CSER60 Lab Reportedo Digol Velasmabast Ation 695 Trailing tag of B Experiment Hame: - to girl Quille Grates

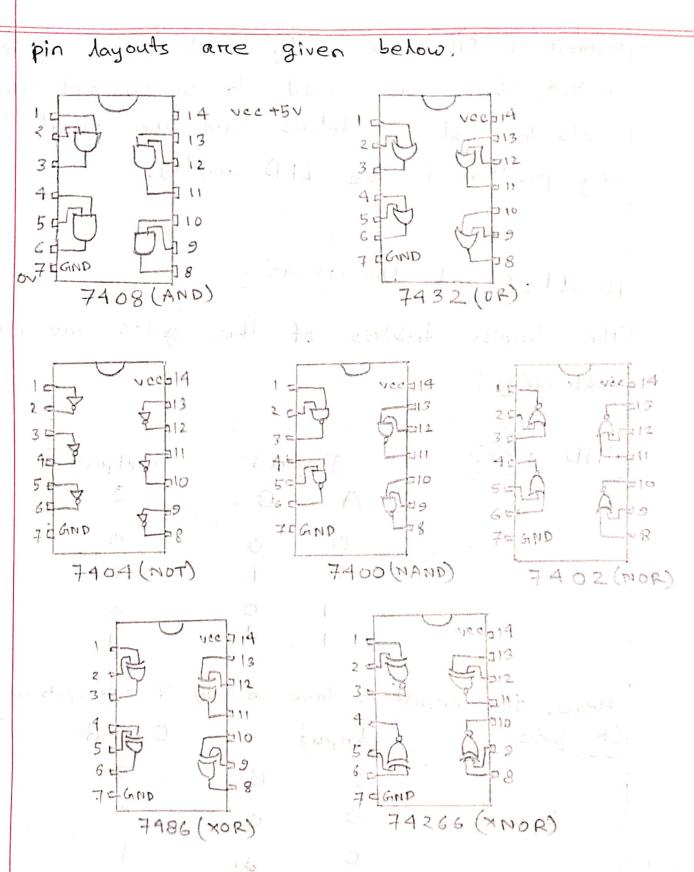
Pul Familianization of Fundamental Logic Grates construction their truth toldes @ To get familianized with other lugic gales like MAND(IC-7400), NOR (IC-7702), YOR (TO-Submitteds + by DT) SOMX boxo (38AF Name/raine wood boo strangered banupas IDford filosofosto posto postos Merrious ICs . </ Section: 10 21-02-3,2/32 Laboraninaged Date tion ow transmission still prihoubons not as Fallows - 1400, Thos 201 posed screary 7486, 74266. The c 3404 JA405 JA432

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- To get familiarized with fundamental logic gates and demonstrate the input output output relationship of 2-input AND(IC-7408), OR (IC-7432) and NOT (IC-7404) gates by constructing their truth tables.
 - To get familiarized with other logic gales
 like NAND(IC-7400), NOR(IC-7402), XOR(IC-7486) and XNOR(IC-74266).

Experimental setaps = 20-15

For conducting this experiment, we will need several ICs as follows - 7400, 7402 7404, 7408, 7432, 7486, 74266. Their



Here, we need to place the ICs on the trainer board. Then, connect pin 14 to 15 v

position of DC power supply and pin 7 to GND position. Then we need to in connect the inputs to Data switches and the output to any position of the LED display.

Results & and Discussions:

The truth tables of the gates are as following:

| AND gate: | Input | | output |
|-----------|-------|---|--------|
| | A | В | 2 |
| | O | O | O |
| | 0 | 1 | |
| | . 1 | 0 | 0 |

Here, the nesult is True only if both inputs are True OR gate: Output

A B C
O O O

Here, the result is True if at least 1 input is the True. NOT gate: - Input Output Heave, the gate is the combination of the ylor BUST 21 tration ant estage Total BNO if both the inputs one FALSE Here, the output is the movemen inverse of input. - ngra I x08 9/10x +,49/-100 NAND gate: Input Output Heare, other output Is sand TRUE when the impule and opposite. Here, the gate is the combination of AND and NOT gate. The output is FALSE only if both the inputs are TRUE.

NOR o gate: I si Input the output , snot A SIMB STATE OF FLATON tughed the tught of TON 8 9 BAA Mere, the gate is the combination of OR and NOT gates. The output is TRUE only if both the inputs are FALSE. Here the output is the mesoured invented . tugni 70 XOR gate: Input Output thought 0 tug tuo Solog QUAN Here, the output is only TRUE when the inpute are opposite. Hence, the yorle is the hembination as ISTATE si tugtino Date The Mort is FALSE only it book the reports are stilled.

MNOR gate: - Input Output

A B C

O O I

O I

O I

Here, the output is TRUE only
when both the inputs are same.