

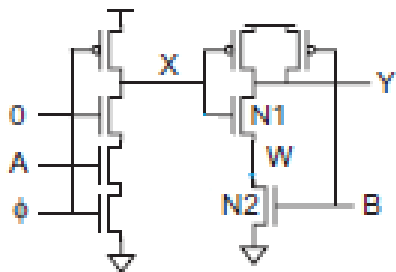
# DVD Quiz 7

Total marks =10

## Instructions

1. This is a take-home quiz, with no compulsion to join the meeting, but please ask your doubts in the meeting itself.
  2. The quiz duration is **25 mins and 10 mins** extra given to upload your scanned PDFs (high quality) on the google classroom. Upload answer PDF on classroom
  3. The quiz starts at **8:00 PM** sharp and ends at 8:25 PM. 10 minutes are reserved for scanning and uploading the quiz to Google Classroom, any submission after **8:35 PM** will attract a penalty
  4. Meeting link for doubts: <https://meet.google.com/gyd-cecr-tez>
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**Q1. Explain back gate coupling using the below circuit (2 marks) with waveform (1 mark), and how it can be avoided (1 mark)? (4 marks)**



**Q2. One of the partitions on SoC is operating at high frequency (>Mhz) while another partition is working on very low frequency, you have to design a circuit for the same. Explain briefly where you use dynamic logic style and why? (2 mark)**

**Q3. If  $V_{tn}=|V_{tp}|=0.5V$  and  $V_{DD}$  is 2.5 V then complete the waveform of the X, Y and Z node in the below circuit (2 marks) and verify it mathematically (2 marks) {overall 4 marks}**

