



UNITED NATIONS DEVELOPMENT PROGRAMME

ITB: 2015-246

LOT 17

Bill of Quantities

Programme Title: Right to Education in the Gaza Strip
Project name: Rehabilitation Works For Universities

PAL10- 00094739- LOT 17

**Rehabilitation Works of University of Palestine, Gaza University, Al Quds Open University
and Arabic College for science**



UNITED NATIONS DEVELOPMENT PROGRAMME

ITB : 2015-246

WBS 1408

University of Palestine

University of Palestine					
Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
	<p>General Notes:</p> <p>1- Complete detailed shop drawings should be delivered to the Engineer to take his approval prior the commencement of work. Samples of all materials shall also be delivered to the Engineer to take his approval,</p> <p>2-Contractor shall take into consideration that all – direct and indirect works and their relevant expenses required for proper implementation of the project including temporary facilities, fencing, securing utilities (water, wastewater, telephone and electricity systems) as well as making access to project implementation location away from the one in use by the students and teachers such that the school is running safely without disturbance. The contractor will be accountable for all necessary equipment, materials and activities to assure the safety of people within the school buildings and vicinity, where an approved safety plan will be prerequisite to initiating activities along with installing all required components and materials necessary for safety of workers, project team as well as people at school. All relevant costs are deemed to be included in the unit price in addition to the required re-instatement works needed to bring the original facilities to its original status before addition of temporary works.</p> <p>3-The contractor will expect that more than one contractor will be carrying out works in the school at the same time, the Contractor is presumed to make all necessary coordination and facilitate accessibility to and other work-related issues</p> <p>4-All works and installations listed here below should be carried out, tested and commissioned by specialized responsible skilled labors in full coordination with The university , all in accordance with drawings, specifications and relevant standards, and the instruction of the Engineer. The Engineer has the right to reject any component of the work not complying with the specifications and the terms of the contract.</p>				

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
Bill No 1. CARPENTRY WORKS					
	<p>1- The contractor shall submit shop drawings for all items.</p> <p>2- The contractor has to take engineer approval for raw materials for the each item (MDF, Plywood, soft and hard wood, locks, brace hinges, stainless steel grade 304, foam 32kg/m3, high quality textile and all accessories required) before manufacturing.</p> <p>3- All wooden works includes painting with high quality paints.</p> <p>4- Type of cladding works shall be similar to existing cladding.</p> <p>5- Price includes workmanship, transportation and installation.</p> <p>6- The items include supplying carpentry works from good wood grade "A" including frame cover mould, architrave, sanding sealer, prime coats , at least two coats of oil paint, 15cm Aluminum kick plate 1mm thick from both sides , hard ware, lock type Wally switch or equivalent and brass hinges 10cm height, door stopper and all other fitting according to specification and drawing.</p> <p>7- The fixation of cladding will be internal.</p> <p>.Providing samples for approval and all the required tests</p>				
1.1	Complete maintenance for wooden platforms, the price includes replacing any defected parts painting one priming coat and two oil finishing coats, All works according to specifications, approved drawings and engineer ,instructions	Ls	1		
1.2	Supply and install of Drop beam cladding MDF wood, 17mm thick, covered of beech veneer (Zan), stailless steel deviders where required, to match the existing in the conference room, the price includes cornices, decorations, applying one coat of sanding sealer, two coat of anti scratching paint Wenga , and required accessories and materials to complete the job as per specification, drawings and engineer instructions.	M2	65		
1.3	Supply and install cladding for columns of MDF wood, 17mm thick covered of Beech veneer, the price includes fixing on hard wood (Zan), 50*30mm section <u>to match the existing in conference room</u> , Applying one coat of sanding sealer, two coat of anti scratching paint Wenga ,stailless steel deviders where required, all required accessories and materials to complete the jobs as per specification, drawings and engineer instructions..	M2	35		
1.4	Ditto but for windows arch <u>to match the existing in conference room</u> , stailless steel deviders where required, to be installed at a distance of 30 cm from windows.	M2	35		
1.5	Ditto but for walls behind lecture platform <u>to match the existing in conference room</u> .	M2	25		

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
1.6	Supply and install of wooden cladding for control room of wood MDF 17mm covered of beech veneer (Zan), stainless steel dividers where required, and frame Zan (3X5)cm to match the existing in conference room , the price includes opening (100*60 cm) of clear glass 6mm thickness,applying one coat of sanding sealer, two coats of anti scratching paint Wenga according to specification, drawings and engineer instructions.	M2	30		
1.7	Supply, fix & paint flushed wooden door, overall size 110*220*4.5cm thick with decoration, the price includes window double glass 25*40cm to match the existing in Sameer hall, dismantle the existing door including frame, to be delivered to university stores, the works composed with brushed glass 6mm, MDf 17 mm covered with beech veneer both sides as detailed on the drawings and as specified; complete including frames, trims, hardwood lip, hardware locked type Virro switch or equivalent, high quality brass hinges, and door stops. the price includes painting one priming coat and two coats of anti scratching paint Wenga, All works according to specifications, approved drawings and engineer instructions.	NO	2		
1.8	Supply and install of MDF wood for wall cladding, two layers, the first is MDF 16 mm thickness, the second is 17mm thick covered of OAK veneer . The price includes stainless steel dividers where required, painting with one coat of sanding sealer, two coats of anti scratching paint Wenga, accessories and materials to complete the job as per specifications, drawings and engineer instructions.	M2	50		
1.9	Supply and install Zan frame cornice 10cm wide with thickness of 3.75 cm in shapes for gypsum suspended roof, applying one coat of sanding sealer, two coats of approved lazore paint and one coat of luster, all required accessories and materials to complete the jobs as per specification, drawings and engineer instructions.	Mr	45		
1.10	Ditto ,but with width of 5cm.	Mr	35		
Total					

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
Bill No 2. MISCELLANEOUS WORKS					
	<p>All works must be according to drawings, specification and engineer instructions.</p> <p>B- Tiles works</p> <p>All works must be according to drawings, specification and engineer instructions. Rates shall include :</p> <ol style="list-style-type: none"> 1. Samples for approval and all the required tests. 2. Cleaning, mechanical polishing and pointing using grout. 3. Insulation works under ceramic floor tiles for underneath bath rooms and kitchens using primer coat, two hot bitumen coats (75/25) including skirting 20cm height. 4. Plastic angle beads for ceramic wall tiles and Aluminum angle for ceramic of walls at the corners and top and sides of ceramic edges. 5. Measuring the stockpiled quantities of tiles and obtaining the engineer approval prior to shipment to the site. 6. Transporting and carefully handling the stored quantities to the site. 				
2.1	Supply and install travertine marble panels for walls with 2.5cm thick 60 cm height, to match the existing , with slices 7 cm between them, and octangular edges, the price includes preparing the walls, remove paint layers, layer galvanized of wire mesh 2 mm, remove all debris to approved dump site, white cement mortar, decorations and any required accessories to complete the job according to specifications, drawings and engineer instructions.	M2	60		
2.2	Ditto, but with dimensions 60 cm * 106 cm for platform back walls	M2	17		
2.3	Supply and install Decoration Gypsum board ceiling (Suspension system) in different shapes and levels , The price includes hot galvanized metal studs standing frame ,(each 60*60cm for both sides), bolts, screws, hot galvanized supports, "C" section, angles..etc., and putty and two coats of emulsion paints according to specifications, drawings and engineer instructions.	M2	60		
2.4	Supply and install high quality moquette (turkey or equivalent) , for the floors, platform and stairs ,the price includes upper Aluminum angles for upper steps edges 30*30*1.25mm, stainless steel rod 14mm for lower edge, skirting, sticking materials, cleaning and preparation the surface to install the moquette according instructions. installation on wood and tile installation with penile the places of others clad in wood, the price also includes removing of old moquette, cleaning , preparing the surface for installation new layers, according to specifications, drawings and engineer instructions.	M2	180		

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
2.5	<p>Supply , install, test and commission air conditioning Heat Pump Split Unit, composed of out door unit. filled with environment friendly refrigerant such as (R410, R407c,..) and COP not less than 3, Well supported on hot galvanized steel base on the roof, indoor unit with plasma filter as indicated on drawings to be tights installed completed with all necessary supports, hangers, drain pipes from indoor unit to the nearest floor drain, (PVC Ø 1"), cupper pipes , sleeves, thermostat , Remote control and including Isolation Switch MOELLER and all required electrical power cables from SDB to the unit according to drawings and engineers approval.</p> <p>CAPACITY : (36000 BTU/HR)(3 Ton)</p> <p>(Type is ELECTRA or equivalent) . The price include electricity work(preliminary installation, cables, wires, tests..etc..)fixation, repainting in place of demolittion,according to specifications, drawings and engineer instructions.</p>	No	4		
Total					

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
Bill No 3. ELECTRICAL WORKS					
	<p>General:</p> <p>*The items in general shall also include conduits, connection boxes, controls, wires, connectors, clamps, bolts, and connecting the cables to switchboards and common electric network are included in the unit price.</p> <p>* Contractor shall submit shop drawings for all electrical works to be approved by the Engineer before executing the work.</p> <p>* As-built drawings shall be submitted after handing over the work.</p> <p>* All the electrical works shall be executed according to Standards, drawings, specifications and supervisor engineer instructions.</p> <p>* Dismantling & Removing old lighting unit (fluorescent light fixture, glops, Etc) and move to school stores as per engineer instructions.</p> <p>* Lighting swiches will be installed in the control room, and supervisor engineer will select it places and control</p> <p>* All equipment will be installed must have manufacturer guranti not less than 3 years with all certifiacte test.</p> <p>The following items shall include supply, install, connect and commission lighting and power socket outlets, including PVC conduits, conduit fittings, pull boxes, wires, cables, accessories and circuit wiring between fittings, switches or socket outlet up to its sub-panel board. As shown on drawings & specifications.</p>				
LIGHTING SWITCHES AND OUTLETS WORKS					
3.1	<p>Supply, install connect and operate 3W/ 2" Led Spot Light . European made ,Model # LP-COB03For equivalent (Type is LIPER or equivalent).</p> <p>The item includes ballast, wires, PVC pipes ,boxes and all necessary equipments for installation and operation as per drawings, specifications and engineer instructions.</p>	NO	48		
3.2	<p>Supply, install connect and operate 20W/ 6" Circular Led (Spot) DownLight, Suitable to false ceiling and gypsumboard Model # LPDL-20A-Y (Type is LIPER or equivalent).</p> <p>The item includes ballast, wires, PVC pipes ,boxes and all necessary equipments for installation and operation as per drawings, specifications and engineer instructions.</p>	NO	4		
3.3	<p>Supply, install connect and operate Led Strip(tube) Light 230v 60led/m different colours (Type is SIGMA or equivalent), Suitable to false ceiling and gypsumboard (Hidden side).</p> <p>The item includes all necessary equipments for installation and operation as per drawings, specifications and engineer instructions.</p>	L.M	95		

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
3.4	Supply, install connect and operate Fluorescent Light Fixture 2x36W PHILIPS made Model # TMS022 2xTL-D 36W HFS or equivalent, Suitable to false ceiling and gypsumboard (Hidden side). The item includes lamps and starters OSRAM made,Electronic ballast, capacitor and all necessary equipments for installation and operation as per drawings, specifications and engineer instructions.	No	46		
3.5	Supply, install connect and operate Single internal socket outlet 16A, 220v, 2p+E for flush, wall, or surface mounted , complete with PVC conduits, J.bboxes, wiring, and all necessary accessories. (Type is BTICINO MATIX or equivalent).	No.	17		
3.6	Ditto but double internal socket outlets	No.	7		
ELECTRICAL BOARDS WORKS& Cables					
3.7	Supply and install electrical switch board of size 60x40x20cm one door, the frame work is made of galvanized steel sheets 2mm thickness, painted by antistatic and insulation paint.The item includes busbars, wiring, insulations, plastic ducts, terminal blocks and all necessary equipments and civil works for installation and operation as per drawings, specifications and engineer instructions (Type is MOELLER or equivalent)	No	1		
3.8	Supply , install and connect NZMB1 3*63A MOELLER made # NZMB1-63A	No	1		
3.9	Ditto but ,MCB 16A, 6KA	No	4		
3.10	Ditto but ,MCB 10A, 6KA	No	4		
3.11	Ditto but ,MCB 25A, 5KA	No	4		
3.12	Ditto but ,ELCB 4*40A/0.03A	No	1		
3.13	Ditto but ,MCB 3*40A, 10KA	No	1		
	Supply, install and connect of the following cables with all required electrical PVC pipes and civil works to connect cables terminals from source to destination.According to drawings, specifications, instructions, and demands of the supervising engineer. as follow:				
3.14	N2XY-XLPE cable 5*10 mm2	M.R	60		

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
SOUND SYSTEM, CCTV,FIRE ALARM					
3.15	Supply, install , connect, and test digital sound Mixer with internal amplifier (Type is Peavey or Bosch - Mixing amplifier or equivalent) Which has the following specifications <ul style="list-style-type: none"> ▶ At least 32 input channels ▶ Output interface: at least 8 to 12 channels. ▶ Standard connection with external wireless mic. ▶ Standard connection with external speakers. ▶ Power Supply: 220 VAC, 50 Hz. 	No.	1		
3.16	Supply, install and connect ceiling mounted loud speaker not less than 15 inch Diam. with nominal max. power of 64W including all required cables (2,5 mm2) , junction boxes conduits and, metal front protection mesh, clips for quick attachment , line transformer all necessary accessories (Type is Bosch,Cotina or equivalent)	No.	8		
3.17	Supply, install , connect Vocal Microphone Omni-directional, Dynamic Pattern,with high level of sensitivity. (Type is SHURE, BOSCH or equivalent) The item includes standard base controller with stand and cables for amplifier connection with 5-pin DIN connector.	No.	7		
3.18	Supply, install , connect Wireless Vocal Microphone, Omni-directional, Dynamic Pattern,with Internal Battery. (Type is SHURE, BOSCH or equivalent) The item includes: <ul style="list-style-type: none"> - Charger Base with Power Supply: 220 VAC, 50 Hz.. - Battery: 2 Pcs. - standard base controller with stand and cables for amplifier connection with 5-pin DIN connector. 	Unit	3		
3.19	Supply, install and connect PVC pipes and boxes for CCTV SYSTEM Networks in the Hall The item includes all necessary electrical and civil works and equipments for installation and operation as per drawings, specifications and engineer instructions.	L.S	1		

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
3.20	<p>Supply, install and commission of LCD Projector Epson EX3212 SVGA 3LCD Projector .</p> <p>Projection System: Epson 3LCD, 3-chip technology</p> <p>Projection Method: Front / rear / ceiling mount</p> <p>Driving Method: Epson Poly-silicon TFT Active Matrix</p> <p>Pixel Number: 480,000 dots (800 x 600) x 3</p> <p>Color Brightness (Color Light Output): 2800 lumens1</p> <p>White Brightness (White Light Output): 2800 lumens1</p> <p>Aspect Ratio: 4:3</p> <p>Native Resolution: 800 x 600 (SVGA)</p> <p>Resize: 640 x 480 (VGA), 1024 x 768 (XGA), 1152 x 864 (SXGA), 1280 x 800 (WXGA), 1400 x 1050 (SXGA+)</p> <p>Lamp Type: E-TORL™ 200 W UHE</p> <p>Lamp Life:</p> <ul style="list-style-type: none"> • ECO mode: Up to 5000 hours2 • Normal mode: Up to 4000 hours2 <p>Throw Ratio Range: 1.45 – 1.96</p> <p>Size (projected distance): 30" – 350" (2.9 ft – 34.2 ft)</p> <p>Keystone Correction:</p> <ul style="list-style-type: none"> • Automatic: Vertical: ±30 degrees • Manual: Horizontal: ±30 degrees <p>USB Plug 'n Play:</p> <ul style="list-style-type: none"> • Projects audio and video • PC and Mac compatible <p>Contrast Ratio: Up to 3000:1</p> <p>Color Reproduction: 16.77 million colors</p> <p>Projection Lens</p> <p>Type: Digital zoom / Manual focus</p> <p>F-number: 1.44</p> <p>Focal Length: 16.7 mm</p> <p>Zoom Ratio: Digital zoom 1.0 – 1.35</p> <p>The item includes the following:</p> <p>Lamp spare</p> <p>display screen wall size 120 cm × 220 cm</p> <p>Animated stand to install Projector LCD, complete with all necessary conduits , cables, outlets connections and accessories, according to specifications, catalogues and engineer instructions.(Type is EPSON EX3212 SVGA or (equivalent</p>	No	1		
Total					

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
Bill No 4. FURNITURE WORKS					
	<u>General:</u> 1- The contractor shall submit shop drawings for all items. 2- The contractor has to take engineer approval for raw materials for the each item (MDF, Plywood, soft and hard wood, locks, brace hinges, stainless steel grade 304, foam 32kg/m3, high quality textile and all accessories required) before manufacturing. 3- The contract shall provide sample after manufacturing for submission. 4- All furniture works includes painting with high quality furniture paints. 5- All steel furniture shall be oven painted. 6- Price includes workmanship, transportation and installation. 7- All used textile, leather, moquette and carpets must be of brand name.				
4.1	Supply and install conference chair of coated chrome profile (high quality) , the price includes back and base of plywood (17mm), high density foam 32kg/m3, 10cm for base and 6cm for back, covered with high quality (Class A) natural leather, and all accessories and materials required to complete the job according to specification, drawings and engineer instructions.	No.	70		
4.2	Supply and install Couple chair type Dim. (1.3m*0.45m*0.83m) with metal Profile 40mm*20mm*3mm thick Columns, 20mm*20mm*3mm thick for horizontal connection painted with thermal black color, 17mm MDF thick covered with colored OAK veneer, and painted with one coat of sanding sealer, two coat of approved anti scratching paint Wenga, as required by engineer, fixation of chair with 7cm black screws , the price includes any required accessories and materials to complete the job as per drawings, specifications and engineer instructions.	No.	30		
4.3	Supply and install table(1person)as drawings, 75*45*88cm of plywood, 17mm thick covered with colored Zan veneer to match the existing, the price includes hardwood (Zan)frame for edges (3*3cm), the metal frame of steel profile 30*40*3 mm, smooth chamfered edges, painting with one coat of primer, undercoat and at least two coats of anti scratching paint Wenga , with openings 6cm diameter for microphone, and with plastic cover for opening, and all accessories and materials required to complete the job according to drawings, specification, and engineer instructions.	No.	1		
4.4	Ditto but for 3 persons 2.25m*0.45m*0.88m.	No.	1		

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
4.5	Supply and install Platform speech of MDF 17mm thick covered with beech veneer (Zan), hard wood (Zan) supports 4mm thick, the price includes hardwood (Zan) frame for edges (2.5*2.5cm), with openings 6cm diameter for microphone, and with plastic cover for opening with decoration as shown in drawings, the price include painting with one coat of primer, undercoat and at least two coats of anti scratching paint Wenga , and any accessories and materials to complete the job as per specifications, drawings and engineer instructions.	No.	1		
4.6	Supply and install table, 60*45*88cm of plywood, 17mm thick covered with Zan veneer to match the existing, the price includes hardwood (Zan) frame for edges (2.5cm*2.5cm),with openings for cables, the metal frame of steel profile 30*40*3 mm, smooth chamfered edges, painting with one coat of primer, undercoat and at least two coats of undercoat and at least two coats of anti scratching paint Wenga and all accessories and materials required to complete the job according to drawings, specification, and engineer instructions.	Mr	7		
Total					

DESCRIPTION	Total Amount \$
1. CARPENTRY WORKS	
2. MISCELLANEOUS WORKS	
3.ELECTRICAL WORKS	
4. FURNITURE WORKS	
SUBTOTAL (\$)	



UNITED NATIONS DEVELOPMENT PROGRAMME

ITB : 2015-246

WBS 1410

Gaza university

Gaza University					
Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
General Notes:					
	<p>1- Complete detailed shop drawings should be delivered to the Engineer to take his approval prior the commencement of work. Samples of all materials shall also be delivered to the Engineer to take his approval,</p> <p>2-Contractor shall take into consideration that all – direct and indirect works and their relevant expenses required for proper implementation of the project including temporary facilities, fencing, securing utilities (water, wastewater, telephone and electricity systems) as well as making access to project implementation location away from the one in use by the students and teachers such that the university is running safely without disturbance.</p> <p>3-The contractor will be accountable for all necessary equipment, materials and activities to assure the safety of people within the university buildings and vicinity, where an approved safety plan will be prerequisite to initiating activities along with installing all required components and materials necessary for safety of workers, project team as well as people at university.</p> <p>4-All relevant costs are deemed to be included in the unit price in addition to the required re-instatement works needed to bring the original facilities to its original status before addition of temporary works.</p> <p>5-The contractor will expect that more than one contractor will be carrying out works in the university at the same time, the Contractor is presumed to make all necessary coordination and facilitate accessibility to and other work-related issues</p> <p>6-All works and installations listed here below should be carried out, tested and commissioned by specialized responsible skilled labors in full coordination with university engineering office , all in accordance with drawings, specifications and relevant standards, and the instruction of the Engineer.</p> <p>7- All unite price for each Item includes remove any surplus materials and any debris for any floor safely according to specifications and/or engineer's instructions</p> <p>9- The contractor should prepare and submit detailed work plan in coordination with University.</p> <p>8-The Engineer has the right to reject any component of the work not complying with the specifications and the terms of the contract.</p>				

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
Bill No 1. Demolition Works					
	<p>1-Contractor shall take into consideration that all – direct and indirect works and expenses required for the completion of the coming items are included in the unit price. Measurement is engineering measurement.</p> <p>2-All works must be according to drawings, specification and engineer instructions. Rates shall include :</p> <p>3-Cleaning the site and removing all debris, surplus unwanted materials and rubbles to approved dump site.</p> <p>4- Price include all required tests by an approved laboratory for the defected & damaged concrete element specified by the engineer.</p> <p>5- The price includes detailed Method of statement including safety plan and in coordination with the University.</p>				
1.1	Demolish safely and remove the existing damaged walls .The price includes removal of ground beams, foundation and all debris inside and out side the university to approved dumpsite according to specifications and engineers instructions.	L.S	1		
1.2	Excavation from natural ground level in any type of soil to the required designed level. The price includes compaction of the subgrade soil to get (98% MDD). The excavated unwanted material should be removed out from the site to the approved places. The excavated selected material should be properly stored in the vicinity of site for reuse in backfilling. All to be executed as per specifications, drawings and the engineer's instructions.	M3	50		
1.3	Backfilling with selected materials from excavation around foundations & any other element up to ground slab level in layers not more than 25cm thick for each layer with compaction to 98% of MDD. The works including compacting the design soil surfaces to get (98% MDD).	M3	50		
Total					

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
Bill No 2. CONCRETE WORK					
	<p>Rates of Concrete Works shall include:-</p> <ol style="list-style-type: none"> 1. All form works and shuttering (new lumber for shuttering painted by special oil (fuel or burnt oil is not accepted) in any form, shape and size . Making chamfered and curved edges, allowing for and making grooves and sleeves and using Tie Rods (Batant) for concrete walls ; removal of forms and cleaning of all exposed tie wires and rods. Steel forms must be used in shuttering the external decorations. 2. Supplying, Casting, vibrating and curing as per specifications. 3. Approved additives and admixtures. 4. Developing new Concrete Job Mix Designs, Sampling , testing and providing test results certificates, storing and saving of samples. 5. Painting of exposed surfaces of underground reinforced concrete elements with two coats of hot bituminous paint (75/25) after primer layer , the strokes of each layer to be opposite to each other. 6. Preliminary installations for Electrical, plumbing and floor drainage in floor slabs including final floor slab. 7. Compaction and testing under the foundation, ground beams, ground slabs and Apron. the compaction should not be less than 98% of MDD. 8. All works according to specifications , drawings and supervisor engineer instructions 9. Supply, fabricate and fix reinforcement steel (fy= 410 N/mm²) for all the structural elements according to drawings and engineer's instructions for any grade, size and length as detailed in the drawings, storing on site including cutting, bending and fixing in position and providing all tying wires, spacers, shop drawings, testing and bar bending schedules .All works according to specifications , drawings and supervisor engineer instructions 10. In rehabilitation works, supply fabricate and fix steel dowels to the existing concrete using special materials. In case of lapping with existing steel reinforcement, rates will include cleaning rust and treatment with special materials 11. In case after excavation the new columns locations and relevant footings coincide with the existing ones, the contractor will make modification to adapt implementation to the existing conditions and deemed to include in his rates relevant costs accordingly. 12. The works shall include removal of any existing insulation sheets, foam concrete, development of columns steel with the existing by using epoxy material , rates will include cleaning rust, treatment with special materials, the insulation shall be reinstated around the new constructed part. 				

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
	<p>13. The unit price includes demolish and removal of any required elements to complete the work according to the new design.</p> <p>14. All rehabilitation works will include the necessary extra steel reinforcement and concrete to be applied in layers if necessary in addition to the necessary special materials and accessories.</p> <p>15-The price include all safety measures, scaffolding and all required by the engineer</p>				
2.1	Supply and cast ready mix plain concrete B (200) kg/cm2 for Blinding beds 5 cm thick including polythene sheets, the price include excavation to the design level , backfilling with approved selected material,compaction and testing as per specifications and drawings.	M3	2		
2.2	Supply and cast ready mix reinforced concrete B (250) kg/cm2 for foundations (isolated, strip footing, strap & inverted T sec.) , the price include excavation to the design level , backfilling with approved selected material,compaction and testing, as per specifications and drawings.	M3	3		
2.3	Ditto but for ground beams including ground beam for the platform.	M3	7		
2.4	Supply and cast ready mix reinforced concrete B300 for Retaining walls and foundation , including reinforcement steel and shuttering, insulation, batant, construction joint, kalkal, sika flex, cleaning and treatment of existing steel bars according to Drawings, Specifications and instructions of the Engineer.	M3	16		
2.5	Supply and cast ready mix reinforced concrete B (300) kg/cm2 for columns as per specifications and drawings.	M3	4		
2.6	Supply and cast ready mix reinforced concrete B (250) kg/cm2 for top beam as per specifications and drawings.	M3	4		
Total					

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
Bill No 3. Building Works					
	<p>The price include:</p> <p>1- Supplying hollow or solid cement block from good and approved factory in perfect dimension and build it in good manner with a compressive strength 35 kg/cm² for hollow block and 60 kg/cm² for solid block. This item will include cement mortars, galvanized steel ties, reinforced concrete infill (B250) between columns & block walls (10-20 cm wide) and top, bottom lintels, sills for windows, doors and decorative arches with 1Ø8mm/40cm horizontally and 2Ø8mm vertically according to drawings, pipes encasement, false columns 20x20 cm/4.0m among the parapet wall with 4Ø12mm and bituminous paper between block work and drop beams and testing as well as all requirements needed to finish the works according to the drawings, specification and to the supervision engineer instructions.</p> <p>2- The unit price includes dismantle any required works and deliver to university stores and demolish any required works and remove all debris safely to approved dump site.</p> <p>3-The price includes expansion joints including polystyrene sheets, filling with flexible rubbing material (Sikaflex or equivalent) and fix coloured aluminium sheets 2mm thickness.</p>				
3.1	Supply and build hollow cement blocks 40x20x20cm	M2	200		
Total					

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
Bill No 4. FINISHING works					
	A- Plaster works All works must be according to drawings, specification and engineer instructions. Rates shall include : 1-Supply of all needed materials, including galvanized angles for the corners, windows and external decoration as well as the use of galvanized wire mesh between concrete and block work. 2-Preparation works by covering all conduits of electricity, water supplies , etc., with a galvanized wire mesh at least 20cm width coated by mortar (1:1) cement : sand and the work includes removal of wires and nails and cleaning of surfaces to be ready for plastering. 3- Contractor shall take into consideration that all – direct and indirect works and expenses required for the completion of the coming items are included in the unit price 4-Trimming of concrete chippings, removing the wires and etc. and cleaning of existing surfaces to be ready for plastering. 5- Checking out all of the preliminary installation in ceilings and walls such as electrical, water supply and waste water pipes and repairing the damages if any. 6- Curing with water for at least three days for each coat. This should be done prior to commencement of plastering and after obtaining a written approval from the supervision engineer. 7- The unit price includes scaffolding, removal all Tyrolean existing finish layer, maintenance all existing plaster after removal specified area, repairing cracks, preparing the surface to install the new layer, covering the windows by polytherene sheets, dismantle, refix and commission air conditioners, pipes, advertisement panels and any other required works to complete the job according to specifications, and engineer instruction. 8-The unit price includes removal of damaged or burnet plaster by sand gun, haking deteriorated loose plaster layers and remove all debris to approved dump site 9- The unit price includes maintenance for block works and any defected ribs (slab blocks) .				
	B- Tiles works All works must be according to drawings, specification and engineer instructions. Rates shall include : 1. Samples for approval and all the required tests. 2. Cleaning, mechanical polishing and pointing using grout. 3.Insulation works under ceramic floor tiles for all wet areas and kitchens using primer coat, two hot bitumen coats (75/25) 4. Plastic angle beads for ceramic wall tiles at the corners and top and sides of ceramic edges.				

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
	5. Local marble must be Grade (A), free from cracks, holes and pits, clay flaws, homogeneous in color, and approved by the Engineer. 6. Measuring the stockpiled quantities of tiles and obtaining the engineer approval prior to shipment to the site. 7. Transporting and carefully handling the stored quantities to the site. 8. Black Basalt mixed with white marble chips, size 4mm, shall be used in precast terrazzo tiles and skirting. Price of tiles shall include all tests required as directed by the Engineer. 9. Only grade A imported glazed ceramic tiles (floor and wall) shall be used, and approved by the Engineer . 10. Price shall include Skirting, polish, and remove existing				
4.1	Supply and make external plastering 20mm thick to walls with four faces : the first is the rough nail rendering (mix 1:1) cement sand; the second is 5mm thick mortar (mix 1: 2) cement: sand, the third is the undercoat 13mm (mix 1: 3 :0.25) cement:sand:lime, the forth is two coats of Tyrolean finish (mix 1: 3) white cement to fine aggregate (Quartz) and all is according to specifications , drawings and supervisor engineer's instructions	M2	350		
4.2	Supply and make external plastering 20mm thick to walls with four faces : the first is the rough nail rendering (mix 1:1) cement sand; the second is 5mm thick mortar (mix 1: 2) cement: sand, the third is the undercoat 13mm (mix 1: 3 :0.25) cement:sand:lime, the forth is marmarina finish and all is according to specifications , drawings and supervisor engineer's instructions	M2	25		
4.3	Marmarina finish for elevations, edges and anywhere else with color painting and all required works the price includes Scaffolding, removing the destroyed (old) coats, maintenance of the damaged plaster and preparing the walls for new coats according to specification and engineer's instructions.	M2	150		
4.4	Ditto but for granulite maintenance for ramps and elevations or stairs the price includes Scaffolding, removing the destroyed (old) coats, maintenance of the damaged plaster and preparing the walls for new coats according to specification and engineer's instructions.	M2	150		
4.5	Supply & paint two coats of internal water proof colored emulsion paint (Supercryle) .The works include removing the old paint and plaster repairing, testing, treatment of cracks including cleaning, rubbing, open, filling with Sikaflex, closing openings, repairing damaged plaster up to 20x20cm and cleaning the surface as specification and drawings.	M2	1000		

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
4.6	Supply and paint the internal walls with two coats of putty, one undercoat primer and two coats of colored oil paint . The price includes removing old paints by fire, plaster repairing, testing, Treatment of cracks including cleaning, rubbing, open, filling with Sikaflex, closing openings, repairing damaged plaster up to 20x20cm and cleaning the surface as specification and engineer instructions.	M2	1000		
4.7	Supply & install Nirro Africa granite (Oriz) steps for external staircase 300mm wide× 40 mm thick polished and chamfered laid on 20mm thick mortar including stair risers 150mm high ×20mm thick, stair skirting 170mm high ×20mm thick on both sides.	MR	27		
4.8	Supply & install local marble (khalily) size 30mm thickness for windows sills laid on 25mm mortar bed.	M2	20		
4.9	Maintenance of the existing nature stone elevations , the price includes scaffolding, replacement of any defected stone, concrete between block and stone, reinforcement steel 1T6 /20cm in both directions, decorative stone around windows, stainless steel anchor, shuttering, mortar, cleaning with sand gun, testing, pointing with white cement and special sand mortar (1:1) with all additives, painting with special materials to prevent water leakage covering the windows by polytherene sheets, dismantle, refix, commission air conditioners, protection steel for windows pipes, advertisement panels. the price also includes supply & install B350 concrete to make complete maintenance for the damaged concrete elements, special epoxy to make bond between old & new concrete, additional steel, shuttering and all required work to complete work according to supervisor engineer's instructions.	M2	500		
4.10	Supply and paint one primer coat & two coats of oil paint for protection steel, the price includes removing of the old painting, skirting, anti rust treatment, all according to the drawings, specification and engineer's instructions	M2	100		
Total					

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
Bill No 5. EQUIPMENT & FURNITURE					
	<p>1- All works and installations listed here below should be carried out, tested and commissioned by specialized responsible contractor by coordination with the university, all specifications and relevant standards, and the instruction of the Supervisor Engineer. The Engineer has the right to reject any component of the work not complying with the specifications and the requirement of the contract.</p> <p>2- All equipment will be installed must have manufacture guarantee not less than 3 years with all certificate test.</p> <p>3- The contractor should provide 3 types (catalogues) to get the approval before supplying</p>				
5.1	<p>Supply, install, commission of PC Dell or equivalent with the following specifications: Processor: LGA775, Intel® Core i7. Motherboard: Intel® Desktop Board DG31PR, Intel® G31 Express Chipset that supports: Memory Two 240-pin DDR2 SDRAM Dual Inline Memory Module (DIMM) sockets. Support for DDR3 800 MHz. Support for up to 4 GB of system memory. Audio: Intel® High Definition Audio subsystem in the follow configuration: 6-channel (5.1) audio subsystem using the Realtek* AL C888 audio codec. Video Intel® ATI external (Nuivada 240) Graphics Media Accelerator 3100 graphics subsystem. I/O control legacy I/O controller for diskette drive, serial header, and PS/2* ports.</p> <p>Network Cord Gigabit (10/100/1000)Mbits/sec) RAM: 8 GB, DDR3, 800MHz. Hard Disk: 500 GB (SATA) 7200rpm Optical Device: CD-ROM DVD R/W Keyboard: Microsoft Internet Pro Keyboard Arabic/English. Mousse: Microsoft Optical Mouse (USB) with PS2 convertor. Case: P4, /SP MASS Case with 2 Front Panel audio con, 2 front Panel USM Connectors. And all required accessories and materials to complete the job as per specifications, drawings and engineer instructions.</p>	No.	40		
5.2	Supply, install, commission of LCD monitor 20" for PC (LG or equivalent) complete with all necessary conduites , cables, outlets connetions and accessories, according to specifications,catalogues and engineer instructions.	No.	40		
5.3	Supply, install, connect and commission on line UPS 1kVA(1ph/1ph) with batteries ,230 V, sine wave output, complete with all necessary protections , indicators and accessories, the maintenance one year should be started after the devices guarantee (Type is APC 650 Smart or equivalent). All required accessories and materials to complete the job as per specifications, drawings and engineer instructions.	No.	40		

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
5.4	Supply, install,connect & commission monitoring Camera No. 2 (DVR+H.D.D500 +CapleDISPLAY19”)High Resolution (H 246,Full 960-D1) DVR 16CH, USB Backup up to 18 cameras, Hard disk 500G, remote control, network Entrance IP, Control Program CD, Video outlet, VGA, support Mobile System, CIF, HD1, D1, HDM1, Embedded linux- HUNDAI , the price includes fixation, connecting,cables,commission, and all required materials to complete the job and operate the system according to specifications and engineer instructions.	LS	1		
5.5	Supply video Camera Panasonic or equivalent (P2 Handheld Camcorder/AG-HP*250P) + Tripod-Manfrotto 504HD or 502, -1/3" with Carrying Bag -Type 2.2 Mp 3MOS Imager -Integrated 22x (28-616mm Equiv) Lens -10-Bit AVC-Intra Recording at 100 Mb/s -DVCPRO HD & SD Recording The item includes one extra backup battery and Cam Carrying Bag .All must be according to specifications and engineer instructions.	No.	1		
5.6	Kaspersky Endpoint Security for Business, "SELECT" (SKU: KL4863IA*FS) valid for one year, offer for max 100 clients contain: • Kaspersky End point Security for Workstations • Kaspersky End point Security for Smartphone • Kaspersky End point Security for file servers • Kaspersky End point Security for laptops	LS	1		
5.7	Supply & install Printer HP LASERJET PRO 400 M401 SERIES (M401dn) or equivalent, direct USB port, wireless connectivity, and remote printing features.All must be according to specifications and engineer instructions.	No.	1		

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
5.8	<p>Supply, install and commission of LCD Projector Epson EX3212 SVGA 3LCD Projector .</p> <p>Projection System: Epson 3LCD, 3-chip technology</p> <p>Projection Method: Front / rear / ceiling mount</p> <p>Driving Method: Epson Poly-silicon TFT Active Matrix</p> <p>Pixel Number: 480,000 dots (800 x 600) x 3</p> <p>Color Brightness (Color Light Output): 2800 lumens1</p> <p>White Brightness (White Light Output): 2800 lumens1</p> <p>Aspect Ratio: 4:3</p> <p>Native Resolution: 800 x 600 (SVGA)</p> <p>Resize: 640 x 480 (VGA), 1024 x 768 (XGA), 1152 x 864 (SXGA), 1280 x 800 (WXGA), 1400 x 1050 (SXGA+)</p> <p>Lamp Type: E-TORL™ 200 W UHE</p> <p>Lamp Life:</p> <ul style="list-style-type: none">• ECO mode: Up to 5000 hours2• Normal mode: Up to 4000 hours2 <p>Throw Ratio Range: 1.45 – 1.96</p> <p>Size (projected distance): 30" – 350" (2.9 ft – 34.2 ft)</p> <p>Keystone Correction:</p> <ul style="list-style-type: none">• Automatic: Vertical: ±30 degrees• Manual: Horizontal: ±30 degrees <p>USB Plug 'n Play:</p> <ul style="list-style-type: none">• Projects audio and video• PC and Mac compatible <p>Contrast Ratio: Up to 3000:1</p> <p>Color Reproduction: 16.77 million colors</p> <p>Projection Lens</p> <p>Type: Digital zoom / Manual focus</p> <p>F-number: 1.44</p> <p>Focal Length: 16.7 mm</p> <p>Zoom Ratio: Digital zoom 1.0 – 1.35</p>	No	1		
5.9	<p>Supply, install and connect IDF/MDF Rack : - 10U Rack , wih removable sides including the following :</p> <ul style="list-style-type: none">- 2 fan, rack mounted power distributer- 2 panels of 24 port patch panel with female RJ45 cat 6 connector type 3M original.- 2 switch 24 port Cisco WS-C2960S-24TS-S switch , with Lan Base Image including 48 x patch cable 30cm cat 6 original .- 1x UPS 650 va APC Smart rackmount, cat 6 FTP cable from the main rack to the new rack at the roof .	No	1		

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
5.10	<p>Supply, install and operate switchboard MOELLER type, size of 25x40x60, the item includes busbars, wiring, insulations, plastic ducts, terminal blocks and all necessary equipments for installation and operation as per drawings, specifications and engineer instructions and including the following equipments:</p> <p>MCB 3*50A MOELLER made # FAZ-C50/3 (Qt:1) ELCB 4*40A MOELLER made # FIM-40/4/0.03-A (Qt:1) MCB 1*10A MOELLER made # FAZ-C10/1 (Qt:2) MCB 1*16A MOELLER made # FAZ-C16/1 (Qt:22)</p>	No.	1		
5.11	<p>Supply and install of computer desk of plywood 17mm thick, (78*50*75cm) dimensions, covered of thick formica for all sides with round edges, to match the existing, the price includes edge frame of hard wood (Zan), sliding shelves for mouse and keyboard, case cabinet, electrical socket (Type is GEWISS or equivalent), RG45 socket, holes for wires, plastic caps and all required accessories and materials (including wires) to complete the job as per specifications, drawings and engineer instructions.</p>	No	40		
5.12	<p>Supply and install Diana chair type with stainless steel 1.25mm thick frame, 12mm plywood base, high density foam 32kg/m3 covered with high quality leather (Class A), to match the existing, the price includes any required accessories and materials to complete the job as per drawings, specifications and engineer instructions.</p>	No.	40		
5.13	<p>Supply and install wooden counter between the two sides of computer desks, for electrical installation, 2.3 *0.25* 0.9 m of plywood 17mm thick, covered of thick formica for all sides, the price includes edge frame of hard wood (Zan), all required accessories and materials (Including wires) to complete the job as per specifications, drawings and engineer instructions.</p>	No.	3		
5.14	<p>Supply , install, test and commission air conditioning Heat Pump Split Unit, composed of out door unit. filled with environment friendly refrigerant such as (R410, R407c,..) and COP not less than 3, Well supported on hot galvanized steel base on the roof, indoor unit with plasma filter as indicated on drawings to be tights installed completed with all necessary supports, hangers, drain pipes from indoor unit to the nearest floor drain, (PVC Ø 1"), cupper pipes , sleeves, thermostat , Remote control and including Isolation Switch MOELLER and all required electrical power cables from SDB to the unit according to drawings and engineers approval. CAPACITY : (36000 BTU/HR)(3 Ton) (Type is ELECTRA or equivalent) .</p>	No.	1		

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
5.15	Supply and install high quality moquette 6 mm thick, 1.8kg/m2 (Super lugo or equivalent), the price includes removal of old moquette and handling to the university upper Aluminum angles for upper steps edges 30*30*1.25mm, stainless steel rod 14mm for lower edge, skirting, sticking materials, cleaning and preparation the surface to install the moquette according to specifications and engineer instructions.	M2	50		
5.16	Supply and install of high quality Blackout curtains (colored cloth) on original rail, Turkish or equivalent height 270 cm the price includes galvanized corrugated steel pipes 1" diam. and 1 mm thick. , covered with colored plc. coater, rings of copp loops. 6 loops/meter, tiebacks of the same type of the curtains' fabric and all accessories and materials required to complete the job according to specification, and engineer instructions. Note: Measurement per pipe length.	MR	10		
Total					

DESCRIPTION	TOTAL AMOUNT \$
1. DEMOLISH WORKS	
2. CONCRETE WORKS	
3. BUILDING WORKS	
4. FINISHING WORKS	
5.FURNITURE & EQUIPMENTS	
SUBTOTAL (\$)	



UNITED NATIONS DEVELOPMENT PROGRAMME

ITB : 2015-246

WBS 1407

Al Quds university

Al Quds Open University					
Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
	<p>General Notes:</p> <p>1- Complete detailed shop drawings should be delivered to the Engineer to take his approval prior the commencement of work. Samples of all materials shall also be delivered to the Engineer to take his approval,</p> <p>2-Contractor shall take into consideration that all – direct and indirect works and their relevant expenses required for proper implementation of the project including temporary facilities, fencing, securing utilities (water, wastewater, telephone and electricity systems) as well as making access to project implementation location away from the one in use by the students and teachers such that the school is running safely without disturbance. The contractor will be accountable for all necessary equipment, materials and activities to assure the safety of people within the school buildings and vicinity, where an approved safety plan will be prerequisite to initiating activities along with installing all required components and materials necessary for safety of workers, project team as well as people at school. All relevant costs are deemed to be included in the unit price in addition to the required re-instatement works needed to bring the original facilities to its original status before addition of temporary works.</p> <p>3-The contractor will expect that more than one contractor will be carrying out works in the school at the same time, the Contractor is presumed to make all necessary coordination and facilitate accessibility to and other work-related issues</p> <p>4-All works and installations listed here below should be carried out, tested and commissioned by specialized responsible skilled labours in full coordination with The university , all in accordance with drawings, specifications and relevant standards, and the instruction of the Engineer. The Engineer has the right to reject any component of the work not complying with the specifications and the terms of the contract.</p>				

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
Bill No 1. FINISHING works					
	A- Tiles works All works must be according to drawings, specification and engineer instructions. Rates shall include : 1. Samples for approval and all the required tests. 2. Cleaning, mechanical polishing and pointing using grout. 3. Insulation works under ceramic floor tiles for underneath bath rooms and kitchens using primer coat, two hot bitumen coats (75/25) including skirting 20cm height. 4. Plastic angle beads for ceramic wall tiles and Aluminum angle for ceramic of walls at the corners and top and sides of ceramic edges. 5. Measuring the stockpiled quantities of tiles and obtaining the engineer approval prior to shipment to the . 6. Transporting and carefully handling the stored quantities 7. Repairing the existing cracks and fill it using Sika flex. 8. The contractor shall take approval for any required materials before implementation.				
1.1	Supply and fix color glazed ceramic wall tiles(grade A) (natural stone Shape), Spanish made or equivalent, size 30x60x0.80cm for the elevations. The price includes removal of the existing paints and plaster by sand gun, lime free key nail and pointing using special pre-mixed grout, scaffolding , covering the windows by polyethylene sheets, dismantle, refix and commission air conditioners, pipes, advertisement panels and any other required works to complete the job as specifications and supervisor engineer instructions.	M2	550.00		
1.2	Supply and install colored (Stone Finish) for external elevations . The price includes scaffolding, removal all Tyrolean finish layer, maintenance all existing plaster after removal Tyrolean layer, reaping cracks, preparing the surface to install the new layer, covering the windows by polyethylene sheets, dismantle, refix and commission air conditioners, pipes, advertisement panels and any other required works to complete the job according to specifications, and engineer instruction.	M2	1,600.00		
1.3	Supply and install Spanish Porcelain tiles (full body) 40x40*1cm. Grade (A)including, glue material to paste New Porcelain with Old tiles, skirting, finishing and polishing. and any other required works to complete the job as specifications and supervisor engineer instructions.	M2	75		
1.4	Supply and lay Rozabetta stair treads size 32 cm wide x 3cm thick chamfered once , rebated once and laid on 2cm thick mortar bed. The price including Rozabetta stair risers size 15 cm high x2cm thick. Granite Rozabetta Skirting (triangle shape) 2cm thick on the both sides and remove the existing to approved dump site as specification and the engineers instructions.	MR	100		
Total					

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
Bill No 2. PLUMPING WORKS					
	<p>1. All plumbing work, except rainwater pipes and water supply pipe work in water points shall be measured by number.</p> <p>2. Rainwater pipes shall be measured run over fittings.</p> <p>3. Pipe work in frames to shading sheds shall be measured run over fittings.</p> <p>(1) Rates generally shall include for:</p> <ol style="list-style-type: none"> 1. Shop drawings, 2. Cutting and forming all chases, recesses, holes, and the like, 3. Pipe sleeves, 4. Building of concrete and/or brick ducts in floors, walls ...etc., 5. Excavation, forming of trenches for services, concreting, bedding and back filling and ramming after laying, 6. Fixing brackets, clips, holder bats, hangers, and the like, 7. Temporary and final fixing, 8. Nails, screws, bolts, nuts, washers, holes, plugs, sleeves and the like, 9. Building in or cutting and pinning, 10. Testing and drawings, 11. Painting, 12. All work of other trades in connection with plumbing work including all making good. <p>(2) Rates for building of manholes and pits shall include excavation, concrete, benching, plastering, backfilling and cover as per Drawings and Specifications,</p> <p>(3) Rates for sanitary fittings, isolated taps and gullies shall also include for:</p> <ol style="list-style-type: none"> 1. All pipe work in connection therewith and connections thereto including connection to the nearest manhole or gully and to the cold water storage tank. <p>(4) Rates for pipe work including pipe work in frames to shading sheds shall include for:</p> <ol style="list-style-type: none"> 1. Joints in the running length, 2. Nipples, connections, sockets, ferrules, couplings, back nuts, unions, and the like, 3. Bends, elbows, tees, reducers, access doors, cleaning eyes, blank caps, stop valves, and the like, 4. Welded joints and connections including grinding, 5. Lagging and wrapping, 6. Excavation, bedding and backfilling. 				

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
2.1	Maintenance of all element of water network at the roof including water storage tanks, pipes, inlet, outlet, prevent leakage from pipes , the price includes supply and install all required fittings to replace any defected parts according to specifications and engineers instructions.	L.S	1		
2.2	Supply and install 3" diameter PVC Pipes. the price includes demolish carefully in the walls, fixation in the walls, connection of air conditioners drainpipes, shuttering, supply and cast concrete B250 around the pipes, plastering, PVC ducts for air conditions pipes and all connections, tees, bends, fittings. The price includes scaffolding and removal of all debris to approved dump site, all as per specifications, drawings and supervisor engineer instructions.	M.R	100		
Total					

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
Bill No 3. ROOFING WORKS					
	<p>(1) Rates for foam concrete/ cement and mortar work shall include for:</p> <ol style="list-style-type: none"> 1. Supply and storage of cement. 2. Supply and storage of aggregates and water, 3. Mixing, 4. Hacking concrete, applying cement slurry or raking out joints of block work to form key, 5. Application to any surface, 6. Finish to surface, 7. Finish to falls and cross falls, 8. Forming bays including joints, 9. Finish to edges, 10. Making good around steel sections, pipes, tubes, bars, brackets, outlets, and the like, 11. Ends, intersections, ramps, and the like, on fillets, <p>(2) Rates for waterproofing shall include for:</p> <ol style="list-style-type: none"> 1. Preparation of surface, 2. Any area or width, 3. Cutting in edges. 4. Over laps, priming and treatment at the corners and floor drains. 5. Testing for the roof with water 6. Dressing over parapets and stub columns including forming groove to receive edge of plasticized bitumen membrane and sealing with elastic sealer. 7. Removal of damaged elements (damaged insulation sheets, damaged foam concrete, cleaning the surface and any other required work to complete the job according to specifications. <p>(3) Rates for roof sheets shall include for:</p> <ol style="list-style-type: none"> 1. Side and end laps, Fittings including bolts, hook bolts, screws and washers, 2. Sheets of any width or length. 				
3.1	Supply and lay one layer of plasticized bitumen roofing membrane with chipping 4 mm thick, (20 X 20) cm pieces for small openings including priming concrete surface before laying, complete maintenance around rain water outlets and cover the angle fillets, water test for the whole area of the roof. The rate includes verticals parts skirting as per specification and engineers instructions.	No	100		
Total					

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
Bill No 4. PAINTING WORKS					
	<p>1. Painting and decorating to walls, ceilings and the like shall be measured net in squared meters,</p> <p>2. Painting and decorating to all other surfaces, items and things are included in the items of surfaces, items and things, will not be measured separately.</p> <p>Rates for painting and decorating work shall include for:</p> <p>1. Preparation of surface including puttying, sealing and priming,</p> <p>2. Any area or width,</p> <p>3. Any location,</p> <p>4. Work in multi colors,</p> <p>5. Cutting in edges,</p> <p>6. Any taping and covering to protect areas and others.</p> <p>7. cleaning and polish for any place after paint.</p> <p>All the painting materials should be approved and tested by approved local laboratory and have the final Approved from the Eng.</p>				
4.1	Supply and paint one primer and minimum two coats of emulsion paint (color Poliside) for internal walls, ceiling and drop beams .The works include removing the old paint and plaster repairing, testing, Treatment of cracks including cleaning, rubbing, open, filling with Sikaflex, closing openings, repairing plaster in the walls up to (20*20 cm) and cleaning the surface.. as specification and drawings.	M ²	1200		
4.2	Supply and paint the internal walls up to a high of 2.2m above finishing floor level two coats of putty one undercoat primer and two coats of colored oil paint and the price included the maintenance of plaster in damage area, and repairing existing cracks repairing plaster in the walls up to (20*20 cm) and cleaning the surface. as per specifications, drawings and the engineer's instructions.	M ²	1400		
4.3	Ditto but for the existing doors.	No	20		
4.4	Supply & paint two coats of colored external water proof colored emulsion paint (Supercryle) .The works include removing the old paint and plaster repairing, testing, scaffolding, Treatment of cracks including cleaning, rubbing, open, filling with Sikaflex, closing openings, repairing plaster, terolyne finish in the walls up to (20*20 cm) and cleaning the surface as specification and drawings.	M ²	300		
Total					

DESCRIPTION	Total Amount \$
1.FINISHING WORKS	
2. PLUMBING WORKS	
3. ROOFING WORKS	
4.PAINTING WORKS	
SUBTOTAL (\$)	



UNITED NATIONS DEVELOPMENT PROGRAMME

ITB : 2015-246

WBS 1405

Arabic College for science

Arabic College for Science					
Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
	<p>General Notes:</p> <p>1- Complete detailed shop drawings should be delivered to the Engineer to take his approval prior the commencement of work. Samples of all materials shall also be delivered to the Engineer to take his approval,</p> <p>2-Contractor shall take into consideration that all – direct and indirect works and their relevant expenses required for proper implementation of the project including temporary facilities, fencing, securing utilities (water, wastewater, telephone and electricity systems) as well as making access to project implementation location away from the one in use by the students and teachers such that the University is running safely without disturbance. The contractor will be accountable for all necessary equipment, materials and activities to assure the safety of people within the University buildings and vicinity, where an approved safety plan will be prerequisite to initiating activities along with installing all required components and materials necessary for safety of workers, project team as well as people at University. All relevant costs are deemed to be included in the unit price in addition to the required re-instatement works needed to bring the original facilities to its original status before addition of temporary works.</p> <p>3-The contractor will expect that more than one contractor will be carrying out works in the University at the same time, the Contractor is presumed to make all necessary coordination and facilitate accessibility to and other work-related issues</p> <p>4-All works and installations listed here below should be carried out, tested and commissioned by specialized responsible skilled labours in full coordination with The university , all in accordance with drawings, specifications and relevant standards, and the instruction of the Engineer. The Engineer has the right to reject any component of the work not complying with the specifications and the terms of the contract.</p>				

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
Bill No 1. PAINTING WORKS					
	<p>Rates for painting and decorating work shall include for:</p> <ol style="list-style-type: none"> 1. Preparation of surface including puttying, sealing and priming, 2. Any area or width, 3. Any location, 4. Work in multi colors, 5. Cutting in edges, 6. Any taping and covering to protect areas and others. <p>All the painting materials should be approved and tested by approved local laboratory and have the final Approved from the Engineer</p>				
1.1	Supply & paint two coats of internal water proof colored emulsion paint (Supercryle) .The works include removing the old paint and plaster repairing, testing, treatment of cracks including cleaning, rubbing, open, filling with Sikaflex, closing openings, repairing damaged plaster up to 20x20cm and cleaning the surface as specification and drawings.	M2	350		
1.2	Supply and install gypsum board false ceiling of 60*60cm manufactured by ArmstrongPrima -Dune or approved equivalent ,with exposed suspension system manufactured by Raysound including galvanized steel hanger wire, hold down clip, wall molding, main and cross bar, as shown in drawing and according to engineer's approval. The suspension parts will be selected by the Engineer. The works shall include the Gypsum border to close the sides.	M2	120		
Total					

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
Bill No 2.ALUMINUM & METAL WORKS					
	<p>The items include supplying aluminum windows section 7000 matching the existing ones, with min. wall thickness 1.5mm (to be approved by representative engineer) as frame, glass 4 mm thick, ironmongery , accessories and hard ware along with fixing as per specification and drawings. All maintenance works include all needed materials for reinstatement and workmanship.</p> <p>Steel work should be properly treated and prepared, painted with two coats of oil paint, one primer (polyline) and one undercoat. The price shall include removing the damaged aluminum and steel works and handing to the maintenance department of the college.</p> <p>The price should include dismantle and remove the existing defected parts and any required work needed to fix the new elements</p>				
2.1	Supply and fix colored aluminum window section 7000complete with frame, colored, two sliding leaves ,colored glass 4mm thick, ironmongery and hardware. and as per specification and drawing.	M2	6		
2.2	Supply and fix colored aluminum window section 4500 complete with frame, colored, colored glass 4mm thick, ironmongery and hardware. and as per specification and drawing.	M2	9		
2.3	Complete Maintenance for the existing Aluminum doors (cafeteria door), 2.6*2.4 The price including replacement of defect parts,switch,broken glass and all required accessories according to the specification and engineer instruction.	L.S	1		
Total					

Item No.	Description	Unit	Quantity	Unit Rate US \$	Total Amount US \$
Bill No 3. MISCELLANEOUS WORKS					
	MISCELLANEOUS WORKS				
	GENERAL:				
	3. Price should include all excavation, removal of trees and disposal materials to approved dump site, backfilling, leveling of subgrade, supporting of trenches and all associated works				
	4. The Contractor shall consider in his price the costs or expenses of tests of materials used (concrete, steel bars, base coarse, block, cement ...etc.				
3.1	Supply and cast reinforced concrete B250, 40cm height , 20cm thick (edge beam) for required interlock tiles (2Ø 12 mm upper reinforcement and 2Ø 12 mm lower reinforcement and 5Ø 8 mm stirrups every 1meter), according to Drawings, Specifications and instructions of the Engineer the work includes cut, fill, compaction, construction joint, sika flex, polyethylene sheets, impregnated fiber boards . with all required works as per drawings, specifications and engineer instructions.	M3	3		
3.1	Supply & lay pre-cast concrete curbstones for side walks (17x30x100 cm) including all necessary excavations, filling with dune sand & compaction to 100% of MDD and the base coarse layer (30x10 cm), B250 plain concrete foundation (30x10cm) under the curb and (13x21cm) behind, spreading 2 cm mortar under the curbstone, filling joints between curbs with cement mortar and painting with one prime coat and two finishing coats of approved brand name painting material ,expansion joint every 12 m.r with Celotex board and filling 3cm with Sika flex ,all according to drawing and technical specifications.	MR	160		
3.2	Supply and construct interlock tiles (B400) 8cm thick including 20 cm base coarse layer (80% C.B.R). . The price includes compaction of base course layer to 100% compaction ratio, watering, and testing, leveling of subgrade, compaction of subgrade (98%) , the price also includes 5 cm sand . Levels, colors and shapes all determined according to drawings, specifications and the supervisor Engineer's instructions.	M2	1200		
Total					

DESCRIPTION	Total Amount \$
1.PAINTING WORKS	
2.ALUMINUM & METAL WORKS	
3.MISCELLANEOUS WORKS	
SUBTOTAL (\$)	

OVERALL SUMMARY

NO.	Description	Total price (\$)
1	Total of University of Palestine - US\$	
2	Total of Gaza university - US\$	
3	Total of Al Quds university - US\$	
4	Total of Arabic College - US\$	
Total		

Total in numbers:

Total in letters:

Name of the contractor:

Authorized signature:

Signature and Sealing:.....

Title:

Telephone:.....

Fax:

Mobile: