

# DVD Quiz 10

**Duration: 20 Mins**

**Marks: 10**

## Instructions

1. This is a take home quiz, no compulsion to join the meeting, but please ask your doubts in the meeting itself.
2. The quiz duration is 20 mins and 10 mins extra is given to upload your scanned PDFs (high quality) on the classroom. Upload answer PDF on classroom.
3. Quiz starts at 8:00PM sharp and ends at 8:30PM. Late submission will attract a penalty of 1 mark deduction every minute.
4. Meeting link for doubts: <https://meet.google.com/yyv-ixnb-ztu>

**Q1.** Why is Flash memories denser than SRAMs? Why are SRAMs better than Flash in terms of endurance? **(1+1 Marks)**

**Q2.** What technique to save area is allowed to be used only in memory cell layouts & not in digital circuits? Why is it allowed? **(1+1 Marks)**

**Q3.** If devices in a 6T SRAM cell are sized as below in 65nm technology, which 2 figures of merit get degraded for each of them? Explain. **(2+2 Marks)**

- a) PG: 280/65; PU: 120/80; PD: 260/80
- b) PG: 180/65; PU: 220/65; PD: 260/65

**Q4.** For a full adder draw the logic circuit for generation of Sum & Carry-out? **(1+1 Marks)**

-----**BEST OF LUCK**-----