

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 1 - Birthing Suite

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	other than quantities that are specified herein, contractor to determine required no. of fittings and accessories on the basis of design space required, in compliance with standard and local authority regulation. Contractor to follow related conceptual design concept existing in the building				
A	PRELIMINARIES				
1	Mobilization and Demobilization	1	item		0
1a	Mobilization				
1b	Demobilization				
2	ADM/ADCD and other local Authorities Approvals	1	item		0
2a	ADM/ADDC drawing approvals				
2b	Civil Defense				
3	Project Mangement	1	item		0
3a	PM and Supervision charges				
4	Site Protection	1	item		0
4a	Temporary protection on walls and floors				0
5	Progress Reporting	1	item		0
5a	Documentation, photos, progress of work monitoring				
6	Temporary Site Facilities	1	item		0
6a	First Aid				
6b	Fire Entinguesher, Blanket				
6c	Maintaining, keeping sanitary site condition				
7	QA, QC & HSE/EHS	1	item		0
7a	Adhering to University ISO and standard pratices and protocols				
8	Debris removal, cleaning	1	item		0
	Contractor is totally and absolutely responsible for the removal of any debris cause by the construction, surplus spoil, materials and the like resultant from the execution of the works caused either by their manpower, sub-contractors or by suppliers to appropriate location				
8a					
8b	Site cleaning for the entire project duration				
8c	Final cleaning before occupancy				
9	Submittals of Shop Drawings	1	item		0
9a	Drawing production, site/client/sub-contractor				
9b	Prints Out, contruction and revisions				
9c	AS-Built drawings, Soft and Hard copy - 2 sets				
B	SCAFFOLDING				
1	Supply and setting of the scaffolding for providing working platform for the ceiling area works including the supply of manpower for setting and removing of the scaffolding from the site	1	lot		0

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ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
C					
1	DEMOLITION WORKS				
1	Removal of unwanted solid block walls etc. Wrap material in good condition, cart away to specified store	52	m2		0
2	Removal of unwanted floor finish, prepare surface to accommodate new floor covering	15	m2		0
3	Removal of other unwanted material/debris within the space required, cart away to specified municipality dump site	1	lot		0
D	CIVIL				
1	PARTITION WORKS				
1	Supply and installation of blockwork including plastering, prepare surface to accommodate paint finish	47	m2		0
1	Supply and installation of 100mm thick gypsum board partitions, consisting of 72mm GI tracks, 70mm GI studs, Rockwool insulation - density of 35kg/m3 and double layer of 12.5mm thick gypsum board on each side. Works includes, taping, sanding, joiting etc. ready to recieve final finish. Specified brand - Knauf	31	m2		0
E	JOINERY				
1	Design, construction, supply and instillation of Control room, footprints as indicated in the layout. Partition to be of standard gypsum, complete with 35kg/m3 rockwool insulation. Control room window to be of one-way mirror to match those of the Simulation control and or OSCE observation cove.	1	lot		0
F	THERMAL AND MOISTURE PROTECTION				
	Works as may required to be carried out ensuring that entire space is free from warm air and moistures	1	lot		0
G	WATER PROOFING				
1	Supply and fix water proofing where wash basin is, and other plumbing line wall area, as per drawing including all fixing accessories	1	lot		0
2	Apply appropriate water proofing in the entire floor area,	56	m2		0
H	FLOOR FINISH				
1	Repair and make good all areas affected by removal and or setting up partition floor profile and embedding floor boxes and trunking	1	Item		0
2	Apply appropriate thickness concrete screed including leveling compound to prepare entire space to receive vinyl	56	m2		0

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ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
3	Supply and installation of 3mm thick vinyl tiles: - ASTM F1700, Class III solid vinyl tiles, resilient flooring with 1.0 wear layer thickness, sound reduction of 17dB min. slip resistance, chemical resistance, flammability/smoke emission - ASTM E648, class 1, Tensile strenght upto 4000lbs/sq.inch, static load, environmentally friendly, indoor Air quality certified at least 10 years of manufacturers defect warranty. Offices corridors, Reception and Conference room	56	m2		0
4	Termination of joints between existing floor finish and new by means of threshold, floor grip, strips wherever needed	1	lot		0
J	METAL WORK				
1	All necessary support to accommodate false ceiling	1	lot		0
K	WALL FINISH - Paint				
1	Prepare and apply Jotun Fenomastic silk paint finish to new partition and existing walls and partitions. Color to match or as required	180	m2		0
2	Supply and installation of 100mm high SS skirting to match existing, covering all walls and partitions	50	Lm		0
L	CEILING FINISHES				
1	Supply and installation of aluminum tiles to match, complete with suspension system to suit proposed layout. Specified brand - RAM	56	m2		0
2	Supply and installation of vertical bulkhead, 12.5mm thick gypsum board, single layer on GI frame suspension	30	LM		0
3	Any other related ceiling finishes required not mentioned above to cover cost of completing above task	1	lot		0
K	SIGNAGE				
1	Supply and fix internal and external signage in english and Arabic. Design and material to match existing. External Sign to address room utilization and Internal is for Control room	1	lot		0
L	ELECTRICAL WORKS				

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ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	Provide and install all electrical installation and associated accessories and fixtures to complete project as required. Complete installation to follow standard practice in accordance to safety protocols with local authority and adhering to university EHS. Works follows contractor generated layout, approved to include but not limited to wherever deemed required; Low Voltage Switchgear and Distribution Board				
	A Sub-main Distribution Boards				
A1	Wall mounted/free standing distribution circuit breaker boards (MCCB Boards) including all incoming and outgoing MCCB's cable terminations etc. based on appropriate load schedule as designed	1	lot		0
	B FINAL DISTRIBUTION BOARDS				
B1	Recessed/surface installed final distribution boards (MCB Boards) including incoming ELCB and outgoing circuit MCB's, contactors, cable termination etc.as	1	lot		0
	C ISOLATING SWITCH				
C1	Supply, install, test, commission and maintain W.P. disconnect switches including conduits, conduit fittings, wiring, cabling, cable trays, vertical risers, termination disconnect switch, accessories and all necessary ancillary works as specified and required by the drawings. Supply, install, test, commission and maintain W.P. disconnect switches including conduits, conduit fittings, wiring, cabling, cable trays, vertical risers, termination disconnect switch, accessories and all necessary ancillary works as specified and required by the drawings	3	no		0
2	CABLES & CABLE SUPPORT SYSTEM				
	XLPE Insulated LSF sheathed - Armoured cables from MDB's to SMDB's and from SMDB's to FDB's as shown on the schematic diagram and as per the Local Authority regulations and requirements				
2	3Cx4mm ² XLPE / SWA / LSF + 1Cx4mm ² ECC	1	lot		0
2	4Cx6mm ² XLPE / SWA / LSF + 1Cx6mm ² ECC	1	lot		0
2	4Cx10mm ² XLPE / SWA / LSF + 1Cx10mm ² ECC	1	lot		0
2	4Cx16mm ² XLPE / SWA / LSF + 1Cx16mm ² ECC	1	lot		0
3	4Cx25mm ² XLPE / SWA / LSF + 1Cx16mm ² ECC	1	lot		0
3	4Cx35mm ² XLPE / SWA / LSF + 1Cx16mm ² ECC	1	lot		0

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ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
3	Supply and installation and commission Cable trays, cable dusts, GI cable trunking, cable cleats, etc hardwares, shop drawings for the rootings and all cable supporting details as per the site requireme -nts to be submiited				
3	(100X 50mm) GI Cable Tray	1	lot		0
3	(150X 50mm) GI Cable Tray	1	lot		Incl
3	(300X 50mm) GI Cable Tray	1	lot		0
3	(450X 50mm) GI Cable Tray	1	lot		0
4	(600X 50mm) GI Cable Tray	1	lot		0
4	(900X 50mm) GI Cable Tray	1	lot		0
4	(100X 100mm) GI Trunking for Lighting Circuits	1	lot		0
4	(100X 100mm) GI Trunking for Power Circuits	1	lot		0
4	WIRING ACCESSORIES				
4	Supply and install conduits, conduit fittings, junction boxes, Wires, draw boxes from final distribution board including all wires and connections for socket outlets.				
4	Ditto, but for 13A double switched socket outlets in 1.2meter height	11	no.		0
4	Ditto, but for 13A double switched socket outlets.in 30cm height	19	no.		0
4	Ditto, but for 20A Double Pole Switch & Flex outlet for FCU, VAV, CAV (above the ceiling)	10	no.		0
5	Ditto, but for power connection230v, 3 core, 2.5mm (above ceiling)	1	no.		0
5	Ditto, but for 20A Double Pole Water heater switch with indicator light and flex outlet	1	no.		0
5	LIGHTING FIXTURES				
5	Supply, installation, testing and commissioning of Light fittings complete with lamps, tubes, reflectors, control gears, transformers, power supply units and all required fixings accessories, etc.,including ceiling roses and flexible cabling, wiring and conduit and connected the distribution boards & lighting control system, all as shown on the drawings, as specified, as required for proper operation and as per Local Authority requirements.	1	lot		0
5	Light Fitting;-IP-65=60X60CM LED PANEL LIGHT	15	no.		0

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ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
5	Supply and install wiring and conduit in concealed installation including cable trays / trunking, with all accessories, complete in accordance with specifications, drawings and Local Authority requirements.	15	no.		0
6	SWITCHES				
	Supply, install, test, commission switches including all necessary accessories complete in accordance with specifications, drawings and Local Authority requirements.				
6	One way switch, 2 gangs	1	lot		0
6	One way switch, 1 gang - W/P	1	lot		Incl
6	One way switch, 2 gang - W/P	1	lot		Incl
6	Two way switch, 2 gangs	1	lot		Incl
7	Other related under Electrical works that may required not mentioned above if any	1	lot		Incl
M	EARTHING SYSTEM				
1	Provide a complete earthing system including main earth electrode pits, earth continuity conductors, equipotential bonding, etc., all as specified , shown on the drawings and DEWA regulations	1	lot		0
2	Sundries				
a	Allow required testing as may required buy the Local Authority	1	lot		0
b	Allow for all painting and identification	1	lot		0
c	Allow for all Builder's work in connection with Electrical System's installation.	1	lot		0
d	Allow for all submittals, samples, shop drawings, As-built Drawings, warranty certificates.	1	lot		0
N	HVAC WORKS				
	Contractor to check, assess, verify existing condition/status in the space required. Accordingly come up with solution to put all related task in completion of the project. Scope to include but not limited to				
1	Supply and installation of new FCU should require, considering normal - operation, negative and positive temperature	1	lot		0

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ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2	Supply and installation of required Hepa filters, adhering to Public Health and Safety due to Covid-19	1	lot		0
3	Supply and installation of UV inside the duct as may required	1	lot		0
4	HYGIENE TYPE FRESH AIR HANDLING UNIT Should require: - Supply, install, testing and commissioning of double skin S.S Construction DX Type Air Handling Units complete with, DX coils, plug fans, drains pan, filters, vent, valves , all protective devices, drain to waste, anti-vibration mountings, joints to pipe work and ductwork and all necessary electrical connections as specified and as shown on schedule of equipment.	1	lot		0
5	VARIABLE & CONSTANT AIR VOLUME BOXES Supply, install, testing and commissioning of factory calibrated (VAV & CAV) variable and constant air volume boxes for variable and constant air system as shown on drawings with integral silencer to meet the specified noise criteria ,with or without reheat coil/Elec tricheating element as specified and as shown on schedule of equipment	1	lot		0
5	By Pass Type VAV's	1	lot		0
5	Pressure Independent CAV's	1	lot		0
5	Pressure Independent CAV's With Electrical Reheat Coil	1	lot		0
6	GI DUCT WORKS Supply, install, testing and commissioning of sheet metal air ducts of GI sheets complete for all air systems with all fittings and acces sories as per SMACNA construction for 2"WG ducts and as specified, Extract Duct for Labs shall be welded joints, fabricated of SS316	1	lot		0
b	Allow for thermal and acoustic insulation to the supply, return ductwork as required by the specification	1	lot		0
c	Supply, install, testing and commissioning of Sound Attenuators , gravity louvers, fire dampers, flexible ducts, plenums, VCDs, moto rized and smoke fire dampers MSFD, Duct silencers, access doors and all duct accessories as shown on drawings and as necessary	1	lot		0
7	AIR TERMINAL, INLETS AND OUTLETS Supply and install supply, return & extract air terminals including				
a	grilles,diffusers,louvers, disc valves , door grill, with all accessories , flexible duct,dampers, as per sizes specified on drawings.	1	lot		0
8	VARIABLE SPEED FREQUENCY CONTROLLERS				

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ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Supply and install Variable frequency controller having capacities compatible with the motor horse powers.				
a	Allow for FAHU VFD Panels	1	lot		0
b	Allow for Exhaust Fans VFD Panels	1	lot		0
9	MISCELLANEOUS:				
a	Allow For Controls with all necessary accessories & associated wiring	1	lot		0
b	Allow For Anti vibration mounts	1	lot		0
c	Allow For Tags and identification plates.	1	lot		0
d	Allow For Insulated Condensate drain Pipe	1	lot		0
e	Allow For Hangers, supports, brackets etc. for pipe and ductwork.	1	lot		0
f	Allow for testing and commissioning of complete system by third party specialist	1	lot		0
g	Other HVAC related works not mentioned above if any				
O	FIRE ALARM				
	Allow for relocation of the existing fire alarm system including wiring , smoke detectors, FACP etc. All according to standard in adherence to university health and safety protocols and to Local Authority requirements.	1	lot		0
1	Supply & install the following analogue addressable fire alarm system and outlets complete including pull boxes, conduits, fire rated FP400 cable, address and all necessary fixing accessories all as shown in the drawings & specification.				
2	Fire alarm Control Panel	1	no.		0
3	Analogue Addressable Smoke Detector	3	no.		0
4	Void Smoke Detector with remote LED	3	no.		0
5	Analogue Addressable Break Glass Unit	2	no.		0
6	Addressable Control Module ((Quantities to be agreed based on the third party points of load and subjected to site condition)	3	no.		0
7	SUNDRIES				

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ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
7	allow for Testing the whole installation at completion in the presence of the Engineer, repeat test as may be required and leave in perfect order and to the satisfaction of the engineer and Local Authority.				
7	Allow for all painting and identification	1	lot		0
7	Allow for all Builder's work in connection with Fire Alarm System's installation.	1	lot		0
7	Allow for all submittals, samples, shop drawings, As-built Drawings, warranty certificates.	1	lot		0
8	Other related Fire Alarm works required not mentioned above if any	1	lot		0
P	FIRE FIGHTING WORKS				
	WET RISER SYSTEM				
1	Allow for Seamless Galvanized steel tubing and fittings with screwed and flanged joints including all fittings, supports and fixings, of different diameters as per relevant drawings.	1	lot		0
2	Allow for Relocation of the Existing Fire sprinklers as per the new design and drawings.	1	lot		0
3	Modification of MEP Services above Ceiling as per new Layout.	1	lot		0
4	PORTABLE FIRE EXTINGUISHERS				
4	Allow for 5KG CO2 Type Fire Extinguisher	2	no.		0
4	Allow for 6KG Dry Type Fire Extinguisher	2	no.		0
5	SUNDRIES				
5	Allow for Testing the whole of the fire fighting installation at completion in the presence of the Engineer, repeat test as may be required and leave in perfect order and to the satisfaction of the engineer and Local Authority.	1	LS		0
5	Allow for all Builder's work in connection with Fire Fighting System's installation	1	lot		0
5	Allow for all submittals, samples, shop drawings, As-built Drawings, warranty certificates.	1	lot		0
5	Supply and installation of necessary pipe with complete fittings using entire Immersive room area.	1	lot		0
6	Draining and refilling of Fire Fighting system	1	lot		0

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ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
6	Pressure Test	1	lot		0
6	Other related Fire Fighting works required not mentioned above if any	1	lot		0
Q	EMERGENCY LIGHTING WORKS				
1	Relocation of existing emergency light should required	1	lot		0
2	Supply & install the following Emergency Lightng & Exit Lighting system and components complete including pull boxes, conduits, cable address and all necessary fixing accessories	1	lot		0
3	Emergency Light control Panel	1	lot		0
4	Addressable 1x8W Emergency Light, Non Maintained	1	lot		0
5	Addressable 1x8W Emergency Light, Non Maintained W/P	1	lot		0
6	Addressable 1x8W Exit Light, Maintained	1	lot		0
7	Addressable 1x8W Exit Light, Maintained, Single Side	1	lot		0
8	Addressable 1x8W Exit Light, Maintained, Double Side	1	lot		0
9	Allow for Supply and installation of FP400 fire rated stranded cable	1	lot		0
10	Allow for Supply and installation of cat 6 cable for communication	1	lot		0
11	Supply and installation of (100X 100mm) GI Trunking for EM Lighting Circuits	1	lot		0
12	SUNDRIES				
a	allow for Testing the whole ELV Systems installation at completion in the presence of the Engineer, repeat test as may be required and leave in perfect order and to the satisfaction of the engineer and Local Authority.	1	lot		0
b	Allow for all painting and identification	1	lot		0
c	Allow for all Builder's work in connection with ELV System's installation.	1	lot		0
d	Allow for all submittals, samples, shop drawings, As-built Drawings, warranty certificates.	1	lot		0
R	PLUMBING SYSTEM				

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ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	Allow for Hot water pipes, fittings, valves shall be PPR pipes with all necessary fittings as manufactured, see list of materials. Catalogues, samples, workshop drawings should be submitted for prior approval.	1	lot		0
2	Allow for Complete internal concealed piping in Pex' pipes for hot and cold water supply including water hammer arrester elsewhere required with all necessary accessories.	1	lot		0
3	WATER HEATER Ceiling mounted, horizontal type, electric Water Heater, glass lined, wool insulation, complete with connections for fresh water supply and delivery lines. Each water heater to have valves on both cold and hot water inlet and outlet Capacity 50 liters.	1	no.		0
S	DRAINAGE SYSTEM				
1	INTERNAL DRAINAGE				
	Allow for HDPE Drainage pipes fittings, GT ,etc.. for all medical drainage, as per drawings to diameters required including all necessary fittings. Samples, catalogues, workshop drawings shall be submitted for prior approval.	1	lot		0
2	Allow for PVC Drainage pipes fittings, GT ,etc.. for Normal drainage, as per drawings to diameters required including all necessary fittings to match existing. Samples,catalogues, workshop drawings shall be submitted for prior approval.	1	lot		0
3	Furnish and install acoustic insulation for all internal drainage pipes works (sewage and storm) passing in false ceiling above OCCUPIED SPACES with all associated works as specified and shown on detail drawings.	1	lot		0
4	Supply and install condensate drain piping from all fan coil units and air handling units to nearest floor drain complete with cleanout, piping , fitting and all associated works. Indoor piping shall be upvc pipes with 12mm closed cell foam insulation. Rooftop drain lines shall be in GI without insulation.	1	lot		0
5	SUNDRIES				
5	Allow for all submittals, samples, shop drawings, As-built Drawings, warranty certificates, testing & commissioning.	1	lot		0
5	Allow for all builder's work in connection with plumbing and drainage installation	1	lot		0
5	Allow for all painting and identification to the installation	1	lot		0
5	Rates shall include testing at 150 psi, commissioning of all water supply system	1	lot		0

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ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
6	Drainage system shall be tested as per specifications in the presence of the Consultant & Client representative. This will be considered as part of works acceptance undertaken by contractor.	1	lot		0
6	allow for water heater necessary area	1	lot		0
6	Other related works not mentioned above				
T	STRUCTURED CABLING WORKS				
	Supply & install the following structure cabling system outlets complete including pull boxes, conduit cable address and all necessary fixing accessories to complete task given				
1	Intermediate distribution frame (IDF)	1	no.		0
2	Dual RJ45 CAT 6 socket outlets	6	no.		0
3	Single RJ45 socket outlets for WIFI.	1	no.		0
4	Single RJ45 socket outlets for Access control	2	no.		0
5	Single RJ45 socket outlets for CCTV	4	no.		0
6	3 compartment floor service box		no.		0
7	supply, installation , T&C for Single and Multimode fiber optic cables as per sizes shown on drawings and according to TRA Requirements.	1	no.		0
8	Supply and installation and commission Cable trays, cable dusts, GI cable trunking, etc as specified and shown on drawings(For Containment)	1	lot		0
8	(100X 50mm) GI Cable Tray	1	lot		0
8	(150X 50mm) GI Cable Tray	1	lot		0
8	(300X 50mm) GI Cable Tray	1	lot		0
8	(450X 50mm) GI Cable Tray	1	lot		0
9	(600X 50mm) GI Cable Tray	1	lot		0
9	(900X 50mm) GI Cable Tray	1	lot		0
9	Supply and installation of WIFI	1	no.		0

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U	ACCESS CONTROL SYSTEM				
	Supply, install, test, commission and maintain the complete access control system including cabling, wiring, conducting, fittings, accessories and power connections complete in accordance with specifications ,of existing system (For Containment)	1	LS		0
1	card reader	2	no.		0
2	Door contact	2	no.		0
3	Single door Magnetic lock	1	no.		0
4	Double door Magnetic lock with tower bolt	1	no.		0
5	Push button	2	no.		0
6	Break glass unit	1	no.		0
7	Door Controller Unit	2	no.		0
8	Door Access Controller	1	no.		0
9	220V AC UPS Power supply	1	no.		0
V	DATA NETWORKING for AV system				
1	Supply & install the following Data server looping system and outlets complete including pull boxes, conduits, cable address and all necessary fixing accessories all as shown in the drawings & specification	1	lot		0
2	Supply and installation of data sockets with cat 6 network cable and installation of patch panel with proper labeling (server cabinet excluded)	1	lot		0
3	Supply and installation of AV points wall mounted at 2400mm level as per the drawing	3	no.		0
4	Supply and installation of AV points on the ceiling as per the drawing	17	no.		0
5	Supply and fixing of GI cable tray with cover above the ceiling	1	no.		0
W	CCTV SYSTEM				
	Supply & install the following IP CCTV system and outlets complete including pull boxes, conduits, cable address and all necessary fixing accessories all as shown in the drawings & specification. (Subject comply and approval of Monitoring and Control Center "MCC") (Only Containment)	1	LS		0

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ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	CCTV Control Equipment	1	no		0
2	Network Video Recorder with Hard disk	1	no.		0
3	CCTV UPS	1	no.		0
4	CCTV LED Monitor	1	no.		0
5	Dome Camera Recognition Camera	4	no.		0
6	Dome Camera Identification Camera	1	no.		0
7	Cabling and PVC conducting works	1	no.		0
X	MEDICAL GAS				
1	Supply and installation of medical gas; Oxygen, Air and Vacuum to location as shown in the layout. Contractor to hook up needed feed from existing medical gas lines running in the corridors. Scope to include gas valve receiver, ready to receive equipment. (3x Oxygen, 3x Vacuum and 2x Air point as shown	1	lot		0
Y	ADDITIONAL ITEMS				
1	Contractor is required to add below any additional items with quantities and rates, deemed necessary, not mentioned above, ensuring completion of scope based on above tasks. Stipulated cost for the above shall be the basis of agreement should contractor fail to outline needful. Project as titled to be carried out completely, and to the satisfaction of end users with no additional cost.	1	lot		0

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ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
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BILL NO. 10 - Multi Purpose Admission Room

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	other than quantities that are specified herein, contractor to determine required no. of fittings and accessories on the basis of design space required, in compliance with standard and local authority regulation. Contractor as a must to follow related conceptual design existing in the building				
A	PRELIMINARIES				
1	Mobilization and Demobilization	1	item		0
	1a Mobilization				
	1b Demobilization				
2	ADM/ADDC and other local Authorities Approvals	1	item		0
	2a ADM/ADDC drawing approvals				
	2b Civil Defense				
3	Project Mangement	1	item		0
	3a PM and Supervision charges				
4	Site Protection	1	item		0
	4a Temporary protection on walls and floors				
5	Progress Reporting	1	item		0
	5a Documentation, photos, progress of work monitoring				
6	Temporary Site Facilities	1	item		0
	6a First Aid				
	6b Fire Entinguesher, Blanket				
	6c Maintaining, keeping sanitary site condition				
7	QA, QC & HSE/EHS	1	item		0
	7a Adhering to University ISO and standard pratices and protocols				
8	Debris removal, cleaning	1	item		0
	Contractor is totally and absolutely responsible for the removal of any debris cause by the construction, surplus spoil, materials and the like resultant from the execution of the works caused either by their manpower, sub-contractors or by suppliers to appropriate location				
	8a				
	8b Site cleaning for the entire project duration				
	8c Final cleaning before occupancy				
9	Submittals of Shop Drawings	1	item		0
	9a Drawing production, site/client/sub-contractor				
	9b Prints Out, contruction and revisions				
	9c AS-Built drawings, Soft and Hard copy - 2 sets				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 10 - Multi Purpose Admission Room

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
B	DEMOLITION WORKS				
1	Removal, clearing of unwanted debris, ceiling tiles & bulkhead and other related materials on floor, cat away to municipality dump site.	1	lot		0
2	Prepare entire space for required build out	1	lot		0
C	Civil WORKS				
1	Supply and application of concrete screed to the level required matching existing corridor as appropriate	223	m2		0
2	Supply and application of leveling compound to accommodate new floor finish	223	m2		0
3	All existing door keys to be check, ensuring that keys - cylinder are in good operational condition. Scope to include supply and installation of new set - master key system should existing found to be unoperational and or doors are without lockset.	1	lot		0
4	Check and repair existing door where necessary, ensure that all ironmongery are in good condition	3	no.		0
5	Fabricate, supply and installation of laminate door - single leaf, with double glazed 6mm thick , tempered clear glass vision panel, complete with ironmongery.	1	no.		0
6	Design, supply and instalation of wall mounted signage to read as "Student Affairs Multi Purpose Room" in Arabic and English. Material and finishes to match existing	1	no.		0
7	Design, supply and instalation of wall mounted signage, Faculty users / room names with title plus room # in all rooms, Arabic and English. Material and finishes to match existing	2	no.		0
D	FLOOR FINISH				
1	Supply and installation of Class III solid vinyl tiles, 3mm thick, chemical and slip resistance. Environmentally friendly and indoor Air Quality Certified. Installation, VOC free adhesive and levelling compound, LEED and Green certified -	223	m2		0
2	Termination of joints, ramp, between existing floor finish and new by means of threshold, floor grip, strips wherever needed	1	lot		0
E	WALL FINISH				
1	Prepare and apply Jotun Fenomastic silk paint finish to the entire wall. Color to match or as required	280	m2		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 10 - Multi Purpose Admission Room

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2	Supply and application of 1500mm height writable wall space - IDEA paint, end-to-end on short side of wall, both end.	38	LM		0
3	Supply and installation of 100mm high SS skirting to match existing, covering all walls and partitions	121	LM		0
F	CEILING FINISHES				
1	Supply and installation of plain gypsum ceiling, 12.5mm thick gypsum board on GI framing to suit proposed layout. Conceptual design to match existing. Specified brand - Knauf	50	m2		0
2	Supply and installation of aluminum tiles to match, complete with suspension system to suit proposed layout. Specified brand - RAM	200	m2		0
3	Supply and installation of vertical bulkhead, 12.5mm thick gypsum board, single layer on GI frame suspension	80	LM		0
4	Prepare and apply Jotun Fenomastic silk paint finish to new gypsum ceiling and bulkhead. Color to match or as required	274	m2		0
H	LIGHTING				
1	Supply of linear light, length 1200mm to match existing. Contrator to design atmospheric light following standard lighting lux appropriate to room activities, with sensor. Lighting to be done in 2 zones with On-Off switch.	70	no.		0
2	Supply and installation of downlighter with powered factor ballast wherever indicated	1	lot		0
J	ELECTRICAL WORKS				
1	Installation of light fittings including conduiting and wiring	70	no.		0
2	Supply and installation of lighting override swithces	1	lot		0
3	Relocationof existing sensors should exist	1	lot		0
4	Supply and installation of Lighting sensor	1	lot		0
5	Supply and installation of control module	1	lot		0
6	Containement and wiring for modification and upgrade of lighting control system should require	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 10 - Multi Purpose Admission Room

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
7	Testing and commissioning of Lighting Control System	1	lot		0
8	Supply and installation of 13A power socket -twin, including conduiting and wiring	33	no		0
9	Supply and installation of 13A spur outlet, including conduiting and wiring for VAV	8	no		0
10	Supply and instalation of floor box, including conduiting and wiring	2	no.		0
11	Modification of existing DB as to fit - assuming that existing DB have enough spare and load to accommodate additional load requirement	1	lot		0
12	Suuply and installation of DB, upgraded to accommodate all load requirement in case line item 12 above found to be insufficient	1	lot		0
13	Modification of GI trunking for power and lighting	1	lot		0
14	PVC containment for wall mounted data points	23	no.		0
15	PVC containment for floor mounted - floor box, data points	2	lot		0
16	Modification of cable tray to accommodate new data cabling	1	lot		0
17	Supply and installation of CCTV including cabling and conduiting. Works to include system configuration, all in accordance with and approval of local authority	2	no.		0
18	Supply and installation of Digital Clock - network, including conduiting and wiring	2	no.		0
19	Other electrical related works not mentioned above if any to complete task	1	lot		0
K	HVAC WORKS				
1	Modification, supply and installation of A/C supply and return as appropriate. Scope to include Temperature contro. Type, concept and operational to match existing.	1	lot		0
2	Supply and installation of new bypass VAV including accessories	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 10 - Multi Purpose Admission Room

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
3	Supply and installation of new Fan coil Unit as may deem required, including Thermostat, valve package, chilled water and drain pipe with insulation. Works to include supply of 20A DP switch. All works to include conduiting and wiring. Contractor to his discretion, to have 3rd party survey and assessment in able to determine sufficiency of supply	2	no.		0
4	Modification of existing chilled water pipe with insulation	1	lot		0
5	Supply and installation of thermostat for VAV	2	no.		0
6	Supply and installation of PI Duct for supply and air duct	1	lot		0
7	Supply and installation of Plenum box	1	lot		0
8	Supply and installation of Supply & Return Slot Diffuser	1	lot		0
9	Modification of condensate drain pipe with insulation	1	lot		0
10	Modification of existing BMS as may deem required to accommodate new Bypass VAV and relocation	1	lot		0
11	Reprogramming, Testing and Commissioning of BMS system	1	lot		0
12	Chilled water flow test and performance test for existing AC units	1	lot		0
13	Supply and Installation of new valve package for the cooling fans (2 Nos)	1	lot		0
14	Supply and Installation of flexible ducts and VCDs	1	lot		0
	Air Balancing	1	lot		0
14	Chilled Water Flushing & Balancing	1	lot		0
15	Other related HVAC works required not mentioned above if any to complete task				
L	FIRE ALARM				
1	Supply and installation of Smoke Detector including fire rated cabling following international and local standard and regulation protocols	12	no.		0
2	Supply and installation of break glass including fire rated cabling	3	no.		0
3	Supply and instalaltion of Sounder including fire rated cabling	2	no.		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 10 - Multi Purpose Admission Room

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4	Dissable, Reprogramming, testing and Commissioning of Fire Alarm system	1	lot		0
5	Other related Fire Alarm works required not mentioned above if any to complete task				
M	FIRE FIGHTING WORKS				
1	Relocation of existing Pendant Sprinkler as deemed fit	1	lot		0
2	Supply and installation of Pendant Sprinkler including fire rated cabling following international and local standard and regulation protocols	20	no.		0
3	Draining and refilling of Fire Fighting system	1	lot		0
4	Pressure Charges	1	lot		0
5	Shop drawing preparation and coordination with Civil Defense approval	1	lot		0
6	Supply and installation, sets of Fire Extinguishers follwing safety standard	1	lot		0
	Other related Fire Fighting works required not mentioned above if any to complete task				
N	EMERGENCY LIGHTING WORKS				
1	Removal and reinstallation of existing Exit light	2	no.		0
2	Supply and installation of Emergency exit light including conduiting and wiring following international standard regulation and protocols	2	no.		0
3	Dissable, Reprogramming, testing and Commissioning of Emergency Lighting system (assume that existing CBS Panel have enough capacity to accommodate additional light)	1	lot		0
4	Supply and instalaltion of additonal circuit card should required	1	lot		0
5	Other related Emergency lighting works required not mentioned above if any to complete task	1	lot		0
P	STRUCTURED CABLING WORKS				
1	UTP CAT 6a structured cabling for voice and data, including pulling, termination, face plate to match existing, RJ45 module, termination and labeling	22	no.		0

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS

BILL NO. 10 - Multi Purpose Admission Room

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2	Patch cord 1 meter, 1 no per data point	22	no.		0
3	Patch cord 3 meter, 1 no. per data point	22	no.		0
4	24 port patch panel cat 6a or as deem required, fiber cabling with accessories - for Etisalat connection - 6 core single mode, fiber patch panel, single mode adapters, single mode sc/apc pigtails, sleeves, fiber cable pulling and splicing, fiber fluke testing etc.	1	lot		0
5	42U Rack	1	no.		0
6	All above to conform with given scope of works in accordance with the layout given	1	lot		0
7	Supply and installation of WIFI	1	no.		0
8	Other related works not mentioned above to complete task	1	lot		0
Q	AUDIO / VIDEO - please refer to AV SOW document				
1	Complete work is to provide comprehensive solution as fully describe in the scope of works. Contractor/vendor is to submit design, detailed BOQ, specific catalogs of proposed items	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 11 - ITAV Multi Purpose

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Design, supply and installation of comprehensive audio and video solution forming a functional collaborative environment. Equipment and devices to include switches, interfaces etc. necessary to link all gadgets, integrate for a seamless trouble free collaboration activities with items not limited to				
1	Wall mounted 65 " Touch Screen TV with Built in PC	8			
2	Trolley Mounted 65 " Touch Screen TV with Built in PC	2			
3	Ceiling Mounted Projector - Retractable / Short Throw Projector Not less than 4000 Lumens	2			
4	Motorised 100" Screen	2			
5	Wireless Presentation System for All TVs	10			
6	Wireless Presentation System for All Projectors	2			
7	Wired Connections (HDMI / VGA) for Projector	2			
8	Instructor Podium for the Room with Mic , Built in PC and Document Camera	2			
9	Ceiling mounted PTZ Camera for Recording	4			
10	Matric system to cast content from any source to have the Ability to cast content from any source to all / any one of the displays.	2			
11	System with the ability to view any source on a Tablet or Laptop	2			
12	Control system integrated on a Touch Screen Tablet	2			
13	Manual Controls (alternate) for Lighting	2			
14	Alternate Web Based Control of the Room	2			
15	Integration with BMS and Firefighting	Lot			
16	Wireless Lapel Microphone	2			
17	Wireless Handheld Microphones	4			

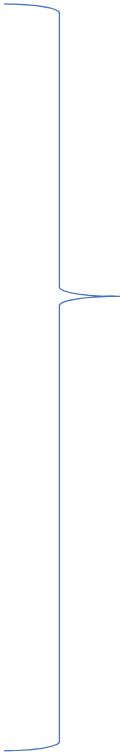
MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS

BILL NO. 11 - ITAV Multi Purpose

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
18	Ceiling mounted Speakers for Audio - integrated with with Audio / Video	2 Sets			
19	Ceiling mounted Array Microphones for Participants in the room during Conferencing	2 Sets			
20	DSP system to ensure proper isolation and control of Aufdio	2			
21	Integration with Conferencing solutions like Zoom / Teams	Lot			
	TO COLLECTION				-

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS

BILL NO. 11 - ITAV Multi Purpose

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
22	Network Switches (Manageable / PoE) as required - 48 Ports	2			
23	Cabling and Termination of network points	Lot			
24	Cabling and Termination of HDMI	Lot			
25	Video Transmitters / Recievers as required	Lot			
26	Racks to House Audio / Video Equipment	1			
27	Power Sockets (13A Dual Socket)	Lot			
28	Connection to Wired Network of the University	4			
29	Provision for Wireless Network AP	2			
30	Lighting with Dimmers suitable for Class room Setting and Meeting Room	Lot			
31	Room Booking Displays Integrated with University Crestron Fusion	2			

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 13 - Civil & MEP _ 2nd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	other than quantities that are specified herein, contractor to determine required no. of fittings and accessories, labors associated with on the basis of design space required, in compliance with international standard and local authority regulation. Contractor to follow related design concept existing in the building based on the indicative layout provided. Task deem required to complete the project spaces not mentioned, contractor as a must, to include all, add itemized description in brief under the line that reads" - related item not mentioned above to complete the task" wherever needed.				
A	PRELIMINARIES				
1	Mobilization and Demobilization	1	item		0
1a	Mobilization				
1b	Demobilization				
2	ADM/ADCD and other local Authorities Approvals	1	item		0
2a	ADM/ADDC drawing approvals				
2b	Civil Defense				
3	Project Mangement	1	item		0
3a	PM and Supervision charges				
4	Site Protection	1	item		0
4a	Temporary protection on walls and floors				
5	Progress Reporting	1	item		0
5a	Documentation, photos, progress of work monitoring				
6	Temporary Site Facilities	1	item		0
6a	First Aid				
6b	Fire Entinguesher, Blanket				
6c	Maintaining, keeping sanitary site condition				
7	QA, QC & HSE/EHS	1	item		0
7a	Adhering to University ISO and standard pratices and protocols				
8	Debris removal, cleaning	1	item		0
8a	Contractor is totally and absolutely responsible for the removal of any debris cause by the construction, surplus spoil, materials and the like resultant from the execution of the works caused either by their manpower, sub-contractors or by suppliers to appropriate location				
8b	Site cleaning for the entire project duration				
8c	Final cleaning before occupancy				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 13 - Civil & MEP _ 2nd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	TO COLLECTION				-
9	Submittals of Shop Drawings	1	item		0
9a	Drawing production, site/client/sub-contractor				
9b	Prints Out, contruction and revisions				
9c	AS-Built drawings, Soft and Hard copy - 2 sets				
B	DEMOLITION WORKS				
1	Removal of unwanted partition walls; concrete/gypsum, re-aligning services that maybe within should needed, wrap material in good condition, making good affected areas, cart to specified store, municipality dump site				
a	200mm thick blockwall - Tissue Culture Lab	60	m2		0
2	Removal of unwanted ceiling materials; tiles, bulkhead, re-aligning MEP services there maybe to suit as required	1	lot		0
3	Removal of debris, segregate and securely wrap usable items should there be, cart away trash to municipality dump site	1	lot		0
4	Contractor to provide accounting of realated materials for records and handing-over	1	item		0
C	Civil/PARTITION WORKS				
1	Supply and installation of blockworks, where specified. Internal and perimeter thickness to match existing				
a	200mm thick up to underside of slab - Tissue Culture Lab	41	m2		0
2	Supply and installation of 100mm thick gypsum board partitions, consisting of 72mm GI tracks, 70mm GI studs, Rockwool insulation - density of 35kg/m3 and single layer of 12.5mm thick gypsum board on each side. Works includes, taping, sanding, joiting etc. ready to recieve final finish				
a	Gap at curtaion wall - Autoclave	10	m2		0
b	Gap at curtaion wall - Labs spaces	80	m2		0
c	B02005, 4000mm FFL	21	m2		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 13 - Civil & MEP _ 2nd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
3	Supply and installation of specialized door for Freezer and Cold Storage Room including frames and ironmongery, safety lock mechanism as per manufacturer standard	2	set		0
4	Supply and Installation of ceiling hang curtain closure, SS aluminum railing, PVC curtain, 3 bays as shown in room A02007	1	set		0
5	Fabricate, supply and installation of fire rated laminate door with vision panel, complete door frame, ironmongery to match existing. Standard height to match with width as indicated in the layout				
a	Single Leaf - Tissue Culture lab	2	no.		0
b	Double Leaf - B02005	1	no.		0
6	Apply, pour appropriate thickness concrete screed including leveling compound				
a	B02046	38	m2		0
b	B02047	18	m2		0
c	B02048	9	m2		0
d	B02049	18	m2		0
e	Tissue Culture	90	m2		0
f	B02052	18	m2		0
g	B02056	18	m2		0
h	2002	71	m2		0
j	2003	112	m2		0
k	2004	84	m2		0
m	2005	83	m2		0
n	2006	84	m2		0
o	2007	84	m2		0
p	2008	99	m2		0
q	2012	25	m2		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 13 - Civil & MEP _ 2nd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
D	2013 FLOOR FINISH	73	m2		0
1	Supply and installation of Class III solid vinyl tiles, 3mm thick, chemical and slip resistance. Environmentally friendly and indoor Air Quality Certified. Installation, VOC free adhesive and levelling compound, LEED and Green certified	#REF!	m2		#REF!
a	Tissue Culture	90	m2		0
b	B02052	18	m2		0
c	B02056	18	m2		0
d	2002	71	m2		0
e	2003	112	m2		0
f	2004	84	m2		0
g	2005	83	m2		0
h	2006	84	m2		0
j	2007	84	m2		0
k	2008	99	m2		0
m	2013	73	m2		0
2	Prepare and apply Epoxy paint finish,	226	m2		0
a	B02046	38	m2		0
b	B02047	18	m2		0
c	B02048	9	m2		0
d	B02049	18	m2		0
e	2012	25	m2		0
3	Termination of joints between existing floor finish and new by means of threshold, floor grip, strips wherever needed and as appropriate	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 13 - Civil & MEP _ 2nd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
E	WALL FINISH				
1	Concrete/mortar plastering				
a	B02046	98	m2		0
b	B02047	59.5	m2		0
c	B02048	42	m2		0
d	B02049	60	m2		0
e	Tissue Culture	259	m2		0
f	B02052	60	m2		0
g	B02056	60	m2		0
h	2002	119	m2		0
j	2003	151	m2		0
k	2004	130	m2		0
m	2005	179	m2		0
n	2006	130	m2		0
o	2007	130	m2		0
p	2008	140	m2		0
q	2012	88	m2		0
r	2013	175	m2		0
2	Prepare and apply Jotun Fenomastic silk paint finish to new partition and existing walls and partitions. Color to match or as required	5123	m2		0
a	Tissue Culture	259	m2		0
b	B02052	60	m2		0
c	B02056	60	m2		0
d	2002	105	m2		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 13 - Civil & MEP _ 2nd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
e	2003	132	m2		0
f	2004	130	m2		0
g	2005	165	m2		0
h	2006	116	m2		0
j	2007	116	m2		0
k	2008	123	m2		0
l	2013	161	m2		0
3	Prepare and apply Epoxy paint finish	952	m2		0
a	B02046	98	m2		0
b	B02047	59.5	m2		0
c	B02048	42	m2		0
d	B02049	60	m2		0
e	2012	88	m2		0
4	Apply anti-bacteria, anti-fungus paint on walls above false ceiling				
a	B02046	56	m2		0
b	B02047	34	m2		0
c	B02048	24	m2		0
d	B02049	34	m2		0
e	Tissue Culture	148	m2		0
f	B02052	34	m2		0
g	B02056	34	m2		0
h	2002	68	m2		0
j	2003	86	m2		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 13 - Civil & MEP _ 2nd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
k	2004	74	m2		0
m	2005	102	m2		0
n	2006	74	m2		0
o	2007	74	m2		0
p	2008	80	m2		0
q	2012	50	m2		0
r	2013	100	m2		0
4	Supply and installation of manually operated perforated Roller Blinds, microscreen, 34%G + 66%PVC	50	bays		0
6	Supply and installation of 100mm high PVC skirting to match existing, covering all walls and partitions	462	LM		0
F	CEILING FINISHES				
1	Supply and installation of plain gypsum ceiling, 12.5mm thick gypsum board on GI framing to suit proposed layout. Knauf				
a	Tissue Culture	55	m2		0
b	B02052	11	m2		0
c	B02056	11	m2		0
d	2002	25	m2		0
e	2003	32	m2		0
f	2004	27	m2		0
g	2005	35	m2		0
h	2006	27	m2		0
j	2007	27	m2		0
k	2008	29	m2		0
m	2012	17	m2		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 13 - Civil & MEP _ 2nd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
n	2013	35	m2		0
2	Supply and installation of aluminum tiles to match, complete with suspension system to suit proposed layout. RAM	2190	m2		0
a	B02046	38	m2		0
b	B02047	18	m2		0
c	B02048	9	m2		0
d	B02049	18	m2		0
e	Tissue Culture	39	m2		0
f	B02052	7	m2		0
g	B02056	7	m2		0
h	2002	47	m2		0
j	2003	57	m2		0
k	2004	48	m2		0
m	2005	58	m2		0
n	2006	57	m2		0
o	2007	57	m2		0
p	2008	70	m2		0
q	2012	8	m2		0
r	2013	38	m2		0
3	Supply and installation of vertical bulkhead, 12.5mm thick gypsum board, single layer on GI frame suspension	315	LM		0
4	Prepare and apply Jotun Fenomastic silk paint finish to new gypsum ceiling and bulkhead. Color to match or as required	646	m2		0
G	JOINERY WORKS				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 13 - Civil & MEP _ 2nd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	Contractor to check, repair all existing doors, frames, architraves and ironmongery making sure that all are well and good and operational, replace cylinder wherever necessary	1	lot		0
H	LIGHTING				
1	Supply of linear light, length 1200mm to match existing. Contrator to design atmospheric light following standard lighting lux appropriate to specifi room activities	1	lot		0
2	Supply and installation of downlighter with powered factor ballast as may suit following existing design concept in the building	1	lot		0
J	ELECTRICAL WORKS				
	All lab spaces to be fitted with dedicated DB. No. of circuits in a DB should be calculated as per international and local regulation standard based on the indicative layout. All Services required indicated in service riser and spine on lab benches - lab spaces parallel/adjacent to the carpark, contractor only to supply circuits with capacity qty and capacity based on no. of points indicated in the layout in conjunction with decription written in the scope of work. Power/data/medical gases on walls in these labs as indicated and those rooms and labs spaces located not parallel to car park - contractor to fully supply terminate, test and commission.				
1	Installation of light fittings including conduitng and wiring baed on lighting above	1	item		0
2	Supply and installation of lighting override swithces	1	item		0
3	Relocationof existing sensors should exist	1	item		0
4	Supply and installation of Lighting sensor	1	item		0
5	Supply and installation of control module	1	item		0
6	Containement and wiring for modification and upgrade of lighting control system	1	item		0
8	Supply and installation of 13A power socket -twin, including conduiting and wiring	1	item		0
9	Supply and installation of 13A spur outlet, including conduiting and wiring for VAV	1	item		0
10	Suuply and installation of DB, to accommodate all load requirement. All lab spaces to be fitted with dedicated DB	1	item		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 13 - Civil & MEP _ 2nd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
11	Modification of GI trunking for power and lighting	1	lot		0
12	PVC containment for wall mounted data points	1	item		0
13	Modification of cable tray to accommodate new data cabling	1	item		0
14	Supply and installation of CCTV, quantity and coverage based on local regulation compliance	1	item		0
15	Supply and installation of 20A DP switch with flex outlet for water heater wherever needed, including conduiting and wiring	1	item		0
16	Supply and installation of Digital Clock - network, including conduiting and wiring	1	item		0
17	Integration, Programming, Testing and commissioning for above tasks	1	item		0
18	Supply and Installation of UPS System for sockets in the lab benches for each floors (We assumed that existing panel have enough provision to accommodate UPS System)	1	item		0
19	Supply and installation of Card access reader complete with magnetic lock and Time Management system including required programming and integration - Lab spaces	9	set		0
20	MEP related works not mentioned above to complete task				
	TO COLLECTION				-
K	HVAC WORKS All rooms, labs spaces has already Airconditioning units installed. However, Contractor to check, verify existence of; FCUs, AHU's within and or feeding spaces that required cooling. Assess operational condition should exists and shall determine additional requirements as calculation may suggest to comply with standard room temperature required to complete task				
1	Supply and installation of new bypass VAV including accessories	1	item		0
2	Relocation of existing Fan coil Unit including valve packaged as may deem required to suit with ceiling and bulkhead	1	item		0
3	Supply and installation of new Fan coil Unit as may deem require, including Thermostat, valve package, chilled water and drain pipe with insulation. Works to include supply of 20A DP switch. All works to include conduiting and wiring	1	item		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 13 - Civil & MEP _ 2nd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4	Modification of existing chilled water pipe with insulation	1	item		0
5	Supply and installation of thermostat for VAV	1	item		0
6	Supply and installation of PI Duct for supply and air duct	1	item		0
7	Supply and installation of Plenum box	1	item		0
8	Insulate existing ducting that are without insulation	1	item		0
9	Supply and installation of Supply & Return Slot Diffuser	1	item		0
10	Relocation of existing thermostat wherever required	1	item		0
11	Modification of condensate drain pipe with insulation	1	item		0
12	Modification of existing BMS as may deem required to accommodate new Bypass VAV and relocation	1	item		0
13	Chilled water flow test and performance test for existing AC units	1	item		0
14	Provide extraction duct in SS tubing on location where Fume Cupbaord and Autocalve are located. Velocity is as per international standard	1	item		0
15	Itegration, Reprogramming, Testing and Commissioning of BMS system	1	item		0
16	Other related HVAC works required not mentioned above if any to complete task	1	item		0
17	Integration of fume hood/ PCR Hood/ Biological workstations VAVs	1	item		0
18	Supply and Installation of PI ducts	1	item		0
19	Supply and Installation of new valve package for the cooling coils	1	item		0
20	Supply and Installation of flexible ducts and VCDS	1	item		0
21	Air Balancing	1	item		0
22	Chiller Water flushing and balancing	1	item		0
23	Fume Hood Extract Fans	1	item		0
24	Supply and installation of Air Pressure Monitor including conduit and cabling. Atmospheric room extraction contractor to determine following ASRAE standard and considereing Air changing unit of 10/h				
a	Tissue Culture lab (+ 20 Pa)	1	no.		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 13 - Civil & MEP _ 2nd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
b	Microscop Room (- 10 Pa)	1	no.		0
c	Equipment Room (+ 5 Pa)	1	no.		0
d	Tissue Culture lobby (- 5 Pa)	1	no.		0
e	2005 Lobby (- 5 Pa)	1	no.		0
f	2048 - Autoclave (+ 20 Pa)	1			
g	2047 - Walk-in Freezer Room (Contractor to determine)	1	no.		0
g.1	Also require Temperature monitoring Control as per manufacturer standar	1	set		0
h	2049 - Cold Storage (Contractor to determine)	1	no.		0
h.1	Also require Temperature monitoring Control as per manufacturer standar	1	set		0
25	Other related HVAC works required not mentioned above if any to complete task				
L	FIRE ALARM				
	All rooms, labs spaces has existing smoke detectors, contractor to verify, check operational condition, assess compliance in terms of quantity and placements. Re-align, add wherever needed ensuring compliant with standard regulation, local and international, add should deem require. Quantity may deem void, contractor to mark line item NA if exists and or incorporate correct quantity on the side				
1	Removal and relocation of existing Smoke Detector	1	LS		0
2	Supply and installation of Smoke Detector including fire rated cabling.	1	item		0
3	Supply and installation of break glass including fire rated cabling	1	item		0
4	Supply and instalaltion of Sounder including fire rated cabling	1	item		0
5	Dissable, Reprogramming, testing and Commissioning of Fire Alarm system	1	item		0
6	Other related Fire Alarm works required not mentioned above if any to complete task				
M	FIRE FIGHTING WORKS				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 13 - Civil & MEP _ 2nd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	All rooms, labs spaces has existing sprinkler heads, contractor to verify, check operational condition, assess compliance in terms of quantity and placements. Re-align, add wherever needed ensuring compliant with standard regulation, local and international, add should deem require. Quantity may deem void, contractor to mark line item NA if exists and or incorporate correct quantity on the side				
1	Relocation of existing Pendant Sprinkler as per fit	1	item		0
2	Supply and installation of Pendant Sprinkler including fire rated cabling	1	item		0
3	Draining and refilling of Fire Fighting system	1	item		0
4	Pressure Charges	1	item		0
5	Shop drawing preparation and coordination with Civil Defense approval	1	item		0
6	Supply and installation, sets of Fire Extinguishers following safety standard	1	item		0
	TO COLLECTION				-
	Other related Fire Fighting works required not mentioned above if any to complete task	1	item		0
	Supply and Installation of Fire Fighting Pipes for the new pendant sprinklers	1	item		0
N	EMERGENCY LIGHTING WORKS				
1	Relocation of emergency light	1	item		0
2	Removal and reinstallation of existing Exit light	1	item		0
3	Supply and installation of Emergency exit light including conduiting and wiring	1	item		0
4	Disable, Reprogramming, testing and Commissioning of Emergency Lighting system (assume that existing CBS Panel have enough capacity to accommodate additional light)	1	item		0
5	Supply and installation of additional circuit card should required	1	item		0
O	PLUMBING SYSTEM				
1	Supply and installation of water supply	1	item		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 13 - Civil & MEP _ 2nd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2	Supply and instalation of gate valve	1	item		0
3	Supply and installation of water hammer arrester	1	item		0
4	Supply and installation of required drainage	1	item		0
5	Supply and installation of 50L water heater	1	item		0
6	Supply and installation of floor trap	1	item		0
7	Floor Clean Outs	1	item		0
8	Fixing of Lab Sinks	1	item		0
9	Other related works not mentioned above to complete task				
P	STRUCTURED CABLING WORKS				
	Other than those going to lab benches service riser and spine specifically on labs spaces parallel/adjacent to the car park, all voice and data as indicated in the layout - contractor to supply, intall, terminate, test and commission. Contractor as part of the scope, to count total quantity required, those going to the lab benches (Service riser and spine) which quantity not mentioned herein, allocate appropriately and install all network related items ready to accommodate cabling by others				
1	UTP CAT 6a structured cabling for voice and data, including pulling, termination, face plate to match existing, RJ45 module, termination and labeling	1	item		0
2	Patch cord 1 meter	1	item		0
3	Patch cord 3 meter	1	item		0
4	24 port patch panel cat 6a or as deem required, fiber cabling with accessories - for Etisalat connection - 6 core single mode, fiber patch panel, single mode adapters, single mode sc/apc pigtails, sleeves, fiber cable pulling and splicing, fiber fluke testing etc.	1	item		0
5	42U Rack	1	item		0
6	Supply and install WIFI	7	no.		0
7	Supply and install IT Active Component where necessary	1	item		0
6	All above to conform with given scope of works	1	item		0

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS

BILL NO. 13 - Civil & MEP _ 2nd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
7	Other related works not mentioned above to complete task				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 14 - Civil & MEP _ 3rd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	other than quantities that are specified herein, contractor to determine required no. of fittings and accessories, labors associated with on the basis of design space required, in compliance with international standard and local authority regulation. Contractor to follow related design concept existing in the building based on the indicative layout provided. Task deem required to complete the project spaces not mentioned, contractor as a must, to include all, add itemized description in brief under the line that reads" - related item not mentioned above to complete the task" wherever needed.				
A	PRELIMINARIES				
1	Mobilization and Demobilization	1	item		0
1a	Mobilization				
1b	Demobilization				
2	ADM/ADDC and other local Authorities Approvals	1	item		0
2a	ADM/ADDC drawing approvals				
2b	Civil Defense				
3	Project Mangement	1	item		0
3a	PM and Supervision charges				
4	Site Protection	1	item		0
4a	Temporary protection on walls and floors				
5	Progress Reporting	1	item		0
5a	Documentation, photos, progress of work monitoring				
6	Temporary Site Facilities	1	item		0
6a	First Aid				
6b	Fire Entinguesher, Blanket				
6c	Maintaining, keeping sanitary site condition				
7	QA, QC & HSE/EHS	1	item		0
7a	Adhering to University ISO and standard pratices and protocols				
8	Debris removal, cleaning	1	item		0
8a	Contractor is totally and absolutely responsible for the removal of any debris cause by the construction, surplus spoil, materials and the like resultant from the execution of the works caused either by their manpower, sub-contractors or by suppliers to appropriate location				
8b	Site cleaning for the entire project duration				
8c	Final cleaning before occupancy				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 14 - Civil & MEP _ 3rd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
9	Submittals of Shop Drawings	1	item		0
9a	Drawing production, site/client/sub-contractor				
9b	Prints Out, contruction and revisions				
9c	AS-Built drawings, Soft and Hard copy - 2 sets				
B	DEMOLITION WORKS				
1	Removal of unwanted partition walls; concrete/gypsum, re-aligning services that maybe within should needed, wrap material in good condition, making good affected areas, cart to specified store, municipality dump site				
a	200mm thick blockwall - PCR room	33	m2		0
2	Removal of unwanted ceiling materials; tiles, bulkhead, re-aligning MEP services there maybe to suit as required	1	lot		0
3	Removal of of 1 no. laminated single leaf door, complete with ironmongery, frame etc. Safely wrap material for re-installation - PCR room	1	lot		0
4	Removal of debris, segregate and securely wrap usable items should there be, cart away trash to municipality dump site	1	lot		0
5	Contractor to provide accounting of rrelated materials for records and handing-over	1	item		0
C	Civi/PARTITION WORKS				
2	Supply and installation of blockworks, where specified. Internal and perimeter thickness to match existing				
a	200mm thick up to underside of slab - PCR Room	55	m2		0
3	Supply and installation of 100mm thick gypsum board partitions, consisting of 72mm GI tracks, 70mm GI studs, Rockwool insulation - density of 35kg/m3 and single layer of 12.5mm thick gypsum board on each side. Works includes, taping, sanding, joiting etc. ready to recieve final finish				
a	Gap at curtaion wall - Lab spaces	80	m2		0
b	Gap at curtaion wall - Autoclave	10	m2		0
4	Supply and installation of Hermatic Sliding door complete with ironmongery - PCR room	1	set		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 14 - Civil & MEP _ 3rd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
5	Apply, pour appropriate thickness concrete screed including leveling compound				
a	PCR room	20	m2		0
b	PCr Prep Room	27	m2		0
c	PCR Reagent	13	m2		0
d	PCR Airlock room	7	m2		0
e	PCR Cell Culture	29	m2		0
f	3050	19	m2		0
g	3054	19	m2		0
h	3002	70	m2		0
j	3003	113	m2		0
k	3004	84	m2		0
m	3005	85	m2		0
n	3006	84	m2		0
o	3007	84	m2		0
p	3008	48	m2		0
q	3009	49	m2		0
r	3013	25	m2		0
s	3014	75	m2		0
D	FLOOR FINISH				
1	Supply and installation of Class III solid vinyl tiles, 3mm thick, chemical and slip resistance. Environmentally friendly and indoor Air Quality Certified. Installation, VOC free adhesive and levelling compound, LEED and Green certified				
a	PCR room	20	m2		0
b	PCr Prep Room	27	m2		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 14 - Civil & MEP _ 3rd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
c	PCR Reagent	13	m2		0
d	PCR Airlock room	7	m2		0
e	PCR Cell Culture	29	m2		0
f	3050	19	m2		0
g	3002	70	m2		0
h	3003	113	m2		0
j	3004	84	m2		0
k	3005	85	m2		0
m	3006	84	m2		0
n	3007	84	m2		0
o	3008	48	m2		0
p	3009	49	m2		0
q	3014	75	m2		0
2	Prepare and apply Epoxy paint finish,				
a	3054	19	m2		0
b	3013	25	m2		0
3	Termination of joints between existing floor finish and new by means of threshold, floor grip, strips wherever needed and as appropriate	1	lot		0
E	WALL FINISH				
1	Concrete/mortar plastering				
a	PCR room	70	m2		0
b	PCr Prep Room	73.5	m2		0
c	PCR Reagent	49	m2		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 14 - Civil & MEP _ 3rd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
d	PCR Airlock room	39	m2		0
e	PCR Cell Culture	88	m2		0
f	3050	63	m2		0
g	3054	63	m2		0
h	3002	104	m2		0
j	3003	134	m2		0
k	3004	115	m2		0
m	3005	118	m2		0
n	3006	116	m2		0
o	3007	116	m2		0
p	3008	88	m2		0
q	3009	92	m2		0
r	3013	76	m2		0
s	3014	123	m2		0
2	Prepare and apply Jotun Fenomastic silk paint finish to new partition and existing walls and partitions. Color to match or as required				
a	PCR room	70	m2		0
b	PCr Prep Room	73.5	m2		0
c	PCR Reagent	49	m2		0
d	PCR Airlock room	39	m2		0
e	PCR Cell Culture	88	m2		0
f	3050	63	m2		0
g	3002	104	m2		0
h	3003	134	m2		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 14 - Civil & MEP _ 3rd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
j	3004	115	m2		0
k	3005	118	m2		0
m	3006	116	m2		0
n	3007	116	m2		0
o	3008	88	m2		0
p	3009	92	m2		0
q	3014	123	m2		0
3	Prepare and apply Epoxy paint finish,	952	m2		0
a	3054 - Freezer Room	63	m2		0
b	3013 - Autoclave	76	m2		0
4	Prepare and apply anti-bacteria, anti-fungus paint at above ceiling				
a	PCR room	40	m2		0
b	PCr Prep Room	42	m2		0
c	PCR Reagent	28	m2		0
d	PCR Airlock room	22	m2		0
e	PCR Cell Culture	50	m2		0
f	3050	36	m2		0
g	3054	36	m2		0
h	3002	66	m2		0
j	3003	86	m2		0
k	3004	74	m2		0
m	3005	74	m2		0
n	3006	74	m2		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 14 - Civil & MEP _ 3rd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
o 3007		74	m2		0
p 3008		56	m2		0
q 3009		58	m2		0
r 3013		52	m2		0
s 3014		70	m2		0
5	Supply and installation of manually operated perforated Roller Blinds, microscreen, 34%G + 66%PVC	48	bays		0
6	Supply and installation of 100mm high PVC skirting to match existing, covering all walls and partitions	938	LM		0
F	CEILING FINISHES				
1	Supply and installation of plain gypsum ceiling, 12.5mm thick gypsum board on GI framing to suit proposed layout. Allow at least 800mm surface width				
a	PCR room	13	m2		0
b	PCr Prep Room	14	m2		0
c	PCR Reagent	9	m2		0
d	PCR Airlock room	7	m2		0
e	PCR Cell Culture	18	m2		0
f 3050		12	m2		0
g 3002		24	m2		0
h 3003		33	m2		0
j 3004		27	m2		0
k 3005		27	m2		0
m 3006		27	m2		0
n 3007		27	m2		0
o 3008		20	m2		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 14 - Civil & MEP _ 3rd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
p 3009		20	m2		0
q 3014		25	m2		0
2	Supply and installation of aluminum tiles to match, complete with suspension system to suit proposed layout				
a PCR room		7	m2		0
b PCr Prep Room		13	m2		0
c PCR Reagent		4	m2		0
e PCR Cell Culture		11	m2		0
f 3050		7	m2		0
g 3052		19	m2		0
h 3002		46	m2		0
j 3003		80	m2		0
k 3004		57	m2		0
m 3005		58	m2		0
n 3006		57	m2		0
o 3007		57	m2		0
p 3008		28	m2		0
q 3009		29	m2		0
r 3013		8	m2		0
s 3014		50	m2		0
3	Supply and installation of vertical bulkhead, 12.5mm thick gypsum board, single layer on GI frame suspension	324	LM		0
4	Prepare and apply Jotun Fenomastic silk paint finish to new gypsum ceiling and bulkhead. Color to match or as required	904	m2		
G	JOINERY WORKS				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 14 - Civil & MEP _ 3rd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2	Contractor to check, repair all existing doors, frames, architraves and ironmongery making sure that all are well and good and operational	1	lot		0
H	LIGHTING				
1	Supply of linear light, length 1200mm to match existing. Contrator to design atmospheric light following standard lighting lux appropriate to specifi room activities	1	lot		0
2	Supply and installation of downlighter with powered factor ballast as may suit following existing design concept in the building	1	lot		0
J	ELECTRICAL WORKS				
	All lab spaces to be fitted with dedicated DB. No. of circuits in a DB should be calculated as per international and local regulation standard based on the indicative layout. All Services required indicated in service riser and spine on lab benches - lab spaces parallel/adjacent to the carpark, contractor only to supply circuits with capacity qty and capacity based on no. of points indicated in the layout in conjunction with decription written in the scope of work. Power/data/medical gases on walls in these labs as indicated and those rooms and labs spaces located not parallel to car park - contractor to fully supply terminate, test and commission.				
1	Installation of light fittings including conduiting and wiring baed on lighting above	1	item		0
2	Supply and installation of lighting override swithces	1	item		0
3	Relocationof existing sensors should exist	1	item		0
4	Supply and installation of Lighting sensor	1	item		0
5	Supply and installation of control module	1	item		0
6	Containement and wiring for modification and upgrade of lighting control system	1	item		0
8	Supply and installation of 13A power socket -twin, including conduiting and wiring	1	item		0
9	Supply and installation of 13A spur outlet, including conduiting and wiring for VAV	1	item		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 14 - Civil & MEP _ 3rd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
10	Modification of existing DB as per proposed layout - assuming that existing DB have enough spare and load to accommodate additional load requirement				
11	Supply and installation of DB, upgraded to accommodate all load requirement in case line item 12 above found to be insufficient. All lab spaces to be fitted with dedicated DB	1	item		0
12	Modification of GI trunking for power and lighting	1	lot		0
13	PVC containment for wall mounted data points	1	item		0
14	Modification of cable tray to accommodate new data cabling	1	item		0
15	Supply and installation of CCTV, quantity and coverage based on local regulation compliance	1	item		0
16	Supply and installation of 20A DP switch with flex outlet for water heater wherever needed, including conduiting and wiring	1	item		0
17	Supply and installation of Digital Clock - network, including conduiting and wiring	1	item		0
18	Integration, Programming, Testing and commissioning for above tasks	1	item		0
19	Supply and Installation of UPS System for sockets in the lab benches for each floors (We assumed that existing panel have enough provision to accommodate UPS System)	1	item		0
20	Supply and installation of Card access reader complete with magnetic lock and Time Management system including required programming and integration - Lab spaces	8	set		0
21	MEP related works not mentioned above to complete task				
	TO COLLECTION				-
K	HVAC WORKS All rooms, labs spaces has already Airconditioning units installed. However, Contractor to check, verify existence of; FCUs, AHU's within and or feeding spaces that required cooling. Assess operational condition should exists and shall determine additional requirements as calculation may suggest to comply with standard room temperature required to complete task				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 14 - Civil & MEP _ 3rd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	Supply and installation of new bypass VAV including accessories	1	item		0
2	Relocation of existing Fan coil Unit including valve packaged as may deem required to suit with ceiling and bulkhead	1	item		0
3	Supply and installation of new Fan coil Unit as may deem require, including Thermostat, valve package, chilled water and drain pipe with insulation. Works to include supply of 20A DP switch. All works to include conduiting and wiring	1	item		0
4	Modification of existing chilled water pipe with insulation	1	item		0
5	Supply and installation of thermostat for VAV	1	item		0
6	Supply and installation of PI Duct for supply and air duct	1	item		0
7	Supply and installation of Plenum box	1	item		0
8	Insulate existing ducting that are without insulation	1	item		0
9	Supply and installation of Supply & Return Slot Diffuser	1	item		0
10	Relocation of existing thermostat wherever required	1	item		0
11	Modification of condensate drain pipe with insulation	1	item		0
12	Modification of existing BMS as may deem required to accommodate new Bypass VAV and relocation	1	item		0
13	Chilled water flow test and performance test for existing AC units	1	item		0
14	Provide extraction duct in SS tubing on location where Fume Cupbaord and Autocalve are located. Velocity is as per international standard	36	points		0
15	Itegration, Reprogramming, Testing and Commissioning of BMS system	1	item		0
16	Supply and installation of Air Pressure Monitor including conduit and cabling. Atmospheric room extraction contractor to determine following ASRAE standard and considereing Air changing unit of 10/h				
a	PCR Room (- 15 Pa)	1	no.		0
b	Cell Culture Room (+ 15 Pa)	1	no.		0
c	Prep Room (- 15 Pa)	1	no.		0
d	Reagent Store (+ 5 Pa)	1	no.		0
e	Air Lock (- 5 Pa)	1	no.		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 14 - Civil & MEP _ 3rd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
f	3013- Autoclave (+ 20 Pa)	1	no.		0
g	3054 - Freezer Room (Contractor to determine)	1	no.		0
17	Integration of fume hood/ PCR Hood/ Biological workstations VAVs (36 Nos)	1	item		0
18	Supply and Installation of PI ducts	1	item		0
19	Supply and Installation of new valve package for the cooling coils (35 Nos)	1	item		0
20	Supply and Installation of flexible ducts and VCDS	1	item		0
21	Air Balancing	1	item		0
22	Chiller Water flushing and balancing	1	item		0
23	Fume Hood Extract Fans	1	item		0
24	Other related HVAC works required not mentioned above if any to complete task	1	item		0
L	FIRE ALARM				
	All rooms, labs spaces has existing smoke detectors, contractor to verify, check operational condition, assess compliance in terms of quantity and placements. Re-align, add wherever needed ensuring compliant with standard regulation, local and international, add should deem require. Quantity may deem void, contractor to mark line item NA if exists and or incorporate correct quantity on the side				
1	Removal and relocation of existing Smoke Detector	1	item		0
2	Supply and installation of Smoke Detector including fire rated cabling.	1	item		0
3	Supply and installation of break glass including fire rated cabling	1	item		0
4	Supply and instalaltion of Sounder including fire rated cabling	1	item		0
5	Dissable, Reprogramming, testing and Commissioning of Fire Alarm system	1	item		0
6	Other related Fire Alarm works required not mentioned above if any to complete task	1	item		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 14 - Civil & MEP _ 3rd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
M	FIRE FIGHTING WORKS				
	All rooms, labs spaces has existing sprinkler heads, contractor to verify, check operational condition, assess compliance in terms of quantity and placements. Re-align, add wherever needed ensuring compliant with standard regulation, local and international, add should deem require. Quantity may deem void, contractor to mark line item NA if exists and or incorporate correct quantity on the side				
1	Relocation of existing Pendant Sprinkler as per fit	1	item		0
2	Supply and installation of Pendant Sprinkler including fire rated cabling	1	item		0
3	Draining and refilling of Fire Fighting system	1	item		0
4	Pressure Charges	1	item		0
5	Shop drawing preparation and coordination with Civil Defense approval	1	item		0
6	Supply and installation, sets of Fire Extinguishers following safety standard	1	item		0
7	Supply and Installation of Fire Fighting Pipes for the new pendant sprinklers	1	item		0
8	Other related Fire Fighting works required not mentioned above if any to complete task				
N	EMERGENCY LIGHTING WORKS				
1	Relocation of emergency light	1	item		0
2	Removal and reinstallation of existing Exit light	1	item		0
3	Supply and installation of Emergency exit light including conduiting and wiring	1	item		0
4	Disable, Reprogramming, testing and Commissioning of Emergency Lighting system (assume that existing CBS Panel have enough capacity to accommodate additional light)	1	item		0
5	Supply and installation of additional circuit card should required	1	item		0
O	PLUMBING SYSTEM				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 14 - Civil & MEP _ 3rd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	Supply and installation of water supply	1	item		0
2	Supply and instalation of gate valve	1	item		0
3	Supply and installation of water hammer arrester	1	item		0
4	Supply and installation of required drainage	1	item		0
5	Supply and installation of 50L water heater	1	item		0
6	Supply and installation of floor trap	1	item		0
7	Floor Clean Outs	1	item		0
8	Fixing of Lab Sinks	1	item		0
9	Other related works not mentioned above to complete task				
P	STRUCTURED CABLING WORKS				
	Other than those going to lab benches service riser and spine specifically on labs spaces parallel/adjacent to the car park, all voice and data as indicated in the layout - contractor to supply, intall, terminate, test and commission. Contractor as part of the scope, to count total quantity required, those going to the lab benches (Service riser and spine) which quantity not mentioned herein, allocate appropriately and install all network related items ready to accommodate cabling by others				
1	UTP CAT 6a structured cabling for voice and data, including pulling, termination, face plate to match existing, RJ45 module, termination and labeling	1	item		0
2	Patch cord 1 meter	1	item		0
3	Patch cord 3 meter	1	item		0
4	24 port patch panel cat 6a or as deem required, fiber cabling with accessories - for Etisalat connection - 6 core single mode, fiber patch panel, single mode adapters, single mode sc/apc pigtails, sleeves, fiber cable pulling and splicing, fiber fluke testing etc.	1	item		0
5	42U Rack	1	item		0
6	Supply and install WIFI	8	no.		0
7	Supply and install IT Active Components where needed	1	item		0
8	All above to conform with given scope of works	1	item		0

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS

BILL NO. 14 - Civil & MEP _ 3rd Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
9	Other related works not mentioned above to complete task				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 15 - Civil & MEP _ 4th Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	other than quantities that are specified herein, contractor to determine required no. of fittings and accessories, labors associated with on the basis of design space required, in compliance with international standard and local authority regulation. Contractor to follow related design concept existing in the building based on the indicative layout provided. Task deem required to complete the project spaces not mentioned, contractor as a must, to include all, add itemized description in brief under the line that reads" - related item not mentioned above to complete the task" wherever needed.				
A	PRELIMINARIES				
1	Mobilization and Demobilization	1	item		0
1a	Mobilization				
1b	Demobilization				
2	ADM/ADDC and other local Authorities Approvals	1	item		0
2a	ADM/ADDC drawing approvals				
2b	Civil Defense				
3	Project Mangement	1	item		0
3a	PM and Supervision charges				
4	Site Protection	1	item		0
4a	Temporary protection on walls and floors				
5	Progress Reporting	1	item		0
5a	Documentation, photos, progress of work monitoring				
6	Temporary Site Facilities	1	item		0
6a	First Aid				
6b	Fire Entinguesher, Blanket				
6c	Maintaining, keeping sanitary site condition				
7	QA, QC & HSE/EHS	1	item		0
7a	Adhering to University ISO and standard pratices and protocols				
8	Debris removal, cleaning	1	item		0
8a	Contractor is totally and absolutely responsible for the removal of any debris cause by the construction, surplus spoil, materials and the like resultant from the execution of the works caused either by their manpower, sub-contractors or by suppliers to appropriate location				
8b	Site cleaning for the entire project duration				
8c	Final cleaning before occupancy				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 15 - Civil & MEP _ 4th Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
9	Submittals of Shop Drawings	1	item		0
9a	Drawing production, site/client/sub-contractor				
9b	Prints Out, contruction and revisions				
9c	AS-Built drawings, Soft and Hard copy - 2 sets				
B	DEMOLITION WORKS				
1	Removal of unwanted ceiling materials; tiles, bulkhead, re-aligning MEP services there maybe to suit as required	1	lot		0
2	Removal of debris, segregate and securely wrap usable items should there be, cart away trash to municipality dump site	1	lot		0
3	Contractor to provide accounting of realated materials for records and handing-over	1	item		0
C	Civil/PARTITION WORKS				
1	Supply and installation of 12.5mm thicknes gypsum board at curtain wall gap	37	m2		0
2	Apply, pour appropriate thickness concrete screed including leveling compound				
a	4050	19	m2		0
b	4054	19	m2		0
c	4012	25	m2		0
d	4006	84	m2		0
e	4007	84	m2		0
f	4008	99	m2		0
D	FLOOR FINISH		m2		0
1	Supply and installation of Ceramic tiles in Kitchen to match existing - 4050	20	m2		0
2	Supply and installation of Class III solid vinyl tiles, 3mm thick, chemical and slip resistance. Environmentally friendly and indoor Air Quality Certified. Installation, VOC free adhesive and levelling compound, LEED and Green certified				
a	4050	19	m2		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 15 - Civil & MEP _ 4th Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
b	4006	84	m2		0
c	4007	84	m2		0
d	4008	99	m2		0
4	Prepare and apply Epoxy paint finish,				
a	4054	19	m2		0
5	Termination of joints between existing floor finish and new by means of threshold, floor grip, strips wherever needed and as appropriate	1	lot		0
E	WALL FINISH				
1	Supply and installation of Ceramic tiles in Kitchen to match existing - 4050	70	m2		0
2	Concrete/mortar plastering				
a	4050	63	m2		0
b	4054	63	m2		0
c	4012	77	m2		0
d	4006	119	m2		0
e	4007	119	m2		0
f	4008	123	m2		0
3	Prepare and apply Jotun Fenomastic silk paint finish to new partition and existing walls and partitions. Color to match or as required				
a	4050	63	m2		0
d	4006	119	m2		0
e	4007	119	m2		0
f	4008	123	m2		0
4	Prepare and apply Epoxy paint finish,				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 15 - Civil & MEP _ 4th Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
a	4054	63	m2		0
b	4012	77	m2		0
5	Appy anti-bacterial, anti-fungus paint above ceiling				
a	4050	36	m2		0
b	4054	36	m2		0
c	4012	52	m2		0
d	4006	76	m2		0
e	4007	76	m2		0
f	4008	80	m2		0
6	Supply and installation of manually operated perforated Roller Blinds, microscreen, 34%G + 66%PVC	25	bays		0
6	Supply and installation of 100mm high PVC skirting to match existing, covering all walls and partitions				
a	4050	18	LM		0
b	4054	18	LM		0
c	4012	26	LM		0
d	4006	38	LM		0
e	4007	38	LM		0
f	4008	40	LM		0
F	CEILING FINISHES				
1	Supply and installation of plain gypsum ceiling, 12.5mm thick gypsum board on GI framing to suit proposed layout				
a	4050	12	m2		0
b	4054	12	m2		0
c	4012	17	m2		0
d	4006	27	m2		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 15 - Civil & MEP _ 4th Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
e 4007		27	m2		0
f 4008		30	m2		0
2	Supply and installation of aluminum tiles to match, complete with suspension system to suit proposed layout				
a 4050		7	m2		0
b 4054		7	m2		0
c 4012		8	m2		0
d 4006		57	m2		0
e 4007		57	m2		0
f 4008		69	m2		0
3	Supply and installation of vertical bulkhead, 12.5mm thick gypsum board, single layer on GI frame suspension	128	LM		
4	Prepare and apply Jotun Fenomastic silk paint finish to new gypsum ceiling and bulkhead. Color to match or as required	288	m2		
G	JOINERY WORKS				
1	Supply and installation of Kitchen Counter, Corian top finish, double bowl SS sink with H/C mixer, complete with under counter standard cabinetry and overhang cabinet. Dimension as shown in the layout - 4th flr	1	set		0
2	Contractor to check, repair all existing doors, frames, architraves and ironmongery making sure that all are well and good and operational	1	lot		0
H	LIGHTING				
1	Supply of linear light, length 1200mm to match existing. Contrator to design atmospheric light following standard lighting lux appropriate to specifi room activities	1	lot		0
2	Supply and installation of downlighter with powered factor ballast as may suit following existing design concept in the building	1	lot		0
J	ELECTRICAL WORKS				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 15 - Civil & MEP _ 4th Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	All lab spaces to be fitted with dedicated DB. No. of circuits in a DB should be calculated as per international and local regulation standard based on the indicative layout. All Services required indicated in service riser and spine on lab benches - lab spaces parallel/adjacent to the carpark, contractor only to supply circuits with capacity qty and capacity based on no. of points indicated in the layout in conjunction with description written in the scope of work. Power/data/medical gases on walls in these labs as indicated and those rooms and labs spaces located not parallel to car park - contractor to fully supply terminate, test and commission.				
2	Supply and installation of lighting override switches	1	item		0
3	Relocation of existing sensors should exist	1	item		0
4	Supply and installation of Lighting sensor	1	item		0
5	Supply and installation of control module	1	item		0
6	Containment and wiring for modification and upgrade of lighting control system	1	item		0
8	Supply and installation of 13A power socket -twin, including conduiting and wiring	1	item		0
9	Supply and installation of 13A spur outlet, including conduiting and wiring for VAV	1	item		0
10	Supply and installation of DB, upgraded to accommodate all load requirement in case line item 12 above found to be insufficient. All lab spaces to be fitted with dedicated DB	1	item		0
11	Modification of GI trunking for power and lighting	1	lot		0
12	PVC containment for wall mounted data points	1	item		0
13	Modification of cable tray to accommodate new data cabling	1	item		0
14	Supply and installation of CCTV, quantity and coverage based on local regulation compliance	1	item		0
15	Supply and installation of 20A DP switch with flex outlet for water heater wherever needed, including conduiting and wiring	1	item		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 15 - Civil & MEP _ 4th Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
16	Supply and installation of Digital Clock - network, including conduiting and wiring	1	item		0
17	Integration, Programming, Testing and commissioning for above tasks	1	item		0
18	Supply and Installation of UPS System for sockets in the lab benches for each floors	1	item		0
19	Supply and installation of Card access reader complete with magentic lock and Time Management system including required programing and integration - Lab spaces	3	set		0
20	MEP related works not mentioned above to complete task				
K	HVAC WORKS				
	All rooms, labs spaces has already Aircondioning units installed. However, Contractor to check, verify existence of; FCUs, AHU's within and or feeding spaces that required cooling. Assess operational condition should exists and shall determine additional requirements as calculation may suggest to comply with standard room temperature required to complete task				
1	Supply and installation of new bypass VAV including accessories	1	item		0
2	Relocation of existing Fan coil Unit including valve packaged as may deem required to suit with ceiling and bulkhead	1	item		0
3	Supply and installation of new Fan coil Unit as may deem require, including Thermostat, valve package, chilled water and drain pipe with insulation. Works to include supply of 20A DP switch. All works to include conduiting and wiring	1	item		0
4	Modification of existing chilled water pipe with insulation	1	item		0
5	Supply and installation of thermostat for VAV	1	item		0
6	Supply and installation of PI Duct for supply and air duct	1	item		0
7	Supply and installation of Plenum box	1	item		0
8	Insulate existing ducting that are without insulation	1	item		0
9	Supply and installation of Supply & Return Slot Diffuser	1	item		0
10	Relocation of existing thermostat wherever required	1	item		0
11	Modification of condensate drain pipe with insulation	1	item		0
12	Modification of existing BMS as may deem required to accommodate new Bypass VAV and relocation	1	item		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 15 - Civil & MEP _ 4th Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
13	Chilled water flow test and performance test for existing AC units	1	item		0
14	Provide extraction duct in SS tubing on location where Fume Cupbaord and Autocalve are located. Velocity is as per international standard	1	item		0
15	Itegration, Reprogramming, Testing and Commissioning of BMS system	1	item		0
16	Supply and installation of Air Pressure Monitor including conduit and cabling. Atmospheric room extraction contractor to determine following ASRAE standard and considereing Air changing unit of 10/h				
a	3013- Autoclave (+ 20 Pa)	1	no.		0
b	Freezer Room (Contractor to determine)	1	no.		0
17	Integration of fume hood/ PCR Hood/ Biological workstations VAVs	1	item		0
18	Supply and Installation of PI ducts	1	item		0
19	Supply and Installation of new valve package for the cooling coils	1	item		0
20	Supply and Installation of flexible ducts and VCDS	1	item		0
21	Air Balancing	1	item		0
22	Chiller Water flushing and balancing	1	item		0
23	Fume Hood Extract Fans	1	item		0
24	Other related HVAC works required not mentioned above if any to complete task	1	item		0
L	FIRE ALARM				
	All rooms, labs spaces has existing smoke detectors, contractor to verify, check operational condition, assess compliance in terms of quantity and placements. Re-align, add wherever needed ensuring compliant with standard regulation, locl and international, add should deem require. Quantity may deem void, contractor to mark line item NA if exists and or incorporate correct quantity on the side				
1	Removal and relocation of existing Smoke Detector	1	LS		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 15 - Civil & MEP _ 4th Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2	Supply and installation of Smoke Detector including fire rated cabling.	1	LS		0
3	Supply and installation of break glass including fire rated cabling	1	LS		0
4	Supply and instalaltion of Sounder including fire rated cabling	1	LS		0
5	Dissable, Reprogramming, testing and Commissioning of Fire Alarm system	1	LS		0
6	Other related Fire Alarm works required not mentioned above if any to complete task	1	LS		0
M	FIRE FIGHTING WORKS				
	All rooms, labs spaces has existing sprinkler heads, contractor to verify, check operational condition, assess compliance in terms of quantity and placements. Re-align, add wherever needed ensuring compliant with standard regulation, locl and international, add should deem require. Quantity may deem void, contractor to mark line item NA if exists and or incorporate correct quantity on the side				
1	Relocation of existing Pendant Sprikler as per fit	1	item		0
2	Supply and installation of Pendant Sprinkler including fire rated cabling	1	item		0
3	Draining and refilling of Fire Fighting system	1	item		0
4	Pressure Charges	1	item		0
5	Shop drawing preparation and coordination with Civil Defense approval	1	item		0
6	Supply and installation, sets of Fire Extinguishers follwing safety standard	1	item		0
	TO COLLECTION				-
	Other related Fire Fighting works required not mentioned above if any to complete task	1	item		0
	Supply and Installation of Fire Fighting Pipes for the new pendent sprinklers	1	item		0
N	EMERGENCY LIGHTING WORKS				
1	Relocation of emergency light	1	item		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 15 - Civil & MEP _ 4th Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2	Removal and reinstallation of exisxting Exit light	1	item		0
3	Supply and installation of Emergency exit light including conduiting and wiring	1	item		0
4	Dissable, Reprogramming, testing and Commissioning of Emergency Lighting system (assume that existing CBS Panel have enough capacity to accommodate additional light)	1	item		0
5	Supply and instalation of additonal circuit card should required	1	item		0
O	PLUMBING SYSTEM				
1	Supply and installation of water supply	1	item		0
2	Supply and instalation of gate valve	1	item		0
3	Supply and installation of water hammer arrester	1	item		0
4	Supply and installation of required drainage	1	item		0
5	Supply and installation of 50L water heater	1	item		0
6	Supply and installation of floor trap	1	item		0
7	Floor Clean Outs	1	item		0
8	Fixing of Lab Sinks	1	item		0
9	Other related works not mentioned above to complete task				
P	STRUCTURED CABLING WORKS				
	Other than those going to lab benches service riser and spine specifically on labs spaces parallel/adjacent to the car park, all voice and data as indicated in the layout - contractor to supply, intall, terminate, test and commission. Contractor as part of the scope, to count total quantity required, those going to the lab benches (Service riser and spine) which quantity not mentioned herein, allocate appropriately and install all network related items ready to accommodate cabling by others				
1	UTP CAT 6a structured cabling for voice and data, including pulling, termination, face plate to match existing, RJ45 module, termination and labeling	1	item		0
2	Patch cord 1 meter	1	item		0
3	Patch cord 3 meter	1	item		0

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS

BILL NO. 15 - Civil & MEP _ 4th Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4	24 port patch panel cat 6a or as deem required, fiber cabling with accessories - for Etisalat connection - 6 core single mode, fiber patch panel, single mode adapters, single mode sc/apc pigtails, sleeves, fiber cable pulling and splicing, fiber fluke testing etc.	1	item		0
5	42U Rack	1	item		0
6	Supply and install of WIFI	3	no.		0
7	Supply and install IT Active Component where needed	1	item		0
6	All above to conform with given scope of works	1	item		0
8	Other related works not mentioned above to complete task				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 12 - Civil & MEP _ First Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	other than quantities that are specified herein, contractor to determine required no. of fittings and accessories, labors associated with on the basis of design space required, in compliance with international standard and local authority regulation. Contractor to follow related design concept existing in the building based on the indicative layout provided. Task deem required to complete the project spaces not mentioned, contractor as a must, to include all, add itemized description in brief under the line that reads" - related item not mentioned above to complete the task" wherever needed.				
A	PRELIMINARIES				
1	Mobilization and Demobilization	1	item		0
1a	Mobilization				
1b	Demobilization				
2	ADM/ADDC and other local Authorities Approvals	1	item		0
2a	ADM/ADDC drawing approvals				
2b	Civil Defense				
3	Project Mangement	1	item		0
3a	PM and Supervision charges				
4	Site Protection	1	item		0
4a	Temporary protection on walls and floors				
5	Progress Reporting	1	item		0
5a	Documentation, photos, progress of work monitoring				
6	Temporary Site Facilities	1	item		0
6a	First Aid				
6b	Fire Entinguesher, Blanket				
6c	Maintaining, keeping sanitary site condition				
7	QA, QC & HSE/EHS	1	item		0
7a	Adhering to University ISO and standard pratices and protocols				
8	Debris removal, cleaning	1	item		0
8a	Contractor is totally and absolutely responsible for the removal of any debris cause by the construction, surplus spoil, materials and the like resultant from the execution of the works caused either by their manpower, sub-contractors or by suppliers to appropriate location				
8b	Site cleaning for the entire project duration				
8c	Final cleaning before occupancy				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 12 - Civil & MEP _ First Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
9	Submittals of Shop Drawings	1	item		0
9a	Drawing production, site/client/sub-contractor				
9b	Prints Out, contruction and revisions				
9c	AS-Built drawings, Soft and Hard copy - 2 sets				
B	DEMOLITION WORKS				
1	Removal of unwanted partition walls; concrete/gypsum, re-aligning services that maybe within should needed, wrap material in good condition, making good affected areas, cart to specified store, municipality dump site				
a	Removal of 5300LM countertop, and 15m2 carpet tiles in room 1st flr 104130. Prepare floor and wall surface to accommodate epoxy paint finish	1	set		0
b	Removal of 2 no. double leaf door including door frames and ironmongery, wrap material and cart away to nearest store	1	set		0
c	Removal of 1 no. single leaf, double glazed door including frame, sub-frame and ironmongery. Contractor to re-intall in 101058 Offie. Scope to include preparation of door opening to accommodate 1 meter widht of laminate door	1	set		0
2	Contractor to provide accounting of realated materials for records and handing-over	1	item		0
C	Civil/PARTITION WORKS				
1	Supply and installation of blockworks, where specified. Internal and perimeter thickness to match existing				
a	200mm thick up to underside of slab - 1st flr 101007	47	m2		0
2	Supply and installation of 100mm thick gypsum board partitions, consisting of 72mm GI tracks, 70mm GI studs, Rockwool insulation - density of 35kg/m3 and single layer of 12.5mm thick gypsum board on each side. Works includes, taping, sanding, jolting etc. ready to recieve final finish				
a	1st flr 101058 and 101059 plus gap at curtain wall	110	m2		0
b	Gap at curtain wall - 1013 Autoclave	10	m2		0
3	Supply and installation of double glazed partition, 6+88+6 clear glass, tempered				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 12 - Civil & MEP _ First Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
a	1st flr 101058 and 101059	18	m2		0
4	DITTO, windows in the gypsum partitions				
a	1st flr 101058 and 101059	5.6	m2		0
5	Fabricate, supply and installation of powder coated aluminum framed single leaf glass-swing door - double glazed, tempered complete with ironmongery. Standard height to match with width as indicated in the layout				
a	1st flr 101058 and 101059	3	no.		0
6	Fabricate, supply and installation of powder coated aluminum framed double leaf glass-swing door, tempered complete with ironmongery. Standard height to match with width as indicated in the layout	2	no		0
7	Fabricate, supply and installation of fire rated laminated door with vision panel to match existing, complete with ironmongery. Standard height to match, 1 meter width - 104130	1	no		0
8	Supply and installation of sandblasted film on glass partitions and doors. 101058 - 1059	8	LM		0
9	Apply, pour appropriate thickness concrete screed including leveling compound				
a	1058	45	m2		0
b	1059	43	m2		0
c	1002	70	m2		0
d	1007	74	m2		0
e	1007a	80	m2		0
f	1008	156	m2		0
g	1013	28	m2		0
D	FLOOR FINISH				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 12 - Civil & MEP _ First Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	Supply and installation of Class III solid vinyl tiles, 3mm thick, chemical and slip resistance. Environmentally friendly and indoor Air Quality Certified. Installation, VOC free adhesive and levelling compound, LEED and Green certified				
a	1058	45	m2		0
b	1059	43	m2		0
c	1002	70	m2		0
d	1007	74	m2		0
e	1007a	80	m2		0
f	1008	156	m2		0
2	Prepare and apply Epoxy paint finish	226	m2		0
a	1013	28	m2		0
b	4130	14	m2		0
3	Termination of joints between existing floor finish and new by means of threshold, floor grip, strips wherever needed and as appropriate	1	lot		0
E	WALL FINISH				
1	Apply, appropriate thickness concrete mortar, plastering on walls. Floor to 4000mm FFL				
a	1058	180	m2		0
b	1059	180	m2		0
c	1002	280	m2		0
d	1007	286	m2		0
e	1007a	305	m2		0
f	1008	389	m2		
2	Prepare and apply Jotun Fenomastic silk paint finish to new partition and existing walls and partitions. Color to match or as required				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 12 - Civil & MEP _ First Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
a 1058		224	m2		0
b 1059		224	m2		0
c 1002		90	m2		0
d 1007		113	m2		0
e 1007a		112	m2		0
f 1008		160	m2		0
3	Prepare and apply Epoxy paint finish,	952	m2		0
a 1013		79	m2		0
b 4130		56	m2		0
4	Prepare and apply anti-bacteria, anti-fungal paint above false ceiling	508	m2		0
5	Supply and installation of manually operated perforated Roller Blinds, microscreen, 34%G + 66%PVC	24	bays		0
6	Supply and installation of 100mm high PVC skirting to match existing, covering all walls and partitions	199	LM		0
7	Supply and installation of 100mm high SS skirting to match existing, covering all walls and partitions	92	LM		0
F	CEILING FINISHES				
1	Supply and installation of plain gypsum ceiling, 12.5mm thick gypsum board on GI framing to suit proposed layout				
a 1058		19	m2		0
b 1059		19	m2		0
c 1013		18	m2		0
d 1002		24	m2		0
e 1007		24	m2		0
f 1007a		26	m2		0
g 1008		39	m2		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 12 - Civil & MEP _ First Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2	Supply and installation of aluminum tiles to match, complete with suspension system to suit proposed layout				
a	1058	26	m2		0
b	1059	24	m2		0
c	1013	9	m2		0
d	1002	46	m2		0
e	1007	50	m2		0
f	1007a	54	m2		0
g	1008	116	m2		0
h	4130	14	m2		0
3	Supply and installation of vertical bulkhead, 12.5mm thick gypsum board, single layer on GI frame suspension				
a	1058	7	m2		0
b	1059	7	m2		0
c	1013	4	m2		0
d	1002	8	m2		0
e	1007	8	m2		0
f	1007a	9	m2		0
g	1008	13	m2		0
4	Prepare and apply Jotun Fenomastic silk paint finish to new gypsum ceiling and bulkhead. Color to match or as required	225	m2		0
G	JOINERY WORKS				
1	Check and repair where necessary all existing door surface	1	item		0
2	Check and repair, supply and install new cylinder on existing door wherever deem necessary	6	no.		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 12 - Civil & MEP _ First Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
H	LIGHTING				
1	Supply of linear light, length 1200mm to match existing. Contrator to design atmospheric light following standard lighting lux appropriate to specifi room activities	1	lot		0
2	Supply and installation of downlighter with powered factor ballast as may suit following existing design concept in the building	1	lot		0
J	ELECTRICAL WORKS				
	All lab spaces to be fitted with dedicated DB. No. of circuits in a DB should be calculated as per international and local regulation standard based on the indicative layout. All Services required indicated in service riser and spine on lab benches - lab spaces parallel/adjacent to the carpark, contractor only to supply circuits with capacity qty and capacity based on no. of points indicated in the layout in conjunction with decription written in the scope of work. Power/data/medical gases on walls in these labs as indicated and those rooms and labs spaces located not parallel to car park - contractor to fully supply terminate, test and commission.				
1	Installation of light fittings including conduiting and wiring baed on lighting above	1	lot		0
2	Supply and installation of lighting override swithces	12	no.		0
3	Relocationof existing sensors should exist	1	item		0
4	Supply and installation of Lighting sensor	12	no.		0
5	Supply and installation of control module	1	item		0
6	Containement and wiring for modification and upgrade of lighting control system	1	item		0
8	Supply and installation of 13A power socket -twin, including conduiting and wiring on all points indicated in the layout	1	lot		0
9	Supply and installation of 13A spur outlet, including conduiting and wiring for VAV	1	item		0
10	Supply and installation of DB, to accommodate all load requirement as design may suggest. All lab spaces to be fitted with dedicated DB	5	no		0
11	Modification of GI trunking for power and lighting	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 12 - Civil & MEP _ First Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
12	PVC containment for wall mounted data points	1	lot		0
13	Modification of cable tray to accommodate new data cabling	1	item		0
14	Supply and installation of CCTV, quantity and coverage based on local regulation compliance	1	item		0
15	Supply and installation of 20A DP switch with flex outlet for water heater wherever needed, including conduiting and wiring	4	no.		0
16	Supply and installation of Digital Clock - network, including conduiting and wiring	5	no.		0
17	Integration, Programming, Testing and commissioning for above tasks	1	item		0
18	Supply and Installation of UPS System for sockets in the lab benches for each floors (We assumed that existing panel have enough provision to accommodate UPS System)	1	item		0
19	Supply and installation of Card access reader complete with magnetic lock and Time Management system including required programming and integration - Lab spaces	3	set		0
20	MEP related works not mentioned above to complete task				
K	HVAC WORKS				
	All rooms, labs spaces has already Airconditioning units installed. However, Contractor to check, verify existence of; FCUs, AHU's within and or feeding spaces that required cooling. Assess operational condition should exists and shall determine additional requirements as calculation may suggest to comply with standard room temperature required to complete task				
1	Supply and installation of new bypass VAV including accessories	1	item		0
2	Relocation of existing Fan coil Unit including valve packaged as may deem required to suit with ceiling and bulkhead	1	item		0
3	Supply and installation of new Fan coil Unit as may deem require, including Thermostat, valve package, chilled water and drain pipe with insulation. Works to include supply of 20A DP switch. All works to include conduiting and wiring	1	item		0
4	Modification of existing chilled water pipe with insulation	1	item		0
5	Supply and installation of thermostat for VAV	1	item		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 12 - Civil & MEP _ First Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
6	Supply and installation of PI Duct for supply and air duct	1	item		0
7	Supply and installation of Plenum box	1	item		0
8	Insulate existing ducting that are without insulation	1	item		0
9	Supply and installation of Supply & Return Slot Diffuser	1	item		0
10	Relocation of existing thermostat wherever required	1	item		0
11	Modification of condensate drain pipe with insulation	1	item		0
12	Modification of existing BMS as may deem required to accommodate new Bypass VAV and relocation	1	item		0
13	Chilled water flow test and performance test for existing AC units	1	item		0
14	Provide extraction duct in SS tubing on location where Fume Cupbaord and Autocalve are located. Velocity is as per international standard	1	item		0
15	Integration, Reprogramming, Testing and Commissioning of BMS system	1	item		0
16	Supply and installation of Air Pressure Monitor including conduit and cabling. Atmospheric room extraction contractor to determine following ASRAE standard and considering Air changing unit of 10/h				
a	A01013 - Autocalve (- 20 Pa)	1	no.		0
b	A04130 - Freezer Room (contractor to determine)	1	no.		0
17	Integration of fume hood/ PCR Hood/ Biological workstations VAVs (36 Nos)	1	item		0
18	Supply and Installation of PI ducts	1	item		0
19	Supply and Installation of new valve package for the cooling coils (35 Nos)	1	item		0
20	Supply and Installation of flexible ducts and VCDS	1	item		0
21	Air Balancing	1	item		0
22	Chiller Water flushing and balancing	1	item		0
23	Fume Hood Extract Fans	1	item		0
24	Other related HVAC works required not mentioned above if any to complete task	1	item		0
L	FIRE ALARM				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 12 - Civil & MEP _ First Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	All rooms, labs spaces has existing smoke detectors, contractor to verify, check operational condition, assess compliance in terms of quantity and placements. Re-align, add wherever needed ensuring compliant with standard regulation, local and international, add should deem require. Quantity may deem void, contractor to mark line item NA if exists and or incorporate correct quantity on the side				
1	Removal and relocation of existing Smoke Detector	1	item		0
2	Supply and installation of Smoke Detector including fire rated cabling.	1	item		0
3	Supply and installation of break glass including fire rated cabling	1	item		0
4	Supply and instalaltion of Sounder including fire rated cabling	1	item		0
5	Dissable, Reprogramming, testing and Commissioning of Fire Alarm system	1	item		0
6	Other related Fire Alarm works required not mentioned above if any to complete task	1	item		0
M	FIRE FIGHTING WORKS				
	All rooms, labs spaces has existing sprinkler heads, contractor to verify, check operational condition, assess compliance in terms of quantity and placements. Re-align, add wherever needed ensuring compliant with standard regulation, local and international, add should deem require. Quantity may deem void, contractor to mark line item NA if exists and or incorporate correct quantity on the side				
1	Relocation of existing Pendant Sprikler as per fit	1	item		0
2	Supply and installation of Pendant Sprinkler including fire rated cabling	1	item		0
3	Draining and refilling of Fire Fighting system	1	item		0
4	Pressure Charges	1	item		0
5	Shop drawing preparation and coordination with Civil Defense approval	1	item		0
6	Supply and installation, sets of Fire Extinguishers follwing safety standard	1	item		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 12 - Civil & MEP _ First Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
7	Supply and Installation of Fire Fighting Pipes for the new pendent sprinklers	1	item		0
8	Other related Fire Fighting works required not mentioned above if any to complete task				
N	EMERGENCY LIGHTING WORKS				
1	Relocation of emergency light	1	item		0
2	Removal and reinstallation of exisxtng Exit light	1	item		0
3	Supply and installation of Emergency exit light including conduiting and wiring	1	item		0
4	Dissable, Reprogramming, testing and Commissioning of Emergency Lighting system (assume that existing CBS Panel have enough capacity to accommodate additional light)	1	item		0
5	Supply and instalaltion of additonal circuit card should required	1	item		0
O	PLUMBING SYSTEM				
1	Supply and installation of water supply	1	item		0
2	Supply and instalation of gate valve	1	item		0
3	Supply and installation of water hammer arrester	1	item		0
4	Supply and installation of required drainage	1	item		0
5	Supply and installation of 50L water heater	4	no.		0
6	Supply and installation of floor trap	1	item		0
7	Supply and installation of Floor Clean Outs	1	item		0
8	Fixing of Lab Sinks	1	item		0
9	Other related works not mentioned above to complete task				
P	STRUCTURED CABLING WORKS				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 12 - Civil & MEP _ First Floor

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Other than those going to lab benches service riser and spine specifically on labs spaces parallel/adjacent to the car park, all voice and data as indicated in the layout - contractor to supply, intall, terminate, test and commission. Contractor as part of the scope, to count total quantity required, those going to the lab benches (Service riser and spine) which quantity not mentioned herein, allocate appropriately and install all network related items ready to accommodate cabling by others				
1	UTP CAT 6a structured cabling for voice and data, including pulling, termination, face plate to match existing, RJ45 module, termination and labeling	1	item		0
2	Patch cord 1 meter	1	item		0
3	Patch cord 3 meter	1	item		0
4	24 port patch panel cat 6a or as deem required, fiber cabling with accessories - for Etisalat connection - 6 core single mode, fiber patch panel, single mode adapters, single mode sc/apc pigtails, sleeves, fiber cable pulling and splicing, fiber fluke testing etc.	1	item		0
5	42U Rack	1	item		0
6	Supply and instalaltion of WIFI	5	no.		0
7	Supply and installation of IT Active Components where required	1	item		0
6	All above to conform with given scope of works	1	item		0
7	Other related works not mentioned above to complete task				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 2 - Immersive Cave

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	PRELIMINARIES				
1	Mobilization and Demobilization				
1.1	Mobilization	1	lot		0
1.1	Demobilization	1	lot		0
2	ADM/ADDC and other local Authorities Approvals				
2.1	ADM/ADDC drawing approvals	1	lot		0
2.2	Civil Defense	1	lot		0
3	Project Mangement				
3.1	PM and Supervision charges	1	lot		0
4	Site Protection	1	lot		0
4.1	Temporary protection on walls and floors	1	lot		0
5	Progress Reporting				
5.1	Documentation, photos, progress of work monitoring	1	lot		0
6	Temporary Site Facilities				
6.1	First Aid	1	lot		0
6.2	Fire Entinguesher, Blanket	1	lot		0
6.3	Maintianing, keeping sanitary site condition	1	lot		0
7	QA, QC & HSE/EHS				
7.1	Adhering to University ISO and standard pratices and protocols	1	lot		0
8	Debris removal, cleaning				
	Contractor is totally and absolutely responsible for the removal of any debris cause by the construction, surplus spoil, materials and the like resultant from the execution of the works caused either by their manpower, sub-contractors or by suppliers to appropriate location	1	lot		0
8.1					
8.2	Site cleaning for the entire project duration	1	lot		0
8.3	Final cleaning before occupancy	1	lot		0
9	Submittals of Shop Drawings				
9.1	Drawing production, site/client/sub-contractor	1	lot		0
9.2	Prints Out, contruction and revisions	1	lot		0
9.3	AS-Built drawings, Soft and Hard copy - 2 sets	1	lot		0
10	SCAFFOLDING				
	Supply and setting of the scaffolding to provide working platform for ceiling works including supply of manpower for setting and removal after	1	lot		0
B	DEMOLITION WORKS				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 2 - Immersive Cave

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	Removal of unwanted solid block walls, wrap material in good condition, cart away to specified store	101	m2		0
2	Removal of existing wooden doors including all associated works	1	no.		0
3	Removal of unwanted floor finish from the floor area	41	m2		0
4	Removal of unwanted electrical points from the floor area wall area should there be	1	lot		0
5	Demolition of non-structural elements including all associated works.	1	lot		0
6	Construction debris removal from the floor and send it to municipality dump yard	1	lot		0
C	CIVIL				
1	PARTITION WORKS				
1.1	Repair and making good of area/spaces affected by demolition	1	lot		0
1.2	Supply and making of solid block wall for the immersive class room including plastering	60	m2		0
1.3	Close out space where double door is to remove with blockwork including plastering	5	m2		0
1.4	Supply and installation of 100mm thick gypsum board partitions, consisting of 72mm GI tracks, 70mm GI studs, Rockwool insulation - density of 35kg/m3 and double layer of 12.5mm thick gypsum board on each side for the Immersive Cave and Military area. Works includes, taping, sanding, joiting etc. ready to recieve final finish. Specified brand - Knauf	47	m2		0
1.5	Remove existing double leaf door, door jamb, frames and accessories including ironmongeries. Securely wrap in bubble plastic, cart away to specified store.	2	no.		0
1.6	Fabricate, supply and installation of fire rated solid core door - double leaf, complete with ironmongery to match existing. ISurface of the door - leaf to be treated with a movie theater acoustical concept, preventing sound/noise to come out	2	no.		0
2	GYPSON WALL CLADDING				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 2 - Immersive Cave

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2.1	Supply and installation of standard gypsum wall cladding in the entire perimeter wall including 35kg/m3 rockwool insulation ready to received paint finish - Knauf	450	m2		0
D	JOINERY				
1	Design, construction, supply and instllation of Control room, footprints as indicated in the layout. Partition to be of standard gypsum, complete with 35kg/m3 rockwool insulation. Control room window to be of one-way mirror to match those of the Simulation control and or OSCE observation cove.	1	lot		0
E	THERMAL AND MOISTURE PROTECTION				
1	Apply thermal and moisture protection on all items above ceiling as may deem require	1	lot		0
F	WATER PROOFING				
1	Supply and fix water proofing in complete floor area, as per drawing including all fixing accessories.	310	m2		0
G	FLOOR FINISH				
1	Supply and fixing sand cement screeding works at complete floor area	310	m2		0
2	Supply and fixing of self level by using the self levelling cement compound for the proposed simulation area	310	m2		0
3	Supply and fix smooth concrete finish with durable floor gray color paint as per drawings.(2A)	64	m2		0
4	Supply and fix smooth concrete finish as per drawings(3A)	88	m2		0
5	Supply and fix smooth concrete finish as per drawings(4a)	48	m2		0
6	Supply and fix smooth concrete finish with durable floor gray color paint as per the drawings(5A)	41	m2		0
7	Termination of joints between existing floor finish and new by means of threshold, floor grip, strips wherever needed	1	lot		0
H	METAL WORK				
1	GI I BEAM for the storage shutter opening				
1.1	Create an opening to accommodate shutter door, wall between Store and Simulation space. Opening should be well supported to carry load of automatic roller shutter. Make good of all area affected	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 2 - Immersive Cave

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.2	Supply and installation of over head automatic roller Shutter for the storage room , Size-W- 3000mm x H- 3000mm	1	no.		0
J	WALL FINISH				
1	Supply and applying of two coat putty and two coat primer	650	m2		0
2	Supply and applying of cool gray color antibacterial Fenomastic paint area labelled (2B) in the layout	96	m2		0
3	Supply and applying of smooth finish white color antibacterial Fenomastic paint area labelled (3B) in the layout	100	m2		0
4	Supply and applying of smooth finish white color antibacterial Fenomastic paint area labelled (4B) in the layout	41	m2		0
5	Supply and applying of cool gray color antibacterial Fenomastic paint area labelled (5B) in the layout	104	m2		0
K	CEILING FINISHES				
1	Supply and fix integrated pharmaceutical aluminum false ceiling with medical grid (equipped with a clean room grade modular false ceiling, gas tight, able to With stand a 100 Pascal differential pressure without loosed the tightness).black color finish	310	m2		0
2	Supply and installation of gypsum bulkhead made by using 15mm thick fire rated gypsum board	115	LM		0
3	Supply and applying of two coat putty and two coat primer on gypsum bulkhead	115	m2		0
4	Supply and applying of antibacterial paint on bulkhead area as per the approved color	115	m2		0
5	Supply and installation of Rockwool insulation 35kg/m3	310	m2		0
5	Any other related works not mentioned above to complete task				
L	SIGNAGE				
1	Supply and fix internal and external signage in english and Arabic. Design and material to match existing. External Sign to address room utilization and Internal is for Control room	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 2 - Immersive Cave

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
M	ELECTRICAL WORKS				
	Provide and install all electrical installation and associated accessories and fixtures to complete project as required. Complete installation to follow standard practice in accordance to safety protocols with local authority and adhering to university EHS. Works follows contractor generated layout, approved to include but not limited to wherever deemed required;				
1	Low Voltage Switchgear and Distribution Board	1	lot		0
2	Sub-main Distribution Boards	1	lot		0
2.1	Wall mounted distribution circuit breaker boards (MCCB Boards) including all incoming and outgoing MCCB's cable terminations etc. as may deem required	1	no		0
3	FINAL DISTRIBUTION BOARDS				
3.1	Recessed/surface installed final distribution boards (MCB Boards) including incoming ELCB and outgoing circuit MCB's, contactors, cable termination etc.as - should required	2	no.		0
4	ISOLATING SWITCH				
4.1	Supply, install, test, commission and maintain W.P. disconnect switches including conduits, conduit fittings, wiring, cabling, cable trays, vertical risers, termination disconnect switch, accessories and all necessary ancillary works related to	2	no		0
5	CABLES & CABLE SUPPORT SYSTEM				
	Should required, following standard cables and support to be observe and or otherwise contractor to continue whatever already exist. XLPE Insulated LSF sheathed - Armoured cables from MDB's to SMDB's and from SMDB's to FDB's. Execution and design should adhere with safety and local regulation standard				
5.1	4Cx6mm ² XLPE / SWA / LSF + 1Cx6mm ² ECC	1	lot		0
5.2	4Cx10mm ² XLPE / SWA / LSF + 1Cx10mm ² ECC	85	Mtrs		0
5.3	4Cx16mm ² XLPE / SWA / LSF + 1Cx16mm ² ECC	1	lot		0
5.4	4Cx25mm ² XLPE / SWA / LSF + 1Cx16mm ² ECC	20	Mtrs		0
5.5	4Cx35mm ² XLPE / SWA / LSF + 1Cx16mm ² ECC	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 2 - Immersive Cave

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
6	Supply and installation and commission Cable trays, cable dusts, GI cable trunking, cable cleats, etc hardwares, shop drawings for the rootings and all cable supporting details as per the site requireme -nts to be submiited				
6.1	(100X 50mm) GI Cable Tray	1	lot		0
6.2	(150X 50mm) GI Cable Tray	1	lot		Incl
6.3	(300X 50mm) GI Cable Tray	1	lot		0
6.4	(450X 50mm) GI Cable Tray	1	lot		0
6.5	(600X 50mm) GI Cable Tray	1	lot		0
6.7	(900X 50mm) GI Cable Tray	1	lot		0
6.8	(100X 100mm) GI Trunking for Lighting Circuits	1	lot		0
6.9	(100X 100mm) GI Trunking for Power Circuits	1	lot		0
7	WIRING ACCESSORIES				
7.1	Ditto, but for 13A double switched socket outlets.(W/P-IP56/65)in floor boxes	9	no.		0
7.2	Ditto, but for 13A double switched socket outlets.(W/P-IP56/65)Above the ceiling.	27	no.		0
7.3	Ditto, but for 13A double switched socket outlets.3000mm height from the FFL	19	no.		0
7.4	Ditto, but for SP indistrial socket	2	no.		0
7.5	Ditto, but for 20A Double Pole Switch & Flex outlet for FCU, VAV, CAV	10	no.		0
7.6	Ditto, but for power connection230v,3 core,2.5mm for the floor box and one above the ceiling	1	no.		0
7.7	Ditto, but for 3 compartment floor service box	5	no.		0
8	LIGHTING FIXTURES				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 2 - Immersive Cave

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
8.1	Supply, installation, testing and commissioning of Light fittings complete with lamps, tubes, reflectors, control gears, transformers, power supply units and all required fixings accessories, etc., including ceiling roses and flexible cabling, wiring and conduit and connected the distribution boards & lighting control system. Design and placement and light intensity to be calculated according to standard	1	lot		0
8.2	Light Fitting;-IP-65=60X60CM LED PANEL LIGHT	62	no.		0
8.3	Supply and install wiring and conduit in concealed installation including cable trays / trunking, with all accessories, complete in accordance with specifications, drawings and ADWEA requirements.	1	no.		0
9	SWITCHES				
	Supply, install, test, commission switches including all necessary accessories complete in accordance with specifications, drawings and DEWA requirements.				
9.1	One way switch, 1 gang	1	no.		0
9.2	One way switch, 2 gangs	1	no.		Incl
9.3	One way switch, 3 gangs	1	no.		Incl
9.4	Two way switch , 1 gang	1	no .		Incl
9.5	Two way switch, 2 gangs	1	no.		Incl
9.6	MEP related works not mentioned above	1	no.		Incl
M	EARTHING SYSTEM				
1	Provide a complete earthing system including main earth electrode pits, earth continuity conductors, equipotential bonding, etc., all as specified , shown on the drawings and DEWA regulations	1	lot		0
2	Sundries				
2.1	allow for Testing the whole Electrical installation at completion in the presence of the Engineer, repeat test as may be required and leave in perfect order and to the satisfaction of the engineer and Local Authority.	1	lot		0
2.2	Allow for all painting and identification	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 2 - Immersive Cave

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2.3	Allow for all Builder's work in connection with Electrical System's installation.	1	lot		0
2.4	Allow for all submittals, samples, shop drawings, As-built Drawings, warranty certificates.	1	lot		0
N	HVAC WORKS				
	Contractor to check, assess, verify existing condition/status in the space required. Accordingly come up with solution to put all related task in completion of the project. Scope to include but not limited to				
1	Supply and installation of new AC Units with FCU And maintaining negative, positive and normal temperature pressure at different cabins	1	lot		0
2	Supply and installation of required Hepa filters	1	lot		0
3	Supply and installation of UV Using inside the duct	1	lot		0
4	HYGIENE TYPE FRESH AIR HANDLING UNIT Should require: - Supply, install, testing and commissioning of double skin S.S Construction DX Type Air Handling Units complete with, DX coils, plug fans, drains pan, filters, vent, valves , all protective devices, drain to waste, anti-vibration mountings, joints to pipe work and ductwork and all necessary electrical connections as specified and as shown on schedule of equipment.	1	lot		0
5	Reprogramming, Testing and Commissioning of BMS system	1	lot		0
6	Chilled water flow test and performance test for existing AC unit	1	lot		0
7	Air Balancing	1	lot		0
8	Chilled Water Flushing & balancing	1	lot		0
9	Other related HVAC works required not mentioned above if any to complete task				
10	VARIABLE & CONSTANT AIR VOLUME BOXES				
10.1	Supply, install, testing and commissioning of factory calibrated (VAV & CAV) variable and constant air volume boxes for variable and constant air system as shown on drawings with integral silencer to meet the specified noise criteria ,with or without reheat coil/Elec tricheating element as specified and as shown on schedule of equipment	1	lot		0
10.2	By Pass Type VAV's	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 2 - Immersive Cave

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
10.3	Pressure Independent CAV's	1	lot		0
10.4	Pressure Independent CAV's With Electrical Reheat Coil	1	lot		0
11	GI DUCT WORKS				
11.1	Supply, install, testing and commissioning of sheet metal air ducts of GI sheets complete for all air systems with all fittings and acces sories as per SMACNA construction for 2"WG ducts and as specified, Extract Duct for Labs shall be welded joints, fabricated of SS316	1	lot		0
11.2	Allow for thermal and acoustic insulation to the supply, return ductwork as required by the specification	1	lot		0
11.3	Supply, install, testing and commissioning of Sound Attenuators , gravity louvers, fire dampers, flexible ducts, plenums, VCDs, moto rized and smoke fire dampers MSFD, Duct silencers, access doors and all duct accessories as shown on drawings and as necessary	1	lot		0
12	AIR TERMINAL, INLETS AND OUTLETS				
13	Supply and install supply, return & extract air terminals including grilles,diffusers,louvers, disc valves , door grill, with all accessories , flexible duct,dampers, as per sizes specified on drawings.	1	lot		0
13	VARIABLE SPEED FREQUENCY CONTROLLERS				
	Supply and install Varriable frequency controller having capacities compatible with the motor horse powers.				
13.1	Allow for FAHU VFD Panels	1	lot		0
13.2	Allow for Exhaust Fans VFD Panels	1	lot		0
14	MISCELLANEOUS:				
14.1	Allow For Controls with all necessary accessories & associated wiring	1	lot		0
14.2	Allow For Anti vibration mounts	1	lot		0
14.3	Allow For Tags and identification plates.	1	lot		0
14.4	Allow For Insulated Condensate drain Pipe as Per Spec.	1	lot		0
14.5	Allow For Hangers, supports, brackets etc. for pipe and ductwork.	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 2 - Immersive Cave

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
14.6	Allow For Submittals, Samples, Shop drawings, As-built Drawings	1	lot		0
14.7	Allow for testing and commissioning of complete system by third party inspector	1	lot		0
15	ADDITIONAL ITEMS				
	Contractor is required add below any additional items with quantities and rates, deemed necessary, not mentioned above, ensuring completion of scope based on above tasks. Stipulated cost for the above shall be the basis of agreement should contractor fail to outline needful. Works to be carried out completely, and to the satisfaction of end users with no additional cost.	1	lot		0
	Air Balancing	1	LS		0
O	FIRE ALARM				
1	Allow for relocation of the existing fire alarm system including wiring , smoke detectors, FACP etc. All according to standard in adherence to university health and safety protocols and to Local Authority requirements.				
1.1	Supply & install the following analogue addressable fire alarm system and outlets complete including pull boxes,conduits, fire rated FP400 cable, address and all necessary fixing accessories all as shown in the drawings & specification.	1	lot		0
1.2	Fire alarm Control Panel	1	no.		0
1.3	Analogue Addressable Smoke Detector	11	no.		0
1.4	Void Smoke Detector with remote LED	11	no.		0
1.5	Analogue Addressable Break Glass Unit	3	no.		0
1.6	Addressable Control Module ((Quantities to be agreed based on the third party points of load and subjected to site condition)	1	no.		0
2	SUNDRIES				
2.1	allow for Testing the whole installation at completion in the presence of the Engineer, repeat test as may be required and leave in perfect order and to the satisfaction of the engineer and Local Authority.	1	lot		0
2.2	Allow for all painting and identification	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 2 - Immersive Cave

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2.3	Allow for all Builder's work in connection with Fire Alarm System's installation.	1	lot		0
2.4	Allow for all submittals, samples, shop drawings, As-built Drawings, warranty certificates.	1	lot		0
2.5	Other related Fire Alarm works required not mentioned above if any	1	lot		0
P	FIRE FIGHTING WORKS				
1	WET RISER SYSTEM				
1.1	Allow for Seamless Galvanized steel tubing and fittings with screwed and flanged joints including all fittings, supports and fixings, of different diameters as per relevant drawings.	1	lot		0
1.2	Allow for Relocation of the Existing Fire sprinklers as per the new design and drawings.	1	lot		0
1.3	Modification of MEP Services above Ceiling as per new Layout.	1	lot		0
2	PORTABLE FIRE EXTINGUISHERS				
2.1	Allow for 5KG CO2 Type Fire Extinguisher	3	no.		0
2.2	Allow for 6KG Dry Type Fire Extinguisher	3	no.		0
3	SUNDRIES				
3.1	Allow for Testing the whole of the fire fighting installation at completion in the presence of the Engineer, repeat test as may be required and leave in perfect order and to the satisfaction of the engineer and Local Authority.	1	lot		0
3.2	Allow for all Builder's work in connection with Fire Fighting System's installation	1	lot		0
3.3	Allow for all submittals, samples, shop drawings, As-built Drawings, warranty certificates.	1	lot		0
3.4	Supply and installation of necessary pipe with complete fittings using entire Immersive room area.	1	lot		0
3.5	Draining and refilling of Fire Fighting system	1	lot		0
3.6	Pressure Charges	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 2 - Immersive Cave

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
3.7	Other related Fire Fighting works required not mentioned above if any	1	lot		0
Q	EMERGENCY LIGHTING WORKS				
1	Relocation of emergency light	1	lot		0
	Supply & install the following Emergency Lightng & Exit Lighting system and components complete including pull boxes, conduits, cable address and all necessary fixing accessories all as shown in the drawings & specification.				
2	Emergency Light control Panel	1	no.		0
3	Addressable 1x8W Emergency Light, Non Maintained W/P	7	no.		0
4	Addressable 1x8W Exit Light, Maintained	4	no.		0
5	Addressable 1x8W Exit Light, Maintained, Single Side	4	no.		0
6	Addressable 1x8W Exit Light, Maintained, Double Side	4	no.		0
7	Allow for Supply and installation of FP400 fire rated stranded cable	1	no.		0
8	Allow for Supply and installation of cat 6 cable for communication	1	no.		0
9	Supply and installation of (100X 100mm) GI Trunking for EM Lighting Circuits	1	no.		0
10	SUNDRIES				
10.1	allow for Testing the whole ELV Systems installation at completion in the presence of the Engineer, repeat test as may be required and leave in perfect order and to the satisfaction of the engineer and Local Authority.	1	lot		0
10.2	Allow for all painting and identification	1	lot		0
10.3	Allow for all Builder's work in connection with ELV System's installation.	1	lot		0
10.4	Allow for all submittals, samples, shop drawings, As-built Drawings, warranty certificates.	1	lot		0
R	STRUCTURED CABLING WORKS				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 2 - Immersive Cave

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Supply & install the following structure cabling system outlets complete including pull boxes, conduit cable address and all necessary fixing accessories to complete task given (PVC Containment)	1	lot		0
1	Intermediate distribution frame (IDF)	1	no.		Incl
2	Dual/ single RJ45 CAT 6 socket outlets	20	no.		Incl
3	Single RJ45 socket outlets for Access control	8	no.		Incl
4	Single RJ45 socket outlets for CCTV	11	no.		Incl
5	3 compartment floor service box	5	no.		Incl
6	supply, installation , T&C for Single and Multimode fiber optic cables as per sizes shown on drawings and according to TRA Requirements.	1	no.		Incl
7	CABLE TRAY WORKS				
	Supply and installation and commission Cable trays, cable dusts, GI cable trunking, etc as specified and shown on drawings (PVC Containment)				
7.1	(100X 50mm) GI Cable Tray	1	lot		Incl
7.2	(150X 50mm) GI Cable Tray	1	lot		Incl
7.3	(300X 50mm) GI Cable Tray	1	lot		Incl
7.4	(450X 50mm) GI Cable Tray	1	lot		Incl
7.5	(600X 50mm) GI Cable Tray	1	lot		Incl
7.6	(900X 50mm) GI Cable Tray	1	lot		Incl
U	ACCESS CONTROL SYSTEM				
	Supply, install, test, commission and maintain the complete access control system including cabling, wiring, conducting, fittings, accessories and power connections complete in accordance with specifications,of existing system (PVC Containment)				
1	card reader	4	no.		Incl
2	Door contact	3	no.		Incl
3	Single Magnetic lock	2	no.		Incl

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 2 - Immersive Cave

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4	Double Magnetic lock	2	no.		Incl
5	Push button	5	no.		Incl
6	Break glass unit	3	no.		Incl
7	Door Controller Unit	4	o.		Incl
8	Door Access Controller	4	no.		Incl
9	220V AC UPS Power supply	1	no.		Incl
V	DATA NETWORKING for AV system				
1	Supply & install the following Data server looping system and outlets complete including pull boxes, conduits, cable address and all necessary fixing accessories all as shown in the drawings & specification				
2	Supply and installation of data sockets with cat 6 network cable and installation of patch panel with proper labeling	2	no.		Incl
3	Supply and installation of AV points wall mounted at 2400mm level as per the drawing	6	no.		Incl
4	Supply and installation of AV points on the ceiling as per the drawing	24	no.		Incl
5	Supply and fixing of GI cable tray with cover above the ceiling	1	no.		Incl
6	Supply and installation of data points with cat 6 network cable	15	no.		Incl
7	Supply and installation of data points with cat 6 network cable above the ceiling	3	no.		Incl
8	Supply and installation of HDMI cable	30	no.		Incl
9	Supply and installation of WIFI	1	no.		0
W	CCTV SYSTEM				
	Supply & install the following IP CCTV system and outlets complete including pull boxes, conduits, cable address and all necessary fixing accessories all as shown in the drawings & specification. (Subject comply and approval of Monitoring and Control Center "MCC") (Only Containment)				
1	CCTV Control Equipment	1	lot		Incl
2	Network Video Recorder with Hard disk	1	lot		Incl

MEP & CIVIL WORKS FOR MEDICAL COLLEGE - PHASE 2 AT THE MAIN CAMPUS

BILL NO. 2 - Immersive Cave

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
3	CCTV UPS	1	lot		Incl
4	CCTV LED Monitor	1	lot		Incl
5	Dome Camera Recognition Camera	8	no.		Incl
6	Dome Camera Identification Camera	3	no.		Incl
7	Cabling and PVC conducting works	1	lot		Incl

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 3 - Test Center

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	other than quantities that are specified herein, contractor to determine required no. of fittings and accessories on the basis of design space required, in compliance with standard and local authority regulation. Contractor to follow related conceptual design concept existing in the building				
	PRELIMINARIES				
	1 Mobilization and Demobilization	1	item		0
	1a Mobilization				
	1b Demobilization				
	2 ADM/ADDC and other local Authorities Approvals	1	item		0
	2a ADM/ADDC drawing approvals				
	2b Civil Defense				
	3 Project Mangement	1	item		0
	3a PM and Supervision charges				
	4 Site Protection	1	item		0
	4a Temporary protection on walls and floors				
	5 Progress Reporting	1	item		0
	5a Documentation, photos, progress of work monitoring				
	6 Temporary Site Facilities	1	item		0
	6a First Aid				
	6b Fire Entinguesher, Blanket				
	6c Maintaining, keeping sanitary site condition				
	7 QA, QC & HSE/EHS	1	item		0
	7a Adhering to University ISO and standard pratices and protocols				
	8 Debris removal, cleaning	1	item		0
	Contractor is totally and absolutely responsible for the removal of any debris cause by the construction, surplus spoil, materials and the like resultant from the execution of the works caused either by their manpower, sub-contractors or by suppliers to appropriate location				
	8b Site cleaning for the entire project duration				
	8c Final cleaning before occupancy				
	9 Submittals of Shop Drawings	1	item		0
	9a Drawing production, site/client/sub-contractor				
	9b Prints Out, contruction and revisions				
	9c AS-Built drawings, Soft and Hard copy - 2 sets				
B	DEMOLITION WORKS				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 3 - Test Center

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	Removal of unwanted partition walls, ceiling tiles & bulkhead and other related materials on floor, wrap for possible re-use	1	lot		0
2	Demolish wall adjacent to MEP vent shaft to create space as corridor, passage going from test room to toilet vise-versa. Scope to ensure front wall of office space accommodates double glass wall with door to match existing	48	m2		0
3	Demolition of existing 2 no. office space to accommodate construction and buildout of new Female Toilet, securely wrap material with bubble plastic, cart away to specified store., Scope includes making good of all surfaces affected	1	lot		0
4	Contractor to provide accounting of related materials for records and handing-over	1	lot		0
C	Civil WORKS				
1	Convert existing 2 no. of closed offices to accommodate FEMALE Toilet as shown in the layout. Scope to include all interior fit out, ceiling, cubicles, tiles, sanitary fit out and accessories and water proofing. Perimeter wall with 200mm thick blockworks, interior wall at slop sink - 100mm thick, all to match existing	1	lot		0
2	Contractor to check existing door opening - Quiet Space, ensuring that size of wheelchair can easily go In-Out. If found not, contractor to modify opening to accommodate standard width of wheelchair. Scope include making good of all surfaces affected and supply and installation of the glass door with frame tempered complete with ironmongery.	1	no.		0
3	Supply and installation of 100mm thick gypsum board partitions, consisting of 72mm GI tracks, 70mm GI studs, Rockwool insulation - density of 35kg/m3 and double layer of 12.5mm thick gypsum board on each side as shown in the layout but has not been constructed yet. It is to vendor discretion to check existing against what's made available in the site, build as required. Works includes, taping, sanding, jointing etc. ready to receive final finish.	130	m2		0
	NOTE: 1) Inside the Control Room Space is to be fully acoustic to 40dB				
4	Prepare existing Copy room to accommodate new Pantry. Scope to include providing hot and cold water supply, floor and wall drain. Appropriate size of hot water tank complete with Korean top counter with double bowl SS sink, overhead and undercounter cabinet - all to match existing	1	set		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 3 - Test Center

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
5	Modify, repair curtain, drapes as may deem required - Test area. Supply and installation of new otherwise if not found to exist, to match existing	21	bays		0
6	Supply and installation of window glazed double, oneway mirror - Proctor's room. Design and concept to match Sikulation Control room in the 4th floor - building B	20	m2		0
7	Supply and installation of double glazed partition, 6+88+6 clear glass, tempered - Office and at adjacent corridor above	12	m2		0
8	Supply and installation of frameless glass partition, including single leaf door - tempered complete ironmongery - new corridor between Office and MEP shaft. Glass Partition _ 3400mmL	1	no.		0
9	Fabricate, supply and installation of laminate door - single leaf, complete with ironmongery to match existing. Standard height to match with width as indicated in the layout - Office & Store	2	no.		0
10	Fabricate, supply and installation of laminate door - single leaf, interior details with honeycomb for sound absorvent, with double glazed 6mm thick , tempered clear glass vision panel, complete with ironmongery. Door to be fully sealed by means of rubber moulding, preventing In-Out noise, one side of the door shall be incorporated with sound proofing material covered in washable fabric material. Standard height to match with width as indicated in the layout - Proctor's Room	2	no.		0
11	Fabricate, supply and installation of laminate door - double leaf, interior details with honeycomb for sound absorvent, with double glazed 6mm thick , tempered clear glass vision panel, complete with ironmongery. Door to be fully sealed by means of rubber moulding, preventing In-Out noise, one side of the door shall be incorporated with sound proofing material covered in washable fabric material. Standard height to match with width as indicated in the layout - Proctor's Room	4	no.		0
12	Build up, continue decorative wooden partition to fill gap. Scope to include emergency door to match complete with ironmongery . Partitons _ 2LM Long	1	lot		0
13	Supply and installation of drop down segmented, fully acoustic, sound proof partition - motorized (automatic). Each 2400mmL	2	no.		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 3 - Test Center

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
14	Supply and installation of turnstile, 3 bays, 1 for handicap. Turnstile is to match existing, including supply of power, access system connected to existing . To be link to the Registratiønn counter.	1	lot		0
15	Supply and installation of sandblasted film on glass partitions and doors	7	LM		0
16	Supply and installation of 2-compartment lockers to match existing	20	no.		0
17	All existing door keys to be check, ensuring that keys - cylinder are in good operational condition. Scope to include supply and installation of new set - master key system should existing found to be unoperational and or doors are without lockset.	1	lot		0
18	Design, supply and instalation of wall mounted signage to read as "Testing Center" in Arabic and English. Material and finishes to match existing	1	no.		0
19	Design, supply and instalation of wall mounted signage, Faculty users / room names with title plus room # in all rooms, Arabic and English. Material and finishes to match existing	11	no.		0
D	FLOOR FINISH				
1	Supply and installation of heavy duty sound absorvent raised floor system covering the 2 - Testing Area	310	m2		0
2	Supply and installation of 8mm thick carpet tiles: - solution dyed nylon type 6.6, glas bac backing (no bitumen) tufted loof, static protection, anti stain protection, environemntally friendly, indoor air quilty certified with flamability rating, lifetime antimicrobial protection, at least 10 years manufacturing - Test space	310	m2		0
3	Supply and application of concrete screed to the level required matching existing corridor as appropriate - Office and Store and Toilet	75	m2		0
4	Supply and application of leveling compound to accommodate new floor finish - Office, store and Toilet	75	m2		0
5	Supply and installation of Class III solid vinyl tiles, 3mm thick, chemical and slip resistance. Environmentally friendly and indoor Air Quality Certified. Installation, VOC free adhesive and levelling compound, LEED and Green certified -Office & store	45	m2		0

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS

BILL NO. 3 - Test Center

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
6	Supply and instalallation of granite/ceramic tiles in the new Female toilet and Pantry, to match existing	60	m2		0
7	Termination of joints, ramp, between existing floor finish and new by means of threshold, floor grip, strips wherever needed	1	lot		0
E	WALL FINISH				
1	Supply and installation of ceramic tiles to match existing - Pantry and Toilet	216	m2		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 3 - Test Center

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2	Prepare and apply Jotun Fenomastic silk paint finish to new partition and existing walls and partitions. Color to match or as required	700	m2		0
3	Supply and installation of 100mm high SS skirting to match existing, covering all walls and partitions	150	LM		0
F	CEILING FINISHES				
1	Supply and installation of plain gypsum ceiling, 12.5mm thick gypsum board on GI framing to suit proposed layout. Conceptual design to match existing - Knauf	70	m2		0
2	Supply and installation of aluminum tiles to match, complete with suspension system to suit proposed layout. RAM	385	m2		0
3	Supply and installation of vertical bulkhead, 12.5mm thick gypsum board, single layer on GI frame suspension	113	LM		0
4	Prepare and apply Jotun Fenomastic silk paint finish to new gypsum ceiling and bulkhead. Color to match or as required	488	m2		0
G	JOINERY WORKS				
1	Design, fabricate, supply and installation of custom made Reception counter, footprint as indicated in the layout. All outside surface to be of Corian finish. Size:6000mml	1	no.		0
2	Design, fabricate, supply and installation of Decorative wood panel divider, 2200mm FFL. - Waiting Room. Size:9000mml	1	no.		0
H	LIGHTING				
1	Supply of linear light, length 1200mm to match existing. Contrator to design atmospheric light following standard lighting lux appropriate to room activities, with sensor. Lighting to be done in 2 zones with On-Off switch.	1	lot		0
J	ELECTRICAL WORKS				
1	Installation of light fittings including conduitng and wiring, quantity as determined line item 1 of lighting above	238	no		0
2	Supply and installation of lighting override swithces	1	lot		0
3	Relocationof existing sensors should exist	1	lot		0
4	Supply and installation of Lighting sensor	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 3 - Test Center

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
5	Supply and installation of control module	1	lot		0
6	Containment and wiring for modification and upgrade of lighting control system should require	1	lot		0
7	Testing and commissioning of Lighting Control System	1	lot		0
8	Supply and installation of 13A power socket -twin, including conduiting and wiring	53	no.		0
9	Supply and installation of 13A spur outlet, including conduiting and wiring for VAV	11	no		0
10	Supply and instalaltion of floor box, including conduiting and wiring	58	no.		0
11	Modification of existing DB as to fit - assuming that existing DB have enough spare and load to accommodate additional load requirement	1	lot		0
12	Suuply and installation of DB, upgraded to accommodate all load requirement in case line item 12 above found to be insufficient	1	lot		0
13	Modification of GI trunking for power and lighting	1	lot		0
14	PVC containment for wall mounted data points	1	lot		0
15	PVC containment for floor mounted - floor box, data points	1	lot		0
16	Modification of cable tray to accommodate new data cabling	1	lot		0
17	Supply and installation of CCTV including cabling and conduiting. Works to include system configuration, all in accordance with and approval of local authority	1	lot		0
18	Supply and installation of Digital Clock - network, including conduiting and wiring	6	no.		0
19	Supply and Installation of 20A DP switch with flex outlet for Hand Dryer & water heater	2	no		0
20	Other electrical related works not mentioned above if any to complete task				
K	HVAC WORKS				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 3 - Test Center

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	Modification, supply and installation of A/C supply and return as appropriate. Scope to include Temperature control per office space, room and corridor. Type, concept and operational to match existing.	1	lot		0
2	Relocation of existing Fan coil Unit including valve packaged as may deem required	1	lot		0
3	Supply and installation of new bypass VAV including accessories	1	lot		0
4	Supply and installation of new Fan coil Unit as may deem required, including Thermostat, valve package, chilled water and drain pipe with insulation. Works to include supply of 20A DP switch. All works to include conduiting and wiring. Contractor to his discretion, to have 3rd party survey and assessment in able to determine sufficiency of supply	1	lot		0
5	Modification of existing chilled water pipe with insulation	1	lot		0
6	Supply and installation of thermostat for VAV	1	lot		0
7	Supply and installation of PI Duct for supply and air duct	1	lot		0
8	Supply and installation of Plenum box	1	lot		0
9	Supply and installation of Supply & Return Slot Diffuser	1	lot		0
10	Relocation of existing thermostat wherever required	1	lot		0
11	Modification of condensate drain pipe with insulation	1	lot		0
12	Modification of existing BMS as may deem required to accommodate new Bypass VAV and relocation	1	lot		0
13	Reprogramming, Testing and Commissioning of BMS system	1	lot		0
14	Chilled water flow test and performance test for existing AC units	1	lot		0
15	Contractor to ensure sufficeint cooling is achieve, considering humidity etc.	1	lot		0
16	Supply and Installation of Sound Attenuators for the existing AHUS	1	lot		0
17	Supply and Installation of flexible duct and VCDS	1	lot		0
18	Air Balancing	1	lot		0
19	Chilled Water Flushing & balancing	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 3 - Test Center

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
20	Other related HVAC works required not mentioned above if any to complete task				
L	FIRE ALARM				
1	Removal and relocation of existing Smoke Detector	1	lot		0
2	Supply and installation of Smoke Detector including fire rated cabling following international and local standard and regulation protocols	15	no		0
3	Supply and installation of break glass including fire rated cabling	7	no		0
4	Supply and instalaltion of Sounder including fire rated cabling	6	no		0
5	Dissable, Reprogramming, testing and Commissioning of Fire Alrm system	1	lot		0
6	Other related Fire Alarm works required not mentioned above if any to complete task	1	lot		0
M	FIRE FIGHTING WORKS				
1	Relocation of existing Pendant Sprikler as deemed fit	1	lot		0
2	Supply and installation of Pendant Sprinkler including fire rated cabling following international and local standard and regulation protocols	1	lot		0
3	Draining and refilling of Fire Fighting system	1	lot		0
4	Pressure Charges	1	lot		0
5	Shop drawing preparation and coordination with Civil Defense approval	1	lot		0
6	Supply and installation, sets of Fire Extinguishers follwing safety standard	1	lot		0
7	Other related Fire Fighting works required not mentioned above if any to complete task (Supply and Installation of fire fighting pipes for the new pendent sprinklers)				
N	EMERGENCY LIGHTING WORKS				
1	Removal and reinstallation of existing Exit light	1	lot		0
2	Supply and installation of Emergency exit light including conduiting and wiring following international standard regulation and protocols	30	no		0

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS

BILL NO. 3 - Test Center

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
3	Dissable, Reprogramming, testing and Commissioning of Emergency Lighting system (assume that existing CBS Panel have enough capacity to accommodate additional light)	1	lot		0
4	Supply and instalaltion of additonal circuit card should required	1	lot		0
5	Other related Emergency lighting works required not mentioned above if any to complete task	1	lot		0
P	STRUCTURED CABLING WORKS				
1	UTP CAT 6a structured cabling for voice and data, including pulling, termination, face plate to match existing, RJ45 module, termination and labeling	85	no.		0

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS

BILL NO. 3 - Test Center

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2	Patch cord 1 meter, 1 no per data point	85	no.		0
3	Patch cord 3 meter, 1 no. per data paoint	85	no.		0
4	24 port patch panel cat 6a or as deem required, fiber cabling with accessories - for Etisalat connection - 6 core single mode, fiber patch panel, single mode adapters, single mode sc/apc pigtails, sleeves, fiber cable pulling and splicing, fiber fluke testing etc.	1	lot		0
5	42U Rack	1	no.		0
6	All above to conform with given scope of works in accordance with the layout given	1	lot		0
7	Supply and installation of WIFI	3	no.		0
8	Other related works not mentioned above to complete task	1	lot		0
Q	AUDIO / VIDEO - please refer to AV SOW document				
1	Complete work is to provide comprehensive solution as fully describe in the scope of works. Contractor/vendor is to submit design, detailed BOQ, specific catalogs of proposed items	1	lot		0

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS

BILL NO. 3 - Test Center

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 4 - ITAV Testing Center

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Design, supply and installation of comprehensive audio and video solution forming a functional Prometrics and Pearsonvue concept of Examination and Training environment. Equipment and devices to include switches, interfaces etc. necessary to link all gadgets, integrate for a seamless trouble free monitoring and control with items not limited to				
1	Network Switches Manageable / Stackable (PoE) 48 Ports - with 2 Fibre Ports in the Rack	4			
2	Projectors 6 K Lumens	6			
3	Motortorized Screens - 116"	6			
4	Wireless Presentation Receivers for Projectors	6			
5	HDMI Cabling with Wall plates	12			
6	Matrix Swicther with Input Output Extenders	2			
7	Digital Signage Player to Cater for Displaying Content	2			
8	Equipment Rack in Control Room	1			
9	Fiber connection from the Control Room Rack to the IDF Room	2			
10	Acoustic Isolation of Control Room from Test Rooms	Lot			
11	Large Screen Displays for Camera Surveillance Control Room	3			
12	Meeting Riom Dispayas Integrated with the University Room Booking System	4			
13	Power Sockets 13 As required	Lot			
14	UPS for the Rack - Rack Mounted	1			
15	Video Surveillance System for Monitoring the Exam Hall and Examinees - To monitor all Examinees	2 Lots			
17	Video Capture, Replay And Archiving System with Time Synchronisation between all the cameras	1			
18	Any additional Items required to complete the project as per the Scope and Drawings	2 Lots			

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS

BILL NO. 4 - ITAV Testing Center

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	TO COLLECTION				-

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS

BILL NO. 4 - ITAV Testing Center

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 5 - BALSAM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	other than quantities that are specified herein, contractor to determine required no. of fittings and accessories on the basis of design space required, in compliance with standard and local authority regulation. Contractor to follow related conceptual design concept existing in the building				
A	PRELIMINARIES				
1	Mobilization and Demobilization	1	item		0
1a	Mobilization				
1b	Demobilization				
2	ADM/ADCD and other local Authorities Approvals	1	item		0
2a	ADM/ADDC drawing approvals				
2b	Civil Defense				
3	Project Mangement	1	item		0
3a	PM and Supervision charges				
4	Site Protection	1	item		0
4a	Temporary protection on walls and floors				0
5	Progress Reporting	1	item		
5a	Documentation, photos, progress of work monitoring				
6	Temporary Site Facilities	1	item		0
6a	First Aid				
6b	Fire Entinguesher, Blanket				
6c	Maintaining, keeping sanitary site condition				
7	QA, QC & HSE/EHS	1	item		0
7a	Adhering to University ISO and standard pratices and protocols				
8	Debris removal, cleaning	1	item		0
	Contractor is totally and absolutely responsible for the removal of any debris cause by the construction, surplus spoil, materials and the like resultant from the execution of the works caused either by their manpower, sub-contractors or by suppliers to appropriate location				
8a					
8b	Site cleaning for the entire project duration				
8c	Final cleaning before occupancy				
9	Submittals of Shop Drawings	1	item		0
9a	Drawing production, site/client/sub-contractor				
9b	Prints Out, contruction and revisions				
9c	AS-Built drawings, Soft and Hard copy - 2 sets				
B	DEMOLITION WORKS				
	Demolition and or clearing of items visible not required to this project, includes clearing of unwanted items in floor, wall and ceiling. Prepare surface to accommodate task as stated under categories				
1		1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 5 - BALSAM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2	Contractor to provide accounting of realated materials for records and handing-over	1	lot		0
	TO COLLECTION				-
C	Civil / PARTITION WORKS				
1	Supply and installation of 100mm thick gypsum board partitions, consisting of 72mm GI tracks, 70mm GI studs, Rockwool insulation - density of 35kg/m3 and single layer of 12.5mm thick gypsum board on each side as shown in the layout but has not been constructed yet. It is to vendor discretion to check existing against whats made available in the site. Works includes, taping, sanding, joiting etc. ready to recieve final finish. Specified brand - Knauf	84	m2		0
2	Supply and installation of double glazed partition, 6+88+6 clear glass, tempered	14	m2		0
3	DITTO, windows in the gypsum partitions	3	m2		0
4	Fabricate, supply and installation of powder coated aluminum framed single leaf glass-swing door - double glazed tempered complete with ironmongery. Standard height to match with width as indicated in the layout	3	no.		0
5	Remove, modify, repair existing single leaf door, door jamb, frames and accessories including ironmogenries to fit as Emergency Exit Door. If however existing door found to be not feasible, contractor to supply and install proper Emergency Exit door, compliant to safety standard and protocols. Existing door and all its accessoried to be securely wrap with bubble plastic, cart awat to specified location. See clouds "A" in the layout.	1	no.		0
6	Remove existing double leaf door, door jamb, frames and accessories including ironmogenries. Securely wrap in bubble plastic, cart away to specified store. Fabricate, supply and installation of powder coated aluminum frameless double leaf glass-swing door - double glazed, tempered complete with ironmongery. See clouds "B" in the layout	1	no.		0
7	Supply and installation of sandblasted film on glass partitions and doors	8	LM		0
8	Modify, repair curtain, drapes as may deem required to fit partitioning layout. Supply and installation of new otherwise if not found in existence, to match existing	3	room		0
9	All existing door keys to be check, ensuring that keys - cylinder are in good operational condition. Keys and cylinders to be put in a resealable plastic - hand over to user representative	2	no.		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 5 - BALSAM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
10	Design, supply and instalation of wall mounted signage to read as "Balsam Community Outreach" in Arabic and English. Material and finishes to match existing	1	no.		0
11	Design, supply and instalation of wall mounted signage, Faculty users / room names with title plus room # in all rooms, Arabic and English. Material and finishes to match existing	3	no.		0
	TO COLLECTION				-
D	FLOOR FINISH				
1	Supply and application of concrete screed to the level required matching existing corridor as appropriate	95	m2		0
2	Supply and application of leveling compound to accommodate new floor finish	95	m2		0
3	Supply and installation of 8mm thick carpet tiles: - solution dyed nylon type 6.6, glas bac backing (no bitumen) tufted loof, static protection, anti stain protection, environemntally friendly, indoor air quility certified with flamability rating, lifetime antimicrobial protection, at least 10 years manufacturing - Offices	25	m2		0
4	Supply and installation of 3mm thick vinyl tiles: - ASTM F1700, Class III solid vinyl tiles, resilient flooring with 1.0 wear layer thickness, sound reduction of 17dB min. slip resistance, chemical resistance, flammability/smoke emission - ASTM E648, class 1, Tensile strenght upto 4000lbs/sq.inch, static load, environmentally friendly, indoor Air quality certified at least 10 years of manufacturers defect warranty. Offices corridors, Reception and Conference room	70	m2		0
5	Termination of joints between existing floor finish and new by means of threshold, floor grip, strips wherever needed and as appropriate	1	lot		0
E	WALL FINISH				
1	Prepare and apply Jotun Fenomastic silk paint finish to new partition and existing walls and partitions. Color to match or as required	360	m2		0
2	Supply and installation of 100mm high SS skirting to match existing, covering all walls and partitions	80	LM		0
F	CEILING FINISHES				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 5 - BALSAM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	Supply and installation of plain gypsum ceiling, 12.5mm thick gypsum board on GI framing to suit proposed layout. Conceptual design to match existing. Specified brand - Knauf	48	m2		0
2	Supply and installation of aluminum tiles to match, complete with suspension system to suit proposed layout. Specified brand - RAM	70	m2		0
3	Supply and installation of vertical bulkhead, 12.5mm thick gypsum board, single layer on GI frame suspension	24	m2		0
4	Prepare and apply Jotun Fenomastic silk paint finish to new gypsum ceiling and bulkhead. Color to match or as required	72	m2		0
G	JOINERY WORKS				
1	Design, fabricate, supply and installation of custom made Reception counter and cabinet, footprint as indicated in the layout, laminated finish for counter and mobile pedestal to match existing	1	no.		0
H	LIGHTING				
1	Supply of linear light, length 1200mm to match existing. Contrator to design atmospheric light following standard lighting lux appropriate to room activities, with sensor	18	no.		0
2	Supply and installation of downlighter with powered factor ballast wherever indicated	2	no.		0
J	ELECTRICAL WORKS				
1	Installation of light fittings including conduiting and wiring	26	lot		0
2	Supply and installation of lighting override swithces	1	lot		0
3	Relocation of existing sensors should exist	1	lot		0
4	Supply and installation of Lighting sensor	4	no.		0
5	Supply and installation of control module	1	lot		0
6	Containement and wiring for modification and upgrade of lighting control system	1	lot		0
7	Testing and commissioning of Lighting Control System	1	lot		0
8	Supply and installation of 13A power socket - single, including conduiting and wiring	5	no.		0
9	Supply and installation of 13A power socket -twin, including conduiting and wiring	11	no.		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 5 - BALSAM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
10	Supply and installation of 13A spur outlet, including conduiting and wiring for VAV	7	no		0
11	Supply and instalaltion of floor box, including conduiting and wiring	6	no.		0
12	Modification of existing DB as per proposed layout - assuming that existing DB have enough spare and load to accommodate additional load requirement	1	lot		0
13	Supply and installation of DB, upgraded to accommodate all load requirement in case line item 12 above found to be insufficient	1	lot		0
14	Modification of GI trunking for power and lighting	1	lot		0
15	PVC containment for wall mounted data points	6	no.		0
16	PVC containment for floor mounted - floor box, data points	6	no.		0
17	Modification of cable tray to accommodate new data cabling	1	lot		0
18	Supply and installation of CCTV including cabling and conduiting. Works to include system configuration and integration, all in accordance with and approval of local authority	2	no.		0
19	Supply and installation of Digital Clock - network, including conduiting and wiring	1	no.		0
20	Electrical civil related works	1	lot		0
21	All system, testing, commissioning and integration required	1	lot		0
22	Other electrical related works not mentioned above if any to complete task				
K	HVAC WORKS				
1	Modification, supply and installation of A/C supply and return as appropriate. Scope to include Temperature control per office space, room and corridor. Type, concept and operational to match existing.	1	lot		0
2	Supply and installation of new bypass VAV including accessories	4	no.		0
3	Relocation of existing Fan coil Unit including valve packaged as may deem required	1	no.		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 5 - BALSAM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4	Supply and installation of new Fan coil Unit as may deem required, including Thermostat, valve package, chilled water and drain pipe with insulation. Works to include supply of 20A DP switch. All works to include conduiting and wiring. Contractor to his discretion, to have 3rd party survey and assessment in able to determine sufficiency of supply	1	no.		0
5	Modification of existing chilled water pipe with insulation	1	lot		0
6	Supply and installation of thermostat for VAV	4	no.		0
7	Supply and installation of PI Duct for supply and air duct	1	lot		0
8	Supply and installation of Plenum box	1	lot		0
9	Supply and installation of Supply & Return Slot Diffuser	1	lot		0
10	Relocation of existing thermostat wherever required	1	lot		0
11	Modification of condensate drain pipe with insulation	1	lot		0
12	Modification of existing BMS as may deem required to accommodate new Bypass VAV and relocation	1	lot		0
13	Reprogramming, Testing and Commissioning of BMS system	1	lot		0
14	Chilled water flow test and performance test for existing AC units	1	lot		0
15	Supply and installation of sound attenuator for the AHU	1	lot		0
16	Chilled Water Flushing & Balancing	1	lot		0
17	Air Balancing	1	lot		0
18	Other related HVAC works required not mentioned above if any to complete task				
L	FIRE ALARM				
1	Removal and relocation of existing Smoke Detector	1	lot		0
2	Supply and installation of Smoke Detector including fire rated cabling following international and local standard and regulation protocols	6	no.		0
3	Supply and installation of break glass including fire rated cabling	2	no.		0
4	Supply and instalation of Sounder including fire rated cabling	1	no.		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 5 - BALSAM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
5	Dissable, Reprogramming, testing and Commissioning of Fire Alarm system	1	lot		0
6	Other related Fire Alarm works required not mentioned above if any to complete task	1	lot		0
M	FIRE FIGHTING WORKS				
1	Relocation of existing Pendant Sprikler as deemed fit	1	lot		0
2	Supply and installation of Pendant Sprinkler including fire rated cabling following international and local standard and regulation protocols	8	no.		0
3	Draining and refilling of Fire Fighting system	1	lot		0
4	Pressure Charges	1	lot		0
5	Shop drawing preparation and coordination with Civil Defense approval	1	lot		0
6	Supply and installation, sets of Fire Extinguishers follwing safety standard	1	set		0
7	Other related Fire Fighting works required not mentioned above if any to complete task				
N	EMERGENCY LIGHTING WORKS				
1	Relocation of emergency light	1	lot		0
2	Removal and reinstallation of existing Exit light	1	lot		0
3	Supply and installation of Emergency exit light including conduiting and wiring following international standard regulation and protocols	5	no.		0
4	Dissable, Reprogramming, testing and Commissioning of Emergency Lighting system (assume that existing CBS Panel have enough capacity to accommodate additional light)	1	lot		0
5	Supply and instalation of additonal circuit card should required	1	lot		0
P	STRUCTURED CABLING WORKS				
1	UTP CAT 6a structured cabling for voice and data, including pulling, termination, face plate to match existing, RJ45 module, termination and labeling	12	point		0
2	Patch cord 1 meter, 1 no per data point	12	no.		0
3	Patch cord 3 meter, 1 no. per data paoint	12	no.		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 5 - BALSAM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4	24 port patch panel cat 6a or as deem required, fiber cabling with accessories - for Etisalat connection - 6 core single mode, fiber patch panel, single mode adapters, single mode sc/apc pigtails, sleeves, fiber cable pulling and splicing, fiber fluke testing etc.	1	lot		0
5	42U Rack, contractor to check should required	1	no.		0
6	All above to conform with given scope of works in accordance with the layout given	1	lot		0
7	Supply and installation of WIFI	1	no.		0
8	Other related works not mentioned above to complete task	1	lot		0
Q	FURNITURE INSTALLATION				
1	Installation of office furniture from internal resources as per the layout, not limited to;				
a	L-Shape desk including pedestal	2	set		0
b	Install, Modify existing free standing fabric panel partition to suit	4	set		0
c	Task chair	7	no.		0
d	Visitors chair	4	no.		0
e	Meeting table	1	no.		0
f	Meeting chair	10	no.		0
g	Cabinet	3	no.		0

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
 PHASE 2 AT THE MAIN CAMPUS

BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
A	PRELIMS				
	CONDITIONS OF CONTRACT				
	The Conditions of Contract as included.	1	Item		0
	The Contractor shall include such sums as he considers necessary to cover his obligations, Liabilities and services under these conditions.				
B	RESTRICTIONS				
	Access to site	1	Item		0
	Access to site is from adjoining roads on the front side of the building.				
	CONTRACTOR'S ADMINISTRATIVE ARRANGMENTS.				
a	Site Administration	1	Item		0
	The Contractor shall provide sufficient staff and equipment to perform the administrative duties in executing the Contract, subject to approval of Consultant.	1	Item		0
	All staff to be properly qualified to perform their respective duties and shall not be removed from site or replaced without the prior permission of the Engineer.	1	Item		0
	SUPERVISION	1	Item		0
	The whole of the works shall be under the full time supervision of the Contractor. Supervisory staff appointed for the works shall be fully qualified and experience in the type of construction work to be carried out. A minimum of Project Manager, Two Site Engineers, Two Foreman, Secretary, Document Controller shall be provided by the Contractor at all times with ample experience to Consultant's approval.	1	Item		0
	Senior supervisory staff appointed for the works shall be able to speak, read and write English.	1	Item		0
	The Contractor shall allow for liaising and co-ordinating all the works for other contractors and nominated sub-contractors who may be employed to carry out works during the currency of the contract.	1	Item		0
	Allow for providing the following facilities including modifying, adapting or relocating to suit the progress of the works and removing from site	1	Item		0
	The Contractor shall keep the Engineer fully informed of the sequence of all operations of the Works. This task cannot be assigned to any other party without the written consent of the Engineer.	1	Item		0

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS

BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	The Contractor shall be responsible for co-ordinating all Builder's work and working drawings including those of all other parties employed in connection with works.	1	Item		0
	TO COLLECTION				-

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
 CMHS-Civil MEP P2
 PHASE 2 AT THE MAIN CAMPUS

BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
c	<p>The Contractor is to ensure that all works are installed as to ensure proper performance and adequate fixing and to avoid conflicts in the positioning of all services installations and other like items.</p> <p>Security</p> <p>The Contractor shall allow for protecting the site and works from unauthorized entry.</p> <p>The Contractor shall control the labour force to ensure that no nuisance or trespass onto adjacent property is caused.</p> <p>The Contractor shall provide all necessary watching and lighting by day and night to protect the works from damage and to protect public and private traffic on or near the works.</p> <p>The Contractor shall take all precautions to prevent the outbreak of fire and shall provide adequate fire Fighting appliances on site to the approval of the University EHS</p> <p>The Contractor shall also take all necessary precautions against fire as required by the insurance company insuring the works.</p>	1	Item		0
d	<p>Safety, Health and Welfare of Work People</p> <p>The Contractor and all persons employed by him on the site shall comply in all respect with the provisions of all Acts., Orders, Laws and Regulations concerning the safety, health or welfare of person working on site, including provision of safety shoes, hard hats etc., for workers and supervision staff.</p> <p>The Project rep may require the immediate removal from the works of any person who in the opinion fails to observe the provisions of the previous clause.</p> <p>The provisions of the previous two clause shall apply to and be binding upon any sub-contractor or supplier employed by the Contractor.</p>	1	Item		0
e	<p>First Aid</p> <p>The Contractor shall provide a temporary first aid post properly equipped and manned by a competent person. The facility shall be clearly marked with a red crescent and clear lettering "FIRST AID" in English and Arabic.</p>	1	Item		0
f	Labour Procurement				

CMHS-Civil MEP P2
**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
 PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	The Contractor shall allow for procuring all labour required to execute the works and shall pay all charges in connection with the employment and discharge of such labour.	1	Item		0
g	Transport of Work People				
	If any claim is made by anyone against the Contractor or any Sub-Contractor on account of any accident the Contractor shall promptly report the facts in writing, giving full details on the claim.	1	Item		0
	The Contractor shall immediately replace at his own cost all items or equipment that become defective for the required duties.	1	Item		0
	Contractor to allow hydraulic lifter with license operator to hoist equipment deem to to go to roof area	1	Item		0
C	EMPLOYER'S FACILITIES				
a	Temporary Office Accommodation	1	Item		0
	The Contractor shall provide a temporary office, etc., for the exclusive use of the Employer, Engineer and their Representatives. The accommodation shall include all furnishing, fittings, etc.,				
	Mobilization	1	Item		0
	Maintenance	1	Item		0
	Removal	1	Item		0
b	Stationery and Office Supplies				
	The Contractor shall provide an office attendant as may required				
	The Contractor shall provide miscellaneous office equipment for the duration of the Contract				
c	Printing and Copying				
	The Contractor shall provide at site adequate facilities for reproducing plans and documents for timely discussion	1	Item		0
d	Programming and Progress				
	The Contractor shall allow for preparing and submitting to the Engineer a fully detailed programme and shall update this on a regular basis.	1	Item		0
	The Contractor shall allow for keeping records of progress and reporting such progress to CMHS rep.				
e	Progress Photographs				

CMHS-Civil MEP P2
**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
 PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	The Contractor shall provide 4Nr. 297 x 210mm & 24Nos. colour photos each month showing the progress of the works, i.e. in the form of monthly basis report. The photographs shall be taken as instructed and shall be forwarded along with weekly/monthly reports.	1	Item		0
f	Operation and Maintenance Manuals.				
	The Contractor shall provide operation and maintenance manuals as required by the Specifications.	1	Item		0
g	Signboard				
	The Contractor shall provide and remove on completion of the works 2Nr. temporary sign boards located as appropriate and agreed.				
	The signboard shall bear all necessary per instrcution of EHS rep	1	Item		0
h	Site Survey and Site Investigation				
	The Contractor shall make a accurate survey of the site and shall produce a dimensional site layout plan showing existing ground levels and boundaries	1	Item		0
i	Site Survey and Site Investigation				
	The survey drawings shall be based on a approved grid to the same scale as the drawings. All excavated ground levels and boundaries shall be agreed be discussed and agreed before commencement of the works.	1	Item		0
	The Contractor shall conduct a survey of the present condition of the properties adjacent to the works in conjunction with the Engineer. This survey shall include the use of photographs to record defects.	1	Item		0
D	CONTRACTOR'S FACILITIES				
a	Contractor's Working Area				
	The Contractor's working area within which he must confine his operations shall be agreed and approved .	1	Item		0
	Throughout the period of construction or the Works the Contractor shall maintain the whole area of his operations in a clean, tidy and safe conditions by arranging his materials in an orderly manner.	1	Item		0

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ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	All rubbish, waste materials, debris, etc., shall be systematically cleared off the working areas as it accumulates and if not remove directly from the site shall be deposited at collecting points as approved by the Engineer.	1	Item		0
	The previous clause in no way invalidates the obligations under the Conditions of Contract.	1	Item		0
	The Contractor shall be responsible for the provision, erection maintenance and subsequent removal of all offices with all required furniture and equipment, including the required space outside the plot for offices.	1	Item		0
b	Site Survey and Site Investigation				
	The survey drawings shall be based on a approved grid to the same scale as the drawings. All excavated ground levels and boundaries shall be agreed with before commencement of the works.	1	Item		0
	The Contractor shall conduct a survey of the present condition of the properties adjacent to the works in conjunction with CMHS rep. This survey shall include the use of photographs to record defects.	1	Item		0
c	Contractor's Site Buildings				
	The Contractor's office shall be open at all reasonable hours to receive instructions and other communication.	1	Item		0
d	Telephone				
	The Contractor shall provide a temporary telephone/Internet facility for his own use and pay all charges in connection therewith.	1	Item		0
e	Existing Services				
	The Contractor shall take such measures and exercise such care to protect the site as shown on the site plans during the course of the works as directed by	1	Item		0
	The Contractor shall determine and record all existing on site services routes.	1	Item		0
	The Contractor shall be responsible for the protection of all existing services within the site and shall make good any damage resulting from carrying out the works to full satisfaction	1	Item		0
	Making good of damage to the existing services shall also be to the entire satisfaction of the relevant authorities.	1	Item		0

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
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ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
E	The Contractor shall be responsible for giving notices to the relevant authorities where temporary or permanent rerouting or existing services is found to be necessary.	1	Item		0
	The Contractor shall provide attendant upon any contractor employed to carry out such re-routing.	1	Item		0
	f Hoarding, etc.				
	The Contractor shall provide and maintain temporary site hoardings and the like for the protection and security of the works, persons working thereon and the general public. The Design and location of hoardings shall be discussed and approved. Contractor shall allow for providing asthetically designed hoardings, design to approval of Engineer.				
	The design & construction of hoardings, etc., shall be to the approval of the Engineer only.	1	Item		0
	g Lighting				
	The Contractor shall allow for providing all necessary lighting and power for the duration of the Works and shall pay all charges in connection.	1	Item		0
	SUNDRY ITEMS				
	The Contractor shall allow for providing and submitting samples of all materials he propose to incorporate into the works.	1	Item		0
	The Contractor shall not proceed with ordering any materials until approval in writing has been obtained	1	Item		0
a	Samples shall be labeled accordingly				
	Testing				
	Contractor shall submit proposal for quality analysis and quality control as per ISO requirement for approval prior to start of works with regard to type number of tests applicable and maintain records for the same.	1	Item		0
	The Contractor shall allow for the testing of materials as required by the Specifications and other tests as ideem necessary	1	Item		0
	Tests shall be carried out by an approved laboratory at the contractor's expense, for all works as specified and as required at site.	1	Item		0
	Test result shall be submitted as soon as they are received by the Contractor and records shall be kept for testing procedures for inspection.	1	Item		0

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BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Contractor to allow for printed booklets for materials submittal forms, sub-contractor submittal forms etc for all submissions.	1	Item		0
b	Protection Adequate protection against any form of damage or deterioration shall be provided for all sections of the works. This shall include protection tapes, coating, casings, guard rails and the like, which shall be cleared away on completion. Particular care should be taken to mask finished surfaces during the application of adjacent in-situ work and windows and doors during the application of sprayed finished. In pursuance of his obligations under the Condition of Contract, the Contractor shall wherever required or directed by the Engineer cover up and protect the works from the weather and from all possible damage. The Contractor shall provide all necessary dust sheets, barriers and guard rails and clear away on completion. The Contractor shall take reasonable and proper steps for the protection of all places on or about the works which may be dangerous to his workmen or any other persons or traffic. The Contractor shall provide and maintain signs, red warning lamps and barricades as necessary in such places.	1	Item		0
c	Cleaning the Works Immediately prior to handing over the works the Contractor shall thoroughly clean the whole building and surrounding area, wash down windows, etc., ready for occupation, all to the approval of the Engineer. The cleaning works shall be carried out by professional cleaning company to engineer's	1	Item		0
d	Traffic Regulations The Contractor shall allow for complying with all traffic regulations and shall liaise with the Police and other authorities with jurisdiction over traffic movement whenever needed	1	Item		0
e	Giving Notices and Paying Fees	1	Item		0

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BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
f	<p>The Contractor shall give notice; seek permissions as necessary for the issue of building permits and temporary service connections and the like for the Projects and pay any penalties from local authorities for consultant/contractor for any short comings, defective work, etc for successful completion of the project.</p> <p>Completion Certificate</p> <p>Contractor to include for obtaining ADM completion certificate after completion of all works as per drawings</p> <p>All testing for HVAC works shall be monitored and approved by third party entity</p> <p>All finishing material used/proposed for the building shall be approved for green building usage. Tenderer to allow for necessary documentation /requirements in the prescriptive format provided by third party</p>	1	Item		0
g	<p>Permanent Services</p> <p>Contractor to liase with ADDC/ADM/Etisalat, Drainage section and other Services Department for obtaining permanent services for the project within two weeks of completion certificate.</p>	1	Item		0
h	<p>Handing over of the Project</p> <p>Contractor to include for proper testing, commissioning and handing over of the project as per contract after completion of all the snags.</p>	1	Item		0
F	<p>LABORATORY ANIMAL SCIENCE and ENVIRONMENT</p> <p>Contractor to allow Facility design assistance, builders and construction expertise from ALLENTOWN, world known solution provider for Environment Design, Environment Control and Qualification - vivarium and animal housing for which project layout and details done in collaboration with ensuring correct interpretation and timely implementation on site</p>				-

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS

BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
G	WATER PROOFING				
	Liquid water proofing membrane (to manufacturer's recommendation) to horizontal and vertical surface (for minimum 125 mm height) incl. smoothening of concrete slab and cement-sand angle fillets	1650	sqm		0

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
 PHASE 2 AT THE MAIN CAMPUS

BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
H	Finishes				
1	BLOCKWORKS				
	All external blockworks in insulated thermal concrete blocks (with polystyrene inserts / fixed) with machine mixed cement-sand mortar incl. reinforced with stainless steel wall ties and mesh horizontally fixed, movement joints, jointing and pointing, complete all as shown on drawings and as specified				
	250 mm blockwork (all external)	1,556	sqm		0
	200mm thick blockwork (all external)				
	100mm thick solid non insulated blockwork (all external)				
	All internal walls in non-structural concrete hollow block with machine mixed cement-mortar, reinforced GI wall ties and mesh horizontally fixed, incl. control joints, complete all as shown on drawings and as specified				
	200mm hollow block work (internal walls)	2,283	sqm		0
	100mm hollow block works (internal block)				
2	<u>SUNDRIES</u>				
	RCC lintels on 250 mm thk external walls	283	Lm		0
	Precast GI lintels on 200 / 150 / 100 mm thk internal walls	415	Lm		0
	Filling voids in blockworks, jambs and cills	1	Lot		0
3	INTERNAL PLASTERING				
	Providing and applying average 12mm thk plaster in single coat to all internal surfaces at all levels in masonry / concrete surfaces. Plaster to be finished rough/smooth to receive corresponding finishes as required, as per drawings and details including preparation of surface, hacking, & cleaning, providing and fixing expanded metal mesh of 20 gauge extending 75 mm on either side of the junctions of concrete & masonry /electrical conduit, making grooves at the junctions of masonry & RCC, chamfering and rounded angles up to 80 mm girth, curing, cleaning etc. complete as directed by consultant.	4,566	sqm.		0
4	WALL FINISHES				

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
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BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
a	Providing and Applying Washable Emulsion Paint System : First coat shall be PVA co-polymer based primer for internal use with volume solids 16% as per ISO 3233 / 1998 (E). Second & third coats shall be PVA co-polymer based stucco filler with volume solids 52% as per ISO 3233 / 1998 (E). Fourth & fifth coats shall be of high quality acrylic co-polymer based emulsion paint with outstanding washability and colour retention properties to provide smooth and durable matt / silk finish with volume solids 44% as per ISO 3233 / 1998 (E).	4,750	sqm		0
b	Providing and Applying Washable Emulsion Paint System : First coat shall be PVA co-polymer based primer for internal use with volume solids 16% as per ISO 3233 / 1998 (E). Second & third coats shall be PVA co-polymer based stucco filler with volume solids 52% as per ISO 3233 / 1998 (E). Fourth & fifth coats shall be of high quality acrylic co-polymer based emulsion paint with outstanding washability and colour retention properties to provide smooth and durable matt / silk finish with volume solids 44% as per ISO 3233 / 1998 (E). The top coat to have the following properties/test certificates:-Crack tolerance of upto 1.00 mm (total DFT of top coats to be 100 microns min).Classified for surface spread of flame to BS 476:Part 7:1997 as Class 1Y.Special anti fungal and anti bacterial independent test certificate. Excellent flow and levelling, good opacity and highly washable finish.	0	sqm		0
c	Supply and Fixing, VITRIFIED TILE CLADDING of 300X600MM approved make, size, thickness and design fixed in line level and plumb matching its joints with corresponding floor joints with proper jointing in pigmented white cement finishing complete and as directed by the consultant. Epoxy grouting to be considered in tech clinical areas	168	sqm		0
d	Supply and Fixing 20 mm thk, 600X600 MARBLE WALL CLADDING of approved shade, size and design to be laid in line level and plumb matching its joints with corresponding floor joints and proper jointing in pigmented white cement finishing complete as per drawing and as approved by the consultant. The base of the marble shall be bitumen painted. (SR: 180 dHS/ sQM)	185	sqm		0
e	Supply & Fixing 2/3 MM thick wall cladding with lead sheets from FFL to slab soffit in radiation rooms	135	sqm		0
f	Supply & installation of Radio Frequency(RF) shielding for MRI room as per the specification document provided . To Be Carried Out By Specialist Contractor. Main contractor to allow for all coordination	1	item		0

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 PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
g	Supply & installation of Fermacell board / Class 100/ HPB wall of 12.5 mm thickness, with necessary supports , seamless finish with antibacterial/ paint , primer etc as applicable . The partition shall go upto 150mm high above false ceiling.To Be Carried Out By Specialist Contractor. Main contractor to allow for all coordination	1	item		0
h	Supply & apply anti carbonate epoxy paint as specified for basements , staircase well etc	1000	Sqm		0
5	PARTITION WORK Providing and fixing Full Ht. Gypsum Partition as per design, fixed with Vertical Aluminum Struts going upto Structural member for proper support and covered with 8mm MDF sheet of exterior grade clad with One Hour Fire Rated, rockwool insultaion for acoutsic protection, Gypsum sheets fully taped, filled and levelled smooth, preparing surface to receive primer and paint. Rate to include for cutouts with framework for switch-sockets, Thermostats etc. finishing complete as per design and as directed by the Interior Designer. The partition shall go upto 150mm high above the false ceiling level. Same as above but with ecmentitious sheets	1400	Sqm		0
6	SCREEDING Supply and laying screed below FFL achieving the required floor level to receive the finished flooring material as per the drawings and as approved by the consultant. The finished surface to be smooth and level without any undulation. Provisions shall be provided for all the services laid under the FFL.	1450	Sqm		0
a					
b	Supply and Fixing 600X600X 20mm thk 1st grade Marble Flooring in combination and pattern to be laid in line, level and plumb with proper jointing in pigmented white cement/ epoxy grout finishing complete as per the drawings and as approved by the consultant. The base of the marble shall be polythene lacquered painted.	125	Sqm		0
c	Supply and laying 1st quality 600X600MM VITRIFIED TILE flooring of approved make, size, thickness and design fixed in line, level and plumb, with proper jointing finished in pigmented white cement as per drawing and as approved by the consultant. The vitrified tile shall have proper sharp edges and finished with hairline joints.	400	Sqm		0

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BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
d	Supply and fixing of 2mm thick non directional, Homogenous printed VINYL FLOORING (PVC) from approved manufacturer's in Roll Form for a moderate Commercial Traffic, treated with PUR and Sanitized and Anti bacteria Treatment. Rate shall include an average 5 mm self levelling compound to achieve even horizontal receiving surface for the Vinyl flooring. include seamless skirting up to 100mm of the same material with end capping. Rate shall include the corresponding cold welding of the matching design, colour and fixed as per manufacturer's instructions finishing complete as per drawing and as approved by the consultant.	325	Sqm		0
e	Supply and applying EPOXY PAINT consisting of base agent and curing agent compound, of standard proportion, flooring including 100 MM coving, to be brushed, rolled or towelled upon the coating into place of specified thickness. Epoxy Coving - S6	550	Sqm		0
7	SKIRTING	154	Lm		0
a	Supply and Fixing 20 mm thk, recessed 100mm high marble skirting in line level and plumb, matching its joints with corresponding floor joints and proper jointing in pigmented white cement, finishing complete and as directed by the Consultant. The maximum projection of the skirting shall be not more than 5mm from the finished wall surface. The base of the marble shall be bitumen painted.	53	LM		0
b	Supply and Fixing, VITRIFIED TILE skirting of approved make, size, thickness and design fixed in <i>line level and plumb matching its joints with corresponding floor joints with proper jointing in pigmented white cement, with maximum project of the skirting not be more than 5mm from the finished wall surface finishing complete and as directed by the consultant.</i>	265	LM		0
8	FALSE CEILING WORK AND WALL PANELLING WORKS				
	Refer to the Finishes Schedule				
a	Providing / Cutting openings in the ceiling and vertical drops for light fittings and a.c. supply and return air grilles etc. with necessary surround frame.Necessary acccess panel as required to be considered	1	LS		0
b	Providing necessary Ply / MDF backing for installation of the light fittings. Shadow grooves to be considered for ceiling transitions	1	LS		0
c	Gypsum bulkhead within 100 mm depth shall be considered as apart of gypsum plain gypsum ceiling works & no separate rate will be entertained.				0

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ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
d	Providing and Fixing 12 mm thk Plain Gypsum Ceiling fixed on a GI suspension system as per design and as indicated in the drawings issued by consultant. The Gypsum sheets shall be taped, filled and levelled smooth, Jointing compound of approved quality to be used, preparing surface to receive primer and paint. Rate to include for cut-outs with wooden framework for light fixtures, A.C. Diffusers, speakers, etc. finishing complete as per design and as directed by the Consultant	900	Sqm		0
e	Providing & fixing 600x600mm Grid suspension system with Tegular edges with Mineral Fiber Tiles with acoustic protection AND MICROLOOK GRID SYSTEM	250	Sqm		0
f	Providing & fixing 600x600 mm concealed Grid suspension system with Mineral Fibre Clean Room Ceiling panel	100	Sqm		0
g	Providing & fixing of 600X600 Grid Ceiling with 6mm Grid suspension system with Calcium Silicate Tiles of approved sample and make and having Regular edges.	200	Sqm		0
h	Curtain Pelmet	180	Lm		0
9	DOORS & WINDOWS				
	Refer to the drawings				
a	Providing and Fixing all doors and windows as per drawing with all necessary accessories , fire rating and lead lining as per drawings	1	Lot		0
	Single Doors (40 Nos) Double Doors (8 Nos) Windows				

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BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
J	MISC				
	MEP Builder's works				
1	Excavation for laying various service lines	1	item		0
2	Construction of manholes, gully traps, access chambers as required for all MEP services	1	item		0
3	Provide concrete foundations / pedestals / bedding for MEP equipments, pipe supports etc. as required.	1	item		0
4	Anti vibration pedetsal shall be done with all necesary details as shown with thrid party certificate/study if reuquired				
5	Provide access platforms / crossing steps (in EPOXY painted steel sections) over MEP service lines at roof as required.	1	item		0
6	Providing sleeves, cutouts, voids, subsequent repair and making good including filling with approved fire sealant as required for MEP works.	1	item		0
7	Allow for all co-ordination with statutory authorities	1	item		0
8	Allow for other builder's works as mentioned in preamble to BoQ	1	item		0
9	Suply & install acoustic underlayer as per specification	1	item		0
10	Supply & install transition strip in metal finish for diferent flooring & wall as required	1	item		0

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ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
K	Mech				
	Air-conditioning and Ventilation Services				
1	FAHUS(Hygeine type with SS 316 drain panes with valve packages ,Vibration mounts / pads along with BMS compatability as per the specifications and HVAC drawings ,				
2	Air handling units , double skin type,(all hygiene type) with all fittings and accessories, control damper with neoprene gasket, damper stop, damper accutator , room thermostat, with temperature, pressure & RH controls with BMS compatability as per ASHRAE standards with latest precision controls, access doors suitable for hospital applications	25	No		0
3	VAV & CAV box including casing, all fittings and accessories, control damper with neoprene gasket, damper stop, damper accutator , room thermostat, with temperature, pressure & RH controls with BMS compatability as per ASHRAE standards with latest precision controls. access doors as required	1	Ls		0
4	Extract fans including all accessories, fittings, dampers, vibration mounts etc as detailed in drawings and schedule complete	1	item		0
5	Extract & Makeup Fans c/w all fittings & accessories alongwith installation conforming to local authority requirements.	1	item		0
6	Thermostats [As per the HVAC design drawings with BMS compatibility]		No		0
7	Supply and Return diffusers (Circular) With VCDs & other accessories.	1	item		0
a	Supply & return diffuser size 4" dia		No		0
b	Supply & return diffuser size 6" dia		No		0
c	Supply & return diffuser size 9" dia		No		0
d	Supply & return diffuser size 12" dia		No		0
e	Supply & return diffuser size 15" dia		No		0
f	Supply & return diffuser size 24" dia		No		0
g	Supply & return diffuser size 32" dia		No		0
8	Supply & return grilles as per the HVAC drawings, size to be mentioned & quantified as per drawings		No		0
9	Supply & return registers as per the HVAC drawings, size to be mentioned & quantified as per drawings		No		0

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ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
10	GI Ducting for HVAC services complete, including for fresh air, supply/return air ,extract air including all civil works in walls slabs, suspensions, supports, fire dampers, VCD'S, flexible connectors, duct acoustic liner , thermal insulation, aluminum cladding(exterior), reducers for various sizes as per specification & drawings for the hospital building	1	Item		0
11	Non ferrous ducting with insulation along with non-ferrous supports for MRI Room.	1	Item		0
12	Digital Pressure Differential Manometers for special rooms	1	Item		0
13	Generally for the complete Installations				
a	Drawings, manuals, approvals and instructions books	1	Item		0
b	Testing and commissioning	1	Item		0
c	Labels, special tools, etc.	1	Item		0
d	Protective and decorative painting	1	Item		0
e	Coordination and liaison with all Local Authorities	1	Item		0
f	Main connections to water-main	1	Item		0
g	Specific builder's work including ducts, sleeves, support, etc., complete	1	Item		0
h	General builder's work including cutting chasing, making goods, etc., complete	1	Item		0
j	Close all the duct & pipe penetrations across side walls & slabs as per the CDA requirements using fire rated materials.	1	Item		0
k	Supply and Installation of additional chiller to cater the cooling requirement of vivarium - 100 TR Cooling Capacity	1	Item		0
14	Chilled Water Piping for the FCUs	1	Item		0
15	Supply and Installation of valve package for the FCU	1	Item		0
16	Supply and Installation of Bypass type VAVs for temperature control in the closed offices	1	Item		0
17	Condensate drain for the Fcus	1	Item		0
18	Supply and Installation of thermostats for the Fcus and Bypass VAVs	1	Item		0
19	Special Filter on the return grill of the animal holding rooms in order to prevent accumulation of particulate matter inside the extract ducts.	1	Item		0
20	Supply and Installation of HEPA Filter for surgery room	1	Item		0
21	Chiller Water flushing and balancing	1	Item		0
22	Air Balancing	1	Item		0
23	BMS work including Fcu control valves, chiller, FAHs and integration with the existing BMS network	1	Item		0
24	Testing and commissioning of entire HVAC SYSTEM	1	Item		0
25	Supply and Installation of Chilled Water Pumps, pressurization unit and chemical dosing pot.	1	Item		0
26	Supply and installation of Chilled water FCUs	1	Item		0
L	DRAINAGE INSTALLATIONS				

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ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	uPVC pipe work of any kind (waste, soil, condensate, vent, rainwater), including UV ray protection to exposed pipe work, insulation, all supports, accessories, rodding eyes, earthworks (if required), complete	1	ITEM		0
	TO COLLECTION				-

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ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Ditto 100 m dia		LM		0
	Vent cowl 75 mm dia		No		0
	Ditto 100 mm		No		0
	Upvc pipe fittings/ADPE				
	150 mm dia 45 deg. bend		No		0
	150 mm T- junction		No		0
	150 mm dia 90 deg. bend		No		0
	100 mm dia 90 deg. bend		No		0
	75 mm dia 90 deg. bend		No		0
	Pipe in Pipe system for drainage joints as per drawings		No		0
	HDPE pipe system for hot water drains		No		0
	Generally for the complete Installations		No		0
	Drawings, manuals, approvals and instruction books	1	Item		0
	Testing and commissioning	1	Item		0
	Labels, special tools, etc.	1	Item		0
	Protective and decorative painting	1	Item		0
	Coordination and liaison with all Local Authorities	1	Item		0
	Final connections to Main-sewer	1	Item		0
	Specific builder's work including ducts, sleeves, supports, etc., complete	1	Item		0
	General builder's work including cutting chasing, making good, etc., complete	1	Item		0
	Contractor has to fulfill the latest Green building requirements of DM				
	The Contractor will list here and price any items shown on the Drawings, mentioned in the Specifications or required for the satisfactory completion of this section but not mentioned elsewhere in the BOQ. Any such items not listed below shall be deemed to be included :				
	Contractor to allow construction of chemical bed/tank to convert chemical into water and salt before liquids goes to municipality drainage	1	item		0

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BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2	Floor Traps	1	item		0
	Floor Grating	1	item		0
	Floor Clean outs	1	item		0
	DOMESTIC WATER SERVICES				
	Cold Water Installation				
	Pipe work including pumps, fittings, fixing accessories, Isolating valves, return valves, supports, PEX pipes ,earthworks (if required), etc., complete	1	item		0
	20 mm dia		LM		0
	25 mm dia		LM		0
	32 mm dia		LM		0
	40 mm dia		LM		0
	50 mm dia		LM		0
	65 mm dia		LM		0
	100 mm dia		LM		0
	25 mm dia to R.O unit		LM		0
	32 mm dia to R.O Unit		LM		0
	Cold water final connection to sanitary ware including accessories etc., complete	1	Item		0
	Hot water Installation				
	Hot water pipe work including fittings, fixing, accessories, valves, supports, PEX pipes, earth work (if required) etc., complete	1	Item		0
	15 mm dia		LM		0
	20 mm dia		LM		0
	25 mm dia		LM		0
	32 mm dia		LM		0
	40 mm dia		LM		0
	50 mm dia		LM		0
	75 mm dia		LM		0

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
 PHASE 2 AT THE MAIN CAMPUS

BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Hot water final connection to sanitary ware, including accessories etc., complete		Item		0
	Insulation for hot water pipe work as specified				
	15 mm dia		LM		0
	20 mm dia		LM		0
	25 mm dia		LM		0
	32 mm dia		LM		0
	40 mm dia		LM		0
	50 mm dia		LM		0
	75 mm dia		LM		0
	Following including all the accessories, fittings, connections, etc., complete				
	Pump sets including valves, flexible connections, strainers, test, points, pressure gauges, controllers, fixing, accessories, PRVs, NRVs & other valves, Gauges, Water hammer arrestors etc., complete as per the drawings and as per the local Authority requirements	1	Item		0
	R.O unit complete including circular pump ,pump set ,UV, ss 316 water tank, softener pump set, plant heat exchanger, all necessary accessories, connections , pipes, valves as shown on drawings W-205 & W-701	1	Item		0
	Sanitary fixtures including all types of valves, traps, fittings, fixing, accessories, complete	1	item		0
	European water closet including cistern		No		0
	Ablution hand spray		No		0
	Pedestal mounted wash basin		No		0
	Counter type wash basins		No		0
	Mixer set for above		No		0
	Shower tray		No		0
	Mixer set for shower		No		0
	Sink with double bowl and single drain		No		0
	Mixer set for sink		No		0

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
 CMHS-Civil MEP P2
 PHASE 2 AT THE MAIN CAMPUS

BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
3	Hot & Cold water outlet		No		0
	Bib tap		No		0
	Mop sink		No		0
	Slop Sink for soiled work rooms		No		0
	Scrub Sink		No		0
	Plaster Sink		No		0
	Any other fitting /accessories as per drawing				
	Generally for the complete Installations				
	Drawings, manuals, approval and instruction books	1	Item		0
	Testing and commissioning	1	Item		0
	Labels, special tools, etc.	1	Item		0
	Protective and decorative painting	1	Item		0
	Coordination and liaison with all Local Authorities	1	Item		0
	Main connections to water-main	1	Item		0
	Specific builder's work including ducts, sleeves, supports, etc., complete	1	Item		0
M	General builder's work including cutting chasing, making good, etc., complete	1	Item		0
	Consider fire sealant/foam sealant for all the water supply & drainage penetrations across the slabs & walls.	1	Item		0
	Contractor has to fulfill the latest Green building requirements of DM				
	Water Heater	1	Item		0
	FIRE FIGHTING SERVICES				
	The following including civil works, fittings, fixing, connections, accessories as per drawing complete				
	Sprinkler head concealed , powder coated, 15mm orifice	150	No		0
	Ceiling void sprinklers as required	150	No		0
	4.5Kg dry powder fire extinguisher	10	No		0
	5.0 Kg CO2 fire extinguisher	10	No		0

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
CMHS-Civil MEP P2
PHASE 2 AT THE MAIN CAMPUS

BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Fire hose reel cabinet with enclosure (FHRC) complete as per drawings.SS enclure cabinets required only for basement floors & service areas. Remaining areas FHRC enclosure shall be as per Interior scheme of the hospital project	4	No		0
	FF system for robotic parking as per approved drawings	1	LS		
	Automatic swinging type hose reel 25 mm dia 30 m long	2	No		0
	2 way breaching inlet including recessed cabinet (for wet & dry riser) as per drawings	2	No		0
	Sprinkler zone control valve	2	No		0
	Pre action valve along with necessary connections for the fire protection as per drawing		No		0
	FM 200 system as per drawings		No		0
	Foam System as per drawings		No		0
	Pipe for sprinkler head including supports, painting, markers, all fittings, reducers, Zone control valves with flow switches and accessories complete with ID labels as per drawings	1	Item		0
	25 mm dia		LM		0
	32 mm dia		LM		0
	40 mm dia		LM		0
	50 mm dia		LM		0
	65 mm dia		LM		0
	75 mm dia		LM		0
	100 mm dia		LM		0
	150 mm dia		LM		0
	Generally for the complete installation				
	Drawings, manuals, approvals and instruction books	1	Item		0
	Testing and commissioning	1	Item		0
	Labels, special tools, etc.	1	Item		0
	Protective and decorative painting	1	Item		0
	Coordination and liaison with all Local Authorities	1	Item		0
	Final connections from service authorities	1	Item		0

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS

BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	Specific builder's work including ducts, sleeves, supports, etc., complete	1	Item		0
	General builder's work including cutting chasing, making goods, etc., complete	1	Item		0
	All the fire installations should as per the current CDA requirements and all the fire systems should have compatibility with Fire Alarm, BMS , Smoke Management Systems and also with all other building automation system.Contractractor has to fulfill the latest Green building requirements of DM				
	The Contractor will list here and price any items shown / Commented on CDA approved drawings, mentioned in the Specifications or required for the satisfactory completion of this section but not mentioned elsewhere in the BOQ				

CMHS-Civil MEP P2
**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
 PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
N	Elec				
	ELECTRICAL INSTALLATION				
1	Sub main distribution boards/Distribution boards including, breakers, termination, isolators, supports, accessories, capacity bank, mccbs, built in meters, fuses, complete including cable termination, glanding and installation.	5	no		0
2	Distribution boards and Motor Control Centers including, breakers ,terminations, isolators, supports, accessories, capacity bank, mccbs, built In meters, fuses, complete including cable termination, glanding and installation.	7	no		0
3	Cables, conduits, and ceiling rose (wherever applicable) in final sub-circuits to				0
4	Cabling including trays, accessories, etc., complete				
a	4C 185 mm2 CU/XLPE/SWA/PVC + 1C 95mm2 CPC	250	mtrs		0
b	4C 35 mm2 XLPE/SWA/PVC + 1C 25mm2 CPC	600	mtrs		0
c	4C 25 mm2 CU/XLPE/SWA/PVC + 1C 16mm2 CPC	1,020	mtrs		0
d	4C 16 mm2 XLPE/SWA/PVC + 1C 16mm2 CPC	1,150	mtrs		0
e	4C 4 mm2 CU/ XLPE/SWA/PVC + 1C 4mm2 CPC	80	mtrs		0
f	Light fittings		mtrs		0
g	Switches		mtrs		0
h	Flex outlet		mtrs		0
5	Installation of light fittings (as per lighting layout)	400	no		0
a	Double tube LED lamp surface mounted moisture proof (IP65)		no.s		0
b	600 x 600 52 watt LED (IP20)		no.s		0
c	600 x 600 52 watt LED (IP44)		no.s		0
d	Clean room fitting 100 watt		no.s		0

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
 PHASE 2 AT THE MAIN CAMPUS

BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
e	27 watt LED tube lighting		no.s		0
f	14 watt LED mirror light (IP44)		no.s		0
g	Mirror light LED tube (IP 44)		no.s		0
h	100 watt decorative pendant light		no.s		0
j	LED strip light		no.s		0
k	19 watt 4000 K LED downlight		no.s		0
m	36 watt 4000 K LED downlight		no.s		0
o	19 watt 4000 K LED downlight (IP44)		no.s		0
p	36 watt 4000 K LED downlight DC voltage operation for specified radiology applications		no.s		0
q	100 watt decorative surface mounted light fixtures		no.s		0
r	2 x 26 compact fluorescent lamp (IP44)		no.s		0
s	100 watt wall mounted decorative light		no.s		0
6	Electrical accessories including trays, containment , terminations, support, fitting etc., complete	1	item		0
a	20A SP lighting 1 gang 1 way switch		no.s		0
b	20A SP lighting 1 way switch w/p (weather proof)		no.s		0
c	20A SP lighting 3 gang 1 way switch		no.s		0

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
 PHASE 2 AT THE MAIN CAMPUS

BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
d	20A SP lighting 2 gang 1 way switch		no.s		0
e	20A SP lighting 1 gang 2 way switch		no.s		0
f	20A SP lighting 1 gang 2 way switch w/p		no.s		0
g	20A SP lighting 2 gang 2 way switch		no.s		0
h	20A SP lighting 5 gang 1 way switch		no.s		0
j	Timer Switch		no.s		0
k	Dimmer switch 4 gang		no.s		0
m	20A SP lighting 3 gang 2 way switch		no.s		0
n	20A SP lighting 4 gang 1 way switch		no.s		0
7	Flex outlet.		no.s		0
a	Supply, GI conduiting , wiring and installation of single switch sockets	34	no.s		0
b	Supply, GI conduiting , wiring and installation of single switch sockets	59	no.s		0
c	Supply, GI conduiting , wiring and installation of 20A DP switch with flex outlet	104	no.s		0
d	Supply, GI conduiting , wiring and installation of 16A SP Industrial Sockets	2	no.s		0
e	Supply, GI conduiting , wiring and installation of 20A SP Industrial Sockets	28	no.s		0
f	Supply, GI conduiting , wiring and installation of 32A SP Industrial Sockets	8	no.s		0
g	Supply and Installation of 20A SP Isolator for Roller Shutter	2	no.s		0
h	Supply and Installation of 20A TP Isolator for Cage Extract Fan	2	no.s		0
j	Supply and Installation of 63A TP Isolator for HMD, DH	62	no.s		0
k	Supply and Installation of 100A TP Isolator for FAHU	2	no.s		0
8	Earthing system				
a	Earthing system including all cables, earth rods, accessories, and the inspection pits with cover including the connecting cables (yellow/green coded) and copper bars as per specification.	1	LS		0
b	Generally for the complete installation				
c	Drawings, manuals, approvals and instruction books				0
d	Testing and commissioning				0
e	Labels, special tools, etc.				0
f	Protective and decorative painting				0
g	Coordination and liaison with all Local Authorities				0
h	Final connections from service authorities				0

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS

BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
j	Specific builder's work including ducts, sleeves, supports, etc., complete	1	item		0

CMHS-Civil MEP P2
**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
 PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
k	General builder's work including cutting chasing, making goods, etc., complete	1	item		0
	Generally The Contractor will list here and price any items shown on the Drawings, mentioned in the Specifications or required for the satisfactory completion of this section but not mentioned elsewhere in the BOQ. Any such items not listed below shall be deemed to be included				
O	LOW CURRENT SERVICES				
1	Access control and time management system server (attendance system) including all accessories card printer alarm printer, digital camera, monitors including cabling and containment for the connectivity between devices as per design,	1	LS		0
2	Access control devices including door contacts, door locks, access card readers, push buttons and break glass,		mtrs		0
3	Public address music system rack, including a microprocessor controlled audio matrix switch, zone amplifier rack audio system music source as specified and P.A system server,		mtrs		0
4	Microphone with zone selector, t.		mtrs		0
5	Ceiling speaker,		mtrs		0
6	Volume control rotary switches, for the schematic as well as floor wise layout.		mtrs		0
7	Music over ride unit for local music system		mtrs		0
8	CCTV system with 2 no.s 42" monitors connected to DVR's as required based on the cameras and the number of channels available on the DVR. System to be complete with all interconnecting cables between cameras, DVR's and servers		mtrs		0
9	CCTV camera wall mounted Pan Tilt & Zoom (weather proof),		mtrs		0
10	CCTV camera fixed/dome,		mtrs		0
11	Night vision cameras		mtrs		0
12	Voice Data system including containment, cabling and all accessories, connections outlets complete as per drawings		mtrs		0

CMHS-Civil MEP P2
**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
 PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
13	Voice Data MDT located in the server room, main etisalat incoming connection to the ODF in the main etisalat room and their interconnectivity with fiber optic cable as given in the single line diagram for telephone system,		mtrs		0
14	Voice Data IDT connectivity t.		mtrs		0
15	Fire Alarm Control Panel		mtrs		0
16	Main Distribution Terminal		mtrs		0
17	Telephone with jack socket outlet position		mtrs		0
18	Telephone jack socket outlet position wall mounted type		mtrs		0
P	Fire Alarm System				
1	Fire Alarm system include cables, (normal and fire resistant) conduits, GI trunking , connections etc., complete				
2	Fire Alarm Control Panel	1	no.s		0
3	Photo electric smoke sensor for ceiling void with remote indicatro for each void detector	60	no.s		0
4	Photo electric smoke sensor	60	no.s		0
5	Heat sensor	6	no.s		0
6	Manual Call point	20	no.s		0
7	Sounder with Flasher	15	no.s		0
8	Sounder without strobe flasher.	5	no.s		0
9	Sounder with flasher (W/P)	3	no.s		0
10	Emergency lighting system including cabling (normal/fire resistant) connections, accessories complete				
11	8W Emergency light(EL) non maintained	60	no.s		0

CMHS-Civil MEP P2
**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
 PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
12	8w exit light with pictogram as indicated and maintained (wall mounted/ weather proof/ decorative type)	25	no.s		0
13	Decorative / building lights to be integrated with central battery system as per design.	1	LS		0
14	Fire Alarm System Installation				
15	Junction box for F. A. cables		no.s		0
16	Laying of cables in trenches complete including all civil works connections, terminations, backfilling				
17	Coordination for 24 x 7 CDA main panel.	1	lot		0
18	Generally for the complete installation				0
19	Drawings , manuals, approval and instruction books	1	lot		0
20	Testing and commissioning	1	lot		0
21	Labels, special tools etc.,	1	lot		0
22	Protective and decorative painting	1	lot		0
23	Coordination and liason with local Authority	1	lot		0
24	Final connections from service authorities	1	lot		0
25	Specific builders work including ducts, sleeves, supports etc., complete	1	lot		0
26	General builders work including cutting chasing, making good etc., complete	1	lot		0
27	Include for the supply & complete installation as detailed in the specification and on the etc contd.,	1	lot		0
	Note The contractor will list here and price any items shown on the drawings, mentioned in the specification or required for the satisfactory completion of this section but not mentioned elsewhere in the BOQ. Any such items not listed below shall be deemed to be included:				

CMHS-Civil MEP P2
**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
 PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 6 - VIVARIUM

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	uPVC pipes / ducts laid and jointed in trenches including excavation, backfilling, bed and surround , end caps, draw ropes, duct markers, warning tapes, complete				
28	4 way 100 mm dia ducts	1	lot		0
29	Connect 100 mm dia, 4 way ducts to existing Etislalat manhole including all demolitions, excavation, backfilling complete				0
	Generally for the complete Eelctrical Engineering installations				0
30	Drawings , manuals, approval and instruction books	1	lot		0
31	Testing and commissioning	1	lot		0
32	Labels, special tools etc.,	1	lot		0
33	Protective and decorative painting	1	lot		0
34	Coordination and liason with local Authority	1	lot		0
35	Final connections from service authorities	1	lot		0
36	Specific builders work including ducts, sleeves, supports etc., complete	1	lot		0
37	General builders work including cutting chasing, making good etc., complete	1	lot		0
38	Include for the supply & complete installation as detailed in the specification and on the etc contd.,	1	lot		0
39	Integrated Building Manangemeny System	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 7 - Clinical Skill

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	other than quantities that are specified herein, contractor to determine required no. of fittings and accessories on the basis of design space required, in compliance with standard and local authority regulation. Contractor to follow related conceptual design concept existing in the building				
A	PRELIMINARIES				
1	Mobilization and Demobilization	1	item		0
1a	Mobilization				
1b	Demobilization				
2	ADM/ADDC and other local Authorities Approvals	1	item		0
2a	ADM/ADDC drawing approvals				
2b	Civil Defense				
3	Project Mangement	1	item		0
3a	PM and Supervision charges				
4	Site Protection	1	item		0
4a	Temporary protection on walls and floors				
5	Progress Reporting	1	item		0
5a	Documentation, photos, progress of work monitoring				
6	Temporary Site Facilities	1	item		0
6a	First Aid				
6b	Fire Entinguesher, Blanket				
6c	Maintaining, keeping sanitary site condition				
7	QA, QC & HSE/EHS	1	item		0
7a	Adhering to University ISO and standard pratices and protocols				
8	Debris removal, cleaning	1	item		0
8a	Contractor is totally and absolutely responsible for the removal of any debris cause by the construction, surplus spoil, materials and the like resultant from the execution of the works caused either by their manpower, sub-contractors or by suppliers to appropriate location				
8b	Site cleaning for the entire project duration				
8c	Final cleaning before occupancy				
9	Submittals of Shop Drawings	1	item		0
9a	Drawing production, site/client/sub-contractor				
9b	Prints Out, contruction and revisions				
9c	AS-Built drawings, Soft and Hard copy - 2 sets				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 7 - Clinical Skill

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
9c	AS-Built drawings, Soft and Hard copy - 2 sets				
	TO COLLECTION				-
B	DEMOLITION WORKS				
1	Demolition and or clearing of items visible not required to this project, includes clearing of unwanted items in floor, wall and ceiling. Prepare surface to accommodate task as stated under categories	1	lot		0
2	Contractor to provide accounting of realated materials for records and handing-over	1	lot		0
C	Civil / PARTITION WORKS				
1	Supply and installation of 100mm thick gypsum board partitions, consisting of 72mm GI tracks, 70mm GI studs, Rockwool insulation - density of 35kg/m3 and single layer of 12.5mm thick gypsum board on each side as shown in the layout but has not been constructed yet. It is to vendor discretion to check existing against whats made available in the site. Works includes, taping, sanding, joiting etc. ready to recieve final finish	168	m2		0
2	Supply and installation of double glazed partition, 6+88+6 clear glass, tempered	40	m2		0
3	DITTO, windows in the gypsum partitions	15	m2		0
4	Fabricate, supply and installation of powder coated aluminum framed single leaf glass-swing door - double glazed, tempered complete with ironmongery. Standard height to match with width as indicated in the layout	7	no.		0
5	Remove existing single leaf door, door jamb, frames and accessories including ironmogenries. Securely wrap in bubble plastic, cart away to specified store. Fabricate, supply and installation of double glazed window - 6+88+6, 1m from FFL, height to match elevation of exterior doors, close gap with double layer gypsum board at each sides. See clouds "A" in the layout.	1	no.		0
6	Remove existing double leaf door, door jamb, frames and accessories including ironmogenries. Securely wrap in bubble plastic, cart away to specified store. Fabricate, supply and installation single leaf emergency exit door, complete with push bar and other related exit ironmongery. close half of the width with blockworks. See clouds "B" in the layout	1	no.		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 7 - Clinical Skill

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
7	Remove existing double leaf door, door jamb, frames and accessories including ironmongeries. Securely wrap in bubble plastic, cart away to specified store. Fabricate, supply and installation of powder coated aluminum frameless double leaf glass-swing door - double glazed, tempered complete with ironmongery. See clouds "C" in the layout	1	no.		0
	TO COLLECTION				-
8	Fabricate, supply and installation of fire rated laminate door with vision panel, single leaf, complete with ironmongery to match existing. Standard height to match with width as indicated in the layout	1	no.		0
9	Supply and installation of sandblasted film on glass partitions and doors	20	LM		0
10	Modify, repair curtain, drapes as may deem required to fit partitioning layout. Supply and installation of new should drapes are not found exist	6	room		0
11	All door KEYS to be of Master Keying system	8	no.		0
12	Design, supply and instalation of wall mounted signage to read as "Clinical Skills Support" in Arabic and English. Material and finishes to match existing	1	no.		0
13	Design, supply and instalation of wall mounted signage, Faculty users name and title plus room # in all rooms, Arabic and English. Material and finishes to match existing	10	no.		0
D	FLOOR FINISH				
1	Supply and application of concrete screed to the level required matching existing corridor as appropriate	175	m2		0
2	Supply and application of leveling compound to accommodate new floor finish	175	m2		0
3	Supply and installation of 8mm thick carpet tiles: - solution dyed nylon type 6.6, glas bac backing (no bitumen) tufted loof, static protection, anti stain protection, environemntally friendly, indoor air qulity certified with flamability rating, lifetime antimicrobial protection, at least 10 years manufacturing	102	m2		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 7 - Clinical Skill

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4	Supply and installation of 3mm thick vinyl tiles: - ASTM F1700, Class III solid vinyl tiles, resilient flooring with 1.0 wear layer thickness, sound reduction of 17dB min. slip resistance, chemical resistance, flammability/smoke emission - ASTM E648, class 1, Tensile strenght upto 4000lbs/sq.inch, static load, environmentally friendly, indoor Air quality certified at least 10 years of manufacturers defect warranty. Offices corridors, Reception and Conference room	73	m2		0
3	Termination of joints between existing floor finish and new by means of threshold, floor grip, strips wherever needed	1	lot		0
E	WALL FINISH				
1	Prepare and apply Jotun Fenomastic silk paint finish to new partition and existing walls and partitions. Color to match or as required	1200	m2		0
2	Supply and installation of 100mm high SS skirting to match existing, covering all walls and partitions	280	LM		0
F	CEILING FINISHES				
1	Supply and installation of plain gypsum ceiling, 12.5mm thick gypsum board on GI framing to suit proposed layout. Conceptual design to match existing. Specified brand - Knauf	115	m2		0
2	Supply and installation of aluminum tiles to match, complete with suspension system to suit proposed layout. Specified brand - RAM	95	m2		0
3	Supply and installation of vertical bulkhead, 12.5mm thick gypsum board, single layer on GI frame suspension	86	m2		0
4	Prepare and apply Jotun Fenomastic silk paint finish to new gypsum ceiling and bulkhead. Color to match or as required	200	m2		0
G	JOINERY WORKS				
1	Design, fabricate, supply and installation of custom made Reception counter and cabinet, footprint as indicated in the layout, laminated finish for counter and mobile pedestal, gypsum with adjustable 8mm thick glass shelves, to match existing	1	no.		0
H	LIGHTING				
1	Supply of linear light, length 1200mm to match existing. Contrator to design atmospheric light following standard lighting lux appropriate to room activities, with sensor	36	no.		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 7 - Clinical Skill

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2	Supply and installation of downlighter with powered factor ballast wherever indicated	6	no.		0
J	ELECTRICAL WORKS				
1	Installation of light fittings including conduiting and wiring	57	no.		0
2	Supply and installation of lighting override switches	11	no.		0
3	Relocation of existing sensors should exist	1	lot		0
4	Supply and installation of Lighting sensor	1	lot		0
5	Supply and installation of control module	1	lot		0
6	Containment and wiring for modification and upgrade of lighting control system	1	lot		0
7	Testing and commissioning of Lighting Control System	1	lot		0
8	Supply and installation of 13A power socket - single, including conduiting and wiring	12	no.		0
9	Supply and installation of 13A power socket -twin, including conduiting and wiring	21	no.		0
10	Supply and installation of 13A spur outlet, including conduiting and wiring for VAV	11	no.		0
11	Supply and installation of floor box, including conduiting and wiring	2	no.		0
12	Modification of existing DB as per proposed layout - assuming that existing DB have enough spare and load to accommodate additional load requirement	1	lot		0
13	Supply and installation of DB, upgraded to accommodate all load requirement in case line item 12 above found to be insufficient	1	lot		0
14	Modification of GI trunking for power and lighting	1	lot		0
15	PVC containment for wall mounted data points	11	no.		0
16	PVC containment for floor mounted - floor box, data points	2	no.		0
17	Modification of cable tray to accommodate new data cabling	1	lot		0
18	Supply and installation of CCTV including cabling and conduiting. Works to include system configuration, all in accordance with and approval of local authority	1	lot		0
19	Supply and installation of Digital Clock - network, including conduiting and wiring	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 7 - Clinical Skill

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
20	Other electrical related works not mentioned above if any to complete task	1	lot		0
K	HVAC WORKS				
1	Modification, supply and installation of A/C supply and return , in offices and corridor space as appropriate. Scope to include Temperature control per office space and corridor. Type, concept and operational to match existing.	2	no.		0
2	Supply and installation of new bypass VAV including accessories	10	no.		0
3	Relocation of existing Fan coil Unit including valve packaged as may deem required	1	no.		0
4	Supply and installation of new Fan coil Unit as may deem required, including Thermostat, valve package, chilled water and drain pipe with insulation. Works to include supply of 20A DP switch. All works to include conduiting and wiring. Contractor to his discretion, to have 3rd party survey and assessment in able to determine sufficiency of supply	1	no.		0
5	Modification of existing chilled water pipe with insulation	1	lot		0
6	Supply and installation of thermostat for VAV	10	no.		0
7	Supply and installation of PI Duct for supply and air duct	1	lot		0
8	Supply and installation of Plenum box	1	lot		0
9	Supply and installation of Supply & Return Slot Diffuser	1	lot		0
10	Relocation of existing thermostat wherever required	1	lot		0
11	Modification of condensate drain pipe with insulation	1	lot		0
12	Modification of existing BMS as may deem required to accommodate new Bypass VAV and relocation	1	lot		0
13	Reprogramming, Testing and Commissioning of BMS system	1	lot		0
14	Chilled water flow test and performance test for existing AC units	1	lot		0
15	Air Balancing	1	lot		0
16	Chilled Water Flushing & balancing	1	lot		0
17	Other related HVAC works required not mentioned above if any to complete task				
L	FIRE ALARM				
1	Removal and relocation of existing Smoke Detector	2	no.		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 7 - Clinical Skill

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2	Supply and installation of Smoke Detector including fire rated cabling following international and local standard and regulation protocols	12	no.		0
3	Supply and installation of break glass including fire rated cabling	2	no.		0
4	Supply and instalaltion of Sounder including fire rated cabling	1	no.		0
5	Dissable, Reprogramming, testing and Commissioning of Fire Alarm system	1	lot		0
6	Other related Fire Alarm works required not mentioned above if any to complete task				
M	FIRE FIGHTING WORKS				
1	Relocation of existing Pendant Sprikler as deemed fit	6	no.		0
2	Supply and installation of Pendant Sprinkler including fire rated cabling following international and local standard and regulation protocols	22	no.		0
3	Draining and refilling of Fire Fighting system	1	lot		0
4	Pressure Charges	1	lot		0
5	Shop drawing preparation and coordination with Civil Defense approval	1	lot		0
6	Supply and installation, sets of Fire Extinguishers follwing safety standard	2	set		0
7	Other related Fire Fighting works required not mentioned above if any				
N	EMERGENCY LIGHTING WORKS				
1	Relocation of emergency light	2	no.		0
2	Removal and reinstallation of exisxtng Exit light	2	no.		0
3	Supply and installation of Emergency exit light including conduiting and wiring following international standard regulation and protocols	4	no.		0
4	Dissable, Reprogramming, testing and Commissioning of Emergency Lighting system (assume that existing CBS Panel have enough capacity to accommodate additional light)	1	lot		0
5	Supply and instalaltion of additonal circuit card should required	1	lot		0
P	STRUCTURED CABLING WORKS				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 7 - Clinical Skill

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	UTP CAT 6a structured cabling for voice and data, including pulling, termination, face plate to match existing, RJ45 module, termination and labeling	14	no.		0
2	Patch cord 1 meter, 1 no per data point	14	lot		0
3	Patch cord 3 meter, 1 no. per data point	14	lot		0
4	24 port patch panel cat 6a or as deem required, fiber cabling with accessories - for Etisalat connection - 6 core single mode, fiber patch panel, single mode adapters, single mode sc/apc pigtails, sleeves, fiber cable pulling and splicing, fiber fluke testing etc.	1	lot		0
5	42U Rack, contractor to check should required	1	no.		0
6	Supply and installation of WIFI	1	no.		0
7	Other related works not mentioned above	1	lot		0
Q	FURNITURE INSTALLATION				
1	Installation of office furniture from internal resources as per the layout, not limited to;				
a	L-Shape desk including pedestal	8	set		0
b	Task chair	8	no.		0
c	Visitors chair	16	no.		0
d	Round meeting table	1	no.		0
e	Meeting chair	4	no.		0
f	Cabinet	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 8 - 2nd Floor Office

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	other than quantities that are specified herein, contractor to determine required no. of fittings and accessories on the basis of design space required, in compliance with standard and local authority regulation. Contractor to follow related conceptual design concept existing in the building				
A	PRELIMINARIES				
1	Mobilization and Demobilization	1	item		0
1a	Mobilization				
1b	Demobilization				
2	ADM/ADDC and other local Authorities Approvals	1	item		0
2a	ADM/ADDC drawing approvals				
2b	Civil Defense				
3	Project Mangement	1	item		0
3a	PM and Supervision charges				
4	Site Protection	1	item		0
4a	Temporary protection on walls and floors				
5	Progress Reporting	1	item		0
5a	Documentation, photos, progress of work monitoring				
6	Temporary Site Facilities	1	item		0
6a	First Aid				
6b	Fire Entinguesher, Blanket				
6c	Maintaining, keeping sanitary site condition				
7	QA, QC & HSE/EHS	1	item		0
7a	Adhering to University ISO and standard pratices and protocols				
8	Debris removal, cleaning	1	item		0
8a	Contractor is totally and absolutely responsible for the removal of any debris cause by the construction, surplus spoil, materials and the like resultant from the execution of the works caused either by their manpower, sub-contractors or by suppliers to appropriate location				
8b	Site cleaning for the entire project duration				
8c	Final cleaning before occupancy				
9	Submittals of Shop Drawings	1	item		0
9a	Drawing production, site/client/sub-contractor				
9b	Prints Out, contruction and revisions				
9c	AS-Built drawings, Soft and Hard copy - 2 sets				
B	DEMOLITION WORKS				

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS

BILL NO. 8 - 2nd Floor Office

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	Demolition and or clearing of items visible not required to this project, includes clearing of unwanted items in floor, wall and ceiling. Prepare surface to accommodate task as stated under categories	1	lot		0
	TO COLLECTION				-

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 8 - 2nd Floor Office

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2	Contractor to provide accounting of related materials for records and handing-over	1	lot		0
3	Removal of existing double leaf door, complete with frames, architraves and ironmongeries, wrap material in bubble plastic, cart away to specified store. Scope to include making good of all affected areas ready to receive frameless glass door	2	set		0
C	PARTITION WORKS				
1	Supply and installation of double glazed partition, 6+88+6 clear glass, tempered	28	m2		0
2	DITTO, windows in the gypsum partitions, between two offices	45	m2		0
3	Fabricate, supply and installation of powder coated aluminum framed single leaf glass-swing door - double glazed, tempered complete with ironmongery. Standard height to match with width as indicated in the layout	6	no.		0
4	Fabricate, supply and installation of powder coated aluminum frameless double leaf glass-swing door - double glazed, tempered complete with ironmongery. Standard height to match with width as indicated in the layout	2	no.		0
5	Fabricate, supply and installation of fire rated laminate door with vision panel, single leaf, complete with ironmongery to match existing. Standard height to match with width as indicated in the layout	1	no.		0
6	Supply and installation of sandblasted film on glass partitions and doors, design to match existing	93	LM		0
7	Supply and installation of 100mm thick gypsum board partitions, consisting of 72mm GI tracks, 70mm GI studs, Rockwool insulation - density of 35kg/m3 and single layer of 12.5mm thick gypsum board on each side as shown in the layout but has not been constructed yet. It is to vendor discretion to check existing against what's made available in the site. Works includes, taping, sanding, jointing etc. ready to receive final finish. Specified brand - Knauf	160	Sqm		0
8	All door KEYS to be of Master Keying system	1	lot		0
9	Design, supply and installation of wall mounted signage in Arabic and English - Departmental name to be given at a later stage. Material and finishes to match existing	1	no.		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 8 - 2nd Floor Office

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
10	Design, supply and installation of wall mounted signage, Faculty users name and title plus room # in all rooms, Arabic and English. Material and finishes to match existing	10	no.		0
11	Contractor to check, repair all existing doors, frames, architraves and ironmongery making sure that all are well and good	1	lot		0
	TO COLLECTION				-
11	Supply and installation of perforated roller drapes to match existing in all windows. Contractor to ensure that curtain cove, space to accommodate and hang mechanical rollers are properly in place	5	room		0
D	FLOOR FINISH				
1	Repair and make good all areas affected by removal and or setting up partition floor profile and embedding floor boxes and trunking	1	Item		0
2	Apply appropriate thickness concrete screed including leveling compound to prepare entire space to receive vinyl	242	m2		0
3	Supply and installation of 3mm thick vinyl tiles: - ASTM F1700, Class III solid vinyl tiles, resilient flooring with 1.0 wear layer thickness, sound reduction of 17dB min. slip resistance, chemical resistance, flammability/smoke emission - ASTM E648, class 1, Tensile strenght upto 4000lbs/sq.inch, static load, environmentally friendly, indoor Air quality certified at least 10 years of manufacturers defect warranty. Offices corridors, Reception and Conference room	120	m2		0
4	Supply and installation of 8mm thick carpet tiles: - solution dyed nylon type 6.6, glas bac backing (no bitumen) tufted loof, static protection, anti stain protection, environemntally friendly, indoor air quility certified with flamability rating, lifetime antimicrobial protection, at least 10 years manufacturing	85	m2		0
5	Supply and installation 40x40 and or 60x60 ceramic tiles	40	m2		0
6	Termination of joints between existing floor finish and new by means of threshold, floor grip, strips wherever needed and as appropriate	1	lot		0
E	WALL FINISH				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 8 - 2nd Floor Office

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	Prepare and apply Jotun Fenomastic silk paint finish to new partition and existing walls and partitions. Color to match or as required. Rooms: A02026a. A02087 and A02020	630	m2		0
2	Supply and installation of 100mm high SS skirting to match existing, covering all walls and partitions	140	LM		0
3	Supply and installation 40x40 ceramic tiles	160	m2		0
F	JOINERY				
1	Supply and installation of Kitchen Counter, Corian top finish, double bowl SS sink with H/C mixer, complete with under counter standard cabinetry and overhang cabinet. Dimension as shown in the layout .Size:5500mmLx600mmW	1	lot		0
2	Design, supply and installation of Reception counter, dimesnion basein the footprint and shown in the layout.Laminate finish with box/box/file mobile pedestal. Concept to match existing in 3rd floor offices block in building A .Size:4000mmLx600mmW	1	lot		0
G	CEILING FINISHES				
1	Supply and installation of plain gypsum ceiling, 12.5mm thick gypsum board on GI framing to suit proposed layout. Specified brand - Knauf	100	m2		0
2	Supply and installation of aluminum tiles to match, complete with suspension system to suit proposed layout. RAM	200	m2		0
3	Supply and installation of vertical bulkhead, 12.5mm thick gypsum board, single layer on GI frame suspension	140	LM		0
4	Prepare and apply Jotun Fenomastic silk paint finish to new gypsum ceiling and bulkhead. Color to match or as required	150	m2		0
H	LIGHTING				
1	Supply of linear light, length 1200mm to match existing. Contrator to design atmospheric light following standard lighting lux appropriate to room activities. Vendor to design spaces as appropriate	36	no.		0
2	Supply and installation of downlighter with powered factor ballast wherever indicated - above reception counter	5	no.		0
J	ELECTRICAL WORKS: -				
1	Installation of light fittings including conduiting and wiring	77	points		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 8 - 2nd Floor Office

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2	Supply and installation of lighting override swithces	1	lot		0
3	Relocationof existing sensors should exist	1	lot		0
4	Supply and installation of Lighting sensor	11	no.		0
5	Supply and installation of control module	1	lot		0
6	Containement and wiring for modification and upgrade of lighting control system	1	lot		0
7	Testing and commissioning of Lighting Control System	1	Lot		0
8	Supply and installation of 13A power socket -twin, including conduiting and wiring	46	no.		0
9	Supply and installation of 13A spur outlet, including conduiting and wiring for VAV	15	no.		0
10	Supply and instalaltion of floor box, including conduiting and wiring	6	no.		0
11	Modification of existing DB as per proposed layout - assuming that existing DB have enough spare and load to accommodate additional load requirement	1	lot		0
12	Supply and installation of DB, upgraded to accommodate all load requirement in case line item 12 above found to be insufficient	1	lot		0
13	Modification of GI trunking for power and lighting	1	lot		0
14	PVC containment for wall mounted data points	20	no.		0
15	PVC containment for floor mounted - floor box, data points	6	no.		0
16	Modification of cable tray to accommodate new data cabling	1	lot		0
18	Supply and installation of CCTV including cabling and conduiting. Works to include system configuration, all in accordance with and approval of local authority	1	lot		0
18	Relocation/supply of Digital Clock - network, including conduiting and wiring	3	no.		0
19	Electrical civil related works	1	lot		0
20	All system, testing, commissioning and integration required	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 8 - 2nd Floor Office

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
21	Supply and Installation of 20A DP switch with flex outlet for FCU	1	no		0
22	Other related works not mentioned above to complete task				
K	HVAC WORKS				
1	Supply and installation of new bypass VAV including accessories	10	no.		0
2	Relocation of existing Fan coil Unit including valve packaged as may deem required	2	no.		0
3	Supply and installation of new Fan coil Unit as may deem require, including Thermostat, valve package, chilled water and drain pipe with insulation. Works to include supply of 20A DP switch. All works to include conduiting and wiring - Provision - contractor to check	1	no.		0
4	Modification of existing chilled water pipe with insulation	1	lot		0
5	Supply and installation of thermostat for VAV	10	no.		0
6	Supply and installation of PI Duct for supply and air duct	1	lot		0
7	Supply and installation of Pienum box	1	lot		0
8	Supply and installation of Supply & Return Slot Diffuser	1	lot		0
9	Relocation of existing thermostat wherever required	1	no.		0
10	Modification of condensate drain pipe with insulation	1	lot		0
11	Modification of existing BMS as may deem required to accommodate new Bypass VAV and relocation	1	lot		0
12	Reprogramming, Testing and Commissioning of BMS system	1	lot		0
13	Chilled water flow test and performance test for existing AC units	1	lot		0
15	Supply and Installation of new valve package for the cooling coils (2 Nos)	1	lot		0
16	Supply and Installation of flexible ducts and VCDs , Air Balancing	1	lot		0
17	Chilled Water Flushing & balancing	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 8 - 2nd Floor Office

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
18	Other related HVAC works required not mentioned above if any to complete the task	1	lot		0
L	FIRE ALARM				
1	Removal and relocation of existing Smoke Detector	6	no.		0
2	Supply and installation of Smoke Detector including fire rated cabling	8	no.		0
3	Supply and installation of break glass including fire rated cabling	4	no.		0
4	Supply and instalaltion of Sounder including fire rated cabling	3	no.		0
5	Dissable, Reprogramming, testing and Commissioning of Fire Alm system	1	lot		0
6	Other related Fire Alarm works required not mentioned above if any to complete the task	1	lot		0
M	FIRE FIGHTING WORKS				
1	Relocation of existing Pendant Sprikler as per fit	6	no.		0
2	Supply and installation of Pendant Sprinkler including fire rated cabling	30	no.		0
3	Draining and refilling of Fire Fighting system	1	lot		0
4	Pressure Charges	1	lot		0
5	Shop drawing preparation and coordination with Civil Defense approval	1	lot		0
6	Supply and installation, sets of Fire Extinguishers follwing safety standard	2	set		0
7	Other related Fire Fighting works required not mentioned above if any to complete the task	1	lot		0
N	EMERGENCY LIGHTING WORKS				
1	Relocation of emergency light	6	no.		0
2	Removal and reinstallation of exisxtng Exit light	4	no.		0
3	Supply and installation of Emergency exit light including conduiting and wiring	2	no.		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 8 - 2nd Floor Office

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
4	Dissable, Reprogramming, testing and Commissioning of Emergency Lighting system (assume that existing CBS Panel have enough capacity to accommodate additional light)	1	lot		0
5	Supply and instalaltion of additonal circuit card should required	1	lot		0
P	STRUCTURED CABLING WORKS				
1	UTP CAT 6a structured cabling for voice and data, including pulling, termination, face plate to match existing, RJ45 module, termination and labeling	25	point		0
2	Patch cord 1 meter	25	no.		0
3	Patch cord 3 meter	23	no.		0
4	24 port patch panel cat 6a or as deem required, fiber cabling with accessories - for Etisalat connection - 6 core single mode, fiber patch panel, single mode adapters, single mode sc/apc pigtails, sleeves, fiber cable pulling and splicing, fiber fluke testing etc.	1	lot		0
5	42U Rack, contractor to check should required	1	no.		0
6	Supply and installation of WIFI	3	no.		0
7	Other related works not mentioned above to complete task	1	lot		0
Q	FURNITURE INSTALLATION				
1	Installation of office furniture from internal resources as per the layout, not limited to;				
a	L-Shape desk inlcuding pedestal	8	set		0
b	Task chair	9	no.		0
c	Visitors chair	17	no.		0
d	Round meeting table	1	no.		0
e	Meeting chair	22	no.		0
f	Conferencing Table	1	set		0
g	Cabinet	9	no.		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 9 - 3RD FLOOR OFFICE

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	other than quantities that are specified herein, contractor to determine required no. of fittings and accessories on the basis of design space required, in compliance with standard and local authority regulation. Contractor to follow related conceptual design concept existing in the building				
A	PRELIMINARIES				
1	Mobilization and Demobilization	1	item		0
1a	Mobilization				
1b	Demobilization				
2	ADM/ADCD and other local Authorities Approvals	1	item		0
2a	ADM/ADDC drawing approvals				
2b	Civil Defense				
3	Project Mangement	1	item		0
3a	PM and Supervision charges				
4	Site Protection	1	item		0
4a	Temporary protection on walls and floors				
5	Progress Reporting	1	item		0
5a	Documentation, photos, progress of work monitoring				
6	Temporary Site Facilities	1	item		0
6a	First Aid				
6b	Fire Entinguesher, Blanket				
6c	Maintaining, keeping sanitary site condition				
7	QA, QC & HSE/EHS	1	item		0
7a	Adhering to University ISO and standard pratices and protocols				
8	Debris removal, cleaning	1	item		0
8a	Contractor is totally and absolutely responsible for the removal of any debris cause by the construction, surplus spoil, materials and the like resultant from the execution of the works caused either by their manpower, sub-contractors or by suppliers to appropriate location				
8b	Site cleaning for the entire project duration				
8c	Final cleaning before occupancy				
9	Submittals of Shop Drawings	1	item		0
9a	Drawing production, site/client/sub-contractor				
9b	Prints Out, contruction and revisions				
9c	AS-Built drawings, Soft and Hard copy - 2 sets				
B	DEMOLITION WORKS				
1	Demolition and or clearing of items visible not required to this project, includes clearing of unwanted items in floor, wall and ceiling. Prepare surface to accommodate task as stated under categories	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 9 - 3RD FLOOR OFFICE

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
2	Contractor to provide accounting of realated materials for records and handing-over	1	lot		0
3	Removal of existing double leaf door, complete with frames, architraves and ironmongeries, wrap material ib bubble plastic, cart away to specified store. Scope to include making good of all affected areas ready to receive frameless glass door	2	set		0
C	PARTITION WORKS				
1	Supply and installation of double glazed partition, 6+88+6 clear glass, tempered	28	m2		0
2	DITTO, windows in the gypsum partitions, between two offices	45	m2		0
3	Fabricate, supply and installation of powder coated aluminum framed single leaf glass-swing door - double glazed, tempered complete with ironmongery. Standard height to match with width as indicated in the layout	6	no.		0
4	Fabricate, supply and installation of powder coated aluminum frameless double leaf glass-swing door - double glazed, tempered complete with ironmongery. Standard height to match with width as indicated in the layout	2	no.		0
5	Fabricate, supply and installation of fire rated laminate door with vision panel, single leaf, complete with ironmongery to match existing. Standard height to match with width as indicated in the layout	1	no.		0
6	Supply and installation of sandblasted film on glass partitions and doors, design to match existing	93	LM		0
7	Supply and installation of 100mm thick gypsum board partitions, consisting of 72mm GI tracks, 70mm GI studs, Rockwool insulation - density of 35kg/m3 and single layer of 12.5mm thick gypsum board on each side as shown in the layout but has not been constructed yet. It is to vendor discretion to check existing against whats made available in the site. Works includes, taping, sanding, joiting etc. ready to recieve final finish. Specified brand - Knauf	160	Sqm		0
8	All door KEYS to be of Master Keying system	1	lot		0
9	Design, supply and instalation of wall mounted signage in Arabic and English - Departmental name to be given at a later stage. Material and finishes to match existing	1	no.		0
10	Design, supply and installation of wall mounted signage, Faculty users name and title plus room # in all rooms, Arabic and English. Material and finishes to match existing	10	no.		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 9 - 3RD FLOOR OFFICE

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
11	Contractor to check, repair all existing doors, frames, architraves and ironmongery making sure that all are well and good (5 Doors)	1	lot		0
12	Supply and installation of perforated roller drapes to match existing in all windows. Contractor to ensure that curtain cove, space to accommodate and hang mechanical rollers are properly in place	5	room		0
D	FLOOR FINISH				
1	Repair and make good all areas affected by removal and or setting up partition floor profile and embedding floor boxes and trunking	1	Item		0
2	Apply appropriate thickness concrete screed including leveling compound to prepare entire space to receive vinyl	242	m2		0
3	Supply and installation of 3mm thick vinyl tiles: - ASTM F1700, Class III solid vinyl tiles, resilient flooring with 1.0 wear layer thickness, sound reduction of 17dB min. slip resistance, chemical resistance, flammability/smoke emission - ASTM E648, class 1, Tensile strength upto 4000lbs/sq.inch, static load, environmentally friendly, indoor Air quality certified at least 10 years of manufacturers defect warranty. Offices corridors, Reception and Conference room	120	m2		0
4	Supply and installation of 8mm thick carpet tiles: - solution dyed nylon type 6.6, glass back backing (no bitumen) tufted loop, static protection, anti stain protection, environmentally friendly, indoor air quality certified with flammability rating, lifetime antimicrobial protection, at least 10 years manufacturing	85	m2		0
5	Supply and installation 40x40 and or 60x60 ceramic tiles	40	m2		0
6	Termination of joints between existing floor finish and new by means of threshold, floor grip, strips wherever needed and as appropriate	1	lot		0
E	WALL FINISH				
1	Prepare and apply Jotun Fenomastic silk paint finish to new partition and existing walls and partitions. Color to match or as required. Rooms: A02026a, A02087 and A02020	630	m2		0
2	Supply and installation of 100mm high SS skirting to match existing, covering all walls and partitions	140	LM		0
6	Supply and installation 40x40 ceramic tiles	160	m2		0
F	JOINERY				

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 9 - 3RD FLOOR OFFICE

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	Supply and installation of Kitchen Counter, Corian top finish, double bowl SS sink with H/C mixer, complete with under counter standard cabinetry and overhang cabinet. Dimension as shown in the layout. Size:5500mmLx600mmW	1	lot		0
2	Design, supply and installation of Reception counter, dimension base in the footprint and shown in the layout. Laminate finish with box/box/file mobile pedestal. Concept to match existing in 3rd floor offices block in building A. Size:4000mmLx600mmW	1	lot		0
G	CEILING FINISHES				
1	Supply and installation of plain gypsum ceiling, 12.5mm thick gypsum board on GI framing to suit proposed layout. Specified brand - Knauf	100	m2		0
2	Supply and installation of aluminum tiles to match, complete with suspension system to suit proposed layout. Specified brand - RAM	200	m2		0
3	Supply and installation of vertical bulkhead, 12.5mm thick gypsum board, single layer on GI frame suspension	140	LM		0
4	Prepare and apply Jotun Fenomastic silk paint finish to new gypsum ceiling and bulkhead. Color to match or as required	150	m2		0
H	LIGHTING				
1	Supply of linear light, length 1200mm to match existing. Contractor to design atmospheric light following standard lighting lux appropriate to room activities. Vendor to design spaces as appropriate	36	no.		0
2	Supply and installation of downlighter with powered factor ballast wherever indicated - above reception counter	5	no.		0
J	ELECTRICAL WORKS: -				
1	Installation of light fittings including conduiting and wiring	77	points		0
2	Supply and installation of lighting override switches	1	lot		0
3	Relocation of existing sensors should exist	1	lot		0
4	Supply and installation of Lighting sensor	11	no.		0
5	Supply and installation of control module	1	lot		0
6	Containment and wiring for modification and upgrade of lighting control system	1	lot		0
7	Testing and commissioning of Lighting Control System	1	Lot		0
8	Supply and installation of 13A power socket -twin, including conduiting and wiring	46	no.		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 9 - 3RD FLOOR OFFICE

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
9	Supply and installation of 13A spur outlet, including conduiting and wiring for VAV	15	no.		0
10	Supply and instalaltion of floor box, including conduiting and wiring	6	no.		0
11	Modification of existing DB as per proposed layout - assuming that existing DB have enough spare and load to accommodate additional load requirement	1	lot		0
12	Suuply and installation of DB, upgraded to accommodate all load requirement in case line item 12 above found to be insufficient	1	lot		0
13	Modification of GI trunking for power and lighting	1	lot		0
14	PVC containment for wall mounted data points	20	no.		0
15	PVC containment for floor mounted - floor box, data points	6	no.		0
16	Modification of cable tray to accommodate new data cabling	1	lot		0
17	PVC containment for CCTV	1	lot		0
18	Supply and installation of CCTV including cabling and conduiting. Works to include system configuration and integration, all in accordance with and approval of local authority	4	no.		0
19	Relocation/supply of Digital Clock - network, including conduiting and wiring	3	no.		0
20	Electrical civil related works	1	lot		0
21	All system, testing, commissioning and integration required	1	lot		0
22	Supply and Installation of 20A DP switch with file outlet for FCU	1	no		0
23	Other related works not mentioned above to complete task				
K	HVAC WORKS				
1	Supply and installation of new bypass VAV including accessories (Supply and Installation of new VAVs with thermostats for temperature control in closed spaces)	12	no.		0
2	Relocation of existing Fan coil Unit including valve packaged as may deem required	2	no.		0
3	Supply and installation of new Fan coil Unit as may deem require, including Thermostat, valve package, chilled water and drain pipe with insulation. Works to include supply of 20A DP switch. All works to include conduiting and wiring - Provision - contractor to check	1	no.		0
4	Modification of existing chilled water pipe with insulation	1	lot		0
5	Supply and installation of thermostat for VAV	10	no.		0
6	Supply and installation of PI Duct for supply and air duct	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 9 - 3RD FLOOR OFFICE

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
7	Supply and installation of lienum box	1	lot		0
8	Supply and installation of Supply & Return Slot Diffuser	1	lot		0
9	Relocation of existing thermostat wherever required	1	no.		0
10	Modification of condensate drain pipe with insulation	1	lot		0
11	Modification of existing BMS as may deem required to accommodate new Bypass VAV and relocation	1	lot		0
12	Reprogramming, Testing and Commissioning of BMS system	1	lot		0
13	Chilled water flow test and performance test for existing AC units	1	lot		0
14	Supply and Installation of new valve package for the cooling coils (2 Nos)	1	lot		0
15	Supply and Installation of flexible ducts and VCDs , Air Balancing	1	lot		0
16	Chilled Water Flushing & balancing	1	lot		0
17	Other related HVAC works required not mentioned above if any to complete the task				
L	FIRE ALARM				
1	Removal and relocation of existing Smoke Detector	6	no.		0
2	Supply and installation of Smoke Detector including fire rated cabling	8	no.		0
3	Supply and installation of break glass including fire rated cabling	4	no.		0
4	Supply and instalaltion of Sounder including fire rated cabling	3	no.		0
5	Dissable, Reprogramming, testing and Commissioning of Fire Alrm system	1	lot		0
6	Other related Fire Alarm works required not mentioned above if any to complete the task	1	lot		0
M	FIRE FIGHTING WORKS				
1	Relocation of existing Pendant Sprikler as per fit	6	no.		0
2	Supply and installation of Pendant Sprinkler including fire rated cabling	30	no.		0
3	Draining and refilling of Fire Fighting system	1	lot		0
4	Pressure Charges	1	lot		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

BILL NO. 9 - 3RD FLOOR OFFICE

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
5	Shop drawing preparation and coordination with Civil Defense approval	1	lot		0
6	Supply and installation, sets of Fire Extinguishers follwing safety standard	1	lot		0
7	Other related Fire Fighting works required not mentioned above if any to complete the task				
N	EMERGENCY LIGHTING WORKS				
1	Relocation of emergency light	6	no.		0
2	Removal and reinstallation of exisxting Exit light	4	no.		0
3	Supply and installation of Emergency exit light including conduiting and wiring	2	no.		0
4	Dissable, Reprogramming, testing and Commissioning of Emergency Lighting system (assume that existing CBS Panel have enough capacity to accommodate additional light)	1	lot		0
5	Supply and instalaltion of additonal circuit card should required	1	lot		0
P	STRUCTURED CABLING WORKS				
1	UTP CAT 6a structured cabling for voice and data, including pulling, termination, face plate to match existing, RJ45 module, termination and labeling	1	lot		0
2	Patch cord 1 meter	25	no.		0
3	Patch cord 3 meter	23	no.		0
4	24 port patch panel cat 6a or as deem required, fiber cabling with accessories - for Etisalat connection - 6 core single mode, fiber patch panel, single mode adapters, single mode sc/apc pigtails, sleeves, fiber cable pulling and splicing, fiber fluke testing etc.	1	lot		0
5	42U Rack, contractor to check should required	1	no.		0
6	Supply and installation of WIFI	1	no.		0
7	Other related works not mentioned above to complete task	1	lot		0
Q	FURNITURE INSTALLATION				
1	Installation of office furniture from internal resources as per the layout, not limited to;				
a	L-Shape desk inlcuding pedestal	8	set		0
b	Task chair	9	no.		0

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS

BILL NO. 9 - 3RD FLOOR OFFICE

ITEM NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
c	Visitors chair	17	no.		0
d	Round meeting table	1	no.		0
e	Meeting chair	22	no.		0
f	Conferencing Table	1	set		0
g	Cabinet	9	no.		0

**MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS**

SUMMARY

INDEX

TOTAL

BILL 1	BIRTHING SUITE
BILL 2	IMMERSIVE CAVE
BILL 3	TESTING CENTER - Civil
BILL 4	TESTING CENTER - A/V
BILL 5	BALSAM
BILL 6	ANIMAL HOUSE - VIVARIUM
BILL 7	CLINICAL SKILLS
BILL 8	2ND FLOOR - OFFICES
BILL 9	3RD FLOOR - OFFICES
BILL 10	MULTI-PURPOSE ROOM - Civil
BILL 11	MULTI-PURPOSE ROOM - A/V
BILL 12	LABS - CIVIL & MEP WORKS - First Floor
BILL 13	LABS - CIVIL & MEP WORKS - Second Floor
BILL 14	LABS - CIVIL & MEP WORKS - Third Floor
BILL 15	LABS - CIVIL & MEP WORKS - Fourth Floor

SUMMARY

MEP & CIVIL WORKS FOR MEDICAL COLLEGE -
PHASE 2 AT THE MAIN CAMPUS

SUMMARY by FLOORS

INDEX

TOTAL

GROUND FLOOR

FIRST FLOOR

SECOND FLOOR

THIRD FLOOR

FOURTH FLOOR

SUMMARY