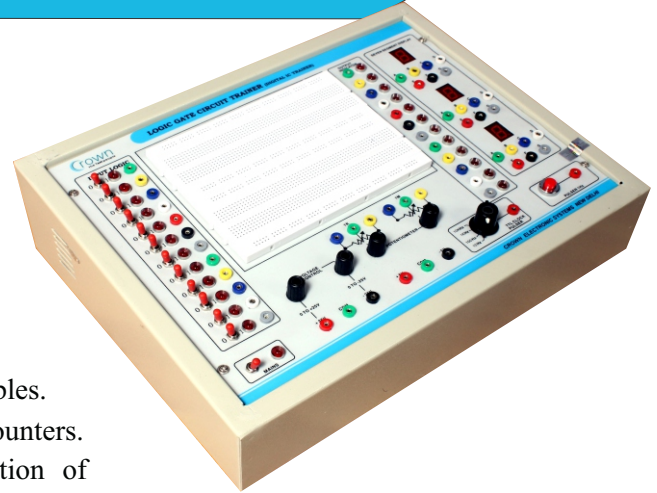


CEE 2024

DIGITAL IC TRAINER

“CROWN” made DIGITAL IC TRAINER has been designed to perform the following experiments :

1. Study and verify truth tubes of Logic Gates (AND,OR, NOT NAND, NOR, EX-OR GATES USING TTL& CMOS ICs)
2. Verification of Boolean Identities & Demorgan's Theorems.
3. Study and verify truth table of Digital Adder and Subtractor (Half Adder - Subtractor , Full Adder - Subtractor & 4 Bit Adder & Subtractor Using IC 7483 & 7486).
4. Study of RS, T, D & J-K Flip-Flops and verification of their truth tables.
5. Study of Synchronous, Asynchronous, Decade & Johnson Ring Counters.
6. Study of Left , Right & Programable Shift Registers and Verification of their truth tables.
7. Study of BCD to 7 SEGMENT Decoder.
8. Study of BCD to DECIMAL Decoder.
9. Study of DECIMAL to BCD Encoder.
10. Study of 8 -1 Line Multiplexer.
11. Study of 1-8 Line Demultiplexer.



Instrument will be supplied along with following Ic's to perform various experiment.

Kit will be set of IC 7408, 7400, 7432, 7404, 7402, 7486, 7483, 7490, 7493, 7473, 74193, 74138, 74151, 7474, 7476 ,74147, 7445, 7446, 74194 , 7448 & 7447 (or equivalent as available)

SPECIFICATION

INPUT : 230V AC $\pm 10\%$.

DC OUTPUT : A) $\pm 5V/500mA$.
B) 0 - $\pm 25V/500mA$

1. Bread board having 1680 tie points is mounted on front panel.
2. 12 logic input with LED indicator using SPDT switch.
3. 12 nos. Logic output with LED indicator.
4. 1Hz mono shot clock pulse with pulser switch.
5. TTL clock pulser having output frequency's of 10Hz, 100Hz, 1KHz & 10KHz selectable By switch.
6. Three (2 Nos. Common Anode LT542 & 1 No. Common Cathode LT543) Seven segment display connected with sockets for each segment
7. Two Potentiometer of 1Kohm & 1 Mohm.

OPTIONAL ACC.

- * DC-10MHz Single Trace Oscilloscope.
- * Digital Multimeter