

# Electronics and Communication Engineering



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**Important Facilities are**

## Advanced Microprocessor Lab

### List of Equipments, Computers, Software's, Printers

| Sl No | Name of The Equipment        | Major Specification         |
|-------|------------------------------|-----------------------------|
| 1     | personal Computer            | <b>i3</b>                   |
|       |                              | AMD Athlon 3200             |
| 2     | UPS                          | 5 KVA                       |
| 3     | 8086/8088 microprocessor kit |                             |
| 4     | Add on modules               | Keyboard interface module   |
|       |                              | Dual interface Module(0800) |
|       |                              | ADC interface module        |
|       |                              | 8259 study card             |
|       |                              | 8257 study card             |
|       |                              | Stepper Motor               |
|       |                              | Logic controller            |
|       |                              | Printer Interface           |
| 5     | Laptops                      | AMD 64 bit                  |
|       |                              | HCL Core 2 Duo              |

## Basic Electronics Lab & Mini Project Lab

### List of Equipments, Computers, Software's, Printers

| Sl.No | Name of Equipment                    | Major Specifications           |
|-------|--------------------------------------|--------------------------------|
| 1     | CRO, Philips PM 3213                 | 20MHz                          |
| 2     | Probe (Oscilloscope) PP9186          | Attenuation Probe              |
| 3     | DMM, MECO -9A                        | 3.5 Digit Autoranging          |
| 4     | Function Generator (1013) Systronics | 1MHz                           |
| 5     | Analog Multimeter (8xMK111)          |                                |
| 6     | Milliammeter MECO                    | 0-10MA (moving coil)           |
| 7     | Milliammeter MECO                    | 0-25MA (moving coil)           |
| 8     | Milliammeter MECO                    | 0-100MA (moving coil)          |
| 9     | Microammeter MECO                    | 0-100 $\mu$ A (moving coil)    |
| 10    | Microammeter MECO                    | 0-500 $\mu$ A (moving coil)    |
| 11    | Power supply Systronics              | 2A, 0-30 V                     |
| 12    | Milliammeter MECO                    | 0-50MA (moving coil)           |
| 13    | Microammeter MECO                    | 0-250 $\mu$ A (moving coil)    |
| 14    | Voltmeter MECO                       | 0-60V                          |
| 15    | Bread board                          |                                |
| 16    | Power supply (pacific)               | Dual, 1A, 0-30V                |
| 17    | CRO, Philips ,3055                   | 60MHz                          |
| 18    | Rheostat                             | 106 $\Omega$ , 6.1A            |
| 19    | Rheostat                             | 966 $\Omega$ , 6.1A            |
| 20    | Rheostat                             | 1 $\epsilon$ 6 $\Omega$ , 1.0A |
| 21    | Function Generator AP-Lab            | 1KHz, Counter                  |
| 22    | FG, Scientech (4060)                 | 1MHz                           |
| 23    | CRO, Scientech (201)                 | 20MHz                          |
| 24    | CRO, APlab 3305S                     | 20MHz                          |
| 25    | Dual O/P Power supply scientific     | 0-30V, 2A                      |
| 26    | Oscilloscope -Aplab-3706             | 2-channel, Far Trace 30MHz     |

## Electronics Circuit Lab I & II

### List of Equipments, Computers, Software's, Printers

| Sl No | Name of The Equipment                     | Major Specification   |
|-------|---|-----------------------|
| 1     | MicroProcessor 8085 Trainer Kit 8 bit ADC | 8 Bit ADC & DAC Cards |
| 2     | Digital Multimeter                        | 3½ Dgit Auto Ranging  |
| 3     | Decade Inductance Box                     | Model DIB401          |
| 4     | Decade Condenser Box                      | DCB 310               |
| 5     | Servo Controlled Voltage Stabiliser       | 10 KVA                |
| 6     | Bread Board                               | GEI 105               |
| 7     | HVDC Power Supply                         | 0 - 300 V             |
| 8     | CRO                                       | 20 MHz Dual trace     |
| 9     | Power Scope                               | Systronics            |
| 10    | LCR Meter                                 |                       |
| 11    | Wire Stripper                             |                       |
| 12    | Desoldering Pump                          |                       |
| 13    | Dual Power Supply                         | 0 - 30 V , 1 A        |
| 14    | Function Generator                        | 1 MHz                 |
| 15    | BNC Connector                             | Red, Black            |
| 16    | 3 KVA /UPS                                | Hykon AEM 3000/120 V  |
| 17    | UPS Battery                               | 12 V                  |
| 18    | CRO 30MHz D                               | Dual Channel 4 trace  |

## Digital Electronics Lab

### List of Equipments, Computers, Software's, Printers

| Sl no | Name of equipment          | Major specifications  |
|-------|----------------------------|---|
| 1     | CRO                        | 30 MHz  |
| 2     | Digital IC Tester          | Digital Ics upto 40 pins in DIP package   |
| 3     | Digital IC Trainer Kit     | 16 logic switches,<br>16 logic indicators,<br>1 Hz,10,100,1K,10K<br>100 KHz clock |
| 4     | Regulated Power Supply     | 0-30V variable  |
| 5     | Power Supply               | 5V  |
| 6     | Digital IC Power Supply    | Fixed   |
| 7     | Dual Track DC Power Supply | Dual Track  |
| 8     | Power Supply               | 0-5 V variable  |
| 9     | Function Generator         | 1MHz  |
| 10    | Digital Multimeter         | 3 1/2 Digit   |

## Communication Lab I & II

### List of Equipments, Computers, Software's, Printers

| SI No | Name of The Equipment                  | Major Specification                               |
|-------|--|---|
| 1     | Philips 20 MHz Dual Trace Oscilloscope | 20 MHz, Dual trace                                |
| 2     | Frequency Counter                      | 150 MHz   |
| 3     | Frequency Counter                      | 1.3 GHz   |
| 4     | Bread Board                            | GEI - 106   |
| 5     | Digital Multi Meter                    | Model 9A  |
| 6     | Function Generator                     | 20 MHz,   |
| 7     | Dual trace Oscilloscope                | 100 MHz   |
| 8     | Power supply                           | 0 - 30 V, 2A                                      |
| 9     | Inductance Box                         | Model DIB - 4                                     |
| 10    | Aplab Dual Trace Oscilloscope          | 20 MHz  |
| 11    | Digital storage Oscilloscope           | 200 MHz   |
| 12    | Digital Function Generator             | 1 MHz   |
| 13    | Multi output Power supply              | 0 - 30 V, 2A, 0 - $\pm 15$ V, 1 A, $\pm 5$ V, 2 A |
| 14    | LCR $\Phi$ weter                       | Bridge Model                                      |
| 15    | AM Modulation & Demodulation Kit       |   |
| 16    | FM Modulation & Demodulation Kit       |   |
| 17    | PCM Modulator                          |   |
| 18    | Radio receiver dynamic demonstrator    |   |
| 19    | Colour TV dynamic demonstrator         |   |
| 20    | Intel PC                               | Intel Pentium 4                                   |
| 21    | DSP Application Kit                    |   |
| 22    | PC                                     | Pentium 4 , 1.7 GHz                               |
| 23    | UPS                                    | 3 KVA   |
| 24    | Scanner                                | Epson AQ 1150                                     |
| 25    | Ethernet Switch                        | 16 Port   |
| 26    | Colour TV                              | 21 "  |
| 27    | Arbitrary Waveform Function Generator  | 80 MHz  |
| 28    | VCR                                    |   |
| 29    | Fiber Optic Trainer Kit                |   |
| 30    | Microwave Bench with Klystron tube     |   |
| 31    | Microwave Bench with Gunn diode        |   |
| 32    | DSP Starter Kit                        | Model 6713  |
| 33    | DSP Starter Kit                        | Model 6416  |
| 34    | Servo Stabilizer                       | Single Phase, Air cooled                          |
| 35    | Power supply(Multi Output)             | 0 - $\pm 32$ V, 3A                                |

## **DSP Lab**

### **List of Equipments, Computers, Software's, Printers**

| <b>Sl.No</b> | <b>Name of Equipment</b>                             | <b>Major Specifications</b>   |
|--------------|--|---|
| 1            | DSP Starter Kits JMS<br>320 C6416 fixed point<br>DSK | 1GHz AIC23 stereo<br>codec. 16 Mbytes of<br>synchronous DRAM.<br>512Kbytes of non-<br>volatile flash memory |

## **Microprocessor Lab**

### **List of Equipments, Computers, Software's, Printers**

| <b>Sl.No.</b> | <b>Name of Equipment</b>        | <b>Major Specifications</b> |
|---------------|---------------------------------|-----------------------------|
| 1             | 8085 Microprocessor kit         | 8085                        |
| 2             | ADC                             | 12bit-8channels             |
| 3             | ADC                             | 8bit-16channels             |
| 4             | EPROM Programmer                |                             |
| 5             | EPROM Eraser                    |                             |
| 6             | ESA ICE-2 circuit<br>Emulator   |                             |
| 7             | Personal Computer +<br>UPS      | P-IV                        |
| 8             | Universal Programmer            |                             |
| 9             | Micro controller trainer<br>kit | 8051                        |
| 10            | InkJet printer                  |                             |
| 11            | UPS                             | 3KVA                        |

## Electronics Department

### List of Equipments, Computers, Software's, Printers

| Sl.No | Name of Equipment     | Major Specifications                                   |
|-------|-----------------------|--|
| 1     | Printer               | Printer Scanner Copier (HP 3050)<br>Dot Matrix Printer |
| 2     | UPS                   | 500VA  |
| 3     | LCD Projector         | PANOSONIC PTL LB51EA                                   |
| 4     | Laptops               | HP compaq 6735B  |
| 5     | Wireless Access point | Dlink DWL 2100AP                                       |

## Project Lab

### List of Equipments, Computers, Software's, Printers

| SI No | Name of The Equipment        | Major Specification  |
|-------|------------------------------|--|
| 1     | Personal Computer            | HCL Infinity Pro BL 1200<br>HCL Orbital K 5020<br>HP Compaq 3090 |
| 2     | Laptop                       | HP Core 2 Duo  |
| 3     | Wireless Access Point        |  |
| 4     | Digital Storage Oscilloscope | Tektromix Malee  |
| 5     | FPGA Trainer Module          | Xi Linx spartan  |
| 6     | PIC trainer Kit              |  |
| 7     | Universal Programs           |  |
| 8     | PIC Program                  |  |
| 9     | EDWIN XP S/W                 |  |