

**NAME OF WORK: CONSTRUCTION OF MEDICAL COLLEGE GROUND, KOZHIKODE [ FOOT BALL] [ SH: SUB STATION, WET RISER & MISCELLANEOUS**

Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
<b>A</b>	<b>SUB STATION.</b>						
	<b>UNITISED SUB STATION</b>						
A-1	Supply, installation, testing and commissioning of Indoor unitised package substation comprising the following modules completely interconnected with Aluminium busbars and the whole assembly etc. as required						
	a) Indoor incoming module with 1 no. 11 KV, 630 A, 26.2 KA, Load breaking, Fault making, air break switch suitable for 11 KV, 3 phase, 50 Hz AC supply with interlocked earth switch, suitable HT HRC fuses, fixed type PT of 11KV/110V ratio, Class 0.5 accuracy, CT of **/5A ratio, (**CT ratio shall be confirmed by Engineer In Charge) 15 VA, Class 0.5 accuracy, shunt trip coil, Space heater with thermostat, interconnection bus bars with insulators, <b>provision for fixing TOD meter</b> with separate metering chamber and sealing arrangement etc as required.						
	b) Indoor outgoing module comprising 1 no. 3 phase 50 Hz, resin cast dry type naturally air cooled step down indoor transformer of <b>160KVA</b> capacity, copper wound having delta primary & star secondary with neutral brought out and having no-load voltage ratio 11 KV/433 V, vector DYN-11 with tappings from +5% to -10% in steps of 2.5 % operatable with Off circuit, interconnected with suitable size of Bus bars with incoming module, <b>along with 1 No 400A 50 KA Braking capacity MCCB with thermal magnetic release and Earth fault release</b> with <b>provision</b> for connecting 2 Nos cables of suitable size on outgoing side, with winding temperature indicator and all other standard accessories etc as required.						
	Note: Lay out of the unitised package substation with all relevant dimensions shall be prepared by the contractor in consultation with the Engineer-in-charge to suit the site requirements and the same shall be got approved by the Engineer-in-charge before commencement of the work.						
	Complete as above	1	Job	1243045	Rupees twelve lakhs fourty three thousand and fourty five only	Job	1243045
A-2	supply, installation, testing and calibration of TOD meter of class 0.5 accuracy suitable for use in HT tariff supply including loading, unloading, transportation and calibration of TOD meter along with existing, CTs & PTS in meter testing unit of KSEB including removing, loading, unloading, transportation, refixing etc as required [ Note: Meter should be KSEB approved make]. [ Note: Payment of Testing fees should be paid by the contractor and same shall be refunded by NGS on production of documentary proof)	1	Job	35585	Rupees thirty five thousand five hundred and eighty five only	Job	35585
	<i>MV panel</i>						

Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
A-3	SITC of extensible, floor mounting , free standing ,cubicle type , MV panel suitable to work on 415V, 3phase & Neutral made up of <b>2mm</b> thick CRCA sheet complete with hinged doors, Main Aluminium bus bars of 650A for phases and 325A for neutral and Branch Aluminium bus bars of suitable size including provding and fixingng the following switch gears, P/F channel of required size and length on the base and across the cable duct at suitable intervals and ,P/F,Copper earth bus bars, Busbar supports, Isolation barriers,earthing of switchgears, painting with <b>powder coating</b> complete as per specifications attached						
	Incomer						
	a) 2 Nos 400 A, 4P, 50 kA MCCB with thermal release range from 250-320 A range,including front operated rotory handle,spreader terminals shunt release,and Earth fault release module , with electrical and mechanical interlocking facility.						
	b)2sets 144 mm size square, flush mounting type voltmeter of 0-600 V range with selector switch for EA/EB supply						
	c) 2sets 144 mm size square ,flush mounting type Ammeter of 0-250 range alongwith 3 Nos class I CTs of 250 ratio and selector switch for EB/EA set supply						
	d) 2 set of RYB LED Type Indication lamps with HRC fuse toggale switch for pilot lamps of EB/EA set supply.						
	e) Mechanical inter lock with 5 locks and 3 key (Interlocking arrangement to be made as desired by Engineer-in -charge)						
	Out going						
	a) Out goings- 3Nos 250A TPN SDFU WITH HRC fuse link,						
	b) Out goings- 3 Nos 125 A TPN SDFU with 63 amps HRC fues						
	<b>Note:1)</b> The panel should have provision for connecting cables for incoming and out goings on rear side f the panel. Deth of the panel is to be incaredcacordingly.;						
	<b>Note:-2</b> Detailed drawing & lay out of the LT panel required at site with all relevant dimensions shall be prepared by the contractor in consultation with the Engineer-in-charge to suit the site requirements and the same shall be got approved by the Engineer-in-charge before commencement of the work.						
	Complete as above	1	Job	295658	Rupees two lakhs ninety five thousand six hundred and fifty eight only	Job	295658

Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
A-4	<b>CAPACITOR PANEL-40 KVAR</b>						
	SITC of extensible, floor mounting , free standing ,cubicle type , capacitor panel to work on 415V, 3phase & Neutral made up of <b>2mm</b> thick CRCA sheet complete with hinged doors, Main Aluminium bus bars of 400A for phases and 200A for neutral and Branch Aluminium bus bars of suitable size including provding and fixingng the following switch gears, P/F channel of required size and length on the base and across the cable duct at suitable intervals and ,P/F,Copper earth bus bars, Busbar supports, Isolation barriers,earthing of switchgears, painting with <b>powder coating</b> complete as per specifications attached						
	Incomer						
	a) 1 No. 200 Amps TPN SDFU with 100 A HRC fuses.						
	b) 1 No-8 stage automatic power factor controller with suitable CTS to be connected on EB incomer on MV panel.						
	c)1sets 96 mm size square, flush mounting type voltmeter of 0-600 V range with selector switch						
	d) 1sets 96 mm size square ,flush mounting type Ammeter of 0-250 range alongwith 3 Nos class I CTs of 250 ratio and selector switch						
	e)1 set of RYB LED type Indication lamps with HRC fuse)& toggale switch						
	<b>OUTGOING</b>						
	a) 1 Sets -each with sets of 3 Nos 4 A HRC Fuses with carrier and base , 1 No Capacitor duty contactor suitable for switching 1 KVAR capacitor with ON- OFF P.B's ON-OFF Indicating Lamps & control MCB's , 0-60 sec timer and with 1 No -1 KVAR -MPP Heavy duty Capacitor.[ Box type resin filled]						
	b) 1 Sets -each with sets of 3 Nos 6 A HRC Fuses with carrier and base ,1 No capacitor duty contactor suitable for switching ON 2 KVAR capacitor with ON- OFF P.B's ON-OFF Indicating Lamps & control MCB's , 0-60 sec timer and 1 No 2 KVAR -MPP Heavy duty Capacitor[ Box type Resin filled].						
	c) 1 Sets -each with sets of 3 Nos10 A HRC Fuses with carrier and base , 1 No - capacitor duty contactor suitable for switching 3 KVAR capacitor,with ON- OFF P.B's ON-OFF Indicating Lamps & control MCB's , 0-60 sec timer and 1 No -3 KVAR -MPP Heavy duty Capacitor[ Box type - Resin filled].						
	d) 1 Sets -each with sets of 3 Nos 16 A HRC Fuses with carrier and base , 1No capacitor duty contactor suitable for for switching ON 5 KVAR capacitor with ON- OFF P.B's ON-OFF Indicating Lamps & control MCB's , 0-60 sec timer and 1 No -5 KVAR -MPP Heavy duty Capacitor[ Box type resin filled].						

Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
	b) 1 Sets- each with sets of 25A HRC Fuses , -1 No capacitor duty contactor suitable for switching ON 10 KVAR capacitor with ON-OFF P.B's ON-OFF Indicating Lamps & control MCB's , 0-60 sec timer-and 1 No 10 KVAR MPP heavy duty Capacitor.[ Box type -Resin filled]						
	e)1- Set -each with set of 50 A HRC Fuses , - 63 TP capacitor duty contactor with ON- OFF P.B's ON-OFF Indicating Lamps & control MCB's , 0-60 sec timer 20 KVAR MPP heavy duty Capacitor[Box type resin filled].						
	f) 1 Set provision of space only for mounting capacitor and accesories . Mountings & Capacitors not to be provided . However necessary knockouts for PB's and hole s for tapping connection in bus bar to be provided.						
	Complete as above	1	Job	171658	Rupees One lakh seventy one thousand six hundred fifty eight only	Job	171658
A-5	Supplying and laying of Laying 100mm Dia B class GI pipe in existing trench /on surface of wall i/c P/F Necessary clamps etc as required.[ Make Tata/ Jindal/Zenith)	36	Mtrs	1323.00	Rupees One thosand three hundred and twenty three only	Mtr	47628
A-6	Making trench of 0.35 M with 1.20 Mtr. deep including cutting bitumen road for a depth of 0.20 M, excavation for balance depth, refilling after laying existing pipes /cable etc etc as required	36	Mtrs	257.55	Rupees two hundred and fifty seven and fifty five paisae only	Mtr	9271.8
A-7	Providing and fixing MV danger notice plate 200 mm x 150 mm made of mild steel minimum 2mm thick and vitreous enamelled white on both sides and with inscriptions in signal red colour in front side as required.	2	Nos	637.00	Rupees Six hundred and thirty seven only	Each	1274
A-8	Providing and fixing HT danger notice plate 250 mm x 200 mm made of mild steel minimum 2mm thick and vitreous enamelled white on both sides and with inscriptions in signal red colour in front side as required.	1	Nos	701.00	Rupees Seven hundred one only	Each	701
A-9	Supplying of tool box made of 16 SWG MS sheet of wall mounting type with glass door on the front & following approved quality of tools neatly arranged inside the box on hooks / clamps including fixing the box on the wall etc. as required.						
	a) Spanner set from 6-32 mm 10 pieces						
	b) Screw driver 300 mm long 1 no.						
	c) Line tester of 230 mm 1 no.						
	d) Adjustable spanner of 300 mm 1 no.						
	Complete as above	1	set	5104.00	Rupees Five thousand one hundred and four only	set	5104
A-10	Supplying of FIRST AID BOX of approved make including all items as per list attached including providing and fixing necessary MS wall shelf as required.	1	set	809.00	Rupees Eight hundred nine only	set	809

Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
A-11	Supplying and fixing 1 No GI buckets of 9 litres capacity each having round bottom, inscripted with FIRE in signal red colour on each bucket, i/c providing and fixing of suitable MS brackets with hooks for handling the buckets, painting and filling the buckets with sand etc. as required.	16	Nos	329.00	Rupees three hundred and twenty nine only	Each	5264
A-12	Supplying and laying 6mm thick rubber mat suitable for MV supply as required.	8	Sqmt	1401.00	Rupees thousand four hundred and one only	Sqmt	11208
A-13	Supplying of HT 11 KV grade tested quality hand gloves as required.	1	set	751.00	Rupees Seven hundred fifty one only	set	751
A-14	Supplying artificial resuscitator for electric shock with chart showing use of it as required.	1	set	2046.00	Rupees Two thousand and forty six only	set	2046
A-15	Supply & laying of 1 no. 11 KV grade XLPE cable of the following sizes in ground including excavation of trench of size 35 x 120cm, rock powder cushioning up to a height of 25cm, providing protective covering with country burnt bricks laid breadth wise, refilling the trench etc. as required (in ordinary soil).						
a	3 core 300 sq mm	194.00	Mtrs	3044.00	Rupees Three thousand and forty four only	Mtr	590536
A-16	Supply & laying of one number 11 KV grade XLPE cable of the following sizes in the existing RCC/ HUME / STONE WARE/ GI/ DWC pipe as required.						
a	3 core 300 sq mm	36.00	Mtrs	2726.00	Rupees Two thousand seven hundred twenty six only	Mtr	98136
A-17	Supply & laying of one No. 11 KV grade XLPE cable of the following sizes in the existing masonry open duct as required.						
a	3 core 300 sq mm	15.00	Mtrs	2714.00	Rupees Two thousand seven hundred and fourteen only	Mtr	40710
A-18	Supplying and fixing route marker <i>with cement concrete</i> 1:2:4 of size 60x60 cm at the bottom and 50x50 cm at the top with a thickness of 10cm including inscription as required.	5	Nos	213.00	Rupees Two hundred thirteen only	Each	1065
A-19	Supplying and making <i>indoor end termination with push-on end termination kit (earthed) for 11 KV grade XLPE</i> cable of the following sizes including supply of end sealing kit consisting of stress-cum-semi conducting pad, sliding core, self bonding insulating tape, boot (with 3 core kit), earth continuity connection (with 3 core kit), earthing lug (with 1 core kit), adhesive-cum-solvent, PVC (NA) tape, silicon grease, aluminium crimping lug, aluminium oxide cloth, nylon string, copper binding wire, hose clamp and bi-metallic washer etc. as required.						
a	3 core 300 sq mm	1	set	11429.00	Rupees Eleven thousand four hundred twenty nine only	set	11429

Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
A-20	Supplying and making <i>outdoor end termination with push-on end termination kit (earthed) for 11 KV grade XLPE cable</i> of the following sizes including supply of end sealing kit consisting of stress-cum-semi conducting pad, cap, rain shield, self bonding insulating case, leakage current collector, protective corrugated hose pipe, boot, earth continuity connection (with 3 core kit only), earthing lug (with 1 core kit), adhesive-cum-solvent, PVC (NA) tape, silicon grease, aluminium crimping lug, aluminium oxide cloth, nylon string, copper binding wire, hose clamp and bi-metallic washer etc. as required.						
a	3 core 300 sq mm	1	set	12780.00	Rupees twelve thousand seven hundred and eighty only	set	12780
A-21	Providing LAISON & CO-ORDINATION with KSEB & Electrical Inspectorate for getting preliminary approval and final approval for Sub Station and for getting Electricity connection including carrying out the following as required.						
	a) Submission and Approval of installation Drawings before start work.						
	b) Survey & approval of installation location.						
	c) Inspection and approval of the installation under scope of this tender (HT&LT).						
	d) Co-Ordination with KSEB & EI for commissioning of the installation.						
	e) any other activity / approval related to the scope of this tenderer.						
	f) Submission of required test reports to EI& KSEB.						
	f) Contractor shall pay statutory fees required to be paid to KSEB/Electrical inspectorate in connection with sub station work except and same shall be reimbursed after submitting necessary documentary proof.						
	Compete as above	1	Job	32434.00	Rupees thirty two thousand four hundred thirty four only	Job	32434
	TOTAL OF A						<b>2617092.8</b>

Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
<b>B MISCELLANEOUS</b>							
B-1	S/F cable management system of following size fabricated out of U-PVC/SMC/Plastic material along with base and front cover, 2 Nos cable dividers cable retainers at required interval including providing all required accessories such as internal angle, external angle, flat angle, flat tee, flat cross, end cap, spacer, wall plates, joint cover, reducer etc including cutting, finishing, etc as required [ Note: Measurement shall be taken from centre to centre] [ M/s MK-/schneider or similar superior make]						
	a) 100mmx50mm	240	Mtrs	1246.00	Rupees thousand two hundred and forty six only	Mtr	299040
	b) 50mmx50mm	400	Mtrs	665.00	Rupees Six hundred sixty five only	Mtr	266000
B-2	Supplying and filling refrigerant in the existing A/C units for topping up the system etc as required.	3	Kg	815	Rupees Eight hundred and fifteen only	Kg	2445
B-3	Providing and fixing 20 mm size heavy duty water PVC pipe including providing fixing necessary accessories such as bends elbows etc as required.	50	Mt	179	Rupees One hundred seventy nine only	Mt	8950
B-4	S/F of weather proof box of size 20cmx17cmx10cm with locking arrangement on the existing lamp post/wall including supplying and fixing 1 number 6A SP MCB & 1 no 6 way connector, making good the damages, sign writing etc as reqd.	20	Nos	167	Rupees One hundred sixty seven only	Each	3340
B-5	Making trench 0.75 Mtr. Deep in any soil other than rock with rock powder bedding above and below cable, bricks on both top of cable, and reinstating of cable trench with ramming with supply of sand bricks, etc. except cable ). The rate under this item is applicable only to cable laid underground with excavation.	315	Mtrs	303	Rupees Three hundred and three only	Mtr	95445
B-6	Supply and clamping the following sizes of strips on surface of wall/ parapet/ existing cable tray using clamps fabricated from 20 x 3 mm GI flat duly painted or heavy duty GI spacer saddles, spacing of clamps not exceeding 1m, making good the damages, colour washing etc. as required (for horizontal run).						
	a) 20 x 3 mm GI strip	120	Mtrs	95.00	Rupees Ninety five only	Mtrs	11400
B-7	Supply and clamping the following sizes of strips on surface of wall/ parapet/ existing cable tray using clamps fabricated from 20 x 3 mm GI flat duly painted or heavy duty GI spacer saddles, spacing of clamps not exceeding 1m, making good the damages, colour washing etc. as required (for vertical run).						
	a) 20 x 3 mm GI strip	50	Mtrs	120.00	Rupees One hundred twenty only	Mtrs	6000

Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
B-8	Supply and laying the following sizes of strips laid 0.60 m below ground level including excavating trench of suitable size and refilling etc. as required (in ordinary soil).						
	a)32 x 3 mm GI strip	30	Mtrs	103.00	Rupees One hundred three only	Mtrs	3090
B-9	Supply and providing earth lead from the test joint to the earth electrode using the following sizes of conductors/ strips including cutting, drilling necessary holes (in case of strip) and fixing firmly with plate test joint etc as required.						
	a)32 x 3 mm GI strip	40	Mtrs	89.00	Rupees Eighty nine only	Mtrs	3560
B-10	Riveting , sweating and soldering of one GI/ aluminium/ copper tape with another GI/ aluminium/ copper tape using 2 nos. 6mm dia. GI bolt and nut/ rivets including drilling holes, tinning etc. as required.	30	Nos	37.00	Rupees Thirty seven only	Nos	1110
B-11	Supply and providing test joint for the earthing system using 2 Nos of the following sizes of strips including cutting and bending to shape, drilling necessary holes and fixed to the watering pipe etc as required.						
	2 Nos 20x3 mm GI strip 150mm long	3	Nos	49.00	Rupees Forty nine only	Each	147
B-12	Providing and fixing of lightning conductor finial, made of 25mm dia 300mm long G.I. tube having single prone at top, with 85mm dia 6mm thick GI base plate including holes etc as reqd.	3	Nos	1087.00	Rupees One thousand eighty seven only	Nos	3261
B-13	Supplying, threading, laying, jointing & clamping of the following sizes of PVC pipe (8 Kg/ cm <sup>2</sup> ) with all required accessories and clamp including cutting and making good the walls, colour washing etc. on surface of wall / parapet etc. as required.						
	a) 40 mm dia	6	Mtrs	58.00	Rupees fifty eight only	Mtrs	348
B-14	Providing and fixing of ceiling fan hook made of 10mm thick ms rod including chipping the ceiling, fixing hook, making good the damages etc as reqd.	19	Nos	286.00	Rupees Two hundred eighty six only	Each	5434
B-15	Providing hole in Brick wall suitable for installing 225 mm size exhaust fan i/c cutting plastering etc as required.	11	Job	389.00	Rupees three hundred eighty nine only	Job	4279
	<b>TOTAL OF MISCELLANEOUS</b>						<b>713849</b>
	<b>C FIRE FIGHTING.</b>						
C-1	<b>MAIN ELECTRIC PUMP SET</b>						
	Supplying , instaltion, testing and comissioning of electric driven main fire pump suitable for automatic operation and consisting of following complete in all respect as required.						



Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
	Horizontal type, multistage centrifugal split casing type fire pump, of cast iron body & bronze impeller with stainless steel shaft mechanical seal to ensure a minimum pressure of 3.5 kg per sq.cm at highest and farthest outlet at specified flow of delivery of 2280 lts/min against a total head of 64m confirming to IS 1520/9137(Kirloskar <b>DSM-100/36</b> , Crompton or similar superior make)						
	60 HP Squirrel cage, induction motor TEFC synchronous speed 1500 RPM suitable for 415V, 3phase, 50Hz AC supply, with IP 55 protection for enclosure, horizontally mounted type with class 'F' insulation confirming to IS 325(Kirloskar Electric/ /Siemens/Crompton Greaves or similar superior make)						
	Suitable cement concrete foundation duly plastered with angle iron nozing on top and all four corners.						
	MS fabricated Common bed plate of requisite strength, coupling, coupling guard, foundation bolts etc as reqd.						
	Complete as above.	1	Job	331960	Rupees Three lakhs thirty one thousand nine hundred sixty only	Job	331960
C-2	<b>DIESEL ENGINE DRIVEN FIRE PUMP</b>						
	Supply, installation, testing and commissioning of diesel engine driven main fire pump suitable for automatic operation and consisting of following complete as required.						
	a) Horizontal type, multistage centrifugal pump of cast iron body and bronze impeller with stainless steel shaft, mechanical seal to ensure a minimum pressure of 3.5 Kg/Cm at highest and farthest outlet at specified outlet at specified flow of delivery of 2280 Litres/min against a total head of 64 mtr confirming to IS1520(Kirloskar <b>DSM-100/36</b> Crompton or similar superior make)						
	b) Water cooled diesel engine developing not less than <b>72 HP</b> , 1500 RPM and suitable for the above pumps Confirming to relevant and latest BS&IS standards complete with auto starting mechanism, electric starting equipment, Diesel tank, exhaust pipe extended up to 1m outside the pump house duly insulated with 50mm thick glass wool with 1.0mm thick aluminium sheet cladding residential silencer, instruments and protection for LLOP, High water temperature and high speed, stop solenoid for autostop in the event of fault with audio indications, 12V 180 AH battery with stand, fuel tank of suitable capacity for filling fuel for 12 hrs running with necessary Angle iron supports, hand fuel pump, fuel piping from fuel tank to Engine and over flow return lines with necessary valves etc, required number of AVM pads, painted with post office red colour etc as reqd. ( KOEL/ Ashok Leyland / Cummins)						

Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
	c) MS fabricated common base plate , coupling, coupling guard, foundation bolts etc as reqired						
	d) Supplying and filling 200 litres of diesel with barrel with hand pump and flexible pipe of 5 mtrs length.						
	e) Suitable cement concrete foundation duly plastered with angle iron nozing on top and all four corners.						
	complete as above	1	Job	663244	Rupees Six lakhs sixty three thousand two hundred forty four only	Job	663244
	<b>JOCKEY PUMP</b>						
C-3	Supply of electrically driven Jockey pump for automatic pressurization of the wet riser system in case of minor leakage consisting of the following and also conforming to specifications attached.						
	Horizontally mounted centrifugal type pump with bronze impeller and stainless steel shaft running at 2900rpm capable of delivering <b>228 lpm</b> against a head of 55 mtr (Kirloskar DB32/26,Crompton or similar superior make)confirming to IS 1520/9137						
	Squirrel cage TEFC induction motor suitable for 415V, 3Ph, 50Hz AC supply of <b>12.5 HP</b> for the above pump running at Synchronous speed of 2900 RPM with IP 55 class of protection and class 'F' insulation confirming to IS 325 (M/s Kirloskar/ Siemens/ NGEF or similar superior make)						
	Suitable cement concrete foundation duly plastered with angle iron nozing on top and all four corners.						
	Complete as above.	1	Job	84846	Rupees Eighty four thousand eight hundred and forty six only	Job	84846
	<b>TEERACE PUMP</b>						
C-4	Supply of electrically driven terrace pump for automatic of the wet riser system in case of Main Electric and disel pump fails and consisting of the following and also conforming to specifications attached.						
	Horizontally mounted centrifugal type pump with bronze impeller and stainless steel shaft running at 2900rpm capable of delivering 400LPM against a head of 28 mtr (Kirloskar ,Crompton or similar superior make)confirming to IS 1520/9137						
	Squirrel cage TEFC induction motor suitable for 415V, 3Ph, 50Hz AC supply of <b>5HP</b> for the above pump running at Synchronous speed of 2900 RPM with IP 55 class of protection and class 'F' insulation confirming to IS 325 (M/s Kirloskar/ Siemens/ NGEF or similar superior make)						
	Suitable cement concrete foundation duly plastered with angle iron nozing on top and all four corners.						
	MS fabricated Common bed plate of requisite strength, coupling, coupling guard, foundation bolts etc as reqd.						
	Complete as above.	1	Job	40772	Rupees Forty thousand seven hundred and seventy two only	Job	40772

Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
	WATER PUMP SET FOR FILLING TERRACE TANK.						
C-5	Supplying , installation , testing and commissioning of single stage horizontal centrifugal type monoblock pump set with Cast Iron impellor and carbon steel shaft , having pumping capacity of 4.0LPS at a total head of 26 meter , designed for 2" dia suction and 1 -1/2 " dia discharge lines and driven by <b>3 HP</b> electric motor suitable for 3 phase, 415 V, 50 Hz AC supply , including providing and fixing suitable cement concrete foundation with suitable size of MS angle iron nozing on top and all four sides etc as required. ( Kirloskar- KDS 335++ model or similar superior make )	1	Job	28616	Rupees Twenty eight thousand six hundred and sixteen only	Job	28616
	PUMP SET FOR FILLING PRIMING TANK						
C-6	Supplying , installation , testing and commissioning of monoblock type self priming <b>open well Submersible type</b> pump set having pumping capacity of 1LPS at a total head of 14 Mtrs and,driven by <b>0.5 HP(0.37KW)</b> electric motor suitable for single phase, 50 Hz AC supply , with base plate, Angle iron stand, 25 Mm dia delivery line from pump set to top of the sump with PVC flexible pipe and with B class GI pipe from top of the sump to Priming tank, including providing and fixing 1 No 25 m size GM gate valve , foot valve suplying and fixing necessary weather proof cable from starter to priming tank with necessary protection pipe, ropes for lifting the pump set,etc as required ( Kirloskar, Model No KOS-0516 or similar superior make[ Note: Sump is below the pump room] & priming tank is on the top of the pump room]	1	Job	17980	Rupees Seventeen thousand nine hundred eighty only	Job	17980
	<b>MAIN FIRE PUMP CONTROL PANEL</b>						
C-7	Fabrication, Supply ,installation testing and commissioning of electrical control panel of cubical construction,wall mounted type , fabricated out of 2 mm thick CRCA sheet , compartmentalized with hinged lockable doors, dust and vermin proof ,powder coated with approved shade after 7 tank treatment, cable allay ,inter connection, with following switch gears and accessories conforming to latest IS standards,mounting and internal wiring, earth terminals, numbering etc complete in all respect ,suitable for operation on 415 V , 3 phase , 50 HZ ac supply , with necessary base channel etc with enclosure protection class IP 42 as required.						
	<b><u>I) INCOMER SECTION</u></b>						
	The incomer section shall comprise:						
	i) 1No.250 A TPN SDFU with HRC fuses						
	ii) 1No.0-500V voltmeter with selector switch						
	iii) 1No. 0-250A Ammeter with selector switch & CTs etc.						

Sr. No.	Description	Quantity	Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
	iv) LED type R Y B indicators with control fuses & toggle switches- one set					
	ii) 1 set of 4 strips, 415V Aluminum bus bar of 400 Amps capacity of suitable length with insulators..					
	<b>II) OUT GOINGS</b>					
	a)1No 63 TPN SDFU with HRC fuses [ For Terrace Pump]					
	b)1No 63TPN SDFU with 20 A HRC fuses -1 No [For Battery charger]					
	c) Electric Fire Pump Section					
	i)200 A TPN SDFU with 125 A HRC fuses with Fully Automatic star delta starter suitable for 60 BHP electric driven pump with over load protection, current sensing type single phasing preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto manual/OFF operation ( Make Seimens /L&T/ EE/ similar superior make)					
	d)Jockey Pump Section:-					
	i) 63 A TP&N SDFU with 40 A HRC fuses Fully Automatic star delta starter suitable for 12.5 BHP electric driven pump with over load protection, current sensing type single phasing preventor complete with all accessories and internal wiring rquired for automatic operation, selector switch for local/remote, auto manual/OFF operation with out any under voltage/no volt trip ( Make Seimens /L&T/ EE/ similar superior make)					
	e) Diesel Engine Fire pump Section:-					
	Control for Diesel engine comprising the following.					
	i) Auo/manual selector switch & 3 attempstarting device,timers and relays as required , push buttons start/stop in manual mode.					
	ii) Indiction lamp for LLOP, high water temparature and Engine ON Indication.					
	iii)Battery charger suitable for 12/24 V DC with boost and tricke selector switch 0 – 30 V DC voltmeter and 0 – 20 A DC ammeter					
	iv) All standard relays and accessories for automatic operation of diesel Engine.					
	f) General					
	i)Visual indication/audio alarm hooter of suitable range.					
	ii)Earthing - Two earth bars of 25x5mm GI strip shall run at the rear of the board binding all sections, two suitable earth studs shall also be provided on the panel for terminating earth strip or wire from main earth stations.All the hinged door shall earthed with suitable size pvc sheathed copper conductor wire etc as reqd.					
	iii )Pressure switches 3Nos. (for fire pumps & pressurization pump)					
	iv)Water level indicator & switch to prevent dry running of fire pump i/c audio & visual alarm.					

Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
	v)Status selector switch of each of the pumps for automatic as well as manual operation as reqd.						
	vi)Pumps when under manual status shall be operated through relevant push buttons as reqd.						
	vii)Lock out indication for Electric fire pump as well as audio alarm with silencing facility as reqd.						
	xi)Lock out indication for diesel fire pump as well as audio alarm with silencing facility as reqd.						
	xii)Manual resetting push button for return to normal operation of locked out unit as reqd.						
	xiii)Terminal facility for repeat indications of various audio & visual indications.						
	Note:1) All the Control cable from pressure switches/ relays etc to control panel, from control panel to Diesel Engine for automatic starting/annunciation of status/defect, from battery charger to Battery, etc with in the pump room are included in the scope of work.						
	Note: 2 ) The pressurisation Pump will start on sudden pressure loss and only in case main Electric pump fails to start. No other pump will be working when diesel engine fire pump is in opeartion.Audio visual alarm should be provided to indicate failure of main electric fire pump.If within preset time, the stand by pump also fails to develop pressure, this pump shall be shut down and locked out .The terrace pump will start on sudden loss of pressure only when both the fire pumps have either failed to start or exhausted water.						
	Complete as above	1	Job	262826	Rupees Two lakhs sixty two thousand eight hundred and twenty six only	Job	262826
	<i>INDICATION PANEL IN FIRE CONTROL ROOM.</i>						
C-8	Fabrication, supply , installation , testing & commissioning of wall mounted remote indication panel for fire fighting system fabricated from not less than 1.6 Mm Thick CRCA sheet , powder coated of approved shade complete internal wiring , indicating lamps , relays, accessoriries , numbering, lettering complete on all respect and consisiting of follwing as required.						
	( a ) ON/OFF indication of main electrical fire pump, pressuristion pump, terrace pump.						
	(b) Audio/Visual indication of operation of main/ Diesel fire pump and terrance pump with resset push button.						
	(c)Pressure indication in fire fighting system ( pressure transducer to be installed under separate item)						
	Complete as above	1	Job	20017	Rupees Twenty thousand and Seventeen only	Job	20017

Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
	<i>PANEL FOR TERRACE PUMP</i>						
C-9	Fabrication, Supply ,installation testing and commissioning of electrical control panel of cubical construction,wall mounted type , fabricated out of 2 mm thick CRCA sheet , compartmentalized with hinged lockable doors, dust and vermin proof ,powder coated with approved shade after 7 tank treatment, cable allay ,inter connection, with following switch gears and accessories conforming to latest IS standards,mounting and internal wiring, earth terminals, numbering etc complete in all respect ,suitable for operation on 415 V , 3 phase , 50 HZ ac supply with enclosure protection class IP 42 as required.						
	i) 63 A TPN SDFU with 25 A HRC fuses						
	ii) 1No.0-500V voltmeter with selector switch						
	iii) 1No. 0-30A Ammeter with selector switch & selector switch						
	iv) LED type R Y B indicators with control fuse one set						
	v)DOL starter suitable for 5HP electric driven pump with over load protection, current sensing type single phasing preventor complete with all accessories and internal wiring required for automatic operation and provsion for remote operation and extending status of pump set						
	vi) Selector switch for local/remote ,auto/manual/off operation ON/OFF indication lamp etc.						
	Complete as above	1	Job	37208	Rupees Thirty Seven thousand Two hundred and Eight only	Job	37208
	<i>PANEL FOR WATER PUMP SET</i>						
C-10	Fabrication, Supply ,installation testing and commissioning of electrical control panel of cubical construction,wall mounted type , fabricated out of 2 mm thick CRCA sheet , compartmentalized with hinged lockable doors, dust and vermin proof ,powder coated with approved shade after 7 tank treatment, cable allay ,inter connection, with follwing switch gears and accessories conforming to latest IS standards,mounting and internal wiring, earth terminals, numbering etc complete in all respect ,suitable for operation on 415 V , 3 phase , 50 HZ ac supply with enclosure protection class IP 42 as required.						
	a) Incomer						
	i) 1No 63 A TPN SDFU with 63 A HRC Fuses						
	ii) 1No.0-500V voltmeter with selector switch						
	iii) 1No. 0-30A Ammeter with selector switch and CTs						
	iv) 1 set of 4 strips, 415V Aluminum bus bar of 100 Amps capacity of suitable length.						
	v) LED type R Y B indicators with control fuse one set						
	c) Out Going.						
	i) 1No 32 A TPN SDFU with 16 A HRC fuses [ For filling Terrace Tank]						

Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
	ii)1No 32 A TPN SDFU with 16 A HRC fuses [ Pump room Lighting & For Pump for Filling Priming Tank]						
	iii)1No 32 A TPN SDFU with20 A HRC fuses [ Spare]						
	iv)DOL starter suitable for <b>3Hp</b> electric driven pump with over load protection, current sensing type single phasing preventor complete with all accessories Push button for ON/OFF etc as equired ( Make Seimens /L&T/ EE/ similar superior make)						
	v) 1No 6 A AC-3 rating 3 pole contactor with water level sensing device and probes( to be connected to priming tank) for automatic operation of pump set with necessary internal wiring and wiring from control panel to priming tank .						
	vi) 6 A SP MCB[ B Series]-2 Nos						
	vii) 6 A SP-MCB[ C Series]-1 No						
	Complete as above	1	Job	45006	Rupees Forty Five thousand and Six only	Job	45006
C-11	Supplying and laying of 'C' class GI pipes conforming to IS 1239-1976 i/c fittings like bends 'T' sections elbows gaskets etc but excluding valves, gauges of following sizes etc as reqd in the following conditions ( Make TATA, Jindal , Zenith)						
a	On wall/floor or on free standing with suitable brackets/ in existing trench with suitable platform or brick blocks including angle iron edges in supports etc. and fixing the pipe with suitable iron strip, clamps, brackets etc as reqd.						
	i)200mm	10	Mtrs	3878	Rupees Three thousand Eight hundred and Seventy eight only	Mtr	38780
	ii) 150mm	65	Mtrs	2314	Rupees Two thousand Three hundred and Fourteen only	Mtr	150410
	iii) 100 mm dia	20	Mtrs	1654	Rupees One Thousand Six hundred and Fifty four only	Mtr	33080
	iv) 65mm	4	Mtrs	1003	Rupees One thousand and Three only	Mtr	4012
	v) 50mm	30	Mtrs	899	Rupees Eight hundred and Ninety nine only	Mtr	26970
	vi) 40 mm	20	Mtrs	674	Rupees Six hundred and Seventy four only	Mtr	13480
b	In concrete floor/ceiling including cutting making good the damage, etc as required	2	Mtrs	2370	Rupees Two thousand Three hundred and Seventy only	Mtr	4740
	i) 150 mm						
	ii) 40mm dia	2	Mtrs	807	Rupees Eight hundred and Seven only	Mtr	1614
c	In soil including excavation and refilling & making good the damage, providing anti corrosive wrapping and coating etc.,as required.						
	i) 150 mm	175	Mtrs	2564	Rupees Two thousand Five hundred and Sixty four only	Mtr	448700
d	In soil including excavation and refilling & making good the damage etc.,as required.						
	ii) 40 mm	80	Mtrs	840	Rupees Eight hundred and Forty only	Mtr	67200
C-12	Supplying and fixing of the following valves as per specifications of following types as required(ISI marked)						
	i) 150 mm Sluice Valve CI body	7	Nos	13383	Rupees Thirteen thousand Three hundred and Eighty three only	Each	93681
	ii) 100 mm Sluice Valve CI body	1	Nos	10134	Rupees Ten thousand One hundred and Thirty four only	Each	10134

Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
	iii) 65 mm sluice valve with GM body	1	Nos	4854	Rupees Four thousand Eight hundred and Fifty four only	Each	4854
	iv) 50 mm sluice valve with GM body	6	Nos	3485	Rupees Three thousand Four hundred and Eighty five only	Each	20910
	v) 40 mm sluice valve with GM body	4	Nos	2433	Rupees Two thousand Four hundred and Thirty three only	Each	9732
	vi) 150 mm Non Return Valve with CI body	5	Nos	13472	Rupees Thirteen thousand four hundred and Seventy two only	Each	67360
	vii)100 mm dia Non return valve with CI body	1	Nos	9800	Rupees Nine thousand and Eight hundred only	Each	9800
	viii)50 mm dia Non return valve with GM body	5	Nos	2372	Rupees Two thousand Three hundred and Seventy two only	Each	11860
	ix)40 mm dia Non return valve with GM body	1	No	1629	Rupees One thousand Six hundred and Twenty nine only	Each	1629
	x)200mm dia foot valve with strainer with CI / GM body	2	Nos	18333	Rupees Eighteen thousand Three hundred and Thirty three only	Each	36666
	xi)100mm dia foot valve with strainer with CI/GM body	1	No	5097	Rupees Five thousand and Ninety seven only	Each	5097
C-13	Supplying and fixing of the following valves as per specifications of following types						
	i)65mm dia foot valve with strainer with CI/GM body	1	Nos	1438.00	Rupees One thousand Four hundred and Thirty eight only	Each	1438
	i)50mm dia foot valve with strainer with CI/GM body	1	No	1029.00	Rupees One thousand and Twenty nine only	Each	1029
C-14	Supplying and fixing of Air vessel of 250mm external dia & 8 Mm thick MS sheet , 1200mm 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 guages and painting with synthetic enamel paint of approved shade as required.	2	Nos	13261	Rupees Thirteen thousand Two hundred and Sixty one only	Each	26522
C-15	Providing and fixing 'priming' arrangement tank consisting of priming tank of capacity 900 litres fabricated out of 3mm thick MS sheet , graduated water level indicator, with suitable Brick work/ MS Angle iron pedestal and provision for connecting water in and out connections , drain and overflow connections, etc as reqd.	1	No	18599	Rupees Eighteen thousand Five hundred and Ninety nine only	Each	18599
C-16	Supplying and fixing of external yard hydrants comprising the following but excluding the sluice valve, as per specification.						
	i)Stand post for single outlet 80mm GI'C' class pipe.						
	ii)Single headed landing valve.						
	iii)Instantaneous female coupling						
	iv)GI & tee tapping from the underground mains any other accessories as required.						
	Complete as above	5	Jobs	9425	Rupees Nine thousand Four hundred and Twenty five only	Job	47125
C-17	Supplying and fixing of internal hydrant comprising the following as per specifications (ISI mark )						
	i)Double headed double outlet landing valve (Hydrant valve with single inlet (100 mm) and double out let (63 mm) with orifice plate.						



Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
	ii)GI tee tapping from the wet riser, distant piece & any other accessories as required.						
	Complete as above	6	Jobs	13178	Rupees Thirteen thousand One hundred and Seventy eight only	Job	79068
C-18	Supplying and fixing of first aid hose reel equipment comprising hose reel, guide, hose tubing (20mmdia,36.5m long), swinging type bracket, nozzle & globe valve (20mm size) & stop clock & nozzle spanner (Dunlop or similar superior make)	6	Nos	7506	Rupees Seven thousand Five hundred and Six only	Each	45036
C-19	Supplying of hose pipes (63mmdia) 15 Mtrs long with instantaneous type couplings on both ends and of length as per specifications.	22	Nos	4671	Rupees Four thousand Six hundred and Seventy one only	Each	102762
C-20	Supplying and fixing branch pipe with 63mm dia with Instantaneous type male coupling on one end & threading on the other with suitable nozzle of 20mm dia and as per specifications as reqd.(Nozzle as per specifications)	11	Nos	2474	Rupees Two thousand Four hundred and Seventy four only	Each	27214
C-21	Supplying and fixing hose cabinet made out of 1.6 mm M.S sheet as per specifications for:						
	i)Internal Hydrant	6	Nos	16283	Rupees Sixteen thousand Two hundred and Eighty three only	Each	97698
	ii)External Hydrant	5	Nos	11842	Rupees Eleven thousand Eight hundred and Forty two only	Each	59210
C-22	Supplying and fixing of Siamese fire brigade inlet connection with 4 instantaneous male inlet coupling as per specifications with built in valves but without sluice valves						
	a) 4 way	1	No	9258	Rupees Nine thousand Two hundred and Fifty eight only	Each	9258
C-23	Providing sluice valve chamber (1mx1mx1m) with removable pre cast slab with CI manhole.	1	Job	10230	Rupees Ten thousand Two hundred and Thirty only	Job	10230
C-24	S/F of 150 mm dia pressure guage dial type and Bourden type	3	Nos	1237	Rupees One thousand Two hundred and Thirty Seven only	Each	3711
C-25	Providing fixing cable end box/ adopter box / Enclosure for protection of control panel for terrace pump fabricated out of 16 SWG MS sheet including cutting welding, painting etc as required	3	Sqmt	2710	Rupees Two thousand Seven hundred and Ten only	Sqmt	8130
C-26	Providing fixing protective Covering fabricated out of 18 SWG GI sheet suitable for 5 HP motor of terrace pump etc as required.	1	Job	879	Rupees Eight hundred and Seventy nine only	Job	879
C-27	P/F Control box fabricated out of 16 SWG MS sheet for remote operation of terrace pump including providing and fixing ON & OFF push buttons, making connections, painting etc as required.	1	Job	1109	Rupees One thousand One hundred and Nine only	Job	1109

Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
C-28	Supply & laying of one number PVC insulated and PVC sheathed armoured <b>aluminium</b> power cable of 1.1KV grade of the following sizes in ground including excavation of trench of size 35 x 75 cm, sand cushioning up to a height of 25cm (80+170mm), providing protective covering with country burnt bricks laid breadth wise, refilling the trench etc. as required (in ordinary soil).[ <b>For fire fighting pump room</b> ]	10	Mtrs	796	Rupees Seven hundred and Ninety six only	Mtr	7960
a	3.5 corex70 Sqmm						
C-29	Supply & laying of one number PVC insulated and PVC sheathed armoured <b>aluminium</b> power cable of 1.1KV grade of the following sizes in the existing RCC/ HUME / STONE WARE/ GI/ DWC pipe as required[ <b>For fire fighting pump room</b> ].	2	Mtrs	508	Rupees Five hundred and Eight only	Mtr	1016
a	3.5 corex70 Sqmm						
C-30	Supply & laying of one No. PVC insulated and PVC sheathed armoured <b>aluminium</b> power cable of 1.1 KV grade of the following sizes in the existing masonry open duct as required.[ <b>For fire fighting pump room&amp; Capacitor panel</b> ]	20	Mtrs	498	Rupees Four hundred and Ninety Eight only	Mt	9960
a	3.5 corex70 Sqmm						
C-31	Supply, laying and clamping of 1 no. PVC insulated and PVC sheathed armoured <b>aluminium</b> power cable, 1.1 KV grade of the following sizes using clamps noted along with the cables, spacing of clamps not exceeding 60cms, making good the damages , colour washing etc. as required.				Rupees Five hundred and Twenty nine only		
a)	3 core 25 Sqmm	8	Mtrs	529		Mtr	4232
C-32	Supply, laying and clamping of 1 no. PVC insulated and PVC sheathed armoured <b>copper</b> power cable, 1.1 KV grade of the following sizes using clamps noted along with the cables, spacing of clamps not exceeding 60cms, making good the damages , colour washing etc. as required.[ <b>For electric driven fire pump</b> ]						
a)	3 core 25 Sqmm	10	Mtrs	1224	Rupees One thousand Two hundred and Twenty four only	Mtr	12240
C-33	Supply, laying of one No. PVC insulated and PVC sheathed armoured <b>copper</b> conductor control cable of 1.1 KV grade of the following sizes in the existing masonry open duct /existing trench as required.[ <b>Note: For signal cable from Fire Control panel to indication panel in Electrical room and for control cable for remote operation of terrace pump</b> ]						
a)	8 core 2.5 Sqmm	60	Mtrs	410	Rupees Four hundred and Ten only	Mtrs	24600
b)	4 core 2.5 Sqmm	80	Mtrs	237	Rupees Two hundred and Thirty seven only	Mtr	18960

Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
C-34	Supply, laying and clamping of 1 no. PVC insulated and PVC sheathed armoured <b>copper</b> conductor control cable of 1.1 KV grade of the following sizes using clamps noted along with the cables, spacing of clamps not exceeding 60cms, making good the damages, colour washing etc. as required.						
	a)8 core 2.5 Sqmm	15	Mtrs	447	Rupees Four hundred and Forty seven only	Mtr	6705
	b)4 core 2.5 Sqmm	40	Mtrs	240	Rupees Two hundred and Forty only	Mtr	9600
C-35	Supply & laying of one number PVC insulated and PVC sheathed armoured <b>copper</b> control cable of 1.1KV grade of the following sizes in ground including excavation of trench of size 35 x 75 cm, rock powder cushioning up to a height of 25cm (80+170mm), providing protective covering with country burnt bricks laid breadth wise, refilling the trench etc. as required (in ordinary soil).						
	a)8 core 2.5 Sqmm	15	Mtrs	706	Rupees Seven hundred and Six only	Mtrs	10590
	b)4 core 2.5 Sqmm	150	Mtrs	531	Rupees Five hundred and Thirty one only	Mtrs	79650
C-36	Supply & laying of one number PVC insulated and PVC sheathed armoured copper control cable of 1.1KV grade of the following sizes in the existing RCC/ HUME / STONE WARE/ GI/ DWC pipe as required.						
	a)8 core 2.5 Sqmm	2	Mtrs	417	Rupees Four hundred and Seventeen only	Mtrs	834
	b)4 core 2.5 Sqmm	2	Mtrs	242	Rupees Two hundred and Forty two only	Mtrs	484
C-37	Supplying siemens / tropodur type nickel plated <i>single compression brass cable gland</i> for PVC insulated and PVC sheathed armoured aluminium/ copper conductor cable 1.1 KV grade, and making end termination suitable for 2/ 3/ 3½/ 4 /8 core cable of the following sizes as required.						
	a) 3.5 core 70 sqmm	4	Nos	257	Rupees Two hundred and Fifty seven only	Each	1028
	b) 3 core 25 sqmm	4	Nos	151	Rupees One hundred and Fifty one only	Each	604
	c) 8core 2.5 sqmm	2	Nos	84	Rupees Eighty four only	Each	168
	d) 4 core 2.5 sqmm	4	Nos	84	Rupees Eighty four only	Each	336
C-38	Supplying and providing <i>earth clamps</i> for siemens/ tropodur type cable glands of suitable length and other dimensions noted along with each size of glands for the following sizes of cables as required.						
	a) 70 sq mm with 20 mm wide x 1.20 mm thick clip	2	Nos	25	Rupees Twenty five only	Each	50
	b) 25 sq mm with 20 mm wide x 1.20 mm thick clip	1	Nos	25	Rupees Twenty five only	Each	25

Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
C-39	Supply of superior quality <i>aluminium tubular cable socket</i> and making core termination of cables of the following sizes including crimping etc. as required.						
	a) 70 sqmm	12	Nos	21	Rupees Twenty one only	Each	252
	b) 35 sqmm	4	Nos	13	Rupees Thirteen only	Each	52
C-40	Supply of superior quality <i>copper tubular cable socket</i> and making core termination of cables of the following sizes including crimping etc. as required.						
	a)25 sqmm	12	Nos	29	Rupees Twenty nine only	Each	348
C-41	Supplying and laying following sizes of GI wire on surface of wall/ along with cable etc as equired						
	a) 4.00 Dia GI conductor(8SWG)	30	Mts	21	Rupees Twenty one only	Mt	630

Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
	<b>FIRE ALARM PANEL</b>						
C-42	Supplying, Installing, testing & commissioning of wall mounted type microprocessor control panel made of 16 SWG Ms sheet suitable for detectors installed in the fire detection system ,covering following zones complete with 3 Nos potentail free contacts,as per specification excluding batteries.						
	a) 4 zone	1	Nos	9897	Rupees Nine thousand Eight hundred and Ninety Seven only	Each	9897
	a) 10 Zone	1	Nos	19405	Rupees Nineteen thousand Four hundred and Five only	Each	19405
C-43	Supplying and fixing sealed maintenance free battery 12V, 7AH in the existing control panel, including making connections etc as required.	6	Nos	1237	Rupees One thousand Two hundred and Thirty Seven only	Each	7422
C-44	Providing and fixing 5"x5"x2" MS Box of 18 SWG including painting and covering the front portion with phenolic laminated sheet etc complete as required.	99	Nos	275	Rupees Two hundred and Seventy Five only	Each	27225
C-45	Supplying and making cable end termination with brass glands for 1.5 sqmm PVC insulated , PVC sheathed armoured cable as required.	198	set	54	Rupees Fifty four only	set	10692
C-46	Supplying, installing testing and commissioning of sounder (12 watt) as required	1	Nos	751	Rupees Seven hundred and Fifty one only	Each	751
C-47	S/L of 2 x 1.5 Sq mm copper conductor PVC insulated and sheathed armoured (FRLS) cable with (ISI mark) fire protection laws on the wall/ ceiling/ existing cable tray etc as reqd. (M/s Finolex/ Havells/ INCAB/ICC/ Gloster/ Nicco/ Premier/ BSNL approved make)	1750	Mts	137	Rupees One hundred and Thirty seven only	Mt	239750
C-48	SITC of photo Electric type detector with dual chamber, base plate as per site condition and specification ( M/s Appollo/ Edward/ Fenwal/ System sensor)	55	Nos	1729	Rupees One thousand Seven hundred and Twenty Nine only	Each	95095
C-49	Providing LAISON & CO-ORDINATION with Muncipal authorities and Fire Authorities for getting prelimanary approval and final approval for fire fighging system including carrying out the following as required.						
	a) Preparation ,Submission and getting Approval of installation Drawings before start work.						
	b) Conducting Survey & approval of installation location by concerned authorities						
	c) Conducting Inspection and approval of the installation						
	d) Co-Ordination with Muncipal authorities & Fire authorities for commissioning of the installation.						

Sr. No.	Description	Quantity		Rate (Rs.)	Rate in words (Rs.)	Unit	Amount (Rs.)
	e) Any other activity / approval related to the scope of this tenderer.						
	F) Contractor shall pay statutory fees required to be paid to Municipal/Fire or any authorities in connection with fire fighting work and same shall be reimbursed after submitting necessary documentary proof.						
	Complete as above	1	Job	32434	Rupees Thirty two thousand Four hundred and Thirty four only	Job	32434
	TOTAL OF C						<b>3765197.00</b>

**NATIONAL GAMES SECRETARIAT**

**ABSTRACT OF ESTIMATE**

**NAME OF WORK: CONSTRUCTION OF MEDICAL COLLEGE GROUND, KOZHIKODE [ FOOT BALL][ SH: SUB STATION, WET RISER & MISCELLANEOUS**

<b>TOTAL OF A</b>	2,617,093
<b>TOTAL OF B</b>	713,849
<b>TOTAL OF C</b>	3,765,197
<b>GRAND TOTAL</b>	<b>7,096,139</b>

[ Rupees Seventy two Lakhs ninety one thousand eight hundred seven only)

I/We agree to carry out the work at par with

Date

Witness

Name .....

Address .....

Signature, Full Name and

Address of the Tenderer