

# **Setting up of Computer lab for the New IIT at Palakkad**

## **Scope of Work**

**Supply, Installation, Testing and Commissioning of 60 All in one Desktop computers, Linux Server, Configuration of Linux Samba Server for file server and access control on desktop's, Computer Lab Furniture 75 numbers (Tables), Projector and Screen, laying of Networking cable, Configuration of wired and wireless network, Electrical wiring, installation and integrations detailed below.**

### **All in one Desktop Computer Specification Qty = 60nos.**

1. CPU i5
2. Memory 8GB
3. Hard disk 1TB
4. LED Display 21 inch
5. Inbuilt Wifi
6. On board Ethernet port
7. Wired key board and mouse
8. Pre-installed 64 bit Windows 8.1 Professional-OS
9. Power Adapter with 3 pin power cable

### **Linux Server Qty = 1 no.**

1. Rack Server-1no.
  2. CPU – Xeon Dual Processor 10core V3
  3. Memory – 128 GB (ECCRAM)
  4. Main HD – SAS Hard disk for OS 300GB
  5. Separate Storage – 8bay NAS Box directly connected to Server over ISCSI or LAN (SATA 3TB to 5TB)
  6. Power – Dual Power (Dual RPS)
  7. Inbuilt Raid Controller in Motherboard
  8. Display 21 inch
  9. Keyboard and Mouse
  10. Linux Sever OS (Ubuntu latest version-14.04)
  11. Giga bit Ethernet 2nos.
- It includes Installation of server and Configuring sever with 60 desktop machines.

### **Projector Qty = 2 no.**

1. 4000 luminous Day light LCD Projector (1080p) Sanyo/ Panasonic/Epson/or Equivalent
  2. Motorized Drop down screen(Maximum size Screen according to room size and space)
  3. Wireless Projection
  4. Projector mount kit/ceiling mount
  5. Input cables- HDMI and VGA
  6. HDMI and VGA Splitter
  7. Power cable
- It includes mounting of Projector and laying power cable, HDMI, VGA, configuring wireless projection and fixing of screen.

## Complete Networking for Computer lab

1. Networks switch 1Gbps with 2 x 48 ports 1G / 10G SFP+ uplink.
2. Wi-Fi AP's (80 Concurrent users) 2nos.
3. 1 Gbps CAT - 6 Network cables (Molex)
4. Ethernet Port (**80 nos.**)

Model No. Cisco catalyst C2960 S - 48 TD- L/Similar and compatible

- It includes laying of network cable from network switch to all desktop computers and server machine with proper casing /capping and configuration of wired network and wireless network. Use Non-POE.
- Network switch rack and other fittings should be included in the quotation.

## Furniture for Computer lab

**Qty = 75 no.**

### **Computer laboratory Table (as per picture)**

1. **Table Top:** Two Side Laminated / Pre-Laminated MDF of 25mm (1") Thick with PVC edge binding **or** curved edges.
2. **Table Top:** Approximate 900 mm x 650 mm
3. **Levelers:** Legs should be fixed with levelers to adjust to the evenness of the floor.
4. **Legs:** Made of 50 mm (2") Square ERW Tube-16G with levelers to cater floor undulations.
5. All metal components should be powder coated with 40 – 60 microns.
6. Separate raceways to accommodate data and power cables.
7. **Wire Management:** Provision for wire management should be given below the tabletop.
8. Height of tabletop from the floor till work surface should be Approximate 750 mm to follow the right ergonomics.
9. Ethernet port and 5amp 3pin socket 3 numbers should be fixed as per image.
10. Furnish the Design of alignment and arrangement of furniture in the technical bid.
11. Mention the brand name and model number of furniture.
12. Furniture sample should be provided along with the quotation and all samples should be got approved before effecting bulk supply.

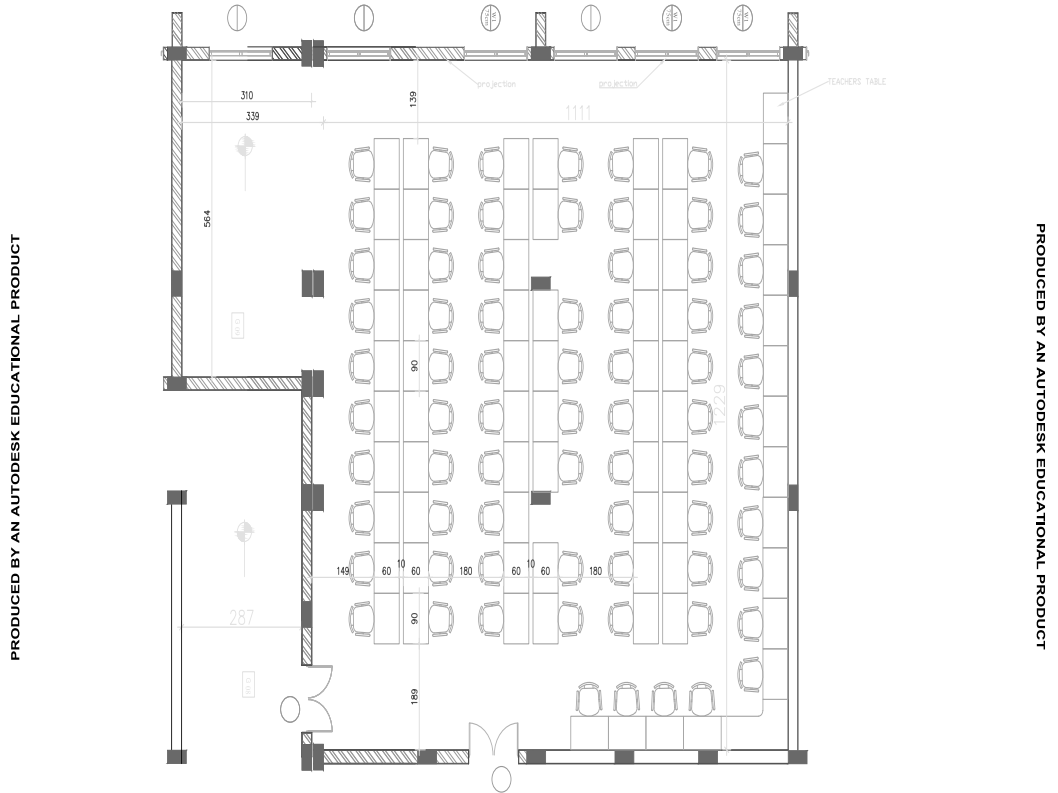
Five LED lights (Tube lights) should be powered from UPS line for emergency lamp while power shut down.

**Other conditions**

1. All equipment should work together and compatible.
2. Vendor should provide DB for distribution of UPS power (For all equipment).
3. The quotations should be furnished on two part tendering basis. First part containing technical bid and second part containing financial bid sealed in separate covers. These two covers may be placed in a bigger cover, properly sealed and delivered to the address given in the tender document.
4. Vendor/OEM should have significant experience in setting up such computer lab with at least 50 computers or more as a turnkey project during the last 3years. Proof / contact details of at least one such installation to be submitted along with the technical bid.
5. Make and model number of Computers, LCD Projector, Network switches, LED lights, Network and power connectors and accessories should be specified clearly in quotation.
6. The furniture should be erected inside the lab and desktops to be installed.
7. Entire Supply, erection, commissioning and testing should be completed before 15-07-2015.
8. All tools for erection should be brought by the Vendor.
9. No damage should be done to floor or walls for laying the cables, necessary casing/capping should be done. Reversible changes are allowed.
10. No cable should be exposed in moving space of the floor.
11. All materials used should be of good quality.
12. Minimum of 3 years Warranty for all items except furniture for which one year warranty essential.
13. IIT technical supervisor will be inspecting periodically to ensure the progress of the work.
14. Electrical wiring and power point for each system should be done by Vendor with necessary material required.
15. After erection and completing the work it will be tested jointly by IIT Technical authority and the contractor ensures that all the systems are working in excellent condition and to entire satisfaction of IIT Personnel.
16. The layout should be suitable for 75 seats with clear visibility to the projector screen as in the attached sample layout.
17. All samples should be got approved before effecting bulk supply.

## Suggested Computer lab layout

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COMPUTER LAB

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