

S.No.		Description.	Unit.	Qty	Rate in Figures (in Rs.)	Amount in Rs.
4.03		Supplying & fixing 6 Amps to 32 Amps rating, 240 volts,'B' series, miniature circuit breaker suitable for lighting & other loads of following poles in the existing MCB DB complete with connections, testing & commissioning etc. as per technical specifications & as required.				
	i	Single pole	Each	252	141	35532
	ii	Triple pole (10A-32A)	Each	6	785	4710
	iii	Triple pole (40-63A)	Each	6	1178	7068
	iv	Four pole MCCB 100AMP (16KA) TM	Each	2	4940	9880
4.04		Supplying & fixing following rating, four pole, 415 volts, Miniature Circuit Breaker (MCB),in the existing MCB DB complete with connections, testing & commissioning etc. as per technical specifications and as required.				
	i	40 Amps	Each	5	1450	7250
	ii	63 Amps	Each	10	1760	17600
4.05		Supplying & fixing following rating, four pole, 415 volts,Residual Current Circuit Breaker (RCCB) having a sensitivity current upto 300 mA in the existing MCB DB complete with connections, testing & commissioning etc. as per technical specifications and as required.				
	i	40 Amps	Each	5	2290	11450
	ii	63 Amps	Each	10	2895	28950
4.06		Supplying and fixing Single pole Blanking plate in the existing MCB DB complete as required.	Each	93	5	465
		TOTAL SUB HEAD-4: MCB DISTRIBUTION BOARDS.				195533

S.No.		Description.	Unit.	Qty	Rate in Figures (in Rs.)	Amount in Rs.
		SUB HEAD 5: WIRING				
5.00		WIRING				
5.01	i	Wiring for light point/fanpoint/ exhaust fan point/call bell point with 1.5 sq.mm. PVC insulated, fire retardant low smoke (FRLS) copper conductor cable, single core/ multi strand, in steel conduit (Including supplying & recess laying of MS conduit and accessories) including the following and complete as required.				
	ii	Supplying and Fixing Modular type switches (modular Bell push in case of call bell points) in suitable size modular metal boxes, base plate & modular cover plates, space for fixing electronic fan regulator in case of fan point wiring & space for fixing 5A socket on the board etc.				
	iii	Supplying and fixing Hexagonal fan Boxes with 3 mm thick hylem sheet covers in case of Fan Points				
	iv	Supplying & Fixing Ceiling Rose in case of Exhaust Fan Points etc.				
		Note :				
		i) Unless otherwise specified all the conduiting work to be done in recess				
		Point wiring as mentioned above	Point	620	1031	639034
5.02	i	Wiring for twin control light points with 1.5 sq.mm. PVC insulated, FRLS copper conductor cable in MS conduit (including supplying and recess laying of MS conduit) including the following and complete as required.				
	ii	Supplying and Fixing Modular type two numbers 2 Way switches in suitable size modular metal boxes, base plate & modular cover plates etc.				

S.No.	Description.	Unit.	Qty	Rate in Figures (in Rs.)	Amount in Rs.
	Note :				
	i) Unless otherwise specified all the conduiting work to be done in recess				
	Wiring for twin control light points as mentioned above	Point	10	1089	10890
5.03	Wiring for 5A light plugs with 1.5 sq.mm. PVC insulated, FRLS copper conductor cable including one number 1.5 sq.mm. PVC insulated, copper conductor cable for earthing in surface/recessed ISI marked MS conduit (including supply and recess laying of ISI marked MS conduit) as per technical specifications and as required.	Meter	1500	110	165000
5.04	Wiring for computer points (Three sockets & one switch) with 2.5 sq.mm. PVC insulated, FRLS copper conductor cable including one number 2.5 sq.mm. PVC insulated, copper conductor cable for earthing in surface/recessed MS conduit (including supply and recess laying of conduit) as per technical specifications and as required.	Meter	640	218	139520
5.05	Wiring for Bed Power (Three sockets 5 amp three pin & one 15 Amp switch) with 4 sq.mm. PVC insulated, FRLS copper conductor cable including one number 4 sq.mm. PVC insulated, copper conductor cable for earthing in surface/recessed MS conduit (including supply and recess laying of conduit) as per technical specifications and as required.(2 bed points looped)	Meter	1340	328	439252

S.No.	Description.	Unit.	Qty	Rate in Figures (in Rs.)	Amount in Rs.
5.06	Wiring for 16 amp power plug with 2X4 sqmm PVC insulated, FRLS copper conductor, single core/multi strand cable in surface/recessed MS conduit (including supply and recess laying of MS conduit with all accessories) along with 4 sqmm PVC insulated, copper conductor, single core/multi strand cable for loop earthing etc per technical specifications & as required.				
	Directly from MCB-Distribution Board to the Socket Outlets	Meter	1080	328	354240
5.07	Wiring for 20 Amp power plug with 2X4 sq.mm. PVC insulated, FRLS copper conductor multi strand cable in surface/recessed in MS conduit (including supply and recess laying of MS conduit with all accessories) along with 1X4 sqmm PVC insulated FRLS copper conductor for loop earthing, as per technical specifications & as required.	Meter	520	328	170560
5.08	Wiring for 32 amp power plug with 2X6 sq.mm. PVC insulated FRLS copper conductor, multi strand cable in surface/recessed in MS conduit (including supply and recess laying of MS conduit with all accessories) along with 1X6 sqmm PVC insulated FRLS copper conductor for loop earthing, as per technical specifications & as required.	Meter	260	438	113880
5.09	Wiring for circuit/ Submain wiring with following size of PVC insulated FRLS copper conductor single core/multi strand cable in recessed steel conduit (including supply & laying of recessed conduit) as required.				
	i) 2X2.5 Sqmm with 1 No. 2.5 sqmm PVC insulated FRLS copper conductor for earthing.	Metre	788	198	155925
	ii) 2X10 Sqmm with 1 No. 10 sqmm PVC insulated FRLS copper conductor for earthing	Metre	70	398	27860

S.No.		Description.	Unit.	Qty	Rate in Figures (in Rs.)	Amount in Rs.
	iii)	4X6 Sqmm with 2 No. 6 sqmm PVC insulated FRLS copper conductor for earthing	Metre	100	483	48300
	iv)	4X10 Sqmm with 2 No. 10 sqmm PVC insulated FRLS copper conductor for earthing	Metre	300	774	232200
	v)	4X16 Sqmm with 2 nos 16 sq mm PVC insulated FRLS copper conductor for earthing.	Metre	475	1086	515850
5.10		Supplying and fixing suitable Module metal box on surface or in recess including providing and fixing 3 pin 5/6 amps. modular socket outlet with shutters and 5/6 amps. modular type switch, base plate, modular cover plate, connections etc. and all civil works 'complete as required.	Each	75	340	25500
5.11		Supplying and fixing suitable module modular metal box on surface or in recess including providing and fixing 6 pin 15/16 A modular socket outlet with shutters and 15/16 A modular switch, base plate, modular cover plate, connections, etc. and all civil works complete as required.	Each	54	485	26190
5.12		Supply, Installation, Testing & Commissioning 63 Amps, TPN MCCB in a sheet steel enclosure, extended rotary operating mechanism complete with all accessories as required.	Each	2	7000	14000
5.13		Supplying and fixing suitable Module metal box on surface or in recess including providing and fixing three nos 3 pin 5/6 amps. modular socket outlet with shutters and one no. 10 amps. modular type switch, base plate, modular cover plate, connections etc. and all civil works 'complete as required. (For computer Points)	Each	32	855	27360

S.No.	Description.	Unit.	Qty	Rate in Figures (in Rs.)	Amount in Rs.
5.14	Supplying and fixing suitable Module metal box on surface or in recess including providing and fixing three nos 3 pin 5/6 amps. modular socket outlet with shutters and one no. 15 amps. modular Indicating type switch, base plate, modular cover plate, connections etc. and all civil works 'complete as required. (For Bed Points)	Each	67	855	57285
5.15	Supply and fixing following 20 Amps, 240 volts, 2P+E, Industrial Socket Outlet (with plugs) in a metal box with 20 SP MCB in a sheet steel cover on surface or recess complete with all accessories including connections, testing and commissioning etc. as required.	Each	26	800	20800
5.16	Supplying, providing & fixing cordless musical bell, batteries etc of approved make complete as required.	Each	5	800	4000
5.17	Supplying, providing & fixing electronic type call push button outside each ward of approved make complete as required.	Each	5	450	2250
	TOTAL SUBHEAD: 5- WIRING				3189896
	SUB HEAD: 6 - LIGHT FIXTURE AND FANS				
	LIGHT FIXTURES AND FANS				
6.01	Supply of following light fixture with high efficiency electronic/dimmable ballast, starter, tubes/lamps, capacitor, reflector, diffuser, MS body/housing holder etc. complete with all fixing accessories as required.				
i)	1X28 watt box type flourescent light fixture (Philips TMS 122M 1XTL5 28 W EBE or approved equivalent) (136b/136bw)	Each	168	1384	232512

S.No.	Description.	Unit.	Qty	Rate in Figures (in Rs.)	Amount in Rs.
ii)	2X28 watt box type flourescent light fixture without reflector (Philips TMS 122M 2XTL5 28 W EBE or approved equivalent) (236b)	Each	20	1902	38040
iii)	1X36 watt surface mounted type flourescent light fixture with opal acrylic diffuser (Philips TCS019 1XTL-D36W EBT or approved equivalent) (136AC1)	Each	8	1425	11400
iv)	1X36 watt Surface/recessess mounted flourescent light fixture (Philips TCS 306 1XTL-D-36W HF EBE 136 or approved equivalent) 136SMO1	Each	114	2579	294006
vi)	2X36 watt Surface/recessess mounted flourescent light fixture (Philips TCS 306 2XTL-D-36W HF EBT 236 or approved equivalent) 236SMO1	Each	48	3066	147168
viii)	2X 36 watt recess mounted clean room flourscent light fixture with bottom opening and toughened glass (Philips FBS 670 2X36W TL-D FOP GT or approved equivalent). (236RMO2)(OT)	Each	22	9087	199914
ix)	4 X 14 watt recess mounted clean room flourscent light fixture with bottom opening and clear arcylic cover (Philips TBS 651 4XTL5 -14 W-EB CR FOP GT or approved equivalent). (Sq fitting -OT)	Each	6	6873	41238
6.02	Supply of following compact flourescent light fixture with electronic ballast, starter, capacitor, yellow light lamps, reflector, diffuser, MS body/housing holder etc. complete with all fixing accessories as required.				

S.No.		Description.	Unit.	Qty	Rate in Figures (in Rs.)	Amount in Rs.
	i)	1x9 watt Bulk Head light fixture (Philips FXC 101 1XPL-S/2P11 W ACO or approved equivalent) BH	Each	2	1092	2184
	ii)	1X10 W surfaced mounted down light fixture with frosted glass (DECON : PL-10W 03UW 01 approved equivalent)	Each	32	1012	32384
	iii)	1X13 watt Mirror light with acrylic cover & Reflector (Anchor 23527 or approved equivalent) (w toilet)	Each	20	345	6900
	iv)	Surface mounted Batten holder (Plastic) with 9 watt CFL	Each	50	150	7500
	vi)	2 X 18 watt surface mounted down light forested glass (DECON:PL-2X18 W 03NB 01 or approved equivalent)	Each	9	1841	16569
6.03		Supply of following ceiling fans (Crompton Greaves High Breeze or approved equivalent) complete with double ball bearing, motor, blades, downrod, canopies, capacitor, modular type electronic fan regulator, suitable for operation on 230 volts, 50 Hz., 1 phase, AC supply complete as required				
	i	1200 mm sweep	Each	137	1870	256190
6.04		Supply of 900 RPM, 300 mm (Crompton Greaves Trans Air or approved equivalent) exhaust fan suitable for single phase 230 volts, 50 Hz., AC supply complete with motor, louvers/shutters etc. complete as required.	Each	19	3442	65398
6.05		Supply of 450 mm sweep, crompton greaves model high flow 18" wall mounted fan complete with double ball bearing, motor, blades, capacitor etc suitable for single phase 230 volts, 50 Hz., AC supply, complete as required.	Each	2	1900	3800

S.No.	Description.	Unit.	Qty	Rate in Figures (in Rs.)	Amount in Rs.
6.06	Installation, testing and commissioning of prewired, fluorescent fittings of all types, complete with all accessories and tube etc. directly on ceiling/wall, including connections with 1.5 sq.mm. PVC insulated, FRLS copper conductor, single core/ multi strand cable etc. as required.	Each	360	75	27000
6.07	Installation, testing and commissioning of prewired, compact fluorescent lamp fixture (CFL fixtures) of all types, complete with all accessories and lamp etc. directly on ceiling/wall, including connections with 1.5 sq.mm. PVC insulated, FRLS copper conductor, single core/ multi strand cable etc. as required.	Each	113	75	8475
6.08	Installation, testing and commissioning of ceiling fan and modular type electronic fan regulator (Electronic regulator to be fixed in switch board) including wiring the down rod and connection with 1.5 sqmm FR PVC insulated, copper conductor single core/multi strand cable including providing & fixing phenolic laminated sheet cover on the fan box, etc. as required.	Each	137	120	16440
6.09	Installation, testing and commissioning of exhaust fan up to 450 mm sweep in the opening, including making the hole to suit the size of the above fan including, fixing of louvers/ shutters with frame making good the damages etc. as required.	Each	19	300	5700
6.10	Installation, testing and commissioning of wall mounted fan up to 450 mm sweep including supply and fixing wall bracket arrangement complete as required.	Each	2	100	200

S.No.		Description.	Unit.	Qty	Rate in Figures (in Rs.)	Amount in Rs.
		TOTAL SUBHEAD 6 : LIGHT FIXTURE & FANS				1413018
		SUB HEAD 7 : FIRE DETECTION AND ALARM				
7.00		FIRE DETECTION AND ALARM SYSTEM				
7.01		Supply and drawing of following sizes of PVC insulated FRLS copper conductor single core cable in surface/recessed MS conduit (including supplying and fixing of MS Conduit) complete as required.				
	i	2X1.5 sqmm	Metre	1240	195	241800
7.02		Supply, installation, testing and commissioning of the following addressable type fire detection and alarm accessories as per technical specification & complete with connections etc. as required.				
	i	Optical type Smoke Detector	Each	76	3200	243200
	ii	Heat Detector	Each	2	3200	6400
	iii	Manual call point	Each	2	4500	9000
	iv	Fire Alarm Bell / Hooter of suitable range to cover the complete floor, in enclosure.	Each	2	1500	3000
	v	Response indicator	Each	42	130	5460

S.No.	Description.	Unit.	Qty	Rate in Figures (in Rs.)	Amount in Rs.
7.03	Supply, Installation, testing and commissioning of 1 loop microprocessor based addressable type networkable Fire Detection & Alarm Panel complete with inbuilt power supply, battery charger with SMF batteries for minimum 24 hours back-up. The panel shall have a communication module and HI 485 network card. The panel should have rectifier, loop card, minimum 80 character LCD unit to indicate fire/ fault signals with address including external/ internal printer port complete as per technical specifications and requirement of Local Fire Authority and as required.	Set	1	125000	125000
	TOTAL SUB HEAD 7 : FIRE DETECTION AND ALARM				633860
	SUB HEAD 8: LT CABLES				
8.00	LT CABLES				
8.01	Supply of following sizes of 1.1 kV grade multicore aluminum conductor armoured XLPE cable as per IS 7098.				
	i 3.5 Core 300 Sqmm.	Metre	300	1501	450300
	ii 3.5 Core 185 Sqmm.	Metre	300	681	204300
	iii 3.5 Core 120 Sqmm.	Metre	120	472	56640
	iv 3.5 Core 70 Sqmm.	Metre	10	304	3040
	v 3.5 Core 35 Sqmm.	Metre	250	168	42000
	vi 3.5 Core 25 Sqmm.	Metre	200	139	27800
	vii 4 Core 16 Sq mm	Metre	50	114	5700
	viii 2 Core 10 Sq mm	Metre	200	79	15800
	ix 3 Core 4 Sq mm	Metre	100	69	6900
8.02	Laying of one number PVC insulated and PVC sheathed power cable 1.1kV grade direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. as required				

S.No.		Description.	Unit.	Qty	Rate in Figures (in Rs.)	Amount in Rs.
	i	Size not exceeding 25 sq.mm	Metre	275	100	27500
	ii	Size exceeding 25 sq.mm but not exceeding 120 sq.mm	Metre	91	213	19383
	iii	Size exceeding 120 sq.mm but not exceeding 300 sq.mm	Metre	420	230	96600
8.03		Laying of one number PVC insulated and PVC sheathed power cable 1.1kV grade direct in the existing RCC/ Hume/Stoneware/Metal pipe as required				
	i	Size not exceeding 25 sq.mm	Metre	220	20	4400
	ii	Size exceeding 25 sq.mm but not exceeding 120 sq.mm	Metre	20	25	488
	iii	Size exceeding 120 sq.mm but not exceeding 300 sq.mm	Metre	90	44	3960
8.04		Laying of one number PVC insulated and PVC sheathed power cable 1.1kV grade on surface or on existing cable tray complete as required.				
	i	Size not exceeding 25 sq.mm	Metre	55	42	2310
	ii	Size exceeding 25 sq.mm but not exceeding 120 sq.mm	Metre	20	70	1365
	iii	Size exceeding 120 sq.mm but not exceeding 300 sq.mm	Metre	90	61	5490
8.05		Supplying and making end termination with suitable size Copper lugs including double compression glands of following sizes of 1.1. kv grade multicore aluminium conductor PVC insulated and PVC sheathed				
	i	3.5 Core 300 Sqmm.	Each	6	750	4500
	ii	3.5 Core 185 Sqmm.	Each	4	635	2540
	iii	3.5 Core 120 Sqmm.	Each	6	399	2393
	iv	3.5 Core 70 Sqmm.	Each	2	310	620
	v	3.5 Core 35 Sqmm.	Each	4	210	840
	vi	3.5 Core 25 Sqmm.	Each	4	133	530
	vii	4 Core 16 Sq mm	Each	4	130	520
	viii	2 Core 10 Sq mm	Each	24	150	3600
	ix	3 Core 4 Sq mm	Each	4	100	400

S.No.		Description.	Unit.	Qty	Rate in Figures (in Rs.)	Amount in Rs.
8.06		Fabricating and installing following size of perforated M.S. cable trays including horizontal and vertical bends, reducers, tees, cross members and other accessories as required and duly suspended from the ceiling with M.S. suspenders and including painting etc. as required :-				
	i	150 mm. width x 50 mm. depth x 1.6 mm. thickness	Metre	15	500	7500
	ii	300 mm. width x 62.5 mm. depth x 2.0 mm. thickness	Metre	15	800	12000
	iii	450 mm. width x 62.6 mm. depth x 2.0 mm. thickness	Metre	10	950	9500
	iv	600 mm. width x 62.6 mm. depth x 2.0 mm. thickness	Metre	10	1200	12000
		TOTAL SUB HEAD 8 : LT CABLES				1030918
		SUB HEAD 9: EARTHING SAFETY EQUIPMENT AND MISC. ITEMS				
9.00		EARTHING, SAFETY EQUIPMENTS AND MISC. ITEMS				
9.01		Earthing with copper plate 600mmX600mmX3mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. (but without charcoal or coke and salt) complete as required	Set	6	10000	60000
9.02		Earthing with GI plate 600mmX600mmX6mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. (but without charcoal or coke and salt) complete as required	Set	10	5000	50000
9.03		Extra for using charcoal and salt for GI or copper plate earth electrode as required.	Set	16	760	12160

S.No.		Description.	Unit.	Qty	Rate in Figures (in Rs.)	Amount in Rs.
9.04		Supplying and laying 25mmX5mm GI strip at 0.5m below ground level as strip earth electrode, including soldering etc. as required.	Metre	300	98	29400
9.05		Providing and fixing 25mmX5mm GI strip on surface/on existing cable trench/RCC pipe/GI pipe or in recess for earth electrode as required.	Metre	100	120	12000
9.06		Supplying and laying 50mmX5mm Copper strip at 0.5m below ground level as strip earth electrode, including soldering etc. as required.	Metre	150	756	113400
9.07		Providing and fixing 50mmX6mm Copper strip on surface/on existing cable trench/RCC pipe/GI pipe or in recess for earth electrode as required.	Metre	60	1082	64920
9.08		Providing and fixing 25mmX5mm Copper strip on surface/on existing cable trench/RCC pipe/GI pipe or in recess for earth electrode as required.	Metre	20	766	15320
9.09		Supplying and laying 25mmX5mm Copper strip at 0.5m below ground level as strip earth electrode, including soldering etc. as required.	Metre	50	315	15750
9.10		Providing and laying of following sizes non pressure NP2 class (light duty) RCC pipe with collar joint with stiff mixture of cement (1 cement : 2 fine sand) including testing the joints etc. as required.				
	i	150mm dia	Metre	50	226	11300
	ii	300mm dia	Metre	50	426	21300

S.No.	Description.	Unit.	Qty	Rate in Figures (in Rs.)	Amount in Rs.
9.11	Providing and fixing M.V. danger notice plate of 200mmX150mm made of mild steel, atleast 2mm thick and vitreous enamelled white on both sides and with inscription in signal red colour on front side as required.	Each	12	68	816
9.12	Providing and fixing H.T. (11kV) danger notice plate of 250mmX150mm made of mild steel, atleast 2mm thick and vitreous enameled white on both sides and with inscription in signal red colour on front side as required.	Each	4	68	272
9.13	Supplying and laying of 12kV grade 1 metre wide anti skid chequered type rubber mat.	Metre	10	2500	25000
9.14	Supplying and laying of 1.1kV grade 1 metre wide anti skid chequered type rubber mat.	Metre	20	1800	36000
9.15	Design, manufacture, supply and installation of Fire Buckets 13 litre capacity 4 Nos. duly filled with sand and GI pipe support stand for these buckets including painting etc. complete as required.	Set	4	4500	18000
9.16	Supply and fixing shock treatment chart in English, Hindi and local language mounted on 5mm thick Plywood and 3mm thick plain glass front complete as required.	Set	2	1500	3000
9.17	Supplying and fixing Foam type 9 ltrs capacity fire extinguishers as approved by ISI complete as required.	Set	2	4800	9600
9.18	Supplying and fixing Dry Chemical powder type 10 Kg capacity fire extinguishers as approved by ISI complete as required.	Set	2	4200	8400

S.No.	Description.	Unit.	Qty	Rate in Figures (in Rs.)	Amount in Rs.
19.19	Supplying and fixing CO2 type 9 Kg capacity fire extinguishers as approved by ISI complete as required.	Set	2	11400	22800
9.20	Supplying and fixing CO2 type 4.5 Kg capacity fire extinguishers as approved by ISI complete as required.	Set	4	5310	21240
9.21	Supplying, storing, handling and fixing in position First Aid Medical Box complete as per technical specifications as required.	Each	1	3500	3500
9.22	Supply and testing of 11kV ISI marked hand gloves	Each	2	800	1600
9.23	Providing & fixing rigid PVC pipe complete with fittings, clamps including trenching & refilling/ wall cutting & plastering, etc. (for cable entry) with all minor civil & mech. Works complete as required.				
	100 mm dia nominal bore	Metre	50	200	10000
	TOTAL SUB HEAD 9: EARTHING, SAFETY EQUIPMENT AND MISC. ITEMS				565778
	SUB HEAD 10: OUT DOOR LIGHTING				
10.00	OUT DOOR LIGHTING				
10.01	Supply, erection, testing and commissioning of external swaged steel tubular pole with following specifications & items :				

S.No.		Description.	Unit.	Qty	Rate in Figures (in Rs.)	Amount in Rs.
	i	9.0 Mtrs. high swaged steel tubular pole with arm length around 1.5 Metre, the construction of the pole shall be as per IS:2713 - 1980 410 SP-30 with base plate 450mmX450mmX6mm complete as per requirement with two coats of spray paints of approved shade.				
	ii	1X150 watts street light fixture with 150watts high pressure sodium vapour (HPSV) lamp complete with control gear, acrylic cover cover etc. similar to Philips SRP 051/ 150 W or approved equivalent including its wiring with 2X4 sq.mm. PVC insulated, FRLS copper conductor and 1.5 sqmm PVC insulated, FRLS copper earth wire from control box complete as required.				
	iii	Suitable size 32 A DP MS Control box with 2 no. incoming and outgoing terminals and 2 nos. tap-out terminal with 6A DP MCB complete as required - 1 Set				
	iv	Suitable number(s) 40mm dia Class-B GI Pipe(s) from above control box to upto 0.5 metre below ground level for power cable entry				
	v	Providing foundation including excavation, shuttering, alignment of poles, casting etc. including lean concrete at the bottom as per CPWD/BIS specifications.				
	vi	The above installations shall be completed as CPWD specifications and as required				
	A.	Steet Tubular Poles(9M) Single Arm as mention above	Set	6	17900	107400
10.02		Supply, installation, testing and commissioning of external post top lantern with following accessories and complete as required :				
	i)	4m high (3.3m above ground) 50mm dia GI pole as approved, adopting socket at top for fixture mentioned below, base plate 300 x 300 x 6mm and provision for mounting junction box etc. - 1 set.				

S.No.	Description.	Unit.	Qty	Rate in Figures (in Rs.)	Amount in Rs.
ii)	1 x 70 W Post top lantern with 70W HPSV lamp (Philips SPC 101 x SON 70 W E or equivalent) and its wiring with 2 x 2.5 sq.mm PVC insulated copper wire and 1.5 sqmm PVC insulated copper earth wire from control box				
iii)	Suitable size 20A DP MS Control box with 2 no. incoming and outgoing terminals and 2 nos. tap-out terminal with 1 nos. 5A HRC fuses complete 1 set.				
iv)	Suitable number(s) 40mm dia Class-B GI Pipe(s) from above control box to upto 0.5 metre below ground level for power cable entry				
v)	Providing 400x400x1000mm deep 1:3:6 ratio cement concrete including excavation shuttering alignment of poles casting etc. including 100mm thick lean concrete shall be provided at the bottom				
	Supply, installation, testing and commissioning of external post top lantern as mentioned above	Set	6	6700	40200
10.03	Road Lighting Panel				
	Supply, installation, testing and commissioning of following outdoor type with canopy, IP-54 protected M.V. cubicle type totally enclosed, free standing type, dust, damp and vermin proof, MV Panel, busbars, M.V. danger notice plate, interconnections with suitable capacity aluminium leads/solid aluminium strips/rods, connection of incoming and outgoing cables with thimbles, stove enamelled painted and having following incoming and outgoing switchgears complete as required.				
	INCOMER:				
	1 No. 63 Amp 415 volts, TPN Switch Disconnecter Fuse Unit with HRC Fuses				

S.No.	Description.	Unit.	Qty	Rate in Figures (in Rs.)	Amount in Rs.
	1 Set of phase indicating lamp with HRC fuses				
	1 Set of timer switch & 100A TP contactor with neutral link (for street lights control) .				
	BUSBARS:				
	200 Amp TPN Aluminium busbars				
	OUTGOING:				
	10 Nos. 16 Amp 415 volts, DP MCB				
	Feeder Pillar as mention above	Set	1	20000	20000
	TOTAL SUB HEAD 10: OUTDOOR LIGHTING				167600
	GRAND TOTAL FOR ALL ELECTRICAL WORKS				10429746
	END of ELECTRICAL BOQ				

ABSTRACT		
Estimate for HVAC works FOR "50 BEDDED HOSPITAL, CHHATTISGARH"		
S.No.	DESCRIPTION	Amount in figures(in Rs.)
A	HVAC WORK	
1	15 TR, programmable microprocessor based, Air-cooled Package Type DX units	1800403
2	Pan Type Humidifier made from minimum 2mm thick stainless steel sheet top closed and insulated	39480
3	WINTER/MONSOON HEATING ARRANGEMENT FOR OT AHU	19805
4	DUCTABLE SPLIT TYPE A/C	480633
5	SPLIT AIR CONDITIONERS	343557
6	Window Air Conditioner	98099
7	Propeller Fans	10400
8	GSS DUCTING	201600
9	ALUMINIUM DUCTING	137170
10	FIRE DAMPERS	33284
11	CEILING DIFFUSERS	52050
12	VOLUME CONTROL DAMPERS	11412
13	GRILLES	14557
14	LAMINAR FLOW DIFFUSERS	167261
15	DUCTING INSULATION	134700
16	DUCT ACOUSTIC LINING	13980
17	Balancing of fresh air opening comprising of powder coated extruded aluminium louvers with bird screen, projection with frame and volume control damper	8300
18	AHU PANEL	90000
19	CABLING	34960
20	Perforated MS cable trays including horizontal & vertical bends, reducers, tees, cross members and other accessories	10500
21	EARTHING	15000
22	Providing and fixing earth wire of complete as per specifications as required.	4500
	Total	3721651

BILL OF QUANTITIES (B.O.Q.) FOR HVAC WORKS FOR "50 BEDDED HOSPITAL, CHHATTISGARH"					
ITEM No 1	DESCRIPTION OF ITEM 2	QTY. 3	UNIT 4	RATE (Rs.) 5	AMOUNT (Rs.) 6
1.0	Supplying, installation, testing and commissioning of 15 TR, programmable microprocessor based, Air-cooled Package Type DX units complete with condensing unit, scroll compressor, air-cooled condenser with fan and evaporator,interconnecting refrigerant piping with indoor and outdoor units,pre charge refrigerant necessary insulation. Microprocessor Based Control Panel should be capable for Heating, Cooling & Humidification controls and interlocking with control wiring etc. complete with following and as per specifications and requirement.				
	Indoor Unit-for OT at Ground Floor				
	a) Fan Section and canvass connection (Double Skin Type) with mixing box and thermal break profile.				
	b) Backward curved Centrifugal Blower with Capacity of 3500 CFM and 125mm Static Pressure.				
	c) Cooling Coil Section/s with 15 TR cooling coil/s as per specifications.				
	d) Pre Filter with filter section as required.				
	e) Drain Pan and Drain Connection.				
	f) Drive motor, Drive arrangement guard etc.				
	g) Necessary vibration isolator and supporting arrangements.				
	h) Fresh air intake arrangement, necessary water drain and air purge valve wherever required etc.				
	i) Canvass connection ,necessary foundations, 2 nos pressure gauge, 2nos thermometer etc				

ITEM No 1	DESCRIPTION OF ITEM 2	QTY. 3	UNIT 4	RATE (Rs.) 5	AMOUNT (Rs.) 6
	j) double skin section for housing fine(microvee) and Hepa filters as required complete as per specifications				
	Outdoor Unit for above				
	Suitable Air Cooled Type Condenser with Aluminium Fins & Copper Tube Coils for above indoor unit.				
	b) Scroll Type Hermetically sealed Comperssors.				
	c) Suitable condenser fans for the condensing unit.				
	d) necessary hard drawn copper refrigerant piping per circuit with kinnifoam insulation along with clamps,supports,fittings such as valves,y-strainer, bends,tees,reducers ,expansion valves etc complete as per specfications and requirement	1	Nos.	1800403	1800403
2.0	Supplying, installation, testing and commissioning of Pan Type Humidifier made from minimum 2mm thick stainless steel sheet top closed and insulated with 50mm thick expended polysterene (T.F. Quality) complete with incommining MCB, humidstate and control wiring for OTs.				
2.1	Capacity : 6 kW	1	Nos.	39480	39480
3.0	WINTER/MONSOON HEATING ARRANGEMENT FOR OT AHU				

ITEM No 1	DESCRIPTION OF ITEM 2	QTY. 3	UNIT 4	RATE (Rs.) 5	AMOUNT (Rs.) 6
	Supply, installation, testing & commissioning of winter/monsoon heating/reheating arrangements fixed in ducts/ plenums complete with strip heaters, fixing frame work, insulators, fire protection insulation in duct, controls such as heating thermostats, humidistats etc. The heaters banks shall be controlled by independent thermostats/ humidistats through electro magnetic type contactors and safety thermostats/ geysers as specified complete with wiring for interconnections with 1.5 sq.mm copper conductor multi core armoured cable. The heater capacity shall be as per schedule of equipment and specifications, drawing etc.				
3.1	6 KW	1	Nos.	19805	19805
4.0	DUCTABLE SPLIT TYPE A/C				
	Supply, installation, testing and commissioning of ceiling mounted ductable split type air conditioners of following capacity complete with hermetically sealed compressor, fan section with fan & motor, air cooled condenser, filter section with filters,required no. of strip heaters with fixing arrangement in the plenum, interconnecting refrigerant piping with refrigerant & necessary electrical power cabling,control cabling, earthing, supports, controls,necessary safety measures and voltage stablizer & electrical panel,necessary fresh air intake arrangement,necessary GI drain piping of required size & required length from indoor unit to suitable drain location, complete in all respect as per specifications, drawing & technical schedule.				
4.1	17 TR capacity.	1	Nos.	445258	445258
	Extra Refrigerant Piping for 17 TR	25	Rmt.	1250	31250

ITEM No 1	DESCRIPTION OF ITEM 2	QTY. 3	UNIT 4	RATE (Rs.) 5	AMOUNT (Rs.) 6
	Extra drain piping	25	Rmt.	165	4125
5.0	SPLIT AIR CONDITIONERS				
	Supply , installation , testing and commisioning of HI wall split air conditioner comprising of the following.				
	a) Outdoor condensing Units				
	b) Indoor Evaporative Units				
	c) Interconnecting Refrigerant and drain piping with insulation wherever required, refrigerant and oil. The unit shall include refrigerant piping, power cabling and drain piping.				
	c) Safety and operational controls				
	e) Hiwall splits shall be suitable for single phase power supply and complete with suitable rating voltage stablizer.				
	f) Mounting arrangement and structural supports for outdoor unit are included.				
	g) The units should have 3 star rating from BEE.				
5.1	Capacity : 1.5 TR	1	Nos.	53189	53189
5.2	Capacity : 2.0 TR	4	Nos.	65092	260368
5.3	Extra Refrigerant Piping	50	Rmt.	350	17500
5.4	Extra drain piping	50	Rmt.	250	12500
6.0	Window Air Conditioner				
	Supply , installation , testing and commisioning of Window Acs complete with transformer, electrical cabling as required along with mounting arrangement and Voltage stablizer. Complete in all respect as per specifications. The units should have 3 star rating from BEE.				

ITEM No 1	DESCRIPTION OF ITEM 2	QTY. 3	UNIT 4	RATE (Rs.) 5	AMOUNT (Rs.) 6
	Capacity				
6.1	1.5 TR	1	Nos.	44967	44967
6.2	2.0 TR	1	Nos.	53132	53132
7.0	Propeller Fans				
	Supply, instalation, testing and commissioning of direct driven Propeller fan for exhaust air as shown in drawings. Each fan shall be complete with permanent split capacitor or shaded pole motor, mounting plate, accessories like wire guard, bird screen and fixed louvers for weather protection as required. Fan selection arrangement and Electrical characteristics shall be as follows:				
7.1	150 mm dia 900 RPM fan suitable for 220 +/- 10% volts, 50 Cycles, 1 Phase AC Supply	1	Nos	2700	2700
7.2	225 mm dia 900 RPM fan suitable for 220 +/- 10% volts, 50 Cycles, 1 Phase AC Supply	1	Nos	3200	3200
7.3	300 mm dia 900 RPM fan suitable for 220 +/- 10% volts, 50 Cycles, 1 Phase AC Supply	1	Nos	4500	4500
8.0	GSS DUCTING				
	Supply, installation, testing and balancing of G.S.S ducting of following thickness including necessary supports, hangers, nut bolts, gaskets, splitter dampers, vanes canvass connections etc. complete as per specifications & drawings:				
8.1	24 gauge	120	Sqm.	750	90000
8.2	22 gauge	90	Sqm.	884	79560

ITEM No 1	DESCRIPTION OF ITEM 2	QTY. 3	UNIT 4	RATE (Rs.) 5	AMOUNT (Rs.) 6
8.3	20 gauge	30	Sqm.	1068	32040
9.0	ALUMINIUM DUCTING				
	Supply, fabrication, installation and testing of aluminium ducts in accordance with the approved shop floor drawing and specifications. Material should confirm to IS 737 latest edition.				
9.1	22 gauge	70	Sqm.	877	61390
9.2	20 gauge	60	Sqm.	1044	62640
9.3	18 gauge	10	Sqm	1314	13140
10.0	FIRE DAMPERS				
10.1	Supply, installation, testing and commissioning of motorized combined smoke & fire dampers made out of GI sheet of at least 120 minutes fire rating complete with GI damper of required size, smoke sensor, etc as per specifications and shop drawings.	1	Sqm	9510	9510
10.2	Actuator & Control panels	2	Nos.	11887	23774
11.0	CEILING DIFFUSERS				
11.1	Supply, Installation, testing and balancing of square/circular supply air diffusers of powder coated extruded aluminium construction with attached volume control dampers as per specs. and drawings.	3	Sqm	9982	29946

ITEM No 1	DESCRIPTION OF ITEM 2	QTY. 3	UNIT 4	RATE (Rs.) 5	AMOUNT (Rs.) 6
11.2	Supply, installation, testing and balancing of square/circular return air diffusers of powder coated extruded aluminium construction without volume control dampers.	3	Sqm	7368	22104
12.0	VOLUME CONTROL DAMPERS				
	Supply, installation and testing of volume control dampers of GI sheet, box type to be provided in ducts complete with suitable links, levers and quadrants for manual control of air volume and air balancing as per specifications and drawings.	2	Sqm	5706	11412
13.0	GRILLES				
	Supply, installation, testing and balancing of supply/return air grilles with/without volume control dampers of powder coated extruded aluminium construction suitable for installation in walls, false ceiling boxing etc as per specifications and drawings.				
13.1	Supply air grilles in single louvers with volume control dampers.	1	Sqm	9388	9388
13.2	Return air grilles in single louvers without volume control dampers.	1	Sqm	5169	5169
14.0	LAMINAR FLOW DIFFUSERS				

ITEM No 1	DESCRIPTION OF ITEM 2	QTY. 3	UNIT 4	RATE (Rs.) 5	AMOUNT (Rs.) 6
14.1	Providing & fixing of stainless steel plenum duly reinforced and made 100% air tight complete with 55% free perforated grilles(18 Gauge SS) at bottom for laminar flow in OTs. The plenum shall be insulated with 15 mm closed cell polyethylene insulation & shall be manufactured & installed by specialised agency as per designed to be approved by customer/Consultant				
	Size: 1200 x 600	12	Nos.	13272	159261
14.2	Providing & fixing of aluminium powder coated grilles with 60% face area. The grill shall be complete with damper & complete 25 mm thick aluminium filters	1	Sqm	8000	8000
15.0	DUCTING INSULATION				
15.1	Supply and fixing of 15 mm thick foil faced FR Closed Cell Chemically Crossed Linked Poly Ethylene Foam insulation (fire retardant type) density not less than 33 Kg/CuM, 'K' value not more than 0.028 Kcal/degC with adhesive tape etc. on ducts complete for supply air ducting as per the specifications and approved shop drawings.	300	Sqm	449	134700
16.0	DUCT ACOUSTIC LINING				
	Supply,application and fixing of resin bonded fibre glass hard board acoustic insulation in supply air ducting/plenum covered with tissue paper and perforated aluminium sheet as specified.	20	Sqm	699	13980

ITEM No 1	DESCRIPTION OF ITEM 2	QTY. 3	UNIT 4	RATE (Rs.) 5	AMOUNT (Rs.) 6
17.0	Supply, installation, testing, commissioning and balancing of fresh air opening comprising of powder coated extruded aluminium louvers with bird screen, projection with frame and volume control damper with lever mounting arrangement etc. as per specifications and drawings.	1	Sqm	8300	8300
18.0	AHU PANEL				
	Supply, installation, testing and commissioning of cubicle type totally enclosed wall/floor mounted free standing type, dust, damp and vermin proof for AHU made of 2mm thick CRCA sheet steel in compartmentalized design as per specification and drawings. These distribution boards shall be mounted on 50x50x6 MS angle frame work grouted to floor/walls of recessed. The rate includes the angle iron frame, support, painting, numbering, earthing etc. as required				
18.1	AHU STARTER PANEL				
	INCOMER :				
	1 No. 100 Amps 25 KA FP MCCB, 1 no of 0-125 amp ammeter with selector switch & CT's , 1 no. 0-500 volt voltmeter with selector switch & fuses , 1set of indicating lights (RYB).				
	Bus Bar				
	100 A TPN Aluminium bus bar 415V , 50 Hz.				
	OUTGOINGS :				

ITEM No 1	DESCRIPTION OF ITEM 2	QTY. 3	UNIT 4	RATE (Rs.) 5	AMOUNT (Rs.) 6
	1 set - 63 A, 415 V 15 KA FP MCCB, single phase preventor, suitable starter for 7.5/10 HP motor with thermal overload protection and spare NO-NC contacts for interlocking, ON-OFF indication lamps with push button for AHU motor as required.				
	1 set - 63 A, 415 V 15 KA FP MCCB, contactors of suitable rating for each bank , ON-OFF indication lamps for winter humidifier .				
	1 set - 63 A, 415 V 15 KA FP MCCB, contactors of suitable rating for each bank , ON-OFF indication lamps for winter heating.				
	1 set - 32 A, 415 V 15 KA FP MCCB , as spares.				
	1 set - 16 A, 415 V 10 KA FP MCCB .				
	Complete panel as above	1	Panel	90000	90000
19.0	CABLING				
	Supplying, laying, effecting proper connections, testing & commissioning of following size of 1.1 kv PVC insulated aluminium conducting armoured cables along with necessary cable tray as per IS 1554 Part- 1 laid on surface of wall/ceiling etc. & termination with brass compression glands as required.				
19.1	3 C X4 sq. mm. Cable	50	Rmt	88	4400
19.2	4 C X10 sq. mm. Cable	50	Rmt	133	6650
19.3	4 C X16 sq. mm. Cable	30	Rmt	147	4410
19.4	3.5 X35 sq.mm Cable	60	Rmt	325	19500

ITEM No 1	DESCRIPTION OF ITEM 2	QTY. 3	UNIT 4	RATE (Rs.) 5	AMOUNT (Rs.) 6
20.0	Supply & installation of following sizes of perforated MS cable trays including horizontal & vertical bends, reducers, tees, cross members and other accessories as required and duly supported from the ceiling/wall/floor with MS suspenders/supports and including painting etc. as required				
20.1	150 mm widthx50 mm deep x1.6 mmthickness	20	Rmt	300	6000
20.2	100 mm widthx50 mm deep x1.6 mmthickness	25	Rmt	180	4500
21.0	EARTHING				
21.1	Earth pits with GI earth plate of size 600mmx600mmx6mm thick including all accessories , down watering GI pipes 40mm dia and providing masonry enclosure with cover plate having interlocking arrangement and watering pipe etc. with charcoal of or coke and salt) complete as required	1	Set	7500	7500
21.2	Providing and fixing GI earth strip on walls/ trenches complete as per specifications and as required.				
21.2.1	25mm x 3mm	50	Rmt	150	7500
22.0	Providing and fixing earth wire of complete as per specifications as required.				
22.2	8 SWG wire	100	Rmt	45	4500
	TOTAL				3721651
	END OF HVAC BOQ				

Abstract of Operation Theatre		
SL. NO.	ITEM DESCRIPTION	AMOUNT (Rs.)
OPERATION THEATRE (Major)		
1	Ceiling System	375000
2	Wall with Corner Coving	170000
3	Swing door	195000
4	Peripheral Light	84000
5	X-Ray Film Viewer	62300
6	Distribution Board and Electrical wiring, conduiting with fixture inside the Operation theatre	150000
7	Operation Theatre Flooring (Antistatic Conductive Flooring)	199000
8	Pendant For Anesthesia	270000
9	Pendant For Surgeon	270000
10	Medical Gas Pipeline Installation i/c Valve Box-5 Services	124600
11	Valve Box Assembly-5 Services	14000
12	View Window with Blinds	135000
13	Ceiling OT Light	1125000
OPERATION THEATRE (Minor)		
1	Ceiling System	375000
2	Wall with Corner Coving	141000
3	Swing door	195000
4	Peripheral Light	84000
5	X-Ray Film Viewer	62300
7	Distribution Board and Electrical wiring, conduiting with fixture inside the Operation theatre	110000
8	Operation Theatre Flooring (Antistatic Conductive Flooring)	199000
9	Horizontal Bed Head Panel 1800mm long	25000
10	Medical Gas Pipeline Installation i/c Valve Box-5 Services	97500
11	Valve Box Assembly-5 Services	14000
12	Ceiling OT Light (Halogen)	525000
	Total	5001700

BILL OF QUANTITY					
OPERATION THEATRE (Major)					
Supply Installaton Testing and Commissioning of Operation Theatre (Major) and defect liability period for Chattisgarh					
A					
SL. NO.	ITEM DESCRIPTION	UNIT	QTY	MARKET RATE (Rs.)	AMOUNT (Rs.)
1	Ceiling System The prefabricated modular construction for 1.60 mm thick EGP backed by 12mm thick Gypsum board to provide seamless operating room to provide seamless operating Room. Factory made cutout in the ceiling panel for light fixtures. Aluminium Ducting inside the OT with Powder coated Aluminium Return air grills at four corners fitted with ducting connection to the outside of OT from AHU. Details as per technical specification.	lot	1	375000	375000
2	Wall with Corner Coving Providing and laying Epoxy wall Coating, 300 microns thick over smoothly rendered walls. The treatment consists of surface preparation, priming with Epoxy Primer. Walls should be smoothly rendered with Wall putty. Extruded aluminium powder coated/Anodized clip on type covings for the entire wall to False ceiling. R-70. Details as per technical specification.	lot	1	1,70,000	170000
3	Swing door 44 mm thick doors made with Poly Urethane painted 0.8mm thick GPSP sheets on both sides with PUF as infill, 1.2 mm thick GPSP painted door frames totally flush with the wall, hardware like push plates, handles, door closure, double glazed view glass of std size, Stainless Steel Ball Bearing butt hinges and provision for concealed automatic door bottom Drop seal etc. Supply & Installation of double glazed view panels (1 Square ft. area) with flush design, with 6mm thick float glass fixed in double panel with necessary arrangements. Details as per technical specification..	Nos	1	1,95,000	195000
4	Peripheral Light It should be fitted outside the air ceiling system area and flush with the ceiling in the operation theatre suitable to required illumination of 500 Lux inside the OT. Peripheral lights and clean room luminaries fitted in the frame should be 8 numbers in the OT. Details as per technical specification.	Nos	8	10,500	84000

5	X-Ray Film Viewer	Nos	1	62,300	62300
	The two (2)-plate viewing with 3 pieces of high frequency fluorescent lamps X-Ray Viewing Screen should be designed to provide flicker free luminance for clear film viewing. Each plate should be able to illuminate films upto 14"x17" size and complete as required with all accessories as per technical specification.				
6	Distribution Board and Electrical wiring, conduiting with fixture inside the Operation theatre	lot	1	150000	150000
	All high voltage equipment should be installed in a separate enclosure. And Laying of PVC conduits, Modular Switch Boxes, Modular Switches-sockets, Power and Light wiring including Earthing wire for all the lighting controls, Pendant and other equipment fixtures and fittings inside the theatre Wiring with low leakage current wires of FRLS wires should be as per requirements and complete as required with all accessories as per technical specification.				
7	Operation Theatre Flooring (Antistatic Conductive Flooring)	lot	1	199000	199000
	A floor should be provided, flat to within a tolerance of +/- 3mm over any 3-metre area. Onto this sub floor, a self-leveling compound should be laid prior to laying of the floor finish. The floor finish should terminate at the room perimeter passing over a concealed cove former and continuing up the wall for 100mm. and complete as required with all accessories as per technical specification.				
8	PENDANT FOR ANESTHESIA	Nos	1	2,70,000	270000
	Should be double Arm Pendant with horizontal movement One swivel arm of 850 mm and complete as required with all accessories as per technical specification.				
9	PENDANT FOR SURGEON	Nos	1	2,70,000	270000
	Should be double Arm Pendant with horizontal movement One swivel arm of 850 mm and another of 650 mm. and complete as required with all accessories as per technical specification.				
10	MEDICAL GAS PIPE LINE INSTALLATION including VALVE BOX-5 Services	lot	1	1,24,600	124600
	Medical graded Copper pipes for Oxygen, Air (Medical & Surgical), Vacuum, Nitrous Oxide, Carbon di Oxide and AGSS Outlets inside the Operation Theatres from the manifold system should be provided. and complete as required with all accessories as per technical specification.				

11	VALVE BOX ASSEMBLY (5 Services)	Nos	1	14,000	14000
	Valve Box are made of Powder Coated M.S. Material. Valve Box Assembly consist of the following : Lever operated quarter turn valve (i.e. 90 degree shut off ball valve- has been manufactured by ISO 9001 company and factory degreased) with brass body and chrome plated brass ball and complete as required with all accessories as per technical specification.				
12	VIEW WINDOW WITH BLINDS	Nos	1	1,35,000	135000
	View window with blinds sandwiched in two parallel toughened glasses of thickness 5 mm. The Window frame should be powder coated Aluminum of approved shape flush mounted with wall paneling.and complete as required with all accessories as per technical specification.				
12	Ceiling OT Light (Imported)	Nos	1	11,25,000	1125000
	Dual Dome LED Surgical Lighting System and complete as required with all accessories as per technical specification.				
In words Rupees					3173900

BILL OF QUANTITY					
OPERATION THEATRE (Minor)					
B	Supply Installaton Testing and Commissioning of Operation Theatre and defect liability period for Chattisgarh				
SL. NO.	ITEM DESCRIPTION	UNIT	QTY	MARKET RATE (Rs.) (In Figure)	AMOUNT (Rs.)
1	Ceiling System The prefabricated modular construction for 1.60 mm thick EGP backed by 12mm thick Gypsum board to provide seamless operating room to provide seamless operating Room. Factory made cutout in the ceiling panel for light fixtures. Aluminium Ducting inside the OT with Powder coated Aluminium Return air grills at four corners fitted with ducting connection to the outside of OT from AHU. Details as per technical specification.Details as per technical specification.	lot	1	375000	375000
2	Wall with Corner Coving Providing and laying Epoxy wall Coating, 300 microns thick over smoothly rendered walls. The treatment consists of surface preparation, priming with Epoxy Primer. Walls should be smoothly rendered with Wall putty. Extruded aluminium powder coated/Anodized clip on type covings for the entire wall to False ceiling. R-70. Details as per technical specification.	lot	1	1,41,000	141000
3	Swing door 44 mm thick doors made with Poly Urethene painted 0.8mm thick GPSP sheets on both sides with PUF as infill, 1.2 mm thick GPSP powder coated door frames totally flush with the wall panels, hardware like push plates, handles, door closure, double glazed view glass of std size, Stainless Steel Ball Bearing butt hinges and provision for concealed automatic door bottom Drop seal etc. Supply & Installation of double glazed view panels with flush design, with 6mm thick float glass fixed in double panel with necessary arrangements. Details as per technical specification.	Nos	1	1,95,000	195000
4	Peripheral Light It should be fitted outside the air ceiling system area and flush with the ceiling in the operation theatre suitable to required illumination of 500 Lux inside the OT. Peripheral lights and clean room luminaries fitted in the frame should be 8 numbers in the OT.. Details as per technical specification.	Nos	8	10,500	84000

5	X-Ray Film Viewer	Nos	1	62,300	62300
	The two (2)-plate viewing with 3 pieces of high frequency fluorescent lamps X-Ray Viewing Screen should be designed to provide flicker free luminance for clear film viewing. Each plate should be able to illuminate films upto 14"x17" size and complete as required with all accessories as per technical specification.				
6	Distribution Board and Electrical wiring, conduiting with fixture inside the Operation theatre	lot	1	110000	110000
	Electrical Distribution Board along with all high voltage equipment should be installed in a separate enclosure. AndLaying of PVC conduits, Modular Switch Boxes, Modular Switches-sockets, Power and Light wiring including Earthing wire for all the lighting controls and other equipment fixtures and fittings inside the theatre Wiring with low leakage current wires of FRLS wires should be as per requirements and complete as required with all accessories as per technical specification.				
7	Operation Theatre Flooring (Antistatic Conductive Flooring)	lot	1	199000	199000
	A floor should be provided, flat to within a tolerance of +/- 3mm over any 3-metre area. Onto this sub floor, a self-leveling compound should be laid prior to lying of the floor finish and complete as required with all accessories as per technical specification.				
8	Horizontal Bed Head Panel 1800 mm long	Nos	1	25,000	25000
	High Strength Anodised extruded Aluminium with inbuilt single railing. The chamber of Medical Gas Outlets should be made of anodized aluminium shall be powder coated as per the customer's choice. and complete as required with all accessories as per technical specification.				
9	MEDICAL GAS PIPE LINE INSTALLATION including VALVE BOX-5 Services	lot	1	97,500	97500
	Medical graded Copper pipes for Oxygen, Air(Medical & Surgical), Vacuum, Nitrous Oxide, Carbon di Oxide and AGSS Outlets inside the Operation Theatres from the manifold system should be provided. and complete as required with all accessories as per technical specification.				
10	VALVE BOX ASSEMBLY (5 Services)	Nos	1	14,000	14000
	Valve Box are made of Powder Coated M.S. Material. Valve Box Assembly consist of the following : Lever operated quarter turn valve (i.e. 90 degree shut off ball valve- has been manufactured by ISO 9001 company and factory degreased) with brass body and chrome plated brass ball and complete as required with all accessories as per technical specification.				
11	Ceiling OT Light Halogen	Nos	1	5,25,000	525000
	Surgical Lighting System with the dual reflector complete as required with all accessories as per technical specification.				
In words Rupees					1827800
MINOR OT Total Rs					1827800
Grand Total -OT (Major OT + Minor OT)				Rs.	5001700