

## 11. IT Support

**IT Support**

- **Software**
  - Basic Computer/Data communication Terminology.
  - Computer Abbreviation.
  - Basics of OS, Unix/Linux and Shell Programming.
  - Programming and Database management System (C/C++/java, Object Oriented Programming, Data Structures through C++, .NET Technology, SQL Server, Oracle.
  - Web Designing (HTML, DHTML, Java Script, Flash, Photoshop)
  - Number System, Hexadecimal number system
  - Network Technologies and Internet (IP Addresses, Switches, TCP/IP, VPN, Firewall, Cryptography and System Security, Cyber Crimes)
  - Microsoft Office/ Open office (Word, Excel, power Point, Access, Outlook)
  - Cloud Computing (Cloud computing concepts, cloud deployment scenarios, Security in cloud computing)
  - Software Testing and Quality Management (Software testing, Testing techniques, Testing Process and Specialized System testing)
- **Hardware**
  - Basic Electricity and conducting material: Current, Voltage, emf, Power generation system, Switch-plug wiring, Analyzing Conductivity of elements, Types of Conductors, Semi-Conductors-Silicon, Germanium.
  - Integrated Circuits and Logic Gates (AND, OR, XOR, NOT, NAND, NOR and XNOR)
  - Maintenance and Troubleshooting of operating Systems
  - User Accounts, Windows utilities, Data backup, Protect Data from viruses, Installing , managing and troubleshooting Hardware devices and drivers, Antivirus, familiarization with DDS, CLI & Linux OS
  - Mother Board in detail: Nomenclature, technology, standards, AMD CPUs, Cyrix CPUs. CPU over clocking, troubleshooting, CPU problems. Chips Sets: AMD chip sets, Intel chip sets, VIA chip sets SIS. Chip sets, OPTI chipsets, Legacy and support ICS.
  - PC-assembly and CMOS setup and troubleshooting: Observation of all parts of HDD, CD/DVD, and SMPS, Identification of cables and computers. Mounting Motherboard in cabinet Installation of cards, device and then connecting cables. Fitting of cabinet. CMOS-Setup Troubleshooting.
  - Basic of printers: Types of Printers, Mechanism, how printer work, Inkjet printer, working of laser printer fonts/ Types-faces, troubleshooting printers.
  - Regulated Power Supply: Basic regulated power supply using Zener Diode, Basic Switch Mode Power Supply (SMPS), Basic Uninterrupted Power Supply (UPS)