

1. Using the digits 1,5,2,8 four digit numbers are formed and the sum of all possible such numbers. 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. 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 18kmph and are 60 km apart. There is a fly flying in the train. It flies at 80kmph. 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. At what distance travel by the fly. Ans---12km
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 on the multiples of 1 i.e., he opens and closes all the doors .when the second goes he opens and closes the doors 2, 4 6 8 resly. Similarly when the third one goes he does this for 3 6 9 12 15th doors resly. Find number of doors that are open at last.666
7. There are 9 balls of these one is defective. Find the minimum no. of chances of finding the defective one.2
8. There are coins of Rs.5, 2, 1,50p, 25p, 10p, 5p. each one has got a weight. Rs 5 coin weighs 20gms.find the minimum number of coins to get a total of 196.5gms.
9. A can do a work in 8 days, B can 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 they work on alternate days. When will they finish the work.(which day will they finish the work) $(7+7/168)->>8$
10. A batsman scores 23 runs and increases his average from 15 to 16. Find the runs to be made if he wants to increase the average to 18 in the same match. 39

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

12. In a club there are male and female members. If 15 female quit then the number of males 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: 160/3, 83/3

13. 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 he was. 60

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 Rs9 and player 3 got Rs 12. How many games had been played? 10

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?

16. 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: 31

17. I had Rs100 and I play. If I win I will hav Rs110 and if I lose I will have Rs90. at the end I have 2 wins and 2 lose. How much do I have? Ans: Rs. 100

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. There were many questions on logical reasoning.

Eg: There are two identical islands. Same tribe lives in the islands. But their receptiveness varies.

This is the question. There were four choices and we have to select the most appropriate one.

For the above one the answer is ----- because of climatic changes. There was a question in which they

gave a polygon with all the external angles. We have to calculate the asked interior angle

19 A says " the horse is not black".

B says " the horse is either brown or grey."

C says " the horse is brown"

At least one is telling truth and at least one is lying. tell the colour of horse?

Answer : grey

20. A son and father goes for boating in river upstream . After rowing for mile son notices the hat of his father

falling in the river. After 5 min. he tells his father that his hat has fallen. So they turn round and are able to

pick the hat at the point from where they began boating after 5min. Tell the speed of river? Ans...6 miles/hr

21. $A+B+C+D=D+E+F+G=G+H+I=17$ where each letter represent a number from 1 to 9. Find out what

does letter D and G represent if letter $A=4$. (8 marks)

Ans. $D=5$ $G=1$

22. Argentina had football team of 22 player of which captain is from Brazilian team and goalki from European

team. For remaining player they have picked 6 from argentinan and 14 from european. Now for a team of 11

they must have goalki and captain so out of 9 now they plan to select 3 from argentinian and 6 from European.

Find out no of methods available for it. (2 marks) Ans : 160600(check out for right no. $6C3 * 14C6$)

23 Three thives were caught stealing sheep, mule and camel.

A says " B had stolen sheep "

C says " B had stolen mule"

B says he had stolen nothing.

The one who had stolen horse is speaking truth. the one who had stolen camel is lying . Tell who had stolen

what? Ans. A- camel ;B- mule ;C- horse

24 A group of friends goes for dinner and gets bill of Rs 2400 . Two of them says that they have forgotten their

purse so remaining make an extra contribution of Rs 100 to pay up the bill. Tell the no. of person in that group.

Ans - 8 person

25 In a colony there are some families. Each of them have children but different in numbers. Following are

conditions:

A) No of adult no of sons no of daughters no of families.

B) Each sister must have atleast one brother and should have at the most 1 sister.

C) No of children in one family exceeds the sum of no of children in the rest families.

D) Tell the no of families.(5 marks)

Ans : 3 families

26 There are 6 people W,H,M,C,G,F who are murderer , victim , judge , police, witness, hangman. There was n

eye witness only circumtancial witness. The murderer was sentenced to death.

Read following statement and

determine who is who.

1. M knew both murderer and victim.

2. Judge asked C to discribe murder incident.

3. W was last to see F alive.
4. Police found G at the murder site.
- 5 H and W never met.

1 Diameter of circle is d , Find length of string. (Outer string that covers the circle)

Ans: $d(\pi + 3)$

2 Diamond's value is proportional to its weight². When the diamond broke wts of pieces in ratio 1:2:3:4:5

Total loss in value is 85,000. What is the value of the diamond twice the wt of the original diamond.

Ans: 45,000

3 Person X join a job at 20 yrs. First 3 years sal = 10,000 p.a. Afterwards every year inc of 2,000 per year

for 0 year. Then sal becomes const till retirement. At retirement avg sal is 25,000. (Thro'out career) what

age he retires. 50 yrs

4 In an island there are tribal who speak lang of almost 4 words. Lang consists of 4 alphabets. How many

words can be formed in that language? Ans 340

5 It was found that the cause for the malaria was the swamp marsh and so the swamps were drained

Mosquito the real cause for malaria due to lack of breeding grounds (Swamps) also was wiped out. What

does this illustrate? (Ans: (Possible) when many conditions form a result, eradication of one cause also

eradicates the result)

6 An officer kept files on his table at various times in the order 1, 2, 3, 4, 5, 6. Typist can take file from top

whenever she has time and type it. What order she can't type? (Ans: 4, 5, 6, 2, 3, 1)

7 A and B r fighting .B fires 3 times as many missiles as A. Total hits: total misses = $1/7$.B's misses 357.B's

hits – A's hits = 66.A's hits?

8 40 shots taken.50p for a hit.10p for a miss. (He have to give).Finally he has Rs.5.How many hits? Ans 15

9 Find avg of a, b, c, d, e .Given data: 1) avg of any 4 num =avg of any 3 num
2) $(a+b)^2 = 36$

Which of the abv are sufficient?

10 What is the difference in times btwn clk 1 & clk2.

1) Both show same time 6 hrs back 2) 1 clk gains 1 min an hr, clk2 gains 2 min an hour. Like abv.... 6min

11 A takes 9 strides to B's 7 strides. A stride = 1meter.B stride =1.2m B gets the start of 24m.What dist

should A travel to overtake B? 360

12 Tortoise gets 100 m head start. Hare is 10 times faster as tort. What is the dist traveled by hare to catch up

tort? Ans:1000/9

13 4 weights r weighed in pairs. Weights of pairs are determined as 103,105,106,106,107,109 what is the

min wt? Ans 51

14 Constant cost = 300 And 1.75 / copy. How many copies should he sell at 7.75 /copy to make a profit?

- 15 Find the perimeter? ANs 28
- 16 20 members avg =10.5. 3 memb of 11.5,12.5,13.5 left and 3 memb of 10.5,12.5,14.5 joined along with a teacher of 21 yr.Now avg =Ans 11.
- 17 Find the area of shaded. Radius of circle = 1cm.....Arcs r drawn with center at circumference.
- 18 Find the area of the shaded portion?
- 19 Solid cube of $6 * 6 * 6$. This cube is cut into to 216 small cubes. ($1 * 1 * 1$). The big cube is painted in all its faces. Then how many of cubes are painted at least 2 sides.
(Ans56)
- 20 A Bacteria is doubling at every 4 min. After 40 min 1024 bact. Then 256 when>.....? Ans: 32 min
- 21 A bag contains 3 balls of 11 different colors each. Find the min no of chances to find at least 3 balls of same color ? Ans: 23
- 22 If $x^2 < 4$ then $100/x$ is.....? Ans : $100/x > 50$ & $100/x < -50$.
- 23 If $[x]$ is the int less than x and $|x|$ is the abs val of x.Then max of $[x]/|x|$ is
Ans d) none
- 24 A work in 12 days b in 15 days. Find the no of days if they work on alternate days. Ans $13 \frac{1}{4}$
- 25 A, B, C r positive int.Out of them 2 r odd. Then $5^{2a} + (b-5)^3 (c-3)^2 = ?$ Ans: always odd.
- 26 A squarer side is 5cm.If a square of side 10cm is hinged @ the center of the prev square. When they r rotated common area to both squares (Ans: Does not change)

- 27 $3p^2 + pq + 5q^2$ are even. If
- If p is odd, q is odd
 - If p is even, q is odd
 - If p is odd, p is even
 - At least one of p and q is odd.
- . Ans: 4) None of these

28 A lady has to feed a dog for the one week from Monday to Sunday .She has food types M, N, O, P, Q,

R,S. MNOP \rightarrow protein enriched RS \rightarrow vitamin enriched. Vitamin enriched cannot be fed on consecutive

days. Conditions given: M should be fed before S. M should be fed before Q. R Should be fed before S.

Before N and Q there should be four types. Based on this 3? s are asked. All r easy to answer...

29 A man bought at the cost of 5 plums a rupee and 2 oranges a rupee. He sells 10 plums and 6 oranges at

the selling price of 4 plums a rupee and 3 oranges a rupee. What is his gain or loss? Ans loss of 50p.

30 Out of 32 books the cost of 10 books is Rs. 50 each and he got a profit of 4%. He sells 15 books at a

profit of 3.8461% on the selling price of Rs 70. The remaining cost is 576. The remaining books are

sold at Rs 74. What is his total profit?

31 Two solutions have milk & water in the ratio 7:5 and 6:11.Find the proportion in which these two solutions

should Be mixed so that the resulting solution has 1 part milk and 2 parts water?

a) 35:3 b) 21:36 c) not possible Ans: c