Hi,

I am Prem Prakash, i am persuing my B.E (2007-11) in ECE discipline from TIT BHOPAL.The test pattern is:
1.apptitude test only 35 questions 80 minutes.(15/01/2011)
2.technical round(16/01/2011)
3.HR(06/01/2011)
I am going to share some apptitude, tr and hr questions
1. Out of 7 children the youngest is boy then find the probability that all the remaining children are boys
a) 1/64 b) 1/32 c) 1/128 d) 1/256
ans:probability=(1/2)^6=1/64
2.
On planet korba, a solar blast has melted the ice caps on its equator. 9 years after the ice melts, tiny planetoids called echina start growing on the rocks. Echina grows in the form of circle, and the relationship between the diameter of this circle and the age of echina is given by the formula d = 4*√ (t-9) for t ≥ 9 where d represents the diameter in mm and t the number of years since the solar blast.Jagan recorded the radius of some echina at a particular spot as 7mm. How many years back did the solar blast occur?
a) 17 b) 21.25 c) 12.25 d) 14.05
Ans:put d=7 in given equation and square both side and then find the value of t.

3.Ferrari S.P.A is an Italian sports car manufacturer based in Maranello, Italy. Founded by Enzo Ferrari in 1928 as Scuderia Ferrari, the company sponsored drivers and manufactured race cars before moving into production of street-legal vehicles in 1947 as Ferrari S.P.A. Throughout its history, the company has been noted for its continued participation in racing, especially in Formula One where it has employed great success .Rohit once bought a Ferrari. It could go 4 times as fast as Mohan's old Mercedes. If the speed of Mohan's Mercedes is 35 km/hr and the distance traveled by the Ferrari is 490 km, find the total time taken for Rohit to drive that distance.
a) 20.72 b) 3.5 c) 238.25 d) 6.18

ans:Ferrari speed =4*Mercedes speed =4*35=140, t=490/140=3.5

4.1/3) of a number is 3 more than the (1/6) of the same number?
a) 6 b) 7 c) 18 d) 9
ans:x/3=3+x/6 x/3-x/6=3 x/6=3 x=18

5. There are two water tanks A and B, A is much smaller than B. While water fills at the rate of 1 liter every hour in A, it gets filled up like, 10, 20, 40, 80, 160 in tank B. (At the end of first hour, B has 10 liters, second hour it has 20 liters and so on). If tank B is 1/32 filled of the 26 hours, what is total duration of hours required to fill it completely?
a) 26 B) 31 c) 5 d) 27
ans: 1/32 in 26
2/32 in 27
4/32 in 28
8/32 in 29
16/32 in 30
32/32 in 31

6. lady has fine gloves and hats in her closet- 14 blue, 20 red, and 18 yellow. The lights are out and it is totally dark. In spite of the darkness, she can make out the difference between a hat and a glove. She takes out an item out of the closet only if she is sure that if it is a glove. How many gloves must she take out to make sure she has a pair of each color?
a) 50 b) 8 c) 40 d) 42

Solution:
This is the most repeated question in Tcs so prepare it well. It has no logic but it's answer comes like this
Firstly add 2 max values i.e 20+18=38
Then add 2 to answer i.e. 38+2=40 so this is the answer.

7. There is a square. 5 circles are kept on the diagonal of the square such that the two extreme circles touch the two sides of the square.each circle has equal radius.find the ratio of side of hte squae to that of the radius.

ans: diagonal=(root 2)*a , a= side of the square.
The additon of diameters of all the circles is equal to (root2)*a
2*7*r=(root2)*a

But the two extreme circles wiil not touch at the corners so we have to find those distances.
x=distanse at on corner=r*((root2)-1)
but toal distance=2*x due to 2nd corner

hence tatladistance=2*x+2*7*r
or 2*x+2*7*r=(root2)*a
now you can find the ratio easily.
I think that this is oneof the most conceptual question in the paper.

8. A Sheet of paper has statements number from 1 to 20. Statement n says "At least n of the statements on this sheet are true". Which statements are true and which are false.

a. The even no statements are true and the odd no statements are false.
b. The 1st 13 statements are false and rest are true.
c. The 1st 6 statements are true and rest are false
d. The odd no statements are true and even no. are false.

Solution: This type of question was repeated 3 times but for different case.
For this type of Questions, follow this:
At least- Ist half are true, Last half are false
Exactly- Last second one is true or (N-1)th Statement is true
Almost- All are true.
So correct answer is (C)
9.
n the planet Oz, there are 8 days in a week- Sunday to Saturday and another day called Oz day. There are 36 hours in a day and each hour has 90 min while each minute has 60 sec. As on earth, the hour hand covers the dial twice every day.
Find the approximate angle between the hands of a clock on Oz when the time is 12:40 am.

Solution: 89 deg
36 hours a day mane the clk will be of 18 hours.
18 hours covrs 360 deg
Thus 1 hour covrs 20 deg
12 hours covers 12*20=240 deg
ekhon,1 hour in 90 min
thus in 90min the hour hand goes 20deg
tai, for 1min hr hand goes 2/9deg
sei jonne, for 40 min hour hnd goes (2/9)*40deg=80/9deg=9deg(approx)

thus hr hand covrs total of 240+9=249deg
now min hand covrs=40*4=160deg
(karon, 90min=360deg
1min=4deg)
hus angle betwn them 249-160=89deg
10.Alok and Bhanu play the following min-max game. Given the expression N = 15 + X*(Y â€" Z) Where X, Y and Z are variables representing single digits (0 to 9), Alok would like to maximize N while Bhanu would like to minimize it. Towards this end, Alok chooses a single digit number and Bhanu substitutes this for a variable of her choice (X, Y or Z). Alok then chooses the next value and Bhanu, the variable to substitute the value. Finally Alok proposes the value for the remaining variable. Assuming both play to their optimal strategies, the value of N at the end of the game would be?

Note: For this type of questions:
x+y-z=11
x-y-z=2
x*(y+z)=18
What should be the approach to do such type of prob?

Solution: This question was repeated 3 times for different cases
Yeah TCS has this 3 type of questions where there is
x+y-z,=11
x-y-z ==2
and x*(y+z)=18
TR QUESTIONS:
mam: what is ur name.
me: i am prem prakash.donot say my self
mam:Explain ur project in detail.
me: i told.be prepared with ur project in detail.
mam: what is transistor.expalin cb , ce and cc as an amplifier.
me: i told. i had given the favourite subjects as edc and data comm. be prepared with two subjects or more.
mam:explain full wave rectifier.
me: i explained.
mam: what is emi(electro magnetic induction).
me : i told.
mam: write a program for leap and non leap year.
me: i told.plz be prepared with c.programs like factorial,swaping,prime no.,fibonacci series etc are imp.
mam: do yuo want to ask any question?
me :plz ask questions .
i asked: mam right from now i have 4-5 months then how will i utilize this time so that it becomes benificial for me as well as for ur organisation.
HR:
again another mam:
mam:what is ur name?
me : told
mam:again about project but not in detail.
mam:about my training.
mam :my family background.
mam:Would you be willing to relocate if required?
mam: lastly, do yuo want to ask any question?