSO

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
381	4.7.1.b	Solder less crimping type Aluminium lugs confirming to IS suitable for cable of following size evenly climped with high pressure tool & connected to switchgear terminals with brass / cadmium plated nut bolts in an approved manner(D) 35/50 sq. mm	20	each	64	1280
382	4.7.1.c	Solder less crimping type Aluminium lugs confirming to IS suitable for cable of following size evenly climped with high pressure tool & connected to switchgear terminals with brass / cadmium plated nut bolts in an approved manner(E) 70 sq. mm	25	each	8	200
383	4.7.1.d	Solder less crimping type Aluminium lugs confirming to IS suitable for cable of following size evenly climped with high pressure tool & connected to switchgear terminals with brass / cadmium plated nut bolts in an approved manner(G) 120 Sq.mm.	45	each	2	90
		TOTAL OF SH - III				829174
		SH - IV - Supply & Installation of Light Fitting, Fans				
		and Fixtures				
384	MR	Installation, testing and commissioning of prewired, fluorescent fitting / LED fittings of all types, complete with all accessories and tube etc. directly on ceiling/wall, including connections with 1.5 sq.mm. PVC insulated, copper conductor, single core cable etc. as required.	404			00404
385	2.15.3.C	Cumplying and execting LED Indeer fittings with LEDs of	184	each	111	20424
	.a	wattage 0.2 watt to 0.5 watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet steel confirming to IS: 513/CRCA/aluminium pressure die cast powder coated and high U.V. & corrosion resistance with diffuser housed in aluminium casted body with company mark/name 120 to 300 V, power factor more than 0.9, THD< 10%, CCT 3000 K to 65 K. Luminiare efficacy > 85 lumens/watt. LED efficiency 110 lumens/watt, LED driver efficiency > 85%. CREE/OSRAM/PHILIPS Lumileds/NICHIA/SEOUL/Bridgelux make LED used for luminiare (fitting required LM-79 & LM-80 certificates)(Note: below description have shown ranges of wattage capacity of LED fittings. The Engineer Incharge may select any wattage capacity between the ranges shown).All LED fixtures shall be with minimum 5 years replacement warrantee.(A) Square/ Circular shaped Surface/Recessed Mount Downlight with provision for				
		spring loaded mounting clips complete.IP20, -(a) 5-9 watts, surge-2 KV-Cat - III	218	each	161	35098



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
386	2.15.3.C .b	Supplying and erecting LED Indoor fittings with LEDs of wattage 0.2 watt to 0.5 watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet steel confirming to IS: 513/CRCA/aluminium pressure die cast powder coated and high U.V. & corrosion resistance with diffuser housed in aluminium casted body with company mark/name 120 to 300 V, power factor more than 0.9, THD< 10%, CCT 3000 K to 65 K. Luminiare efficacy > 85 lumens/watt. LED efficiency 110 lumens/watt, LED driver efficiency > 85%. CREE/OSRAM/PHILIPS Lumileds/NICHIA/SEOUL/Bridgelux make LED used for luminiare (fitting required LM-79 & LM-80 certificates)(Note: below description have shown ranges of wattage capacity of LED fittings. The Engineer Incharge may select any wattage capacity between the ranges shown).All LED fixtures shall be with minimum 5 years replacement warrantee.(A) Square/ Circular shaped Surface/Recessed Mount Downlight with provision for spring loaded mounting clips complete.IP20, -(b) 11-15 watts, surge-2 KV-Cat - III	423	each		3181	1345563
387	2.15.3.C .c	Supplying and erecting LED Indoor fittings with LEDs of wattage 0.2 watt to 0.5 watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet steel confirming to IS: 513/CRCA/aluminium pressure die cast powder coated and high U.V. & corrosion resistance with diffuser housed in aluminium casted body with company mark/name 120 to 300 V, power factor more than 0.9, THD< 10%, CCT 3000 K to 65 K. Luminiare efficacy > 85 lumens/watt. LED efficiency 110 lumens/watt, LED driver efficiency > 85%. CREE/OSRAM/PHILIPS Lumileds/NICHIA/SEOUL/Bridgelux make LED used for luminiare (fitting required LM-79 & LM-80 certificates)(Note: below description have shown ranges of wattage capacity of LED fittings. The Engineer Incharge may select any wattage capacity between the ranges shown).All LED fixtures shall be with minimum 5 years replacement warrantee.(A) Square/ Circular shaped Surface/Recessed Mount Downlight with provision for spring loaded mounting clips complete.IP20, -(c) 16-20 watts, surge-2 KV-Cat - III					
			584	each		129	75336



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
388	2.15.3 (D)	Supplying and erecting LED Indoor fittings with LEDs of wattage 0.2 watt to 0.5 watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet steel confirming to IS: 513/CRCA/aluminium pressure die cast powder coated and high U.V. & corrosion resistance with diffuser housed in aluminium casted body with company mark/name 120 to 300 V, power factor more than 0.9, THD< 10%, CCT 3000 K to 65 K. Luminiare efficacy > 85 lumens/watt. LED efficiency 110 lumens/watt, LED driver efficiency > 85%. CREE/OSRAM/PHILIPS Lumileds/NICHIA/SEOUL/Bridgelux make LED used for luminiare (fitting required LM-79 & LM-80 certificates)(Note: below description have shown ranges of wattage capacity of LED fittings. The Engineer Incharge may select any wattage capacity between the ranges shown).All LED fixtures shall be with minimum 5 years replacement warrantee. (B) LED Panel light with provision for plane front frame with translucent cover fixed to housing complete IP 20., (vi) 36 watts, 24" x 24", Surge-					
389	2.15.1.a	2KV,-Cat - III Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA/ aluminium die cast powder coated and high U.V. & corrosion resistance with diffuser with company mark/name 160V to 270V, Power Factor more than 0.95, THD < 15%,, CCT 3000 K to 6500K,, Luminaire efficacy> 85 lumens/watt ,LED, LED driver efficiency > 85 %, (fitting required LM-79 & LM-80 Certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.) -(A) Tube light with integral driver- (i) 5-10 Watts, Surge-2 KV, IP-	1777	each		399	248780
390	2.15.1.b		293	each		297	87021



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
391	2.15.1.c	Supplying and erecting LED indoor fittings with LEDs of wattage 0.2 Watt to 0.5 Watt assembled on single MCPCB, with housing used as a heat sink shall be made of thick sheet Steel conforming to IS: 513/CRCA/ aluminium die cast powder coated and high U.V. & corrosion resistance with diffuser with company mark/name 160V to 270V, Power Factor more than 0.95, THD < 15%,, CCT 3000 K to 6500K,, Luminaire efficacy> 85 lumens/watt ,LED, LED driver efficiency > 85 %, (fitting required LM-79 & LM-80 Certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.) -(A) Tube light with integral driver-(v) 36-40 Watts, Surge-2 KV, IP-20, conventional 4 feet-Cat - III	530	each		158	83740
392	2.17.3	Providing and erecting PVC body surface or pendant mounting LED Bulk type 9 watt Lighting fitting with electronic driver and lumen output from luminiare 720 lm, input voltage range 90-300 VAC, 50 Hz cool white (3000 to 6500 K), inbuilt driver, 20 degree C to + 60 deg C working temperature, AL frame with Beam Angle 120 deg.	780				
393	2.16.2	Supplying and erecting LED street light / Flood light fittings with High power White LEDs wattage of 1Watt and above assembled on single MCPCB, efficiency more than 130 lm/w and corrosion free High pressure die cast aluminum housing with smooth finish powder coated and heat sink extruded aluminium with diffuser and Polycarbonate optics/ lenses with company mark/name engraved or embossed 120 to 300 V,Power Factor more than 0.95, THD < 10 %, CCT 3000 K to 5700K, Uniformity ratio >0.45, Luminaire efficacy> 100 lumens/watt . LED driver efficiency > 85 %.CREE / OSRAM / PHILIPS Lumileds / NICHIA / SEOUL/ BridgeLux (U.S.A.) make LED used for luminaire. (fittings required LM-79 & LM-80 certificates)(NOTE: Below description have shown ranges of Wattage capacity of LED fittings.The Engineer incharge may select any wattage capacity between the ranges shown.)-(B) Flood Light (IP-65), Surge -4KV,Light must have 440VAC line supply protection. It should withstand 48 hours for 440VAC line supply-(IV) above 90 to 120 watts- Cat-III				28	201460
394	2.17.4	Supplying & erecting of LED type High bay fixture having power consumption of following watts with, (input voltage 110 - 290 V AC with full efficiency, power factor > 0.9 with 50/60 Hz, CCVC LED driver used for maximum power saving. Best quality Aluminium alloy housing and aluminium Dome for better heat dissipation, CCT Cool white (6000 K), CRI 80, Beam angle > 120 degrees, working temperature -20 deg. C to +55 deg.C Body IP 65 (B) 90 to 150 watts	7195 5696			8	45568



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
395	2-6-1.	Providing and erecting decorative wall bracket fittings complete with LED lamp and rust free fittings components mounted in chrome finish housing with holder ,clear/opaque glass diffuser complete erected with lead wires with minimum 15 wattage capacity as per instruction engineer incharge/ architect/ authority .cat-III	1696	each	197	334112
396	MR	Supplying of Linear Suspended LED fitting with a nominal system Wattage <= 36-40 W, System Lumen >= 4000,system efficacy at System level (Not Chip Level) >110lumens/watt, Life of fixture 50000hrs@L70% Lumen maintenance, CCT Range 5700-6500 K, CRI >80, PF >0.95, THD <9%. The luminaire shall have a rated system lifetime of 50,000 burning hours at L70. The luminaire shall meet IP20 rating. The luminaire housing should made of pressure die cast aluminium and the luminaire optics shall have a high efficiency diffuser with more than 85% transmittance. Model should be equal to havells destelo generation-2- DESTG250LP/S36WLED857SWH1130 or similar from approved make list.	6580			743540
397	MR	Supplying of LED Recessed/ surface Downlighter with a nominal system Wattage <= 40-45 W, System Lumen >= 4400-4950,system efficacy at System level (Not Chip Level) >110lumens/watt, Life of fixture 50000hrs@L70% Lumen maintenance, CCT Range 5700-6500 K, CRI >80, PF >0.95, THD <9%. The luminaire shall have a rated system lifetime of 50,000 burning hours at L70. The luminaire shall meet IP20 rating. The luminaire housing should made of pressure die cast aluminium and the luminaire optics shall have a high efficiency diffuser with more than 85% transmittance.The fixture should comply with the parameters as per IS10322.	3833	each	40	153320
398	MR	Supply of 5-6 W LED Exit & matter at per site requirement Light with inbuilt battery backup of 2 hours, including drivers, fixing accessories complete as required. The fixture should have sufficient intensity and all fixing arrangement complete as required at site. Bajaj : BESL 03 LED DSD WBB Red/Green or equivalent of Decon and	3717			
399	MR	Insatpower Supply of Ceiling Hanging (Chandelier) complete with electronic driver and LED lamp etc directly on Ceiling including connection with 1.5Sqmm FRPVC insulated copper conductor cable, hanging arrangement, fastners and earthing the body etc. complete as required of approved Make similar to Jaquar-CHL-GLD-AS8051B-D 400 x H 180 MM)	37052	each		182133
400	MR	Supply of Ceiling Hanging Light with 30W LED fitting complete with electronic driver and LED lamp etc directly on Ceiling including connection with 1.5Sqmm FRPVC insulated copper conductor cable and earthing the body as required of approved Make.	5132		18	92376
401	5-1-1.	Providing and erecting Approved make. Providing and erecting Approved make Ceiling fan with double ball bearing ISI mark with condenser A.C. 23OV.50 c/s.1200 mm. sweep complete, canopy erected on existing hook or clamp with earthing. [Make shall be approved by Engineer in charge]	1581	each	529	8456349

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
402	5-1-2. 5.3.4.a	Providing & erecting Approved make Ceiling Fan with double ball bearing ISI mark with condenser A.C.230V 50c/s. 1400 mm. sweep complete, canopy erected on existing hook or clamp with earthing [Make shall be approved by Engineer in Charge] Supplying & erecting Single phase approved make industrial exhaust fan suitable for medium duty ring mounted low noise operation suitable for medium duty having following dia size and maximum speed in RPM-(A)	1721	each	370	636770
404	5.3.4.b	305 mm dia. 900 RPM, Cat II Supplying & erecting Single phase approved make	2034	each	438	890892
		industrial exhaust fan suitable for medium duty ring mounted low noise operation suitable for medium duty having following dia size and maximum speed in RPM-(E) 450 mm dia. 1400 RPM, Cat II	3899	each	7	27293
405	5.3.6	Providing suitable M.S. louver shutter of the Exhaust Fan.	365	each	445	162425
406	5.4.2	Supplying & erecting approved make oscillating type bracket fan A.C. 230 V, 50 cy/s 400/450 mm sweep wall mounted with height adjustment and rotary tilting device complete with guard, flexible core plug top complete erected with lead wires as directed. Cat - II	2509		2	5018
407	3.17.3	Providing & erecting stand alone ceiling mount PIR motion Sensor with ABS Housing single phase AC operation. Complete with Dual element pyroelectric sensor, Digital Signal Processing Detection Range 14 feet at 10 feet height, angle 360 degree, RFI and EMI immunity, Detects motion in it's coverage area. Multipurpose device can be used as security device, an energy saving device, an automatic switch. Complete with infra red sensor, Light & sensitivity Sensor, Timer with Bye pass facility. Complete with 20 Amp. relay to Operate on 1.5 tonne window Air Conditioner, In addition to 6 tube				
408	8-13-2.	lights Providing & erecting water cooler having storage capacity 150 Ltr. & cooling capacity 150 Ltr.per hour @ an ambient temp of 45° C. The outlet temp. of the water should drop by 15°C within a hour, The water cooler should be comprising of hermetically sealed compressor, fan motor, condensing unit, water tank surrounded by evaporating, coil, thermostats, relay etc.complete with necessary inlet & outlet connection. The body of water cooler will be	<u>5191</u> 46187	each	20	646618
409	8-13-6	Supplying & erecting reverse osmosis (RO) water purification system with M.S. powder coated pedestal frame, prefilter housing carbon filter suitable buster DC pump, auto low & high pressure switches with following size of LPH capacity & erected as directed .E] 200 LPH with 1 phase / 3 phase Raw water pump of 1000LPH @ 2.5kg/cm2 (1N0 - Kirloskar/CRI/Lubi) , Dual media filter 10"x54" (1 No), Micron catridge filter 20" x 2.5" - (1No), High pressure pump 1000LPH @ 10kg/cm2 - (1No - Shimge /CRI /Lubi) , RO Membrane housing with RO membrane of 40*40 - (1 No),RO pressure tube 4" x 1E- (1No), 0-1200LPH Rotameter-(2 Nos). Recovery Rate 50%.	77289		14	646618
	I					
		82				

411 8-16-2. Supplying and erecting horizontal / vertical mounting type storage water heater with copper container housed in M.S./S.S./ABS body insulated with glass wool/puff complete with heating elements, adjustable thermostats 300C to 850C, indicating lamp, safety valve, fusible plug, etc. complete erected with coach bolts, nuts. washers & cementation(C)25 Ltr. with 2 KW. heating element - Cat-IIII 7950 each 228 181 TOTAL OF SH - IV 970 Sub-Head - V - Earthing & Lightning Conductor 412 3.14.10 Supplying & erecting in earthpit of minimum bore dia. 225mm size approved make Safe Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 80 mm having 80-200 Micron galvanising, Inner pipe dia of 40 mm having 200-250 Micron galvanising, Inner pipe dia of 40 mm having 200-250 Micron galvanising, Inner pipe dia of 40 mm having bighty conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover (A)(approved make OEM has to submit test certificate including value of earth resistance of installation duly stamped and signed by agency and officer Incharge has to ensure the value of earthing resistane mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound). Resistivity:- 0.2 ohm / meter testing as per IEC 62561-2017, Voltage drop:- < 1 volt at no load & dry form, Sulphar content: <2%(C) Back fill Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. [A] For electrical installation up to440 V, Length of Pipe - 1 Mir, Back filling comp	S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
411 8-16-2. Supplying and erecting horizontal / vertical mounting type storage water heater with copper container housed in M.S./S.S/ABS body insulated with glass wool/puff complete with heating elements, adjustable thermostats 300C to 850C, indicating lamp, safety valve, fusible plug, etc.complete erected with coach bolts, nuts. washers & cementation(C)25 Ltr. with 2 KW. heating element - Cat- III 7950 each 228 181 TOTAL OF SH - IV 970 Sub-Head - V - Earthing & Lightning Conductor 970 4112 3.14.10 Supplying & erecting in earthpit of minimum bore dia. 225mm size approved make Safe Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 80 mm having 200-250 Micron galvanising, connection terminal dia of 14 mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover (A)(approved make OEM has to submit test certificate including value of earth resistance of installation duly stamped and signed by agency and officer Incharge has to ensure the value of earthing resistane mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 ohm / meter testing as per IEC 62561- 2017, Voltage drop: < 1 volt at no load & dry form. Sulphar content: -22%(C) Back fill Compound -: Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. [A] For electrical installation up to 440 V, Length of Pipe - 1 Mtr, Back filling compound -1 Nos. of Bag of 15 Kgs. 5785 each 16 9	410	8-16-1.	type water heater with 3ltr.capacity rust free container housed in ABS plastic body insulated with glass wool / puff insulation and 3 Kw heating elements, adjustable thermostat 30° C to 85° C with set to operate at 85° C (+ /- 6° C) auto reset indication lamps, thermal cut-out, safety	2044			4.40	500000
cementation(C)25 Ltr. with 2 KW. heating element - Cat- II 7950 each 228 181 TOTAL OF SH - IV Sub-Head - V - Earthing & Lightning Conductor 970 412 3.14.10 Supplying & erecting in earthpit of minimum bore dia. 225mm size approved make Safe Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 80 mm having 80-200 Micron galvanising, Inner pipe dia of 40 mm having 200-250 Micron galvanising, connection terminal dia of 14 mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover (A)(approved make OEM has to submit test certificate including value of earth resistance of installation duly stamped and signed by agency and officer Incharge has to ensure the value of earthing resistane mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity: 0.2 ohm / meter testing as per IEC 62561- 2017, Voltage drop:- <1 volt at no load & dry form, Sulphar content: -<2%(C) Back fill Compound -: Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. [A] For electrical installation up to 440 V, Length of Pipe - 1 Mtr, Back filling compound -1 Nos. of Bag of 15 Kgs. 5785 each 16 9 413 MR Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement 5785 each 16 9	411	8-16-2.	Supplying and erecting horizontal / vertical mounting type storage water heater with copper container housed in M.S./S.S./ABS body insulated with glass wool/puff complete with heating elements, adjustable thermostats 300C to 850C, indicating lamp, safety valve, fusible plug,	3641	each		148	538868
Sub-Head - V - Earthing & Lightning Conductor 412 3.14.10 Supplying & erecting in earthpit of minimum bore dia. 225mm size approved make Safe Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 80 mm having 80-200 Micron galvanising, Inner pipe dia of 40 mm having 200-250 Micron galvanising, connection terminal dia of 14 mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover (A)(approved make OEM has to submit test certificate including value of earth resistance of installation duly stamped and signed by agency and officer Incharge has to ensure the value of earthing resistane mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity: 0.2 ohm / meter testing as per IEC 62561- 2017, Voltage drop:- < 1 volt at no load & dry form, Sulphar content:- <2%(C) Back fill Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. [A] For electrical installation up to 440 V, Length of Pipe - 1 Mtr, Back filling compound - 1 Nos. of Bag of 15 Kgs. 1413 MR Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement 5785 each 16 9			III	7950	each		228	1812600
412 3.14.10 Supplying & erecting in earthpit of minimum bore dia. 225mm size approved make Safe Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 80 mm having 80-200 Micron galvanising, Inner pipe dia of 40 mm having 200-250 Micron galvanising, connection terminal dia of 14 mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover (A)(approved make OEM has to submit test certificate including value of earth resistance of installation duly stamped and signed by agency and officer Incharge has to ensure the value of earthing resistane mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound)-Resistivity: 0.2 ohm / meter testing as per IEC 62561-2017, Voltage drop:- < 1 volt at no load & dry form, Sulphar content:- <2%(C) Back fill Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency.								9707697
413 MR Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement 5785 each 16 9	412	3.14.10	Supplying & erecting in earthpit of minimum bore dia. 225mm size approved make Safe Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free hot dipped G.I.Pipes having Outer pipe dia of 80 mm having 80-200 Micron galvanising, Inner pipe dia of 40 mm having 200-250 Micron galvanising, connection terminal dia of 14 mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications with chamber and heavy duty cover (A)(approved make OEM has to submit test certificate including value of earth resistance of installation duly stamped and signed by agency and officer Incharge has to ensure the value of earthing resistane mentioned in test Certificate) & having back filling compound of (B) Inner chemical (CCM Compound)- Resistivity:- 0.2 ohm / meter testing as per IEC 62561- 2017, Voltage drop:- < 1 volt at no load & dry form, Sulphar content:- <2%(C) Back fill Compound :- Earthing compound should be capable to retain moisture for long time Necessary test report must be submitted by Agency. [A] For electrical installation up to 440 V, Length of Pipe -					
mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement	413	MR		5785	each		16	92560
coke and salt as required. 12355 each 4 4			mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/	10255	oach		4	49421



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
414	3.14.12	Supplying & erecting funnel type earthing having earth plate of following size burried in specifically prepared earth pit 3 mtr, below ground with 40 kg charcoal and salt with alternate layers of charcoal & salt, 20 mm dia GI pipe with funnel with a wire mesh for watering & bricks masanory block CI cover complete as per para 7.3 of IS 3043 with necessary length of double Galvanized Iron / copper earth wire no. 6 SWG bolted with lug to the plate and covered in 12 mm dia. G.I pipe 2.5 mtr long complete connected to the nearest switch gear with end socket as per direction & duly tested by earth tester confirming to IS (As per drawing) with following Specification. (B) with 45 x 45 x 0.35 cms. G.I. earth plate					
			2543	each		2	5086
415	3.14.2	Providing and erecting required size HOT deep galvanized iron strip for earthing of H.T, OCB/ACB/Transformer LT panel board, motors etc. using proper clamp.	77	Kg		788	60676
416	3.14.3	Providing and erecting required size Copper strip for					
		earthing of H.T, OCB/ACB/Transformer LT panel board, motors etc. using copper clamp.	787	Kg		66	51942
417	3.14.5	Providing and erecting Hot deep Galvanized Iron strip					
		wire 8 to 16 SWG.	77	Kg		341	26231
418	10.5.1	SITC of Vertical Air Terminal Solid aluminium with base- 10 mm dia and 1000 mm long. Air Termination base tested for conditioning, ageing test & Lightening impulse current withstand test: 100 KA of 10/350 Us waveform in an accerdited third party laboratory as per 6.3 & 6.4 of IEC 62561-1 2017 protocol with MAST 34 mm dia 3000 mm long-Cold Galvanized.	9323	each		15	139845
419	10.5.2	SITC of 8 mm dia solid Aluminium Conductor for roof top mesh grid and tested as per IEC 62561- 2 conducted in the Govt. accredited thirty party laboratory to meet the requirement of IS/IEC 62305 with Required Accessories - Aluminium Holding clamp at every 1 mtr distance, Aluminium/SS cross splicer at every crossing of Alu. conductor, Expansion piece with connectors at every 20 mtr distance, Aluminium straight Splicer to connect conductors. All Accessories should be tested as per IEC 62561-1 2018 Cl. 6.3 for conditioning & Ageing Test & 6.4 for Lightning impulse current withstand test: 100 kA of 10/350µs waveform(Ageing & Electrical test) conducted in a sequence manner & tested in the Govt. accredited Third party laboratory to meet the requirements of IS/IEC 6230	297	metre		920	273240



S.No.	SOR No	Description	Qty	Unit	Rate e GST	excl	Amount
420	10.5.3	SITC of 10 mm MS Round solid conductor having smooth surface should be tested and use exclusively for lightening protection (vertical Riser / down conductor which shall be concealed in column) to meet the requirement of IS IEC 62305 with accessories. Earthing stud of dimensions SS-75 mm OD plate with 10 mm dia tail connector used in structural steel ring earthing system to meet the requirement of IS / IEC 62305. (For interconnecting the column and Terrace AL Conductor / strip/ flat SS cross connector to connect Earth fixing oint to vertical raiser / down conductor. SS straight splicer at every 4 mtr to connect MS conductor in column. Bonding / Rehar clamp at every 3 mtr suitable for innerconnecting round conductor 8-10 mm with earth fixing point. All accessories shall be test as per IEC 62561 I 2018 CI.6.3 for conditioning & ageing test & 6.4 for lightening impulse current withstand test:100 KA of 10/350 Us waveform (Ageing & Electrical test) conducted in a sequence manner & tested in the Govt. accerdited Third party laboratory to meet the requirements of IS/IEC6230.					
			721	metre		706	509026
421	10.5.4	SITC of Galvanized steel flat 25X6 mm thickness from earth electrode directly in ground as required. Zinc coating 500 g/m square (approx 70 micron coating) tested used exclusively for lightening protection earthing system and ring equipment bonding. SITC of 14.2 mm dia 3 mtr long earth electrode of high tensile steel electrode with 250 micron copper bonding &	153	metre		570	87210
		1 bag of carbon fill based environment friendly backfill tested as per IEC 62561-7 in NABL accerdited Laboratory and suitable stainless steel double sided clamp. Eco friendly rust proof heavy duty weather proof polythylene earth pit chamber with following dimensions: 254 mm dia (top) 330 mm dia (bottom) & 260 mm (height).	5933	per set		16	94928
		TOTAL OF SH - V	0000			10	1390165
423	1.3.2	Sub Head - VI - Passive Cabling & LAN System Providing & erecting ISI mark Medium class RIGID PVC					
		Pipes of following size complete to be erected on / in wall or ceiling erected with necessary PVC fittings & junction boxes fixed with adhesive solution & clamps with following dia of pipes, in approved manner as directed(b) 25 mm					
424	7.13.5	SITC of CAT6 UTP 23AWG Solid: Per Meter.[Approved	32	metre	12	900	412800
		by Competent Authority i.e. not Below the rank of Executive Engineer]	43	metre	38	100	1638300
425	7.13.8	SITC of Jack Cat 6 Keystone UTP {Approved by Competent Authority i.e. not Below the rank of Executive Engineer]	160	each		739	118240
426	MR	Supply, Installtion, Testing and comissioning of 15U wall mount rack with fans, 5 cable managers, satationary shelf, 2 Nos of hardware pkts & 5Nos. 6/16A sockets PDU also complete as required.	15668	each		12	188016
						i cu	A ARCHITEC

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
427	MR	SITC of 800 mm x 1000 mm 42 U Free standing cabinet with front locable door , side panels, 230 V AC 90 CFM fan 2 , three Hardware packet 1 set (containing 20 Nos each of 3), AC power strip. Cantilever Tray 1U 225D, one earthing Strip 150 mm H,1 Cable manager 1U height.				
428	7.13.11	SITC of CAT6 UTP 24AWG PATCH CORD:1M,Plug 30U' Snag less .[Approved by Competent Authority i.e. not	56970	each	2	113940
		Below the rank of Executive Engineer]	155	each	739	114545
429	7.13.12	SITC of CAT6 UTP 24AWG PATCH CORD:2M,Plug 30U' Snag less . [Approved by Competent Authority i.e. not Below the rank of Executive Engineer]	199	each		146066
430	7.13.10	SITC of Patch Panel Cat 6 UTP Keystone Type- 24 Port- Fully Loaded. [Approved by Competent Authority i.e. not Below the rank of Executive Engineer]	4357	each	43	187351
431	7.13.7	SITC of Face Plate - Dual (Keystone Jack,square) . [Approved by Competent Authority i.e. not Below the rank of Executive Engineer]	100			73900
432	7.13.1	SITC of O. F.Cable 06F Outdoor - Armoured Unitube SM - HDPE Sheath [Approved by Competent Authority i.e. not Below the rank of Executive Engineer]	50	Mtrs.	1250	62500
433	7.13.2	SITC of LIU 12 PORT Rack Mount - Loaded (LC) SM . [Approved by Competent Authority i.e. not Below the rank of Executive Engineer]	6833			129827
434	7.13.3	SITC of PIGTAIL LC SM SIMPLEX LENGTH- 1m. [Approved by Competent Authority i.e. not Below the rank of Executive Engineer]	772	each		32424
435	7.13.4	SITC of PATCH CORD LC-LC SM DUPLEX LENGTH- 3m . [Approved by Competent Authority i.e. not Below the rank	1883			82852
436	7.13.18	SITC of 20 x SFP ports 4 x Combo 10/100/1000BASE-T/SFP ports 4 x 10G SFP+ ports 6 kV surge protection on all RJ-45 access ports Switch Resource Management (SRM) for flexible management of system resources Redundant Power Supply (RPS) support MPLS L2VPM/L3 VPN support Full L3 routing protocol support including OSPF, BGP, and ISIS for IPv4/IPv6 SDN-enabled switch, compatible with Openflow 1.3 10-GbE SFP+ to SFP+ 1M Direct Attach Cable [Approved by Competent Authority i.e. not Below the rank of Executive Engineer]	641527	each		1283054
437	7.13.15	SITC of 24 x 10/100/1000BASE-T PoE ports 4 x Gigabit RJ45/SFP Combo ports Advanced L2 switching and security features L2+ Static Routing Optional "standard mode" or "surveillance mode" management user interface 193 W PoE budget [Approved by Competent Authority i.e. not Below the rank of Executive Engineer]	31680	each		1362240



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
438	7.13.17	SITC of Maximum distance of up to 10 km Hot-pluggable Single-mode fiber 1000BASE-LX (IEEE 802.3z standard) Duplex LC connector MSA, RoHS-compliant [Approved by Competent Authority i.e. not Below the rank of Executive Engineer]				
			4754	each	104	494416
439	MR	Supplying, installation, testing & commissioning for Indoor Access Point, should support dual-band 802.11abgn/ac/ax Wireless Access Point with Multi- Gigabit Ethernet backhaul and onboard BLE/ZIgbee,, 4x4:4 streams (5GHz) 4x4:4 streams (2.4GHz), OFDMA, MU-MIMO, BeamFlex+, dual ports, 802.3at PoE suppor.Device should have atleast 5 years of support & shall be with all accessories as required.	79909	each	58	4634722
440	MR	Supplying, installation, testing and commssioning of dedicated hardware based wireless controller with 4x10G SFP+ & 4x 1G SFP ports, populated with 100 Access points license with 5 years support from Day-1. The controller should support Unique PSK, AP Survivability, WIDS/WIPS, scalable to 1000 APs or more. Should				
		support	1E+06	each	1	1149762
		TOTAL OF SH - VI Sub Head - VII - IPABX SYSTEM				12224955
441	7.1.2	SITC of Digital / PCM / TDM EPABX System having SMT design, system with flexible universal slots. Inbuilt Auto attendant facility, Minimum 15 Nos. conference, Analog extension line, Calling GSM, E&M line, PRI / EI & VOIP program me through Analog telephone digital key from Ethernet, public address cord, shall have unrestricted simultaneous dialing facility, QSIG protocol on PRI, 95 / STD / ISD / Local-Locking, Class of Service, Quick Dial-Single Digit dialing of any two external number, Once only ring device, Chairman / Secretary - Do not disturb Facility, Power Down Mode, Hot Line, Hot Outward Dialing, Day Night Mode, Auto Call Back, Barge-in, Call Pick Up & Call Transfer, Call transfer while Ringing with Voice Guide System, (DISA), Caller ID (CLI), CLI Base ECF, CLI Base routing Internet Ready Port, External Music Port, Call Budgeting, Call Most Calculation (ASMDR), DID Direct Inverse Dialing, External Music Input, Fax Homing, Global Directory Printing with following capacities [[Approved by Competent Authority i.e. not Below the rank of Executive Engineer] -(E) No. of Extension 128, No. of junctions 24, No of Expendable ports:512, Operator Console-01, Compatible : ISDN and Networking				
442	7.1.4	Providing and erecting IP Phone with display with all IP system supported [[Approved by Competent Authority i.e.	172878	Set		345756
		not Below the rank of Executive Engineer] TOTAL OF SH - VII	5594	each	200	1118800 1464556
		Sub Head - VIII - Fire Detection & PA System				0-7000
443	MR	Supplying, installation, testing & commissioning of				& AS.S.
		intelligent analog addressable photothermal detector				CEL CO
		complete with mounting base complete as required.	2552	each	192	9 489984

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
444	MR	Supplying, installation, testing & commissioning of intelligent addressable thermal detector with rate of rise				
		cum fixed temperature thermister complete with base as required.	2434	each	8	19472
445	MR	Supplying, installation, testing & commissioning of addressable fire control module complete as required.	2681	each	94	252014
446	MR	Supplying, installation, testing & commissioning of addressable horn cum strobe complete as required.	3130	each	65	203450
447 448	MR MR	Supplying, installation, testing & commissioning of addressable manual call point complete as required. Supplying, installation, testing & commissioning of fire	3456	each	65	224640
		fighter phone jack complete as required.	1429	each	65	92885
449	MR	Supplying, installation, testing & commissioning of fire fighter telephone handset complete as required.	5125	each	18	92250
450	MR	Supplying, installation, testing & commissioning of intelligent interface unit BACnet/ Modbus protocol i.e. supplying communication links between building management system and fire alarm control panel complete as required.	167629	each	1	167629
451	MR	Supplying, installation, testing & commissioning of fault isolator complete with base as required.	2920	each	21	61320
452	MR	Supplying, installation, testing & commissioning of central graphical fire alarm management system to centrally monitor and operate the fire alarm system complete as		Cuch	21	01320
453	MR	required. Supplying, installation, testing and commissioning of	179117	each	1	179117
454	7.10.75	micro processor based intelligent addressable main fire alarm panel, central processing unit with the following loop modules and capable of supporting not less than 240 devices (including detectors) and minimum 120 detectors per loop and loop length up to 2 km, network communication card, minimum 320 character graphics/ LCD display with touch screen or other keypad and minimum 4000 events history log in the non volatile memory (EPROM), power supply unit (230 ± 5% V, 50 hz), 48 hrs back-up with 24 volt sealed maintenance free batteries with automatic charger. The panel shall have facility to connect printer to printout log and facility to have seamless integration with analog/digital voice evacuation system (which is part of the schedule of work under SH: PA System) and shall be complete with all accessories . The panel shall be compatible for IBMS system with open protocol BACnet/ Modbus over IP complete as per SITC of Controller Heart of the Plena Voice Alarm	213594	each	3	640782
101	1.10.73	System EN 54-16 certified Built-in message manager and 240 W amplifier Six-zone outputs 6 emergency and 6 business triggers.[Approved by Competent Authority i.e. not Below the rank of Executive Engineer]	174724	each	3	524172
455	7.10.83	SITC of Ceiling speaker, 6W, metal [Approved by Competent Authority i.e. not Below the rank of Executive Engineer]	643	each		221835
456	7.10.33	SITC of Power amplifier, 2x500W 2 × 500 W class-D power amplifier (70/100 V output) Low power consumption in standby mode Excellent sound quality, high signal-to-noise ratio EN 54-16 and ISO 7240-16 system certification [Approved by Competent Authority i.e. not Below the rank of Executive Engineer]	217686	each	5	1088430

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
457	7.10.70	SITC of Call station for 6-zone Stylish six-zone call station, intended for LBB 1925/10 system pre-amplifier Unidirectional condenser microphone on flexible stem Six zone selection keys, all-call key, and momentary PTT- key for calls Selectable gain, speech filter, and limiter for improved intelligibility Selectable priority levels and different pre and post-call chimes LED indications for zone selection, system activity, and call station status [Approved by Competent Authority i.e. not Below the rank of Executive Engineer]	43106	each	3	129318
458	1.3.11 MR	Providing & erecting 16 gauge HGS conduit pipe (as per IS) painted black surface/concealed of following size complete to be erected on/in wall or ceiling with erected with necessary saddles, screws, bends, junction boxes etc. with following (Nominal Bore) dia of pipes, in approved manner as directed -25 mm Supplying and drawing of cable Fire Retardant PVC insulated copper conductor cable in the existing surface / recessed steel conduit of following pairs, cores and size including connections and interconnections etc. as requiredspeaker cable Single pair, 2-core, 1.5 sqmm	103			587100
		requiredspeaker cable onigie pail, 2-core, 1.0 squim	48	each	3900	187200
460	MR	Supplying and drawing following sizes of FR PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/PVC as required2 x 1.5 sq. mm	63	metre		189000
		TOTAL OF SH - VIII				5350598
		Sub Head - IX - CCTV System				
461	MR	Supply, Installation, Testing & Commissioning of 2MP IP Network TDN Low-Light IR Rugged Dome Camera , 1/2.8" CMOS or better, 2MP (1920 x 1080) @ 25fps or better, triple stream at various resolution & Frame Rates, Min. Illumination required 0.005 lux @ F1.6 (color), 0 Lux IR On, 4 IR LEDs Smart IR with upto 50m IR distance, Auto ICR (Infrared Cut Filter) 120dB True WDR, S/N Ratio 50db, Shutter Speed 1/8 - 1/30,000; Adavance Video Compression technology such as H.265 & H.264 High Profile & MJPEG , Triple stream, 2.7 to 13.5mm 5X motorized focus & zoom lens, Field of View FoV H:88°- 24°, BLC, HLC, 3DNR White Balance, Minimum Edge Intelligence Video Analytics : Video Motion Detection, Tampering, Loitering, Intrusion, & People Counting, 4 Privacy Mask, 8 Region Of Intreset, Defog, TLS1.2, AES- 128/256, SSH/Telnet closed, Stream Encryption, Dual channel Audio, Alarm: 1In/ 1out, 256GB SD card support, PoE (802.3 af) and 12V DC, Max 6W, IP 67, IK 10 vandal proof with Die Cast Aluminium Housing, Having Operating temp range : -40°C to 60° C. Certifications: ONVIF Profile S/G/T compliant, UL/CSA 62368-1, CE (EN 50130-4), FCC Part 15, EN 55032, RoHS (EN63000) & NDAA Section 889 compliant.	26538	each	12	318456



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
462	MR	Supply, Installation, Testing & Commissioning of 2MP IP Network TDN Low-Light IR Rugged Bullet Camera , 1/2.8" CMOS or better, 2MP (1920 x 1080) @ 25fps or better, triple stream at various resolution & Frame Rates, Min. Illumination required 0.005 lux @ F1.6 (color), 0 Lux IR On, 4 IR LEDs Smart IR with upto 60m IR distance, Auto ICR (Infrared Cut Filter) 120dB True WDR, S/N Ratio 50db, Shutter Speed 1/8 - 1/30,000; Adavance Video Compression technology such as H.265 & H.264 High Profile & MJPEG , Triple stream, 2.7 to 13.5mm 5X motorized focus & zoom lens, Field of View FoV H:80°- 24°, BLC, HLC, 3DNR White Balance, Minimum Edge Intelligence Video Analytics : Video Motion Detection, Tampering, Loitering, Intrusion, & People Counting, 4 Privacy Mask, 8 Region Of Intreset, Defog, TLS1.2, AES- 128/256, SSH/Telnet closed, Stream Encryption, Dual channel Audio, Alarm: 1In/ 1out, 256GB SD card support, PoE (802.3 af) and 12V DC, Max 6W, IP 67, IK 10 vandal proof with Die Cast Aluminium Housing, Having Operating temp range : –40°C to 60° C. Certifications: ONVIF Profile S/G/T compliant, UL/CSA 62368-1, CE (EN 50130-4), FCC Part 15, EN 55032, RoHS (EN63000) & NDAA Section 889 compliant. (Axis/Avigilon/ Bosch/ Honeywell Enterprise)	28197			101	0444007
463	MR	Supply, Installation, Testing & Commissioning of Outdoor 1/2.8 inch CMOS 5MP or better, IR PTZ Camera, Effective pixels 2592 x 1944, 5MP, 25 fps; 30x Optical Zoom & 16x Digital Zoom, tripple stream; IR distance: 150 meter; Lens type: Wide 5 to 6mm, Tele 150 to -180mm Motorized Auto focus zoom lens; Memory card slot: Min 256GB support. Minimum Illumination- Sense up on- Color: 0.005 lux color, B/W: 0 lux IR On, WDR 120dB, Edge Video Analysis Video Motion Detection, Intrusion, Lioter, Counter & Tampering, 3DNR, BLC, HLC, White Balance, EIS, Defog, Mechanical switchable IR filter (Auto ICR), Pan Range 360° continuous, Tilt Range -10° to 90°, Pan/Tilt Modes - Pan: 0.1°/s - 180°/s; Tilt: 0.1°/s - 90°/s, Presets 256, Preset Accuracy 0.25 Deg, 16 Patrol & Tours, Alarm I/O - 2ln/2Out, 2-Way Audio- 1/1 Channel In/Out, 256GB Memory card slot, 4 individually configurable privacy masks, 8 Region of Interest, POE+ (802.3 at) or 24VAC 3A for indoor/Outdoor application, IP66/67, IK 10 ; Certifications: ONVIF Profile S/G/T compliant, UL/CSA 62368-1, CE (EN 50130-4), FCC Part 15, EN 55032, RoHS (EN63000) & NDAA Section 889 compliant. Approved Makes (Axis/Avigilon/ Bosch/ Honeywell Enterprise)		each		121	547344
464	MR	Supply, Installation, Testing and commissioning of Monitor, 55" LED high resolution monitor with high performance 240VAC, 50 Hz. 24x7 for spot display	182448	each		3	547344
		including all accessories as per specifications and as required to complete the system.	78785	each		6	472710



5.NO. 50R NO	Description	Qty	Unit	Rate GST	excl	Amount
465 MR	SITC of 128 Channel Network Video Storage Manager Server - NSM shall have Intel® Xeon Silver 4210R, 2.2 GHz or better, Mnimum 32GB RAM, 1+1 750W hot plug redundant power supply, OS drive: 2 x 240 GB in RAID 1; 12 field upgrade up to 20 TB SATA/SAS hard drive options for Video Recording, Data RAID Level: 0, 1, 5, 6, 10. NIC card 4 x 1GbE supporting network throughput of 800 MBPS, Windows Server 2019 R2 64- bit/Windows10 64-Bit IOT Operating System, Microsoft SQL Server/Express 2019. NSM Shall support upto 128 Cameras @ 1080P, 25fps, 09 Remote Client Licenses inbuilt, Web Clients, Monitor Layout up to 4x4, Digital Signature for Video Clip, Continous & Motion Based Recording options, up to 8X forawrd & backward palyback, Playback search as date/time timeline, time jump FWD/REV, bookmarks, calendar, preview, film strip, event search and SMART Motion Search as a min. NVR shall be ONVIF S/G/T certified and liested on ONVIF Website. NVR shall Support Two -Way Audio with cameras equiped with Microphone & Speaker. Recording to be concidered for 30 days at 2MP, 25 FPS in RAID 5. NSM Shall be offered in N+1 Failover. Approved Makes (Axis/Avigilon/ Bosch/ Honeywell Enterprise)					
466 MR	Supply, Installation, Testing & Commissioning of Network Video Management Software system for upto 2000 cameras in single server with the following features The NVMMS shall have option to support database redundancy and 1+1 and N+M NSM failover features for unforeseen/maintenance scenarios for increased system reliability,Web client option for simple, no license, no software install applications, Web-based maps with drag- and-drop camera setup, easy cross-site navigation and HTML5 live video pop-up and instant playback, allow quick situational response The NVMMS should support network joystick controller, GPU rendering support for H.264 and H.265 decoding , video on demand, Adaptive video throttling, rule engine, operatore role management, server based Video Motion Detection (VMD), Smart Search, Playback and Clip Export for Efficient Forensic Investigation edge storage backfill support, bookmark with manual comment, bookmark based search, timeline search, Preview search, synchronous playback from all NSMs, monitor wall support, surrounding camera mode, Cybersecured with features such as Digital Signing, General Data Protection Regulation (GDPR) compliance, HTTPS & SSL base, smart web client, secured firewall configuration, password expiry, non-recoverable password; support ANDROID & iOS phones, seamless integration with intgegrated security platform which provides HSDK&API for further integration with 3rd party systems. Cyber Security Features • Enhanced password security – non-recoverable passwords, enforcing complex passwords, password expiry, and no default passwords • Addressed Unauthenticated/Unauthorized channels • Secured firewall configuration • Secured Web client –	1E+06 539052	each		2	2073278

467 MR Supply, installation, testing and commissioning of SERVER station with windows server lot 2019 complete as specification. Processor - Intel® Xeon® E-2236 3.4GHz Database - Microsoft® SQL Server® 2017 Express Chipset - Intel® C246Memory - 16 GB DDR4 OS Hard Drive - Dual (RAID1) 480GB SSDs for OS Network - 2 x Gigabit Ethernet ports 380750 each 468 MR Supply, installation, testing & commissioning of Client Workstation as per following specifications:Intel Core i7-8700K or better, 4.2GHz, OS - Genuine Microsoft Microsoft® Windows 10 Enterprise/IOT 64 Bit, RAM - 166B, OS - 480 GB SSD/SATA, Graphic Card - In-built Processor Graphics (GPU):Intel® HD Graphics 630 or Intel Q470 Processor, supporting 2 Monitors, 01 LAN 01GBPS, Audio IN & Out, USBA, Keybaard and Mouse, associated cables etc complete. Approved Makes : Pelco / Avigilon / Axis / Allgovision / Dell / HP 19488 each 469 MR Supply, Installation, Testing and commissioning of Surveillance Garde 16TB SATA Hard Disk for above VMRs, including fixing accessories and cable termination with required, complete in all respect as per instruction of engineer in-charge. Recording shall be calculated at 2MP, 25fps for 30 days. Approved Makes: WD / Segate /Toshiba / HP 54735 each 470 MR Supply, Installation, Testing and Commissioning of 15 Mtr. HDMI Cable. Approved Makes: Xten / Kramer / Extron / BlueRigger 12440 471 13.1.AC SITC of 13 Passenger, Ground plus 5 upper floors with Rated Speed of 1.0 m/sec-Location : Hostel Building with Machine Room Less-(B) With General PLUS ADDITIONAL SPECIAL FEATURES attached herewith. Prem. Cat. ####### each 473 13.1.BZ<	S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
Workstation as per following specifications:Intel Core i7- 8700K or better, 4.2GHz, OS - Genuine Microsoft Imicrosoft® Windows 10 Enterprise/IOT 64 Bit, RAM - 16GB, OS - 480 GB SSD/SATA, Graphic Card - In-built Processor Graphics (GPU):Intel® HD Graphics 630 or Intel Q470 Processor, supporting 2 Monitors, 01 LAN 01GBPS, Audio IN & Out, USB3.0, Keyboard and Mouse, associated cables etc complete. Approved Makes : Pelco / Avigilon / Axis / Allgovision / Dell / HP 194888 each 469 MR Supply , Installation , Testing and commissioning of Surveillance Garde 16TB SATA Hard Disk for above VMRs, including fixing accessories and cable termination with required, complete in all respect as per instruction of engineer in-charge. Recording shall be calculated at 2MP, 25fps for 30 days. Approved Makes: WD / Segate /Toshiba / HP 54735 each 470 MR Supply, Installation, Testing and Commissioning of 15 Mtr. HDMI Cable. Approved Makes: Aten / Kramer / Extron / BlueRigger 12440 each 471 13.1.AH SITC of 13 Passenger, Ground plus 5 upper floors with Rated speed of 1.0 m/secLocation : SAC Block (B+G+4) with Machine Room Less-(C) With General PLUS ADDITIONAL SPECIAL FEATURES attached herewith. Prem. Cat. ###### each 472 13.1.AR SITC of 13 Passenger, Ground plus 14 upper floors with Rated speed of 2.0 / 2.5 m/sec. Location : Hostel Building with Machine Room Less-(B) With General PLUS ADDITIONAL SPECIAL FEATURES attached herewith. Prem. Cat. ###### each 473 13.1.BZ SITC of 26 passengers . Ground plus 14 upper floors with Rated Speed of 2.0 / 2.5 m/sec with micro price/PL	467	MR	SERVER station with windows server lot 2019 complete as specified including all the required OS, Antivirus as per the given specification. Processor - Intel® Xeon® E- 2236 3.4GHz Database - Microsoft® SQL Server® 2017 Express Chipset - Intel® C246Memory - 16 GB DDR4 OS Hard Drive - Dual (RAID1) 480GB SSDs for OS Network -	360750	each		2	721500
470 Surveillance Garde 16TB SATA Hard Disk for above VMRs, including fixing accessories and cable termination with required, complete in all respect as per instruction of engineer in-charge. Recording shall be calculated at 2MP, 25fps for 30 days. Approved Makes: WD / Segate /Toshiba / HP 54735 470 MR Supply, Installation, Testing and Commissioning of 15 Mtr. HDMI Cable. Approved Makes: Aten / Kramer / Extron / BlueRigger 12440 each 471 13.1.AH SITC of 13 Passenger, Ground plus 5 upper floors with Rated speed of 1.0 m/secLocation : SAC Block (B+G+4) with Machine Room Less-(C) With General PLUS ADDITIONAL SPECIAL FEATURES attached herewith. Prem. Cat. 472 13.1.Arc SITC of 13 Passenger, Ground plus 14 upper floors with Rated speed of 2.0 / 2.5 m/secLocation : Hostel Building with Machine Room Less-(B) With General PLUS ADDITIONAL SPECIAL FEATURES attached herewith. Prem. Cat. 472 13.1.Arc SITC of 13 Passenger, Ground plus 14 upper floors with Rated speed of 2.0 / 2.5 m/secLocation : Hostel Building with Machine Room Less-(B) With General PLUS ADDITIONAL SPECIAL FEATURES attached herewith. Prem. Cat. 473 13.1.BZ SITC of 26 passengers . Ground plus 14 upper floors with micro price/PLC control and ACVVVF drive-Location : Hostel #######	468		Workstation as per following specifications:Intel Core i7- 8700K or better, 4.2GHz, OS - Genuine Microsoft Microsoft® Windows 10 Enterprise/IOT 64 Bit, RAM - 16GB, OS - 480 GB SSD/SATA, Graphic Card - In-built Processor Graphics (GPU):Intel® HD Graphics 630 or Intel Q470 Processor, supporting 2 Monitors, 01 LAN 01GBPS, Audio IN & Out, USB3.0, Keyboard and Mouse, associated cables etc complete. Approved Makes : Pelco / Avigilon / Axis / Allgovision / Dell / HP	194888	each		6	1169328
470 MR Supply, Installation, Testing and Commissioning of 15 Mtr. HDMI Cable. Approved Makes: Aten / Kramer / Extron / BlueRigger 12440 each TOTAL OF SH - IX Sub Head - X - LIFTS 12440 each 471 13.1.AH SITC of 13 Passenger, Ground plus 5 upper floors with Rated speed of 1.0 m/secLocation : SAC Block (B+G+4) with Machine Room Less-(C) With General PLUS ADDITIONAL SPECIAL FEATURES attached herewith. Prem. Cat. ###### each 472 13.1.Anc SITC of 13 Passenger, Ground plus 14 upper floors with Rated speed of 2.0 / 2.5 m/secLocation : Hostel Building with Machine Room Less-(B) With General PLUS ADDITIONAL SPECIAL FEATURES attached herewith. Prem. Cat. ###### each 473 13.1.BZ SITC of 26 passengers . Ground plus 14 upper floors with Rated Speed of 2.0 / 2.5 m/sec with micro price/PLC control and ACVVVF drive-Location : Hostel #######	469	MR	Surveillance Garde 16TB SATA Hard Disk for above VMRs, including fixing accessories and cable termination with required, complete in all respect as per instruction of engineer in-charge. Recording shall be calculated at 2MP, 25fps for 30 days.	E 470E	k		10	1020005
471 13.1.AH SITC of 13 Passenger, Ground plus 5 upper floors with Rated speed of 1.0 m/secLocation : SAC Block (B+G+4) with Machine Room Less-(C) With General PLUS ADDITIONAL SPECIAL FEATURES attached herewith. Prem. Cat. ####### each 472 13.1.Anc SITC of 13 Passenger, Ground plus 14 upper floors with Rated speed of 2.0 / 2.5 m/secLocation : Hostel Building with Machine Room Less-(B) With General PLUS ADDITIONAL SPECIAL FEATURES attached herewith. Prem. Cat. ####### each 473 13.1.BZ SITC of 26 passengers . Ground plus 14 upper floors with Rated Speed of 2.0 / 2.5 m/sec with micro price/PLC control and ACVVVF drive-Location : Hostel #######	470	MR	Supply, Installation, Testing and Commissioning of 15 Mtr. HDMI Cable. Approved Makes: Aten / Kramer / Extron / BlueRigger TOTAL OF SH - IX				19 6	1039965 74640 10368110
472 13.1.Anc SITC of 13 Passenger, Ground plus 14 upper floors with Rated speed of 2.0 / 2.5 m/secLocation : Hostel Building with Machine Room Less-(B) With General PLUS ADDITIONAL SPECIAL FEATURES attached herewith. Prem. Cat. ####### each 473 13.1.BZ SITC of 26 passengers . Ground plus 14 upper floors with Rated Speed of 2.0 / 2.5 m/sec with micro price/PLC control and ACVVVF drive-Location : Hostel Image: Control and ACVVVF drive-Location : Hostel	471	13.1.AH	SITC of 13 Passenger, Ground plus 5 upper floors with Rated speed of 1.0 m/secLocation : SAC Block (B+G+4) with Machine Room Less-(C) With General PLUS ADDITIONAL SPECIAL FEATURES attached herewith.	#######	each		2	4193324
with Rated Speed of 2.0 / 2.5 m/sec with micro price/PLC control and ACVVVF drive-Location : Hostel	472	13.1.Anc	SITC of 13 Passenger, Ground plus 14 upper floors with Rated speed of 2.0 / 2.5 m/secLocation : Hostel Building with Machine Room Less-(B) With General PLUS ADDITIONAL SPECIAL FEATURES attached herewith.	######	each		5	15849580
PLUS ADDITIONAL SPECIAL FEATURES attached herewith. Prem. Cat. ####### each	473	13.1.BZ	SITC of 26 passengers . Ground plus 14 upper floors with Rated Speed of 2.0 / 2.5 m/sec with micro price/PLC control and ACVVVF drive-Location : Hostel Building with Machine Room Less-(C) With General PLUS ADDITIONAL SPECIAL FEATURES attached herewith. Prem. Cat.				1	4983665 25026569



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
474	MR	Supplying, Installation, Testing & Commissioning including design, manufacture and testing at works of indoor type floor mounted metal clad, 11 KV VCB panel board totally enclosed & fully interlocked, Horizontal drawout, Horizontal isolation type breaker as per IEC-62271-100/200, as amended up to date and additional specifications, having capacities as mentioned below, single break, trip free mechanism, motor charged and manually/electrically closing breaker suitable for use on 11 KV,3 Phase, 50Hz A.C. supply with STC 26.3 KA for 3 Sec (1500 MVA). Internal Arc for AFLR 26.3kA at rated voltage for 1s at individual compartments i.e. Busbar, VCB and cable compartment. complete with self contained, fully interlocked, rack in and rack out mechanism, air insulated and encapsulated copper bus bars of 800 Amps capacity, breaker featured with mechanical ON/OFF indicator with hand trip device, spring release coil, shunt trip coil and auxiliary switch of 4 NO + 4 NC and equipped with following switch gears and accessories. SITC of 11 KV HT Switchboard of 5 panels, 2 I/C & 3 O/G panels as above and as per specifications shall be with all accessories, interconnections, internal wiring, labels etc. complete as required.					
			######	Set		1	2747198
475	10-4-9.	SITC of SF6 gas insulated Single VCB/Isolator: Sheet steel enclosed, free standing, Outdoor mounted, 11 kV, 630A, 21kA/3s, 1 WAY Non - extensible SF6 gas insulated VCB, consisting of One no. direct connection of Incoming supply cable upto 300sq mm and one no. VCB(Manually charging & closing) in series with LBS between VCB and Transformer, Self Powered Relay 3 O/C +1 E/F Relay type CSPR-V5, mechanical ON/OFF indicator, trip coil, Manual Close & Trip PB, live cable indicator, mechanical interlocks, pad locking facility, SF6 gas manometer, cable boots, 3 nos. CTs with Ratio -/1A, Cl: 5P10, 2.5 VA for protection	169493	Each		2	338986
476	MR	Design, manufactuer, Supply, installation, testing and commissioning of Oil type transformer ONAN cooling Type 2500 KVA 11/0.433 KV, 3 phase, 50 Hz, Dyn11 vector group, double wound copper, class A insulation, indoor type Transformer with approximately 6.25% impedence subject to tolerance as per IS, ON Load tap changer, operation on HV side in steps of ± 5% to -7.5%, @ 1.25%, having cable end boxes on HV side suitable for 3x300 Sqmm XLPE cable of 11 KV (E) grade and 4000 Amp TPN Sandwitch Bus Duct arrangement on LV side with neutral brought out separately, Marshelling Boxes and other safety equipments etc. & suitable for ambient 50°C temprature. All Relays, Contacts & CT Terminal to be wired upto marshelling Box suitably mounted on M.S.channel i/c supplying and grouting of suitable M.S. Channel with all accessories and confirming to Latest IS/ IS:1180 Part-1/2026 & complete in all respects as required at site. Transformer losses shall be as per Latest ECBC Norms.	#######	each		2	7804908

S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
477	MR	Design, manufacture, testing at works, supply, installation, testing and commissioning of MODBUS ready SCADA Compatible 415V Main LT Panel Tested Assembly – TTA, CPRI /Independent international test house tested for all the tests as per IEC61439-1 & 2 and internal arc tests as per IEC 61641, 50kA for 0.3 SEC. Copies of the test reports & certificates shall be submitted with the tender. INCOMING FROM TRANSFORMER (2500 KVA)-2 No. 4000A, 4-pole EDO type ACB having release, Bus Coupler-1 No. 4000A, 4-pole EDO type ACB having microprocessor release, Bus Bar-Set of 4000 Amps rating TPN copper Bus Bars of suitable length, Outgoing Panels-Bus Section - A -2000 amp, 50KA FP ACB - EDO-1 Nos., 1600 amp, 50KA FP ACB - EDO-2 Nos., 1000 amp, 50KA FP ACB - EDO-1 Nos., 800 amp, 50KA FP ACB - EDO-1 Nos., 630 amp, 50KA FP MCCB - 2 Nos., 400 amp, 36 KA FP MCCB -2 Nos., 200 amp, 36 KA FP MCCB -1 Nos. 1600 amp, 50KA FP ACB - EDO- 2 Nos., 1000 amp, 50KA FP ACB - EDO-2 Nos., 800 amp, 50KA FP ACB - EDO-1 Nos., 630 amp, 50KA FP ACB - EDO- 2 Nos., 1000 amp, 50KA FP ACB - EDO-2 Nos., 800 amp, 50KA FP ACB - EDO-1 Nos., 630 amp, 50KA FP ACB - EDO- 2 Nos., 250 amp, 36 KA FP MCCB - 1 Nos., 200 amp, 36 KA FP MCCB - 2 Nos. Metering & Indication for each outgoing feeders.96 x 96 sq.mm display module mounted on panel door directly connected from release to display all parameters of ACB/MCCB.					
478	MR	Design, manufacture, testing at works, supply installation, testing and commissioning of MODBUS ready SCADA Compatible 415V EMERGENCY PANEL (DG Supply Panel) in ESS, Tested Assembly – TTA, CPRI /Independent international test house tested for all the tests as per IEC61439-1 & 2 and internal arc tests as per IEC 61641, 50kA for 0.3 SEC. Copies of the test reports & certificates shall be submitted with the tender. LT Panel shall also be tested of design as per Seismic Zone 4 of IEC 60068-3-3 requires compliance against 0.4g acceleration. Panel shall be rated for Impulse withstand capability as per IEC-61439. For operator safety IP2 X (touch proof) protection to be available even after opening the feeder compartment door. INCOMING FROM AMF Panel-1 No.1000A, 4-pole EDO type motorized ACB having release, Set of 1000 Amps rating TPN Copper Bus Bars of suitable length shall be provided for entire length of panel board., Outgoing Panels-630 amp, 50KA FP MCCB -1 Nos., 400 amp, 50KA FP MCCB -1 Nos., 315 amp, 50KA FP MCCB -1 Nos., 250 amp, 36KA FP MCCB -1 Nos., 200 amp, 36KA FP MCCB -1 Nos., 100 amp, 36KA FP MCCB -6 Nos., 63 amp, 36KA FP MCCB - 3 Nos., Metering & Indication for each outgoing feeders- 96 x 96 sq.mm display module mounted on panel door directly connected from release to display all parameters of ACB/MCCB.		Set		1	10668682
			######	Set		1	1674266



S.No.	SOR No	Description	Qty	Unit	Rate exc GST	Amount
479	MR	Supply, Installation, testing and Commissioning of Automatic Power Factor Correction Panel (800 KVAR), Design, supply, installation, testing & commissioning of cubicle type semi compartementalized floor mounted free standing type with separation system (as per IS:16636:2017 or IEC 61921,IEC 61439 Part I & II) INCOMMER-1 No. of 2000A Amps. 415 Volts 4P. Type ACB. of 50KA with overload, S/C, O/C and earth fault protection., 2000-Amps (neutral equal size) 3 phase 4 wire 415 volts 50 HZ aluminium bus bars with colour coded PVC heat shrinkable sleeves. OUTGOING-APFC 800 Kvar-1Nos. The Solution should comprise (800 kVAr including Capacitor Duty Contactor,APFC relay & Detuned filter reactors 14%.The capacitor bank should have the following step ratings:6x100+3x50+1X25+1X20+1x5 Capacitor shall be Super Heavy Duty MPP type low loss as per standards with overcurrent capability of 2xIr and Inrush current capability of 500xIr. Cap Bank -100 KVAR - 6 Nos. ,Cap Bank -50 KVAR - 3 Nos. ,Cap Bank -25 KVAR - 1 Nos. ,Cap Bank -20 KVAR - 1 Nos. ,Cap Bank -5 KVAR - 1				
480	10.1.2	Nos. Providing & erecting sandwitched type bus duct having following specification: sandwich type busbar for use as feeder busbar for interconnection between separate electrical equipment / load centers and for use as plug in busbar risers. The busbar shall be suitable for operation in a 690V / 1000V system with frequency of 50 Hz system can be either earthed or unearthed, impulse voltage should be 12 KV; Standard (A) Aluminium Bus-(j) 4000 A,	#######	Set	2	4164424
		Capacity (TR to LT PANEL)	33348	RM	60	2000880
481	MR	Supply of following size of 11 KV XLPE insulated aluminium conductor earthed and armoured cable conforming to IS 7098 complete as required3 Core, 300 sq.mm (from HT Panel to Transformer) Supply of following size of 11 KV XLPE insulated aluminium conductor earthed and armoured cable	2473	RM	80	197840
		conforming to IS 7098 complete as required3 Core, 400				
483	MR	sq.mm (From HT Meter to HT Panel) Laying of one number additional PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size direct in ground in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering and refilling the trench etc as requiredAbove 120 sq. mm and upto 400 sq. mm	3086 371	<u>RM</u>	100	
484	MR	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 11 KV grade of following size in the existing RCC/ HUME/ METAL pipe as requiredAbove 120 sq. mm and upto 400 sq. mm	120		40	
485	MR	supplying and making indoor cable end termination with heat shrinkable jointing kit complete with all accessories including lugs suitable for following size of 3 core, XLPE aluminium conductor cable of 11 kV grade as required 300/400 sq. mm	14508	mtr each	6	2450
					(HE HELE

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
486	MR	Supplying and making straight through cable jointing with heat shrinkable jointing kit complete with all accessories including ferrules suitable for following size of 3 core, XLPE aluminium conductor cable of 11 kV grade as				
487	4.4.4	required300 sq. mm Providing & erecting XLPE (IS:7098()I)-BB ISI armoured cable multistrand / solid copper conductor for 1.1 KV to be	37404	each	2	74808
		laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size of cables- (A) 4 core, 2.5 sq,mm	267	RM	200	53400
488	MR	Supplying, Fixing with End Terminations of 400 sqmm single core 1.1 KV XLPE insulated copper conductor earthed and armoured cable conforming to IS 7098				
489	4.3.3.a	complete as requiredSingle Core, 400 sq.mm Providing and erecting XLPE (IS:7098) - BB ISI armoured cable multistrand aluminium conductor for 1.1 KV . To be	7199	RM	440	3167560
		laid on wall with necessary clamps or in existing trench / pipe of following size of cables(j) 3.5 Core, 300 sq.mm. (150 sq. mm 0.5 core)	1387	RM	2370	3287190
490	4.3.3.b	Providing and erecting XLPE (IS:7098) - BB ISI armoured cable multistrand aluminium conductor for 1.1 KV. To be laid on wall with necessary clamps or in existing trench / pipe of following size of cables(i) 3.5 Core, 240				
		sq.mm.(120 sq. mm 0.5 core)	1150	RM	100	115000
491	4.3.3.c	Providing and erecting XLPE (IS:7098) - BB ISI armoured cable multistrand aluminium conductor for 1.1 KV. To be laid on wall with necessary clamps or in existing trench / pipe of following size of cables(H)3.5 Core, 185	004	DM	0.40	740440
492	4.3.3.d	sq.mm.(95 sq. mm 0.5 core) Providing and erecting XLPE (IS:7098) - BB ISI armoured cable multistrand aluminium conductor for 1.1 KV . To be laid on wall with necessary clamps or in existing trench /	891	RM	840	748440
493	4.3.3.e	pipe of following size of cables(f) 3.5 Core, 120 sq.mm. (70 sq. mm 0.5 core) Providing and erecting XLPE (IS:7098) - BB ISI armoured	529	RM	210	111090
100	1.0.0.0	cable multistrand aluminium conductor for 1.1 KV. To be laid on wall with necessary clamps or in existing trench / pipe of following size of cables(e)3.5 Core, 95 sq.mm.(50 sq. mm 0.5 core)	480	RM	150	72000
494	4.6.3.a	Providing & fixing heavy duty flange type brass double compression type cable gland with rubber ring for PVC insulated armoured cable complete with outgoing tails insulating tape etc. for following size of cables(I) 3.5				
495	4.6.3.b	Core, 300 sq.mm. Providing & fixing heavy duty flange type brass double compression type cable gland with rubber ring for PVC insulated armoured cable complete with outgoing tails	278	each	16	4448
		insulating tape etc. for following size of cables(H) $3\frac{1}{2}$ X 240 sq. mm	245	each	2	490
496	4.6.3.c	Providing & fixing heavy duty flange type brass double compression type cable gland with rubber ring for PVC insulated armoured cable complete with outgoing tails insulating tape etc. for following size of cables(G) 3.5	000			
497	4.6.3.d	Core, 185 sq.mm. Providing & fixing heavy duty flange type brass double compression type cable gland with rubber ring for PVC insulated armoured cable complete with outgoing tails insulating tape etc. for following size of cables(E) 3.5	236	each	4	944
		Core, 120 sq.mm	139	each	2	278

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
498	4.6.3.e	Providing & fixing heavy duty flange type brass double compression type cable gland with rubber ring for PVC insulated armoured cable complete with outgoing tails insulating tape etc. for following size of cables(D) 3.5	130	aaah	2	260
499	4.7.1.a	Core, 95 sq.mm. Solder less crimping type Aluminium lugs confirming to IS suitable for cable of following size evenly climped with high pressure tool & connected to switchgear terminals with brass / cadmium plated nut bolts in an approved manner(K) 300 sq.mm	98	each each		260
500	4.7.1.b	Solder less crimping type Aluminium lugs confirming to IS suitable for cable of following size evenly climped with high pressure tool & connected to switchgear terminals with brass / cadmium plated nut bolts in an approved manner(J) 240 sq. mm	85	each		170
501	4.7.1.c	Solder less crimping type Aluminium lugs confirming to IS suitable for cable of following size evenly climped with high pressure tool & connected to switchgear terminals with brass / cadmium plated nut bolts in an approved manner(I) 185 sq. mm	80	each		320
502	4.7.1.d	Solder less crimping type Aluminium lugs confirming to IS suitable for cable of following size evenly climped with high pressure tool & connected to switchgear terminals with brass / cadmium plated nut bolts in an approved	45	each	2	90
503	4.7.1.e	manner(G) 120 sq. mm Solder less crimping type Aluminium lugs confirming to IS suitable for cable of following size evenly climped with high pressure tool & connected to switchgear terminals with brass / cadmium plated nut bolts in an approved manner(F) 95 sq. mm	43		2	<u> </u>
504	4.11.1.a		616	RM		154000
505	4.11.1.b	Providing & fixing approved make Perforated C type Cable tray, made from sheet steel. The cable tray should be single or double bended as per required and as per IS 2062 / 1079 and shall be coated with hot dip galvanizing as per IS 2629/4759 with max 17.5% perforation with coupler plate / fish plate and GI hardware like nut - bolt and washers etc. erection with necessary support included) as per specification and as per instruction of Engineer In charge(6) 450 mm X 50 mm X 2.0 mm thick	794			39700



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
506	4.11.1.c	Providing & fixing approved make Perforated C type Cable tray, made from sheet steel. The cable tray should be single or double bended as per required and as per IS 2062 / 1079 and shall be coated with hot dip galvanizing as per IS 2629/4759 with max 17.5% perforation with coupler plate / fish plate and GI hardware like nut - bolt				
		and washers etc. erection with necessary support included) as per specification and as per instruction of Engineer In charge(7) 600 mm X 50 mm X 2.0 mm thick	997	RM	50	49850
507	4.5.7.a	Providing & laying RCC Hume pipe for cables to be laid at 90 cm below ground across the road crossing on or floor with necessary material in an approved manner and making the ground as per original(F) 100 mm dia.	224	RM	50	11200
508	4.5.7.b	Providing & laying RCC Hume pipe for cables to be laid at 90 cm below ground across the road crossing on or floor with necessary material in an approved manner and making the ground as per original(D) 250 mm dia.	293			
509	4.5.8.(c)	Providing & laying approved make ISI marked HDPE 6kg/cm2 (Class-3) as per IS:4984:1995 PE-80 to be erected at road crossing on or floor as directed for laying of cable. The pipes as following size of dia & weight per 6mtr63 mm inner dia For Fiber & Power cables				
510	4.5.8.(F)	Providing & laying approved make ISI marked HDPE 6kg/cm2 (Class-3) as per IS:4984:1995 PE-80 to be erected at road crossing on or floor as directed for laying of cable. The pipes as following size of dia & weight per 6mtr110 mm inner dia For Fiber & Power cables	247	RM		
511	10.2.2	Providing pair of Rubber hand gloves suitable for working	725	RM	2500	
512	10.2.1	on 11 KV/22 KV supply. Providing & fixing printed instruction chart both in English & Gujarati and duly framed with front glasses for treatment of person suffering from Electric shock with	212	Pair	2	
513	3.13.2	minimum 50"diagonally size. Providing & erecting metallic vitrified danger notice board as per language suggested by Engineer Incharge for	129	Nos	2	258
	0.40.4	HIGH VOLTAGE installation to be erected as per IS-2551.	81	Nos	2	162
514	3.13.1	Providing & erecting metallic vitrified danger notice board as per language suggested by Engineer Incharge for MEDIUM VOLTAGE installation to be erected as per IS- 2551.	69	Nos	2	138
515	10.2.27	Supplying & erecting ABC power type Ceasefire type fire extinguisher as per IS 13849 or 1 Kg capacity with necessary clamp for erection on wall.	840			
516	10.2.26. A		6526	Nos	4	26104
517	10.2.6	Supplying & erecting floor mounting stand for keeing four nos. of Fire buckets comprising 1500 mm in length, 900 mm height frame made out of 30 mm x 30 mm x 4 mm angle iron with cross supports for legs, welded with 4 hooks and duly painted with one coat of red lead and two coats of approved enamelled silver paint.	933			961 8 ASS 933

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
518	10.2.5	Supplying Fire bucket round bottom of 9 litre capacity made out of 24 gauge GI sheet with extra handle at bottom duly painted white inside and Red outside with Fire mark, filled with dry sand and kept on existing stand provided or hung on wall hook.	212	Nos	4	848
519	10.2.4	Supplying stand First aid box with Anti septic cream, medicine for use on wounds due burn, crepe bandage, gauge bandage, medicated ready to use bandage (band - aid) adhesive tape for medicinal user, scissors, antiseptic solution (Savlon or similar) etc. (all above contents shall be of standard make)	297	Nos	1	297
520	10.2.3.a	Supplying Rubber matting of following thicknes as per IS : 15652 / IEC -61111-(b) 4 mm	1017	sq.m	2	2034
521	10.2.3.b	Supplying Rubber matting of following thicknes as per IS : 15652 / IEC -61111-(c) 12 mm	3051	sq.m	2	6102
522	MR	Supply, installation, testing and commissioning of 10LB. Novec-1230 DLP Assembly with automatic valve mounted on DOT/PESO approved cylinder, push in connector for tube, Mounting bracket etc.	77650	Nos.	2	155300
523	MR	Supply, installation, testing and commissioning of 5LB. Novec-1230 DLP Assembly with automatic valve mounted on DOT/PESO approved cylinder, push in connector for tube, Mounting bracket etc.	63900	Nos.	2	127800
524	MR	Supplying, installation, testing and commissioning of 2.5LB. Novec-1230 DLP Assembly with automatic valve mounted on DOT/PESO approved cylinder, push in connector for tube, Mounting bracket etc.	41950	Nos.	4	167800
525	MR	Supply, installation, testing and commissioning of UL listed Linear Pneumatic Heat Detection Tube (operating temp at 120 Degree Centigrade, Colour-Red) For Automatic Fire Detection & Suppression.	2000	mtr.	300	600000
526	MR	Supply, installation, testing and commissioning of tee connection.	2800		8	22400
527	MR	Supply, installation, testing and commissioning of elbow connection.	2800	Nos.	8	22400
528	MR	Supply, installation, testing and commissioning of end of line adapter with Pressure Gauge For charging & monitoring.	4250	Nos.	6	25500
529	MR	Supply, installation, testing and commissioning of Low pressure switch for monitoring system activation.	9500	Nos.	8	76000
530	MR	Supply, installation, testing and commissioning of Master control Unit with LED Flasher, Electronic Hooter, LED Indicator with provision for Integration with Fire Alarm Control Panel complete as required.	8750	Nos.	8	70000
531	MR	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	12355		16	197686
532	3-14-5	Providing and erecting HOT deep Galvanised iron strip wire 8 to 16 SWG.	77	kg	1455	112053
533	3.14.3	Providing and erecting required size Copper strip for earthing of H.T, OCB/ACB/Transformer LT panel board, motors etc. using copper clamp.	787	kg	275	216425
		Total of Sub Head-XI SUB HEAD-XII-EXTERNAL LIGHTING				41845552



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
534	6.1.4.a	Supplying & erecting approved make Octagonal pole made from HR Sheet steel. The pole should be made as per IS and shall be coated with hot dip galvanizing as per IS 2629/2633/4759, suitable suspend local wind speed with integral junction box consist of terminal plate of min 6 mm Hylam sheet, standard profile 35mm x 7.5 mm Din-					
		Rail for MCB mounting, stud type terminal and arrangement for cable termination to be erected on foundation as per details given by manufacturer					
		considering site requirement(D) 6 Mtr. Long 70 mm Top X 135 mm bottom dia, 3 mm thickness with 200mmX200mmX12mm base plate, 4-M20 Bolts and	8111	each		47	381217
535	6.1.4.b	Supplying & erecting approved make Octagonal pole made from HR Sheet steel. The pole should be made as per IS and shall be coated with hot dip galvanizing as per IS 2629/2633/4759, suitable suspend local wind speed with integral junction box consist of terminal plate of min 6 mm Hylam sheet, standard profile 35mm x 7.5 mm Din- Rail for MCB mounting, stud type terminal and arrangement for cable termination to be erected on foundation as per details given by manufacturer					
		considering site requirement(G) 8 Mtr. Long 70 mm Top X 155 mm bottom dia, 3 mm thickness with 260mmX260mmX16mm base plate, 4-M20 Bolts and					
		600mm long J-Bolt.	13872	each		8	110976
536	6.1.4.c	Supplying & erecting approved make Octagonal pole made from HR Sheet steel. The pole should be made as per IS and shall be coated with hot dip galvanizing as per IS 2629/2633/4759, suitable suspend local wind speed with integral junction box consist of terminal plate of min 6 mm Hylam sheet, standard profile 35mm x 7.5 mm Din- Rail for MCB mounting, stud type terminal and arrangement for cable termination to be erected on foundation as per details given by manufacturer considering site requirement(H) 9 Mtr. Long 70 mm Top X 155 mm bottom dia, 3 mm thickness with 260mmX260mmX16mm base plate, 4-M24 Bolts and 750mm long J-Bolt.	15550	each		48	746400
537	6.1.1	88.9 mm O.D. 4 mtr long duly painted with two coats of aluminium paint complete with metallic base plate of 300mm X 300 mm x 4 mm thick for using as a compund light pole with approx. weight 32 Kg.	3194	each		45	143730
538	6.3.4	Providing 1:2:4 cement concrete foundation & 70 % PCC from bottom including excavation for the pole of size 45 X 45 X 100 cm, deep in below ground level with plinth of 45 cm X 45 cm (or 45 cm dia X 45 cm) high upper ground level with necessary curing and finishing in approved					
539	6.4.3+3. 10.1(B)	manner. (for 4 & 6 mtr pole) Supplying & erecting approved make SMC press moulded composite FRP loop in, loop out approx 2 mm thick box complete with backelite connector strip 5 way (3P+N+E) DIN rail for mounting mob & hanged doors as per requirement having locking arrangement with mounting clamp with nuts, bolts & washers suitable for erection on pole with cable clamp & earth built of following size of box. including 6A SP MCB 10 KA rating Cat-III)(g) 250mm X	801	each		148	118548
		including 6A SP MCB 10 KA rating Cat-III)(g) 250mm X 220mm 135mm (deep)	1222	each		148	12085

S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
540	6-5-2-b.a	Providing and erecting Street Light pole bracket comprising main B Class GI pipe of 4.2 cm/require outside dia. complete with suitable B Class G.I. sleeve tubing of approx. 45cms.length and suitable for 76.5 mm /80mm / required size of pole top having sufficient fasteners for fixing the brackets and having spread of 1.5.mtr. length with 110 deg.with vertical plane & suitable welded stays, reducer and with check nuts complete painted with one coat of Red oxide / PU base primer and two coats of Aluminium / PU paint. paint with following nos of arms. (For 9 Mtr Pole)-[A] Single Arm Bracket 1.5 Mtr	677	each		39	26403
541	6-5-2-b.b	Providing and erecting Street Light pole bracket comprising main B Class GI pipe of 4.2 cm/require outside dia. complete with suitable B Class G.I. sleeve tubing of approx. 45cms.length and suitable for 76.5 mm /80mm / required size of pole top having sufficient fasteners for fixing the brackets and having spread of 1.5.mtr. length with 110 deg.with vertical plane & suitable welded stays, reducer and with check nuts complete painted with one coat of Red oxide / PU base primer and two coats of Aluminium / PU paint. paint with following nos of arms. (For 9 Mtr Pole)-[B] Double Arm Bracket 1.5 Mtr	003	ooob			8027
542	6-5-3-2.2	Providing and erecting street light pole bracket comprising	993	each		9	8937
	0-0-0-a.a	main B Class MS pipe of 4.2 cm/require outside dia. complete with suitable B Class M.S. sleeve tubing of approx. 45cms.length and suitable for 76.5 mm / 80mm. / require size pole top having sufficient fasteners for fixing the brackets and having spread of 1 mtr. length with suitable rise as per site condition & suitable welded stiffener reducer and nipple with check nut complete painted with one coat of Red oxide / PU base primer and two coats of Aluminium / PU paint. paint with following nos of arms[A] Single Arm Bracket 1 Mtr					00040
543	6-5-3-a.b	Providing and erecting street light pole bracket comprising main B Class MS pipe of 4.2 cm/require outside dia. complete with suitable B Class M.S. sleeve tubing of approx. 45cms.length and suitable for 76.5 mm / 80mm. / require size pole top having sufficient fasteners for fixing the brackets and having spread of 1 mtr. length with suitable rise as per site condition & suitable welded stiffener reducer and nipple with check nut complete painted with one coat of Red oxide / PU base primer and two coats of Aluminium / PU paint. paint with following nos of arms[B] Double Arm Bracket 1 Mtr	751	each		36	8261



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
544	2.16.2	Supplying & erecting LED Street light / Flood light fittings with high power white LEDs wattage of 1 watt and above assembled on single MCPCB efficiency more than 130 Im/w and corrosion free high pressure die cast aluminium housing with smooth finish powder coated and heat sink extruded aluminium with diffuser and Polycarbonate optics / lenses with company mark / name engraved or embossed 120 to 300 V power factor more than 0.95, THD < 10% CCT 3000 K to 5700 K, uniformity ratio >0.45, luminiare efficiency >100 lumens/watt, LED driver efficacy >85%. CREE/OSRAM/PHILIPS Lumileds/ NICHIA /SEOUL/ Bridgelux (USA) make LED used for luminiare. (fittings required LM-79 & LM-80 certificates) Note: Below description have shown ranges of wattge, capacity of LED fittings. the Engineer Incharge may select any wattage capacity between the ranges shown.)-Post Top Lantern LED fitting comprises of Copper dust finish cast aluminium spigot and spun aluminium canopy fixed with opal polycarbonate, pipe arrangement for vertical moup Bank -20 KVAR - 1 Nos. ,Cap Bank -5 KVAR - 1 Nos. 00 amp, 36KA FP MCCB -1 Nos., 100 amp, 36KA FP MC				
			4772	each	16	76352
545	2.16.2.(B)	Flood Light (IP-65) surge-4 KV, light must have 440 VAC line supply protection. It should withstand 48 hours for 440 VAC line supply-(vii) above 200 to 250 watts-Cat-III	10711	each	32	342752
546	2.16.2.(A)	Street Light (IP-65), surge protection-4 KV integral and 10 KV non Integral, light must have 440 V AC line supply protection. It should withstand 48 hours for 440 v AC line supply.(iii) Above 60 to 90 watts-Cat -III	5917	each	115	680455
547	2.16.3.C	(c) LED Bollard fittings of minimum height 1000 mm & dia.100mm having polycarbonate clear/milky diffuser mounted on 3mm thick aluminium finished powder coated pipe with base plate 160x160mm with erection by M8x75mm fastner with required RCC foundation.IP65 for 9 to 20 watt and above ,surge-4kv cat-III	4417	each	18	79506
548	4-3-5.	Providing and erecting XLPE (IS:7098)(I)-88 ISI armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables-(A) 4 core 16 Sq. mm	150		2500	375000
549	4.6.1	Providing & fixing heavy duty flange type brass cable gland with rubber ring for PVC insulated armoured cable complete with outgoing tails insulating tape etc. for following size of cables(d) 2 to 4 core 16 sq. mm	47	each	296	13912
550	4.7.1	Solder less crimping type Aluminium lugs confirming to IS suitable for cable of following size evenly climped with high pressure tool & connected to switchgear terminals with brass / cadmium plated nut bolts in an approved manner(c) 16/25 sq. mm	15	each	296	4440
551	4.5.8	Providing & laying approved make ISI marked HDPE 6kg/cm2 (Class-3) as per IS:4984:1995 PE-80 to be erected at road crossing on or floor as directed for laying of cable. The pipes as following size of dia & weight per 6mtr63 mm dia (OD-63 mm & ID-51 mm nominal) For Fiber & Power cables	247	RM	3500	64500
					N	TRCHITEC

S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
552	4.5.7	Providing & laying RCC Hume pipe for cables to be laid at					
		90 cm below ground across the road crossing on or floor					
		with necessary material in an approved manner and	264	mtr		20	5000
553	3-14-12	making the ground as per original150 mm dia	261	mtr		20	5220
555	3-14-12	Supplying & erecting funnel type earthing having earth plate of following size burred in specifically prepared					
		earth pit 3 mtr. below ground with 40 kg. charcoal and salt					
		with alternate layers of charcoal & salt, 20mm.dia. G.I.					
		pipe with Funnel with a wire mesh for watering & bricks					
		masonry block, C.I. Cover complete as per para 7.3 of IS					
		3043 with necessary length of double Galvanised Iron /					
		copper earth wire No 6 SWG bolted with lug to the plate					
		and covered in 12 mm dia. G.I. pipe 2.5 mtr long					
		complete connected to the nearest switch gear with end					
		socket as per direction & duly tested by earth tester					
		confirming to IS (As per drawing) with following					
		specification -(B) With 45 x 45 x 0.35 cms. C.I. earth					
		plate	2543	each		4	10172
554	3.14.5	Providing and erecting Hot deep Galvanized Iron strip	77	l. m		010	70040
FFF	0.00.4	wire 8 to 16 SWG.	77	kg		912	70242
555	2-20-1.	Providing and erecting Three Phase IoT GSM/GPRS					
		Central Control & Monitoring System (CCMS) Panel for Streetlights Smart Feeder Panel with 3 Phase					
		GSM/GPRS CCMS Streetlight Controller with LCD					
		Display (1 Nos.). Streetlight Controller with Individual each					
		Phase Control (Energy Saving feature) and Spare relay					
		facility. Door Switch for unauthorized access & tamper					
		detection. Accelerometer for panel movement detection &					
		tamper alerts. Suitable amount of Wires, Connectors,					
		Terminal Blocks included in Panel. 16/18 gauge M S with					
		industrial exterior powder coated PP with seven tank					
		process RAL 7035 All weather-proof Enclosure Panel					
		having IP65 rating. Waterproof Glands & Grounding					
		Stand included. Dedicated IoT communication					
		GSM/GPRS SIM Card (with minimum 5 years of					
		recharge) for Wireless Communication with CCMS Web					
		Dashboard. 5 Years Data Hosting & Server Charges to be included with CCMS Web Dashboard. Load status, Live					
		analytics, Energy Meter monitoring (Parameters such as					
		kW, kWH, PF, I, V), comparative analytics, reports					
		generation facility. Fault detection on web dashboard. GIS					
		Mapping of CCMS Panel on Web Dashboard. Secured					
		MQTT Communication for Cloud. Includes Android & iOS					
		Mobile Application. Local communication facility via					
		Mobile Application in case of GPRS connectivity failure.					
			59323	each		1	59323
		Total of Sub Head-XII	00020	20011			4327218
		SUB HEAD-XIII-DG SET					



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
556	MR	SITC of 625 KVA 'Silent Type' Diesel Generating sets having PCC 3.3 controller or better alongwith having Prime Power Rating at 1500RPM, 0.8 lagging power factor at 415V suitable for 50Hz, 3 Phase system & for 0.85 Load Factor and consisting of following: Diesel engine 4 stroke water cooled, electric start, of suitable BHP at 1500RPM suitable for above output of alternator at 40 degree C, 50%RH & at 1000 meter MSL and conforming to BS 5514, BS 649, IS 10000, capable of taking 10% oveloading for 1 hour after 12 hour of continuos operation. The engine will be fitted complete with all accessories., Engine mounted Instrument Panel fitted with and having digital display. with Base Frame and Foundation, Daily service fuel tank of 990 liters capacity fabricated out of 3mm thick M.S. sheet complete with all standard accessories and fuel piping between fuel tank and diesel engine with M.S. class 'C' pipes of suitable dia. Dry Exhaust main fold with hospital exhaust silencer and catalytic converter.24 volts DC Starting sytem, Accoustic and weatherproof enclosure with arrangement , Supply and fixing exhaust gas piping of suitable Dia welded black M.S. 'B' Class pipe, confirming to IS:3589 cut to required length and insulated with necessory bends, support and clamps, anti vibration mounting, insulation exhaust					
557	MR	 Providing & erecting approved make AMF control panel suitable for 625 KVA of 3 phase, 415 V, 50 cycles, A.C. diesel generating set complete of scope as detailed below: 1) Power module: A pair of electromechanically interlocked contactors (for mains & generator) Overload relay for generator contactor neutral contactor for mains and generator power socket for connections. 2) Control and metering module: Line voltage monitor, Generator voltage monitor Ammeter 3 items attempt start facility, Air circuit breakers / MCB / MCCB of suitable rating for Auto/Manual operation. Auto/manual switch. Emergency stop push buttons. Manual start push button frequency meter. Engine hour meter, two earthing studs .3) Protection module: The engine shutdown in the unlikely event of Low lube oil pressure High cylinder head temperature. V belt failure. 4) Indicators with alarm Load on generator. 5) Indicators Load on mains Engine fails to start. Emergency stop battery charger. 	314300	Set		1	6250334
		Total of Sub Head-XIII	314300	Set		1	314300 6564634
		SUB HEAD - XIV - SOLAR POWER GENERATION					0304034



S.No. SOR No	Description	Qty	Unit	Rate GST	excl	Amount
558 14.1.1.a	Supply, Installation, Testing & Commissioning of following size of Grid Tied Solar Power Plant with Solar Panels (ALMM approved): Frame Material : Anodized Aluminum alloy Frame With Twin Wall Profile, Front Cover : High Transmission Low-Iron Tempered Glass (AR Coated), High efficency and positive power tolerance Pmax: 0/+5, Module Efficiency should be approx. 18%-21%, Normal operating temperature 45'C, Junction Box with Waterproof IP67 & MC4 Compatible and Enclosed with Bypass diodes, 100% Electroluminescence test to ensure error free Modules, Thep. temp. co-efficient of the PV module shall equal or better than -0.45%/degree C. Solar PV modules of minimum fill factor 75% to be used. Unit Production:- 4 to 5 Unit /kw /day (Actual)(1Year Avg) With 10 year Product warranty and 25 year Linear Power Warranty., Solar Inverter: MPPT Range: 80-1000 V, Max efficiency: 97.5% - 98.9%, O/p Frequency: 50/60Hz, Operating Altitude (m) ≤4000, O/p Power Factor: ~1, O/P THDi: <3%, Operating Tempreture Range: -25~60°C, Anti- islanding Protection: -(D) Grid Tied Solar Power System:					
	26 - 50 kW (3 - phase)	41739	Per KW		50	2086950
	Supply, Installation, Testing & Commissioning of following size of Grid Tied Solar Power Plant with Solar Panels (ALMM approved): Frame Material : Anodized Aluminum alloy Frame With Twin Wall Profile, Front Cover : High Transmission Low-Iron Tempered Glass (AR Coated), High efficency and positive power tolerance Pmax: 0/+5, Module Efficiency should be approx. 18%-21%, Normal operating temperature 45'C, Junction Box with Waterproof IP67 & MC4 Compatible and Enclosed with Bypass diodes, 100% Electroluminescence test to ensure error free Modules, Thep. temp. co-efficient of the PV module shall equal or better than -0.45%/degree C. Solar PV modules of minimum fill factor 75% to be used. Unit Production:- 4 to 5 Unit /kw /day (Actual)(1Year Avg) With 10 year Product warranty and 25 year Linear Power Warranty., Solar Inverter: MPPT Range: 80-1000 V, Max efficiency: 97.5% - 98.9%, O/p Frequency: 50/60Hz, Operating Altitude (m) ≤4000, O/p Power Factor: ~1, O/P THDi: <3%, Operating Tempreture Range: -25~60°C, Antiislanding Protection: -(F) Grid Tied Solar Power System: 101 - 250 kW (3 - phase)	39408	Per KW		210	8275680
560 14.10.1.2	The all inclusive comprehencive annual maintance contract cost covers yearly maintanance of solar Pv Modules, Inverter, wiring, earthing, switchgears, etc with material and labour cost including preventive maintanance. The cost covers entire installation. AMC also includes monthly site visit and inspection of project with submission of inspection and solar generation report. All parts should be replaced/ repaired if found faulty within specified time. Agency has to provide necessory licening work for warranty,power,Bidirectional meter etc -(C)					

S.No. SOR No	Description	Qty	Unit	Rate GST	excl	Amount
561 14.10.1.b	The all inclusive comprehencive annual maintance contract cost covers yearly maintanance of solar Pv Modules, Inverter, wiring, earthing, switchgears, etc with material and labour cost including preventive maintanance. The cost covers entire installation. AMC also includes monthly site visit and inspection of project with submission of inspection and solar generation report. All parts should be replaced/ repaired if found faulty within specified time. Agency has to provide necessory licening work for warranty,power,Bidirectional meter etc -(E) 101KW-200KW System	3390	PER KW		210	711900
	Total of Sub Head-XIV HVAC Work					11286430
562 MR	Supply, Installation, Testing, supervision, & Commissioning of micro-processor controlled Water Cooled Screw Chiller each of min. 140 TR at following conditions, comprising of semi-hermetic mono/twin rotor screw compressors with automatic capacity control and direct driven motor, chiller shall be equipped with insulated shell and tube type flooded cooler with even pass arrangement, water cooled condenser with accessories and even pass arrangement. The chiller package shall also be complete with copper piping, factory charged R-134a refrigerant gas and system control wiring, incoming suitable electrical isolator complete with accessories as required, automatic & safety controls including electronic expansion valve. The chiller package shall be installed on a fabricated mild steel base frame factory assembled to form a compact assembly. Compressor motor shall be TERC type, class-F insulation suitable for operation on 415V+/- 10%, 50 Hz, 3 phase Min. 4,23,360 Kcal/Hr (140 TR) actual capacity. Water chilling machine as described above and at above Supplying, installing, testing and commissioning of FRP Cooling tower of 5,08,800 K.CAL/Hr heat rejection capacity with FRP Water basin, PVC Filling with integral louvers and drift eliminators complete with hot water basin either fitted with spray nozzles or having self rotating sprinklers, statically and dynamically balanced axial flow type fan-direct driven or driven through reduction gear box with TEFC induction motor (EF1 efficiency) normal stater suitable for operation on 415 + 10% volts, 50 Hz. AC supply, suction screen, make-up quick fill arrangement, overflow and drain connections with necessary valves and suitable inspection SS ladder, access arrangement for cooling tower interior, cement concrete foundation, steel/ masonry supporting structure, anti-vibration mountings etc. complete as per specifications and as reqd. The scope shall include suitable electrical isolator suitable for outdoor application near cooling towers. The Cooling tower should be <u>CTI </u>	######	Nos		3	10240231

S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
564	MR	Supply, erection, testing and commissioning of end suction / Vertical Inline Split Coupled centrifugal primary chilled water pump set capable of delivering- 1580 LPM of water against 12 mtr head each comprising of the following and complete with TEFC squirrel cage induction motor, efficiency IE3 with class 'F" insulation. 1450 rpm synchronous speed, operating on 415+ 10% volts, 3 phase, 50 Hz A.C. supply. pump shall have CI body, SS/Bronze impeller, spacer coupling and coupling guard. The scope also shall include following.19mm thick polyvinyl nitrile rubber insulation duly cladded between aluminium sheets of 0.5mm thickness and properly clamped to pump. 2 Nos 150 mm dia dial type pressure gauges,Mounting frame with antivibration pads,RCC/cement concrete foundation for the pump unit.					
565	MR	Supply, erection, testing and commissioning of variable speed Secondary Chilled Water end suction / Vertical in line Split Coupled centrifugal pumps - 3 Nos. (2 W +	140000	Nos.		3	420000
		1 SB) and 3 No. of pump mounted IP55 adjustable frequency drives with built in DC Choke for Variable speed Pumping with 1 nos Parallel pump controller from factory capable of delivering- 1580 LPM of water against 20 mtr head each, complete with TEFC induction motor with class 'F' insulation to operate on 415+ 10% volts, 3 phase, 50 Hz A.C supply for each pump and DPT (Sensors) Supplied by pump Manufacturers or Sensorless Controls in Pump. The shall also include the following - Electrical by pass stater for pumps,19mm thick polyviny nitrile rubber insulation duly cladded between aluminium sheets of 0.5mm thickness and properly clamped to pump. 2 Nos 150 mm dia dial type pressure gauges per pump, Mounting frame with antivibration pads,RCC/cement concrete foundation for the pump unit.					
FCC		Supply practice, testing and commissioning of Vertical	######	Lot		1	1007144
566		Supply, erection, testing and commissioning of Vertical Inline Split Coupled centrifugal Condenser water pump set capable of delivering- 2120 LPM of water against 30 mtr head each comprising of the following and complete with TEFC squirrel cage induction motor efficiency class IE3 with class 'F" insulation. 1450 rpm synchronous speed, operating on 415+ 10% volts, 3 phase, 50 Hz A.C. supply. pump shall have CI body, SS/Bronze impeller, spacer coupling and coupling guard. The scope also shall include 2 Nos 150 mm dia dial type pressure gauges,Mounting frame with antivibration pads,RCC/cement concrete foundation for the pump unit.					
			254519	Nos		3	



	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
567		Supplying, installing, testing and commissioning of factory built floor / ceiling suspended chilled water, double skin type air handling units made of 25mm thick panels consisting of G.I. casing of thickness 0.8 mm outside layer and 0.8 mm SS inside layer with polyurethene foam (PUF) Insulation factory injected between them by injection moulding machine, complete with blower section with blower suitable for static pressure as detailed below, minimum 2 bend GSS/PVC eliminators, cooling coil section with aluminium finned copper tubes (tube thickness not less than 0.5mm) cooling coil , filter sections with 50mm thick metal viscous/washable synthetic type air pre-filters & fine, belt drive package with TEFC drive motor (EF1 efficiency) suitable for 415+10% volts, 50 Hz , 3 phase, A.C supply and scope includes AHU mounted VFD drive complete with incoming electrical isolator in enclosure , drain connections, stainless steel drain pan, thermometers and pressure gauges at the inlet and outlet of coil, necessary vibration isolation arrangement etc. complete as per specifications and of following capacities CS /AHU , 1500CFM 4RD	174771	Nos		1	174771
568		Supplying, installing, testing and commissioning of factory built floor / ceiling suspended chilled water, double skin type air handling units made of 25mm thick panels consisting of G.I. casing of thickness 0.8 mm outside layer and 0.8 mm SS inside layer with polyurethene foam (PUF) Insulation factory injected between them by injection moulding machine, complete with blower section with blower suitable for static pressure as detailed below, minimum 2 bend GSS/PVC eliminators, cooling coil section with aluminium finned copper tubes (tube thickness not less than 0.5mm) cooling coil , filter sections with 50mm thick metal viscous/washable synthetic type air pre-filters & fine, belt drive package with TEFC drive motor (EF1 efficiency) suitable for 415+10% volts, 50 Hz , 3 phase, A.C supply and scope includes AHU mounted VFD drive complete with incoming electrical isolator in enclosure , drain connections, stainless steel drain pan, thermometers and pressure gauges at the inlet and outlet of coil, necessary vibration isolation arrangement etc. complete as per specifications and of following capacities CS /AHU - 2000CFM 4RD	188673			2	377346



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
569		Supplying, installing, testing and commissioning of factory built floor / ceiling suspended chilled water, double skin type air handling units made of 25mm thick panels consisting of G.I. casing of thickness 0.8 mm outside layer and 0.8 mm SS inside layer with polyurethene foam (PUF) Insulation factory injected between them by injection moulding machine, complete with blower section with blower suitable for static pressure as detailed below, minimum 2 bend GSS/PVC eliminators, cooling coil section with aluminium finned copper tubes (tube thickness not less than 0.5mm) cooling coil , filter sections with 50mm thick metal viscous/washable synthetic type air pre-filters & fine, belt drive package with TEFC drive motor (EF1 efficiency) suitable for 415+10% volts, 50 Hz , 3 phase, A.C supply and scope includes AHU mounted VFD drive complete with incoming electrical isolator in enclosure , drain connections, stainless steel drain pan, thermometers and pressure gauges at the inlet and outlet of coil, necessary vibration isolation arrangement etc. complete as per specifications and of following capacities FM AHU ,4000CFM 8RD (TFA)					
570		Supplying, installing, testing and commissioning of factory built floor / ceiling suspended chilled water, double skin type air handling units made of 25mm thick panels consisting of G.I. casing of thickness 0.8 mm outside layer and 0.8 mm SS inside layer with polyurethene foam (PUF) Insulation factory injected between them by injection moulding machine, complete with blower section with blower suitable for static pressure as detailed below, minimum 2 bend GSS/PVC eliminators, cooling coil section with aluminium finned copper tubes (tube thickness not less than 0.5mm) cooling coil , filter sections with 50mm thick metal viscous/washable synthetic type air pre-filters & fine, belt drive package with TEFC drive motor (EF1 efficiency) suitable for 415+10% volts, 50 Hz , 3 phase, A.C supply and scope includes AHU mounted VFD drive complete with incoming electrical isolator in enclosure , drain connections, stainless steel drain pan, thermometers and pressure gauges at the inlet and outlet of coil, necessary vibration isolation arrangement etc. complete as per specifications and of following capacities FM AHU , 8000CFM 6RD (40mm thick panels , Suitable for outdoor application)	278329			2	985356



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
571		Supplying, installing, testing and commissioning of Ceiling mounted chilled water cassette units complete with pre- filter, low noise fan and motor with ON/OFF and 3 speed control and suitable for 1 phase, 230 + 6%V, 50 Hz electric supply wiring in conduit upto thermostat box, the unit shall be complete with electrical terminal strip chilled water copper tube and aluminium finned cooling coil, with stainless steel duly insulated main and auxiliary drain pan, Cordless Remote Controller, powder coated galvanized steel housing, drain pump, factory made Pre-fit set of ball valve with and without strainer, Thermostat & modulating valve, copper piping & connections, Electrical & cabling for proper connection from the 15 Amps outlet to connector box. The noise level at low speed shall be in			IGST		
		the range of 38 to 42db & at high speed upto 45db. Noise levels are at a distance of 2M from the unit. The					
		necessary supporting mechanism with GI suspension					
		rods, GI channel, dash fasteners & vibration isolators to be included. The Cassette capacities shall be : -	60499	Nos		65	3932435
572		Supplying, installation, testing and commissioning of fan coil units having following capacities, ceiling/ wall mounted complete with copper tubes, 3 row deep chilled water cooling coils having aluminium fins and auxiliaries including ball valve set (one with strainer), insulation of drain pan, drain connections, blower, TEFC slow speed (3 speeds) squirrel cage induction motor suitable for operation on 230 volts, single phase, 50 Hz, A.C. supply, controls for fan coil units comprising solenoid valve, three speed selector switch, room thermostat with ON/ OFF switch, electrical wiring etc complete as required 600 Supplying, installation, testing and commissioning of fan coil units having following capacities, ceiling/ wall mounted complete with copper tubes, 3 row deep chilled water cooling coils having aluminium fins and auxiliaries including ball valve set (one with strainer), insulation of drain pan, drain connections, blower, TEFC slow speed (3 speeds) squirrel cage induction motor suitable for operation on 230 volts, single phase, 50 Hz, A.C. supply,	13760	Nos		16	220160
		controls for fan coil units comprising solenoid valve, three speed selector switch, room thermostat with ON/ OFF switch, electrical wiring etc complete as required800					
574		CFM & 2 TR Supplying, installation, testing and commissioning of fan coil units having following capacities, ceiling/ wall mounted complete with copper tubes, 3 row deep chilled water cooling coils having aluminium fins and auxiliaries including ball valve set (one with strainer), insulation of drain pan, drain connections, blower, TEFC slow speed (3 speeds) squirrel cage induction motor suitable for operation on 230 volts, single phase, 50 Hz, A.C. supply, controls for fan coil units comprising solenoid valve, three speed selector switch, room thermostat with ON/ OFF switch, electrical wiring etc complete as required 1000	17023	Nos		1	17023
		CFM & 2.5TR	20570	Nos		1	20570



S.No.	SOR No	Description	Qty	Unit	Rate ex GST	Amount
575	16.11.4.4	Supplying, installation, testing and commissioning of following size electronic, self balancing, pressure independent dynamic balance valve with integrated 2 way modulating control valve in single body. The actuator shall be capable of accepting uto 10V DC & upto 20mA electrical signal and shall provide similar transduced feedback output to control system. Maximum close off pressure shall not be less than 6 Bar for upto 50mm valves & 7 Bar for 65mm & above. Valve should be have pressure rating of 25Bar minimum. The scope shall include thermostat and wiring for interconnection with 1.5 sq.mm copper conductor multicore armoured cable complete as required. 80 mm Ø	48912	Nos		5 244560
576	16.11.4.8	Supplying, installation, testing and commissioning of following size electronic, self balancing, pressure independent dynamic balance valve with integrated 2 way modulating control valve in single body. The actuator shall be capable of accepting uto 10V DC & upto 20mA electrical signal and shall provide similar transduced feedback output to control system. Maximum close off pressure shall not be less than 6 Bar for upto 50mm valves & 7 Bar for 65mm & above. Valve should be have pressure rating of 25Bar minimum. The scope shall include thermostat and wiring for interconnection with 1.5 sq.mm copper conductor multicore armoured cable complete as required32 mm Ø				
			12228	Nos		2 24456
577	MR	Supply, Installation, Testing and commissioning of Dry scrubber for kitchen exhaust consisting of Electrostatic Precipitator, backward curve SISW centrifugal fan with elongated shaft having bearing & drive package out of exhaust air stream, TEFC induction motor, common channel base frame for Fan and motor, vibration isolation arrangement by means of spring type vibration isolators or turret mounts, fire retardant flexible canvass connections made out of canvass sleeve and the scope includes unit mounted stater panel in enclosure. The Electrostatic section shall be 90-95% in single pass as per DOP test method. Electrostatic Precipitator should be able to charge particles from 0.01 micron to 10 micron through solid state power supply. Collector cell shall be of permanent type and slide out facility for easy removal for cleaning. Operating voltage shall be 220+6 % volts, 50 Hz/1Ph, power consumption shall not exceeding 50 watts per unit upto 7500 Cfm. System should be fitted with interlock switch for safety. Velocity across the air cleaner shall not be more than 500 FPM. Scrubber shall be provided with pre-filters as required, pressure drop across ESP with pre filter should not be more than 12mm of Water gauge, . ESPs shall be provided with UV & Ozone Odours removers. ESP Modules shall have necessary provision in terms of flanges to facilitate Ducts/Plenum connections. The scope shall include stater panel for scrubber. The Scrubber shall be of following capacity. Air	361434	Nos		2 722868

ARCHIT

S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
578	MR	Supply, installation, testing and commissioning of synthetic fill pad type air washer at 500 FPM velocity across pads, DIDW Class-I Backward curved centrifugal fan with TEFC weather proof motor (IE3 efficiency) of IP:55 protection suitable for 415 +10% Volts, 3 phase, 50 cycles power supply, mounted on a common base with metallistik vibration isolators, multi sheave pullies for fan and fan motor. The fan capacity shall be based on outlet velocity not exceeding 2000 FPM. The cooler shall be complete with 8" thick celdek fill, 3mm thick FRP steel reinforced tank, water pump 2 Nos. (1+1), cover pipe, distribution pipe, distribution pan, filters at air inlet, water piping, make up water with ball valve, drain and overflow connection,Eleminator etc. all housed in 16 G GSS casing mounted on vibration isolators complete in all respects as per specifications and drawings. scope includes unit mounted stater panel in enclosure. Capacity of coolers as under: - 7500 CFM External Static pressure: 15mm WG	159275	Nos		1	159275
579		Basement Exhaust - Car Parking Area - Supply, Installation, Testing and commissioning of AMCA certified long casing Tube / Vane Axial fans, Complete fan with casing, impeller with adjustable blade angles, wire guard, fire retardant flexible connection, necessary nut bolts and directly coupled with TEFC Sq. Cage induction motor suitable for 415V±10%, 50 Hz. 3 phase electric supply (Class H insulation). Fan & motor assembly shall be suitable for operation upto 250°C temp. for 2hrs fire/smoke conditions. Fan to have safety wire mesh screen on any exposed face. Fan Speed Not exceeding 1450 rpm. The Scope shall include electrical isolator & BMS compactable VFD capable of receiving signal from fire panel / CO sensor controller. Air Qty. 5,000 CFM, Static Pressure 25 mm Wg					
580		Basement Exhaust -(Lift well pr) - Supply, Installation, Testing and commissioning of AMCA certified long casing Tube / Vane Axial fans, Complete fan with casing, impeller with adjustable blade angles, wire guard, fire retardant flexible connection, necessary nut bolts and directly coupled with TEFC Sq. Cage induction motor suitable for 415V±10%, 50 Hz. 3 phase electric supply (Class H insulation). Fan & motor assembly shall be suitable for operation upto 250°C temp. for 2hrs fire/smoke conditions. Fan to have safety wire mesh screen on any exposed face. Fan Speed Not exceeding 1450 rpm. The Scope shall include electrical isolator & BMS compactable VFD capable of receiving signal from fire panel / CO sensor controller. Air Qty. 5,000 CFM, Static Pressure 25 mm Wg 6000cfm / 20mm WG st. pr	40000	Nos.		8	320000
		,	50000	Nos		2	100000



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
581		Basement Exhaust - (Basement Stair pr.) - Supply, Installation, Testing and commissioning of AMCA certified long casing Tube / Vane Axial fans, Complete fan with casing, impeller with adjustable blade angles, wire guard, fire retardant flexible connection, necessary nut bolts and directly coupled with TEFC Sq. Cage induction motor suitable for 415V±10%, 50 Hz. 3 phase electric supply (Class H insulation). Fan & motor assembly shall be suitable for operation upto 250°C temp. for 2hrs fire/smoke conditions. Fan to have safety wire mesh screen on any exposed face. Fan Speed Not exceeding 1450 rpm. The Scope shall include electrical isolator & BMS compactable VFD capable of receiving signal from fire panel / CO sensor controller. Air Qty. 5,000 CFM, Static Pressure 25 mm Wg -26000cfm / 30mm WG st. pr.					
582	MR	Basement Exhaust - Car Parking Area Supply,	######	Nos		2	4600000
		Installation, Testing and commissioning of AMCA certified long casing Tube / Vane Axial fans Complete fan with tube casing, impeller with adjustable blade angles, wire guard, fire retardant flexible connection, necessary nut bolts and directly coupled with TEFC Sq.cage induction motor suitable for 415V±10%, 50 Hz. 3 phase electric supply (Class F insulation). Fan to have safety wire mesh screen on any exposed face. Fan Speed Not exceeding 1450 rpm. The Scope shall include electrical isolator & BMS compactable VFD capable of receiving signal from fire panel / CO sensor controllerAir Qty. 4,000 CFM, Static Pressure 25 mm Wg					
583	MR	Supply, installation, testing and commissioning of Duct	32000	Nos.		8	256000
		mounted in-line exhaust air fans comprising of Housing made out of heavy gauge galvanized sheets, DIDW forward curved centrifugal fan complete with internal rotor motor suitable for single phase, 230 volts, 50 Hz required for the exhaust. The fan shall be complete with speed regulator, external gravity louvers, thermal overload release for the motor as well as terminal box for termination of external power supply for the following Capacities900cfm 12mm	8307	Nos		4	33226
584	MR	Supply, installation, testing and commissioning of Duct mounted in-line exhaust air fans comprising of Housing made out of heavy gauge galvanized sheets, DIDW forward curved centrifugal fan complete with internal rotor motor suitable for single phase, 230 volts, 50 Hz required for the exhaust. The fan shall be complete with speed regulator, external gravity louvers, thermal overload release for the motor as well as terminal box for termination of external power supply for the following Capacities250cfm 8 mm	6390	Nos		5	31949



S.No.	SOR No	•	Qty	Unit	Rate GST	excl	Amount
585	MR	Supply, installation, testing and commissioning of Duct mounted in-line exhaust air fans comprising of Housing made out of heavy gauge galvanized sheets, DIDW forward curved centrifugal fan complete with internal rotor motor suitable for single phase, 230 volts, 50 Hz required for the exhaust. The fan shall be complete with speed regulator, external gravity louvers, thermal overload release for the motor as well as terminal box for termination of external power supply for the following Capacities150cfm 8mm	4932	Nos		16	78918
586	MR	Supply, installation, testing and commissioning of Duct mounted in-line exhaust air fans comprising of Housing made out of heavy gauge galvanized sheets, DIDW forward curved centrifugal fan complete with internal rotor motor suitable for single phase, 230 volts, 50 Hz required for the exhaust. The fan shall be complete with speed regulator, external gravity louvers, thermal overload release for the motor as well as terminal box for termination of external power supply for the following	4932	1105		10	
587	16.10.2	Capacities100cfm 8mm Supplying, fixing, testing and commissioning of condenser water pipes of following nominal bore size diameters, MS C Class as per IS: 3589, , and materials along with necessary clamps, vibration isolators, and fitting such as bends, tees etc. but excluding valves, strainer and gauges etc adequately supported on rigid supports etc as per specification and as required250	4932	Nos		4	19730
588	16.10.3	mm Dia Supplying, fixing, testing and commissioning of condenser water pipes of following nominal bore size diameters, MS C Class as per IS: 3589,, and materials along with necessary clamps, vibration isolators, and fitting such as bends, tees etc. but excluding valves, strainer and gauges etc adequately supported on rigid supports etc as per specification and as required. 200 mm Dia	<u>5940</u> 4934	<u>RM</u>		160	950429
589	16.10.4	Supplying, fixing, testing and commissioning of condenser water pipes of following nominal bore size diameters, MS C Class as per IS : 1239, and materials along with necessary clamps, vibration isolators, and fitting such as bends, tees etc. but excluding valves, strainer and gauges etc adequately supported on rigid supports etc as per specification and as required. 150 mm Dia	3303	RM		60	198161
590	16.10.6	Supplying, fixing, testing and commissioning of condenser water pipes of following nominal bore size diameters, MS C Class as per IS : 1239 and materials along with necessary clamps, vibration isolators, and fitting such as bends, tees etc. but excluding valves, strainer and gauges etc adequately supported on rigid supports etc as per specification and as required. 100 mm Dia	2403	RM		20	48054



S.No.	SOR No	Description	Qty	Unit	Rate o GST	excl	Amount
591	MR	Supplying, fixing, testing and commissioning of condenser water pipes of following nominal bore size diameters, MS C Class as per IS : 1239 and materials along with necessary clamps, vibration isolators, and fitting such as bends, tees etc. but excluding valves, strainer and gauges etc adequately supported on rigid supports etc as per					
		specification and as required 50 mm Dia	1200	RM		20	24000
592	MR	Supplying, fixing, testing and commissioning of Butterfly Valve with CI body SS disc nitrile sheet & O ring, Complete with fittings, Nuts, Bolts & Gaskets (Complete with Flanges integral or welded, fittings, Nuts, Bolts & Gaskets (PN-16 Rating), strainers(Complete with flanges integral or welded, fittings, Nuts, Bolts & Gaskets (PN-16 Rating), gauges etc for condenser water circulation as per specifications 250 mm Ø	15799	Nec			47207
593	16.11.1.1	Supplying, fixing, testing and commissioning of Butterfly Valve with CI body SS disc nitrile sheet & O ring, Complete with fittings, Nuts, Bolts & Gaskets (Complete with Flanges integral or welded, fittings, Nuts, Bolts & Gaskets (PN-16 Rating), strainers(Complete with flanges integral or welded, fittings, Nuts, Bolts & Gaskets (PN-16 Rating), gauges etc for condenser water circulation as per specifications. 200 mm Ø		Nos.		3	47397
594	16.11.1.4	Supplying, fixing, testing and commissioning of Butterfly Valve with CI body SS disc nitrile sheet & O ring, Complete with fittings, Nuts, Bolts & Gaskets (Complete with Flanges integral or welded, fittings, Nuts, Bolts & Gaskets (PN-16 Rating), strainers(Complete with flanges integral or welded, fittings, Nuts, Bolts & Gaskets (PN-16 Rating), gauges etc for condenser water circulation as per specifications. 100mm Ø	12639	Nos.		18	227507
			4832	Nos.		3	14496
595	16.11.1.7	Supplying, fixing, testing and commissioning of Butterfly Valve with CI body SS disc nitrile sheet & O ring, Complete with fittings, Nuts, Bolts & Gaskets (Complete with Flanges integral or welded, fittings, Nuts, Bolts & Gaskets (PN-16 Rating), strainers(Complete with flanges integral or welded, fittings, Nuts, Bolts & Gaskets (PN-16 Rating), gauges etc for condenser water circulation as per specifications. 50mm Ø	3029	Nos.		3	9088
596	16.11.2.1	Dual plate spring loaded Check valve (NRV) - 200 mm Ø					0.4700
597	MR	Flexible connection complete with control unit PN16 -	11576	Nos.		3	34728
598	MR	200mmØ Supplying, fixing, testing and commissioning of Fully automatic balancing valve (Complete with Flanges integral or welded, fittings, Nuts, Bolts & Gaskets (PN-16 Rating), strainers(Complete with flanges integral or welded, fittings, Nuts, Bolts & Gaskets (PN-16 Rating), gauges etc for condenser water circulation as per	8000	Nos.		12	96000
599	16.8	specifications 200 mm Ø SITC of water pressure gauge (100 mm Ø) bourdon type with brass ball valve of 3/8" Ø and SS tubing, socket. Range (0-50) / (0-100) as required	134496 1068	Nos. Nos.		6 12	806976
						l.	TROUTES
		115					IUNI

		Description	Qty	Unit	Rate excl GST	Amount
600	16.9	SITC of Mercury in glass industrial thermometer in SS- 304 casing with 0.5 C least count, range 0-50 C. Brass oil filled thermowell of 1/2" size	931	Nos.	18	16763
601	MR	SITC of Pot strainer as per Specification 250 mm Ø (pipe size) - As per CPWD Specification	106026	Nos.	1	106026
602		SITC of Plug valves - 25mm diameter Plug valves in dirt legs	2500	Nos.	12	30000
<u>603</u> 604	<u>16.7.4.1</u> 16.2.5	SITC of Y strainer - Dia 200mm Supplying, laying/ fixing, testing and commissioning of following nominal sizes of chilled water piping inside / Outside the building (with necessary clamps, vibration isolators and fittings but excluding valves, strainers, gauges etc.) duly insulated with following closed cell elastometric nitrile rubber of minimum 45 Kg / m3 density, thermal conductivity 0.037 W/MK or better at 20 deg mean temperature class 'O' insulation applied by suitable adhesive complete including repairing of damage to building etc. as per specifications and as required complete in all respect. Pipe running out side the building shall be cladded with 24 gauge Aluminium sheet. 200 mm Ø Piping (32mm thick insulation)	44396	Nos	6	266379
605	16.2.6	Supplying, laying/ fixing, testing and commissioning of following nominal sizes of chilled water piping inside / Outside the building (with necessary clamps, vibration isolators and fittings but excluding valves, strainers, gauges etc.) duly insulated with following closed cell elastometric nitrile rubber of minimum 45 Kg / m3 density, thermal conductivity 0.037 W/MK or better at 20 deg mean temperature class 'O' insulation applied by suitable adhesive complete including repairing of damage to building etc. as per specifications and as required complete in all respect. Pipe running out side the building shall be cladded with 24 gauge Aluminium sheet. 150 mm Ø Piping (32mm thick insulation)	3820	RM	160	611143
606	16.2.7	Supplying, laying/ fixing, testing and commissioning of following nominal sizes of chilled water piping inside / Outside the building (with necessary clamps, vibration isolators and fittings but excluding valves, strainers, gauges etc.) duly insulated with following closed cell elastometric nitrile rubber of minimum 45 Kg / m3 density, thermal conductivity 0.037 W/MK or better at 20 deg mean temperature class 'O' insulation applied by suitable adhesive complete including repairing of damage to building etc. as per specifications and as required complete in all respect. Pipe running out side the building shall be cladded with 24 gauge Aluminium sheet. 125 mm Ø Piping (32mm thick insulation)	3341	RM	100	334107



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
607	16.2.8	Supplying, laying/ fixing, testing and commissioning of following nominal sizes of chilled water piping inside / Outside the building (with necessary clamps, vibration isolators and fittings but excluding valves, strainers, gauges etc.) duly insulated with following closed cell elastometric nitrile rubber of minimum 45 Kg / m3 density, thermal conductivity 0.037 W/MK or better at 20 deg mean temperature class 'O' insulation applied by suitable adhesive complete including repairing of damage to building etc. as per specifications and as required complete in all respect. Pipe running out side the building shall be cladded with 24 gauge Aluminium sheet. 100 mm Ø Piping (32mm thick insulation)	2661	RM		200	532143
608	16.2.9	Supplying, laying/ fixing, testing and commissioning of following nominal sizes of chilled water piping inside / Outside the building (with necessary clamps, vibration isolators and fittings but excluding valves, strainers, gauges etc.) duly insulated with following closed cell elastometric nitrile rubber of minimum 45 Kg / m3 density, thermal conductivity 0.037 W/MK or better at 20 deg mean temperature class 'O' insulation applied by suitable adhesive complete including repairing of damage to building etc. as per specifications and as required complete in all respect. Pipe running out side the building shall be cladded with 24 gauge Aluminium sheet. 80 mm Ø Piping (32mm thick insulation)	1988	RM		200	397500
609	16.2.10	Supplying, laying/ fixing, testing and commissioning of following nominal sizes of chilled water piping inside / Outside the building (with necessary clamps, vibration isolators and fittings but excluding valves, strainers, gauges etc.) duly insulated with following closed cell elastometric nitrile rubber of minimum 45 Kg / m3 density, thermal conductivity 0.037 W/MK or better at 20 deg mean temperature class 'O' insulation applied by suitable adhesive complete including repairing of damage to building etc. as per specifications and as required complete in all respect. Pipe running out side the building shall be cladded with 24 gauge Aluminium sheet. 65 mm Ø Piping (32mm thick insulation)					
610	16.2.11	Supplying, laying/ fixing, testing and commissioning of following nominal sizes of chilled water piping inside / Outside the building (with necessary clamps, vibration isolators and fittings but excluding valves, strainers, gauges etc.) duly insulated with following closed cell elastometric nitrile rubber of minimum 45 Kg / m3 density, thermal conductivity 0.037 W/MK or better at 20 deg mean temperature class 'O' insulation applied by suitable adhesive complete including repairing of damage to building etc. as per specifications and as required complete in all respect. Pipe running out side the building shall be cladded with 24 gauge Aluminium sheet. 50 mm Ø Piping (32mm thick insulation)	1602	RM		200	320357
			1387	RM		100	138661
							A ARCHITE

S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
611	16.2.12	Supplying, laying/ fixing, testing and commissioning of following nominal sizes of chilled water piping inside / Outside the building (with necessary clamps, vibration isolators and fittings but excluding valves, strainers, gauges etc.) duly insulated with following closed cell elastometric nitrile rubber of minimum 45 Kg / m3 density, thermal conductivity 0.037 W/MK or better at 20 deg mean temperature class 'O' insulation applied by suitable adhesive complete including repairing of damage to building etc. as per specifications and as required complete in all respect. Pipe running out side the building shall be cladded with 24 gauge Aluminium sheet. 40 mm Ø Piping (32mm thick insulation)	1122	RM		200	224464
612	16.2.13	Supplying, laying/ fixing, testing and commissioning of following nominal sizes of chilled water piping inside / Outside the building (with necessary clamps, vibration isolators and fittings but excluding valves, strainers, gauges etc.) duly insulated with following closed cell elastometric nitrile rubber of minimum 45 Kg / m3 density, thermal conductivity 0.037 W/MK or better at 20 deg mean temperature class 'O' insulation applied by suitable adhesive complete including repairing of damage to building etc. as per specifications and as required complete in all respect. Pipe running out side the building shall be cladded with 24 gauge Aluminium sheet. 32 mm Ø Piping (32mm thick insulation)					
			935	RM		500	467411
613	16.2.14	Supplying, laying/ fixing, testing and commissioning of following nominal sizes of chilled water piping inside / Outside the building (with necessary clamps, vibration isolators and fittings but excluding valves, strainers, gauges etc.) duly insulated with following closed cell elastometric nitrile rubber of minimum 45 Kg / m3 density, thermal conductivity 0.037 W/MK or better at 20 deg mean temperature class 'O' insulation applied by suitable adhesive complete including repairing of damage to building etc. as per specifications and as required complete in all respect. Pipe running out side the building shall be cladded with 24 gauge Aluminium sheet. 25 mm Ø Piping (32mm thick insulation)	776	RM		200	155179
614	16.7.1.1	SITC of C.I. Butterfly valve in the chilled water plumbing duly insulated to the same specifications at factory/ site (PN-16) with CI body SS disc, with integral or separate welded Flange /wafer type construction with EPDM coated disc with long pitch with protected out pipe insulation and PN 16 pressure rating for chilled circulation as specified. The valves above 150 mm dia shall be with geat box for operation.200 mm Ø	13983	Nos.		3	41949



S.No.	SOR No	Description	Qty	Unit	Rate ex GST	cl	Amount
615	16.7.1.2	SITC of C.I. Butterfly valve in the chilled water plumbing duly insulated to the same specifications at factory/ site (PN-16) with CI body SS disc, with integral or separate welded Flange /wafer type construction with EPDM coated disc with long pitch with protected out pipe insulation and PN 16 pressure rating for chilled circulation as specified. The valves above 150 mm dia shall be with geat box for operation. 150 mm Ø	7440	Nos.		18	133923
616	16.7.1.5	SITC of C.I. Butterfly valve in the chilled water plumbing duly insulated to the same specifications at factory/ site (PN-16) with CI body SS disc, with integral or separate welded Flange /wafer type construction with EPDM coated disc with long pitch with protected out pipe insulation and PN 16 pressure rating for chilled circulation as specified. The valves above 150 mm dia shall be with geat box for operation. 80 mm Ø	4327	Nos.		10	43268
617	16.7.1.8	SITC of C.I. Butterfly valve in the chilled water plumbing duly insulated to the same specifications at factory/ site (PN-16) with CI body SS disc, with integral or separate welded Flange /wafer type construction with EPDM coated disc with long pitch with protected out pipe insulation and PN 16 pressure rating for chilled circulation as specified. The valves above 150 mm dia shall be with geat box for operation.40 mm Ø	3126	Nos.		4	12504
618	RA B5.2	SITC of C.I. Ball valve in the chilled water plumbing duly insulated to the same specifications at factory/ site (PN- 16) with Cl body SS disc, with integral or separate welded Flange /wafer type construction with EPDM coated disc with long pitch with protected out pipe insulation and PN 16 pressure rating for chilled circulation as specified. The valves above 150 mm dia shall be with geat box for operation. 32 mm Ø	2153	Nos.		3	6459
619		SITC of C.I. Ball valve in the chilled water plumbing duly insulated to the same specifications at factory/ site (PN- 16) with CI body SS disc, with integral or separate welded Flange /wafer type construction with EPDM coated disc with long pitch with protected out pipe insulation and PN 16 pressure rating for chilled circulation as specified. The valves above 150 mm dia shall be with geat box for operation. 25 mm Ø	1320	Nos.		3	3960
620	16.7.3.2	SITC of Non-Return valve with duel plate of CI body SS plates vulcanized NBR seal Flanged end for chilled water circulation (PN-16). 150 mm Ø	8222	Nos.		6	49334
621		SITC of CI Flanged Balancing valve (PN-16) with Flanges, EPDM coated disc with built-in measuring facility as per Specification.Fully automatic balancing valve. 150 mm Ø	99269	Nos.		3	297807
622	16.7.4.2	SITC of Y- strainer of ductile CI Body flanged ends with stainless steel strainer150 mm Ø	25029	Nos.		6	150177
623	16.7.4.5		8823	Nos.		5	44116
624	16.7.4.8	SITC of Y- strainer of ductile CI Body flanged ends with stainless steel strainer40 mm Ø	3928	Nos.		2	0EL 8 A 7855
625		SITC of Plug valves - 25mm diameter Plug valves in dirt	2500	Nos.	3	35	\$7500
626		SITC of Flexible connection complete with control unit - 150 mm $Ø$	6000	Nos.		12	72000

627 16.8 SITC of water pressure gauge (100 mm Ø) bourdon type with brass ball valve of 38' Ø and SS tubing, socket. 1068 Nos. 20 2 628 16.9 SITC of Mercury in glass industrial thermometer in SS and casing with D-SC lears count, range 0-50 C. Brass oil 31 Nos. 20 2 629 RA BG Supply. Installation, Testing and commissioning of INSULATED PRESSURISED CLOSED WATER EXPANSION TANK suitable for total volume of water in chilled water circuit along with necessary accessories such as 2 Nos pumps (1working + 1standby) with Pressure Transmitter and interconnecting Pipe & Istandby) with Pressure Transmitter and interconnecting rules (110 mm and 110	S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
Range (0-50) / (0-100) as required. 1068 Nos. 20 21 628 16.9 STITC of Metrury in glass industrial thermometer in SS- 304 casing with 0.5C least count, range 0-50 C. Brass oil illed thermowell of 1/2* size 931 Nos. 20 20 628 RA B6 Supply. Installation, Testing and commissioning of INSULATED PRESSURISED CLOSED WATER EXPANSION TANK suble for total volume of water in chilled water circuit along with necessary accessories such as 2 Nos purps (fuvoking + tstandby) with Pressure Transmitter and interconnecting safety relief valve, drain valve, pressure gauge, automatic air purging arrangement, etc. The tank shall be pre-charged. Expansion tank Shall be with replaceable heavy duy buy! rubber bladder. The tank shall be pre-charged. Expansion tank Shall be tifted with lifting rings and a floor mounting skirt for vertical installation. The tank must be connection to facilitate the on site charging of nitrogen in the tank. The tank shall be fitted with lifting rings and a floor mounting skirt for vertical installation. The tank must be constructed in accordance with IS-STANDARD 285- 1969 suitable for 125 PSI working pressure. The complete system shall be courced from single manufacturer and supplied and installed with all accessories and safety fixtures required to proper functioning of the complete hydronic system. The tank shall be duly painted in approved colour shall be could painted in approved colour shall be duly insulated with 30 mm thick EPS insulating material and cladded with aluminium Sheet (20G) 358500 Nos. 1 630 Supply, installation , testing and commissioning of contingult type Air separator with pot type straine	627	16.8					
628 16.9 SITC of Mercury in glass industrial thermometer in SS- 304 casing with 0.5C least count, range 0-50 C. Brass oil filled thermowell of 1/2' size 931 Nos. 20 629 RA B6 Supply. Installation, Testing and commissioning of INSULATED PRESSURISED CLOSED WATER EXPANSION TANK suitable for total volume of water in chilled water circuit along with necessary accessories such as 2 Nos pumps (1working +1standby) with Pressure Transmitter and interconnecting Pipe & Isolating Valve complete with piping connections, safety relief valve, drain valve, pressure gauge, automatic air purging arrangement, etc. The tank shall be pre-charged. Expansion tank Shall be with replaceable heavy duty butyl rubber bladder. The tank shall be pre-charged. Expansion tank Shall be fitted with filing rings and a floor mounting skirt for vertical installation. The tank must be constructed in accordance with IS-STANDARD 2225- 1969 suitable for 125 PSI working pressure. The complete system shall be sourced from single manufacturer and supplied and installed with all accessories and safety fixtures required for proper functioning of the complete hydronic system. The tank shall be duly painted in approved colour shall be complete with pressure withes and power distribution and control panel IP55 Control Panel, Pressure Transmitter, interconnecting piping & wiring. (tank capacity 1000 Lts) 358500 Nos. 1 34 630 Supply, installation , testing and commissioning of Centrifugal type Air separator with pot type strainer / Air & dir separator for flanged connection 150mm pipe line, suitable for PN16 raing, complete with super vent as required, and duly insulated with 50 mm thick EPS insulated material and cladded with super vent as required and duly devent vent valve suitable to			-	1068	Nos	20	21357
304 casing with 0.5C least court, range 0-50 C. Brass oil 331 Nos. 20 629 RA B6 Supply. Installation, Testing and commissioning of INSULATED PRESSURISED CLOSED WATER EXPANSION TANK suitable for total volume of water in chilled water circuit along with necessary accessories such as 2 Nos pumps (Iworking +Istandby) with Pressure Transmitter and interconnecting Pipe & lsolating Valve complete with piping connections, safety relief valve, drain valve, pressure gauge, automatic air purging arrangement, etc. The tank shall be pre-charged. Expansion tank Shall be with replaceable heavy duty butyl rubber bladder. The tank shall have 50 MM system connection and 20 mm drain and charging valve connection and 20 mm drain and charging valve connection of lacititate the on site charging of nitrogen in the tank. The tank shall be fitted with lifting rings and a floor mounting skirt for vertical installation. The tank must be constructed in accordance with IS-STANDARD 2825- 1969 suitable for 125 PSI vorking pressure. The complete system shall be sourced from single manufacturer and supplied and installed with all accessories and affety fixtures required for proper functioning of the complete hydronic system. The tank shall be duly painted in approved coloser shall be complete with pressure switches and power distribution and control panel IP55 Control Panel, Pressure Transmitter, interconnecting piping & wiring, (tank capacity 1000 Lts) 358500 Nos. 1 33 630 Supplyin, installation , testing and commissioning of contribud all accessel pressure? Air & diff separator for flagged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separat	628	16.9		1000	1100.	20	21007
629 RA B6 Supply, Installation, Testing and commissioning of INSULATED PRESSURISED CLOSED WATER EXPANSION TANK suitable for total volume of water in chilled water circuit along with necessary accessories such as 2 Nos pumps (tworking +1standby) with Pressure Transmitter and interconnecting Pipe & Isolating Valve complete with pipig connections, safety relief valve, drain valve, pressure gauge, automatic air purging arrangement, etc. The tank shall be pre-charged. Expansion tank Shall be with replaceable heavy duty butyl rubber bladder. The tank shall have 50 MM system connection and 20 mm drain and charging valve connection to facilitate the on site charging of nitrogen in the tank. The tank shall be fitted with lifting drings and a floor mounting skirt for vertical installation. The tank must be constructed in accordance with IS-STANDARD 2825-1969 suitable for 125 PSI working pressure. The complete system shall be sourced from single manufacturer and supplied and installed with all accessories and safety fidures required for proper functioning of the complete hydronic system. The tank shall be duly painted in approved colour shall be complete with pressure switches and power distribution and control panel IP55 Control Panel, Pressure Transmitter, interconnecting piping & wiring, (tank capacity 1000 Lts) Nos. 1 38 630 Supply, installation , testing and commissioning of centrifugal type Air separator with pot type strainer / Air & dirt separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-98 %, Suitable for PN16 rating, complete with super vert as required. and duly insulated with 30 mm tick EPS insulated material and cladded with aluminium sheet 109238 Nos. 1 10 631 Supply, installation , testing and c			304 casing with 0.5C least count, range 0-50 C. Brass oil				
INSULATED PRESSURISED CLOSED WATER EXPANSION TANK suitable for total volume of water in chilled water circuit along with necessary accessories such as 2 Nos pumps (tworking +1standby) with Pressure Transmitter and interconnecting Pipe & Isolating Valve complete with piping connections, safety relief valve, drain valve, pressure guage, automatic air purging arrangement, etc. The tank shall be pre-charged. Expansion tank Shall be with replaceable heavy duty butyl rubber bladder. The tank shall be pre-charged. Expansion tank Shall be with replaceable heavy duty butyl rubber bladder. The tank shall be sore STANDARD 2825-1969 suitable for 125 PSI working pressure. The complete system shall be sourced from single manufacturer and supplied and installed with all accessories and safety fixtures required for proper functioning of the complete hydronic system. The tank shall be duly painted in approved colour shall be complete with pressure switches and power distribution and control panel IP55 Control Panel, Pressure Transmitter, interconnecting piping & wiring. (tank capacity 1000 Lts) Nos. 1 32 630 Supply, installation , testing and commissioning of Centrifugal type Air separator with pot type strainer / Air & dirt separator for flange connection 150mm pipe ine, automatic air purging arrangement etc. The design parameters for the air separator of reficiency 96-98 %. Suitable for PN16 rating, complete with super vent as required. Air Yent valve suitable to purge out the trapped air in the water pipe line complete as required. 109238 Nos. 1 00 631 Supply, installation , testing and commissioning of Commential and cladded with aluminium sheet 2602 Nos. 2				931	Nos.	20	18625
EXPANSION TANK suitable for total volume of water in chilled water circuit along with necessary accessories such as 2 Nos pumps (tworking +1standby) with Pressure Transmitter and interconnecting Pipe & Isolating Valve complete with piping connections, safety relief valve, drain valve, pressure gauge, automatic air purging arrangement, etc. The tank shall be pre-charged. Expansion tank Shall be with replaceable heavy duly butyl rubber bladder. The tank shall be fitted with lifting rings and a floor mounting skirt for vertical installation. The tank must be constructed in accordance with IS-STANDARD 2825- 1969 suitable for 125 PSI working pressure. The complete system shall be sourced from single manufacturer and supplied and installed with all accessories and safety fixtures required for proper functioning of the complete hydronic system. The tank shall be duly painted in approved colour shall be complete with pressure switches and power distribution and control panel IP55 Control Panel, Pressure Transmitter, interconnecting piping & wiring, (tank capacity 1000 Lts) Chilled water closed vessel pressurized expansion tank as described above shall be duly insulated with 50 m thick EPS insulating material and cladded with aluminium Sheet (20C) 358500 Nos. 1 36 630 Supply, installation , testing and commissioning of Centrifugal type Air separator with pot type strainer / Air & dirt separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of 50 mm tikk EPS insulated material and cladded with aluminium sheet 100238 Nos. 1 10 631 Supplyin, installation , testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required. Nos. 23 <td< td=""><td>629</td><td>RA B6</td><td></td><td></td><td></td><td></td><td></td></td<>	629	RA B6					
chilled water circuit along with necessary accessories such as 2 Nos pumps (1working +1standby) with Pressure Transmitter and interconnecting Pipe & Isolating Valve complete with piping connections, safety relife valve, drain valve, pressure gauge, automatic air purging arrangement, etc. The tank shall be pre-charged. Expansion tank Shall be with replaceable heavy duty butyl rubber bladder. The tank shall have 50 MM system connection and 20 mm drain and charging valve connection to facilitate the on site charging of nitrogen in the tank. The tank shall be fitted with lifting rings and a floor mounting skirt for vertical installation. The tank must be constructed in accordance with IS-STANDARD 2825- 1969 suitable for 125 PSI working pressure. The complete system shall be sourced from single manufacturer and supplied and installed with all accessories and safety fixtures required for proper functioning of the complete hydronic system. The tank shall be duly painted in approved colour shall be complete with pressure switches and power distribution and control panel IP55 Control Panel, Pressure Transmitter, interconnecting piping & wiring (funk capacity 1000 Lts) Chilled water closed vessel pressurized expansion tank as described above shall be duly insulated with 30 mm thick EP5 isolating material and cladded with aluminium Sheet (20G) 358500 Nos. 1							
such as 2 Nos pumps (tworking +1standby) with Pressure Transmitter and interconnecting Pipe & Isolating Valve complete with piping connections, safety relief valve, drain valve, pressure gauge, automatic air purging arrangement, etc. The tank shall be pre-charged. Expansion tank Shall be with replaceable heavy duty butyl rubber bladder. The tank shall be pre-charged. Expansion tank Shall be with replaceable heavy duty butyl rubber bladder. The tank shall be fitted with lifting rings and a floor mounting skirt for vertical installation. The tank must be constructed in accordance with IS-STANDARD 2825- 1999 suitable for 125 PSI working pressure. The complete system shall be sourced from single manufacturer and supplied and installed be complete with pressure switches and power distribution and control panel IP55 Control Panel, Pressure Transmitter, interconnecting piping & wiring. (tank capacity 1000 Lts) Chilled water closed vessel pressurized expansion tank as described above shall be duty insulated with all moth thick EPS insulating material and cladded with aluminium Sheet (20G) 358500 Nos. 1 630 Supply, installation , testing and commissioning of Centrifugal type Air separator with pot type strainer / Air & dirt separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-98 %. Suitable for PN16 rating, complete with super vent as required, and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet 109238 Nos. 1 631 Supplying, fixing, testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required. 2602 Nos. 2							
Isolating Valve complete with piping connections, safety relief valve, drain valve, pressure gauge, automatic air purging arrangement, etc. The tank shall be pre-charged. Expansion tank Shall be with replaceable heavy duty buty rubber bladder. The tank shall be store dwy duty buty rubber bladder. The tank shall be fitted with sitting rings and a floor mounting skir for vertical installation. The tank must be constructed in accordance with IS-STANDARD 2825-1969 suitable for 125 PSI working pressure. The complete system shall be sourced from single manufacturer and supplied and installed with all accessories and safety fixtures required for proper functioning of the complete hydronic system. The tank shall be duly painted in approved colour shall be control panel IP55 Control Panel, Pressure Transmitter, interconnecting piping & wiring. (tank capacity 1000 Lts) 358500 Nos. 1 36 630 Supply, installation , testing and commissioning of Centrifugal type Air separator with pot type strainer / Air & dir separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-98 %. Suitable for PN16 rating, complete with super vent as required. and duly insulated with 50 mm thick EPS insulation , testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required. 109238 Nos. 1 10 631 Supplying, fixing, testing and commissioning of clowing size/diameters duly insulated with 9 mm thick close of cells in the water gipe line complete as required. 2602 Nos. 23 5 632 Supplying, fixing, testing and commissioning of clowing size/diameters duly insulated with 9 mm thick closes cells as required. 2602 No			• •				
relief vaive, drain valve, pressure gauge, automatic air purging arrangement, etc. The tank shall be pre-charged. Expansion tank Shall be with replaceable heavy duty butyl rubber bladder. The tank shall have 50 MM system connection and 20 mm drain and charging valve connection to facilitate the on site charging of nitrogen in the tank. The tank shall be fitted with lifting rings and a floor mounting skirt for vertical installation. The tank must be constructed in accordance with IS-STANDARD 2825- 1969 suitable for 125 PSI working pressure. The complete system shall be sourced from single manufacturer and supplied and installed with all accessories and safety fixtures required for proper functioning of the complete hydronic system. The tank shall be duly painted in approved colour shall be complete with pressure switches and power distribution and control panel IP55 Control Panel, Pressure Transmiter, interconnecting piping & wiring. (tank capacity 1000 Lts) 358500 Nos. 1 34 630 Supply, installation , testing and commissioning of Centrifugal type Air separator of efficiency 96-98 %. Suitable for PN16 rating, complete with super vent as required, and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet 10228 Nos. 1 10 631 Supply, installation , testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete with super vent as required, and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet 2602 Nos. 1 10 631 Supplying, fixing, testing and commissioning of closed cell intilie rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittin			u				
a purging arrangement, etc. The tank shall be pre-charged. Expansion tank Shall be with replaceable heavy duty butyl rubber bladder. The tank shall have 50 MM system connection and 20 mm drain and charging valve connection to facilitate the on site charging of nitrogen in the tank. The tank shall be fitted with lifting rings and a floor mounting skirt for vertical installation. The tank must be constructed in accordance with IS-STANDARD 2825- 1969 suitable for 125 PSI working pressure. The complete sysptied and installed with all accessories and safety fixtures required for proper functioning of the complete hydronic system. The tank shall be duly painted in approved colour shall be complete with pressure switches and power distribution and control panel. IP55 Control Panel, Pressure Transmitter, interconnecting piping & wiring. (tank capacity 1000 Lts) Chilled water closed vessel pressurized expansion tank as described above shall be duly insulated with aluminium Sheet (20G) 358500 Nos. 1 630 Supply, installation , testing and commissioning of Centrifugal type Air separator of efficiency 96-98 %. Suitable for PN16 rang, complete with super vent as required, and duly in							
Expansion tank Shall be with replaceable heavy duty butyl rubber bladder. The tank shall have 50 MM system connection of aclilitate the on site charging of nitrogen in the tank. The tank shall be fitted with lifting rings and a floor mounting skirt for vertical installation. The tank must be constructed in accordance with IS-STANDARD 2825-1969 Suitable for 125 PSI working pressure. The complete system shall be sourced from single manufacturer and supplied and installed with all accessories and safety fixtures required for proper functioning of the complete hydronic system. The tank shall be duly painted in approved colour shall be control panel IP55 Control Panel, Pressure Transmitter, interconnecting piping & wiring. (tank capacity 1000 Lts) Chilled water closed vessel pressure dexpansion tank as described above shall be duly insulated with 50 mm thick EP5 insulating material and cladded with aluminium Sheet (20G) 358500 Nos. 1 36 630 Supply, installation , testing and commissioning of Centrifugal type Air separator with pot type strainer / Air & dirt separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-98 %. Suitable for PN16 rang, complete with super vent as required. and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet 109238 Nos. 1 10 631 Supply, installation , testing and commissioning of Closed cell nitrile ruber insulated with 90 mm thick EPS insulated material and cladded with aluminium sheet 2602 Nos. 23 5 632 Supplying, fixing, testing and commissioning of class G.I. condensate drain pipes on wall/floor/roof of following size/							
rubber bladder. The tank shall have 50 MM system connection to facilitate the on site charging valve connection to facilitate the on site charging of nitrogen in the tank. The tank shall be fitted with lifting rings and a floor mounting skirt for vertical installation. The tank must be constructed in accordance with IS-STANDARD 2825- 1969 suitable for 125 PSI working pressure. The complete system shall be sourced from single manufacturer and supplied and installed with all accessories and safety fixtures required for proper functioning of the complete hydronic system. The tank shall be duly painted in approved colour shall be complete with pressure switches and power distribution and control panel IPS5 Control Panel, Pressure Transmitter, interconnecting piping & wiring. (tank capacity 1000 Lts) Chilled water closed vessel pressurized expansion tank as described above shall be duly insulated with 50 mm thick EPS insulating material and cladded with aluminium Sheet (20G) 358500 Nos. 1 36 630 Supply, installation , testing and commissioning of Centrifugal type Air separator of fligned connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-98 %. Suitable for PN16 rating, complete with super vent as required. and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet 109238 Nos. 1 10 631 Supplyin, installation , testing and commissioning of Z0mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required. 2602 Nos. 23 26 632 Supplying, fixing, testing and commissioning of medium class G.1. condensate drain pipes on wall/floor/roof of following size/diameters duly insulated with 9 mm thick closed cell n							
connection to facilitate the on site charging of nitrogen in the tank. The tank shall be fitted with lifting rings and a floor mounting skift for vertical installation. The tank must be constructed in accordance with IS-STANDARD 2825- 1969 suitable for 125 PSI working pressure. The complete system shall be sourced from single manufacturer and supplied and installed with all accessories and safety fixtures required for proper functioning of the complete hydronic system. The tank shall be duly painted in approved colour shall be complete with pressure switches and power distribution and control panel IP55 Control Panel, Pressure Transmitter, interconnecting piping & wiring. (tank capacity 1000 Lts) Chilled water closed vessel pressurized expansion tank as described above shall be duly insulated with 50 mm thick EPS insulating material and cladded with aluminium Sheet (20G) 358500 Nos. 1 33 630 Supply, installation , testing and commissioning of Centrifugal type Air separator with pot type strainer / Air & dirt separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-88 %. Suitable for PN16 rating, complete with super vent as required. and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet 109238 Nos. 1 10 631 Supply, installation , testing and commissioning of rolowing size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm Ø							
the tank. The tank shall be fitted with lifting rings and a floor mounting skirt for vertical installation. The tank must be constructed in accordance with IS-STANDARD 2825-1969 suitable for 125 PSI working pressure. The complete system shall be sourced from single manufacturer and supplied and installed with all accessories and safety fixtures required for proper functioning of the complete hydronic system. The tank shall be duly painted in approved colour shall be complete with pressure switches and power distribution and control panel IP55 Control Panel, Pressure Transmitter, interconnecting piping & wiring. (tank capacity 1000 Lts) Source of the source of th			. .				
floor mounting skirt for vertical installation. The tank must be constructed in accordance with IS-STANDARD 2825- 1969 suitable for 125 PSI working pressure. The complete system shall be sourced from single manufacturer and supplied and installed with all accessories and safety fixtures required for proper functioning of the complete hydronic system. The tank shall be duly painted in approved colour shall be complete with pressure switches and power distribution and control panel IP55 Control Panel, Pressure Transmitter, interconnecting piping & wiring. (tank capacity 1000 Lts) Chilled water closed vessel pressurized expansion tank as described above shall be duly insulated with 50 mm thick EPS insulating material and cladded with aluminium Sheet (20G) 358500 Nos. 1 35 630 Supply, installation , testing and commissioning of Centrifugal type Air separator with pot type strainer / Air & dirt separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-98 %. Suitable for PN16 rating, complete with super vent as required. and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet 109238 Nos. 1 10 631 Supply, installation , testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required. 2602 Nos. 1 10 632 Supplying, fixing, testing and commissioning of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately support			••••				
be constructed in accordance with IS-STANDARD 2825- 1969 suitable for 125 PSI working pressure. The complete system shall be sourced from single manufacturer and supplied and installed with all accessories and safety fixtures required for proper functioning of the complete hydronic system. The tank shall be duly painted in approved colour shall be complete with pressure switches and power distribution and control panel IP55 Control Panel, Pressure Transmitter, interconnecting piping & wiring, (tank capacity 1000 Lts) Chilled water closed vessel pressurized expansion tank as described above shall be duly insulated with 50 mm thick EPS insulating material and cladded with aluminium Sheet (20G) 358500 Nos. 1 35 630 Supply, installation , testing and commissioning of Centrifugal type Air separator with pot type strainer / Air & dirt separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-98 %. Suitable for PN16 rating, complete with super vent as required. and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet 109238 Nos. 1 10 631 Supply, installation , testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required. 109238 Nos. 1 10 632 Supplying, fixing, testing and commissioning of rollowing size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tese etc. adequately supported as per specifications and as required.50 mm Ø							
1969 suitable for 125 PSI working pressure. The complete system shall be sourced from single manufacturer and supplied and installed with all accessories and safety fixtures required for proper functioning of the complete hydronic system. The tank shall be duly painted in approved colour shall be complete with pressure switches and power distribution and control panel IP55 Control Panel, Pressure Transmitter, interconnecting piping & wiring. (tank capacity 1000 Lts) Chilled water closed vessel pressurized expansion tank as described above shall be duly insulated with 50 mm thick EPS insulating material and cladded with aluminium Sheet (20G)358500 Nos. 133630Supply, installation , testing and commissioning of Centrifugal type Air separator with pot type strainer / Air & dit separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-98 %. Suitable for PN16 rating, complete with super vent as required. and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet109238 Nos. 110631Supply, installation , testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required. 2602 Nos. 2325632Supplying, fixing, testing and commissioning of class G.I. condensate drain pipes on wall/floor/roof of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm 2025			•				
supplied and installed with all accessories and safety fixtures required for proper functioning of the complete hydronic system. The tank shall be duly painted in approved colour shall be complete with pressure switches and power distribution and control panel IP55 Control Panel, Pressure Transmitter, interconnecting piping & wiring. (tank capacity 1000 Lts) Chilled water closed vessel pressurized expansion tank as described above shall be duly insulated with 50 mm thick EPS insulating material and cladded with aluminium Sheet (20G) 358500 Nos. 630 Supply, installation , testing and commissioning of centrifugal type Air separator with pot type strainer / Air & dirt separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design nautomatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required. 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required. 2602 Nos. 631 Supplying, fixing, testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required. <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
fixtures required for proper functioning of the complete hydronic system. The tank shall be duly painted in approved colour shall be complete with pressure switches and power distribution and control panel IP55 Control hydronic system. The tank shall be duly painted in approved colour shall be complete with pressure switches and power distribution and control panel IP55 Control Panel, Pressure Transmitter, interconnecting piping & wiring. (tank capacity 1000 Lts) Chilled water closed vessel pressurized expansion tank as described above shall be duly insulated with 50 mm thick EPS insulating material and cladded with aluminium Sheet (20G) 358500 Nos. 1 35 630 Supply, installation , testing and commissioning of Centrifugal type Air separator with pot type strainer / Air & dirt separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-98 %. Suitable for PN16 rating, complete with super vent as required. and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet 109238 Nos. 1 10 631 Supply, installation , testing and commissioning of Clomm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required. 2602 Nos. 2 6 632 Supplying, fixing, testing and commissioning of fullowing size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of preformed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required			system shall be sourced from single manufacturer and				
hydronic system. The tank shall be duly painted in approved colour shall be complete with pressure switches and power distribution and control panel IP55 Control Panel, Pressure Transmitter, interconnecting piping & wiring. (tank capacity 1000 Lts) Chilled water closed vessel pressurized expansion tank as described above shall be duly insulated with 50 mm thick EPS insulating material and cladded with aluminium Sheet (20G) 358500 Nos. 1 36 630 Supply, installation , testing and commissioning of Centrifugal type Air separator with pot type strainer / Air & dirt separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-98 %. Suitable for PN16 rating, complete with super vent as required. and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet 109238 Nos. 1 10 631 Supply, installation , testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required. 2602 Nos. 23 5 632 Supplying, fixing, testing and commissioning of closed cell nitrile rubber insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm Ø With 9							
approved colour shall be complete with pressure switches and power distribution and control panel IP55 Control Panel, Pressure Transmitter, interconnecting piping & wiring. (tank capacity 1000 Lts) Chilled water closed vessel pressurized expansion tank as described above shall be duly insulated with 50 mm thick EPS insulating material and cladded with aluminium Sheet (20G) 358500 Nos. 1 630 Supply, installation , testing and commissioning of Centrifugal type Air separator with pot type strainer / Air & dirt separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-98 %. Suitable for PN16 rating, complete with super vent as required. and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet 109238 Nos. 1 631 Supply, installation , testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required. 2602 Nos. 23 5 632 Supplying, fixing, testing and commissioning of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm Ø 1000000000000000000000000000000000000							
and power distribution and control panel IP55 Control Panel, Pressure Transmitter, interconnecting piping & wiring (tank capacity 1000 Lts) Chilled water closed vessel pressurized expansion tank as described above shall be duly insulated with 50 mm thick EPS insulating material and cladded with aluminium Sheet (20G) 358500 Nos. 1 35 630 Supply, installation , testing and commissioning of Centrifugal type Air separator with pot type strainer / Air & dirt separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-98 %. Suitable for PN16 rating, complete with super vent as required. and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet 109238 Nos. 1 10 631 Supply, installation , testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required. 2602 Nos. 23 5 632 Supplying, fixing, testing and commissioning of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm Ø 2602 Nos. 23 5							
Panel, Pressure Transmitter, interconnecting piping & wiring. (tank capacity 1000 Lts) A mining. (tank capacity 1000 Lts) Chilled water closed vessel pressurized expansion tank as described above shall be duly insulated with 50 mm thick EPS insulating material and cladded with aluminium Sheet (20G) 358500 Nos. 1 35 630 Supply, installation , testing and commissioning of Centrifugal type Air separator with pot type strainer / Air & dirt separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-98 %. Suitable for PN16 rating, complete with super vent as required. and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet 109238 Nos. 1 10 631 Supply, installation , testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required. 2602 Nos. 23 5 632 Supplying, fixing, testing and commissioning of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of preformed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm Ø 2602 Nos. 23 5							
Chilled water closed vessel pressurized expansion tank as described above shall be duly insulated with 50 mm thick EPS insulating material and cladded with aluminium Sheet (20G)358500Nos.135630Supply, installation, testing and commissioning of Centrifugal type Air separator with pot type strainer / Air & dirt separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-98 %. Suitable for PN16 rating, complete with super vent as required. and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet109238Nos.110631Supply, installation, testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required.2602Nos.21632Supplying, fixing, testing and commissioning of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm Ø110			Panel, Pressure Transmitter, interconnecting piping &				
as described above shall be duly insulated with 50 mm thick EPS insulating material and cladded with aluminium Sheet (20G)358500Nos.135630Supply, installation , testing and commissioning of Centrifugal type Air separator with pot type strainer / Air & dirt separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-98 %. Suitable for PN16 rating, complete with super vent as required. and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet109238Nos.110631Supply, installation , testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required.2602Nos.235632Supplying, fixing, testing and commissioning of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tese etc. adequately supported as per specifications and as required.50 mm ØImage: Complete as a section of the section o							
thick EPS insulating material and cladded with aluminium 358500 Nos. 1 36 630 Supply, installation , testing and commissioning of Stassioning of 1 36 630 Supply, installation , testing and commissioning of 1 36 1 36 630 Supply, installation , testing and commissioning of 1 1 36 631 Supply, installation , testing arrangement etc. The design 1 10 9 parameters for the air separator of efficiency 96-98 %. 109238 Nos. 1 10 631 Supply, installation , testing and commissioning of 109238 Nos. 1 10 631 Supply, installation , testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the 109238 Nos. 1 10 632 Supplying, fixing, testing and commissioning of 2602 Nos. 23 5 632 Supplying, fixing, testing and commissioning of pulle rubber insulation in the form of pre- 2602 Nos. 23 5 632 Supplying, fixing, testing and commissioning of pulle rubber insulation in the form of pre- 1 10 634							
Sheet (20G)358500Nos.135630Supply, installation , testing and commissioning of Centrifugal type Air separator with pot type strainer / Air & dirt separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-98 %. Suitable for PN16 rating, complete with super vent as required. and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet109238Nos.110631Supply, installation , testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required.2602Nos.235632Supplying, fixing, testing and commissioning of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm Ø136			•				
630Supply, installation , testing and commissioning of Centrifugal type Air separator with pot type strainer / Air & dirt separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-98 %. Suitable for PN16 rating, complete with super vent as required. and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet109238Nos.11000000000000000000000000000000000000			5				
Centrifugal type Air separator with pot type strainer / Air & dirt separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-98 %. Suitable for PN16 rating, complete with super vent as required. and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet109238Nos.110631Supply, installation , testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required.2602Nos.235632Supplying, fixing, testing and commissioning of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm ØImage: Centrifugal type in the section of the section o	000			358500	Nos.	1	358500
dirt separator for flanged connection 150mm pipe line, automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-98 %. Suitable for PN16 rating, complete with super vent as required. and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet109238Nos.1631Supply, installation , testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required.2602Nos.23632Supplying, fixing, testing and commissioning of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm ØImage: Common Support of the super superior of the super super super super	630						
automatic air purging arrangement etc. The design parameters for the air separator of efficiency 96-98 %. Suitable for PN16 rating, complete with super vent as required. and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet109238 Nos. 1631Supply, installation , testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required.2602 Nos. 23632Supplying, fixing, testing and commissioning of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm Ø							
Suitable for PN16 rating, complete with super vent as required. and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet109238Nos.1631Supply, installation, testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required.2602Nos.23632Supplying, fixing, testing and commissioning of class G.I. condensate drain pipes on wall/floor/roof of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm ØImage: Complete as previous and along with a previous and along with a previous and along with a previous and previous and previous and							
required. and duly insulated with 50 mm thick EPS insulated material and cladded with aluminium sheet 109238 Nos. 1 10 631 Supply, installation, testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required. 2602 Nos. 23 8 632 Supplying, fixing, testing and commissioning of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of preformed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm Ø Image: Section and along with supported as per specifications and as required.50 mm Ø Image: Section and along with supported as per specifications and as required.50 mm Ø Image: Section and along with support as per specifications and as required.50 mm Ø Image: Section and along with support as per specification and as required.50 mm Ø							
insulated material and cladded with aluminium sheet109238Nos.1631Supply, installation , testing and commissioning of 20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required.2602Nos.23632Supplying, fixing, testing and commissioning of class G.I. condensate drain pipes on wall/floor/roof of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm ØImage: Class in the section is a class in the section in the section is a class in the section in the section is a class in the section is a class in the section is a class in the section in the section is a class in the section in the section is a class in the section in the section is a class in the section in the section is a class in the section							
Image: constraint of the section of							
20mm Automatic Air Vent valve suitable to purge out the trapped air in the water pipe line complete as required. 2602 Nos. 23 8 632 Supplying, fixing, testing and commissioning of medium class G.I. condensate drain pipes on wall/floor/roof of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of preformed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm Ø Image: Complete as the specification of the specification				109238	Nos.	1	109238
632 Supplying, fixing, testing and commissioning of medium class G.I. condensate drain pipes on wall/floor/roof of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre-formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm Ø Nos. 23 E	631						
632 Supplying, fixing, testing and commissioning of medium class G.I. condensate drain pipes on wall/floor/roof of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre-formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm Ø Vol. 23 53							
632 Supplying, fixing, testing and commissioning of medium class G.I. condensate drain pipes on wall/floor/roof of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm Ø			trapped all in the water pipe line complete as required.	2602	Nos.	23	59846
following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm Ø	632		Supplying, fixing, testing and commissioning of medium				
closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm Ø			class G.I. condensate drain pipes on wall/floor/roof of				
formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm Ø							
fittings such as bends, tees etc. adequately supported as per specifications and as required.50 mm Ø							
per specifications and as required.50 mm Ø							
							OEL & ASSOC
				6452	RM	10	64520
						\	Contraction of the second

	Supplying, fixing, testing and commissioning of medium class G.I. condensate drain pipes on wall/floor/roof of			GST		
	following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.40 mm Ø					
	Supplying fiving testing and commissioning of modium	4323	RM		20	86460
	class G.I. condensate drain pipes on wall/floor/roof of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.32 mm Ø	3234	RM		70	226380
	Supplying, fixing, testing and commissioning of medium class G.I. condensate drain pipes on wall/floor/roof of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.25 mm Ø					
101011	Supply Installation Tasting Palansing & Commissioning	1967	RM	5	00	983500
	of G.S.S square/ rectangular factory fabricated ducting complete with gaskets, elbows, splitters, vanes, supports adjustable dampers, etc. as per drawings and as required for dehumidified air distribution of following thickness as per approved working drawings, specifications and requirement .Thickness 1.25mm Sheet	1639	Sq.m		5	8196
16.12.1.3	Supply, Installation, Testing Balancing & Commissioning of G.S.S square/ rectangular factory fabricated ducting complete with gaskets, elbows, splitters, vanes, supports adjustable dampers, etc. as per drawings and as required for dehumidified air distribution of following thickness as per approved working drawings, specifications and requirement. Thickness 1.00mm Sheet	1233	Sam	1	00	123304
16.12.1.2	Supply, Installation, Testing Balancing & Commissioning of G.S.S square/ rectangular factory fabricated ducting complete with gaskets, elbows, splitters, vanes, supports adjustable dampers, etc. as per drawings and as required for dehumidified air distribution of following thickness as per approved working drawings, specifications and requirement .Thickness 0.80mm Sheet					231174
16.12.1.1	Supply, Installation, Testing Balancing & Commissioning of G.S.S square/ rectangular factory fabricated ducting complete with gaskets, elbows, splitters, vanes, supports adjustable dampers, etc. as per drawings and as required for dehumidified air distribution of following thickness as per approved working drawings, specifications and requirement. Thickness 0.63mm Sheet	964	· · · · · · · · · · · · · · · · · · ·		50	231174
	16.12.1.3	 per specifications and as required.40 mm Ø Supplying, fixing, testing and commissioning of medium class G.I. condensate drain pipes on wall/floor/roof of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of preformed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.32 mm Ø Supplying, fixing, testing and commissioning of medium class G.I. condensate drain pipes on wall/floor/roof of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of preformed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.25 mm Ø 16.12.1.4 Supply, Installation, Testing Balancing & Commissioning of G.S.S square/ rectangular factory fabricated ducting complete with gaskets, elbows, splitters, vanes, supports adjustable dampers, etc. as per drawings and as required for dehumidified air distribution of following thickness as per approved working drawings, specifications and requirement .Thickness 1.25mm Sheet 16.12.1.2 Supply, Installation, Testing Balancing & Commissioning of G.S.S square/ rectangular factory fabricated ducting complete with gaskets, elbows, splitters, vanes, supports adjustable dampers, etc. as per drawings and as required for dehumidified air distribution of following thickness as per approved working drawings, specifications and requirement .Thickness 1.00mm Sheet 16.12.1.2 Supply, Installation, Testing Balancing & Commissioning of G.S.S square/ rectangular factory fabricated ducting complete with gaskets, elbows, splitters, vanes, supports adjustable dampers, etc. as per drawings and as required for dehumidified air distribution of following thickness as per approved working drawings, specifications and requirement .Thickness 0.80mm Sheet 16.12.1	per specifications and as required.40 mm Ø 4323 Supplying, fixing, testing and commissioning of medium class G.I. condensate drain pipes on wall/floor/roof of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of preformed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.32 mm Ø 3234 Supplying, fixing, testing and commissioning of medium class G.I. condensate drain pipes on wall/floor/roof of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of preformed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.25 mm Ø 3234 16.12.1.4 Supply, Installation, Testing Balancing & Commissioning of G.S.S square/ rectangular factory fabricated ducting complete with gaskets, elbows, splitters, vanes, supports adjustable dampers, etc. as per drawings and as required for dehumidified air distribution of following thickness as per approved working drawings, specifications and requirement. Thickness 1.25mm Sheet 1639 16.12.1.2 Supply, Installation, Testing Balancing & Commissioning of G.S.S square/ rectangular factory fabricated ducting complete with gaskets, elbows, splitters, vanes, supports adjustable dampers, etc. as per drawings and as required for dehumidified air distribution of following thickness as per approved working drawings, specifications and requirement. Thickness 0.80mm Sheet 1233 16.12.1.1 Supply, Installation, Testing Balancing & Commissioning of G.S.S square/ rectangular factory fabricated ducting complete with	per specifications and as required.40 mm Ø 4323 RM Supplying, fixing, testing and commissioning of medium class G.I. condensate drain pipes on wall/floor/roof of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and as required.32 mm Ø 3234 RM Supplying, fixing, testing and commissioning of medium class G.I. condensate drain pipes on wall/floor/roof of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and as required.25 mm Ø 3234 RM Supplying, fixing, testing Balancing & Commissioning of G.S.S square/ rectangular factory fabricated ducting complete with gaskets, elbows, splitters, vanes, supports adjustable dampers, etc. as per drawings and as required for dehumidified air distribution of following thickness as per approved working drawings, specifications and requirement. Thickness 1.25mm Sheet 1639 Sq.m 16.12.1.2 Supply, Installation, Testing Balancing & Commissioning of G.S.S square/ rectangular factory fabricated ducting complete with gaskets, elbows, splitters, vanes, supports adjustable dampers, etc. as per drawings and as required for dehumidified air distribution of following thickness as per approved working drawings, specifications and requirement. Thickness 1.00mm Sheet 1233 Sq.m 16.12.1.1 Supply, Installation, Testing Balancing & Commissioning of G.S.S square/ rectangular factory fabricated ducting complete with gaskets, elbows, splitters, vanes, supports adjustable dampers, etc. as per drawings and as required for dehumidified air d	per specifications and as required.40 mm Ø 4323 RM Supplying, fixing, testing and commissioning of medium class G.I. condensate drain pipes on wall/floor/roof of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.32 mm Ø 3234 RM Supplying, fixing, testing and commissioning of medium class G.I. condensate drain pipes on wall/floor/roof of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and as required.25 mm Ø 3234 RM 16.12.1.4 Supply, Installation, Testing Balancing & Commissioning of G.S.S square/ rectangular factory fabricated ducting complete with gaskets, elbows, splitters, vanes, supports adjustable dampers, etc. as per drawings and as required for dehumidified air distribution of following thickness as per approved working drawings, specifications and requirement. Thickness 1.25mm Sheet 1639 Sq.m 16.12.1.2 Supply, Installation, Testing Balancing & Commissioning of G.S.S square/ rectangular factory fabricated ducting complete with gaskets, elbows, splitters, vanes, supports adjustable dampers, etc. as per drawings and as required for dehumidified air distribution of following thickness as per approved working drawings, specifications and requirement. Thickness 0.80mm Sheet 1233 Sq.m 1 16.12.1.2 Supply, Installation, Testing Balancing & Commissioning of G.S.S square/ rectangular factory fabricated ducting complete	per specifications and as required.40 mm Ø 4323 RM 20 Supplying, fixing, testing and commissioning of medium class G.I. condensate drain pipes on wall/floor/roof of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and along with necessary clamps, fittings such as bends, tees etc. adequately supported as per specifications and as required.32 mm Ø 3234 RM 70 Supplying, fixing, testing and commissioning of medium class G.I. condensate drain pipes on wall/floor/roof of following size/diameters duly insulated with 9 mm thick closed cell nitrile rubber insulation in the form of pre- formed pipe sections and as required.25 mm Ø 1967 RM 500 16.12.1.4 Supply, Installation, Testing Balancing & Commissioning of G.S.S square/ rectangular factory fabricated ducting complete with gaskets, elbows, splitters, vanes, supports adjustable dampers, etc. as per drawings and as required for dehumidified air distribution of following thickness as per approved working drawings, specifications and requirement. Thickness 1.25mm Sheet 1639 Sq.m 5 16.12.1.2 Supply, Installation, Testing Balancing & Commissioning of G.S.S square/ rectangular factory fabricated ducting complete with gaskets, elbows, splitters, vanes, supports adjustable dampers, etc. as per drawings and as required for dehumidified air distribution of following thickness as per approved working drawings, specifications and requirement. Thickness 0.80mm Sheet 1233 Sq.m 100 16.12.1.2 Supply, Installation, Testing Balancing & Comm

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
640	16.12.1.3	Supply, Installation, Testing Balancing & Commissioning of Kitchen exhaust duct constructed out of 1.6 mm thick black metal sheets (Welded) complete with fire proof gaskets, elbows, bends, tee, supports etc. painted yellow after applying suitable primer	1973	Sq.m	300	591857
641	16.23.1	Supplying and fixing of 19mm thickness duly laminated aluminium foil of mat finish closed cell Nitrile rubber (class "O") insulation on existing duct after applying two coats of cold setting adhesive (CPR X compound). The joints shall sealed with 50 mm wide and 3 mm thick self adhesive nitrile rubber tape insulation complete as per specifications and as required.	673	Sq.m		501545
642		Supply and fixing of external thermal insulation on ducts running in ambient air with 19mm thick chemically cross linked closed cell polythene (XLPE) fire retardant grade insulation of density not less than 30kg per cum in single layer with factory lamination of 30 micron aluminium foil as per specifications. A coat of starbond or equivalent adhesive shall be applied on insulation & then the insulation shall be wrapped with glass cloth. Over glass cloth two more coats of star bond shall be applied.	875			17504
643	16.13	Supply, installation, testing and commissioning of GI volume control duct damper complete with neoprene rubber gaskets,nut,bolts,screws linkages,flanges etc. as per specifications	6291	sqm	2	12582
644	16.15	Supplying, fixing, testing & commissioning of powder coated extruded aluminium section supply air grills with aluminium volume control dampers, as per CPWD	8129	Sqm	12	97554
645	16.16	Supplying, & fixing, of powder coated extruded aluminium section return air grills with louvers but without volume control dampers, complete as per required.	5277	Sqm	25	131920
646	16.17	Supplying, fixing, testing commissioning of supply air diffusers of powder coated aluminium with aluminium volume control dampers.as per CPWD specifications.	10879	Sqm	55	598321
647	16.18	Supplying, fixing, testing, commissioning of return air diffusers of powder coated aluminium, as per CPWD specifications.	7251	Sqm	5	36254
648		Double layered Flexible canvass connection made of fibreglass weave having silver grey silicon rubber coating, Flexible connection shall be air tight & water proof and withstand high temperature application, non flammable and does not support combustion. Flexible connection shall be complete with flanges made out of 22G G.S.S sheet on both sides for connection to unit and duct				
649		complete with nuts, bolts etc. Supplying, fixing, testing & commissioning of powder coated extruded aluminium section fresh air louvers in weather maker room with aluminium volume control	3649	Sqm	10	36490
		dampers, bird screen etc completed as required.	12710	Sqm	3	38130



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
650	16.21	Supply and fixing of acoustic lining of supply air duct and plenum with 25 mm thick resin bonded glass wool having density of 32 kg/m ³ , with 25 mm X 25 mm GI section of 1.25 mm thick, at 600 mm centre to centre covered with Reinforced Plastic tissue paper and 0.5 mm thick perforated aluminium sheet fixed to inside surface of ducts with cadmium plated nuts, bolts, stick pins, CPRX compound etc. complete as required and as per specifications.	632	Sqm		16	10114
651		Main Panel (AC) - Supplying, installation, testing & commissioning of cubical type main MV panel board suitable for 3 phase, 415 V, 50 Hz and of 35 MVA rupturing capacity at 415 volts, fabricated from minimum 2mm thick CRCA Sheet powder coated through seven tank process facility for pickling and degreasing complete with following mountings, inter connections etc as required (Main Electric Panel) Incomer -800A, 4P EDO type ACB (50 KA) with Microprocessor based release unit for short circuit, over current and earth fault protection with adjustable setting and each shall have following accessories: 0-500 Volts, digital Voltmeter and shall be protected by 2Amps MCBs.0-1000 Amps digital Ammeter, Phase indicating lamps and shall be protected by 2Amps MCBs. Each incomer / outgoing multifunction meter with RS485 conectivety. 1000Amps TPN Aluminium busbars, colour coded with heat shrinkable insulation sleeves (after derating) ,Three(3) Nos. 400A TPN MCCB MDO (50 KA) (PS 300Amps) (for Chillers). (One spare) ,Three (3) Nos. 25A TP MCB with star delta stater (for chilled water Secondary 10hp Pumps). (One spare), Three (3) Nos. 25A TP MCB for Pump VFD (for chilled water Condenser 25hp Pumps). (One spare) Three (3) Nos. 20A TP MCB with star delta stater (for chilled water Condenser 25hp Pumps). (One spare) Three (3) Nos. 20A TP MCB with star delta stater (for chilled water Condenser 25hp Pumps). (One spare) Three (3) Nos. 20A TP MCB with star delta stater (for chilled water Condenser 25hp Pumps). (One spare) Three (3) Nos 32A 10 KA TPN MCB (1 Pr. unit)					
			700000	Nos		1	700000



S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
652		(Emergency Electric Panel) - Supplying, installation, testing & commissioning of cubical type main MV panel board suitable for 3 phase, 415 V, 50 Hz and of 35 MVA rupturing capacity at 415 volts, fabricated from minimum 2mm thick CRCA Sheet powder coated through seven tank process facility for pickling and degreasing complete with following mountings, inter connections etc as required Incomer- 630A, 4P EDO type ACB (50 KA) with Microprocessor based release unit for short circuit, over current and earth fault protection with adjustable setting and each shall have following accessories:0-500 Volts, digital Voltmeter and shall be protected by 2Amps MCBs. 0-800 Amps digital Ammeter Phase indicating lamps and shall be protected by 2Amps MCBs. Each incomer / outgoing multifunction meter with RS485 conectivety. 1000Amps TPN Aluminium busbars, colour coded with heat shrinkable insulation sleeves (after derating) Outgoing:- Ten (10) Nos. 20A TP MCB with DOL. (8#Basement exhaust & 2#lift well pr.)Eight (8) Nos. 16A TP MCB with DOL. (Basement intake) Two (2) Nos. 32A TP MCCB with DOL. (Lift Lobby)	800000	Nos	1	800000
653	MR	L.T. CABLES Supplying, installation, testing and commissioning of following size XLPE insulated and PVC sheathed aluminium conductor armoured cable of 1.1 KV grade complete as required. (ISI Marked) including Laying and fixing, interconnections from stators to motors on suitable cable trays / supports as required including connections on both sides with brass compression gland and aluminium lugs as required.3.5Cx 95 Sq.mm (
654	MR	Chiller) 2R L.T. CABLES Supplying, installation, testing and commissioning of following size XLPE insulated and PVC sheathed aluminium conductor armoured cable of 1.1 KV grade complete as required. (ISI Marked) including Laying and fixing, interconnections from stators to motors on suitable cable trays / supports as required including connections on both sides with brass compression gland and aluminium lugs as required.3C x 35 sq.mm. (Cond	1071	RM	120	128520
655	MR	water pumps) L.T. CABLES Supplying, installation, testing and commissioning of following size XLPE insulated and PVC sheathed aluminium conductor armoured cable of 1.1 KV grade complete as required. (ISI Marked) including Laying and fixing, interconnections from stators to motors on suitable cable trays / supports as required including connections on both sides with brass compression gland and aluminium lugs as required.3.5 x 16 sq.mm. (Sec. Pump)	430	Mtrs.	60	11580
656	MR	L.T. CABLES Supplying, installation, testing and commissioning of following size XLPE insulated and PVC sheathed aluminium conductor armoured cable of 1.1 KV grade complete as required. (ISI Marked) including Laying and fixing, interconnections from stators to motors on suitable cable trays / supports as required including connections on both sides with brass compression gland		11115.		05L & ASSO

S.No.	SOR No	Description	Qty	Unit	Rate excl GST	Amount
657		Providing & fixing 25mm x 5mm copper strip on surface or in recess for earth connections etc complete as required.	075	Metre	240	234000
658		Providing & fixing 6 SWG dia GI wire on surface or in recess for loop earthing complete as required.		Metre	840	13440
659		SITC Split AC indoor and out door Unit 1.5 TR Capacity including copper pipe of required length complete .	10	Wotro		10110
		Total of HVAC	44643	each	64	2857152 45225406
		Part - B - Comprehensive Maintenance				43223400
660	MR	Providing services of preventive maintenance Providing services of preventive maintenance, repair & attending the day to day complaints and rectification/replacement of deffective accessories of internal & external electrical equipments in Hostel Block, Housing Block, Student Activity Block, Director Residence and External Street Lighting with Panels, and other buildings etc. Cleaning of equipments including providing consumable material like wire, duster, greece, oil, tape, thimble, lugs, switches, socket, detergent etc. as per directons of Engineer In charge during the general shift with minimum staff of wireman-1 Nos. and Helper/khallasi- 1 Nos. after 1 year of DLP periodFor 1st Year				
			53556	month	12	642672
661	MR	Providing services of preventive maintenance, repair & attending the day to day complaints and rectification/replacement of deffective accessories of internal & external electrical equipments in Hostel Block, Housing Block, Student Activity Block, Director Residence and External Street Lighting with Panels, and other buildings etc. Cleaning of equipments including providing consumable material like wire, duster, greece, oil, tape, thimble, lugs, switches, socket, detergent etc. as per directons of Engineer In charge during the general shift with minimum staff of wireman-1 Nos. and Helper/khallasi-1 Nos. after 1 year of DLP periodFor 2nd Year				
			56234	month	12	674806
662	MR	Providing services of preventive maintenance, repair & attending the day to day complaints and rectification/replacement of deffective accessories of internal & external electrical equipments in Hostel Block, Housing Block, Student Activity Block, Director Residence and External Street Lighting with Panels, and other buildings etc. Cleaning of equipments including providing consumable material like wire, duster, greece, oil, tape, thimble, lugs, switches, socket, detergent etc. as per directons of Engineer In charge during the general shift with minimum staff of wireman-1 Nos. and Helper/khallasi-1 Nos. after 1 year of DLP periodFor 3rd year	58912	month	12	706939



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
663	MR	Providing services of preventive maintenance, repair & attending the day to day complaints and rectification/replacement of deffective accessories of internal & external electrical equipments in Hostel Block, Housing Block, Student Activity Block, Director Residence and External Street Lighting with Panels, and other buildings etc. Cleaning of equipments including providing consumable material like wire, duster, greece, oil, tape, thimble, lugs, switches, socket, detergent etc. as per directons of Engineer In charge during the general shift with minimum staff of wireman-1 Nos. and Helper/khallasi-1 Nos. after 1 year of DLP periodFor 4th Year	61589	month		12	739073
664	MR	Providing services of preventive maintenance, repair & attending the day to day complaints and rectification/replacement of deffective accessories of internal & external electrical equipments in Hostel Block, Housing Block, Student Activity Block, Director Residence and External Street Lighting with Panels, and other buildings etc. Cleaning of equipments including providing consumable material like wire, duster, greece, oil, tape, thimble, lugs, switches, socket, detergent etc. as per directons of Engineer In charge during the general shift with minimum staff of wireman-1 Nos. and Helper/khallasi-1 Nos. after 1 year of DLP periodFor 5th Year	64267	month		12	771206
665	GR	Providing services of comprehensive preventive, annual servicing maintenance contract for the Entire Substation equipment consisting of HT & LT equipments, Oil Filteration, inclusive of all parts consumables, cables, earthing, safety equipments and labour for all equipments supplied as well as replacement of any equipment / component/ part which can be repaired to the satisfaction of Engineer In Charge.after DLP of 1 Years-For 1st Year					
666	GR	Providing services of comprehensive preventive, annual servicing maintenance contract for the Entire Substation equipment consisting of HT & LT equipments, Oil Filteration, inclusive of all parts consumables, cables, earthing, safety equipments and labour for all equipments supplied as well as replacement of any equipment / component/ part which can be repaired to the satisfaction of Engineer In Charge.after DLP of 1 Years-For 2nd Year		month		12	1046136
667	GR	Providing services of comprehensive preventive, annual servicing maintenance contract for the Entire Substation equipment consisting of HT & LT equipments, Oil Filteration, inclusive of all parts consumables, cables, earthing, safety equipments and labour for all equipments supplied as well as replacement of any equipment / component/ part which can be repaired to the satisfaction of Engineer In Charge.after DLP of 1 Years-For 3rd year		month		12	1046136



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
668	GR	Providing services of comprehensive preventive, annual servicing maintenance contract for the Entire Substation equipment consisting of HT & LT equipments, Oil Filteration, inclusive of all parts consumables, cables, earthing, safety equipments and labour for all equipments supplied as well as replacement of any equipment / component/ part which can be repaired to the satisfaction of Engineer In Charge.after DLP of 1 Years-For 4th Year	87178	month		12	1046136
669	GR	Providing services of comprehensive preventive, annual servicing maintenance contract for the Entire Substation equipment consisting of HT & LT equipments, Oil Filteration, inclusive of all parts consumables, cables, earthing, safety equipments and labour for all equipments supplied as well as replacement of any equipment / component/ part which can be repaired to the satisfaction of Engineer In Charge.after DLP of 1 Years-For 5th Year	87178	month		12	1046136
670	GR	Providing services of comprehensive maintenance for 500 KVA DG Set installed in Electric substation along with AMF Panel & Carrying out A,B& C periodic maintenance check, including B-Check Kit, Air Cleaning elements, coolant,& lubricating oil, attaending all major& minor faults and rectification as per terms & conditions after 1 Years of DLP-For 1st Year		month		12	164112
671	GR	Providing services of comprehensive maintenance for 500 KVA DG Set installed in Electric substation along with AMF Panel & Carrying out A,B& C periodic maintenance check, including B-Check Kit, Air Cleaning elements, coolant,& lubricating oil, attaending all major& minor faults and rectification as per terms & conditions after 1 Years of DLP-For 2nd Year					
672	GR	Providing services of comprehensive maintenance for 500 KVA DG Set installed in Electric substation along with AMF Panel & Carrying out A,B& C periodic maintenance check, including B-Check Kit, Air Cleaning elements, coolant,& lubricating oil, attaending all major& minor faults and rectification as per terms & conditions after 1 Years of DLP-For 3rd year		month		12	164112
673	GR	Providing services of comprehensive maintenance for 500 KVA DG Set installed in Electric substation along with AMF Panel & Carrying out A,B& C periodic maintenance check, including B-Check Kit, Air Cleaning elements, coolant,& lubricating oil, attaending all major& minor faults and rectification as per terms & conditions after 1 Years of DLP-For 4th Year		month		12	164112
674	GR	Providing services of comprehensive maintenance for 500 KVA DG Set installed in Electric substation along with AMF Panel & Carrying out A,B& C periodic maintenance check, including B-Check Kit, Air Cleaning elements, coolant,& lubricating oil, attaending all major& minor faults and rectification as per terms & conditions after 1 Years of DLP-For 5th Year	13676	month		12	164112

S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
675	MR	Providing services of running and operation of substation equipments consisting of HT & LT equipments, DG sets in three shifts on all days including sundays & holidays & day to day Maintenance, cleaning of equipments as per direction of Engineer In Charge including attending the complaints in the buildings of campus during 2nd and night shifts with following minimum staff: Supervisor/Engineer-1Nos. Wireman-3Nos. Helper-3NosFor 1st Year					
676	b	Providing services of running and operation of substation	204942	month		12	2459304
070	U	equipments consisting of HT & LT equipments, DG sets in three shifts on all days including sundays & holidays & day to day Maintenance, cleaning of equipments as per direction of Engineer In Charge including attending the complaints in the buildings of campus during 2nd and night shifts with following minimum staff: Supervisor/Engineer-1Nos. Wireman-3Nos. Helper-3NosFor 2nd Year					
			215189	month		12	2582269
677	с	Providing services of running and operation of substation equipments consisting of HT & LT equipments, DG sets in three shifts on all days including sundays & holidays & day to day Maintenance , cleaning of equipments as per direction of Engineer In Charge including attending the complaints in the buildings of campus during 2nd and night shifts with following minimum staff: Supervisor/Engineer-1Nos. Wireman-3Nos. Helper-3NosFor 3rd year	225436	month		12	2705234
678	d	Providing services of running and operation of substation equipments consisting of HT & LT equipments, DG sets in three shifts on all days including sundays & holidays & day to day Maintenance, cleaning of equipments as per direction of Engineer In Charge including attending the complaints in the buildings of campus during 2nd and night shifts with following minimum staff: Supervisor/Engineer-1Nos. Wireman-3Nos. Helper-3NosFor 4th Year	235683			12	2828200
679	e	Providing services of running and operation of substation equipments consisting of HT & LT equipments, DG sets in three shifts on all days including sundays & holidays & day to day Maintenance , cleaning of equipments as per direction of Engineer In Charge including attending the complaints in the buildings of campus during 2nd and night shifts with following minimum staff: Supervisor/Engineer-1Nos. Wireman-3Nos. Helper-3NosFor 5th Year					
	1		245930		1	12	2951165



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
680	GR	Comprehensive Maintenance of 2 Nos. 13 Passeneger Lift for SAC Block (B+G+4) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 1st Year	12231	month		12	146766
681	GR	Comprehensive Maintenance of 2 Nos. 13 Passeneger Lift for SAC Block (B+G+4) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 2nd Year	12231	month		12	146766
682	GR	Comprehensive Maintenance of 2 Nos. 13 Passeneger Lift for SAC Block (B+G+4) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 3rd year	13978	month		12	167733
683	GR	Comprehensive Maintenance of 2 Nos. 13 Passeneger Lift for SAC Block (B+G+4) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 4th Year	15725	month		12	188700
684	GR	Comprehensive Maintenance of 2 Nos. 13 Passeneger Lift for SAC Block (B+G+4) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 5th Year	15725	month		12	188700
685	GR	Comprehensive Maintenance of 1 Nos. 13 Passeneger & 1 Nos. 26 Passenger Lift for Housing Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 1st Year	23781	month		12	285375
686	GR	Comprehensive Maintenance of 1 Nos. 13 Passeneger & 1 Nos. 26 Passenger Lift for Housing Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 2nd Year		month		12	285375
687	GR	Comprehensive Maintenance of 1 Nos. 13 Passeneger & 1 Nos. 26 Passenger Lift for Housing Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 3rd year					
688	GR	Comprehensive Maintenance of 1 Nos. 13 Passeneger & 1 Nos. 26 Passenger Lift for Housing Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 4th Year	27179	month		12	326143
689	GR	Comprehensive Maintenance of 1 Nos. 13 Passeneger & 1 Nos. 26 Passenger Lift for Housing Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 5th Year	30576	month		12	366911
			30576	month		12	366911



SOR No	Description	Qty	Unit	Rate e GST	xcl	Amount
GR	Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 1st Year					
	conditions attached. After DEF of 1 year-1 of 1st Tear	47563	month		12	570751
GR	Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 2nd Year					570751
GR	Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 3rd year					652286
GR	Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 4th Year					
		61152	month		12	733822
GK	2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 5th Year	61152	month		12	733822
MR	Comprehensive Maintenance of 12 Nos. Dome Camera, 148 Nos. Bullet Camera, 3Nos. PTZ Cameras, 6 Nos. 55" LED Display, 2 Nos. 128 Channel NVR, i Nos. VMS Software, 2 Nos. Server station, 6 nos. Client Workstations, 21 Nos. 16 TB HDDand 6 Nos. 15 mtr HDMI Cable etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year of DLP-For 1st Year					207360
MR	Comprehensive Maintenance of 12 Nos. Dome Camera, 148 Nos. Bullet Camera, 3Nos. PTZ Cameras, 6 Nos. 55" LED Display, 2 Nos. 128 Channel NVR, i Nos. VMS Software, 2 Nos. Server station, 6 nos. Client Workstations, 21 Nos. 16 TB HDDand 6 Nos. 15 mtr HDMI Cable etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year of DLP-For 2nd Year	17200	monur		12	
		17280	month		12	207360
С	Comprehensive Maintenance of 12 Nos. Dome Camera, 148 Nos. Bullet Camera, 3Nos. PTZ Cameras, 6 Nos. 55" LED Display, 2 Nos. 128 Channel NVR, i Nos. VMS Software, 2 Nos. Server station, 6 nos. Client Workstations, 21 Nos. 16 TB HDDand 6 Nos. 15 mtr HDMI Cable etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year of DLP-For 3rd year					EL&ASSOC
	GR GR GR GR MR	 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 1st Year GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 2nd Year GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 3rd year GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 3th year GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 5th Year GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 5th Year MR Comprehensive Maintenance of 12 Nos. Dome Camera, 148 Nos. Bullet Camera, 3Nos. PTZ Cameras, 6 Nos. 55" LED Display, 2 Nos. 128 Channel NVR, i Nos. VMS Software, 2 Nos. Server station, 6 nos. Client Workstations, 21 Nos. 16 TB HDDand 6 Nos. 15 mtr HDMI Cable etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year of DLP-For 2nd Year	GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 1st Year 47563 GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 2nd Year 47563 GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 3rd year 54357 GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 3th Year 61152 GR Comprehensive Maintenance of 12 Nos. Dome Camera, 148 Nos. Bullet Camera, 3Nos. PTZ Cameras, 6 Nos. 55° 61152 MR Comprehensive Maintenance of 12 Nos. Dome Camera, 148 Nos. Bullet Camera, 3Nos. PTZ Cameras, 6 Nos. 55° 15 LED Display, 2 Nos. 128 Channel NVR, i Nos. VMS Software, 2 Nos. Server station, 6 nos. Client Workstations, 21 Nos. 128 Channel NVR, i Nos. VMS Software, 2 Nos. Server station, 6 nos. Client Workstations, 21 Nos. 128 Channel NVR, i Nos. VMS Software, 2 Nos. Server station, 6 nos. Client Workstations, 21 Nos. 128 Chann	GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 1st Year 47563 month GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 2nd Year 47563 month GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 3rd year 54357 month GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 3th Year 61152 month GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 5th Year 61152 month GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 5th Year 61152 mon	GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 1st Year 47563 month GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 2nd Year 47563 month GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 3rd year 54357 month GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 5th Year 61152 month GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 5th Year 61152 month MR Comprehensive Maintenance of 12 Nos. Dome Camera, 148 Nos. Bullet Camera, 3Nos. PTZ Cameras, 6 Nos. 55' LED Display, 2 Nos. 128 Channel NVR, i Nos. VMS Software, 2 Nos. Server station, 6 nos. Client Workstations, 21 Nos. 16 TB HDDand 6 Nos. 15 mtr HDML Cable etc. & preventive Maintenanc	GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 1st Year 47563 month 12 GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 2nd Year 47563 month 12 GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 3rd year 54357 month 12 GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 3th Year 61152 month 12 GR Comprehensive Maintenance of 2 Nos. 13 Passeneger & 2 Nos. 26 Passenger Lift for Hostel Block (S+14) with Machine Room Less & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After DLP of 1 year-For 5th Year 61152 month 12 MR Comprehensive Maintenance of 12 Nos. Dome Camera, 148 Nos. Bullet Camera, 3Nos. PTZ Cameras, 6 Nos. 55" 12 12 MR Compr

S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
698	MR	Comprehensive Maintenance of 12 Nos. Dome Camera, 148 Nos. Bullet Camera, 3Nos. PTZ Cameras, 6 Nos. 55" LED Display, 2 Nos. 128 Channel NVR, i Nos. VMS Software, 2 Nos. Server station, 6 nos. Client Workstations, 21 Nos. 16 TB HDDand 6 Nos. 15 mtr HDMI Cable etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year of DLP-For 4th Year	25920	month		12	311040
699	MR	Comprehensive Maintenance of 12 Nos. Dome Camera, 148 Nos. Bullet Camera, 3Nos. PTZ Cameras, 6 Nos. 55" LED Display, 2 Nos. 128 Channel NVR, i Nos. VMS Software, 2 Nos. Server station, 6 nos. Client Workstations, 21 Nos. 16 TB HDDand 6 Nos. 15 mtr HDMI Cable etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year of DLP-For 5th Year					
			25920	month		12	311040
700	MR	Comprehensive Maintenance of 289 Nos. Photothermal detector, 8 nos. Thermal detectors, 76 nos. Fire Control Module, 76 Nos. Horn cum strobe, 76 Nos. MCPs, 76 Nos. Fire Fighter Jack, 18 Nos. Fire Fighter Telephone Handsets, 1 Nos. Intelligent Interface Unit, 21 Nos. Fault Isolators, 1 Nos. Central Graphical FAS Monitoring System, 3 Nos. Two Loop FAS Panel, 3 Nos. PA Controller, 374 Nos. 6W metal Speakers, 5 nos. Power Amplifier, 3 nos. 6 zone stylish call station, 5700 mtr 25 mm dia steel conduit, 4200 mtr speaker cable, 3300 mtr 2X1.5 FR PVC copper Cable etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year of DLP-For 1st Year	8918	month		12	107016
701	MR	Comprehensive Maintenance of 289 Nos. Photothermal detector, 8 nos. Thermal detectors, 76 nos. Fire Control Module, 76 Nos. Horn cum strobe, 76 Nos. Fire Control Module, 76 Nos. Horn cum strobe, 76 Nos. MCPs, 76 Nos. Fire Fighter Jack, 18 Nos. Fire Fighter Telephone Handsets, 1 Nos. Intelligent Interface Unit, 21 Nos. Fault Isolators, 1 Nos. Central Graphical FAS Monitoring System, 3 Nos. Two Loop FAS Panel, 3 Nos. PA Controller, 374 Nos. 6W metal Speakers, 5 nos. Power Amplifier, 3 nos. 6 zone stylish call station, 5700 mtr 25 mm dia steel conduit, 4200 mtr speaker cable, 3300 mtr 2X1.5 FR PVC copper Cable etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year					
		of DLP-For 2nd Year	8918	month		12	107016



S.NO. S	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
702	MR	Comprehensive Maintenance of 289 Nos. Photothermal detector, 8 nos. Thermal detectors, 76 nos. Fire Control Module, 76 Nos. Horn cum strobe, 76 Nos. MCPs, 76 Nos. Fire Fighter Jack, 18 Nos. Fire Fighter Telephone Handsets, 1 Nos. Intelligent Interface Unit, 21 Nos. Fault Isolators, 1 Nos. Central Graphical FAS Monitoring System, 3 Nos. Two Loop FAS Panel, 3 Nos. PA Controller, 374 Nos. 6W metal Speakers, 5 nos. Power Amplifier, 3 nos. 6 zone stylish call station, 5700 mtr 25 mm dia steel conduit, 4200 mtr speaker cable, 3300 mtr					
		2X1.5 FR PVC copper Cable etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year				10	100701
703	MR	of DLP-For 3rd year Comprehensive Maintenance of 289 Nos. Photothermal detector, 8 nos. Thermal detectors, 76 nos. Fire Control Module, 76 Nos. Horn cum strobe, 76 Nos. MCPs, 76 Nos. Fire Fighter Jack, 18 Nos. Fire Fighter Telephone Handsets, 1 Nos. Intelligent Interface Unit, 21 Nos. Fault Isolators, 1 Nos. Central Graphical FAS Monitoring System, 3 Nos. Two Loop FAS Panel, 3 Nos. PA Controller, 374 Nos. 6W metal Speakers, 5 nos. Power Amplifier, 3 nos. 6 zone stylish call station, 5700 mtr 25 mm dia steel conduit, 4200 mtr speaker cable, 3300 mtr 2X1.5 FR PVC copper Cable etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year of DLP-For 4th Year		month		12	133764
704	MR	Comprehensive Maintenance of 289 Nos. Photothermal detector, 8 nos. Thermal detectors, 76 nos. Fire Control Module, 76 Nos. Horn cum strobe, 76 Nos. Fire Control Nos. Fire Fighter Jack, 18 Nos. Fire Fighter Telephone Handsets, 1 Nos. Intelligent Interface Unit, 21 Nos. Fault Isolators, 1 Nos. Central Graphical FAS Monitoring System, 3 Nos. Two Loop FAS Panel, 3 Nos. PA Controller, 374 Nos. 6W metal Speakers, 5 nos. Power Amplifier, 3 nos. 6 zone stylish call station, 5700 mtr 25 mm dia steel conduit, 4200 mtr speaker cable, 3300 mtr 2X1.5 FR PVC copper Cable etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year					
705	MR	of DLP-For 5th Year Comprehensive Maintenance of 2 Nos. of extensions 128 and 159 Nos. of IP Phones etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year	13376	month		12	160512
706	MR	of DLP-For 1st Year Comprehensive Maintenance of 2 Nos. of extensions 128 and 159 Nos. of IP Phones etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year		month		12	29292
707	MR	of DLP-For 2nd Year Comprehensive Maintenance of 2 Nos. of extensions 128 and 159 Nos. of IP Phones etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year	2441	month		12	29292

S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
708	MR	Comprehensive Maintenance of 2 Nos. of extensions 128 and 159 Nos. of IP Phones etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year of DLP-For 4th Year	3661	month		12	43932
709	MR	Comprehensive Maintenance of 2 Nos. of extensions 128 and 159 Nos. of IP Phones etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year of DLP-For 5th Year	3661	month		12	43932
710	MR	Comprehensive Maintenance of Distribution Switches, PoE Switches, WIFI devices, Wireless Controller, Copper & fiber Patch Cords, Jacj Panels, Information Outlets, LAn Cable, conduits, LIUs, Racks etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year	20375	month		12	244500
711	MR	Comprehensive Maintenance of Distribution Switches, PoE Switches, WIFI devices, Wireless Controller, Copper & fiber Patch Cords, Jacj Panels, Information Outlets, LAn Cable, conduits, LIUs, Racks etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year		month		12	244500
712	MR	Comprehensive Maintenance of Distribution Switches, PoE Switches, WIFI devices, Wireless Controller, Copper & fiber Patch Cords, Jacj Panels, Information Outlets, LAn Cable, conduits, LIUs, Racks etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year		month		12	305628
713	MR	Comprehensive Maintenance of Distribution Switches, PoE Switches, WIFI devices, Wireless Controller, Copper & fiber Patch Cords, Jacj Panels, Information Outlets, LAn Cable, conduits, LIUs, Racks etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year	30562	month		12	366744
714	MR	Comprehensive Maintenance of Distribution Switches, PoE Switches, WIFI devices, Wireless Controller, Copper & fiber Patch Cords, Jacj Panels, Information Outlets, LAn Cable, conduits, LIUs, Racks etc. & preventive Maintenance, repair and replacement complete as required as per terms & conditions attached. After 1 Year of DLP-For 5th Year	30562	month		12	366744
715	MR	Providing services of operation, & attending the day to day complaints and rectification of deffective accessories of ELV equipments (LAN, IPABX, CCTV, & Other IT Services) in Hostel Block, Housing Block, Student Activity Block, Director Residence and External area, and other buildings etc. Cleaning of equipments including providing consumable material like duster, cleaning material, wire, connectors, tape etc. as per directons of Engineer In charge during the general shift with minimum staff of It Operator/Technician-2 Nos. after 1 year of DLP period For 1st Year		month		12	681168



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
716	MR	Providing services of operation, & attending the day to day complaints and rectification of deffective accessories of ELV equipments (LAN, IPABX, CCTV, & Other IT Services) in Hostel Block, Housing Block, Student Activity Block, Director Residence and External area, and other buildings etc. Cleaning of equipments including providing consumable material like duster, cleaning material, wire, connectors, tape etc. as per directons of Engineer In charge during the general shift with minimum staff of It Operator/Technician-2 Nos. after 1 year of DLP period For 2nd Year					
			59602	month		12	715226
717	MR	Providing services of operation, & attending the day to day complaints and rectification of deffective accessories of ELV equipments (LAN, IPABX, CCTV, & Other IT Services) in Hostel Block, Housing Block, Student Activity Block, Director Residence and External area, and other buildings etc. Cleaning of equipments including providing consumable material like duster, cleaning material, wire, connectors, tape etc. as per directons of Engineer In charge during the general shift with minimum staff of It Operator/Technician-2 Nos. after 1 year of DLP period For 3rd year					
- 10			62440	month		12	749285
718	MR	Providing services of operation, & attending the day to day complaints and rectification of deffective accessories of ELV equipments (LAN, IPABX, CCTV, & Other IT Services) in Hostel Block, Housing Block, Student Activity Block, Director Residence and External area, and other buildings etc. Cleaning of equipments including providing consumable material like duster, cleaning material, wire, connectors, tape etc. as per directons of Engineer In charge during the general shift with minimum staff of It Operator/Technician-2 Nos. after 1 year of DLP period For 4th Year	65279	month		12	783343
719	MR	Providing services of operation, & attending the day to day complaints and rectification of deffective accessories of ELV equipments (LAN, IPABX, CCTV, & Other IT Services) in Hostel Block, Housing Block, Student Activity Block, Director Residence and External area, and other buildings etc. Cleaning of equipments including providing consumable material like duster, cleaning material, wire, connectors, tape etc. as per directons of Engineer In charge during the general shift with minimum staff of It Operator/Technician-2 Nos. after 1 year of DLP period	68117			12	817402
		Total Of Part B - Maintenance					36265341.4
720	MR	COMPREHENSIVE MAINTENANCE OF HVAC WORK Operation & maintenance (routine & preventive) of the high side & low side of the air conditioning plant comprising of all the machinery, equipment installed in the A.C. Plant room including cooling tower for the defect liability period of one year as per maintenance					
		Schedule attached at Annexure 'H' .(Running and	152042	Month		12	1824498



S.No.	SOR No	Description	Qty	Unit	Rate GST	excl	Amount
721	MR	Operation & maintenance (routine & preventive) and breakdown maintenance of high side & low side of the Air conditioning plant comprising of all the machinery, equipment installed in the A.C. Plant room including cooling tower During five years subsequent to one year guarantee period as per maintenance Schedule attached at Annexure 'H' - 1st year	204542	Month		12	2454498
722	MR	Operation & maintenance (routine & preventive) and breakdown maintenance of high side & low side of the Air conditioning plant comprising of all the machinery, equipment installed in the A.C. Plant room including cooling tower During five years subsequent to one year guarantee period as per maintenance Schedule attached at Annexure 'H' -2nd year	214769			12	2577223
723	MR	Operation & maintenance (routine & preventive) and breakdown maintenance of high side & low side of the Air conditioning plant comprising of all the machinery, equipment installed in the A.C. Plant room including cooling tower During five years subsequent to one year guarantee period as per maintenance Schedule attached at Annexure 'H' - 3rd year	225507			12	2706084
724	MR	Operation & maintenance (routine & preventive) and breakdown maintenance of high side & low side of the Air conditioning plant comprising of all the machinery, equipment installed in the A.C. Plant room including cooling tower During five years subsequent to one year guarantee period as per maintenance Schedule attached at Annexure 'H' - 4th year	236782			12	2841388
725	MR	Operation & maintenance (routine & preventive) and breakdown maintenance of high side & low side of the Air conditioning plant comprising of all the machinery, equipment installed in the A.C. Plant room including cooling tower During five years subsequent to one year guarantee period as per maintenance Schedule attached					
		at Annexure 'H' - 5th year	248621	Month		12	2983458

