

PAPER: CTS PLACEMENT PAPER (APTITUDE SECTION)

- 1) In a club there are certain no. of males and females. If 15 females are absent then no. of males will be twice that of females. If 45 males are absent then female strength will be 5 times that of males. Find no. of males actually present.
- 2) Three men A, B, C plays Cards. If one loses the game he have to give Rs.3. If he wins the game he will gain Rs.6. If A has won 3 Games, B loses Rs.3, C wins Rs.12.What is the total no. of games played?
- 3) A can swim & cross 50m(the length of swimming pool) in 2 min. B can swim & cross 50m in 2min 15sec. Every time when they meet a bell gong is struck. For 2000m how many bell sounds might be produced?
- 4) When I was married 10 years ago my wife is the 6th member of the family. Today my father died and a baby born to me. The average age of my family during my marriage is same as today. What is the age of Father when he died?
ans:70.
- 5) There are 9 balls of equal size and same weight(they look similar) except 1. How may weights required to find the dissimilar ball using a weighing balance?
- 6) Product of Prime no. between 1 to 20?
- 7) Find out the total numbers between 1 to 999 that are neither divisible by 8 nor by 12?
- 8) Find out the distinct numbers that can be formed by 2, 3, 7, 6(don't now exactly) that should be divided by 4?
- 9) Two trains at speed 60 km/hr comes in the opposite direction. At a particular time the distance between the two trains is 18km. A shuttle flies between the trains at the speed of 80 km/hr. At the time the two trains crashes what is the distance traveled by shuttle?
- 10) There are n urns and m balls. If we put 3 balls in each urn 3 balls will be excess. If we put 4 balls in each urn 1 urn will be excess. Find no. of Urns (or) Balls?
- 11) Find the area not occupied by circles: Given length =y breadth =x

Answer: $3 \times 2(1 - \pi/4)$
- 12) A man gets x/y of Rs.10 and y/x of Rs.10. He returns Rs.20. The Answer choices are
a) He may not lose
b) He may lose
c) He always loses
d) Cannot be Determined
- 13) Three men A,B,C can complete a work separately in some specified days(may be 6,7,8). If they do the work together by alternate days. Then how many days need to complete the work?
- 14) Four Members A,B,C,D are playing a game. A person losing a game should double the amount of others. B,C,D are losing in order after three games. The amount after 3 games are A&B having 40,D is having 16&C 80.Each questions carry one mark:

A) who started with small amount of money?

Ans) A

B) who started with greatest amount of money?

Ans)B

C) what amount did B have?

Ans)93

Hint: I solved and found the answers to be A->5,B->93

15) There are some houses in a street back to back. And the house behind 10 was 23. How many houses in the street?

Ans)32

16) There are 1997 doors in a auditorium and as many as people as the no of doors open enter the auditorium. A door was closed and as many as people as no of doors open leave the auditorium. The process was repeated till the no of doors is equal to 1. find the total no of peoples enter the auditorium?

17) A batsman average was 15. at last innings he took 23 runs then his average became 16. How much run he should take to make his average 18?

18) Find the number WXYZ divisible by 36?

i) let the digits be 5, 4, 3, 6 - not in that order

ii) sum of last two digits is 9

iii) sum of middle two digits is 7

if one is sufficient then ans as A || if two is sufficient then ans as B || if all are necessary then ans as C || if nothing is needed then ans as D

19) X and Y live in a North-South parallel street. X travels 10 km towards North to reach the east-west street. Y travels 6 km towards south to reach the east-west street. X travels now 4 km towards east and Y travels 8 km towards west and they met each other. What is the distance between X and Y?

20) The houses are numbered 1, 2, 3, and reach the end of the street and backtrack towards the starting point. The house numbered 10 is opposite to 23. There are even no of houses. Find the total no of houses.

21) A seller has a set of apples out of which he sells one half of it and half an apple to his first customer. then he sells half of the remaining apples and a half apple to his second customer. Then he sells half of the remaining apple and $\frac{1}{2}$ apple to his third customer and so on. This repeats upto 7th customer and no more apples are remaining. Find the total no of apples he had.

22) A hollow cube of size 5 cm is taken, with the thickness of 1 cm. It is made of smaller cubes of size 1 cm. If the outer surface of the cube is painted how many faces of the smaller cubes remain unpainted?

23) If a 36 cm thread is used to wrap a book, lengthwise twice and breadth wise once, what is the size of the book?

24) The various degrees of the vertices are marked in the dig. Find y.

25) If 4 circles of equal radius are drawn with vertices of a square as the centre, the side of the square being 7 cm, find the area of the circles outside the square?

26) A bus has 40 seats and the passengers agree to share the total bus fare among themselves equally. If the total fair is 80.67, find the total no of the seats unoccupied.

27) A 4 digit no may consist of the digits 6,2,7,5 where none of the nos are repeated. Find the possible no of combinations divisible by 36?

28) If u r traveling from Mumbai to banglore and return back. To find the speed of the car which of the following r needed.

- a)the distance between them.
- b)time taken
- c)avg speed towards Mumbai and the avg speed towards banglore.

Choices:

- 1)a only. 2)a and b 3) a,b,c 4)b only 5) c only (ans not in order)

29) (Diagram drawn approximate not to scale.) If all the blocks are squares and the complete fig. is also a square and the area of the a is 1 cm^2 , $b=81 \text{ cm}^2$, what is the area of i?

30) A secret can be told only 2 persons in 5 minutes. The same person tells to 2 more persons and so on. How long will take to tell it to 768 persons ?

- a)47.5 min b)50 min c) 500 min.

Ans: 47.5 min

31) Three birds cross a point in a same st. line and of that 2 fly in opposite directions. If a triangle is formed with the position of the birds what kind of the triangle will be formed?

- a)isosceles b)right angle c)equilateral d)right angle and isosceles.

32) When the angle a, b, c, d are given find x.

33) One question is given for explaining the working of cornea (in eyes) & the window

ans: drawing analogy

34) $m < n$, & $x < y$ which of the following is definitely false?

- a) $m - n < x - y$
- b) $m + n < x + y$
- c) $m - n > x - y$
- d) $m + n > x + y$

35) Four circles are drawn from the corners of a square of area 49 cm^2 . Find the area of 4 circles outside the square (they didn't mention that circles have radius= $1/2$ side of a square)

ans: intermediate

36) In a pond ecosystem, large fishes and small fishes will be there. If we want to remove small amount of pollutants, small fishes are to be employed. In a food-chain food passes through a number of mouths and en route the mouth of the superfeeder-the eagle. The size of the ecosystem is determined by its population. But this has been proved false. What can you infer from above?

37) In Bangalore, during income tax deduction for a single person, the percentage increased by 3% and for middle house-holders, it decreased by 3%. What can you infer?

38) In China, Mao-Tse -Tung was responsible for organizing its people and taking China into success path. It evolved into a great economic power by improved industrial and economical statistics. China prospered in those years, but_____ Which of the following best completes the sentence?

41) A ridge formed over Pacific Ocean was because of the intersection of two volcanoes. But in history it was written that it was not due to those volcanoes. It proves a contradictory to form the view that history will be proved wrong in the future Inference?

42) In a poultry form because of cloning, a large breed of hens were produced. This increased the production but the maintenance was very difficult because of the large number. This does not mean that cloning is a disaster in the scientific world but it is a tool which in some ways is constructive but in other ways it is destructive. Inference?