

**ST.PIUS X COLLEGE RAJAPURAM**  
**DEPARTMENT OF COMPUTER SCIENCE**  
**ADD-ON COURSE ON HARDWARE**  
**SYLLABUS**

## **Unit I**

### **Computer Fundamental**

- What is Computer? ,Functionalities of a computer ,Advantages ,
- Disadvantages ,Generation of computer
- Understanding the PC ,Different types of computers and its key functions
- Identifying the input and output devices.

## **Unit II**

### **Recognize of Motherboard layout, Components, Form Factors**

- Introduction to Mother board,Types of Motherboard ,Chipset
- Motherboard Form Factors ,Types of common Motherboard Form Factors,
- What is Processor?,How a processor works.,Processor Technologies
- Generations of Processor,Types of Instruction Set,Types of Standard Expansion Buses Slots
- Types of Buses ,Power Supply Unit ,Power Supply Form Factors

## **Unit III**

### **Recognize the Memory Form Factors , Display type and Printers**

- Memory Form Factors and Slot Types ,Memory Types
- Difference between DIMM vs. SODIMM
- Video Connector Types: ,VGA ,DVI ,HDMI
- Types of Printers, Toner Cartridges , Ink Cartridges, Interface Types

## **Unit IV**

**Explaining of Networking Concepts, Recognizing of OSI model, Recognizing of TCP/IP Model, Identify the Network Technologies**

- Introduction to Networking ,Types of Network ,Network Categories
- Network Topologies ,MAC Address ,IP Address ,Frames ,Packets
- Network interface card ,Repeater ,Hub ,Bridge ,Switch ,Router
- Crimping of the Network Cable
- Configuring of Network Connection

## **Unit V**

**Computer assembling, Operating system installation and Identify the Common Trouble Shooting**

- Install the processor ,installing of CPU heat sink ,install the memory modules, Install the motherboard, connect the power supply , install the graphics card, connect the keyboard mouse and monitor
- Install Windows 7 and drivers
- Windows 7 Editions
- Troubleshooting Windows
- Recovering an Operating System
- Last Known Good Configuration, Safe Mode, and Other Advanced Boot Options