Cadance Sample Question Paper

Technical

1. In assembler relocatable code generated by ...!!??
   asn: indirect addressing
2. int v,u;
   while(v != 0)
   {
   t = v % u;
   v = u;
   u = t;
   }
   find the time complexity of the above program.
3. x is passed by reference, y passed by value.
   x = 3, y = 2;
   foo(x, y)
   var integer x, y;
   {
   x = x + 2;
   y = y + 3;
   }
   main()
   {
   x = 5;
   y = 5;
   foo(x, y);
   print (x, y);
   }
   output of the above pseudo code.
4. How many flip flops you require for modulo 19 counter.
5. ring counter's initial state is 01000. after how many clock cylces will it return to the initial state.
6. some boolesn expression of the form x'y'z' + yz + .. (something like this) find the simplified expression
7. given 6 bit mantissa in 2s complement form and 4 bit exponent is in excess-4 form in a floating point representation, find the number
   ans -(something) * (2 to the power 3)
8. A signed no is stored in 10-bit register, what is the max and min possible value of the number.

Aptitude

1. log(X**3 + Y**3) where x=3/4 y=1/4
   log(3) , log(7) & log(2) is given ...

   ans:-0.385

2. last question of paper ..
   sum of money of A & B =Rs.10
   diffrence of A + B = Rs.9

   ans : 50 pesa
3. one paper is equlely folded 50 times... what is new thikness of paper..
   ans: 2**50
4. connect nine point without take-off pen & without overlapping line segment
   1 2 3 4
   * * * 5
   * * * 6
   0* * * 7
   ans: start with 0 to 1 to 7 to 0 to 4 .
5. A room is 30 X 12 X 12. a spider is ont the middle of the samller wall, 1 feet from the top, and a fly is ont he middle of the opposite wall 1 feet from the bottom. what is the min distance reqd for the spider to crawl to the fly.
6. A man while going dowm in a escalator(which is miving down) takes 50 steps to reach down and while going up takes 125 steps. If he goes 5 times faster upwards than downwards. What will be the total no of steps if the escalator werent moving.
7. 2/3 of corckery(plates) are broken, 1/2 have someother thing(handle) broken , 1/4 are both broken and handle broken. Ultimately only 2 pieces of corckery were without any defect. How many crockery were there in total.
8. It is difficult to draw a figure but another question was in which some NAND and OR gates were given.
   ans - Z = true.