

Note: All the questions in the actual test will be preceded by lot of unnecessary data to confuse you. I am posting only the main part of each problem

Q.1 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 $\frac{1}{32}$ filled of the 21 hours, what is total duration of hours required to fill it completely?

- a) 26
- b) 25
- c) 5
- d) 27

Solution: for every hour water in tank in B is doubled, Let the duration to fill the tank B is x hours. $\frac{x}{32}$ part of water in tank of B is filled in 21 hours, Next hour it is doubled so, $2 \times (\frac{x}{32})$ part i.e. $(\frac{x}{16})$ part is filled in 22 hours, Similarly $(\frac{x}{8})$ th part in 23 hours, $(\frac{x}{4})$ th part is filled in 24 hours, $(\frac{x}{2})$ th part is filled in 25 hours, (x) th part is filled in 26 hours So answer is 26 hours.

Q.2: 6 persons standing in queue with different age group, after two years their average age will be 43 and seventh person joined with them. Hence the current average age has become 45. Find the age of seventh person?
a) 43 b) 69 c) 52 d) 31

solution Total age of 6 persons is x hours, after two years total age of 6 persons is $x+12$ Average age of 6 persons is after two years is 43 So $(x+12)/6=43$, then solve x, After 7th person is added then $(x+7\text{th person age})/7=45$ So we will get 7th person age easily

Q.3: A man travels from A to B at 4 mph over a certain journey and returns over the same route to A, at 5 mph. What is his average speed for the journey? **Solution:** Average speed $= \frac{2 \times x \times y}{(x+y)}$

Q.4: A toy train produces 10 different sounds when it moves around a circular toy track of radius 5 m at 10 m per min. However, the toy train is defective and it now produces only 2 different tunes at random. What are the odds that the train produces for consecutive music tones of the same type?
a) 1 in 16 B) 1 in 4 c) 1 in 8 d) 1 in 32

Solution: Initially it produces 10 sounds and the defect came and now it produces only 2 different sounds and consecutively so there are totally 2 sounds and we have to select on sound and the probability is $\hat{A}^{\frac{1}{2}}$ and it produces the same sound consecutively for 2 times so the probability becomes $\hat{A}^{\frac{1}{2}} \times \frac{1}{2}$ ie $\hat{A}^{\frac{1}{4}}$

Q.5: A scientist was researching on animal behavior in his lab. He was very interested in analyzing the behavior of bear. For some reason he travelled 1 mile in north direction & reached at North Pole. There he saw a bear. He then followed the bear around 1 hr with a speed of 2 km/hr in east direction. After that he travelled in south direction & reached at his lab in 2 hrs. Then what is the color of the bear?

- a) White
- b) Black

- c) Gray
- d) Brown

Solution: White. all the above matter is nonsense.

Q.6: Usha bought a linen cloth and rope to build a tent. If the rope is 153 m long and it is to be cut into pieces of 1m length, then how many cuts are to be made to cut the ropes into 153 pieces?

- a)153
- b)152
- c)154
- d)155

Solution: To make it 153 pieces we have to cut 152 times so obviously after last cut we got 153rd piece

Q.7: 10 men and 10 women are there, they dance with each other, is there possibility that 2 men are dancing with same women and vice versa?

- a) 22
- b) 20
- c) 10
- d) never

solution: NEVER

Q.8: 20 people are there, they are shaking hands together, how many hand shakes possible, if they are in no pair of cyclic sequence.

- a) 19
- b) 21
- c) 28
- d) 7

solution: answer is 19

For this type of problem answer will be $n-1$. but this formula will vary if cyclic sequence is allowed..

Q.9: there are some cycles and 4 wheeler cars. on tue there are 190 wheels. then how many cycles are there on that spot?

solution: check from options. multiply each and every option with 2 and subtract result from 190.if the obtained result is exactly divisible by 4, that will be the correct answer

Q.10: A father had three children. He had 7 pennies. how can he eqally distribute the fruits among his children if A watermelon costs 1 penny, 2 oranges cost 1 penny and 3 grapes cost 1 penny a)2 melons, 1 orange, 1 grape b) 2 melons, 2 orange, 1 grape c) 1 melons, 2 orange, 1 grape.

solution: if he buys grapes with 1 penny, he can distribute 1grape each equally as there are 3 grapes. then he has 6pennies left with him so with 3pennies he will by 6oranges and distribute 2each. with other 3 rupees he can buy 3watermelons and distribute one each therefore,

answer is: 1water melon, 2 oranges and 3 grapes

Q.11: The age of the two friends were in the ration of 6:5. If the sum of their ages is 55. Then after how many years their ratio will become 8:7?

- a) 11
- b) 7
- c) 10
- d) 12

Solution: $6x+5x=55$, so $x=5$, put first ratio after substitution is $(6*5)/(5*5)$ and second ratio is $40/35$ So difference in numerators $40-30=10$ years

Q.12: A horse chases a pony 2 hours after the pony runs. Horse takes 3 hours to reach the pony. If the average speed of the horse is 81Kmph. Then what is the average speed of the pony?

- a) 46.4
- b) 51
- c) 53.4
- d) 48.6

Solution: Horse takes 3 hours to cover the distance Pony takes $3+2=5$ hours to cover the same distance, $\text{Velocity}=\text{distance}/\text{time}$, distance travelled by them is equal it is $81*3=243\text{km}$, speed of pony $=243/5=48.6$

Q.13: All 32 points are equidistant from a point X on a plane then which is true:

- a) all 32 lie on a circle
- b) distance from X to all 32 is less than distance between each other

Solution: option a

Q.13: 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

Solution: Speed of Ferrari $=4*35=140$, $\text{time}=\text{distance}/\text{velocity}$,

Q.14 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

solution:
0.25

Q.15: 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 $\frac{2}{3}$ of winning the game. What is the probability that Paul will correctly pick the winner of the Ghana-Bolivia game?

a) $\frac{4}{9}$

b) $\frac{2}{3}$

c) $\frac{1}{9}$

d) $\frac{5}{9}$

Answer is $\frac{5}{9}$

Q.16 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 buildings numbered 1 to 1000. How many 3s are used in numbering these buildings?

a) 256

b) 54

c) 192

d) 64

Answer is 192

Q.17: 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, $\{a_1, a_2\}$, $\{a_2, a_3\}$, $\{a_{35}, a_{36}\}$, $\{a_{36}, a_1\}$. 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) 12

b) 13

c) 18

d) 11

Answer is 11

Q.18 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) 0

d) 1

answer is 4

Q.19: 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) 27

b) 18

c) 20

answer is 20

Q.20 Alice has no winning strategy. 34 people attend a party. 4 men are single and the rest are there

with their wives. There are no children in the party. In all 22 women are present. Then the number of married men at the party is

- a) 12
- b) 8
- c) 16

answer is 8

Q.No:21: 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 maximum value of $n_1(P)$ over all configurations P of 19 points in the plane is

- a) 18
- b) 9
- c) 3

Q.No:22 Alice and Bob play the following chip-off-the-table game. Given a pile of 58 chips, Alice first picks at least one chip but not all the chips. In subsequent turns, a player picks at least one chip but no more than the number picked on the previous turn by the opponent. The player to pick the last chip wins. Which of the following is true?

In order to win, Alice should pick 14 chips on her first turn.

In order to win, Alice should pick two chips on her first turn.

In order to win, Alice should pick one chip on her first turn.

I could not solve this

Q.No:23 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) $12/212$
- c) $11/12$
- d) $1/12$ (answer is 0.)

Q.No:24 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 or the leftmost suspect is innocent. B. All suspects are lying and the leftmost suspect is innocent .

- a) A only
- b) Neither A nor B
- c) Both A and B
- d) B only

(answer is A)

Q.No:25: Alchemy is an occult tradition that arose in the ancient Persian empire. Zosimos of Panopolis was an early alchemist. Zara, reads about Zosimos and decides to try some experiments. One day, she collects two buckets, the first containing one litre of ink and the second containing one

litre of cola. Suppose she takes one cup of ink out of the first bucket and pours it into the second bucket. After mixing she takes one cup of the mixture from the second bucket and pours it back into the first bucket. Which one of the following statements holds now?

- a) There is more cola in the first bucket than ink in the second bucket.
 - b) There is as much cola in the first bucket as there is ink in the second bucket.
 - c) There is less cola in the first bucket than ink in the second bucket.
- (answer is a)

Q.No:26: 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 maximum value of $n_1(P)$ over all configurations P of 19 points in the plane is

- a) 18
- b) 9
- c) 3

I could not solve this

Q.No:27: $(1/2)$ of a number is 3 more than the $(1/6)$ of the same number?

- a) 6
- b) 7
- c) 8
- d) 9

Solution: Let the number be x , $((1/2)*x)=3+(1/6)*x$, Then solve x

Q.No:28: 3 persons a,b,c were there A always says truth, B lies on Monday, Tuesday, & Wednesday. but C lies on Thursday, Friday & Saturday. One day A said "that B & C said to A that" B said "yesterday was one of the days when I lie", C said that "yesterday was one of the days when I lie too". then which day was that?

- a) Sunday b) Thursday c) Saturday d) Tuesday

Q.No:29: Which is the smallest no which divides 2880 and gives a perfect square?

- a) 4
- b) 9
- c) 3
- d) 5

Q.No:30: 10 programmers, type 10 lines within 10 minutes then 60 lines can be typed within 60 minutes. How many programmers are needed?

- a) 16
- b) 6
- c) 10
- d) 60

Ans: 10

Q.No:31 to 33 2 to 3 questions of the same type above (q.29) were given like 12 monkeys eat 12 bananas in 12 min. then how many monkeys can eat 72 bananas in 72 min so on..

Guys since there is negative marking try not to make guesses. Cut off for selection may vary between 15-21 depending on your college and the situation. (It may also vary among different branches) I am not sure about the cutoff at our college but I answered 21 questions correctly and cleared the written test. One of my friends who answered only 15 questions was also selected. Getting prepared for the written test by referring all old papers of the new test pattern is more than enough to crack this test..

Round 2: Technical Interview:

In order to get through technical interview, it's better to revise basics of all subjects. Only basic concepts will be asked. IT'S HARD TO GET THROUGH THIS UNLESS WE ARE CONFIDENT ABOUT WHAT WE SPEAK. They check our attitude Even if you do not know the answer, do not get nervous. It's a minor issue. There was one interviewer per panel. The interviewer was very friendly. I did not feel tensed. I spoke very confidently as if I was speaking to a very familiar person With a cute smile on my face throughout the interview

Questions posed to me are:

1. Tell me about yourself?
2. Which languages are you familiar with?
3. Rate yourself for each subject.
4. What is a semaphore?
5. What is diff between CPP and Java?
6. What is static void in Java, its main statement?
7. Who will initialize the objects in Java?
(I said wrong answer: "compiler" but interviewer corrected it & said that the correct answer is Java Virtual Machine)
8. Some other question (I could not remember the questions)
I do not know the answer for that and said the same to him..
9. Why TCS?
10. Given an opportunity how will you see yourself in the next 5 years?

That's it. I was very confident about my performance and came out with a smiling face. As it was already 7.30 pm within a few minutes I was directed to M.R interview panel

Round 3: M.R

I entered the room with the same confidence. again there was only one interviewer in the panel

Me: Good Evening Sir

Interviewer: Good Evening! How was ur day today?

Me: some what uncomfortable due to the heavy rain sir..:)

I: You might be familiar with the questions being asked here. by discussing experiences from your frnds outside. u people are faster than the WWW.

Me: Yes sir (smiling)

I: so what are the questions that you gathered?

Me: why TCS? why CSE? only these two sir..every one are saying these two only!!

I: so I am not going to ask them again bcoz u might b ready with well prepared answer

Me: yes sir fine. I am ready to face any questions

I: k. good what is ur weakness?

based on my weakness sleeping I was given a situation and was asked how I will come out of that. answered that and I was asked to leave.

Round4: H.R: I was asked only a few questions:

1.Are you familiar with the TCS 2yr bond?

2.Willing to work any where in india?

3.How can u manage ur team if there are any controversies?

(this was asked because i mentioned in resume that i can do team work efficiently)

4.Do you have any questions to ask?

One mistake i did in all the three interview rounds is i sat in the chair even before i was asked to sit. Results were announced the next day My Name was announced first among others in our department I felt very happy to be a part of TCS. 268 from our college were selected. We shouted to the roofs that evening. GUYS refer old papers; prepare the basic topics from each and every subject.

Important Among All Speak Confidently. The More Confident You Are The More Will Be The Chance Of Getting Selected. Meet U In TCS.

All The Best

Exam/Interview Date : 19-Nov-2010

No of Rounds : Aptitude Test, Technical Round-1, Client/Manager Interview