

DLD Online 1

Section B1

There are 6 boolean functions in the following page. **There are students ids written beside each problem.**

- You have to implement the boolean functions using **ONLY** the following IC chips in your circuit: ***IC 74x04, IC 74x08 and IC 74x32.***
- Each student will have to implement **only** the function having his/her student id written beside (Check next page).
- The online carries 10 Marks.
- Name your submission as STUDENT_ID.circ (e.g., **1905006.circ**). Submit the file in the moodle.
- **Time: 30 minutes + 5 Minutes to submit in Moodle.** Submissions made after this period will not be evaluated.

Consider there are four 1-bit Boolean inputs A,B,C and D. Implement the following Boolean functions using only the 7400-series IC chips: IC 74x04, IC 74x08 and IC 74x32 in your circuit.

Time: 30 minutes + 5 Minutes to submit in Moodle.

1. $A'D'(B' + C) + ABD + ACD$ [Student Id: 61,67,73,79,85]

2. $AD(B + C) + A'C'D' + A'BD'$ [Student Id: 62,68,74,80,86]

3. $A'B'D + AC'D' + AB'(C' + D')$ [Student Id: 63,69,75,81,87]

4. $A'C'D + AD'(C' + B') + AB'C'$ [Student Id: 64,70,76,82,88]

5. $ABC + A'B(C' + D) + ACD$ [Student Id: 65,71,77,83,89]

6. $A'BC' + ABD + AC(B + D)$ [Student Id: 66,72,78,84,90]

Evaluation

Problem	Link
1 and 2	https://bdren.zoom.us/j/69415066378?pwd=YkloYzdPMlV6MHI1aXh0aJGV3M4dz09
3 and 4	https://bdren.zoom.us/my/rayhan.live
5 and 6	https://bdren.zoom.us/j/68913277376?pwd=bEtzR0J2b3JCNjRUeDA5c010YjBxZz09