

DVD Quiz 4

Instructions

[Total Marks=10]

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/avf-xxbh-sfq>

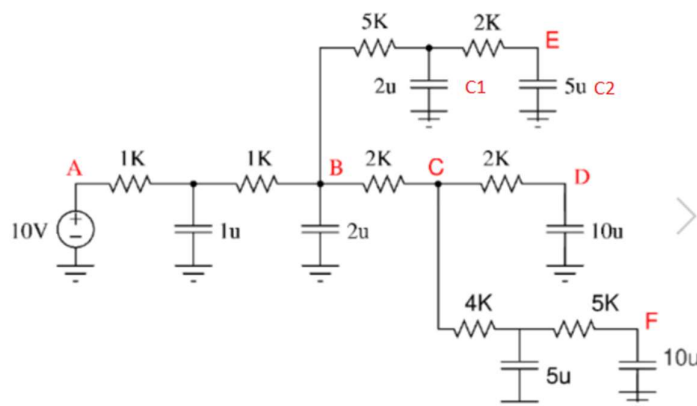
Question 1: Today's Markets are flooded with CMOS based devices. Considering a simplest CMOS circuit i.e. Inverter. State one advantage of CMOS inverter over BJT inverter.

[1 Mark]

Question 2: Explain the purpose of using strap cells in the design at regular intervals? What will happen if we will not provide the strap cells?

[1+1= 2 Marks]

Question 3: Calculate the Elmore delay of path ABCF for the given RC network.



If the capacitances C1 & C2 are made double of their present values. Will it change the Elmore delay of the path ABCF? If Yes calculate the new delay.

[6 Marks]

Question 4: List any 2 ways to alleviate crosstalk.

[1 Mark]