

Hello Friends,

TCS came to our college (Technocrats Institute Of Technology, Bhopal) on 15th January and made the highest number of selection in the Madhya Pradesh region in this session with 173 selections from our college.

There were only 3 rounds:

- 1) Written test
- 2) Technical round
- 3) HR round

There were around 340 students who sat for the campus out of which 243 cleared the written and finally 173 were selected from the college.

It was very easy exam as compared with other company written exams. Test contains 35 questions, only from quantitative, in 60 minutes. You can get through if you prepared with previous papers All patterns are same but with different values. Refer

**Freshersworld.com** question papers.

I am giving the answers that are 100 % correct because we have researched a lot on the answers with friends and got the most correct answers after consulting the we and the yahoo groups.

Written questions

- 1)  $(1/3)$  of a number is 3 more than the  $(1/6)$  of the same number?

a) 6 b) 16 c) 18 d) 21

Ans-  $x/3 = x/6 + 3$  .....solve ans is 18

2) There are two pipes A and B. If A filled 10 liters in an hour, B can fill 20 liters in same time. Likewise B can fill 10, 20, 40, 80, 160. If B filled in  $1/16$  of a tank in 3 hours, how much time will it take to fill the tank completely?

a) 9 B) 8 c) 7 d) 6

This question repeated two times in my paper

Ans: (b) these type of que are repeated frequently but the numeric values change. Simple approach is- count the number of hours taken to fill the part of the tank from the given part ie. Initially the tank is  $1/32$  then after 1 hour it will become  $1/16$  then  $1/8$  then  $1/4$  then  $1/2$  then 1. Here 1 is the state when the tank is full so the number of hours is  $(1+1+1+1+1)=5$ . Now add this number of hours to the given time ie  $5+3=8$

3) A lady has fine gloves and hats in her closet- 18 blue, 32 red, and 25 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 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) 60 d) 42

Ans: Do not get trapped in these type of questions .a very simple trick to solve these type of question is just see the max and the middle value of gloves and hats ...ie 32 and 25 . just add max+min\_values +2 or 1 or 3 ie  $32+25+3=60$  the answer will definitely fall in this range as 60 here

4) Middle- earth is a fictional land inhabited by hobbits, elves, dwarves and men. The hobbits and elves are peaceful creatures that prefer slow, silent lives and appreciate nature and art. The dwarves and the men engage in physical games. The game is as follows. A tournament is one where out of the two teams that play a match, the one that loses get eliminated. The matches are played in different rounds, where in every round; half of the teams get eliminated from the tournament. If there are 8 rounds played in

knock out tournament, how many matches were played?

a) 257 b) 256 c) 72 d) 255

Ans: (255) there are two varieties of this type of que in one they ask about the number of matches in the first round ...so solution to that is  $2^{(\text{number of rounds})}$ ...ie  $2^8=256$  another variety is the number of matches played in the tournament so ans is

$2^{(\text{number of teams})}-1$  ..ie  $2^8-1=255$

5) 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 46 km/hr and the distance traveled by the Ferrari is 953 km, find the total time taken for Rohit to drive that distance.

a) 20.72 b) 5.18 c) 238.25 d) 6.18

Ans very simple question approach is time =dist./speed ie  $953/(4*46)=6.18$

6) how many 8 digit numbers are possible by using the digits 1,2,3,4,5 which are divisible by 4 if repetition of digits is allowed?

Ans: (78125) simple trick to these type of que is that  $5^{(\text{number of digits}-1)}$  ie  $5^{(8-1)}$  i.e.  $5^7=78125$

By math's first 6 digits of the 8 digit number can be filled in by using any 5 digits given so it come out  $(5*5*5*5*5*5)$  and last two must be divisible by 4 ie (44,52,32,12,24) are the 5 possibilities. So the answer is  $(5*5*5*5*5*5*5=5^7)$

7) Hare in the other. The hare starts after the tortoise has covered  $1/5$  of its distance and that too leisurely. A hare and a tortoise have a race along a circle of 100 yards diameter. The tortoise goes in one direction and the hare. The hare and tortoise meet when the hare has covered only  $1/8$  of the distance. By what factor should the hare increase its speed so as to tie the race?

a) 37.80 b) 8 c) 40 d) 5

Ans: 37.80

8) Alok and Bhanu play the following min-max game. Given the expression

$$N = 9 + X + Y - Z$$

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

a) 0 b) 27 c) 18 d) 20

Ans: Do not get trapped in this que i am giving a very short trick that guarantees 100% correct solution just add the following number if the que contains the following changes

$X*(Y-Z)$  then add 18 to the given constant to get N....ie  $9+18=27$

$X+(Y-Z)$  = then add the 12 ie  $9+11=20$

$X-(Y-Z)$  is then add 2 ie  $9+2=11$

9) For the FIFA world cup, Paul the octopus has been predicting the winner of each match with amazing success. It is rumored that in a match between 2 teams A and B, Paul picks A with the same probability as A's chances of winning. Let's assume such rumors to be true and that in a match between Ghana and Bolivia, Ghana the stronger team has a probability of  $2/3$  of winning the game. What is the probability that Paul will

correctly pick the winner of the Ghana-Bolivia game?

a)1/9 b)4/9 c)5/9 d)2/3

Ans: 5/9....just do  $1 - (\text{probability})^2 \dots 1 - (2/3)^2$

11). On planet zorba, a solar blast has melted the ice caps on its equator. 8 years after the ice melts, tiny planetoids called echina start growing on the rocks. echina grows in the form of a circle and the relationship between the diameter of this circle and the age of echina is given by the formula

$$d = 4 * \sqrt{t - 8} \text{ for } t \geq 8$$

Where the represents the diameter in mm and t the number of years since the solar blast.

Jagan recorded the time of some echina at a particular spot is 24 years then what is diameter?

a) 8 b) 16 c) 25 d) 2

Ans: Put the value of years in equation and get the answer ie

10) A sheet of paper has statements numbered from 1 to 70. For all values of n from 1 to 70. Statement n says ' At least n of the statements on this sheet are false. ' Which statements are true and which are false?

a) The even numbered statements are true and the odd numbered are false.

b) The odd numbered statements are true and the even numbered are false.

c) The first 35 statements are true and the last 35 are false.

d) The first 35 statements are false and the last 35 are false.

Ans: c

There are two more varieties of this type of questions. I am giving those also below just concentrate on the part underlined in the questions and mark the answer.

11) A sheet of paper has statements numbered from 1 to 40. For all values of n from 1 to 40, statement n says: 'Exactly n of the statements on this sheet are false.' Which statements are true and which are false?

a) The even numbered statements are true and the odd numbered statements are false.

b) The odd numbered statements are true and the even numbered statements are false.

c) All the statements are false.

d) The 39th statement is true and the rest are false.

Ans: d

12) The IT giant Tirnop has recently crossed a head count of 150000 and earnings of \$7 billion. As one of the forerunners in the technology front, Tirnop continues to lead the way in products and services in India. At Tirnop, all programmers are equal in every respect. They receive identical salaries and also write code at the same rate. Suppose 12 such programmers take 12 minutes to write 12 lines of code in total. How long will it take 72 programmers to write 72 lines of code in total?

a) 6 b) 18 c) 72 d) 12

Ans: d ( $w_1/w_2 = m_1 * t_1 / m_2 * T_2$ )

13) A circular dartboard of radius 1 foot is at a distance of 20 feet from you. You throw a dart at it and it hits the dartboard at some point Q in the circle. What is the probability that Q is closer to the center of the circle than the periphery?

a)0.75 b)1 c)0.5, d)0.25

Ans: Probability= (area of inner circle)/(area of outer circle)

i.e  $(r/2)^2 / r^2 = 1/4 = 0.25$

14) After the typist writes 12 letters and addresses 12 envelopes, she inserts the letters randomly into the envelopes (1 letter per envelope). What is the probability that exactly

1 letter is inserted in an improper envelope?

a) 0 b)  $1/12$  c)  $11/12$  d)  $12/212$

Ans: 0

This questions repeated in my paper thrice.

15) Given 3 lines in the plane such that the points of intersection form a triangle with sides of length 20, 20 and 30, the number of points equidistant from all the 3 lines is

a) 4 b) 3 c) 1 d) 0

Ans: 4

If it is given line then there are 4 points – one in Centre and three circumcentres

If it is given line segment then there is 1 bcoz only one incentre is there

16) For the FIFA world cup, Paul the octopus has been predicting the winner of each match with amazing success. It is rumored that in a match between 2 teams A and B, Paul picks A with the same probability as A's chances of winning.

Let's assume such rumors to be true and that in a match between Ghana and Bolivia, Ghana the stronger team has a probability of  $2/3$  of winning the game. What is the probability that Paul will correctly pick the winner of the Ghana-Bolivia game?

a)  $5/9$  b)  $1/9$  c)  $2/3$  d)  $4/9$

Ans:  $5/9$

17) Mr. Bean went to a shop for buying a gift to his wife on her Birthday. He bought 28 purple marbles as her wife was fond of marbles. He also bought 21 green marbles. While coming out of the shop on the way he also bought 24 red, 42 yellow and 12 pink marbles and he put them all in a bag. When he was returning back to the home a lightning occurred and suddenly due to some reasons the red, green, and yellow balls got converted into white color. But in spite of this Mr. Beans decided to give few marbles to his lovely wife. So, how many times he should put his hand in the bag so that he can gift his wife at least one ball of each color.

Ans: logic is same as I told in the question 3 i.e  $24+42+2=68$

18) Alice and Bob play the following coins-on-a-stack game. 50 coins are stacked one above the other. One of them is a special (gold) coin and the rest are ordinary coins. The goal is to bring the gold coin to the top by repeatedly moving the topmost coin to another position in the stack. Alice starts and the players take turns. A turn consists of moving the coin on the top to a position  $i$  below the top coin ( $0 \leq i \leq 20$ ). We will call this an  $i$ -move (thus a 0-move implies doing nothing). The proviso is that an  $i$ -move cannot be repeated; for example once a player makes a 2-move, on subsequent turns neither player can make a 2-move. If the gold coin happens to be on top when it's a player's turn then the player wins the game. Initially, the gold coin is the third coin from the top. Then

a) In order to win, Alice's first move should be a 0-move.

b) In order to win, Alice's first move should be a 1-move.

c) Alice has no winning strategy.

d) In order to win, Alice's first move can be a 0-move or a 1-move

Ans: (d)

In this type of question if the coin is at the 3 position (as here )then the answer is d otherwise at the 1 or second position of the coin the answer is always. No chance of winning ie C

19) There is a planet oz . The people there are four fingered and reside in 4 – dimensional space and thus the currency used by its residents are 3 – dimensional objects. The rupees notes are cubical in shape while their coins are spherical. However the coin minting machinery lays out some stipulations on the size of the coins.

- The diameter of the coins should be at least 16mm and not exceed 64mm
- Given a coin, the diameter of the next larger coin is at least 50% greater.
- The diameter of the coin must always be an integer.

You are asked to design a set of coins of different diameters with these requirements and your goal is to design as many coins as possible. How many coins can you design?

Ans: 4

At least 16 coins so the series is 16,  $(16+16/2)=24$  ,  $(24+24/2)=36$ ,  $(36+36/2)=54$ . Now next value of coin exceeds 64 so the number of coins is 4

20) 21 people meet and shake hands. The maximum number of handshakes possible if there is to be no 'cycle' of handshakes is (A cycle of handshakes is a sequence of people  $a_1, a_2, \dots, a_k$  such that the pairs  $(a_1, a_2), (a_2, a_3), \dots, (a_{k-1}, a_k), (a_k, a_1)$  shake hands.

- a) 17   b) 18   c) 19   d) 20

Ans: n

21) 10 suspects are rounded by the police and questioned about a bank robbery. Only one of them is guilty. The suspects are made to stand in a line and each person declares that the person next to him on his right is guilty. The rightmost person is not questioned. Which of the following possibilities are true?

- A. All suspects are lying.  
B. leftmost suspect is innocent.  
C. leftmost suspect is guilty  
a) A only   b) A or C   c) A or B   d) B only

Ans: c

22) In planet OZ planet there are 8 days, Sunday to Saturday and 8th day is Oz day. There is 36 hours in a day. What is angle between 12.40?

- a) 80   b) 81   c) 87   d) 89

Ans: 89

23) 36 people  $\{a_1, a_2, \dots, a_{36}\}$  meet and shake hands in a circular fashion. In other words, there are totally 36 handshakes involving the pairs,  $\{a_1, a_2\}, \{a_2, a_3\}, \dots, \{a_{35}, a_{36}\}, \{a_{36}, a_1\}$ . Then size of the smallest set of people such that the rest have shaken hands with at least one person in the set is

- a) 13   b) 18   c) 11   d) 12

Ans:18

24) The pace length P is the distance between the rear of two consecutive footprints. For men, the formula,  $n/P = 144$  gives an approximate relationship between n and P where, n = number of steps per minute and P = pace length in meters. Bernard knows his pace length is 164cm. The formula applies to Bernard's walking. Calculate Bernard's walking speed in kmph.

- a) 23.62   b) 8.78   c) 11.39   d) 236.16

Ans: 236.16 (144\*1.64 m)

25) Anoop managed to draw 7 circles of equal radii with their centers on the diagonal of a square such that the two extreme circles touch two sides of the square and each middle circle touches two circles on either side. Find the ratio of the radius of the circles to the side of the square.

- a)  $1:(4+7\sqrt{3})$  b)  $1:(2+6\sqrt{2})$   
c)  $1:(2+7\sqrt{2})$  d)  $(2+7\sqrt{2}):1$

Ans: b

26) There are 1000 pillars for a temple. 3 friends Linda, Chelsea, Juli visited that temple. (Som unrelated stuff) Linda is taller than Chelsea and taller than 2 of 1000 pillars. Juli is shorter than Linda. Find the correct sentence?

- a) Linda is shorter among them  
b) Chelsea is taller than Juli  
c) Chelsea is shorter than Juli  
d) Cannot determine who is taller among Chelsea and Juli

Ans: d

Friends there is a trick of solving this questions any question in the paper of TCS that involves comparison the answer is always –cannot determine

27) Horse started to chase dog as it relieved stable two hrs. ago. And horse started to ran with average speed 22km/hr., horse crossed 10 mts road and two small pounds with depth 3m, and it crossed two small street with 200 mts length. After traveling 6 hrs., 2hrs after sunset it got dog. compute the speed of dog?

Ans: As we have speed and travel time of horse, we can get distance travelled by it.  
Hence  $d = 22 \times 6 = 132\text{km}$ ,

Exactly this 132km was travelled by dog in 8 hours (as it started two hours earlier).  
Hence speed of dog =  $132/8 = 16.5\text{km/hr}$

Ans: 16.5km/hr.

28) Given a collection of points P in the plane, a 1-set is a point in P that can be separated from the rest by a line, .i.e the point lies on one side of the line while the others lie on the other side. The number of 1-sets of P is denoted by  $n_1(P)$ . The minimum value of  $n_1(P)$  over all configurations P of 5 points in the plane in general position (.i.e. no three points in P lie on a line) is

- a) 3 b) 5 c) 2

Ans: 5

Friends there is a trick of solving this questions any question in the paper of TCS that involves points separated by line with a set of points points each side the answer is the number of points in plane as 5 here the answer is always –cannot determine

29) Alok and Bhanu play the following min-max game. Given the expression  
 $N = 9 + X + Y - Z$

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

a) 0 b) 27 c) 18 d) 20

Ans: 20

Here it is  $X+Y-Z$  then add the 11 so ans is  $(11+9)=20$

30). The citizens of planet nigiet are 8 fingered and have thus developed their decimal system in base 8. A certain street in nigiet contains 1000 (in base 8) buildings numbered 1 to 1000. How many 3s are used in numbering these buildings?

a) 54 b) 64 c) 265 d) 192

Ans: 192

From 1 to 100 3 comes 192

Once you clear this test you are promoted to Technical round

I attempted 35 questions and I was sure that at test 31 were correct, the cut of was high in our college most probably above 25. So be accurate and score high, as the questions are easy.

#### **Technical interview:**

Our interview was in the university campus, in Bhopal itself. I reached the campus around 3 pm. We were given a form from the TCS that contained our basic details from our name to the project and all.

Finally our technical started at 7 in the evening .there were around 9 panels in the conference hall taking the technical interviews I had to wait for a long time and my technical started at around 10 pm in the night.

My TR was more of HR than the technical one. Luckily my TR came out to be from my city itself God favored and the luck!

Questions asked from me were:

Me: Good evening, sir

TR: Good evening, take your seat.

TR: How was your day. You must have waited for a long time

Me: I had a great day, this morning I took my written test and, gave my best. I think have scored well and cleared it. It is my first interview so I liked waiting for a long time because I was waiting anxiously for this time.

TR: Ok, Abhinav tell me why have you written basics of C++, C and java in your resume

Me: sir. I had studied C++ and c in the class 12 as it was in my syllabus so I had acquired basic knowledge of that and recently I have studied java and the other modules are yet to finish so I have written basic word. But sir I have done a project in java recently and did well in it.

TR: looking at my project in the resume, of tell me something about your project

Me: I was waiting eagerly for this question, that Is why I said I made a project in Java. I told about my project "Bhopal road transport enquiry system" everything in deep. TR was impressed.

TR: Ok, you have written you gave paper presentation on surface computer. Tell me about it

Me: I was prepared for this. I told all that I had prepared



TR: Ok, tell me Abhinav, where do you belong to natively  
Me: Told

TR: Then why you chose to study in Bhopal  
Me: I told that I had taken a year drop and prepared for the competitive exams and I got good college like TIT in Bhopal so I opted for this. He was satisfied

TR: Where are you from basically  
Me: I told Kanpur

TR: He asked me about a location from Kanpur that how far was it. I was surprised how come he knows about all in Kanpur. I replied easily

TR: Tell me about batch  
Me: I said that sir I had heard about batch but not had full information about it so can't answer it. I said sorry sir

TR: He says but you have written OS as technical skill in Your subject. Didn't you know batch processing  
Me: I said sorry sir

TR: Then he asked about deadlock  
Me: I replied all I knew about deadlock. He was satisfied

TR: what is merge sort explain  
Me: I explained it but I told incorrectly initially then I corrected my answer by this permission

TR: Ok can you write a program in Java for me. He asked me to print prime numbers between 1 to 100  
Me: I gave the logic and wrote the program

TR: You have drawing and sketching as your hobby, can you draw my sketch  
Me: I was prepared for this I said yes sir but I will take 1 or 2 hours' time and you have to sit still for that period he smiled and said leave it

Finally he said ok you can go now  
Me: But I had a question in my mind I told that I wanted to ask a question. He said yes you can

I asked about his introduction

He said that he belongs to Kanpur. He keeps on visiting there often but, he is basically from Lucknow. I had a smile on the face. Then he shook hands with me I returned with smile confident that my TR will easily promote me.

### **HR round:**

It's very easy round and less elimination round. In this round they ask simple questions and give a situations and observe ur feelings. So be confident in this round. If you cleared this round then you are almost placed.

I was called for my HR at 2:00 am in the morning . My HR had the last resume of mine for the day



He was sitting tired.

Me: Good evening sir

HR: Good evening. Are you tired of waiting. Have you had your dinner

Me: no sir I am not feeling tired but energetic because I have been promoted to my last round of the interviews. I said I had my dinner

HR: What did you have in the dinner? Was it sufficient?

Me: Told what all the lunch packet was provided by our college and that amount each dish had

HR: Ok tell me about your family?

Me: I told all

HR: Tell me why you want to choose a private sector than a government sector

Me: I told

HR: Tell me about your project?

Me: I explained all I was already waiting for this question

HR: Ok you have drawing and sketching as your hobby, can you draw my sketch.

Me: I was prepared for this I said yes sir but I will take 1 or 2 hours' time and you have to sit still for that period. He smiled why not in 10-15 minutes.

Me: I said sir it will be just a rough sketch not an accurate one. He smiled and said do you have any of your sketches in your folder.

Me: I said no sir but I have several certificates I got during college and school days

HR: Are you comfortable to be relocated. Bond with TCS

Me: I said yes with suitable reason that I had interest in travelling to new places and as I mentioned it in my resume and I am sociable as my strength is that so I am comfortable

HR: Ok thank you do you have any questions to ask

Me: I asked about his introduction and the skill I needed to develop till I join TCS.

Finally I left and returned home at 3 :00 am in the morning in the chilling cold. And had a sigh of relief.

Finally the results were out in the college on 17th January at 10 am in the morning answered I was selected out of the 173 from our college.

Finally my suggestion is

- 1) Concentrate on written test and Technical Round. Thank you for reading my experience.
- 2) Use **Freshersworld.com** and read all the patterns from **Freshersworld.com**. I am sure you need not even consult RS Aggarwal or any other books. Your written will be cleared easily just from here
- 3) Go for mock TCS online exam pattern at the [www.openseesame.tcs.com](http://www.openseesame.tcs.com)  
For any help set of TCS sample papers contact me at [abhinav.dwivedi.01@gmail.com](mailto:abhinav.dwivedi.01@gmail.com)  
Best of Luck!

Have faith on God. Sure success comes to you.

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