Assignment 6

Due on 2020-03-11, 23:59 IST.

1. While doing stability analysis and opening the loop, it is essential to remove DC biasing. 
   (a) True  (b) False

2. For single-loop (SISO) applied to a 2-stage fully differential amplifier, same compensation capacitor can be used for both common mode as well as differential response: 
   (a) True  (b) False

3. Which scheme of common-mode extraction is expected to operate well for larger differential signal ratio at the output stage? 
   (a) midline  (b) split-feedback  (c) both perform equally well

4. For capacitive feedback differential OFAMP, DC point at ________ to set with the help of ________
   (a) input DC point, output DC point  (b) output DC point, input DC point

5. The high-resistance DC feedback along with differential capacitive feedback influences: 
   (a) high frequency low pass response  (b) low frequency high pass response  (c) high frequency high pass response  (d) low frequency low pass response

6. The use of high-resistance DC feedback jeopardized the noise response of the amplifier significantly: 
   (a) True  (b) False

7. Use of large resistance DC feedback would delay the settling behavior of: 
   (a) AC simulation  (b) DC simulation  (c) Transient simulation  (d) noise analysis

8. The high-resistance DC feedback must be ________ for stable DC biasing :
   (a) positive  (b) negative

9. For stability analysis of a two-stage ENWIP the loop can be opened at: 
   (a) output of first stage amplifier  (b) input of first stage amplifier  (c) output of first stage output of the main amplifier  (d) all of the above

10. For dual loop CMFB, the reference voltage for both the output stages can be closed to ________
    (a) True  (b) False

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