

## APTITUDE

1. One pipe fills in 4 hrs and another in 5hrs when they both work alternately how much time will be taken to fill the tank.
2. LCM of 3 nos is 120 which of the following no must not be their HCF a. 8 , b.24 c.12 d.24 and 30
3. Two trains from the points A and B moving in opposite direction , at the point they meet the second train travels 120 kms more than the first. The speeds are 50kmph and 60kmph respectively find the distance between A and B?
4. One monkey climbs a poll at the rate of 6mts/min and fell down 3mts in the alternately. Length of the poll is 60 mts , how much time it will take to reach the top?  
a. 31    b.33    c.37    d.40 (ans: 37)
5. A number when multiplied by  $\frac{7}{18}$  instead of  $\frac{7}{8}$  and got the result 770 less than the actual result , find the original number?
6. The volume and the radius of both cone and sphere are equal , then find the ratio of height of the cone to the diameter of the sphere?
7. A and B started a business with 1500 and 2500 and got a profit 800 rs. Half of the profit is shared equally the remaining is shared according to their investment. Find their profits.
8. The difference between the simple interest and compound interest for 2 years?  
A:B =2:3 and B:C=5:6 then find A:B:C
9. An amount of 64 Rs has to become 125 in 3 years in compound interest , find the rate of interest?
10. A similar to the above problem find the time(rate of interest is given)
11. The prime no., which is greater than 6 when divide by 6 will always gives the remainder ans: 1 or 5

12. Length of a rectangle is increased by 50% and breadth is decreased by 25% what is the difference in the area

13. Mr X position in a class is 13th from first and 17th from last, and 8th from the first and 13th from last in passed

candidates list, then how many candidates failed in the exam

14. Two successive discounts of 20% and 15% is equal to a net discount of .....

15. A two digit number is 4 times to its sum of digits , when 9 is added to the number, the digits will get reversed.

Then what is that number? Ans: 12

16. The length of the following rectangle is '4a' and its breadth is '2a'. Radius of the two circles is 'a'. Then find the

ratio of total area of the rectangle to the area not covered by the two circles with in the rectangle

17. A person starts with the speed of  $u/1$  kmph and returns with the speed of  $u/2$  kmph, what is his average speed.

18. A cistern will be filled in 9 hrs, but becoz of an outlet it is filled in 10 hrs, if the cistern is filled, then how much

time the outlet takes to empty the cistern.

19. In a right angled triangle ABC angle B = 90 , BM is the median to AC , then  $AB^2 + BC^2$  (in terms of BM)

20. Three circles with same radius r are drawn with centres as three vertices of a triangle. What is the sum of areas

of the intersections of these circles with the triangle.

21. X men work for X days to produce X products, then Y men can produce Y products in ---- days.

22. The compound interest for first and second years is 200 and 220 on a certain amount. Find the sum.

23. Marked price of a commodity is 35% above the cost price. If he gives a discount of 15%, how much he gains

on the  
deal.

24. 5 mangoes + 4 oranges = 7 mangoes + 1 orange. Find the ratio of mango to orange.

25. A man starts a work, after some time some one joins him.....like this

26. Food is sufficient for 100men for 60days. For how many days the food is sufficient for 500men?

27. If 8men 8hrs per day works for 8days get 45/- then how many men required if the work is 5hrs per day for 10days they get 60/-?

28. A person sold an item at a profit of 12% .If he sold it at a loss of 12% then he would get Rs.6/- less. What is the cost price?

29.  $(1 \frac{1}{2} / ((\frac{3}{4} - \frac{2}{5}) / (\frac{2}{3} + \frac{4}{5}))) * ((2 \frac{3}{4} / ((\frac{4}{3} - \frac{2}{5}) / (\frac{5}{3} + \frac{6}{5})))$  (Numbers different)

30. Avg age of X number of adults in a class is 30yrs. If 12 new adults with avg age of 32 joined with them then the avg age increases by one. Find X?

31. A sphere of radius 2cms is dropped into a cylinder of radius 4 cms containing water upto certain level. The raise in the water level is (not sure)

32. Find the average of reciprocals of x and y :

33. In a school there are 1000 students in the year 1999. The number of students increased by 20% in the year

2000. And it is increased by 15% in the year 2001. But it is decreased by 18% in 2002. Then what is the strength in 2002.(numbers may differ)

### REASONING

1. Odd man out
  - a) stem
  - b) fruits
  - c) flowers
  - d) tree
  - e) root
2. 9, --, 15, 18, 21, 24
3. seating arrangement(2 puzzles)
4. books arrangement (puzzle)
5. flowchart
6. If 3rd day of a month is Monday. Then what is the 5th day after 21st of that month?
7. blood relation