

**UCEP BANGLADESH**  
**Bill of Quantities (BOQ) for Repair, Maintenance & Renovation Works of Two-Storeyed RCC School Building & Others.**  
**UCEP Pahartali Technical School**  
 Station Road Pahartali, Chattogram.  
 Bill of Quantities (BOQ), Construction Cost

**Summary of Bill of Quantities (BoQ)**

Sl No.	Name of the Items	Amount	Remarks
1	(PART-1)-Rigid Pavement for School Ground Assembly Area.	-	
2	(PART-2)- Civil Works-Repair and Maintenance of Two-Story RCC Frame School Building.	-	
3	(PART-3)-Electrical Maintenance Works.	-	
4	(PART-4)-Repair & Maintenance of Sanitary & Water-Supply Works.	-	
5	(PART-5)-Boundary Wall Height Extension with Barbed Wire Installation Work - 240 RFT and 26 Columns (10"x10").	-	
<b>Grand Total Amount (In/C Govt. VAT &amp; AIT)</b>		<b>-</b>	

**\*NOTE :** 1. Contractors should not be quoted for Miscellaneous items.  
 2. Contractors are requested to provide rate quotes for each item inclusive of VAT and AIT as per Govt. rules.  
 3. Items quantity and number of items subject to change based on physical site conditions (as per site need base).  
 4. The contractor shall perform all standard conventional material tests as directed by the engineer in charge.  
 5. Contractor bill will be paid as per physical field measurement by MB entry.

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(PART-1): Rigid Pavement for School Ground Assembly Area	Description of Items	Quantity	Unit	Unit Rate (Tk.)	Amount (Tk.)
1	One layer brick flat soiling in foundation or in floor with first class/picked jhama bricks (BDS 208) including preparation of bed and filling the interstices with local sand, leveling etc. complete and accepted by the Engineer-in-charge.	2,923.00	sft	-	-
2	<b>RCC WORKS: 1:2:4 (measured on gross concrete section): (f<sub>c</sub> = 19 MPa, minimum f<sub>cr</sub> = 26 MPa in nominal mix 1:2:4), with brick-chips (Sand of F.M. 1.2 and F.M. 2.2 in equal proportion)-Reinforced cement concrete works with minimum cement content relates to mix ratio 1:2:4 having maximum water cement ratio = 0.45 and minimum f<sub>cr</sub> = 26 MPa, satisfying a specified compressive strength f<sub>c</sub> = 19 MPa at 28 days on standard cylinders as per standard practice of Code ACI/BNBC/ASTM, cement conforming to BDS EN-197-1-CEM-I, 52.5N (52.5 MPa) / ASTM-C 150 Type - I, best quality sand [50% quantity of best local sand (F.M. 1.2), and 50% quantity of Sylhet sand or coarse sand of equivalent F.M. 2.2] and 20 mm down well graded picked jhama brick chips conforming to ASTM C-33 including conducting necessary tests, breaking chips and screening, making and placing shutter in position maintaining true to plumb, making shutter water-tight properly, placing reinforcement in position; rixing in standard mixer machine with hopper fed by standard measuring boxes, casting in forms, compacting by vibrator machine and curing at least for 28 days, removing centering-shuttering after specified time approved, including cost of water, electricity, other charges etc. all complete, approved and accepted by the Engineer-in-charge.</b>	940.00	cft	-	-
3	<b>Supplying, fabrication and fixing MS rod to detail as per design: Grade 400 (B400DWR / B420DWR) complying BDS ISO 6935-2:2016 / ASTM A615) ribbed or deformed bar produced and marked including straightening and cleaning rust, if any, bending and binding in position with supply of G.I. wires, conducting necessary laboratory tests etc. (excluding splices or laps) complete in all respect and accepted by the Engineer-in-charge (Measurement shall be recorded only on standard mass per unit length of bars, while dia of bars exceeds its standard) according to Bangladesh standard, with minimum yield strength, fy (ReH) = 400 MPa but fy not exceeding 480 MPa and whatever is the actual yield strength within allowable limit, as per BNBC/ ACI 318, the ratio of ultimate tensile strength to yield strength, fy, shall be at least 1.25 and minimum elongation after fracture and minimum total elongation at maximum force is 17% and 8% respectively : up to ground floor, ribbed or deformed bar reinforcement (excluding laboratory test fees) for Reinforced concrete, produced and marked in accordance with BDS ISO 6935-2:2016 (or standard subsequently released from BSTI)</b>	2,000.00	kg	-	-
4	Sand filling in foundation trenches and plinth with sand having minimum F.M. 0.8 in 150 mm layers including leveling, watering and compaction to achieve minimum dry density of 95% with optimum moisture content (Modified proctor test) by ramming each layer up to finished level as per design supplied by the design office only, all complete and accepted by the Engineer-in-charge.	1,415.00	cft	-	-
5	One layer Herringbone bond (HBB) brick soiling in foundation or in floor with first class/picked jhama bricks (BDS 208) including preparation of bed and filling the interstices with local sand, leveling including supply of water, other charges, costs of tools and plants etc. all complete and accepted by the Engineer-in-charge.	355.00	sft	-	-
6	Brick works with first class bricks with cement sand (F.M. 1:2) mortar (1:4) in exterior walls including filling the interstices with mortar, raking out joints, cleaning and socking the bricks at least for 24 hours before use and washing of sand, necessary scaffolding, curing at least for 7 days etc. all complete including cost of water, electricity and other charges (measurement to given as 250 mm width for one brick length and 375 mm for one brick and a half brick length) accepted by the Engineer-in-charge. (Cement: CEM-II/B-M)	115.00	cft	-	-
7	Miscellaneous work, any type of work, Additional materials, labor and other accessories if necessary, during construction. (Site need base)	1.00	L.S	-	-
		Sub-Total Amount (Part-1) (In/c VAT & AIT)			
<b>(PART-2): Civil Works-Repair and Maintenance of Two-Story RCC Frame School Building</b>					
1	Picking up of damaged/unserviceable terraced (lime concrete) floor or roof etc. and removal of debris to a safe distance all complete as per direction of the E-I-C.	3 200.00	sft	-	-
2	<b>Patent stone (Rooftop)</b> 38 mm thick artificial patent stone (1:2:4) flooring with cement, best quality coarse sand (50% quantity of Sylhet sanc or coarse sand of equivalent F.M. 2.2 and 50% best quality local sand of FM 1.2) and 12 mm down well graded brick chips including breaking chips, screening, laying the concrete in alternate panels, compacting and finishing the top with neat cement and curing at least for 7 days in all floors including cost of water, electricity and other charges etc. all complete and accepted by the Engineer-in-charge. (Cement: CEM-II/B-M)	3 200.00	sft	-	-
3	<b>Renewing of exterior standard acrylic emulsion paint of approved brand and quality of approved best quality and color having water resisting properties and resistance properties against fungi, fading &amp; flaking delivered from authorized local agent of the manufacturer in a sealed container, applying to exterior surface with surface preparation including cleaning, drying, making free from dirt, grease, wax, removing all chalked and scaled materials, fungus, mending good the surface defects using sand paper and necessary scaffolding, applying exterior sealer of specified brand on prepared surface, then applying necessary exterior putty of specified brand for leveling, spot filling, crack filling and cutting by sand paper/zero water paper, finally applying 2 coats of exterior emulsion paint spreading by brush/roller/spray &amp; necessary scaffolding etc. upto desired finishing, elapsing specified time for drying or recoating, all complete in all floors and accepted by the Engineer-in-charge.</b>	4,475.00	sft	-	-
4	<b>Renewing of interior super premium acrylic emulsion painting (odorless) to walls and ceiling 2 coat (plastic or matt finish) of approved best quality and colour delivered from authorized local agent of the manufacturer in a sealed container, applying to interior wall and ceiling with surface preparation including cleaning drying, making free from dirt, grease, wax, removing all chalked and scaled materials, fungus, mending good the surface defects using sand paper and necessary scaffolding, applying necessary interior sealer or specified brand on prepared surface, then applying necessary interior putty of specified brand for leveling, spot filling, crack filling and cutting by sand paper/zero water paper; finally applying 2 coats of interior emulsion paint spreading by brush/roller/spray &amp; necessary scaffolding etc. upto desired finishing, elapsing specified time for drying or recoating, all complete in all floors and accepted by the Engineer-in-charge.</b>	7,725.00	sft	-	-
5	Stripping of unserviceable plaster including racking out joints, cleaning etc. all complete as per direction of the E-I-C.	750.00	sft	-	-
6	<b>Plaster (12mm)</b> Minimum 12 mm thick cement sand (F.M. 1:2) plaster (1:4) with fresh cement to both inner-and outer surface of wall, finishing the corner and edges including washing of sand, cleaning the surface, curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-II/B-M)	450.00	sft	-	-
7	<b>Wooden frame</b> Supplying and making door and window frames with seasoned wood of required size in/c painting 2 coats of coal tar to the surface in contact with wall, fitted and fixed in position and mending good any damage (All sizes of wood are finished) for all floors etc. all complete as per direction of the E-I-C. Mehagoni wood.Upto Size 0'-2'-5" x 0'-6" (finished)	6.00	cft	-	-

Item No.	Description of Items	Quantity	Unit	Unit Rate (Tk.)	Amount (Tk.)
8	<b>Door shutter(wooden)</b> Supplying, fitting and fixing of 38 mm thick well matured seasoned (moisture content should be between 12% to 16%) solid wood sircle leaf door shutter having stile section 100m x 38mm, top rail section 100mm x 38mm and bottom rail section 225mm x 38mm (made from minirum 250mm wide plank) with 4nos 100mm long, 3mm thick hinge, 12mm dia 250mm long lower bolt, 12mm dia 200mm long socket bolt, 2nos 150mm long handle, hinged cleats and buffer blocks. All complete in all floors and accepted by the Engineer-in-charge. Mehagoni wood	60.75	sft		
9	<b>Wood varnishing (Matt)</b> of approved quality and colour delivered from authorized local agent of the manufacturer in a sealed container using brand specified thinner to door and window frame and shutter in three coats, applied with brush including cleaning oil, grease, dirt, making dry, sand papering, if required washing with weak detergent solution, stripping out the colour straps, finishing the surface, etc. all complete in all floors and accepted by the Engineer-in-charge.	525.00	sft		
10	<b>M.S. door</b> -(Supplying, fitting and fixing M.S. door shutters made with 38 mm x 38 mm x 6 mm angle outer frame, inner member 25 mm x 6 mm F. I. bar, cladding with 16 B/WG M.S. sheet, 04 nos 75 mm long hinge, 02 nos. locking arrangement with 50 mm x 50 mm x 6 mm M.S. angle chowkat including all charges for welding, riveting etc. including cost of supplying all essential fittings like iron hinges, socket bolts, clamps, for fitting and fixing the frame, making necessary holes in brick walls and R.C.C works and fitting with C.C. (1:2:4) and mending good the damages including all cost of carriage, workshop charges, electricity and labour for fittings, fixing, curing etc. all complete and accepted by the Engineer-in-charge.	40.50	sft		
11	<b>Wall tiles</b> Supplying, fitting and fixing glazed wall tiles-complying BDS ISO 13006: 2015, irrespective of color &/or design, with 20mm thick cement mortar (1:3) with Portland Composite cement (CEM II/A,M, 42.5N) and best quality sand (minimum FM1.2) base, raking out the joints and filling with white cement in/c cleaning the existing surface, cutting, shaping and laying the tiles in proper way, level and finishing with care, etc. all complete as per direction of the E-I-C. Glazed wall tiles less than or equivalent to 250mmx330mm.in.size	440.00	sft		
12	<b>Homogeneous floor tiles</b> Supplying, fitting and fixing GP (Homogeneous) glazed homogeneous floor tiles complying BDS ISO 13006: 2015, water absorption $\leq$ 0.5%, modulus of rupture (MOR) $\geq$ 27 N/mm <sup>2</sup> , irrespective of colour or design (country made) on 20mm thick cement mortar (1:4) with Portland Composite cement (CEM II/A,M, 42.5N) and best quality sand (minimum FM1.2) base, raking out the joints and filling with white cement in/c cleaning the existing surface, cutting, shaping and laying the tiles in proper way, level and finishing with care, etc. all complete as per direction of the E-I-C.GP (Homogeneous) 300x300 mm size glazed floor tiles on skirting.	1,025.00	sft		
14	Taking out of old & unserviceable wooden or MS chowkat /door or window frame.All completed as per direction of Engineer-in-charge.	20.00	Each		
16	Supplying, fitting and fixing window grills of any design made with 20 mm x 5 mm F. I. bar @ 100 mm c/c as inner and outer sector, including fabricating, welding, cost of electricity and tools and plants, finished with anti-corrosive painting (Red-Oxide), carriage, cutting grooves, mending good the damages etc. complete for all floors accepted by the Engineer-in-charge. (Total weight per sam should be approx. 11 kg. and add or deduct @ Tk. 100.00 for each kg/sqm excess or less respectively)	426.00	sft		
16	Supplying, fitting and fixing of <b>aluminium sliding window</b> as per the U.S. Architectural Aluminum Manufacturers Association (AAMA) standard specification and BDS 1879:2014 having minimum 1.2 mm thick outer bottom (size 75.50 mm, 32mm,0.605 kg/m), minimum 1.2 mm thick outer top (size 75.50 mm, 2t: 50 mm0.705 kg/m), minimum 1.2 mm thick shutter top (size 33 mm,26.80 mm,0.42 kg/m), minimum 1.2 mm thick shutter bottom (size 60mm, 24.40 mm,0.589 kg/m), minimum 1.2 mm thick outer side (size 75.50 mm, 19.90 mm,0.52 kg/m), minimum 1.2 mm thick shutter lock (size 49.20 mm,25.80 mm,0.543 kg/m) and minimum 1.2 mm thick inter lock (size 34.40 mm, 32.13 mm,0.562 kg/m) sections all aluminium members will be anodized to aluminium bronze/silver/black colour with a coat not less than 15 microns in thickness or powder coated to any colour with a coat not less than 25 microns in thickness and density of 4 mg per square cm etc. including all accessories like sliding door key lock, sliding door wheel, sliding door mohlar, sliding door neoprene, bolts and nuts including sealants, keeping provision for fitting 5 mm thick glass including labour charge for fitting of accessories, making grooves and mending good damages, carriage, and electricity complete in all respect as per drawing and accepted by the Engineer-in-charge.	295.00	sft		
17	Manufacturing, supplying, fitting and fixing <b>M.S. collapsible gate With Shutter</b> of any design and shape made of 20 mm x 20 mm x 3 mm M.S. angle placed @ 112 mm c/c vertically and connecting the same with each other by 20 mm x 3 mm M.S flat bar scissors 525 mm, 600 mm long provided in 3 rows including cutting the different M.S. members to required sizes, fabricating, welding, riveting with required size rivets, providing required size wheels, pulling handles on both sides, suitable locking arrangement, electrodes, grease and finally placing the same in position in between 2 (two) nos. 50 mm x 50 mm x 6 mm M.S. tee rail made by welding 2 nos. 50 mm x 6 mm M.S. flat bar fitted and fixed at top and bottom with R.C.C. lintel/roof slab, floors and side wall with required Nos. 150 mm to 225 mm long 38 mm x 6 mm M.S. flat bar clamps one end welded with the gate member and the other end bifurcated and embedded in C.C. at the respective point including cutting holes and mending good the damages by pouring concrete (1:2:4) into the holes and finishing, etc. complete, painting 2 (two) coats with approved best quality synthetic enamel paint over a coat of anticorrosive painting, both end carriage, including greasing, electrodes, curing etc. complete as per drawing and design and accepted by the Engineer-in-charge.	140.00	sft		
18	Premium <b>synthetic enamel paint</b> of approved best quality and colour delivered from authorized local agent of the manufacturer in a sealed container, having high water resistance, high bondability, flexibility property, using specified brand thinner applying to <b>metallic or wooden surface</b> by brass/roller/spray in two coats over single coat anti-corrosive coating including cleaning, drying, making free from dirt, grease, wax, removing all chalked and scaled materials, all complete in all floors and accepted by the Engineer-in-charge.	565.00	sft		
19	Miscellaneous work: any type of work, Additional materials, labor and other accessories if necessary during construction. (Site need base)	1.00	L.S		
		Sub-Total Amount (Part-2)-(Invc VAT & AIT)			
1	<b>(PART-3)Electrical Maintenance Works</b> <b>CIRCUIT BREAKER (DPMCB: 30 amps-6KA)</b> Supplying, assembling, fitting, fixing & installation (with effctive connection) on a prepared board 250/500volt grade following single/double/triple pole SPMCB/DPMCB/TPMCCB/TPMCCB having minimum breaking capacity 6/10/16KA with thermal over current & instantaneous electromagnetic short circuit release provision. Manufacturer of SPMCB/TPMCCB/TPMCCB (8/10/16 KA) Dorman smith (UK) Germany) MEM (UK), ABB (Italy), Legrand (France), Hager (France)/SIEMENS (USA/Germany) or equivalent approved by the Engineer-in-charge.	6.00	each		

Item No.	Description of Items	Quantity	Unit	Unit Rate (Tk.)	Amount (Tk.)
2	<b>TPMCCB: 63 amps-10KA.</b> Supplying, fitting, fixing & installation (with effective connection) on a prepared board 500 volt grade following triple pole TPMCCB having minimum breaking capacity 6/10/16KA with thermal over current & instantaneous electromagnetic short circuit release provision. Manufacturer of TPMCCB (6/10/16 KA) Dormar s.r.l. (UK Germany) MEM (UK), ABB (Italy), Legrand (France), Hager (France)/SIEMENS (USA/Germany) or equivalent approved by the Engineer-in-charge.	1.00	each		
3	<b>SOCKET OUTLETS: 3-Pin (13 / 15 / 16 / 20 Amps.)</b> Providing & fixing 250 volt single phase 3-pin combined switch socket outlet (surface / Concealed type) Manufactured / Assembled and tested in accordance with IEC / VDE / NEMA / BS / JIS along with relevant BDS IEC standard, mounted on required size 18 SWG galvanized plain sheet board / Plastic Board (Self-extinguishing 650 degree centigrade) of 76.2 mm. (3") depth. (Manufacturer shall have certificate of standard which they follow). Assembled and made in BANGLADESH / CHINA / INDIA / TURKEY / VIETNAM/Brand: SuperStar/Pran-Rfi or equivalent.	22.00	Each		
4	<b>SOCKET OUTLETS: 2-Pin (5- 10 Amps.)</b> Providing & fixing 250 volt single phase 2-pin combined switch socket outlet (surface / Concealed type) Manufactured / Assembled and tested in accordance with IEC / VDE / NEMA / BS / JIS along with relevant BDS IEC standard, mounted on required size 18 SWG galvanized plain sheet board / Plastic Board (Self-extinguishing 650 degree centigrade) of 76.2 mm. (3") depth. (Manufacturer shall have certificate of standard which they follow). Assembled and made in BANGLADESH / CHINA / INDIA / TURKEY / VIETNAM/Brand: SuperStar/Pran-Rfi or equivalent.	13.00	Each		
5	<b>TUBELIGHT FITTINGS WITH STAND:</b> Providing & fixing the 4' x 40' tube light fitting with superior quality electronic driver of one year guarantee, hider, necessary wiring with approved by the Engineer-in-charge (with 2 years warranty). Brand: SuperStar. Light source: 20W LED T-8 tube Material: MS Sheet L- 1235mm, B- 50mm, P-40mm Gloria cat no-GTF (LED) 751 X1 X 20W Energy +EPL-43001 Cosmo Cat No-ACS-335 X1 X 40W Prescent-GTL-S-7X1X40 Watt or equivalent	13.00	each		
6	<b>ELECTRICAL WIRING</b> BYA Cable: Surface channel wiring/concealed Conduit wiring with the following PVC insulated stranded cable (BYA) & green Colored PVC insulated EOC wire (BYA) through PVC Conduit/Channel (RFL,Aziz or equivalent) complete with fixing materials & other accessories as specified, Manufacturer of cable Eastern/BRB or equivalent according to the Specification & direction of the Engineer-in-charge. BRB-BYA-FR 1c-2x1.5 Sq.mm (BYA). Cable (200m) with 1.3 Sq.mm (100m) (BYA) EOC wire through PVC Pipe/Channel of 25 mm Width.	300.00	meter		
7	<b>ELECTRICAL WIRING</b> BYA Cable: Surface channel wiring/concealed Conduit wiring/Circuit Wiring with the following PVC insulated stranded cable (BYA) & green Colored PVC insulated EOC wire (BYA) through PVC Conduit/Channel (RFL,Aziz or equivalent) complete with fixing materials & other accessories as specified, Manufacturer of cable Eastern/BRB or equivalent; according to the Specification & direction of the Engineer-in-charge. BRB-BYA-FR 1C-2x4 sq. mm (BYA) cable with 4 sqmm (BYA) EOC wire through PVC Pipe/Channel of 25 mm Width.	40.00	meter		
8	<b>CELLING FAN</b> Supplying & fixing AC capacitor type ceiling fan (without regulator) of following specifications and sizes complete with minimum 305 mm ( 1 ft) long and C.75 -1.0" dia. 2.3 mm thickness MS pipe down rod, tempered cast aluminum blades, 2.5 uf 400V AC capacitor, canopy, double Z ball bearing, best quality silicon sheet core, best quality copper made super enamel wire, aluminum alloyed casting body metal body having safety pin with powder coated heat / docu paint as required as per BDS 818 etc. connecting PVC wire complete as required. Brand: Click (RFL)/BRB Rated voltage : 230 volts, Rated frequency : 50 Hz, Rated speed : 300 rpm ± 5 % Service value : Minimum 3.5 m3 / min / watt Temperature rise : Maximum 55°C Class of insulation : Minimum E Noise level: Maximum 60 dB at a distance of 1 meter. (1442 mm. (56") Sweeps Input power (Maximum 65 watt). Ebonite Sheet.	12.00	each		
9	<b>Ebonite Sheet.</b> Providing and fixing of 3mm thick ebonite sheet cover including making hole / groove etc. as required.	1.00	Per sqm		
10	<b>CUT-OUT/PYVANO FUSE</b> Supply & fixing 250 volt grade rewirable fuse link Plano Switch Socket cutout (Country made) on prepared board of the following ratings: 6 amp Rating Brand: SuperStar or equivalent.	5.00	each		
11	<b>PVC Electric Pipe Channel/Electric cable casing:</b> (Minimum Width 25 mm & minimum wall thickness 1mm.) Supply & Fixing of following 25 mm Width PVC Electric Pipe Channel/Electric cable casing (best quality PVC Channel of reputed manufacturer like RFL or Equivalent) is installed along walls or ceilings to conceal and safeguard wiring for lighting fixtures, outlets, and switches, etc. with all accessories & fixing materials etc. as required including mending the damages, good. The work shall be carried out as per direction & approval of the Engineer in Charge.	120.00	feet		
12	<b>FLOOD LIGHT FITTINGS (LED-50W):</b> Supply & fixing LED flood light fittings of following specifications: Luminous efficacy: 100 lm/w (minimum). Power Factor: minimum 0.95, Colour Rendering Index(CRI):70-80, Driver: Should be of IEC standard such as MEANWELL/OSRAM/ENERGY +/SIGNIFY(PHILIPS) or equivalent. LED chips EPistar/OSRAM/SIGNIFY(PHILIPS) / CREE / BRIDGELUX or equivalent. Colour temperature : 3500K-6500K (Warm White). Material: Aluminum alloy. Aluminum reflector. Heat proof glass/Polycarbonate. Model & sample to be accepted approved by the Engineer-in-charge (with 2 years warranty). 50 w. Gloria Cat no-GL-FL-914. Energy. Cat no-EPFDL-17001 -(50W), Cosmo Cat no-BDTCCL-LFDL-01, Adex-AD F.L.E 50W630, Asha Cat no PE FLL0005054/50W or equivalent.	1.00	each		

Item No.	Description of items	Quantity	Unit	Unit Rate (Tk.)	Amount (Tk.)
13	<b>SPOT LED LIGHT FITTINGS (18W):</b> Supply & fixing spot LED light fittings of following specifications: Luminous efficacy: For Spot/Bracket LED Light Fittings: 80 lm/W (mm). ii) For Panel/Tube Light Fittings: 100 lm/W (min). Power Factor: minimum 0.95. Colour Rendering Index(Ra : ) i) For Residential building Ra=80) ii) For office and other types of buildings Ra=85) Driver: Should be of TEC standard such as MEANWELL/OSRAM/ENERGY+/SIGNIFY(PHILIPS) or equivalent. LED chips: EPISTAR/OSRAM/SIGNIFY(PHILIPS) / Cree / BRIDGELUX or equivalent. Colour temperature : 3500K-6500K (Warm White). Model & sample to be accepted / approved by the Engineer-in-charge (with 2 years warranty). Round panel (surface type)-18 W, Approximate Dia -218 mm. Material: Alu Alloy, Acrylic/Gloria Cat No-GSDL-E13/Energy Cat No-EPPIX.F.D-2006 Ccsmo Cat. no-BDTCL-SRPL-CO/Dec-AD SDL 830 840/865/Asha Cat no- ACSLPL-145/Mcgaman-MXT1, 1013-Y Walton M.ED-DSP-R-200-UL or equivalent.	15.00	Each	-	-
14	<b>SPST Switch:</b> Supplying, assembling, fitting, fixing & installation (with effective connection) on prepared board 250 volt 6 amp SPST type switch (Click/SuperStar or equivalent brand) mounted on Ebonite sheet board with other accessories as per drawing, specification, & direction of the Engineer-in-charge.	66.00	Each	-	-
15	<b>MDB BOARD:</b> Supplying and fixing of almirah type 18 SWG metal board of depth 228mm (6") duly painted with powder coating with epoxy polyester resin on all surfaces of board (gray off-white) having built in push type / suitable locking arrangement including metal bridges of suitable size for fixing of all electrical control devices complete with suitable anchoring arrangement in wall / column and keeping provision for cable inlets and exits as required (only front surface of the board will be considered for measurement) accepted/approved by the Engineer-in-charge. Normal board (without water tight). Dimension: 2'0" x 1'6"	1.00	Per sqm	-	-
16	<b>GANG TYPE FAN REGULATOR:</b> Supplying, assembling, fitting, fixing & installation of 250 Volt 6 amp Gang type Fan Regulator/Dimer. Assembled and made in BANGLADESH / CHINA / INDIA / TURKEY / VIETNAM	5.00	Each	-	-
17	<b>HEAVY DUTY INDUSTRIAL EXHAUST FAN-16"</b> Supply and installation of wall mounted heavy duty industrial exhaust fan. Type: 230V-240V/400V-415V, 50 Hz, complete with stainless steel blade steel frame, standard wall louver shutter with necessary accessories (specially used for kitchen of hospital, student hostel/hall, Prison, Cell, barrack, large auditorium etc).	3.00	Each	-	-
18	Miscellaneous work, any type of work, Additional materials, labor and other accessories if necessary during construction. (Site need base)	1.00	L.S	-	-
<b>Sub-Total Amount (Part-3)-(In/c VAT &amp; AIT)</b>					
<b>(PART-4): Repair &amp; Maintenance of Sanitary &amp; Water-Supply Works</b>					
1	Supplying, fitting and fixing of country made glazed vitreous <b>W/H wash basin</b> of any color including pedestal. (Approx. 64c x 488 mm, minimum weight 20 kg) including fitting fixing the same in position with heavy type C.I. brackets, 44mm dia PVC waste water pipe with brass coupling (not exceeding 750mm in length), 12mm dia plastic connection pipe with brass coupling, 12mm dia brass stop cock, 12mm dia C.P. pillar cock, 30mm dia C.P. Basin waste with chain plug including making holes in walls and floors and fitting with royal plug, screws and mending good the damages etc. all complete as per direction of the E-I-C. Appliances shall be clearly and indelibly marked at a prominent place. Each product the appliances are installed with the following: a) manufacturer's name and/or registered trademark, b) the number of Bangladesh standard and c) country of origin. Each product shall also be marked with the BSTI Certification Mark. (The sanitary ware shall conform BDS1162:2014.)	3.00	nos.	-	-
2	<b>Glass plate Shelf:</b> Supplying, fitting and fixing of super quality 600 x 125 mm white glass (plate) shelf having 5 mm thickness with fancy C.P. brackets, screws and frames including making holes in walls and mending good the damages with cement mortar. (1:4) etc. all complete approved and accepted by the Engineer-in-charge.	2.00	nos.	-	-
3	<b>Taking out broken Long Pan and including mending the damages good.</b> The work shall be carried out as per direction & approval of the Engineer in-charge. <b>Long Oriental Pan.</b> Supplying, fitting and fixing superior quality Asian Water Closet (Long Oriental Pan) with foot rest or vitreous China and preparing the base of pan with cement concrete (1:2:4) and with wire net or rods including making holes wherever required and mending good the damages. The sanitary ware shall conform BDS1162:2014. Appliances shall be clearly and indelibly marked at a prominent place, visible even after the appliances are installed with the following: a) manufacturer's name and/or registered trademark, b) the number of Bangladesh standard and c) country of origin. Each product shall also be marked with the BSTI Certification Mark. (Approx. 564 X 439 X 249 mm size, minimum 12.5 kg of weight)	3.00	nos.	-	-
4	Supplying, fitting and fixing of <b>plastic low-down</b> (Asian cistern) of any color, on walls or directly over water closet with necessary accessories (C.I. brackets including supplying best quality 40mm dia PVC flush pipe with brass coupling (not exceeding 1.80m in length), 12mm dia plastic connection pipe with brass coupling, 12mm dia brass stop cock, 12mm dia ball cock and pulling chain etc.), making holes wherever required and mending good the damages and fitting, fixing & finishing etc. complete with all necessary fittings and connections approved and accepted by the Engineer-in-charge.	3.00	nos.	-	-
5	<b>Mirror:</b> Supplying, fitting and fixing of 5 mm thick unframed super quality double coated mirror with all necessary fitting including making holes in walls and mending good the damages with cement mortar (1:4) etc. all complete approved and accepted by the Engineer-in-charge. (Local Mirror, 5 mm thickness)(Size: 450mmx350mm.)	2.00	nos.	-	-
6	<b>Toilet paper holder:</b> Supplying, fitting and fixing of best quality toilet paper holder of standard size including making holes in walls and mending good the damages with cement mortar (1:4) etc. all complete approved and accepted by the Engineer-in-charge. (C.P. iron bracket toilet paper holder-Size: 150mmx150mmx126mm)	3.00	nos.	-	-
7	<b>Reverse Osmosis Water Purifier:</b> Supplying, fitting, fixing of foreign made best quality Reverse Osmosis Water Purifier (Kenil/Unilever/Vapor water purifier/Aqua Shine ASRO-501-75 or equivalent brand) for purification of water by reverse osmosis system to have potable water conforming WHO standard and Bangladesh concentration parameters including installation charge, carriage, sundries etc. complete approved and accepted by the Engineer-in-charge. <b>Water purification capacity: 10 L/hr, storage 6 litre; RO+MF, Reserve Tank Capacity: 12 Liter.</b>	1.00	each	-	-
8	<b>Soap Tray:</b> Supplying, fitting and fixing of standard size country made soap tray including making holes in walls and mending good the damages with cement mortar (1:4) etc. all complete approved and accepted by the Engineer-in-charge. (C.P. soap tray)	3.00	nos.	-	-
9	<b>Floor Gratings:</b> Supplying, fitting and fixing 100 mm dia Stainless steel floor Gratings on floor drains with cement mortar (1:4) including making holes in walls or floors and mending good the damages etc. all complete as per direction of the E-I-C	3.00	nos.	-	-
10	Miscellaneous work, any type of work, Additional materials, labor and other accessories if necessary during construction. (Site need base)	1.00	each	-	-
<b>Sub-Total Amount (Part-4)-(In/c VAT &amp; AIT)</b>					
<b>Part 5: Boundary Wall Height Extension with Barbed Wire Installation Work - 240 RFT and 26 Columns (10' x 10')</b>					
1	Dismantling of unserviceable/damaged brick works (with cement or lime mortar) of thickness 125 mm in foundation and superstructure and removal of debris to a safe distance.	75.00	sf	-	-

Item No.	Description of Items	Quantity	Unit	Unit Rate (Tk.)	Amount (Tk.)
2	Earth work in excavation in all kinds of soil for foundation trenches including layout, providing center lines, local bench-mark pillars, levelling, ramming and preparing the base, fixing bamboo spikes and marking layout with chalk powder, providing necessary tools and plants, protecting and maintaining the trench dry etc., stacking, cleaning the excavated earth at a safe distance out of the area enclosed by the layout etc. all complete and accepted by the Engineer-in-charge, subject to submit method statement of carrying out excavation work to the Engineer-in-charge for approval. However, engineer's approval shall not relieve the contractor of his responsibilities and obligations under the contract.	245.00	cft		
3	Sand filling in foundation trenches and plinth with sand having minimum F.M. 0.8 in 150 mm layers including levelling, watering and compaction to achieve minimum dry density of 95% with optimum moisture content (Modified proctor test) by ramming each layer up to finished level as per design supplied by the design office only, all complete and accepted by the Engineer-in-charge.	225.00	cft		
4	Lean / blinding concrete (1:3:6) in foundation or in floor with cement, sand (F.M. 1.2) and picked jama brick chips including breaking of chips, screening, mixing, laying, compacting to required level and curing for at least 7 days including the supply of water, electricity, costs of tools & plants and other charges etc. all complete and accepted by the Engineer-in-charge. (Cement: CEM-I/II-B-M)	20.00	cft		
5	125 mm brick works with first class bricks with cement sand (F.M. 1.2) mortar (1:4) and making bond with connected walls including necessary scaffolding, raking out joints, cleaning and soaking the bricks for at least 24 hours before use and washing of sand, curing at least for 7 days in all floors including cost of water, electricity and other charges etc. all complete and accepted by the Engineer-in-charge. (Cement: CEM-I/II-B-M)	875.00	sft		
6	Brick works with first class bricks with cement sand (F.M. 1.2) mortar (1:4) in exterior walls including filling the interstices with mortar, raking out joints, cleaning and soaking the bricks at least for 24 hours before use and washing of sand, necessary scaffolding, curing at least for 7 days etc. all complete including cost of water, electricity and other charges (measurement to given as 250 mm width for one brick length and 375 mm for one brick and a half brick length) accepted by the Engineer-in-charge. (Cement: CEM-I/II-B-M)	230.00	cft		
7	RCC WORKS: 1:2:4 (measured on gross concrete section); (fc = 19 MPa, minimum fcr = 26 MPa in nominal mix 1:2:4), with brick-chips (Sand of F.M. 1.2 and F.M. 2.2 in equal proportion)-Reinforced cement concrete works with minimum cement content relates to mix ratio 1:2:4 having maximum water cement ratio = 0.45 and minimum fcr = 26 MPa, satisfying a specified compressive strength $f_{ck}$ = 19 MPa at 28 days on standard cylinders as per standard practice of Code AC/IBNBC/ASTM, cement conforming to BDS EN-197-1-CEM-I, 52.5N (52.5 MPa) / ASTM-C 1157 Type - 1, best quality sand [50% quantity of best local sand (F.M. 1.2) and 50% quantity of Sylhet sand or coarse sand of equivalent F.M. 2.2] and 20 mm down well graded picked jama brick chips conforming to ASTM C-33 including conducting necessary tests, breaking chips and screening, making and placing shutter in position maintaining true to plumb, making shutter water-tight properly, placing reinforcement in position, mixing in standard mixer machine with hopper fed by standard measuring boxes, casting in forms, compacting by vibrator machine and curing at least for 28 days, removing centring-shuttering after specified time approved, including cost of water, electricity, other charges etc. all complete, approved and accepted by the Engineer-in-charge.	285.00	cft		
8	FORMWORK (Wooden): Centering and shuttering, including strutting, propping etc. The formwork must be rigid enough both in and out of plane, to make the concrete surface true to the designed shape and size by using necessary etc. and removal of form for: Column, Coping Beam, Grade beam, lintel, Sunshade and other structural component etc.	1,325.00	sft		
9	Supplying, fabrication and fixing to detail as per design: Grade 400 (B400DWR / B420DWR) complying BDS ISO 6935-2:2016 / ASTM A615) ribbed or deformed bar produced and marked including straightening and cleaning rust, if any, bending and binding in position with supply of G.I. wires conducting necessary laboratory tests etc. (excluding splices or laps) complete in all respect and accepted by the Engineer-in-charge (Measurement shall be recorded only on standard mass per unit length of bars, while dia of bars exceeds its standard) according to Bangladesh standard, with minimum yield strength, fy (R <sub>EH</sub> )= 400 MPa but fy not exceeding 480 MPa and whatever is the actual yield strength within allowable limit as per BNBC/ ACI 318, the ratio of ultimate tensile strength fu to yield strength fu, shall be at least 1.25 and minimum elongation after fracture and minimum total elongation at maximum force is 17% and 8% respectively; up to ground floor ribbed or deformed bar reinforcement (excluding laboratory test fees) for Reinforced concrete, produced and marked in accordance with BDS ISO 6935-2:2016 (or standard subsequently released from BSTI)	1,570.00	kg		
10	Minimum 12 mm thick cement sand (F.M. 1.2) plaster (1:4) having with fresh cement to both inner and outer surface of wall, finishing the edges and corners including washing of sand, cleaning the surface, curing at least for 7 days, cost of water, electricity, scaffolding and other charges etc. all complete in all respect as per drawing and accepted by the Engineer-in-charge. (Cement: CEM-I/II-B-M)	1,876.00	sft		
11	Exterior standard acrylic emulsion paint of approved best quality and color having water resisting properties and resistance properties against fungi, fading & flaking delivered from authorized local agent of the manufacturer in a sealed container, applying to exterior surface with surface preparation including cleaning, drying, making free from dirt, grease, wax, removing all chalked and scaled materials, fungus, mending good the surface defects using sand paper and necessary scaffolding; applying necessary exterior sealer of specified brand on prepared surface; then applying necessary exterior putty of specified brand for levelling, spot filling crack filling and cutting by sand paper/zero water paper, finally applying 2 coats of exterior emulsion paint spreading by brush/roller/spray & necessary scaffolding etc. upto desired finishing, elapsing specified time for drying or recoating; all complete in all floors and accepted by the Engineer-in-charge.	2,365.00	sft		
12	Labour for taking out barbed wire fencing. All completed as per direction of Engineer-in-charge.	150.00	ft		
13	Taking out old unserviceable MS Angle etc. All completed as per direction of Engineer-in-charge.	18.00	each		
14	Supplying, fitting and fixing 12 BWG barbed wire (2 ply, 4 points) in fencing work @ 150 mm c/c in both horizontally and vertically, supported by 38 mm x 38 mm x 6 mm M.S. L-shape angle post (300 mm embedded in R.C.C. or in brick work with a cement concrete base of 75 mm x 75 mm x 300 mm) 600 mm vertical and 450 mm inclined or as per requirement @ 2.4 m c/c including straightening, binding the joints with 18 BWG wire, making holes in the angle etc. including supplying all necessary materials complete in all respect and accepted by the Engineer-in-charge.	650.00	sft		
15	Miscellaneous work, any type of work, Additional materials, labor and other accessories if necessary during construction. (Site need base)	1.00	LS		
		Sub-Total Amount (Part-5)-(Inlc Govt VAT & AIT)			
		Grand-Total Amount (Part 1+2+3+4+5)-(Inlc Govt VAT & AIT)			

- \*NOTE:
- Contractors should not be quoted for Miscellaneous items.
  - Contractors are requested to provide rate quotes for each item inclusive of VAT and AIT as per Govt. rules.
  - Items quantity and number of items subject to change based on physical site conditions (as per site need base).
  - The contractor shall perform all standard conventional material tests as directed by the engineer in charge.
  - Contractor bill will be paid as per physical field measurement by MB entry.