## CTS Cognizant Technology Solutions Placement Paper

1. Using the digits $1,5,2,8$ four digit numbers are formed and the sum of all possible such numbers. ans: 106656
2. Four persons can cross a bridge in $3,7,13,17$ minutes. Only two can cross at a time. find the minimum time taken by the four to cross the bridge.
ans: 20
3. Find the product of the prime numbers between 1-20
ans. 9699690
4. 2,3,6,7--- using these numbers form the possible four digit numbers that are divisible by 4 . ans. 8
5. Two trains are traveling at 18 kmph and are 60 km apart. There is fly in the train. it flies at 80 kmph . It flies and hits the second train and then it starts to oscillate between the two trains. At one instance when the two trains collide it dies. Distance traveled by the fly when both trains collide is Ans.--- 12 km 6. there are 1000 doors that are of the open-close type. When a person opens the door he closes it and then opens the other. When the first person goes he opens-closes the doors ion the multiples of 1 i.e., he opens and closes all the doors. when the second goes he opens and closes the doors 2,468 respectively.
Similarly when the third one goes he does this for 36912 15th doors resly. Find number of doors that are open at last.
Ans: square numbers
7.There are 9 balls of this one is defective. Find the minimum no. of chances of finding the defective one. Ans: 3times
6. There are coins of Rs. $5,2,1,50 \mathrm{p}, 25 \mathrm{p}, 10 \mathrm{p}, 5 \mathrm{p}$. Eath one as go a weight. Rs 5 coin weighs 20 gms .find the minimum number of coins to etta total of 196.5 gms .
9.A can do a work in 8 days, BCan do a work in 7 days, $C$ can do a work in 6 days. A works on the first day, B works on the second day and C on the third day resly.that is the work on alternate days. When will they finish the work. which day will they finish the work.
Ans: 7/168 days
10.A batsman scores 23 runs and increases his average from 15 to 16. find he runs to be made if he wants top inc the avg to 18 in the same match.
Ans: 39runs.
11.A man sells apples. First he gives half of the total apples what he has and a half apple. Then he gives half of the remaining and a half apple. He gives it in the same manner. After 7 times all are over. How many apples did he initially have.
Ans: 127 apples.
12.In a club there are male and female members. If 15 female quit then the number of females will become double the number of males. If 45 males quit no. of female becomes five times the number of males. Find the number of females.
Ans: females: 175 ,males: 80
7. When I was married 10 years back my wife was the sixth member of my family. Now I have a baby. Today my father was dead and I had a new baby. now the average age of my family is the same as that when I was married. Find the age of my father when I was married.
ans:50
14.I and two of my friends were playing a game. For each win I get Rs 3 . totally I had three wins. Player 2 got Rs 9 and player 3 got Rs 12 . how many games had been played.
15.A person gives a secret to two other persons in 5 minutes. How long will he take to tell the secret to 768 people.
8. There are 40 seats in a bus. People agree to share the money for the number of seats. The total money comes to 70.37. how many seats were free.
Ans. 9 seats.Rs.2.27
17.I had Rs100 and I play. If I win I will have Rs1 10 and if I lose I will have Rs90. at the end I have 2 wins and 2 loses. How much do I have.
18.There were sums related to diagrams. They asked to calculate the areas of the circle, rectangle that were enclosed in other objects. They were simple.
9. In a village, there is flood. In one village causalities were less than the other. Why?

Ans : There were better health care centres(HCC).
20. A question on Pythagoras Theorem.

Ans. 20
21. The distance between Mumbai \& Calcutta is 25000 Km . Train goes from Mumbai to Calcutta for which Speed \& Time are given. From C->M Speed alone is give. Of the above conditions which is not required. (Not Complete)
Ans: The distance $25,000 \mathrm{Km}$ is not required. Because, Speed * Time = Distance. So only two conditions are required.
22. $\mathrm{m}<\mathrm{n} \& \mathrm{x}>\mathrm{y}$ Which is false?

Ans: $\mathrm{x}-\mathrm{m}<\mathrm{y}-\mathrm{n}$
23. A person has Rs.100. If he wins he gains $10 \%$. If he loses the game, he loses $10 \%$. He wins twice and loses twice. How much he has at the end?
Ans: Always less than 100.
24. Area of Shaded portion is?

Ans: 115.5
25. In A tribal group two groups live in different climatic conditions. Ear Sensitivity is tested and found that one has more when compared to other. What is the re son.
Ans. Depends on the physical plaeand condition he is living.


