TCS qs...

Pattern 1:

1. (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

2. (1/3) of a number is 3 more than the (1/6) of the same number?

a) 6 b)16 c)18 d)21

3. (1/3) of a number is 6 more than the (1/6) of the same number?

a) 6 b)18 c)36 d)24

4. (2/3) of a number is 4 more than the (1/6) of the same number?

a) 6 b)8 c)36 d)24

5. (1/3) of a number is 5 more than the (1/6) of the same number?

a) 6 b)36 c)30 d)72

Pattern 2:

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 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.

x/32 part of water in tank of B is filled in 21 hours,

Next hour it is doubled so,

2*(x/32) part i.e (x/16) part is filled in 22 hours,

Similarly (x/8)th part in 23 hours,(x/4)th part is filled in 24 hours,

(x/2)th part is filled in 25 hours, (x)th part is filled in 26 hours

So answer is 26 hours.

2. There are two pipes A and B. If A filled 10 liters in an hour, B can fill 20 liters in same time. Likewise B can fill 10, 20, 40, 80, 160. If B filled in 1/16 of a tank in 3 hours, how much time will it take to fill the tank completely?

a) 9 B) 8 c) 7 d) 6

3. 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. 1/8 th

of the tank B is filled in 22 hours. What is the time to fill

the tank fully?

a) 26 B) 25 c) 5 d) 27

4. A tank is filled with water. In first hour 10 liters,

second hours 20 liters, and third hour 40 liters and so on. If

time taken to fill ¼ of the tank if 5 hours. What is the time

taken to fill up the tank?

a) 5 B) 8 c) 7 d) 12.5

5. If a tank A can be filled within 10 hours and tank B can be

filled ¼ in 19 hours then, what is the time taken to fill up

the tank completely?

a) 21 B) 38 c) 57 d) 76

Pattern 3:

1. 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+7th person age)/7=45

So we will get 7th person age easily

2. In a market 4 men are standing. The average age of the four before 4years is 45, after some days one man is added and his age is 49. What is the average age of all?

a) 43 b) 45 c) 47 d) 49

3. In a shopping mall with a staff of 5 members the average age is 45 years. After 5 years a person joined them and the average age is again 45 years. What's the age of 6th person?

a) 25 b)20 c)45 d)30

4. In a market 4 men are standing .The average age of the four before 2 years is 55, after some days one man is added and his age is 45. What is the average age of all?

a) 55 b) 54.5 c) 54.6 d) 54.7

Pattern 4:

1. In the reading room of a library, there are 23 reading spots. Each reading spot consists of a round table with 9 chairs placed around it. There are some readers such that in each occupied reading spot there are different numbers of readers. If in all there are 36 readers, how many reading spots do not have even a single reader?

a) 8 b) none c) 16 d) 15

Solution: 23 reading spots, Each reading spot consists of 9

chairs placed around it so There are some readers such that in each occupied reading spot there are different numbers of readers.

For each table different no of persons are sat,so for first table 1 person is sit,2nd table 2 persons are sit 36 readers means(1+2+3+4+5+6+7+8 so 8 tables are filled so 23-8=15 reading spots does not have single reader.

2. In the reading room of a library, there are 10 tables, 4 chairs per table. In each table there are different numbers of people seated. How many tables will be left out without at least 1 person?

a) 8 b) 6 c) 2 d) 7

3. In the reading room of a library, there are 10 tables, 4 chairs per table. In each table there are different numbers of people seated. How many ways they will sit in the library so that no chair would be blank?

a) 8 b) 6 c) 2 d) 7

Pattern 5:

1. A man jogs at 6 mph over a certain journey and walks over the same route at 4 mph. What is his average speed for the journey?

a) 2.4 mph b) 4.8 mph c) 4 mph d) 5 mph

Solution: Average speed=(2*x*y)/(x+y)

2. 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?

a) 4.44 mph b) 4.8 mph c) 4.887 mph d)5 mph

3. A person is rock climbing at an altitude of 800 m. He go up

by 7 mph. and come down by 9 mph. what was his average speed?

a) 7.875 mph b) 7.125 mph c) 7mph d) 7.5 mph

4. Find average speed if a man travels at speed of 24kmph up

and 36kmph down at an altitude of 200m?

a) 28.8 mph b) 27.8 mph c) 27.5mph d) 30 mph

5. Person travels to a hill, if he goes from A to B with speed

of 4kmph and returns back to B with speed of 5kmph. What is

his average speed of journey?

a) 4.5kmph b) 4.44kmph c) 9kmph d) 4.245kmph

6. A man travels from A to B at 70 mph over a certain journey

and returns over the same route to A, at 80 mph. What is his

average speed for the journey?

a) 74.66 b)75 c)74.33 d)74.99

7. Find average speed if a man travels at speed of 24kmph up

and 36kmph down at an altitude of 200m.

a) 28.8 b)28 c)27 d)28.6

Pattern 6:

1. Susan made a block with small cubes of 8 cubic cm volume to

make a block ,3 small cubes long, 9 small cubes wide and 5

small cubes deep. She realizes that she has used more small

cubes than she really needed. She realized that she could have

glued a fewer number of cubes together to lock like a block

with same dimensions, if it were made hollow. What is the

minimum number of cubes that she needs to make the block?

a) 114 b) 135 c) 21 d) 71

Solution: I do not know perfectly but I got some solutions

from internet I do not know correctly whether it is tru e or

not,((3*9*5))-((3-2)*(9-2)*(5-2)) so answer is 114.

2. A boy wants to make cuboids of dimension 5m, 6m and 7m from

small cubes of .03 m3. Later he realized he can make same

cuboids by making it hollow. Then it takes some cubes less.

What is the number of the cubes to be removed?

a) 2000 b) 5000 c) 3000 d) 7000

3. Smita was making a cube with dimensions 5*5*5 using 1*1*1

cubes. What is the number of cubes needed to make a hollow

cube looking of the same shape?

a) 98 b) 104 c) 100 d) 61

4. Leena cut small cubes of 10 cm dimension each. She joined

it to make a cuboid of length 100 cm, width 50 cm and depth 50

cm. How many more cubes does she need to make a perfect cube?

a) 500 b) 250 c) 750 d) 650

5. Leena cut small cubes of 3 cubic cm each. She joined it to

make a cuboid of length 10 cm, width 3 cm and depth 3 cm. How

many more cubes does she need to make a perfect cube?

a) 910 b) 250 c) 750 d) 650

6. A lady builds 9cm length, 10cm width,3cm height box using 1

cubic cm cubes. What is the minimum number of cubes required

to build the box?

a) 730 b) 270 c) 720 d) 310

Pattern 8:

1. (40*40*40 – 31*31*31)/(40*40+40*31+31*31)=?

a)8 b)9 c)71 d)51

Solution:a3 -b3 =(a-b)*(a2+a*b+b2) so from this formula we

will find (a-b) value

2. (98*98*98 – 73*73*73)/(98*98*98 – 73*73*73)=?

a).171 b).4 c).420 d).415

3. (209*144)^2 + (209*209)+(209*144)+(144*144) = ?

a)905863729 b)905368729 c)905729368 d)65

Pattern 9:

1. ((4x+3y)+(5x+9y))/(5x+5y) = ? as (x/2y) = 2

a)8 b)none c)16 d)15

Solution: substitute x=4y in above we can find solution

2. x/2y = 2a,then 2x/x-2ay=?

a)4 b)8 c)16 d)2

3. 3X/5Y = 5Y/3X…..Find the value of X/Y

a)3/5 b)5/3 c)2/5 d)5/2

4. What is the value of (3X+8Y)/(X-2Y), if X/2Y=2

a)8 b)none c)10 d)13

5. (4x+3y)+(5x+9y))/(5x+5y) = ? as (x/2y) = 2

a)48/5 b)46/5 c)47/5 d)49/5

6. ((4x+2y)/(4x-2y)= ? as (x/2y) = 2

a)8/7 b)9/7 c)11/7 d)6/7

Pattern 10:

1. A girl has to make pizza with different toppings. There are

8 different toppings. In how many ways can she make pizzas

with 2 different toppings?

a) 16 b) 56 c) 112 d) 28

Solution: 8c2

2. A pizza shop made pizzas with many flavors. There are 10

different flavors, in that 7 flavors are taken to make pizza.

In how many ways they can arrange?

a) 240 b) 120 c) 65 d) 210

3. A pizza shop made pizzas with many flavors. There are 9

different flavors, in that 2 flavors are taken to make pizza.

In how many ways they can arrange?

a) 16 b) 26 c) 36 d) 46

Pattern 11:

1. 3, 22, 7, 45, 15,? , 31

a) 91 b)151 c) 90 d) 5

2. 8 6 17 14 35 31 75 _ 143?

3. Inspired by Fibonacci series Sangeet decided to create his

own series which is 1, 2, 3, 7, 7, 22, 15, 67, 31, _, 63?

a) 202 b) 31 c) 76 d) 49

4. 3, 12, 7, 26, 15, ?

a) 54 b) 27 c) 108 d) 31

5. 1! + 2! + ……. + 50!=?

a)3.1035*10^64   b)2.1021*10^65   c)3.1035*10^63

d)3.1035*10^62

6. 1, 2, 3, 6, 7, 14, _, 32?

7. 5, 9, 12, 18, 26, 36, 47, 72, _?

a) 75 b) 135 c) 100 d) 55

8. 3, 15, x, 51, 53,159,161

a) 17 b) 34 c) 54 d) 112

Pattern 12:

1. Simple question but big one on average age.sth like a, b, c

weighted separately 1st a, b, c ,then a& b, then b & c ,then c

& a at last abc, the last weight was 167,then what will be the

average weight of the 7 reading?

a) 95 b) 95.428 c) 95.45 d) 94

Solution: Last weight abc is 167i.e three persons weight is

167 .in first 6 combinations a,b,c,ab,bc,ac i.e a checked

weight for 3 times totally like that band c also so total

weight in all 7 combinations is (4*167)

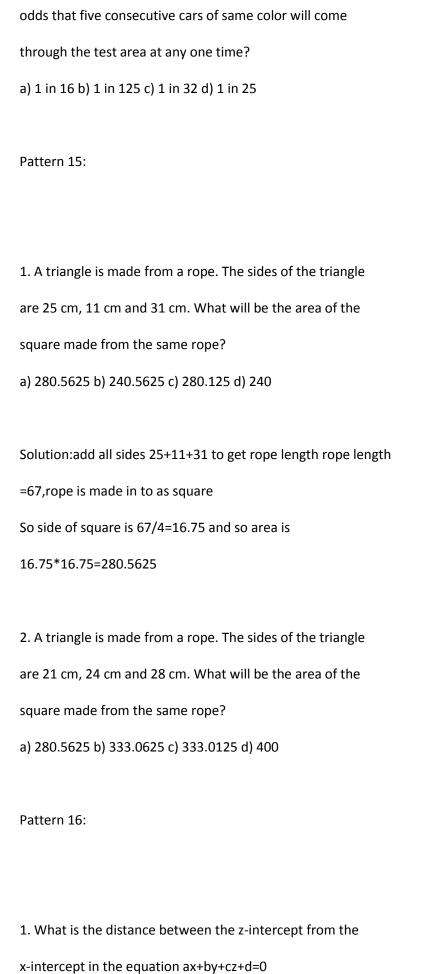Average is (668/7)=95.42

Pattern 13:

1. 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 ½ and it produces the same sound

conceccutively for 2 times so the probability becomes ½*1/2 ie

¼

2. A car manufacturer produces only red and blue models which

come out of the final testing area at random. What are the

odds that five consecutive cars of same color will come

through the test area at any one time?

a) 1 in 16 b) 1 in 125 c) 1 in 32 d) 1 in 25

Pattern 15:

1. A triangle is made from a rope. The sides of the triangle

are 25 cm, 11 cm and 31 cm. What will be the area of the

square made from the same rope?

a) 280.5625 b) 240.5625 c) 280.125 d) 240

Solution:add all sides 25+11+31 to get rope length rope length

=67,rope is made in to as square

So side of square is 67/4=16.75 and so area is

16.75*16.75=280.5625

2. A triangle is made from a rope. The sides of the triangle

are 21 cm, 24 cm and 28 cm. What will be the area of the

square made from the same rope?

a) 280.5625 b) 333.0625 c) 333.0125 d) 400

Pattern 16:

1. What is the distance between the z-intercept from the

x-intercept in the equation ax+by+cz+d=0

Solution:intercept form equation

2. What is the distance of the z-intercept from the

x-intercept in the equation ax+by+cz=d (I do not remember the

values of a, b, c, d).

Pattern 17:

1. 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 1mile in north direction & reached at

North Pole. There he saw a bear. He then followed the bear

around 1 hr with a speed of 2km/hr in east direction. After

that he travelled in south direction & reached at his lab in2

hrs. Then what is the color of the bear?

a) White b) Black c) Gray d) Brown

Solution is: White. above all the matter is nonsense

Pattern 18:

1. Out of 7 children the youngest is boy then find the

probability that all the remaining children are boys

a)1/64 b)1/32 c)1/128 d)1/256

Pattern 19:

1. 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

2. A person has to make 146 pieces of a long bar. He takes 4 seconds to cut a piece. What is the total time taken by him in seconds to make 146 pieces?

a) 584 b) 580 c) 730 d) 725

Solution: 146 pieces means 145 cuts so for each cut it takes 4 seconds means total time 145*4=580

3. A person has to make 141 pieces of a long bar. He takes 2 seconds to cut a piece. What is the total time taken by him in seconds to make 141 pieces?

a) 560 b) 280 c) 112 d) 324

Pattern 20:

1. Spores of a fungus, called late blight, grow and spread infection rapidly. These pathogens were responsible for the Irish potato famine of the mid-19th century. These seem to have attacked the tomato crops in England this year. The tomato crops have reduced and the price of the crop has risen up. The price has already gone up to $45 a box from $27 a box

a month ago. How much more would a vegetable vendor need to

pay to buy 27 boxes this month over what he would have paid

last month?

a) $27 b) $18 c) $45 d) $486

Solution: See last 3 lines only answer is 45-27=18

Pattern 21:

1. A Person buys a horse for 15 ponds, after one year he sells

it for 20 pounds. After one year, again he buys the same horse

at 30 pounds and sells it for 40 pounds. What is the profit

for that person?

Solution: here we cannot consider depreciation or decay of

item accto answer so go acc to answer

Totally 5+10=15$profit

Pattern 22:

1. John buys a cycle for 31 dollars and given a cheque of

amount 35 dollars. Shop Keeper exchanged the cheque with his

neighbor and gave change to John. After 2 days, it is known

that cheque is bounced. Shop keeper paid the amount to his

neighbor. The cost price of cycle is 19 dollars. What is the

profit/loss for shop keeper?

a)loss 23 b)gain 23 c)gain 54 d)Loss 54

Solution: Loss= Change of money given to john(4$)+actual cycle

cost 19$=23$ loss

Pattern 23:

1. A lady has fine gloves and hats in her closet- 18 blue, 32

red, and 25 yellow. The lights are out and it is totally dark.

In spite of the darkness, she can make out the difference

between a hat and a glove. She takes out an item out of the

closet only if she is sure that if it is a glove. How many

gloves must she take out to make sure she has a pair of each

color?

a) 50 b) 8 c) 60 d) 42

Solution: I am not able to answer this if i go in procedure

way so search in net by searching question. Better see below

website

http://www.m4maths.com/placement-puzzles.php?

My answered questions may be answered there.

2. A lady has fine gloves and hats in her closet- 14 blue, 20

red, and 18 yellow. The lights are out and it is totally dark.

In spite of the darkness, she can make out the difference

between a hat and a glove. She takes out an item out of the

closet only if she is sure that if it is a glove. How many

gloves must she take out to make sure she has a pair of each

color?

3. A lady has fine gloves and hats in her closet- 13 blue, 27

red, and 40 yellow. The lights are out and it is totally dark.

In spite of the darkness, she can make out the difference

between a hat and a glove. She takes out an item out of the

closet only if she is sure that if it is a glove. How many

gloves must she take out to make sure she has a pair of each

color?

4. A lady has fine gloves and hats in her closet- 25 blue, 7

red, and 9 yellow. The lights are out and it is totally dark.

In spite of the darkness, she can make out the difference

between a hat and a glove. She takes out an item out of the

closet only if she is sure that if it is a glove. How many

gloves must she take out to make sure she has a pair of each

color?

5. A lady has fine gloves and hats in her closet- 26 blue, 30

red, and 56 yellow. The lights are out and it is totally dark.

In spite of the darkness, she can make out the difference

between a hat and a glove. She takes out an item out of the

closet only if she is sure that if it is a glove. How many

gloves must she take out to make sure she has a pair of each

color?

Pattern 24:

1. Sangakara and Ponting selects batting by using a dice, but dice is biased. So to resolve, Ponting takes out a coin. What is the probability that coin shows correct option?

a)1/2 b)1/6 c)1/12 d)6/10

Solution is ½.

2. There is a die with 10 faces. It is not known that fair or not. 2 captains want to toss die for batting selection. What is the possible solution among the following?

a) If no. is odd it is head, if no. is even it is tail

b) If no. is odd it is tail, if no. is even it is head

c) Toss a die until all the 10 digits appear on top face. And if first no. in the sequence is odd then consider it as tail.
If it is even consider it as head.

Pattern 25:

1. In a family there are some boys and girls. All boys told that they are having equal no of brothers and sisters and girls told that they are having twice the no. of brothers than sisters. How many boys and girls present in a family?

a) 4 boys and 3 girls b) 3 boys and 4 girls c) 2 boys and 5 girls d) 5 boys and 2 girls

Pattern 26:

1. 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) none

2. There are 100 men and 100 women on the dance floor. They

want to dance with each other. Then which of the following

statements is always true:

a) There are 2 men who danced with equal no. of women's

b) There are 2 women who danced with equal no. of men

a) both a and b b)only a c)only b d)none

Pattern 27:

1. Middle- earth is a fictional land inhabited by hobbits,

elves, dwarves and men. The hobbits and elves are peaceful

creatures that prefer slow, silent lives and appreciate nature

and art. The dwarves and the men engage in physical games. The

game is as follows. A tournament is one where out of the two

teams that play a match, the one that loses get eliminated.

The matches are played in different rounds, where in every

round; half of the teams get eliminated from the tournament.

If there are 8 rounds played in knock out tournament, how many

matches were played?

a) 257 b) 256 c) 72 d) 255

Solution: Do not know perfect logic 28

2. A game is played between 2 players and one player is declared as winner. All the winners from first round are played in second round. All the winners from second round are played in third round and so on. If 8 rounds are played to declare only one player as winner, how many players are played in first round?

a) 256 b) 512 c) 64 d) 128

Pattern 28:

1. Metal strip of width 'x' cm. 2 metal strips are placed one over the other, then the combine length of 2 strips is 'y'. If 'z' strips are placed in that manner. What is the final width of that arrangement?

2. A, B, C, D, E are there among A, B, C are boys and D, E are girls D is to the left of A and no girl sits at the middle and at the extemes. Then what is the order of their sittings.

Pattern 29:

1. There is 7 friends (A1, A2, A3....A7).If A1 have to have shake with all without repeat. How many handshakes possible?

a) 6 b) 21 c) 28 d) 7

Solution: For handshakes type question i am confirming you that if the there are n members are there

Handshakes are given in linear manner =n-1(last person

cannot give hand shake to first person)

Handshakes are given in cyclic manner =n(last person can

give hand shake to first person)

But i do not know perfectly for repetition it is nc2

2. 49 members attended the party. In that 22 are males, 17 are

females. The shake hands between males, females, male and

female. Total 12 people given shake hands. How many such kinds

of such shake hands are possible?

a) 122 b) 66 c) 48 d)1 28

Pattern 30:

1. B is taller than j and 3 pillars. P is shorter than B and 2

pillars is j shorter/taller than P?

a) yes b) no c) may be d) can't find

2. There are 1000 pillars for a temple. 3 friends Linda,

Chelsey, Juli visited that temple. (Some unrelated stuff)

Linda is taller than Chelsea and taller than 2 of 1000

pillars. Julia is shorter than Linda. Find the correct

sentence?

a) Linda is shorter among them

b) Chelsea is taller than Julia

c) Chelsea is shorter than Julia

d) Cannot determine who is taller among Chelsea and Julia

Pattern 31:

1. Entry ticket to an exhibition ranges from 1p to 31p. You need to provide exact change at the counter. You have 31p coin. In how many parts will u divide 31p so that u will provide the exact change required and carry as less coins as possible?

a) 4 b) 5 c) 6 d) 7

Solution: in btech we studied 8 4 2 1 code for binary system in digital logic proceed in that way for answer it is 16 8 4 2 1 if u add all we will get 31 so 5 coins required

Pattern 32:

1. Peter and Paul are two friends. The sum of their ages is 35 years. Peter is twice as old as Paul was when Peter was as old as Paul is now. What is the present age of Peter?

a) 8 b) 20 c) 16 d) 15

Pattern 33:

1. 20 men handshake with each other without repetition. What is the total number of handshakes made?

a) 190 b) 210 c) 150 d) 250

2. 10 people are there, they are shaking hands together, how many hand shakes possible, if they are in no pair of cyclic sequence.

a) 45 b) 9 c) 12 d) 10

Pattern 34:

1. If there are 2 wheelers and 4 wheelers parked in a school located at the heart of the city, find the number of 4 wheelers parked there if there were 20 two wheelers parked there

a) 48 b) 50 c) 52 d) 64

Solution: Proceed with answer is best in question they will give total no of wheels

2. If there are 2 wheelers and 4 wheelers parked in a school located at the heart of the city, find the number of 4 wheelers parked there if there were 58 wheels are parked there

a)10 b) 33 c) 22 d) none

Pattern 35:

1. A man whose age is 45 yrs has 3 sons named John, Jill, jack. He went to a park weekly twice. He loves his sons very much. On a certain day he found the shop keepers selling

different things. An apple cost 1penny, 2chocalate costs
1penny & 3 bananas cost 1 penny. He has bought equal number of
apple, chocolate & banana for each son. If the total amount he
invest is 7 penny then how many he has bought from each piece
for his son?

a) 1app, 1cho, 1 banana b)1 app, 2cho,3 banana c)1app, 2cho,
1banana

2. One person had three children. He had 7 pennies. Find the
distribution of the fruits among the three children. A melon
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.

Pattern 36:

1) 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

2)The age of the two friends were in the ration of 6:5. If the
sum of their ages is 66. Then after how many years their ratio
will become 7:6?

a) 11 b) 6 c) 10 d) 12

3) The age of the two friends were in the ration of 2:3. If the sum of their ages is 55. Then after how many years their ratio will become 4:5?

a) 11 b) 33 c) 22 d) 44

Pattern 37:

1) A volume of 10936 l water is in a container of sphere. How many semisphere of volume 4l each will be required to tranfer all the water into the small semispheres?

a) 2812 b) 8231 c) 2734 d) 4222

Pattern 38:

1) A person ismanufacturing a house. He bought 20 ropes of wire which has a density of 300 Kg/m3. The height of the building to be constructed is 40 m. If the capacity of the current passed in the wire is 20 A and the voltage capacity is 80 Volts. Then what will be the opposing force to the current if the wire is used?

a) 2 b) 4 c) 8 d) 1600

Solution: ohms law V=IR, Opposing force of current is resistance, R=v/i

Pattern 39:

1) 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,

Velocity=distance/time, distance travelled by them is equal it

is 81*3=243km, speed of pony=243/5=48.6

3) A horse chases a pony 3 hours after the pony runs. Horse

takes 4 hours to reach the pony. If the average speed of the

horse is 35 kmph, what is the average speed of the pony

Pattern 40:

1)The difference between two no is 9 and the product of the

two is 14.What is the square of their sum?

a) 120 b) 130 c) 137 d) 145

Solution: a-b=9, ab=14, (a-b)2=a2+b2-2*a*b

2) The sum of two no is 5 and the product of the two is

14.What is the sum of their squares?

3) The sum of the squares of two no is 12 and their sum is

15.Find the product of the two no?

Pattern 41:

1) On planet korba, a solar blast has melted the ice caps on

its equator. 9 years after the ice melts, tiny planetoids

called echina start growing on the rocks. Echina grows in the

form of circle, and the relationship between the diameter of

this circle and the age of echina is given by the formula d =

4*$\sqrt{}$ (t-9) for t $\geq$ 9 where d represents the diameter in mm and

t the number of years since the solar blast.Jagan recorded the

radius of some echina at a particular spot as 7mm. How many

years back did the solar blast occur?

a) 17 b) 21.25 c) 12.25 d) 14.05

Solution: radius =7mm, then diameter 2*radius, substitude

diameter the in above equation you will get answer

Pattern 42:

1) A man goes 50Km north , then turned left walked 40Km, then

turned right ? In which direction he is?

a) North b) South c) East d) West

Pattern 43:

1) In T.Nagar the building were numbered from 1 to 100.Then

how many 4's will be present in the numbers?

a) 18 b) 19 c) 20 d) 21.

Solution: You have to count and answer but be prepare with

answer

2) In T.Nagar the building were numbered from 1 to 100. Then

how many 6's will be present in the numbers?

a) 18 b) 19 c) 20 d) 21

3) In T.Nagar the building were numbered from 1 to 100. Then

how many 1's will be present in the numbers?

a) 18 b) 19 c) 20 d) 21

4) In T.Nagar the building were numbered from 1 to 100.Then

how many 0's will be present in the numbers?

a) 18 b) 19 c) 20 d) 11

Pattern 44:

1) A number when divided by D leaves a remainder of 8 and when

divided by 3D leaves a remainder of 21. What is the remainder

left, when twice the number is divided by 3D?

a) 13 b) cannot be determined c) 3 d) 42

Pattern 45:

1) 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,time=distance/velocity,

2) Ferrari S.P.A is an Italian sports car manufacturer based in Marane llo, 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 46 km/hr and the distance traveled by

the Ferrari is 953 km, find the total time taken for Rohit to

drive that distance.

a) 20.72 b) 5.18 c) 238.25 d) 6.18

Pattern 46:

1) A sheet of paper has statements numbered from 1 to 70. For

all values of n from 1 to 70. Statement n says ' At least n of

the statements on this sheet are false. 'Which statements are

true and which are false?

a) The even numbered statements are true and the odd numbered

are false.

b) The odd numbered statements are true and the even numbered

are false.

c) The first 35 statements are true and the last 35 are false.

d) The first 35 statements are false and the last 35 are

false.

Pattern 47:

1) A man goes north 37km.turns left goes 2km.turns right goes

17km.turns right goes 2km. find distance b/w starting ending

point.

a) 54 b) 27 c) 81 d) 67

Pattern 48:

1) If there are 30 cans out of them one is poisoned if a

person tastes very little he will die within 14 hours so if

there are mice to test and 24 hours to test, how many mices

are required to find the poisoned can?

a) 3 b) 2 c) 6 d) 1

Pattern 49:

1) If a and b are mixed in 3:5 ration and b and c are mixed in

8:5 ration if the final mixture is 35 liters, find the amount

of b?

A) 13.34 b) 15.73 c) 16.73 d) 9.45

Solution: Solve for a:b:c,then b ratio is b/(a+b+c)*35

Pattern 50:

1) If we subtract a number with y, we get 4 increase of

number, once it got divided by y itself... Find that number??

A) 13 b) 12 c) 14 d) 11

Pattern 51:

1) It is the class with the seating arrangement in 4 rows and

8 columns. When the teacher says 'start' the girl who is

sitting in first row and first column will say 1, then the

next girl sitting behind her will say 4, the next girl sitting

behind that girl will say 7, in a particular order each girl

is telling a number, the following girls told 10, 13 next turn

is yours what u will say?

a) 15 b) 17 c) 14 d) 16

Solution: It is a series 1, 4, 7, 10, 13.

Pattern 52:

1) It is dark in my bedroom and I want to get two socks of the

same color from my drawer, which contains 24 red and 24 blue

socks. How many socks do I have to take from the drawer to get

at least two socks of the same color?

a) 2 b) 3 c) 48 d) 25

2) Lady has 2 select gloves & hat from a basket. In the dark,

she can distinguish hat & gloves. 14 red, 20 blue, 18 green

are there. Find probability that any selected glove pair has

same color.

3) A lady had fine gloves and hats. 25 blue, 7 red and 9 gey.

She had to select a pair among them. But there was no light so

she had to select in darkness the correct pair with a glove

and a hat. Therefore how many combinations of same color she

can select?

Pattern 53:

1) If the Valentine's Day in 2005 falls on Monday, then on

which day will the Valentine's Day fall on 2010?

A) Saturday b) Thursday c) Wednesday d) Sunday

Pattern 54:

1. A person run from A to B.He took ¼ of the time less to reach B when compare to run at normal Speed.Then how many percentage he has increased his speed?

a) 40 b) 44.4 c) 33.3 d) 22.2

Solution: i do not know perfectly but i have simple logic,1-(1/4)=(3/4),then reverse it so it is 4/3=1.333,1.33-1=33.33 like this

2. An athlete decides to run the same distance in 1/4th less time that she usually took. By how much percent will she have to increase her average speed?

a) 40 b) 44.4 c) 33.3 d) 22.2

Pattern 55:

1. In a building there are 5 rooms.Each having a equal area .The length of the room is 4m and breadht is 5 m.The height of the rooms are 2m. If 17 bricks are needed to make a square meter then how many bricks are needed to make the floor of a particular room?

a) 320 b) 380 c) 340 d) 300

Solution: area of the room is length*breadth=4*5=20m2, For one

square meter it takes 17 bricks, For 20m2 total no of bricks

are 17*20=340,

Pattern 56:

1. One man want to build a wall .The length and breadth of the

wall are 20 and 30 respectively. He need 35 bricks for one

square centimeter then how many bricks he need?

a) 21,500 b) 30,000 c) 21,000 d) 20,000

Pattern 57:

1. In a hotel we can order two types of varities, but we can

make 6 more variteis in home. One can choose the four varities

with two from hotel as must. Find how many ways one can order.

a) 14 b) 15 c) 56 d) 28

Pattern 58:

1. If a pipe can fill the tank within 6hrs.But due to leak it

takes 30 min more. Now the tank is full then how much time

will it take to empty the tank throught the leak?

a) 78 b) 56 c) 66 d) 59

Pattern 59:

1. The bacteria has the probability of split into 3 and probability to die is 1/3rd of the total bacteria.Let the probability is P.Some of them survived with probability 1/5.Then which among the following relation is true?

a)P=1/3+1/5*3 b)P=1/5*(1/8-3)

2. There is a bacteria which has the probability of die 1/3 of its total number or it may tripled. Find out the probability

A. P=1/3+(2/3*p^3) B. P=2/3+(2/3*p^3) C. P=2/3+(1/3*p^3) D P=2/3+(2/3*p^3)

Pattern 60:

1. There was a grand mother in a village who had a grand child.Upon asking her grand childs age she told that she is as older as many days old as her daughters age in weeks and as many days as her own age in years.The sum of the three is 130.then how old is the child.?

Pattern 61:

1) In T.Nagar the building were numbered from 1 to 100.Then how many 4's will be present in the numbers?

a)18 b)19 c)20 d)21

2) In Tnagar many buildings were under residential

category.for buildings they number as 1 to 100. For shops,

corporation numbered between 150 and 200 only prime numbers.

how many time 6 will appear in building numbering?

Pattern 62:

1) Amrith told to Anand in front of a Photo that "He is the

son of my father's son".Find who is in the picture if amrith

have no brothers and sisters.

a) Amrith himself b) Amrith's Uncle c) Amrith's Father d)

Amrith's son

2) One person has no siblings and says," the guy in the photo

is the only son of my father 's son". What is the relation of

the guy to the person?

Pattern 63:

1) One grand father has 3 grand children two of the age

difference is 3.Eldest child age is 3 times the youngest

childs age and the eldest child age is two year more than the

sum of other two children. Find what is the age of the elders

child?

a) 18 b) 22 c) 30 d) 10.

Solution: there are 3 childs,let the age of younger be x,elder

be 3x,so the middle one be m,3x=2+x+m,then we have a-b=3 or

b-c=3,or a-c=3, then for answer we have to go via options,

substitute that in above equations

2) One grandfather has three grandchildren, two of their age

difference is 3, eldest child age is 3 times youngest child's

age and eldest child's age is two times of sum of other two

children. What is the age of eldest child?

3) One grandfather has three grandchildren, two of their age

difference is 3, eldest child age is 3 times youngest child's

age and eldest child's age is two times of sum of other two

children. What is the age of eldest child?

Pattern 64:

1) In a school, for a student out of 100 he got 74 of average

for 7 subjects and he got 79 marks in the 8th subject. what is

the average of all the subject?

a) 76.251 b) 80.25 c) 74.265 d) 74.625

Solution: Total marks=74*7=518, then average=(518+79)/8=74.625

Pattern 65:

1) 3 persons a,b,c were there A always says truth,B lies on

Monday,tusday,& Wednesday.but C lies on thrusday,Friday &

saturday .one day A said"that B & C said to A that" B said

"yesterday way one of the days when I lies",C said

that"yesterday way one of the days when I lies too".then which

day was that?

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

Pattern 66:

1) Which is the smallest no which divides 2880 and gives a

perfect square?

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

Solution: For answer solve via options

Pattern 67:

1) How many 9 digit numbers are possible by using the digits

1,2,3,4,5 which are divisible by 4 if the repetition is

allowed?

a)57 b)56 c)59 d)58

2) how many 13 digit numbers are possible by using the digits

1,2,3,4,5 which are divisible by 4 if repetition of digits is

allowed?

3) By using 1,2,3,4,5,how many 5 digit no. can be formed which is divisible by 4,repetation of no. is allowed??

4) Form 8 digit numbers from by using 1, 2,3,4,5 with repetition is allowed and must be divisible by4?

5) How many of 14 digit numbers we can make with 1,2,3,4,5 that are divisible by 4. Repetitions allowed.

Pattern 68:

1) Consider two tumblers, the first containing Water and next contains coffee. Suppose you take one spoon of water out of the first tumbler and pour it into the second tumbler. After moving you take one spoon of the mixture from the second tumbler and pour it back into the first tumbler . Which one of the following statement holds now?
a) There is less coffee in the first tumbler than water in the second tumblers
b) There is more coffee in the firs tumbler than water in the second tumbler
c) There is as much coffee in the first tumbler as there is water in the second tumbler
d)None of the statements holds true

Solution: Think wisely and answer these are asked in my paper

2 or 3 questions

2) Two bowls are taken, one contains water and another contains tea.one spoon of water is added to second bowl and mixed well, and a spoon of mixture is taken from second bowl and added to the second bowl. Which statement will hold good for the above?

Pattern 69:

1) Six friends decide to share a big cake. Since all of them like the cake, they begin quarreling who gets to first cut and have a piece of the cake. One friend suggests that they have a blindfold friend choose from well shuffled set of cards numbered one to six. You check and find that this method works as it should simulating a fair throw of a die. You check by performing multiple simultaneous trials of picking the cards blindfold and throwing a die. You note that the number shown by the method of picking up a card and throwing a real world die, sums to a number between 2 and 12. Which total would be likely to appear more often – 8,9 or 10?

a) 8 b) All are equally likely c) 9 d) 10

Solution: Calculate how many times 8,9,10 will come when we throw 2 dice, and answer

Pattern 70:

Q1. 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 n1(P). The minimum value of n1(P) over all configurations P of 5 points in the plane in general position (.i.e no three points in P lie on a line) is

a)3   b)5   c) 2   d)1

Ans: 5

For below questions, answers i am not sure whether they are correct or not you have to solve urself

Q2. 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 8) buildings numbered 1 to 1000. How many 3s are used in numbering these buildings?

a) 54 b) 64 c) 265 d) 192

Ans: 192

Some times base value is chang like: 9finger, 1 to 100(base 9)

Q3. 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)1 b)3 c)4 d)0

Q4. Hare in the other. The hare starts after the tortoise has

covered 1/5 of its distance and that too leisurely3. A hare

and a tortoise have a race along a circle of 100 yards

diameter. The tortoise goes in one direction and the. The hare

and tortoise meet when the hare has covered only 1/8 of the

distance. By what factor should the hare increase its speed so

as to tie the race?

a) 37.80 b)8 c) 40 d) 5

Ans: 37.80

Q5. Here 10 programers, type 10 lines with in 10 minutes then

60lines can type within 60 minutes. How many programmers are

needed?

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

Solution:(men*time)/work)

Ans: 10

This type of Q's repeated 4times for me but values are

different.

Q6. 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) 0 b) 27 c) 18 d) 20

The Q's concept is same but the equation of N's is changing.

Q7. Alice and Bob play the following coins-on-a-stack game. 20 coins are stacked one above the other. One of them is a special (gold) coin and the rest are ordinary coins. The goal is to bring the gold coin to the top by repeatedly moving the topmost coin to another position in the stack.
Alice starts and the players take turns. A turn consists of moving the coin on the top to a position i below the top coin ($0 = i = 20$). We will call this an i-move (thus a 0-move implies doing nothing). The proviso is that an i-move cannot be repeated; for example once a player makes a 2-move, on subsequent turns neither player can make a 2-move. If the gold coin happens to be on top when it's a player's turn then the player wins the game. Initially, the gold coinis the third coin from the top. Then

a) In order to win, Alice's first move should be a 1-move.

b) In order to win, Alice's first move should be a 0-move.

c) In order to win, Alice's first move can be a 0-move or a 1-move.

d) Alice has no winning strategy.

Ans: d

Q8. 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 2/3 of winning the game. What is the probability that Paul

will correctly pick the winner of the Ghana-Bolivia game?

a)1/9   b)4/9   c)5/9   d)2/3

Ans: 5/9

Q9. 36 people {a1, a2, ..., a36} meet and shake hands in a

circular fashion. In other words, there are totally 36

handshakes involving the pairs, {a1, a2}, {a2, a3}, ..., {a35,

a36}, {a36, a1}. 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)11   c)13   d)18

Ans: 18

Q10. 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)1/12   b)0   c)12/212 d)11/12

Ans: b

Q11. A sheet of paper has statements numbered from 1 to 40.

For each value of n from 1 to 40,

statement n says "At least and of the statements on this sheet

are true." Which statements are true and which are false?

a)The even numbered statements are true and the odd numbered

are false.

b)The first 26 statements are false and the rest are true.

c)The first 13 statements are true and the rest are false.

d)The odd numbered statements are true and the even numbered

are false.

Ans:c

Q12. There are two boxes, one containing 10 red balls and the

other containing 10 green balls. You are allowed to move the

balls between the boxes so that when you choose a box at

random and a ball at random from the chosen box, the

probability of getting a red ball is maximized. This maximum

probability is

a)1/2   b)14/19   c)37/38 d)3/4

Ans: 14/19

Q13. 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

Ans: d

Q14. 9. A and B play a game of dice between them. The dice consist of colors on their faces (instead of numbers). When the dice are thrown, A wins if both show the same color; otherwise B wins. One die has 4 red face and 2 blue faces. How many red and blue faces should the other die have if the both players have the same chances of winning?

a) 3 red and 3 blue faces   b) 2 red and remaining blue

c) 6 red and 0 blue   d) 4 red and remaining blue

Ans: a

Q15. On planet zorba, a solar blast has melted the ice caps on its equator. 8 years after the ice melts, tiny plantoids called echina start growing on the rocks. echina grows in the form of a circle and the relationship between the diameter of this circle and the age of echina is given by the formula

d = 4 * sqrt (t − 8)for t = 8

Where the represents the diameter in mm and t the number of years since the solar blast.

Jagan recorded the time of some echina at a particular spot is 24 years then what is diameter?

a) 8 b) 16 c) 25 d) 21

Ans: 16

Q16. A sheet of paper has statements numbered from 1 to 40.

For all values of n from 1 to 40, statement n says: 'Exactly n

of the statements on this sheet are false.' Which statements

are true and which are false?

a) The even numbered statements are true and the odd numbered

statements are false.

b) The odd numbered statements are true and the even numbered

statements are false.

c) All the statements are false.

d) The 39th statement is true and the rest are false.

Ans: d

Q17. Alok and Bhanu play the following coins in a circle game.

99 coins are arranged in a circle with each coin touching two

other coin. Two of the coins are special and the rest are

ordinary. Alok starts and the players take turns removing an

ordinary coin of their choice from the circle and bringing the

other coins closer until they again form a (smaller) circle.

The goal is to bring the special coins adjacent to each other

and the first player to do so wins the game. Initially the

special coins are separated by two ordinary coins O1 and O2.

Which of the following is true?

a) In order to win, Alok should remove O1 on his first turn.

b) In order to win, Alok should remove one of the coins

different from O1 and O2 on his first turn.

c) In order to win, Alok should remove O2 on his first turn.

d) Alok has no winning strategy.

Ans: d

Q18. Two pipes A and B fill at A certain rate B is filled at

10, 20, 40, 80. If 1/4 of B if filled in 21 hours what time it

will take to get completely filled

Ans: 23

Q19. Find average speed if a man travels at speed of 24kmph up

and 36kmph down at an altitude of 200m.

Formula is 2xy/(x+y).

Q20. One grandfather has three grandchildren, two of their age

difference is 3, eldest child age is 3 times youngest child's

age and eldest child's age is two times of sum of other two

children. What is the age of eldest child?

Ans: 18

Q21. Ferrari is leading car manufacturer.*Ferrari S.p.A.* is

an Italian sports car. It has enjoyed great success. If

Mohan's Ferrari is 3 times faster than his old Mercedes wich

gave him 35kmph if Mohan travelled 490 km in his ferrari the

how much time(hours) he took?

Easy one try it.

Q22. By using 1,2,3,4,5, how many 12 digit no. can be formed

which is divisible by 4, repetation of no. is allowed?

Ans: (5)^11

Q23. The cost 1 plum is 1 cent, 2 apples is 1 cent, 3 cashew

is 1 cent. If father buys same amount of fruits for his 3 sons

spending 7 cent then what amount of fruit each child will get?

Ans: 1plum, 2apples, 1cashew

Q24. There are some 2 wheelers and 4 wheelers parked total

number of wheels present is 240 then how many 4 wheelers were

there

Ans: For this question answer is deduced from the options.

Q25. One day Alice meets pal and byte in fairyland. She knows

that pal lies on Mondays, Tuesdays and Wednesdays and tells

the truth on the other days of the week byte, on the other

hand, lies on Thursdays, Fridays and Saturdays, but tells the

truth on the other days of the week. Now they make the

following statements to Alice – pal. Yesterday was one of

those days when I lie byte. Yesterday was one of those days

when I lie too. What day is it?

a) Thursday   b) Tuesday   c) Monday d) Sunday

Ans: a

Interview:Then coming to interview my interview is fine i am

from M.Tech, power electronics and drives

In my college for non IT branches separate technical panel

came.For M.tech power electronics and drives and power systems

one technical guy came and interviewd us. But he took around

45 min or more for each person. For me my interview gone for

around 45 min. Mainly they asked questions on electrical only

not on C, C++, Java

Mainly i told to him about my project both B.Tech and M.Tech

answer some HR questions like tell me about yourself, why you

came to software, tell me about TCS, why you had taken power

electronics, if i reject you what will you do, can you

relocate your self, some applications of our branch ie power

electronics and some day to day applications in it and some

basic electrical questions like kirchoffs laws, ohms law,

motor principle, generator principle, why transformer is used.

What are the recent trends in power electronics

Thats it

All the best and see you in TCS.