## **Quantities for Renovation for CAD/CAM Lab**

## **Renovation Works**:

No.	Item	Quantity	Specification	Unit Price	Total	
Alimental works						
1	Aluminum Vertical breaks for inner Space	97.5 m2	M2			
2	Aluminum Doors	8.58 m2	1.3*2.2*3			
3	Aluminum Doors	4.4 m2	1.00*2.2*2			
Ceiling works (Gypsum tiles)						
4	Gypsum tiles for show and management rooms 58.5 m2 M2					
5	Lighting unites for Gypsum tiles	12	.60*.60			
Floor Works						
6	HDF for the laboratory	232.5 m2	M2			
Lab/ Office Furniture						
7	Computer desk	63	1.00*.50			
8	Management desk	2	1.60*.60	1.60*.60		
9	Desk Chair 63		.45 width with wheels			
10	Lecture chair	30	.45 width fixed hand cushion			
11	Management chairs	4	.30 width fixed			
12	Management chairs	2	.45 width with wheels			
Electricity works						
16	Ground Power outlet in the computer hall	120 Full with 1.5mm wires				
17	Wall Power outlet in the training hall	7	Full with 1.5mm wires			

18	Wall Power outlet in the reception	4	Full with 1.5mm wires	
19	Lighting unite (4 lamps) in the training hall	29	Full with 1.5mm wires	
20	Lighting unite (3 lamps) in the Computer hall	4	Full with 1.5mm wires	
21	Lighting unite (2 lamps) in the reception	2	Full with 1.5mm wires	
22	Main Electricity distribution panel	1		
23	Switch control panel	2		
24	Ground internet outlet	62	Ground outlet	
25	Wall internet outlet in training hall	4	Wall outlet	
		Air Condition	oner	
26	Cold air conditioner	4	4-5 HP for the computer hall	
27	Cold air conditioner	1	4 HP for the show room	
28	Cold air conditioner	1	2.5 HP for the training room	

Laboratory dimensions					
No.	Description Dimensions Space		Space	Ceiling height	
1	Laboratory main Hall	13.25 x 13.25 =	175.56 M2	7.5 M	
2	Show Hall	4.47 x 8.10 =	36.2 M2	2.8 M	
3	Office room	2.93 x 4.29 =	12.57 M2	2.8 M	
4	Distribution Hall and entrance	2.00 x 4.00 =	8.00 M2	2.8 M	

## **Required Equipment for**

## General Purpose Lab for Faculty of Engineering, Assiut University

No.	Equipment	Specs	Qty.
1	WorkStation	Processor: Intel Xeon W-2123 Quad-core (4 Core) 3.6GHz, 8MB Cache with turbo up to 4.2 GHz Memory: 16 GB DDR Graphic Card: NVIDIA Quadro P2000 5GB Graphics Windows: 10 Pro 64-bit Monitor: 18/21 Inch LED Monitor	2
2	Desktop	Brand: Dell/ HP Processor: 7 <sup>th</sup> Generation Intel Core i7-7700 Processor (8M Cache, up to 4.0 GHz) Memory: 16 GB, DDR4 Hard Drive: 1TB/ 2TB Graphics Card: NVIDIA GeForce, 512MB/ 1GB DDR3 Optical Drive: DVD-RW Drive Monitor: 18/21 Inch LED Monitor Operating System: 10 Pro 64-bit	50
3	Plotter	<ul> <li>Achieve accurate lines, sharp details up to 2400 dpi from the first print with a long-life print head.</li> <li>Process complex files at high speeds, A1/D prints in 35 seconds, with 1 GB RAM.</li> <li>Deliver architectural designs, maps, photos, and presentations with consistent, high quality results.</li> <li>Help reduce downtime and improve productivity.</li> <li>The intuitive, full-color, 4.3 Inch (109mm) touchscreen simplifies navigation and printing.</li> <li>Two printers in one, print using the built-in A3/B+ tray and up to A0/E1 on the front loading media roll.</li> <li>Built in Wi-Fi</li> </ul>	2

4	3D Printer	Printer Specifications:  Include printing material: 0.5 KG Filament Filament size: 1.75mm Dedicated Top Hotend temperature: 260C (short-term) 240 C (Long-term) Layer Capability: 0.1 mm (100 microns) Build Envelope: 140mm x 140mm x 140mm Filament capabilities: PLA, PVA, Stainless Steel, NinjaFlex, HIPS, WoodFill, LayBrick, CopperFILL, BronzeFill, Carbon Fiber. File Type: STL File transfer: Micro SD card & USB	3
5	Printer + 3in 1	Copy/ Fax/ Printer	6
6	Software	AutoCAD (ACAD): its software use in mechanical, electric, architecture and civil engineering. CAD CAM software.	1
7	TV Screen	54 or 65 Inch	4
8	Data show	With full component	2