LESSON PLAN

NAME OF FACULTY: SONI MEHTA

DISCIPLINE: ELECTRONICS AND COMMUNICATION ENGG.

SEMESTER: 1st

SUBJECT: ELECTRONICS WORKSHOP OF DIPLOMA IN COMPUTER ENGINEERING

LESSION PLAN DURATION: 15 WEEEKS (FROM Oct.2022 to Jan.2023)

WORK LOAD PER WEEK(in hours):Practical-06

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|  |  | PRACTICAL (Rotational) |
| WEEK | Practical Day | Topic |
|  | 1 | Brief introduction of EC W/S & identification of Electronics active and passive components. |
| 1 | 2 | Unit-I; Concept of Resistor colour coding,Tolerance, Maximum power rating, Application of  LDR. |
|  | 3 | Classification of Capacitors, Concept of Inductors |
| 2 | 4 | Testing of components using Multi meter/LCR Q-meter. |
|  | 5 | Unit-II; Practice of Soldering of different electronic  active and passive components on PCB & Join the broken PCB track and test |
| 3 | 6 | Practice de-soldering using pump and wick & Prepare component for soldering. |
|  | 7 | Viva voice & file check |
| 4 | 8 | Unit-III; Identify different types of mains transformers and their testing, measure transformers’ voltages & Identify the primary and secondary transformer windings and test the polarity. |
|  | 9 | Terminal Identification & testing of different kinds of Diodes using bread board. |
| 5 | 10 | Practice to assemble small circuits on bread board |
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|  | 12 | Familiar with different kinds of Integrated circuits’ pin diagrams. |
|  | 13 | IC testing practice |
| 7 | 14 | Viva voice & file check |
| 8 | 15 | Familiar with different kinds of switches. |
|  | 16 | Concept of Relays |
| 9 | 17 | UNIT- IV ;Power Supply, DC power supply, Concept of Dual power supply |
|  | 18 | Cathode Ray Oscilloscope (CRO), CRO probes, Front panel controls, AC/DC voltage measurement, Frequency measurement, wave form generation. |
|  | 19 | Familiar with Function Generator Front panel controls |
| 10 | 20 | Digital Multi Meter, Front panel controls of DMM & Study of AC and DC Waveforms |
| 11 | 21 | Construction of various electronic circuits on breadboard Circuits |
|  | 22 | Testing of outputs of various electronic circuits using test Equipment. |
| 12 | 23 | Viva voice & file check |
|  | 24 | Unit-V;Identify the Phase, Neutral and Earth on power Socket &  Use a Tester to monitor AC power. |
| 13 | 25 | Construct a test lamp and use it to check mains. |
|  | 26 | Measure the voltage between phase and ground and rectify earthing. Identify and test different AC mains cables. |
| 14 | 27 | Practice of Skin the electrical wires /cables using the wire stripper and cutter. Prepare the mains cable for termination. |
|  | 28 | Measure AC and DC voltages using multi meter &  Replace the fuse, battery for the given multi meter |
| 15 | 29 | Revision of Practicals & file check |
|  | 30 | Viva voice |