## 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
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 $\ldots$. 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) $\underline{26}$ B) 25 c) 5 d) 27
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 $10,20,40,80,160 \ldots \ldots$. 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 $1 / 4$ 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 $1 / 4$ in 19 hours then, what is the time taken to fill up the tank completely?
a) 21 B) 38 c$) 57 \mathrm{~d}) 76$

## 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
2. In a market 4 men are standing. The average age of the four before 4 years 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
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) $8 \underline{\text { b) } 6}$ 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) $8 \underline{b}) 6$ 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
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) $4.44 \mathbf{~ m p h ~ b ) ~} 4.8 \mathrm{mph}$ 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) 7 mph d) 7.5 mph
4. Find average speed if a man travels at speed of 24 kmph up and 36 kmph down at an altitude of 200 m ?
a) $\mathbf{2 8 . 8} \mathbf{~ m p h ~ b ) ~} 27.8 \mathrm{mph}$ c) 27.5 mph d) 30 mph
5. Person travels to a hill, if he goes from A to B with speed of 4 kmph and returns back to B with speed of 5 kmph . What is his average speed of journey?
a) 4.5 kmph b) 4.44 kmph c) 9 kmph d) 4.245 kmph
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 24 kmph up and 36 kmph down at an altitude of 200 m .
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) $\mathbf{1 3 5}$ c) 21 d) 71
2. A boy wants to make cuboids of dimension $5 \mathrm{~m}, 6 \mathrm{~m}$ and 7 m from small cubes of .03 m 3 . 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) $\mathbf{2 0 0 0}$ b) $\mathbf{5 0 0 0}$ c) $\mathbf{3 0 0 0}$ 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 9 cm length, 10 cm width, 3 cm 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:

hmm ..... ivi general formula kada so u can do, anyway they are allowing calci so easy......

1. $(40 * 40 * 40-31 * 31 * 31) /(40 * 40+40 * 31+31 * 31)=$ ?
a) 8 b) 9 c) 71 d) 51
2. $(98 * 98 * 98-73 * 73 * 73) /(98 * 98 * 98-73 * 73 * 73)=$ ?
a). 171 b ). 4 c ). 420 d ). 415
3. $(209 * 144)^{\wedge} 2+(209 * 209)+(209 * 144)+(144 * 144)=$ ?
a) 905863729 b) 905368729 c) 905729368 d) 65

## Pattern 9:

This is easy too.... U can do....

1. $((4 x+3 y)+(5 x+9 y)) /(5 x+5 y)=?$ as $(x / 2 y)=2$
a) 8 b)none c) 16 d) 15
2. $x / 2 y=2 a$,then $2 x / x-2 a y=$ ?
a) 4 b) 8 c) 16 d) 2
3. $3 \mathrm{X} / 5 \mathrm{Y}=5 \mathrm{Y} / 3 \mathrm{X} . \ldots$. Find the value of $\mathrm{X} / \mathrm{Y}$
a) $3 / 5$ b) $5 / 3$ c) $2 / 5$ d) $5 / 2$
4. What is the value of $(3 \mathrm{X}+8 \mathrm{Y}) /(\mathrm{X}-2 \mathrm{Y})$, if $\mathrm{X} / 2 \mathrm{Y}=2$
a) 8 b)none c) 10 d) 13
5. $(4 \mathrm{x}+3 \mathrm{y})+(5 \mathrm{x}+9 \mathrm{y})) /(5 \mathrm{x}+5 \mathrm{y})=$ ? as $(\mathrm{x} / 2 \mathrm{y})=2$
a) $48 / 5$ b) $46 / 5$ c) $47 / 5$ d) $49 / 5$
6. $((4 x+2 y) /(4 x-2 y)=?$ as $(x / 2 y)=2$
a) $8 / 7$ b) $9 / 7$ c) $11 / 7$ d) $6 / 7$

## Pattern 10:

Formula: NcM

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
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. 861714353175 $143 ?$
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. $1!+2!+\ldots \ldots .+50!=$ ?
a)3.1035* $10^{\wedge} 64$ b) $2.1021^{*} 10^{\wedge} 65$ c) $3.1035^{*} 10^{\wedge} 63$ d) $3.1035^{*} 10^{\wedge} 62$
6. $1,2,3,6,7,14, \quad 32$ ?
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 $\mathrm{a}, \mathrm{b}$, c weighted separately 1 st $\mathrm{a}, \mathrm{b}, \mathrm{c}$, then $\mathrm{a} \& \mathrm{~b}$, then $\mathrm{b} \& \mathrm{c}$,then $\mathrm{c} \& \mathrm{a}$ 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

## 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 5 consecutive music tones of the same type?
a) 1 in 16 B) 1 in 4 c) 1 in 8 d) $\mathbf{1}$ in $\mathbf{3 2}$
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 $25 \mathrm{~cm}, 11 \mathrm{~cm}$ 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
2. A triangle is made from a rope. The sides of the triangle are $21 \mathrm{~cm}, 24 \mathrm{~cm}$ 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 $a x+b y+c z+d=0$
2. What is the distance of the $z$-intercept from the x -intercept in the equation $a x+b y+c z=d$ (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 $2 \mathrm{~km} / \mathrm{hr}$ in east direction. After that he travelled in south direction \& reached at his lab in 2 hrs. Then what is the color of the bear?
a)white b)black c)gray d)brown

## 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 1 m length, then how many cuts are to be made to cut the ropes into 153 pieces?
a) 153 b) 152 c) 154 d) 155
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
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) $\mathbf{2 8 0}$ 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 $\$ 45 \mathrm{a}$ 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) $\$ 486$

## 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? Ans:15

## 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

## 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
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) $6 / 10$
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
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
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) 128

## 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 1 p to 31 p. You need to provide exact change at the counter. You have 31 p coin. In how many parts will $u$ divide 31 p so that u will provide the exact change required and carry as less coins as possible?
a) 4 b) 5 c) 6 d) 7

## 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
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 1 penny, 2chocalate costs 1 penny \& 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$) 12$
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
2) 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$) 33 \mathrm{c}) 22 \mathrm{~d}) 44$

## PATTERN 37

1)A volume of 109361 water is in a container of sphere. How many semisphere of volume 41 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 $300 \mathrm{Kg} / \mathrm{m} 3$. 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

## 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 81 Kmph . Then what is the average speed of the pony?
a) 46.4 b) 51 c) 53.4 d) 48.6
2) 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 s the average speed of the pony?
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 s 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
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 7 mm . How many years back did the solar blast occur?
a) 17 b) 21.25 c) 12.25 d) 14.05

## PATTERN 42

1)A man goes 50 Km north , then turned left walked 40 Km , 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
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 $3 D$ leaves a remainder of 21 . What is the remainder left, when twice the number is
divided by 3D?
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 $35 \mathrm{~km} / \mathrm{hr}$ and the distance traveled by the Ferrari is 490 km , find the total time taken for Rohit to drive that distance.

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

2) 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 $46 \mathrm{~km} / \mathrm{hr}$ and the distance traveled by the Ferrari is 953 km , find the total time taken for Rohit to drive that distance.
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 $\mathbf{3 5}$ statements are true and the last $\mathbf{3 5}$ are false.
d) The first 35 statements are false and the last 35 are false.

## PATTERN 47

1) A man goes north 37 km .turns left goes 2 km .turns right goes 17 km .turns right goes 2 km . find distance $\mathrm{b} / \mathrm{w}$ starting ending point.
a) $\mathbf{5 4}$ 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?ans:29
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$) 9.45$

## 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$) 14 \mathrm{~d}) 11$

## 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) $\mathbf{1 6}$

## 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) $\mathbf{4 8}$ d) 25
2) Lady has 2 select gloves \& hat from a basket. In the dark, she can distinguish hat\&gloves.14red, 20blue, 18 green r 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 grey. 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 $1 / 4$ 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$) 44.4 \mathrm{c}) 33.3 \mathrm{~d}) 22.2$
2. An athlete decides to run the same distance in $1 / 4$ th 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 4 m and breadht is 5 m . The height of the rooms are 2 m .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$) 300$

## 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) $30,000 \mathrm{c}) \mathbf{2 1 , 0 0 0} \mathrm{d}) 20,000$

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 6 hrs.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 $1 / 3 \mathrm{rd}$ 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) $\mathrm{P}=1 / 3+1 / 5 * 3 \mathrm{~b}) \mathrm{P}=1 / 5 *(1 / 8-3)$
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. $\mathrm{P}=1 / 3+\left(2 / 3^{*} \mathrm{p}^{\wedge} 3\right)$
B. $\mathrm{P}=2 / 3+\left(2 / 3 * \mathrm{p}^{\wedge} 3\right)$
C. $\mathrm{P}=2 / 3+\left(1 / 3^{*} \mathrm{p}^{\wedge} 3\right) \mathrm{D} P=2 / 3+\left(2 / 3^{*} \mathrm{p}^{\wedge} 3\right)$

## 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?ans:his son

## 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 .
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

## PATTERN 65

1) 3 persons $\mathrm{a}, \mathrm{b}, \mathrm{c}$ 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

## 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?ans: $5^{\wedge} 8$
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 $\mathbf{5}^{\wedge} \mathbf{1 2}$
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 by 4 ?
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
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

## PATTERN 70

69) 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 $\mathrm{n} 1(\mathrm{P})$. The minimum value of $n 1(\mathrm{P})$ 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) 8
