Cadence Placement Papers

Technical

1. Inorder and preorder trees (expressions) are given and postorder tree (expression) is to be found out.

2. given a grammar, in which some productions of if then else etc were given. you had to choose one option that can be derived out of the grammar.

3. how many flip flops you require for modulo 33 counter.
    ans : 6 f/f

4. 7 bit ring counter's initial state is 0100010. after how many clock cylces will it return to the initial state.
    ans : 6 cycles

5. some boolesn expression of the form x'y'z' + yz +.. (something like this) find the simplified expression
    ans:z(x+y)

6. 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)

7. A signed no is stored in 10-bit register, what is
    the max and min possible value of the number.

    ans : 2^10 - 1.....max -2^10 ......min

    13.int y int x
    y=5+ x=5-
    + -
    + -
    + -
    6*3 6*3
    ; ;
    printf("%d", x); printf("%d",y);
    what would be the o/p of the code.
    ans : x=23;y=23;

8. a queue four elements a,b,c,d are there ,a=head d=tail. now following operations are performed
    1.deletion
    2, insertion of w and then x
    3. again deletion
    4. insertion of y
    what is the format of the queue

9. configuration of four nand gates forming a XOR gate, but replace the last nand gate with a NOR gate.find the output expression.

10.simplify   xy(bar)z+xy(bar)+xyz

11.operator overloading in c++ is
ans.provide operators with user defined functions.

12. in a machine a flating point number is represented in 2's complement mantissa 6 MSB exponent 4 LSB(excess 4 form) then 01101_0111(10 bits)
ans .656 * 2exp(-3)

  Aptitude

1. 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.

2. A man while going dowm in a escalator(which is moving down) takes 50 steps to reach down and while going up takes 250 steps. If he goes 5 times faster upwards than downwards. What will be the total no of steps if the escalator werent moving.

   ans 150 steps

3. 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.

   ans 24

4. There were 105 handshakes . how many persons were there in party.

5. There were 6 boys and 6 girls . how many ways they can be arranged in a pair.

6. 15*/+120+*9/8 convert into postfix and calculate
   ans. 98

7. meanings of word infallability(antonym) -> mistakingly conjurations (synonym): incantation

8. ring _ _ _ ater
   fill in the dash with three letter to form a meaning
   ful word
   ans. mas

9. willing _ _ _ _ sports. (four letter word)
   23. there was a question in which few incomplete
   letters were given and we have to complete with three
   letters so that they all form a meaningful word.
   wh_ _ _
   r_ _ _
   ans. ich

10.complete the series
   12 8 14 7 16 _
   ans 6

11.11.[: E THEN CIRCLE INSIDE A CIRCLE IS: -----
   ANS CIRCLE WITH A DASH AS A RADIUS.
   27.A GEOMETRICL QUESTION WITH TRIANGLE IN A
   QUADRANT(can not draw the figure)
   ans 10(probably)

12.12. question regarding tyre and its properties.
    ans: tyre is rubber and flexible.

13.srike odd man out
    a. object
    b. time
    c. room
    d. person
    e. reason

14.a man facing east rotates 100(degree) clockwise then 145(degree) anticlockwise.what is new
    direction of man.'
    ans: north east

15.complete the series
    M N J Q G ---
    ANS : H

16.HOW MANY ZEROS IN BINARY EQUIVALENT OF
    15*10^9+4*2^5+3

    ANS:5
    (check
    for expression , but ans. is correct)

17.WHAT IS THE CONDITION OF B&C FOR OUTPUT TO BE ----
    ANS:B=0, C=1.

18.there is a 4:1 mux. obtain fn (B' OR (A' XOR C)) when control inputs are A(LSB) & B(MSB),
    what should be the inputs (I0, I1, I2, I3).
    ANS: 1 1 C' C

19.excess 3 code of nos. 0 to 9 is given by nos ABCD
    0 1100
    1
    . ...
    9 ...
    fIND The minimised function?

20.21 base A-K,ie A=10, B=11, .. K=20 What is the Octal equivalent of KA?
    ans. 656

21.odd man out
    a) rhoes
    b) hepes
    c) owc
    d) guinepen
    ans d) jumbled letters for penguin

22.odd man out
    a) richa
    b) bleat
    c) pratec

d)

ans) jumbled for carpet

23. one simple question wherein a rectangle is inscribed in a circle and one of the diagonal is to be found...which is the radius of the circle...hence the
ans is 10.

24. there is a treeking team which takes a halt after 10 hours and the leadership changes after 5 hours. leadership changes in alphabetical order...kamala is leading now with mary ,malti, ---and sita...who will lead after two rests.
ans. sita.