|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S N | Item | Description | Unit | Qty. |
| 1-1 Copper requirements | | | | |
| 1 | **UTP Cable** | **1454\*(avg length) +length of the uplinks/305** | **Meter** | **286** |
| 2 | **RJ45 Face Plate** | **20 labs each floor each lab has 35 device (1400) +4 printers,6 scanners,4 access point+(28) +6 cameras and 4 attendance devices (20)+6monitors in the basement (6)** | **Each** | **1454** |
| 3 | **Drop cable (pc)** |  | **Each** | **1454** |
| 4 | **Patch Cord** |  | **Each** | **1454** |
| 5 | **Patch panel** | **No. of ports:48** | **Each** | **42** |
| **No. of ports:24** | **Each** | **1** |
| **No. of ports:** | **Each** |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1-2 Fiber Requirements** | | | | |
| **6** | **Indoor Finder cable** | **The cable connecting the server with the 2 floor switches** | **Meter** |  |
| **7** | **Outdoor Fiber Cable** |  | **Meter** |  |
| **8** | **Fiber Face plate** | **75 x 50 x 5mm, Fiber Optic Faceplate** | **Each** | **80** |
| **9** | **Drop cable.**  **(For the server.)** | **3[m]** | **Each** | **2** |
| **10** | **Patch cable (for the panel.)** | **1[m]** | **Each** |  |
| **11** | **Patch Panel** | **No. of ports:** | **Each** |  |
| **No. of ports:** | **Each** |
| **No. of ports:** | **Each** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1-3 Racks** | | | | |
| **12** | **Rack** | **Size48 U:** | **Each** | **1** |
| **Size:24 U:** | **Each** | **40** |
| **Size 12 U:** | **Each** | **0** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1-4 Trunk** | | | | |
| **13** | **Ducts** | **Size:[3.15 x 3.15]**  **Model: Cable tray** | **Meter** | **(1454\*305)/2**  **=43,615** |
| **Size: ……[cm. x cm]**  **Model:** | **Meter** | **-** |
| **Size: ……[cm . x cm]**  **Model:** | **Meter** | **-** |
| **14** | **trays** | **Size:** | **Meter** | **-** |
| **15** | **PVC** | **Size:**  **Specs:** | **Meter** | **66+63=**  **129** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **1-5 Electricity** | | | | |
| **16** | **Circuit breaker** | **1 for each floor** | **Each** | **2** |
| **….[A]** | **Each** |  |
| **….[A]** | **Each** |  |
| **17** | **Enclosures** | |  | | --- | | **UL508A and CAN CSA C22-2 no. 14** | | **Each** | **6** |
| **18** | **Cables** | **Powerflex®️ PLUS YMvKf** | **Reels** | **40** |
| **Size:…[mm]** | **M** |  |
| **Size:…[mm]** | **M** |  |

**2-Active elements**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S. N** | **Item** | **Description** | **Unit** | **Qty** |
| **2-1 Switches, Routers, Security** | | | | |
| **1** | **Access switch** | **24 ports** | **Each** | **2** |
| **2** | **Access (Edge) switch** | **48 ports** | **Each** | **40** |
| **3** | **Distribution switch** | **24 ports** | **Each** | **2** |
| **4** | **Layer 3 switches** | **24 ports10/100/1000**  **(Layer3)** | **Each** | **1(back bone switch)** |
| **5** | **Router** | **1 LAN, 1WAN** | **Each** | **1** |
| **6** | **Modems** | **ADSL** | **Each** | **1** |
| **7** | **Fire walls** |  | **Each** | **2** |
| **8** | **eLearning servers** |  | **Each** | **4** |
| **9** | **Data base server** |  | **Each** | **2** |
| **10** | **Application server** |  | **Each** | **2** |
| **11** | **Web server** |  | **Each** | **1** |
| **12** | **E-mail server** |  | **Each** | **1** |
| **13** | **Print server** |  | **Each** | **2** |
| **14** | **Directory server** |  | **Each** | **1** |

**3-Connectivity**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S. N** | **Item** | **Description** | **Unit** | **Qty.** |
| **1** | **Internet connectivity** | **Connection from 1 different ISP** | **Each** | **1** |
| **2** | **Leases lines** | **Service provider** | **each** | **1** |

**4-Devices**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S. N** | **Item** | **Description** | **Unit** | **Qty** |
| **1** | **PC** |  | **Each** | **1240** |
| **2** | **Printer** |  | **Each** | **8** |
| **3** | **Scanner** |  | **Each** | **12** |
| **4** | **Camera** | **PTZ** | **Each** | **12** |
| **5** | **Attendance device** |  | **Each** | **8** |
| **6** | **Monitor** |  | **Each** | **6** |
| **7** | **Extra room devices** |  | **Each** | **160** |