Assignment 10

Due on 2020-04-06, 23:59 IST.

1. Value of the sampling capacitor affects:
   (a) clock feed-through
   (b) charge injection
   (c) sampling speed
   (d) voltage drop due to leakage.

2. For faster refreshing cycle which one would be preferred:
   (a) smaller offset compensation capacitor
   (b) larger offset compensation capacitor

3. What causes the input referred offset of a differential amplifier?
   (a) noise in power
   (b) input bias current
   (c) common mode noise

4. A smaller but high gain comparator would lead to:
   (a) lower resolution
   (b) static offset in digital world
   (c) higher power dissipation
   (d) all of the above

5. When sampling phase (in lecture it becomes off, does disconnect of capacitor plate from VDD cause any problem?)
   (a) Yes
   (b) No

6. When both comparators are in isocom and both have same sign of offset, the output will be:
   (a) 1
   (b) 0
   (c) not sure

7. When both comparators have opposite sign of offset, the output will be:
   (a) 1
   (b) 0
   (c) not sure

8. Value of the sampling capacitor affects:
   (a) clock feed-through
   (b) charge injection
   (c) sampling speed
   (d) voltage drop due to leakage.

9. BMOS alone can pass ________, PMOS alone can pass ________.
   (a) pin 1 end
   (b) pin 2 end
   (c) any end
   (d) both end

10. For lower refreshing cycle which one would be preferred:
    (a) smaller offset compensation capacitor
    (b) larger offset compensation capacitor

11. What causes the input referred offset of a differential amplifier?
    (a) noise in power
    (b) input bias current
    (c) common mode noise

12. A smaller but high gain comparator would lead to:
    (a) lower resolution
    (b) static offset in digital world
    (c) higher power dissipation
    (d) all of the above

13. When sampling phase (in lecture it becomes off, does disconnect of capacitor plate from VDD cause any problem?)
    (a) Yes
    (b) No

14. When both comparators are in isocom and both have same sign of offset, the output will be:
    (a) 1
    (b) 0
    (c) not sure

15. When both comparators have opposite sign of offset, the output will be:
    (a) 1
    (b) 0
    (c) not sure