Q: There is a toy train that can make 10 musical sounds. It makes 2 musical sounds after being defective. What is the probability that same musical sound would be produced 5 times consecutively? ( 1 of $\qquad$ ) ?
Answer: $1 / 2$ * $1 / 2$ * $1 / 2$ * $1 / 2$ * $1 / 2=1 / 32$
32 will be the answer.

QAlok is attnding a workshop "how to do more with less" and todays theme is working with fewer digits. The speakers discuss how a lot of miraculous mathematics can be achieved if mankind (as well as womankind) had only worked with fewer digits. The problem posed at the workshop is :"how many 7 digit mnumners can be formed using the digits 1,2,3,4,5 (but with repetetion) tha are divisible by 4 ? Can you help alok to find answers?
15625
6250,
19532
19531

Q 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?

Answer: 20 years.

Q The ages of two friends is in the ratio $6: 5$. The sum of their ages is 66 .After how many years will the ages be in the ratio $8: 7$ ?

Answer: 12 years.

Q (There was a long story, l'll cut short it). There are 5 materials to make a perfume: Lilac, Balsalmic, Lemon, Woody and Mimosaic. To make a perfume that is in demand the following conditions are to be followed: Lilac and Balsalmic go together. Woody and Mimosaic go together, Woody and Balsalmic never go together. Lemon can be added with any material. (Actually they had also mentioned how much amount of one can be added with how much quantity of the other; but that's not needed for the question.) All of the following combinations are possible to make a perfume EXCEPT:

Balsalmic and Lilac
Woody and Lemon
Mimosaic and Woody
Mimosaic and Lilac

Answer: Mimosaic and Lilac.
Q. Anoop managed to drow 7 circles of equal dadii with their cnetres on the fdigonal of a square such that the two extreme circles touch two sides of the square and each middle cirle touches tow cirles on either side. Find the ration of the side of the square to radius of the circle. You may assume that square root of 2 is $1: 4$
10.40:1
13.90:1
11.80:1
15.90:1

Q: 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.
Answer: 8 * $7=56$

Q: 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?
Answer:280.5625
Q. What is the distance between the $z$-intercept from the $x$-intercept in the equation $a x+b y+c z+d=0$. (I do not remember the values of $a, b, c, d$ )
Q. 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?
Answer: 33.33\%

Q: 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?

Q: There is 7 friends (A1,A2,A3....A7).If A1 have to have shake with all with out repeat. How many hand shakes possible?

Q: There are two pipes A and B. If A filled 10 liters in a hour $B$ can fills 20 liters in same time. Likewise B can fill $10,20,40,80,160$....if $B$ filled in (1/16) th of a tank in 3 hours, how much time will it take to fill completely?
Answer:7 hours
Q. The teacher is testing a student's proficiency in arithmatic \& poses the following Q:1/2 of a number is 5 more than $1 / 6$ of the sam number. What is the number? Canu help the student to dfind the anw

15
16
3
14

Q: (Keywords): Sports readers, 10 tables,4chairs per table, each table has different number of people then how many tables will left without at least one person?
Ans : 6

Q: The ages of two friends is in the ratio 5:6. After how many years will the ages be in the ratio 7:8?

Answer: 10 years.

Q: What is the distance of the $z$-intercept from the $x$-intercept in the equation $a x+b y+c z+d=0$. (I do not remember the values of $a, b, c, d)$

15: 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?
Answer: 33.33\%
Q. There are two water tanks $A$ and $B$. $A$ is much smaller than $B$. While watel fills at the rate of one litre 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 litres, second hour it has 20 and so on). If tank $B$ is $1 / 8$ filled after 5 hours, wat is $d$ total duration required to fill it completely?
3 hrs
7 hrs
8 hrs
9 hrs
Q. 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 find \# shopkippers sailing different things. An apple cost 1 penny, 2chocalate costs 1 penny.\& 3 bananas cost 1 penny. He has bought equal no. 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
Q. 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 1 mile 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 in2 hrs. Then what is the colour of the bear?

I think ans is white
a)white b)black c)gray d)brown
Q. In a particular city there are 100 homes numbered from 1,2,3..........100. Thecity was build by a builder from chennei. There was 45 shop in the town which was build by a builder from Mumbai. THE $2 n d$ builder can build the in $1 / 2$ time as compared to 1 st builder. If the 2 nd builder builds in 15 days,then how many 2's are used by the builder from Chennai in numbering the 100 homes?
a) 17 b) 18 c) 19
ans d) 20
c) 19
Q. A circular dashboard of radius 2.0 foot is at a distance of 20 feet from you. You throw a dart at it and it hits the dartboard at some point ! in the circle. Wat is the probability that Q is closer to the center of the circle than the perifhery

Q .MR dash has 3 sons whose ages are respectively $a, b, c$. The grandfather has bought a cycle for the eldest son, mother has bought a bag for the youngest one which cost Rs150/. The sum of two age of the elder son \& one son is 15 . The difference of age of sons is $3 \& 2$. Then what is the age of the eldest son?
a) 10 , b) 11 , c) 12, d) 13
Q. We all know that Arya bhatta is the greatest mathematics belongs to india. When his daughter Mayabati was in her teen age he discovered a problem. At that time the age of mayabati is a prime number, let that age is $a$. After some years her age becomes $b$. then Arya Bhatta was able to solve that problem wit the help of he daughter mayabati. If $a-b=5 \&$ product of $a \& b$ is 26 then what is the sum of two squares?
A) 77 b) 45 c) 89 d) 67
Q.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? Ans:5 to the power 12
Q. $\left(40 * 40^{*} 40-31^{*} 31 * 31\right) /\left(40 * 40+40^{*} 31+31 * 31\right)=$ ? a simle calcutation
23. $x / 2 y=2 a$,then $2 x / x-2 a y=$ ?(some thing like this .very easy )
Q. A hare and a tortoise have a race along a cirlcle of 100 yards diameter. The tortoise goes in one direction and the hare int he other. The hare starts after the tortoise has covered $1 / 5$ of its distance and that too leisurely. The hare and tortoise meen when the hare has covered $1 / 6$ of the distance. By what factor should hare increase its speed so as to tie the race

30
6
5
19.00
Q. A big Question describing a story.After that a number is given eg 2880.by what if we divide the number it II become a perfect square?Ans:5
Q. 1st a story. Then a simple ratio problem. The question was if the ratio of age of two persons is $5: 6$,sum of present age is 33 ,then in how many years the ratio of their age becomes $7: 8$ ?
a) 3 b) 4 c) 5 d) 6
Q. Mr behera wants to build $A$ house for his wife. In this there are 5 rooms each having equal area. The length of each room is 4 m ,,breadth is 5 m . the height of the rooms are 2 m . if to make a sq meter we need 17 bricks ,then how many bricks are needed to make the floor of a particular room?
Q. A very big story.on Tuesday college parking place have only 4 wheelers \& bicycles,total no of wheels was 182 ,yhen what is the possible no of bicycles?
a)20 b 19 c 18 d 17

A hollow cube size 5 cm is taken, with a thickness of 1 cm . its made of smaller cubes of size 1 cm .

If 3 daces of the other surface of the cube, totally how many daces of the smaller cubes remain unpainted?

825
513
900
525
Q. Simple question bt big one on average age.sth like a,b,c weigheted separately 1 st $a, b, c$,then a \& b,then b\&c ,then c\&a at last abc,the last weight was 167 ,then what will be the avg weight of the 7 weight?
Q. Arrange the jumbled letters to make a perfect word RGTEI(sth like this). Find to which category it belong?(not so easy, I was bt able 2 solve the problem .the number of the question was 34)
A)town b)vegetable c)animal d) bird
Q. 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?
Ans: a Sunday b thrusday c saterday d.Tuesday
Q.a long story \& with in it a mathematical series present like

$$
861714353071 \text { _ } 143 .
$$

Q people (a1, a2..., a30) meet and shake hands in a circular fashion. In other words, there are totally 30 shakehanders involving the pairs, (a1, a2),...,(a29, a30), (a30, a1). Then the size of the smallest set of people such that the rest have shaken hands with atleast one person in the set is 11

10
9
15
Q. One man want to build a wall the length and breadth of the wall are 20, 30 respectively. He need 35 bricks for one square centimeter then how many bricks he need?

Ans:I*b*35(no of bricks needed for sqcm)
Q. one person had three children.he has 7 pennis.then how he can distribute the fruits among his
child by folloing conditions.
a)he can get one water millon for 1 penny.
b)he can get 2 oranges for 1 penny.
c) he can get 3 grapes for 1 penny.

Ans: 2 water millon 1 orange 1 grape
Q. $1 / 3 \mathrm{rd}$ of a number is more 3 than the $1 / 6$ th of a number then find the number?

Ans:18
Q. 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?
Ans:
For 1 to $10-1$ six
2 to 20-1 six
Similarly upto 59 we utilise six, 5 times
from 60 to 69 (including 66) - 11 times
from 70 to $100-3$, hence ans $=5+11+3=19$
Ans:19.
Q. After the typist writes 100 letters and addresses 100 envelopes, she incerts the letters randomly into envelopes (1 letter per envelope). What is the probability that ewxactly 1 letter is incerted in an improper envelope?

1/100
1-1/100
$1 / 100$ !
0
Q. . one grand father has 3 grand child.eldest one age is 3 times of the youngest child age.sum of two youngest child age is more than two of eldest one age.find the eldest one age?
Ans: 15(we can easily predict from options, as we take y as 15)
Q..difrence $\mathrm{b} / \mathrm{w}$ two nubers is 4 .and their product is 17.then find the sum of their squers?

Ans: 70 (By using ( $x-y$ )2=x2+y2-2xy)
Q. A man has some socks in his drawer -- 15 identical blue, 41 identical red, 29 identical black. The lights are out and it is totally dark. How many socks must he take to make sure he has a pair of each colour?

51
49
56
72
Q. . I dont remember exactly the question, one logical problem stating the colour of beer?

Ans: white.
Q. . find category from following Jumbled letters, parakeet(answer)

Ans: bird(category)
Q. suspects are rounded by the police and questioned about a bank robbery. Only one of them is guilty. The suspects are made to stand in a line and each person declares that the person next on his right is guilty. The rightsome person is not questioned. Which of the follwoing possibilities ar etrue? A. All the suspects are lying B. The left most suspect is guilty. C. The righmost suspect is guilty.
Aand B
B only
A only
And C
Q. . which is the smallest digit when devides the 2880 gives perfect squre.?

Ans:5(we can easily predict from options, as we devides them with 2880)
Q. I don't have any brothers and sisters.by pointing a picture that man said that his father is my fathers .son then who is he?

Ans:his son.
Q.. 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?
Solution: Here the question appear as an easy one, but carried a lot of unwanted sentences and unwanted datas(i dint mention above) in exam which may confuse $u$ on solving technique.

So now we can compute $x$ from above equation. ( $x=41,6 x=246$ )
Let now we compute $\mathrm{y},((6 \mathrm{x}+\mathrm{y}) / 7)=45$, as we have value of x , compute y .
Ans: 69
Q.The ratio $\mathrm{b} / \mathrm{w}$ the ages of two pwrsons is $6: 5$.and sum of there ages is 77 then how many years later there ratio becomes 8:7?

Ans: we can easily predict from options
Q. For the king's revelry 6 barrels of beer have been ordered. however, it was found that one of them is poisoned. The poison takes effect even if consumed in the tiniest amount after 14 hours. you need to find, within 24 hours, the poisoned barrel and have at your disposal some beer guzzling mice. The smallest number of mice required to find the poisoned barrel is

2
3
4
6
Q. Horse started to chase dog as it relieved stable two hrs ago. And horse started to ran with average speed $22 \mathrm{~km} / \mathrm{hr}$, horse crossed 10 mts road and two small pounds with depth 3 m , and it crossed two small street with 200 mts length. After traveling 6 hrs, 2 hrs after sunset it got dog. compute the speed of dog?

Ans: As we have speed and travel time of horse, we can get distance travelled by it...
Hence d $=22^{*} 6=132 \mathrm{~km}$,
Exactly this 132 km was travelled by dog in 8 hours (as it started two hours earlier).
Hence speed of $\mathrm{dog}=132 / 8=16.5 \mathrm{~km} / \mathrm{hr}$
Ans: $16.5 \mathrm{~km} / \mathrm{hr}$.
Q..six friends go to pizza corner there $r 2$ types of pizzas.and six different flavors $r$ there they has to select 2 flavors from 6 flavors what's chanses to select?

## Ans:6C2

## 46.3, $22,7,45,15, ?, 31$

Solution: Here it appear simple, because it arranged in arranged in sequence manner, but the
actual question was some what twist mentioning fibonacci series and more over question was in statements (no numbers).. hence first try to understand the question well.
here let group alternate terms $3,7,15,31(3+4=7,7+8=15,15+16=31)$
Similarly for second group $(22,45, ?(22+23=45,45+46=91)$ hence ans is 91 .
Q. 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 $P$ is denoted by $n 1(P)$. The maximum value of $n 1(P)$ over all configurations $P$ of 15 points in the plane is

14
15
7
16
Q. cycles and 4 wheelors problem?

Ans: We can easily predict from options

Q .some irrivvelent data.in last two lines problem will be there.
One man walks certain distance with 5 kmph .and walk back the same
Ans: A
$Q . A$ and $B$ tanks $r$ there. $1 / 8$ th of the tank $B$ is filled in 22Hrs.what is time to fill the tank full?
50.5 friends went for week end party to Mc donalds restrurent and there they measure there weights .some irrrrrrrrrrrrrrrilevent data.finel measure is 155 kg then find the average weight of 5 people?

Ans: 155/5=31
Q. 2 pots $r$ there. 1 st pot is filled with ink and $2 n d$ pot is filled with water.take 1 spoon of ink from 1st pot and pore it in 2nd pot.and take 1 spoon of mixture from 2nd pot and pore it in 2nd pot then which one of following is true?

Ans: Water in 1st pot is less than the ink in 2nd pot.
Q. There are two boxes, one containing 33 red balls and other containing 21 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
Q.:One electronic problem?Ohm's law

Ans: V=IR
Q.There $r$ ten spots in library and each spot has 4 tables and ten readers ar there . sorry I don't remember complete question?
Ans: None
$Q$ :lion and tiger $r$ there.lion lies on Monday,tues, wends and tiger lies on thurs,frid,sat.
Lion said that today is one of those days when I lies.
Tiger said that today is one of those days when I lie too.Then find today?
Ans: Thursday
Q. 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?

Solution: it is given as after 2 yr average age will be 43 so now the average is 2 yr . After addition of 7th person avg is 45 so 7 th person wiil be $45+\left(6^{*}(45-4)\right)$

Ans: 69
Q. Horse started to chase dog as it relieved stable two hrs ago. And horse started to ran with average speed $22 \mathrm{~km} / \mathrm{hr}$, horse crossed 10 mts road and two small pounds with depth 3 m , and it crossed two small street with 200 mts length. After traveling 6 hrs, 2 hrs after sunset it got dog. compute the speed of dog?

Ans: As we have speed and travel time of horse, we can get distance travelled by it...

Hence $d=22^{*} 6=132 \mathrm{~km}$,

Exactly this 132 km was travelled by dog in 8 hours (as it started two hours earlier).

Hence speed of dog $=132 / 8=16.5 \mathrm{~km} / \mathrm{hr}$
Q. $3,22,7,45,15, ?, 31$

Solution: Here it appear simple, because it arranged in arranged in sequence manner, but the actual question was some what twist mentioning fibonacci series and more over question was in statements (no numbers).. hence first try to understand the question well.
here let group alternate terms $3,7,15,31(3+4=7,7+8=15,15+16=31)$

Similarly for second group $(22,45, ?(22+23=45,45+46=91)$ hence ans is 91 .
Q. The citizens of planet Oz are 4 fingured and thus have developed a number system in base 4. A certain street in Oz contains 100 buildings bumberred from 1 to 100 . How many 2's are used in numbering these buildings? Express your answer in base 10.
12
8
4
10
Q. 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?

Ans:
this type of question if it is asked how many 2,3,4,5,6,7,8,9 then you bindly write the answer as 20.but for 1 answer wiil be 21 as 100 is included
Q. $((4 x+3 y)+(5 x+9 y)) /(5 x+5 y)=?$ as $(x / 2 y)=2$

Ans: as $\mathrm{x}=2 \mathrm{y}$ put the value and get the answer.

Q: If we subract a number with $y$, we get 4 increase of number, once it got divided by $y$ itself.. Find that number??

Ans: 12 (we can easily predict from options, as we take y as 6 )
Q. I dont remember exactly the question, one logical problem stating the colour of beer?

Ans: white.what ever the question about the color of beer means you wrote the answer as white because polar beer.this question is very lengthy don't burther about that.

On the planet Oz , there are 8 days in a week - Sunday to Saturday and another day called Oz day. There are 36 hours in a day and each hour has 90 minutes while each has 60 seconds. As on earth, the hour hand covers the dial twice every day. Find the approximate angle between the hands of a clock on Oz when time is 16:40 am

169 deg
331 deg
151 deg
211 deg
Q. Jumbled letters, parakeet(answer)

Ans: bird(category)
Q. Im only son for my parents. (some irrelevant statements in the middle to distract $u$ ). The man in picture is my father's son.(some irrelevant statements). who is he?
64.A toy train can make 10 sounds sound changes aftr every 4
min. $\qquad$
$\qquad$
now train is defective and can make only 2 sounds $\qquad$
find probability that same sound is repeated 3 times consecutively(1 OUT OF
$\qquad$
1.16
2.8
3.12
4.4

ANS:
$(1 / 2)^{*}(1 / 2)^{*}(1 / 2)=(1 / 8)$
thus 1 out of 8

Q
$\qquad$
$\qquad$
$\qquad$
resistance is $X$ ohm voltage $Y$ then wat is current
1.
2.
3.
4.
ans: $\mathrm{V}=\mathrm{IR}$
Q. I have 3 grandsons
age diff btw 2 of grandsons X yrs
1 st grandson is twice elder than younger one
adiition off ages of all the three is $y$
thn what is age of eldest grandson??(there is some value in X and Y )
Q. 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 35
kmph
if Mohan travelled 490 km in his ferrari
the hw much time(hours) he took??
1.8
2.4
3.7
4.7.33
(options may be different)
Q.lion rat stayin in jungle happily.

Lion lies on : MON TUE WED
RAT lies on :WED THURS SAT
if lion says: I didnt lie yesterday
RAT says : e1 i didnt lie yesterday
so what day is today??

The ratio of current age of $X$ and $Y$ is 5:7, after hw many years der age ratio will b 7:9?
Q. A sheet paper has statements numbered from 1 to 10 . For all values of $n$ from 1 to 10 , statement $n$ says "at most $n$ of the statements on this sheet are false". Which stratements are true and which are false?

All statements are false
The odd numberred statements are true and the even numberred are false The even numberred statements are true and the odd numberred are false All statements are true
Q. Inspired by fibonacci series sanket decided to create is own series which is
$1,2,3,7,7,22,15,67, \ldots$.
lik dis,then what no come immediately before 63?
ans= 202
xpalnaton ;check altenate no.1,3,7,15=====>n*2+1
similarly $2,7,22,67=======>n^{*} 3+1$
so series is $1,2,3,7,7,22,15,67,31,202,63 . \ldots . . .$.

The pacelength $P$ is the distance between the rear of two consecutive footprints. For nen, the formula, $n / P=113$ gives an approximate relationship between $n$ and $P$ where, $n=n u m b e r$ of steps per minute and $P$-pacelength in meters. bernard knows his pacelength is 106 cms . The formula applies to Bernard's walking. Canculate Bernard's walking speed in KMPH.

10
66,
7.62
9.38
119.78
Q. 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??

Ans-last 2 place should be divisible by 4
So possible values at last place are $12,24,32,44,52$ this can be arranged in 5 ways The rest 3 places can be filled in $5^{*} 5^{*} 5$ way so total is $5^{\wedge} 4$
Q. The cost 1 plum is 1 cent ,2 apples is 1 cent, 3 banana is 1 cent. $\qquad$
if rahul buys same amount of fruits for his 3 sons spending 7 cent den what amount of fruit each child will get??
ans: 1 plum ,2 apple, 1 banana
xplanation:7/3=2.333 cents for each child
according to ans given for d sum each child will get 1 plum ,2 apple, 1 banana
Q. Middle earth is a fictional land inhabited by Hobbits, Elves, dwarves and men, The hobbits and the Elves are peaceful creatures who prefer slow, silent lives and appreciate nature and art. The dwarves and men engage in physical games. The game is as follows. A tournoi is one, where out of the tow teams that play a match, the one that loses get eliminated. The natches are played in different rounds where in every round; half of the teams 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 7 rounds in a knock-out tournoi how many matches were played?
Q. 2880 is divided by which smallest no. so we get no. which is perfect square???
ans= 5
xplanation 2880/5=576 sure sort question.
Q. There are to prime no........(with some nonsence stuff) $\qquad$ den addition of two prime no is $13, \mathrm{n}$ multiplication is 21 , den wat r some of der squares?
Explanation : $\mathrm{XY}=21$ and $\mathrm{X}+\mathrm{Y}=13$...solve using calci.. ans of X \& Y will b in points..den $\mathrm{x} 2+\mathrm{y} 2=$ ??
Q. Smita was makin 1 design .....(again some nonsence)....size of larger cube to be made is 5*5*5........
using smaller cubes of $1^{*} 1^{*} 1 \ldots$...she created solid larger cube ..den she decided to make hollow cube...
den hw many $1^{*} 1^{*} 1$ cubes rqd to make hollow larger cube

Ans $=104$
Explanation $(25+25)+(15+15)+(12+12)=104$
Q. $2 X / 5 Y=5 X / 3 Y$...den wat is $x / y$
Q. A pizza parlor provides pizzas...there wer 2 toppings available initially peperoni and salami. but now they,ve introduces 8 new toppings (some names) to select from...... a person wishes to buy two DIFFERENT pizzas of NEW topping....in how many ways he can do that??
ans: $8 \times 7=56$
Q. 24 people meet and shake hands. The maximum number if possible if there is to be no "cycle" of handshakes is (A cycle of handshakers is a sequence of people a1, a2,..., ak, $k>2$ such that the pairs (a1, a2), (a2, a3),...(a\{k-1\}. ak), (ak, a1) shake hands)

21
23
20
22

Q Person travels to....(some nonsence stuff).....if he goes from $A$ to $B$ with speed of 4 kmph and returns back to $B$ with speed of $5 \mathrm{kmph} . .$. what is his avg. speed of journey??(values may b different)

Ans: 4.44(its NOT 4.5)
Explaination : $2 \mathrm{PQ} /(\mathrm{P}+\mathrm{Q})===2^{*} 4 * 5 /(4+5)=4.44 \mathrm{kmph}$
Q. There is a dice having value frm 1 .. 6 on each face......and a pack of cards having face card aces .....
(hugh chunk of nonsense)......when 2 dies are thrown and their scores are added then which sum will come max number of times??
1.8
2.9
3.10
4.11

Ans: 8
Explanation: 8----2,6 3,5 4,4

9----4,5 3,6
10----5,5 4,6
11---- 5,6
thus 8 's probability is more
Q. Given 3 lines in the plane such that the points of intersection from a triangle with sides of length 20,20 and 26 , the number of points equidistant from all the 3 lines is

4
3
1
0
Q. "susha brought terilon cloth and rope to (some nonsence nw jst go to last 2 lines)....".... if rope is 153 mtr long and it is to be cut into pieces of 1 mtr long then how many times will she have to cut it??
Ans: 152 times
Q. sheet of paper has statements numbered from 1 to 10 . For all values of $n$ from 1 to 10 , statement $n$ says " at least $n$ of the statements on this sheet are false. Which statements are true and which are false?

The even numberred statements are truw and the odd numberred are false.
The first half of the statements are false and the last half statements are truw The first half of the statements are truw and the last half statements are false The odd numberred statements are tru and the odd numberred are false.
Q. There are some 2 wheelers and 4 wheelers parked $\qquad$ (some nonsense) $\qquad$ total number of wheels present is 240
then how many 4 wheelers wer there
Ans-
This can be done by looking at the option first check the no of bicycles and then multiply it by 2. And then substract the multiplication value from 240 if the value is divided by 4 then that is the answer
Q. $1 / 3$ of a number is 6 more than $1 / 6$ of that number then what is the number

Ans $=x / 3=x / 6+6=36$
Q. The cost of making a robot consists of material cost,repairing cost,coloring cost and is in the ratio 3:4:5.if the material cost is 1200 then find out the cost of the robot.
Ans- simple 3 part is 1200 so $3+4+5=12$ part=?
Q. For the FIFA world cup, Paul the octopus has been the winner of each match with amazing sucess. It is rumoured that in a match between 2 teams, $A$ and $B$. A with the same probability as A's chances of winning. Lets's Assume such sumours to be truw and that in a match between Ghana and Bolivia, Ghana the stronger team has a probability of $2 / 3$ of winnign the game. Wat is $d$ probability tha tpaul will correctly pic the winner of the same game.
Q. There are pepsi 1 litre \& oil 1 litre .it is given as 1 spoon of pepsi is aken and is mixed with Oil. Then 1 spoon oil\&pepsi is taken and is mixed with pepsi then which of the condition holds true. Ans-the amount of pepsi in oil is mre than amount of oil in pepsi.
Q. An tank is filled with water .in first hour 10 lit ,in second hour 20 lit and in 3 rd hour time 40 lit.if time taken to fill $1 / 4$ of the tank is 5 hr .what is the time required to fill up the tank.

Ans-as the water is filled as twice speed. and in 5 the hour $1 / 4$.so in 6 hour $1 / 2$.so answer 7 th hour.
Q. Which is the smallest no divides 2880 and gives a perfect square?
a. 1 b. 2 c. 5 d. 6 Ans: c
Q. Alok and Bhanu play the follwoing min-max expression $N=12+X$ * $(Y-Z)$, where $X, Y$ and $Z$ are variables representing single digits ( 0 to 9 ), Alok wud like to maximize N while bhanu woud like to minimize it. Towards this end, Alok chjooses the a single digit number and bhanu substitutes this for a variable of her choice ( $\mathrm{X}, \mathrm{Y}$ and Z )Alok then chooses the next value and Bhanu, the variable to substitute the value. Finally Alok proposes the value for the remaining variable. Assuning both play tpo their optimal stategies, the value of N at the end of the game would eebe??
Q. 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?
(Ans: second liquid in first bowl is smaller than the first mixture in second bowl)
Q. Form 8 digit numbers from by using $1,2,3,4,5$ with repetition is allowed and must be divisible by4?
a. 31250
b. 97656
c. 78125 d. 97657

Ans: c
Q. Rearrange and categorize the word 'RAPETEKA'?

Ans: bird
Q. In school there are some bicycles and 4wheeler wagons.one Tuesday there are 190 wheels in the campus. How many bicycles are there?

Ans: 15
Q. Key words in question (Fibonacci series, infinite series, in the middle of the question one number series is there....I got the series 31272615 ?

Ans:54
(Logic: $3 * 2+1=7 \quad 12 * 2+2=26$
$7 * 2+1=15 \quad 26 * 2+2=54)$
Q. A lies on mon, tues, wed and speak truths on other days, B lies on thur, fri, sat and speaks truths on other days ...one day a said I lied today and B said I too lied today. What is the day?
Q. Man, Bear, North, South, walks.

Ans: White
Q.Alok and Bhanu play the follwoing min-max expression $N=37+X+Y+Z$, where $X, Y$ and $Z$ are variables representing single digits ( 0 to 9 ), Alok wud like to maximize $N$ while bhanu woud like to minimize it. Towards this end, Alok chjooses the next value and Bhanu , the variable to substitute the value. Finally Alok proposes the valu for the remaining variable. Assuning both play tpo their optimal stategies, the value of N at the end of the game would eebe??
Q. A father has 7 penny's with him and 1 water melon is for 1 p, 2chickoos for 1 p, 3 grapes foe 1 p.he has three sons. How can he share the fruits equally?

Ans: 1 watermelon,2chickoos,1grape
Q. $(1 / 2)$ of a number is 3 times more than the $(1 / 6)$ of the same number?

Ans: 9
Q. There are two pipes A and B. If A filled 10 liters in hour $B$ can fills 20 liters in same time. Likewise B can fill $10,20,40,80,160$....if $B$ filled in (1/16) th of a tank in 3 hours, how much time will it take to fill completely?

Ans: 7 hours
Q. KEYWORDS:T.Nagar,Chennai,1-100,prime numbers b/n 140-180,How many 2's are there?

Ans: 20 (Not only 2's ,1's,3's,4's,5's,6's,7's,8's,9's,0's also 20)
Q. A man is standing before a painting of a man and he says I have no bro and sis and his father is my father's son?

Ans: he himself
Q. One question has last part like difference between two terms is 9 and product of two numbers is 14 , what is the squares of sum of numbers?
Ans:109
Q. What is the value of $[(3 \mathrm{x}+8 \mathrm{Y}) /(\mathrm{x}-2 \mathrm{Y})]$; if $\mathrm{x} / 2 \mathrm{y}=2$ ?

Ans:10 \{the numerical may change)
Q. A pizza shop made pizzas with to flavours.in home there are ' N ' different flavors, in that ' M ' flavors are taken to made pizza.in how many ways they can arrange?
(Logic: NcM )
Q. 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:15
Q. KEYWORDS: one organization ,material labor and maintenance are in the ratio of $4: 6: 7$, the material cost is: 100 , what is the total cost?
Ans: 425
101. KEYWORDS: density, reluctance, sensitivity, voltage ,current, what is the resistance Formula is " $\mathrm{R}=\mathrm{V} / \mathrm{I}$ "
102. In a market 4 man are standing .the average age of the four before $4 y e a r s$ is 45 ,aftyer some days one man is added and his age is 49. what is the average weight of all?
Ans: 49
103. KEYWORDS: Sports readers, 10 tables,4chairs per table, each table has different number of people then how many tables will left without at least one person?

Ans: 6
107. KEYWORDS: Die, card, coin, b/n 2 to 12

Ans: All are equal
108. In a school for a student out of a 100 he got 74 of average for 7 subjects and he got 79 marks in 8th subject. what is the average of all the subjects?

Ans: 74.625
109. In a question, last part has ,the ages of two people has the ratio of $6: 6$ and by adding the numbers we get 44 ,after how many years the ratio would be $8: 7$ ?
Ans: 8
110.One train travels 200 m from A to B with $70 \mathrm{~km} / \mathrm{ph}$. and returns to A with 80 kmph , what is the average of their speed?
111. Two years before Paul's age is 2times the Alice age and the present age of Paul is 6times the Alice. what is the presents Paul's age???( 3years) "u try to solve this question once"
112. There is ferarri and benz car, benz speed is say 10 kmph and it cover 10 km . And if ferarri goes with 3 times faster than benz. So in how much time ferarri could take to cover same distance. sol: as speed of ferarri is $3^{*} 10=30$ so time will be $10 / 30$
113. If one lady have 3 daughter and any of out 3 have diff, of ages is 3 . And oldest is 3 times of more than 2 than yougest after 2 years then tell the age of oldest daughter.
Solution: let $x$ is youngest , $y$ middle,$z$ oldest. so $y-x=3, z-y=3$, and $z=2=2(x+2)$ and put the option answer try to get condition.(sorry i forgot option but pattern II be same)
114.One question like that ,there is fabonaci series and you have to find one number ..clue-it based on series
116.if a person moves 15 km straight and turns 45 km right and moves 15 km straight then how much distance he needs to walk to reach starting point?
117.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 ,how many mices are required to find the poisoned can?
.if atlantic is found in atlantic ocean ,india is found in indian ocean then which of the following cases are true
118.if $a$ and $b$ are mixed in $3: 5$ ration and $b, c$ are mixed in $8: 5$ ration if the final mixture is 35 litres,find the amount $\left\{a / b=3 * 8 / 5^{*} 8\right.$ and $b / c=8 * 5 / 5 * 5 \quad a / b / c=24: 40: 25$
ans $=40 * 35 /(24+40+35)=1400 / 89$
Ans=15.79\}
of $b$ in the final mixture
$119.1!+2!+\ldots .50!=3^{*} 10^{\wedge} 64 ?$
120. 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?

Solution: Here the question appear as an easy one, but carried a lot of unwanted sentences and unwanted datas(i dint mention above) in exam which may confuse $u$ on solving technique.

Let $x$ be current average age of first 6 persons in queue and current age of seventh person be $y$. Then $6 x$ will become the sum of those 6 persons age.

Now, let compute the sum of those 6 persons after two years, $6 x+12$ (as each and individual increase their age by 2). hence its average become $(6 x+12) / 6=43$ (give in question itself).

So now we can compute $x$ from above equation. ( $x=41,6 x=246$ )

Let now we compute $\mathrm{y},((6 \mathrm{x}+\mathrm{y}) / 7)=45$, as we have value of x , compute y .

Ans: 69
121. Horse started to chase dog as it relieved stable two hrs ago. And horse started to ran with average speed $22 \mathrm{~km} / \mathrm{hr}$, horse crossed 10 mts road and two small pounds with depth 3 m , and it crossed two small street with 200 mts length. After traveling 6 hrs, 2 hrs after sunset it got dog. compute the speed of dog?

Ans: As we have speed and travel time of horse, we can get distance travelled by it...

Hence $d=22^{*} 6=132 \mathrm{~km}$,

Exactly this 132km was travelled by dog in 8 hours (as it started two hours earlier).

Hence speed of dog $=132 / 8=16.5 \mathrm{~km} / \mathrm{hr}$

Ans: $16.5 \mathrm{~km} / \mathrm{hr}$.

Solution: Here it appear simple, because it arranged in arranged in sequence manner, but the actual question was some what twist mentioning fibonacci series and more over question was in statements (no numbers).. hence first try to understand the question well.
here let group alternate terms $3,7,15,31(3+4=7,7+8=15,15+16=31)$

Similarly for second group $(22,45, ?(22+23=45,45+46=91)$ hence ans is 91 .
123. 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?

Ans:

For 1 to $10-1$ six
2 to 20-1 six
Similarly upto 59 we utilise six, 5 times
from 60 to 69 (including 66) - 11 times
from 70 to $100-3$, hence ans $=5+11+3=19$

Ans:19.
124. If we subract a number with $y$, we get 4 increase of number, once it got divided by $y$ itself.. Find that number??

Ans: 12 (we can easily predict from options, as we take y as 6 )
125. Im only son for my parents. (some irrelevant statements in the middle to distract $u$ ). The man in picture is my father's son.(some irrelevant statements).who is he?
Ans: he himself(blood relation type of question)..
126. 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? 16
127. 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?

2
3
48
25 ; Solution: 3
128. Inspired by fibonacci series sanket decided to create is own series which is

1,2,3,7,7,22,15,67,....
lik dis,then what no come immediately before 63?
ans= 202
xpalnaton ;check altenate no.1,3,7,15=====>n*2+1
similarly $2,7,22,67======>n^{*} 3+1$
so series is $1,2,3,7,7,22,15,67,31,202,63 \ldots \ldots .$.
129..valentine day 14 feb 2005,was celebrated by $n$ and u on monday, he was very happy, he $n$ she. $\qquad$
.........den day on 14 feb 2010???(similar to dis some date qn was der)
130.the cost 1 plum is 1 cent ,2 apples is 1 cent, 3 banana is 1 cent.
if rahul buys same amount of fruits for his 3 sons spending 7 cent den what amount of fruit each child will get??
ans: 1 plum ,2 apple, 1 banana
xplanation:7/3=2.333 cents for each child
according to ans given for d sum each child will get 1 plum ,2 apple, 1 banana
131.there is a dice having value frm 1 .. 6 on each face......and a pack of cards having face card aces .....
(hugh chunk of nonsense)......when 2 dies are thrown and their scores are added then which sum will come max number of times??

Ans: 8
explanation: 8----2,6 3,5 4,4
9----4,5 3,6
10----5,5 4,6
11---- 5,6
thus 8 's probability is more
132."susha brought terilon cloth and rope to (some nonsence nw jst go to last 2 lines)....".... if rope is 153 mtr long and it is to be cut into pieces of 1 mtr long then how many times will she have to cut it??
ans: 152 times
133.(dnt remembr the xact q but procedure was somethn lyk this)
.........................8th year--1/1024,, 9th year--1/512,, 10th year--1/256 then aftr hw many years 1/32???
ans: 13
134.there are 2 cans $A$ and $B$ one of MILK and other of Water resp. , both of same qty...... first one teaspoon of milk from $A$ can was added to $B$ can...
then one teaspoon from $B$ can was added to $A$ can then wich of the folloelwing is true..
1.Can $A$ contain more milk than water in can $B$
2. Can $A$ contain less milk than water in can $B$
3.both contain same qty of milk and water
4.

Ans: option--2
135.If a pipe can fill the tank within 6 hrs but due to leak it took 30 min more
now if the tank was full hw much tym will it take to get emptyed through the leak??(i dont remembr whole sum exactly)(lil bit tricky sum)
136.Avg wt of class is X kg(some number) after adding wt of the teacger avg wt of class becomes Ykg then wat is the wt of the teacher??
137.20 men shake hand with each other. Maximum no of handshakes w without cyclic handshakes.
138. 100 men \& women dance with each other. Probability that a man cannot dance with more than two women.
139. Horse chasing a pony. Horse leaves stable aftr 2 hrs from ponys departure. 4 hrs 2 catch pony. Find speed of pony. Given-speed of horse.
140. 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.
141. Lady hav 2 select gloves\&hat from a basket I the dark.she can distinguish hat\&gloves.14red,20blue,18green $r$ there. Find probability that any selected glove pair has same colour.
142. Alice in wonderland meets a character goblet whose age is 2times alice.aftr 2 years age problem
143. Peter is 2times paul's age was when peter's age is same as paul's present age.find pauls age.
144. From a rope a triangle is made of sides $21 \mathrm{~cm}, 24 \mathrm{~cm}, 28 \mathrm{~cm}$. from this a square is made. Find area of square.
145. In a supermarket average of 4people standin in queue taken $2 y r s$ before is $55 y$ yrs. Now a person of 45 yrs is added current age.
146. A toy can produce 10diiff sounds. Nw toy is defective to produce 2 sounds in 3 min . find probability that it produces 6 consecutive is $1 \mathrm{in}\left(\_\right)$
147. $1 / 6$ th of a no is 4 times more than $2 / 3$ of a no.find no
148. Age of 2 in d ratio 4:5. Total of 2 ages is 55 . Aftr 2 yrs age in ratio 5:7 ages
149. A jogger jogs@1/6th of his usual speed. How much \% she has 2 increase 2 reach normal pace of walking.

150: $X$ is 3 years yunger to $Y$. $X$ 's father is a businessman who invested 10000/- at $8 \%$ rate of interest n obtained his amount after 10 years. Y's father is a job holder who invested around 20000 at $2 \%$ rate $n$ obtained his amount after 20 years.Now Compunded both of dem get around ABC rs/(dnt remenbr).After 5 years the ratio of ages of $X n Y$ is 1:2. Now $X$ 's father is 20 years older to $Y n$ $Y^{\prime}$ father is 30 years more than X . After 20 years again X 's mother asks X 's father to purchase a LCD TV whch costs around 45000/-.
what is the age of Xn Y together?
Ans: answer lies in considering two statements 2gether i.e " X is 3 years younger to Y " n "After 5 years the ratio of ages of $\mathrm{X} n \mathrm{Y}$ is 1:2"
151. $3,22,7,45,15, ?, 31$

Solution: Here it appear simple, because it arranged in arranged in sequence manner, but the actual question was some what twist mentioning fibonacci series and more over question was in statements (no numbers).. hence first try to understand the question well.
here let group alternate terms $3,7,15,31(3+4=7,7+8=15,15+16=31)$
Similarly for second group $(22,45, ?(22+23=45,45+46=91)$ hence ans is 91 .
152. 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?

Solution:

For 1 to $10-1$ six
2 to 20-2 six
Similarly upto 59 we utilise six, 6 times
from 60 to 69 (including 66) - 11 times
from 70 to $100-3$, hence ans $=5+11+3=19$

Ans:19.
153.The bacteria had a probability of splitting into three and a probability to die is one third of total
bacteria..Let the probability be P. Some of them survived wit probability $1 / 5$. then wic among the following relation is true?
a) $\mathrm{P}=1 / 3+1 / 5^{*} 3$
b) $\mathrm{P}=1 / 5^{*}(1 / 8-3)$
c)
154. if a tank a can be filled within 10 hrs and tank $B$ is $1 / 4$ th filled in 19 hrs .. then wat is the duration of the tank to fill completely?
155.A man looks at a painting and tells "Neither I hv brothers nor sisters, but the person in the painting is my father's son". Then who is in the painting?
156. 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 wit a glove and a hat. Therefore how many combinations of same color she can select?
157.A old lady had three grandchildren,the difference between two children was 3 years. Her eldest grandchild was 3 times elder than the youngest one and the elder one 2 years more than the sum of the other two. Then wat is the age of the eldest child?
158. There was a grandmother in a village who had a grandchild. Upon asking her grandchild's age she told dat she is as older as many days old as her daughter's 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?
159.(98*98*98-73*73*73)/(98*98*98+73*73*73)=?
8.which is the smallest number wic on dividing 2880 to make it a perfect square?
$\begin{array}{lllll}\text { a. } 6 & \text { b. } 5 & \text { c. } 4 & \text { d. } 3\end{array}$

Ans :5
160.Leena cut small cubes of 10 cubic cms each. Which she joined to form a cube wit 10 cubes length, 5 cubes in depth and 5 cubes wide. How many more small cubes does she require to form a perfect cube?
10.the first two numbers are 1 and 2 . The numbers in series are $3,6,7,14,, 32$ ? Which number comes before 32
161.The age of two people is in the ratio $6: 8$. the sum of their ages is 77 . after 2 years the ratio of their ages becomes $5: 7$. wat is their present age?
162.if $a$ and $b$ are mixed in $3: 5$ ration and $b, c$ are mixed in $8: 5$ ration if the final mixture is 35 litres,find the amount of $b$ in the final mixture
163. A vendor sells 1 apple for 1 penny, 2 grapes for 1 penny, 3 bananas for 1 penny. A man spends 7 penny and gives equal amount of fruits to each of his three daughters. What is the possible number of fruits each daughter gets? Ans: 1 apple,2 grape,2 banana
164. 5 persons standing in queue with different age group, two years ago their average age will be $X(I$ couldn't remember) and 6th person joined with them. hence the current average age has become $Y(I$ couldn't remember). find the age of seventh person?
165. Horse started to chase dog as it relieved stable three hrs ago. Avg speed of the horse was given and the time horse chased dog was also given. What is the speed of the dog?
166. $5,9,12,18,26,36,47,72,--$ ? Here odd terms have differences as multiples of 7 and even terms adds with themselves to form the next number. So answer is 75 .
167. 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 4 will appear in building numbering? Ans: 19
168. Jumbled letters, choices were given whether the word is bird or city or sweet......parakeet(answer)
Ans: bird(category)
169. Lion tells lie on Monday, Tuesday, and Wednesday. Rat tells lie on Thursday, Friday and Saturday. Both of them speak truth on other days. Lion tells, "Yesterday was one of the days which I tell lying". Rat also tells, "Yesterday was one of the days which I tell lying". what day was yesterday?
170. There were three different gloves. 13 red, 27 black and 40 green. How many gloves one has to take so as to ensure that there is at least one pair in each color?
171. Probability of occurrence of some events was given. Have to find total probability of specified group of events.
172. 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?
173. Difference of two numbers is 6 . Product of them is 13 . What is the sum of their squares?
174. Voltage and current are given, resistance was asked. V=IR
175. Speed and distance were given and time taken was asked. $T=D / S$
176. A problem on finding the age of the grand mother.
177. A lady builds 9 cm length, 10 cm width, 3 cm height box using 3 cubic cm cubes. What is the minimum number of cubes required to build the box?
178. When a pair of dice is thrown, what number has the higher probability to occur...the sum of 8 or 9 or 10 ?
179. 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?
180) 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?

Solution: Here the question appear as an easy one, but carried a lot of unwanted sentences and unwanted datas(i dint mention above) in exam which may confuse $u$ on solving technique.

Let $x$ be current average age of first 6 persons in queue and current age of seventh person be $y$. Then $6 x$ will become the sum of those 6 persons age.

Now, let compute the sum of those 6 persons after two years, $6 x+12$ (as each and individual
increase their age by 2). hence its average become $(6 x+12) / 6=43$ (give in question itself).

So now we can compute $x$ from above equation. ( $x=41,6 x=246$ )

Let now we compute $\mathrm{y},((6 \mathrm{x}+\mathrm{y}) / 7)=45$, as we have value of x , compute y .

Ans: 69
181) Horse started to chase dog as it relieved stable two hrs ago. And horse started to ran with average speed $22 \mathrm{~km} / \mathrm{hr}$, horse crossed 10 mts road and two small pounds with depth 3 m , and it crossed two small street with 200 mts length. After traveling 6 hrs , 2 hrs after sunset it got dog. compute the speed of dog?

Ans: As we have speed and travel time of horse, we can get distance travelled by it...

Hence $d=22^{*} 6=132 \mathrm{~km}$,

Exactly this 132 km was travelled by dog in 8 hours (as it started two hours earlier).

Hence speed of $\operatorname{dog}=132 / 8=16.5 \mathrm{~km} / \mathrm{hr}$

Ans:16.5km/hr.
182) $3,22,7,45,15, ?, 31$

Solution: Here it appear simple, because it arranged in arranged in sequence manner, but the actual question was some what twist mentioning fibonacci series and more over question was in statements (no numbers).. hence first try to understand the question well.
here let group alternate terms $3,7,15,31(3+4=7,7+8=15,15+16=31)$

Similarly for second group $(22,45, ?(22+23=45,45+46=91)$ hence ans is 91 .
183) 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?

Solution:

For 1 to $10-1$ six
2 to 20-1 six
Similarly upto 59 we utilise six, 5 times
from 60 to 69 (including 66) - 11 times
from 70 to $100-3$, hence ans $=5+11+3=19$

Ans:19.
184) $((4 x+3 y)+(5 x+9 y)) /(5 x+5 y)=$ ? as $(x / 2 y)=2$

Ans: 2(simple algebra, i think $u$ no need of explanation)
185) If we subract a number with $y$, we get 4 increase of number, once it got divided by $y$ itself..

Find that number??

Ans: 12 (we can easily predict from options, as we take y as 6 )
186) I dont remember exactly the question, one logical problem stating the colour of beer?

Ans: white.
187) Jumbled letters, parakeet(answer)

Ans: bird(category)
188) ratio proportional problem with age. Sorry, dint remember exact question.
189) one question like. (209*144)^2 + (209*209)+(209*144)+(144*144) $=$ ?

Ans: here you can use calc, many(4 to 5) questions were depend upon calc alone.(no need problem solving technique).
190) Im only son for my parents. (some irrelevant statements in the middle to distract $u$ ). The man in picture is my father's son.(some irrelevant statements).who is he?

Ans: he himself(blood relation type of question).

191 By which number should we divide the number 2880 to make it perfect square?
Ans: 5
192. There is a problem to find out the color of beer. It is full of unwanted data in problem. for that the

Ans: white
193. $1 / 3$ ofsome number is 5 more than $1 / 6$ th of that number. Find the number.

Ans: 30
194. Difference of two numbers is 4 and their product is 13 . Find the sum of squares of that numbers.

Note: this problem starts with the story of aryabhatta , ignore all and read the problem from last line.
195. How many of 14 digit numbers we can make with $1,2,3,4,5$ that are divisible by 4 .

Repetitions allowed.
Ans: we have calculate the value (5power12)* (like $5^{*} 5^{*} 5^{*} 5^{*} 5^{*} 5^{*} 5^{*} 5^{*} 5^{*} 5^{*} 5^{*} 5^{*} 4=$ value will be given in answers check it out)
196. There is a lengthy problem with details of Chennai city. At last they ask how many 6's came when we give numbering to 100 buildings from 1 to 100 .
Ans: 20
197. Rearrange the alphabets REGHFTYD(SOMETHING LIKE THAT) . find the type of rearranged word belongs to:
Animal
Tree
Bird
Thing
Ans: c (bird)
198. There is a factory which is producing the bicycles and four wheelers. One day the total production of wheels is 158 . Find out the possible no. of bicycles produced

## 9

Ans: 7 (note: there is a probability of the answer of 19 also for this question . take care of it. )Also they change the total number of wheels to 198.
199. Four years hence the average of 6 members is 45 . Now a person is added and the avg becomes 48 . What is the age of added person?

Ans: 42
There is another question with diff. details. For that ans is :69 (problem is not remembered but ans is 69 only)
200. A dog two hours early before the horse started. The horse reached the dog after 6 hours with the speed of 16 kmph . find the speed of dog. I cant remember the exact figures.
Ans may be 16.5 kmph
201. There is a problem with blood relations. A man is saying while pointing to a person who is painting like this:" I am the only son to my father. His father is the son my father". Find the relation to him with the painting person.
ans: his son
202. There is problem on probabilities. There are gloves and hats with three different colors with some totals are given for each type. Then asked to find out the probability of taking the pair of glove and hat of same color in dark.
203. There is a bacteria which has the probability of die $1 / 3$ of its total number or it may tripled. Find out the probability
$P=1 / 3+\left(2 / 3^{*} p^{\wedge} 3\right)$
$P=2 / 3+\left(2 / 3^{*}{ }^{\wedge}{ }^{\wedge} 3\right)$
$P=2 / 3+\left(1 / 3^{*}{ }^{\wedge}{ }^{\wedge} 3\right)$
$P=2 / 3+\left(2 / 3^{*} p^{\wedge} 3\right)$
I marked it as A. check it out
204. There are two tanks $A, B$. A will be fill up 1 ltr in one hour. $B$ tank will fill up double in every hour (like $10,20,40,80,160 \ldots$. .). if the tank $B$ is filled $1 / 16$ in 13 hours how much time it will take to fill up totally.
Ans: 17 hours (note: here no need with A tank details. but they gave to confuse, all problems are like this ,avoid unnecessary data)
205. In a hotel we can order two types of varieties, but we can make 6 more varieties in home. One can want the four varieties with two from hotel must. Find how many ways one can order. Ans: 12 ways
206. There is a series $13,14,27,30,55,62, ?, 126$. Find the missing.

This is combination of two series; 13,2755 , ? and $14,30,62,126$ ( $14,14 * 2+2(30), 30 * 2+2(62), \ldots$ ) $13,13^{*} 2+1(27), 27^{*} 2+1(55), ?=55^{*} 2+1=111$.For this numbers may be changed but the logic is same.
207. There are three frnds $x, y, z$ gone to excursion with their girl frnds. there they wanted to find their weights but their GF's are not accept to check their weight( all unnecessary data). Then they check weights as $x, y, z$ individually and then $x$ and $y, y$ and $z, x$ and $z$,then all $(x, y, z)$. the last measure is 171 . Then find the avg of all these seven measures.
208) Two tanks A and B. A fills $1 \mathrm{ltr} / 1 \mathrm{hr} . . \mathrm{b}$ fills $10,20,30 \ldots .$. per hour. if this is (passage unnecessary). if $1 / 4$ th tnk of $b$ takes 15 hrs to fill how much it time will $t$ take to fill complete tank?
209) Out of 7 children the youngest is boy then find the probability that all the remaining children are boys

Ans: $1 / 2^{\wedge} 6=1 / 64$
210) The three sides of a triangle are given.16, 14, 21 cms and this triangle is conveted into a square .so what will be the area of the square generated?

Ans: - $(14+16+21) / 4$. Then you will get the 1 side of a square and now find the area of a square.ie, side^2
211) An equation of the form $4 x+6 y-2 z=32$. Find the difference between $x$ intercept and $z$ intercept?
Ans: $x / a+y / b+z / c=1$
212) A toy train can make 10 sounds sound changes after every 4 min $\qquad$ now train is defective and can make only 2
sounds. $\qquad$ Find probability that same sound is repeated 5 times consecutively (1 OUT OF $\qquad$ )?
Ans: 1/32
213) ) 20 men and 20 women are there, they dance with each other, is there possibilty that 2 men are dancing with same women and vice versa.

Ans-never
214) 10 people are there, they are shaking hands together, how many hand shakes possible, if they are in no pair of cyclic sequence.

Ans-9
215) In school there are some bicycles and 4 wheeler wagons. One Tuesday there are 234 wheels in the campus. How many bicycles are there?

Ans: go wid options. muliply each option wid 2 and subtact the obtained no from 234 . if it is exactly divisible by 4 , that is the ans....
216) A father has 7 penny's with him and 1 water melon is for 1 p, 2chickoos for $1 p, 3$ grapes foe 1 p.he has three sons. How can he share the friuts equally?

Ans: 1 watermelon,2chickoos,1grape
217) A piza shop made pizzas
with to flavours.in home there are ' 9 ' different flavors, in that ' 2 ' flavors are taken to made piza in how many ways they can arrange?
(Logic: $\mathrm{NcM}, \mathrm{N}=9, \mathrm{M}=2$ )
218) one organization ,material ,labor and maintenance are in the ratio of $4: 6: 7$, if the material cost is: 272 ,what is the total cost?
Ans: $4 \mathrm{x}=272==>\mathrm{x}=68$; now total cost $=272+6(68)+7(68)$.
219) 4 years before Paul's age is 3times the Alice age and the present age of Paul is 6times the Alice. what is the presents Paul's age???

Ans: $x-4=3(y-4) ; x=6 y$ : solve $u$ will get it..
220) In a question ,last part has ,the ages of two people has the ratio of $6: 5$ and by adding the numbers we get 55 ,after how many years the ratio would be 8:7?
Ans: easy u can do it... simple eqtns
221) In a room $\qquad$ ( unwanted stuff) $\qquad$ Sports readers, 10 tables,4chairs per table, each table has different number of people then how many tables will left without at least one person?
Ans: 6
222) passage $\qquad$ joe is taller than jerry and 3 pillers. kistern is shorter than joe and 2 pillers is jerry shorter/taller than kistern?

Ans:
223) a volume of $A$ are having in a container of sphere... how many semi hemispheres of $B$ volume each will be rqred to transfer all the A in to semi hemispheres.... ...?
Ans: $A=x B$
224) Question based on $V=I^{*} R$ but in dis question most of data given are ridiculas like volume ,density,length,height similar long story are given
Ans:
225) Peter and Paul are two friends. The sum of their ages is 42 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?
Ans:
226) A horse chases a pony 2 hours after the pony runs. Horse takes 4 hours to reach the pony. If the average speed of the horse is 81 kmph , what s the average speed of the pony? (This question was really long with loads of irrelevant statement)
Ans:
227) difrence $b / w$ two nubers is 4 .and their product is 17 .then find the sum of their squers? Ans:
228) $A, B, C, D, E$ 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..
Ans:
229.) some ages problem. $\qquad$ then asked the answer in binary

Ans:
230) $\qquad$ .(some chetta chikkati sollu)..unwanted data. $\qquad$ folowed by a formula diameter $d=10^{*}(t-14), t>14 \ldots$ then what id diameter after $t=40 .$. ?
Ans:
231) Some denominations question... like u have 31 ps , and tckt cost is between 1 to 31 , u have to give the exact denominations for the ticket. find all the no of possible denominations u may prdict and $u$ must be left wid atleast few paise...?
232) Direction problems..... A man goes 50 km NORTH, then turned left walked 40 km , then turned RIGHT...? in which direction is he in?
Ans: NORTH
Questions
233) Out of 6 children the youngest is boy then find the probability that all the remaining children are boys.

Ans: $1 / 2^{\wedge} 5=1 / 32$
234) A man went 1 mile to east den 1 mile to north (un wanted stuff) and killed a bear what is the color of the bear?

Ans: White
235) Some age, average related problems (practice R. S.Aggarwal )
236) $(1 / 2)$ of a number is 3 times more than the $(1 / 6)$ of the same number..?
237) There are two pipes $A$ and $B$. If $A$ filled 10 liters in hour $B$ can fills 20 liters in same time. Likewise B can fill $10,20,40,80,160$....if $B$ filled in $(1 / 16)$ th of a tank in 3 hours, how much time will it take to fill completely?
Ans: 7 hours
238) In a market 4 man are standing the average age of the four before 4years is after some days one man is added and his age is 49 .what is the average weight of all? Ans: 49
239) One train travels 200 m from $A$ to $B$ with $70 \mathrm{~km} / \mathrm{ph}$. and returns to $A$ with 80 kmph , what is the average of their speed?
Ans: apply $2 x y / x+y$
240) The three sides of a triangle are given. $18,18,28 \mathrm{cms}$ and this triangle is conveted into a square .so what will be the area of the square generated?
Ans: - $(18+18+28) / 4$. Then you will get the 1 side of a square and now find the area of a square.ie, side^2
241) An equation of the form $7 x+17 y+3 z=54$. Find the difference between $x$ intercept and $z$ intercept?
Hint: $x / a+y / b+z / c=1$
Ans: convert the above equation to this form and see the difference between a and c then you will get the answer
242) Permutation problem don't remember exactly, but it was almost like there are n people sitting. Find the number of handshakes
243) Average wt of class is (some number) kg after adding wt of the teacher average wt of class becomes some number kg then what is the wt of the teacher??
244) A pizza shop, there were 2 kinds of pizzas available. But now they have introduces 8 new types, a person buy two different type pizzas of new type in how many ways he can select? Ans: $8 \times 7=56$
245) Series Problem like $412 \times 4446132$ 134. Find $x$ ? (I could not solve out this in exam).
246) There are 1000 pillars for a temple. 3 friends Linda, Chelsey, Juli visited that temple.
(Som unrelated stuff) Linda is taller than Chelsey and taller than 2 of 1000 pillars. Juli is shorter than Linda. Find the correct sentence?
Linda is shorter among them
Chelsey is taller than Juli
Chelsey is shorter than Juli
Cannot determine who is taller among Chelsey and Juli
Ans:: d
247) A toy train can make 10 sounds sound changes after every 4 min. $\qquad$ now train is defective and can make only 2
sounds. $\qquad$ Find probability that same sound is repeated 3 times consecutively (1 OUT OF $\qquad$ )?
1.16
2.8
3.12
4.4

Ans: $(1 / 2)^{*}(1 / 2)^{*}(1 / 2)=(1 / 8)$
248) Probability problem (little tricky)
249) Some Statement and Conclusion type problems
250) Entry ticket to an exhibition ranges from 1 p to 7 p . You need to provide exact change at the counter. You have 7 p coin. In how many parts will $u$ divide 7 p so that $u$ will provide the exact change required and carry as less coins as possible?
a) 8
b) 7
c) 5
d) 3 (I cud not solve out the answer in exam)
251) Dhoni and Ponting are waiting for the toss to happen. Umpire found that the coin to be tossed
is missing. Ponting then takes a dice (1-6) from his pocket and asks the umpire to toss with it. Umpire feels both the captains may not get fair chance with dice. Dhoni den suggests a solution to umpire which den wud give fair chance to both captains. What would be the idea of Dhoni? Toss the dice if even no comes captain wil win the toss and if it is odd he loses. (It's the only option I remember and I think its da answer)
252) Now pet's age is to times when paul was once. But at that time paul's age=pet's current age ,how old is pet?
253) Block has $10,9,5$ size, how many unit cube is needed to make a block of that size?
254) 23 people are there, they are shaking hands together, how many hand shakes possible, if they are in pair of cyclic sequence.

Ans-22
255) 10 men and 10 women are there, they dance with each other, is there possibilty that 2 men are dancing with same women and vice versa.

Ans-never
256) A lady took out jacket and gloves, which are avialable in blue 26 , yellow 30 and red 56. Power goes off, she can distinguish between gloves and jacket but not in colors. What's the possibilty their she will pick up pair of gloves of each color
257) $B$ is taller than $j$ and 3 pillers. $P$ is shorter than $B$ and 2 pillers is $j$ shorter/taller than $P$ ?

Ans-irrelevant question
258) Sangakara and ponting selects batting by using a dice, but dice is biased so to resolve ponty takes out a coin, what is the probability that dice shows correct option.
259) In school there are some bicycles and 4 wheeler wagons. One Tuesday there are 58 wheels in
the campus. How many bicycles are there?

Ans: 7
260. 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?
(Ans: second liquid in first bowl is smaller than the first mixture in second bowl)
261. Which is the smallest no divides 2880 and gives a perfect square?
a. 1 b. 2 c. 5 d. 6

Ans: c
262. Form 8 digit numbers from by using $1,2,3,4,5$ with repetition is allowed and must be divisible by4?
a. 31250 b. 97656 c .78125 d .97657

Ans: c
263. One problem on (a3-b3)/(a2+ab+b2)

Ans: ‘a-b’
264. Rearrange and categorize the word 'RAPETEKA'?

Ans: bird(parakeet)
265. Key words in question (Fibonacci series, infinite series, in the middle of the question one number series is there....I got the series 31272615 b ?

Ans:54
(Logic: $3 * 2+1=712 * 2+2=26$
$7 * 2+1=1526 * 2+2=54)$
266. A father has 7 penny's with him and 1 water melon is for 1 p, 2 chickoos for 1 p, 3 grapes foe 1 p.he has three sons. How can he share the fruits equally?

Ans: 1 watermelon,2chickoos,1grape
267. A lies on mon, tues, wed and speak truths on other days, B lies on thur, fri, sat and speaks truths on other days.. one day a said I lied today and B said I too lied today. What is the day?
268. Man, Bear, North, South, walks.

Ans: White
269. ( $1 / 2$ ) of a number is 3 times more than the $(1 / 6)$ of the same number?

Ans: 9(for any no it can be true)
270. There are two pipes $A$ and $B$. If $A$ filled 10 liters in hour $B$ can fills 20 liters in same time. Likewise B can fill $10,20,40,80,160 \ldots$..if $B$ filled in (1/16) th of a tank in 3 hours, how much time will it take to fill completely?

Ans:7 hours
271. KEYWORDS:T.Nagar,Chennai, 1-100,prime numbers b/n 140-180,How many 2 's are there?

Ans: 20 (Not only 2's ,1's,3's,4's,5's,6's, 7's, 8's,9's,0's also 20)
272. One question has last part like difference between two terms is 9 and product of two numbers is 14 , what is the squares of sum of numbers?
Ans:109
273. A man is standing before a painting of a man and he says I have no bro and sis and his father is my father's son?

Ans: His son
274. What is the value of $[(3 x+8 Y) /(x-2 Y)]$; if $x / 2 y=2$ ?

Ans:10 \{the numerical may change)

## 275. A pizza shop made pizzas

with to flavours.in home there are ' $N$ ' different flavors, in that ' $M$ ' flavors are taken to made pizza.in how many ways they can arrange?
(Logic: NcM)
276. 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
277. In a market 4 man are standing .the average age of the four before $4 y$ years is 45 ,aftyer some days one man is added and his age is 49 . what is the average weight of all?
Ans: 49
278. KEYWORDS: one organization ,material ,labor and maintenance are in the ratio of 4:6:7,the material cost is: 100 ,what is the total cost?
Ans: 425
279. KEYWORDS: density, reluctance, sensitivity, voltage ,current, what is the resistance Formula is " $\mathrm{R}=\mathrm{V} / \mathrm{l}$ "
280. KEYWORDS: Sports readers, 10 tables,4chairs per table, each table has different number of people then how many tables will left without at least one person?

Ans: 6
281. In a school for a student out of a 100 he got 74 of average for 7 subjects and he got 79 marks in 8th subject. what is the average of all the subjects?
Ans:
the xtra 5 marks will be distributed in 8 semester, $5 / 8=.625$
$74+.625=74.625$
282. In a question ,last part has ,the ages of two people has the ratio of $6: 5$ and by adding the numbers we get 44 ,after how many years the ratio would be 8:7?
Ans: 8
283. Two years before Paul's age is 2times the Alice age and the present age of Paul is 6 times the

Alice. what is the presents Paul's age???( 3years) "u try to solve this question once"
284.One train travels 200 m from A to B with $70 \mathrm{~km} / \mathrm{ph}$. and returns to $A$ with 80 kmph , what is the average of their speed?

## Aptitude test

285. 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 find \# shopkippers sailing different things. An apple cost 1penny, 2chocalate costs 1penny.\& 3 bananas cost 1 penny. He has bought equal no. 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) 1 app, 1 cho, 1 banana
b)1 app,2cho,3 banana
c) 1 app,2cho,1banana
D)2 app,2cho,2 banana
286. 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 1 mile 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 in2 hrs. Then what is the colour of the bear? I think ans is white
a)white b)black c)gray d)brown
287. How many 9 digit numbers are possible by using the digits $1,2,3,4,5$ which are divisible by 4 if repetition of digits is allowed?
288. Calcutation based on $\mathrm{A}^{\wedge} 3-\mathrm{B}^{\wedge} 3$ formula
289. A long story based ALICE AND WONDER LAND after that simple age question .
290. Question based on $V=I^{*} R$ but in dis question most of data given are ridiculas like volume ,density,length,height similar long story are given
291. A direct question on blood relation.
292. A big Question describing a story ARYABHATT AND HIS DAUGHTER LILAVATI

After that a number is given eg 2088.by what if we divide the number it II become a perfect square?

2293 1st a story. Then a simple ratio problem. The question was if the ratio of age of two persons
is $5: 6$,sum of present age is 33 ,then in how many years the ratio of their age becomes $7: 8$ ? a) 3 b) 4 c) 5 d) 6
294. A very big story.on Tuesday college parking place have only 4 wheelers \& bicycles,total no of wheels was 182 ,yhen what is the possible no of bicycles?
a)20 b 19 c 18 d 17
295. Simple question bt big one on average age.sth like a,b,c weigheted separately 1 st 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 avg weight of the 7 weight?
296. Arrange the jumbled letters to make a perfect word RGTEI(sth like this). Find to which category it belong? (plz do not these type q becoz its time consuming)
A)town b)vegetable c)animal d) bird
297) Simple puzzle based on IQ

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?
Ans: a Sunday b thrusday c saterday $\mathrm{d} . .$.
298) 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.
Answer: 8 * $7=56$
299) 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?
300) Question based on pipe \& ciston (geometrical series)
$A$ and $B$ tanks $r$ there. $1 / 8$ th of the tank $B$ is filled in 22Hrs. what is time to fill the tank full?
301) 5 friends went for week end party to Mc donalds restrurent and there they measure there weights .some irrrrrrrrrrrrrrrilevent data.finel measure is 155 kg then find the average weight of 5 people?
ans:155/5=31
302) 2 pots are there. 1st pot is filled with ink and $2 n d$ pot is filled with water.take 1 spoon of ink from 1st pot and pore it in 2nd pot.and take 1 spoon of mixture from 2nd pot and pore it in 2nd pot then which one of following is true?
ans: Water in 1st pot is less than the ink in 2nd pot.
303) There $r$ ten spots in library and each spot has 4 tables and ten readers ar there .10 student come into liberary and want 2 study in how many ways that they sit in d liberary so that no chair would be blank?
ans :1
304. Question 1: There is a toy train that can make 10 musical sounds. It makes 2 musical sounds after being defective. What is the probability that same musical sound would be produced 5 times consecutively? ( 1 of $\qquad$ ?
Answer: $1 / 2$ * $1 / 2$ * $1 / 2$ * $1 / 2$ * $1 / 2=1 / 32$
32 will be the answer.
(My friends got similar question with "3 times consecutively"; for that the answer would be 8)
305.Question 2: 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? Luckily, I had this question twice. Initially I left it because of the confusing statement but when I got the same question second time with different names of the friends (Pooja and Prasad) then I gave a little extra time and solved it.

Answer: 20 years. I simply substituted the answers in the statement to find the best fit, because the statement in the question was pretty confusing.
306. Question 3: The ages of two friends is in the ratio $6: 5$. The sum of their ages is 66 .After how many years will the ages be in the ratio 8:7?
Answer: 12 years.
307.Question 4: (There was a long story, l'll cut short it). There are 5 materials to make a perfume: Lilac, Balsalmic, Lemon, Woody and Mimosaic. To make a perfume that is in demand the following conditions are to be followed: Lilac and Balsalmic go together. Woody and Mimosaic go together, Woody and Balsalmic never go together. Lemon can be added with any material. (Actually they had also mentioned how much amount of one can be added with how much quantity of the other; but that's not needed for the question.) All of the following combinations are possible to make a perfume EXCEPT:
Balsalmic and Lilac
Woody and Lemon

## Mimosaic and Woody

## Mimosaic and Lilac

Answer: Mimosaic and Lilac. I have made the question here really easy to understand. But the actual question was in a twisted language and it was difficult to find the answer. It took me some time to get to the answer.
308.Question 5: 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.
Answer: 8 * $7=56$
309. Question 6: 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?
Answer:280.5625
310.Question 7: What is the distance between the z-intercept from the $x$-intercept in the equation $a x+b y+c z+d=0$. (I do not remember the values of $a, b, c, d$ )
311.Question 8: 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?
Answer: 33.33\%
312. Question 9: 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? (This question was really long with loads of irrelevant statement)
313.Question 10: There is 7 friends (A1,A2,A3....A7).If A1 have to have shake with all with out repeat. How many hand shakes possible?(I dont know the exact question but like this only) 314. Question 11: There are two pipes $A$ and $B$. If $A$ filled 10 liters in a hour $B$ can fills 20 liters in same time. Likewise B can fill 10, 20, 40, $80,160 \ldots$...if B filled in (1/16) th of a tank in 3 hours, how much time will it take to fill completely?
Answer:7 hours
315.Question 12: KEYWORDS: Sports readers, 10 tables,4chairs per table, each table has different number of people then how many tables will left without at least one person?
Ans: 6
316.) Two pipes $A$ and $B$ fill at $A$ certain rate $B$ is filled at $10,20,40,80$,. If $1 / 16$ of $B$ if filled in 17 hours what time it will take to get completely filled
317.) 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?
318) Find $(4 x+2 y) /(4 x-2 y)$ if $x / 2 y=2$
319) Find average speed if a man travels at speed of 24 kmph up and 36 kmph down at an altitude of 200 m . Formula is $2 x y /(x+y)$
320.) Same model as 4th question. But it is on flat surface. Formula is same $2 x y /(x+y)$.
321) Six friends go to pizza corner there are 2 types of pizzas. And six different flavors are there they have to select 2 flavors from 6 flavors. In how many ways we can select?
Ans: 6C2
322) $3,15, x, 51,53,159,161$. Find $X$

Ans: 17
323) 3 friends $A, B, C$ went for week end party to McDonald's restaurant and there they measure there weights in some order IN 7 rounds. $A ; B ; C ; A B ; B C ; A C ; A B C$. Final round measure is 155 kg then find the average weight of all the 7 rounds?
Ans: $4(155) / 7=31$
324) There is a toy train that can make 10 musical sounds. It makes 2 musical sounds after being defective. What is the probability that same musical sound would be produced 5 times consecutively? ( 1 of )?
Ans: $1 / 2$ * $1 / 2$ * $1 / 2$ * $1 / 2$ * $1 / 2=1 / 32$
325) (There was a long story, l'll cut short it). There are 5 materials to make a perfume: Lilac, Balsamic, Lemon, and Woody and MI mosaic. To make a perfume that is in demand the following conditions are to be followed: Lilac and Balsamic go together. Woody and MI mosaic go together; Woody and Balsamic never go together. Lemon can be added with any material. (Actually they had also mentioned how much amount of one can be added with how much quantity of the other; but that's not needed for the question.) All of the following combinations are possible to make a perfume except:
Balsamic and Lilac
Woody and Lemon

MI mosaic and Woody
Ml mosaic and Lilac
326) A triangle is made from a rope. The sides of the triangle are $\mathrm{Acm}, \mathrm{Bcm}$ and Ccm (I do not remember the numerical value). What will be the area of the square made from the same rope? Ans: ((A+B+C)/4)2
327) 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 $a, b, c, d)$.
Ans: sqrt ((d/a) 2+ (d/c) 2)
328) A scientist in Antarctic region conducts research on bears came to know that bears changes according to the location .once he moves 1 mile towards north, then he moves 2 miles towards east, then 1 mile towards south. Now the color of bear he found will be in:

Ans: white
$329)(1 / 3)$ of a number is 3 times more than the $(1 / 6)$ of the same number?
Ans is 18
330) There are 11 boys in a family. Youngest child is a boy. What is the probability of all are boys?
a) 2
b) 2 !
C) 2048
d) 1024
331) A boy bought a roll A of 56 inches wide and 141 yards long. He also bought $B$ of 77 inches wide of length 333yards. We don't want any details of B. Some irrelevant matter. Final question is Time taken for cutting A into 1 yard piece is 2 seconds. Time taken to cut into 141 pieces of 1 yard each is?
Ans is $2(141)=242$
332) 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 is 15 pounds
333) 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?
Ans is 23 (cost price + change given).

334 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?
Ans is 4 boys and 3 girls
335) There are certain number of hats and gloves in a box. They are of 41 red, 23 green, 11 orange. Power gone. But a woman can differentiate between hats and gloves.How many draws are required to obtain a pair of each color.
336) 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?
If no. is odd it is head, if no. is even it is tail
If no. is odd it is tail, if no. is even it is head
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.
I didn't remembered last option and I don't know answer.
337) 2 years ago of $A$ is $x$ times that of $B$. 3 Years hence the age of $A$ is $4 / 3$ times of $B$. What is the present age of B in binary form?
I didn't remember the exact values of $x$ and $y$. You can solve easily.
338) 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?

Ans is $(z-1)(y-x)+x$.
339) 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:
There are 2 men who danced with equal no. of women's
There are 2 women who danced with equal no. of men
340) 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
Ans is 28.
341) There are 3 boys A, B, C and 2 Girls D, E. D always sit right to A. Girls never sit in extreme positions and in the middle position. C always sits in the extreme positions. Who is sitting immediate right to E ?
Ans is B or C
342) 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?
Ans is 12C2
343) 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?

Linda is shorter among them
Chelsea is taller than Julia
Chelsea is shorter than Julia
Cannot determine who is taller among Chelsea and Julia
Ans: d
344) 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) 22
b) 31
c) 6
d) 32

Ans is 6
345) There are 2 friends Peter and Paul. Peter age is twice as old as Paul when peter was as old as Paul is now. Sum of the present ages of Peter and Paul is 35 .What is the present age of Peter? Ans is 20
346) A lady took out jacket and gloves, which are avialable in blue 26 , yellow 30 and red 56 . Power goes off, she can distinguish between gloves and jacket but not in colors. What's the possibilty their she will pick up pair of gloves of each color.
347) 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?
(Ans: second liquid in first bowl is smaller than the first mixture in second bowl)
348) Rearrange and categorize the word 'RAPETEKA'?

Ans: bird(parakeet)
349) A lies on mon, tues, wed and speak truths on other days, B lies on Thurs, Fri, Sat and speaks truths on other days. One day a said I lied today and B said I too lied today. What is the day?
350) 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
351) Now pet's age is to times when paul was once. But at that time paul's age=pet's current age ,how old is pet?
352) Block has $10,9,5$ size, how many unit cube is needed to make a block of that size?
353) 23 people are there, they are shaking hands together, how many hand shakes possible, if they are in pair of cyclic sequence.

Ans-22
354) 10 men and 10 women are there, they dance with each other, is there possibilty that 2 men are dancing with same women and vice versa.
Ans-never
355) A lady took out jacket and gloves, which are avialable in blue 26 , yellow 30 and red 56. Power goes off, she can distinguish between gloves and jacket but not in colors. What's the possibilty their she will pick up pair of gloves of each color
356) $B$ is taller than $j$ and 3 pillers. $P$ is shorter than $B$ and 2 pillers is $j$ shorter/taller than $P$ ? Ans-irrelevant question
357) Sangakara and ponting selects batting by using a dice, but dice is biased so to resolve ponty takes out a coin, what is the probability that dice shows correct option.
358) In school there are some bicycles and 4 wheeler wagons. One Tuesday there are 58 wheels in the campus. How many bicycles are there?

## Ans: 7

359. 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?
(Ans: second liquid in first bowl is smaller than the first mixture in second bowl)
360. Which is the smallest no divides 2880 and gives a perfect square?

1 b. 2 c. 5 d. 6
Ans: c
361. Form 8 digit numbers from by using $1,2,3,4,5$ with repetition is allowed and must be divisible by4?
31250 b. 97656 c. 78125 d. 97657
Ans: c
362. One problem on (a3-b3)/(a2+ab+b2)

Ans: ‘a-b’
363. Rearrange and categorize the word 'RAPETEKA'?

Ans: bird(parakeet)
364. Key words in question (Fibonacci series, infinite series, in the middle of the question one number series is there. I got the series 31272615 b?
Ans:54
(Logic: $3^{*} 2+1=7 \quad 12 * 2+2=26$
$7 * 2+1=1526 * 2+2=54)$
365. A father has 7 penny's with him and 1 water melon is for 1 p, 2chickoos for 1 p, 3 grapes foe 1 p . He has three sons. How can he share the fruits equally?
Ans: 1 watermelon, 2chickoos, 1 grape
366. A lies on mon, tues, wed and speak truths on other days, $B$ lies on thur, fri, sat and speaks truths on other days.. one day a said I lied today and B said I too lied today. What is the day?
367. Man, Bear, North, South, Walks.

Ans: White
368. ( $1 / 2$ ) of a number is 3 times more than the $(1 / 6)$ of the same number?

Ans: 9 (for any no it can be true)
369. There are two pipes $A$ and $B$. If A filled 10 liters in hour $B$ can fills 20 liters in same time.

Likewise B can fill $10,20,40,80,160$. If $B$ filled in $(1 / 16)$ th of a tank in 3 hours, how much time will it take to fill completely?
Ans: 7 hours
370. Keywords: T.Nagar, Chennai, 1-100, prime numbers b/n 140-180, How many 2 's are there? Ans: 20 (Not only 2's, 1's,3's,4's,5's,6's,7's,8's,9's,0's also 20)
371. One question has last part like difference between two terms is 9 and product of two numbers is 14 , what is the squares of sum of numbers?
Ans: 109
372. A man is standing before a painting of a man and he says I have no bro and sis and his father is my father's son?

Ans: His son
373. What is the value of $[(3 x+8 Y) /(x-2 Y)]$; if $x / 2 y=2$ ?

Ans: 10 \{the numerical may change)
374. A pizza shop made pizzas with to flavours.in home there are ' $N$ ' different flavors, in that ' M ' flavors are taken to made pizza.in how many ways they can arrange?
(Logic: NcM)
375. 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
376. In a market 4 man are standing. The average age of the four before 4 years is 45 , aftyer some days one man is added and his age is 49 . What is the average weight of all?
Ans: 49
377. Keywords: One organization, material, labor and maintenance are in the ratio of 4:6:7, the material cost is: 100 , what is the total cost?

Ans: 425
378. Keywords: Density, Reluctance, Sensitivity, Voltage, Current, what is the Resistance Formula is " $\mathrm{R}=\mathrm{V} / \mathrm{l}$ "
379. Keywords: Sports readers, 10 tables, 4chairs per table, each table has different number of people then how many tables will left without at least one person?
Ans: 6
380. Keywords: Die, card, coin, b/n 2 to 12

Ans: All are equal
381. In a school for a student out of a 100 he got 74 of average for 7 subjects and he got 79 marks in 8th subject. what is the average of all the subjects?
The extra 5 marks will be distributed in 8 semester, $5 / 8=.625$
$74+.625=74.625$
382. In a question, last part has ,the ages of two people has the ratio of $6: 5$ and by adding the numbers we get 44 ,after how many years the ratio would be $8: 7$ ?

Ans: 8
383. Two years before Paul's age is 2times the Alice age and the present age of Paul is 6times the Alice. What is the presents Paul's age?( 3years) "You try to solve this question once"
384. One train travels 200 m from A to $B$ with $70 \mathrm{~km} / \mathrm{ph}$. and returns to $A$ with 80 kmph , what is the average of their speed?
385. Which is the smallest no divides 2880 and gives a perfect square?
$\begin{array}{llll}\text { a. } 1 & \text { b. } 2 & \text { c. } 5 & \text { d. } 6\end{array}$
Ans: c
386. In school there are some bicycles and 4wheeler wagons.one Tuesday there are 190 wheels in the campus. How many bicycles are there?
Ans: 15
387. Man, Bear, North, South, walks. Colour of bear(Hint: North pole )

Ans: White
388. A father has 7 penny with him and 1 water melon is for 1 p, 2chickoos for 1 p, 3 grapes foe 1 p.he has three sons. How can he share the fruits equally?
Ans: 1 watermelon, 2chickoos, 1grape
389. ( $1 / 2$ ) of a number is 3 times more than the $(1 / 6)$ of the same number?

Ans: 9
390. There are two pipes A and B. If A filled 10 liters in hour $B$ can fills 20 liters in same time.

Likewise B can fill $10,20,40,80,160$ if $B$ filled in $(1 / 16)$ th of a tank in 3 hours, how much time will it take to fill completely?
Ans: 7 hours
391. In a market 4 man are standing .the average age of the four before $4 y$ years is 45 ,aftyer some days one man is added and his age is 49 .what is the average weight of all?
Ans: 49
392. There are 10 reading spots in a room. Each reading spot has a round table. Each round table has 4 chair. If different no of persons are sitting at each reading spot. And if there are 10 persons inside the room then how many reading spots donot have atleast a single reader.
(1) 5
(2) 6
(3) 7 (4) None

Ans 6 . because different no of persons are sitting on round table. So possible differnt combinations for 10 people will be 123 4. because max 4 people can sit on round table. so round tables left are 6.
393. A person do rock climbing at an altitude of 800 m . He go up by 7 mph . and come down by 9 mph. what was his av speed.
Ans (7+9)/2=8.
394. A boy want to make a cuboid of dimension $5 \mathrm{~m}, 6 \mathrm{~m}, 7 \mathrm{~m}$. from small cubes of .03 m 3 . later he realized he can make same cuboid by making it hollow. Then it take some cubes less. What is the no. of these cube.
Ans. Vol of solid cuboid $=5^{*} 6^{*} 7=210 \mathrm{m3}$. Vol of its inner cuboid by removal of which the cuboid will be hollow $=(5-2)^{*}(6-2)^{*}(7-2)=60 \mathrm{~m} 3$, then ans will be $60 / .03$
395. Two years ago A was 6 times older than B. Now he is 2 times older than B. What is the age of A.

Ans. Age of $A=5$, Age of $B=$ Two and half.
396. What is thew value of $\left(78^{*} 78^{*} 78-45^{*} 45^{*} 45\right) /\left(78^{*} 78+78^{*} 45+45 * 45\right)$

Ans. $78-45=33$. $a 3-b 3=(a-b)(a 2+a b+b 2)$
397) Two pipes $A$ and $B$ fill at $A$ certain rate $B$ is filled at $10,20,40,80$,. If $1 / 16$ of $B$ if filled in 17 hours what time it will take to get completely filled
Ans 21
398) 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?
399) Find ( $4 x+2 y$ )/ ( $4 x-2 y$ ) if $x / 2 y=2$

400] Find average speed if a man travels at speed of 24 kmph up and 36 kmph down at an altitude of 200 m .formula is $2 x y /(x+y)$
401) Same model as 4 th question. But it is on flat surface. Formula is same $2 x y /(x+y)$.
402) Six friends go to pizza corner there $r 2$ types of pizzas. And six different flavors $r$ there they have to select 2 flavors from 6 flavors. In how many ways we can select?
Ans: 6C2
403) $3,15, x, 51,53,159,161$. Find $X$

Ans: 17
404) 3 friends $A, B, C$ went for week end party to McDonald's restaurant and there they measure there weights in some order IN 7 rounds. $A ; B ; C ; A B ; B C ; A C ; A B C$. Final round measure is 155 kg then find the average weight of all the 7 rounds?

Ans: 4(155)/7=31
405) There is a toy train that can make 10 musical sounds. It makes 2 musical sounds after being defective. What is the probability that same musical sound would be produced 5 times consecutively? ( 1 of )?
Answer: $1 / 2$ * $1 / 2$ * $1 / 2$ * $1 / 2$ * $1 / 2=1 / 32$
406) (There was a long story, l'll cut short it). There are 5 materials to make a perfume: Lilac, Balsamic, Lemon, and Woody and MI mosaic. To make a perfume that is in demand the following conditions are to be followed: Lilac and Balsamic go together. Woody and MI mosaic go together; Woody and Balsamic never go together. Lemon can be added with any material. (Actually they had also mentioned how much amount of one can be added with how much quantity of the other; but that's not needed for the question.) All of the following combinations are possible to make a perfume except:
Balsamic and Lilac
Woody and Lemon
MI mosaic and Woody
MI mosaic and Lilac
407) A triangle is made from a rope. The sides of the triangle are A cm, B cm and C cm (I do not remember the numerical value). What will be the area of the square made from the same rope? Ans: ((A+B+C)/4)2
408) 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 $a, b, c, d$ ).

Ans: sqrt ((d/a) 2+ (d/c) 2)
409) A scientist in Antarctic region conducts research on bears came to know that bears changes according to the location .once he moves 1 mile towards north, then he moves 2 miles towards east, then 1 mile towards south. Now the color of bear he found will be in:

Ans: white
$410)(1 / 3)$ of a number is 3 times more than the $(1 / 6)$ of the same number?
Ans is 18
411) There are 11 boys in a family. Youngest child is a boy. What is the probability of all are boys?
a) 2
b) 2 !
C) 2048
d) 1024
412) A boy bought a roll A of 56 inches wide and 141 yards long. He also bought $B$ of 77 inches wide of length $333 y$ yards. We don't want any details of $B$. Some irrelevant matter. Final question is Time taken for cutting A into 1 yard piece is 2 seconds. Time taken to cut into 141 pieces of 1 yard each is?

Ans is $2(141)=242$
413) 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 is 15 pounds
414) 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?
Ans is 23 (cost price + change given).
415) 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?

Ans is 4 boys and 3 girls
416) There are certain number of hats and gloves in a box. They are of 41 red, 23 green, 11 orange. Power gone. But a woman can differentiate between hats and gloves.How many draws are required to obtain a pair of each color.
417) 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?

If no. is odd it is head, if no. is even it is tail If no. is odd it is tail, if no. is even it is head 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.
I didn't remembered last option and I don't know answer.
418) 2 years ago of $A$ is $x$ times that of $B$. 3 Years hence the age of $A$ is $4 / 3$ times of $B$. What is the present age of B in binary form?

I didn't remember the exact values of $x$ and $y$. You can solve easily.
419) 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?
Ans is $(z-1)(y-x)+x$.
420) 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:
There are 2 men who danced with equal no. of women's
There are 2 women who danced with equal no. of men
421) 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

Ans is 28.
422) There are 3 boys A, B, C and 2 Girls D, E. D always sit right to A. Girls never sit in extreme positions and in the middle position. C always sits in the extreme positions. Who is sitting immediate right to E ?
Ans is B or C
423) 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?

Ans is 12C2
424) 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?
Linda is shorter among them
Chelsea is taller than Julia
Chelsea is shorter than Julia
Cannot determine who is taller among Chelsea and Julia
Ans: d
425) Entry ticket to an exhibition ranges from $1 p$ to 31 p . You need to provide exact change at the counter. You have 31p 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) 22
b) 31
c) 6
d) 32

Ans is 6
426) There are 2 friends Peter and Paul. Peter age is twice as old as Paul when peter was as old as Paul is now. Sum of the present ages of Peter and Paul is 35.What is the present age of Peter? Ans is 20
427) Two tanks A and B. A fills 1 ltr/1 hour B fills 10, 20, 30 per hour. If this is (passage unnecessary). If $1 / 4$ th tank of $B$ takes 15 hours to fill how much it time will to take to fill complete tank?
428) Out of 7 children the youngest is boy then find the probability that all the remaining children are boys
Ans: $1 / 2^{\wedge} 6=1 / 64$
429) The three sides of a triangle are given. 16, $14,21 \mathrm{cms}$ and this triangle is conveted into a square. So what will be the area of the square generated?

Ans:(14+16+21)/4. Then you will get the 1 side of a square and now find the area of a square.ie, side^2
430) An equation of the form $4 x+6 y-2 z=32$. Find the difference between $x$ intercept and $z$ intercept?Ans: $\mathrm{x} / \mathrm{a}+\mathrm{y} / \mathrm{b}+\mathrm{z} / \mathrm{c}=$
431) A Toy train can make 10 sounds sound changes after every 4 mins, now train is defective and can make only 2 sounds. Find probability that same sound is repeated 5 times consecutively ( 1 out of)?

Ans: 1/32
432) 20 men and 20 women are there, they dance with each other, is there possibilty that 2 men are dancing with same women and vice versa.
Ans: Never
433) 10 people are there, they are shaking hands together, how many hand shakes possible, if
they are in no pair of cyclic sequence.
Ans-9
434) In school there are some bicycles and 4 wheeler wagons. One Tuesday there are 234 wheels in the campus. How many bicycles are there?

Ans: Go with options. Multiply each option with 2 and subtact the obtained no from 234. If it is exactly divisible by 4 , that is the answer.
435) A father has 7 penny's with him and 1 water melon is for 1 p, 2 chickoos for $1 p, 3$ grapes foe 1 p . He has three sons. How can he share the friuts equally?
Ans: 1 watermelon, 2chickoos, 1grape
436) A pizza shop made pizzas with to flavours. In home there are ' 9 ' different flavors, in that ' 2 ' flavors are taken to made piza in how many ways they can arrange?
(Logic: NcM, N=9, M=2 )
437) One organization, material, labor and maintenance are in the ratio of $4: 6: 7$, if the material cost is: 272 , what is the total cost?
Ans: $4 x=272=>x=68$; now total cost $=272+6(68)+7(68)$.
438) 4 years before Paul's age is 3times the Alice age and the present age of Paul is 6 times the Alice. What is the presents Paul's age?
Ans: $x-4=3(y-4) ; x=6 y$ : Solve you will get it.
439) In a question, last part has, the ages of two people has the ratio of $6: 5$ and by adding the numbers we get 55, after how many years the ratio would be 8:7?
Ans: Easy you can do it, simple equtions
440) In a room (unwanted stuff) Sports readers, 10 tables, 4 chairs per table, each table has different number of people then how many tables will left without at least one person?
Ans: 6
441) Passage joe is taller than jerry and 3 pillers. kistern is shorter than joe and 2 pillers is jerry shorter/taller than kistern?
442) a volume of $A$ are having in a container of sphere. how many semi hemispheres of $B$ volume each will be required to transfer all the A in to semi hemispheres?
Ans: $A=x B$
443) Question based on $V=I^{*} R$ but in dis question most of data given are ridiculas like volume, density, length, height similar long story are given
444) Peter and Paul are two friends. The sum of their ages is 42 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?
445) A horse chases a pony 2 hours after the pony runs. Horse takes 4 hours to reach the pony. If the average speed of the horse is 81 kmph , what s the average speed of the pony? (This question was really long with loads of irrelevant statement)
446) Difference between two numbers is 4 and their product is 17 . Then find the sum of their squers?
447) 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.
448) Some ages problem, then asked the answer in binary
449) (Some chetta chikkati solutions) unwanted data folowed by a formula diameter $\mathrm{d}=10^{*}(\mathrm{t}-14)$, $\mathrm{t}>14$ then what id diameter after $\mathrm{t}=40$ ?
450) Some denominations question like you have 31 paise, and ticket cost is between 1 to 31 , you have to give the exact denominations for the ticket. Find all the no. of possible denominations you may prdict and you must be left wid atleast few paise?
451) Direction problems. A man goes 50 km North, then turned left walked 40 km , then turned right? In which direction is he in?

Ans: North

Find the value of $\left(74^{*} 74^{*} 74-70 * 70 * 70\right)$
2000 pillar temple of Hyderabad.
The difference between the age of 2 of my 3 grandchildren is 3 . My eldest is 3 times older then the youngest.
Prasad is twice as heavy as Pooja. Pooja's father has 3 times as much land as Prasad's father. Their families are exchanging $\qquad$ . It turns out that prasad is also twice as old as Pooja when

Prasad was as old as Pooja is now.
The no. of problems that can use this formula is sum of 2 prime numbers. The Product of 2 prime numbers is smaller than the total number of problems. Now, if the difference of any two numbers is 4 , and the product is 24 , what is the sum of the squares?
Watermelon is one penny each, dates at 2 for a penny and grapes at 3 for a penny. A father spent 7 penny and got the same amount of each type of fruit for each of his 3 children, Jane, Joe, and Jill. Jane is 3 yrs older than Jill and Joe. And Joe is exactly half the age of Jane and Jill. What did each child get?

1 Watermelon, 2 Dates, 1 Grape
1 Watermelon, 1 Dates, 1 Grape
Watermelon, 3 Dates, 2 Grape
Watermelon, 2 Dates, 2 Grape

A man is standing in front of a painting of a man. And he tells the following brothers and sister
have $\qquad$ , but this man's father is my father's son? Who is on the painting.a) His son b) He himself c) His father d) His grandfather.
A racehorse starts chasing a wild pony 3 hours after the pony bolts the stable. The pony runs through the entire country of Alb.Texas jumping 3 streams and crossing four 10 meter roads. The racehorse finally catches up with the pony after four hours by the time the sun had set and the moon was up in the sky for 4 hours. If the average speed of the racehorse is 73 kmph then average speed of the wild pony is $\qquad$ kmph. a)54.75 b)42.71 c)31.29 d)41.71

The number of problems that can use this formula is sum of 2 prime numbers. Find $3 x+2 y / x-2 y$ if $x / 2 y=2$

A Seamstress buys a certain amount of gringham cloth which comes in rolls that are exactly 56 inches wide. She also bought a certain length of Seersucker- 1 yard long and 35 inches wide. She discovers she has 112 yards of gringham and she wants to divide this into 112 lengths of 1 yard each. She wants to have twicw as many pieces as Seersucker as she does of gringham. It takes her 8 seconds to cut each length working non stop, how long in seconds does it take to cut 112 pieces.

In the reading room of a library, there are ten reading spots. Each reading spot consist of a round table with four chairs placed around it. There are some readers such that in each occupied reading spot, there are different number of readers. If in all there are ten readers how many reading spots do not have even a single reader.

Stephen Hawking is the Author of the bestseller "The Brief History of Time" and his daughter explains the universe to readers of all ages in their book "George's Secret key to the Universe". When Lucy was young his father would take his daughter to the terrace and explain about constellations to his daughter and then leaves her alone in the terrace to find few of them all by herself. Lucy finds around 25 groups of stars that appear to her as constellations. She draws 7 patterns of the constellations in her notebook and notes down the number of stars in each of them. She counts 5 stars in first constellation and 15 on next. She counts a number the thrid time and forgets to note it down. The next four constellations she counts $51.53,159,161$. Next day her father looks at the notebook and wants to know the number of stars in the third constellation. Lucy only remembers that number of starts counted in each of the constellation followed a pattern $5,15, x, 51,53,159,161$.
$19 \mathrm{~b}) 45 \mathrm{c}) 16 \mathrm{~d}) 17$
Rowen is taller than lily and 2 of the 1000 pillars. Jill is shorter than Rowen \& 3 pillars. Which is more accurate? a) Lily is shorter than Jill. b) Its impossible to tell c) Lily is taller than Jill d) Jill is as tall as Lily.

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 $n 1(P)$. The minimum value of $n 1(P)$ 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

Q2) Paul the octopus who has been forecasting the outcome of FIFA world cup matches with tremendous accuracy has now been invited to predict ICC world cup matches in 2011. We will assume that the world cup contenders have been divided into 2 groups of 9 teams each. Each team in a group plays the other teams in the group. The top two teams from each group enter the semi finals ( after which the winner is decided by knockout).

However, Paul has a soft spot for India and when India plays any team, Paul always backs India. Alas, his predictions on matches involving India are right only 2 out of 3 times. In order to qualify for the semi finals, it is sufficient for India to win 7 of its group matches. What is the probability that India will win the ICC world cup?
a) $(2 / 3)^{\wedge} 10$
b) $(2 / 3)^{\wedge} 9+8 / 3^{*}(2 / 3)^{\wedge} 9$
c) $8 / 3^{*}(2 / 3)^{\wedge} 9$
d) $(2 / 3)^{\wedge} 10+8 / 3^{\star}(2 / 3)^{\wedge} 9$

Q3) A toy train produces at least 10 different tunes when it moves around a circular toy track of radius 5 meters at 10 meters per minute. However, the toy train is defective and it now produces only two different tunes at random. What are the odds that the toy train produces 4 consecutive music tunes of the same type?

1 in 16 b) 1 in 4 c) 1 in 8

Q4) 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
100. 3
d) 42

Q5) 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
100. 9
d) 10

Q6) 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
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Q7) A car manufacturer produces only red and blue models which come out of the final testing area completely at random. What are the odds that 5 consecutive cars of the same color will come through the test area at any one time?
a) 1 in 16
b) 1 in 125
c) $\quad 1$ in 32
d) 1 in 25

Q8) Alok is attending a workshop "How to do more with less" and today's theme is Working with fewer digits. The speakers discuss how a lot of miraculous mathematics can be achieved if mankind(as well as womankind) had only worked with fewer digits.

The problem posed at the end of the workshop is

How many four digit numbers can be formed using the digits $1,2,3,4,5$ ( but with repetition) that are divisible by 4 ?

Can you help Alok find the answer?
a) 100
b) 125
c) 75
d) 85

Q9) Rearrange the following letters to make a word and choose the category in which it Ms RAPETEKA
a) Bird
b) Vegetable
c) City
d) Fruit

Q10) 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) 12.06

Q11) In the reading room of a library, there are23 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

Q12) 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 Feraari 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.
a) 20.72
b) 5.18
c) 238.25
d) 6.18

Q13) 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?

The even numbered statements are true and the odd numbered are false.

The odd numbered statements are true and the even numbered are false.

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

The first 35 statements are false and the last 35 are false.

Q14) Middle - earth is a fictional land inhabited by Hobbits, Elves, dwarves and men. The Hobbits and the Elves are peaceful creatures who prefer slow, silent lives and appreciate nature and art. The dwarves and the men engage in physical games. The game is as follows. A tournol 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 a knock-out tournol how many matches were played?
a) 257
b) 256
c) 72
d) 255

Q15) A research lab in Chennai requires 100 mice and 75 sterilized cages for a certain set of laboratory experiments. To identify the mice, the lab has prepared labels with numbers 1 to 100 , by combining tags numbered 0 to 9 . The SPCA requires that the tags be made of toxin-free material and that the temperature of the cages be maintained at 27 degree Celsius. Also, not more than 2 mice can be caged together and each cage must be at least $2 \mathrm{sq} . \mathrm{ft}$ in area. The 5 experiments to be conducted by lab are to be thoroughly documented and performed only after a round of approval by authorities. The approval procedure takes around 48 hours. How many times is the tag numbered ' 4 ' used by the lab in numbering these mice?
a) 9
b) 19
c) 20
d) 21

Q16)There are two water tanks $A$ and $B, A$ is much smaller than $B$. While water fills at the rate of
one litre 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 litres, second hour it has 20 , and so on). If tank $B$ is $1 / 32$ filled after 21 hours, what is the total duration required to fill it completely?
a) 26 hrs
b) 25 hrs
c) 5 hrs
d) 27 hrs

Q17) Consider two tumblers, the first containing one litre of 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?

There is less coffee in the first tumbler than water in the second tumbler.

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There is as much coffee in the first tumbler as there is water in the second tumbler

None of the statements holds true.

Q18) Francois Pachet, a researcher at Sony Computer Science laboratories is also a jazz musician. He decided to build a robot able to improvise like a pro. Named Continuator, the robot can duet with a live musician in real- time. It listens to a musical phrase and then computes a complementary phrase with the same playing style. If the cost of making the robot is divided between and then computes a complementary phrase with the same playing style. If the cost of making the robot is divided between materials, labour and overheads in the ratio of 4:6:2.If the materials cost $\$ 108$. the cost of the robot is
a) $\$ 270$
b) $\$ 324$
c) $\$ 216$
d) $\$ 648$

Q19) 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 inspite 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 colour?
50
b) 8 c) 60
d) 42

Q20) 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?
4 mph
b) 5 mph
c) 2.4 mph
d) 4.8 mph

Q21) 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) $\$ 486$

Q22) Given a collection of 36 points $P$ in the plane and a point equidistant from all points in $P$, which of the following are necessarily true?

The points in P lie on a circle.

The distance between any pair of points in $P$ is larger than the distance between $X$ and a point in $P$
a) A and B
b) Neither A nor B
c) B only
d) A only

Q23) In the year 2002, Britain was reported to have had 4.3 m closed - circuit television (CCTV) cameras - one for every 14 people in the country. This scrutiny is supposed to deter and detect crime. In one criminal case, the police interrogates two suspects. The ratio between the ages of the two suspects is $6: 5$ and the sum of their ages is $6: 5$ and the sum of their ages is 55 years. After how many years will the ratio be 8:7.?
a) 11
b) 6
c) 10
d) 5

Q24) 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

Q25) 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 O 1 and O 2 . Which of the following is true ?

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

In order to win, Alok should remove one of the coins different from O 1 and O 2 on his first turn.

In order to win, Alok should remove O 2 on his first turn.

Alok has no winning strategy.

A school yard contains only bicycles and 4 wheeled wagons. On Tuesday, the total number of wheels in the schoolyard was 114 . What would be the possible number of bicycles?

18
17
16
8
Determine the distance between x -intercept and 2-intercept of the plane where equation is $6 \mathrm{x}+8 \mathrm{y}$ $32=72$.

3
26.83

9
25.63

There are 7 children and the youngest child is a boy. What is the probability that all of them are

NY public library is one of the world's greatest repositories of books and journals. It has a beautiful reading room facing Manhattan's famous 5th Avenue. In the reading room are10 reading spots. Each reading spot consists of a round table with 4 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 are10 readers, how many spots are empty?
6
none
5
4
A seamstress buys a certain amount of Gingham cloth which comes in rolls that are exactly 56 inches wide. She has also bought a certain length of Seek sucker cloth and 35 inches wide. The seamstress first focuses on the Gingham roll ad discovers that she has 116 yards of Gingham and she wants to divide the gingham into 116 lengths of 1 yard each. She wants to have twice as many pieces of seek sucker as she does of the Gingham. It takes 4 seconds to cut each length of Gingham. Working non-stop, how long (in seconds) will it take her to cut all 116 pieces?

20 people meet and shake hands. The maximum number of hand shakes possible if there is to be no 'cycle' of handshakes is( a cycle of handshake is a sequence of people $\mathrm{a} 1, \mathrm{a} 2, \ldots . . \mathrm{ak}$ ) such that people(a1,a2),(a2,a3).....(a(k-1),ak),(a2,a1) shake hand is

A pie is to be divided among 20 people. A man eats 3 pieces, a woman eats 2 pieces and a child eats $1 / 2$ a piece of pie. What is the number of men, women children, so that 20 people in total and everyone get the same pie? There are 20 pieces of pie in all.

7 women, 1 man, 12 children
5 women, 1 man, 14 children
4 women, 2 men, 12 children
A toy train produces at least 10 different tunes when it moves around a circular toy track of radius

5 m at $10 \mathrm{~m} / \mathrm{min}$. However, the toy train is defective and it now produces only 2 different tunes at random. What are the odds that toy train produces 6 consecutive music tunes of the same type.

Bob, Peter, Oliver and 2 girls -Raven and Chelsey are to be seated in a row. Raven often gets sits to left of Bob. No girl sits at extreme positions and middle positions. Peter always sits at the extreme position. Who sits to the right of Chelsey?
Oliver
Bob
Peter/Oliver
Peter
A taxi driver commenced his journey from a point and he drove 10 km towards north and turned to his left and drove another 20 km . After waiting to meet a friend here, he turned to his right and continued to drive another 10 km . In which direction is he now?

West
South
North
East
A hunter walked one kilometer south from his camp. Then he walked one kilometer west. There he shot a bear. Then he walked one kilometer north, and found that he was back at his camp. What color was the bear?

Black
White
Brown
None of the above

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 $n 1(P)$. The minimum value of $n 1(P)$ 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

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cannot be determined
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d) 42
(solution:c)

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## 8

All are equally likely 9 10

Q6) 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 ?
2. Thursday
3. Tuesday
4. Monday
5. Sunday
(solution:a)

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12.25
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19
20
d) 21
(solution:b)

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2.4 mph

4 mph
4.8 mph
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\$27
\$ 18
\$45
\$ 486

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$A$ and $B$
Neither A nor B
B only
A only

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11
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10
5

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135
21
71

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In order to win, Alok should remove one of the coins different from O 1 and O 2 on his first turn.

In order to win, Alok should remove O 2 on his first turn.

Alok has no winning strategy.

Question 1: There is a toy train that can make 10 musical sounds. It makes 2 musical sounds after being defective. What is the probability that same musical sound would be produced 5 times consecutively? ( 1 of )?
Answer: $1 / 2$ * $1 / 2$ * $1 / 2$ * $1 / 2$ * $1 / 2=1 / 32$
32 will be the answer. (My friends got similar question with " 3 times consecutively"; for that the answer would be 8)

Question 2: 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?

Luckily, I had this question twice. Initially I left it because of the confusing statement but when I got the same question second time with different names of the friends (Pooja and Prasad) then I gave a little extra time and solved it.

Answer: 20 years. I simply substituted the answers in the statement to find the best fit, because the statement in the question was pretty confusing.

Question 3: The ages of two friends is in the ratio 6:5. The sum of their ages is 66 .After how many years will the ages be in the ratio 8:7?

Answer: 12 years.

Question 4: (There was a long story, I'll cut short it). There are 5 materials to make a perfume:
Lilac, Balsalmic, Lemon, Woody and Mimosaic. To make a perfume that is in demand the following conditions are to be followed: Lilac and Balsalmic go together. Woody and Mimosaic go together,

Woody and Balsalmic never go together. Lemon can be added with any material. (Actually they had also mentioned how much amount of one can be added with how much quantity of the other; but that's not needed for the question.) All of the following combinations are possible to make a perfume except:
Balsalmic and Lilac
Woody and Lemon
Mimosaic and Woody
Mimosaic and Lilac
Answer: Mimosaic and Lilac. I have made the question here really easy to understand. But the actual question was in a twisted language and it was difficult to find the answer. It took me some time to get to the answer.

Question 5: 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.

Answer: 8 * $7=56$

Question 6: 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?

Answer: 280.5625

Question 7: What is the distance between the z-intercept from the $x$-intercept in the equation $a x+b y+c z+d=0$. (I do not remember the values of $a, b, c, d$ )

Question 8: 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?

Answer: 33.33\%

Question 9: 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? (This question was really long with loads of irrelevant statement)

Question 10: There is 7 friends (A1, A2, A3....A7). If A1 have to have shake with all with out repeat. How many hand shakes possible?(I dont know the exact question but like this only)

Question 11: There are two pipes A and B. If A filled 10 liters in a hour B can fills 20 liters in same time. Likewise B can fill 10, 20, 40, 80,160 ....if B filled in (1/16) th of a tank in 3 hours, how much time will it take to fill completely?
Answer: 7 hours
Question 12: Keywords: Sports readers, 10 tables, 4chairs per table, each table has different
number of people then how many tables will left without at least one person?
Ans: 6

1) 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 $\mathrm{n} 1(\mathrm{P})$ 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

Q2) Paul the octopus who has been forecasting the outcome of FIFA world cup matches with tremendous accuracy has now been invited to predict ICC world cup matches in 2011. We will assume that the world cup contenders have been divided into 2 groups of 9 teams each. Each team in a group plays the other teams in the group. The top two teams from each group enter the semi finals ( after which the winner is decided by knockout).

However, Paul has a soft spot for India and when India plays any team, Paul always backs India. Alas, his predictions on matches involving India are right only 2 out of 3 times. In order to qualify for the semi finals, it is sufficient for India to win 7 of its group matches. What is the probability that India will win the ICC world cup?
a) $(2 / 3)^{\wedge} 10$
b) $(2 / 3)^{\wedge} 9+8 / 3^{*}(2 / 3)^{\wedge} 9$
c) $8 / 3^{*}(2 / 3)^{\wedge} 9$
d) $(2 / 3)^{\wedge} 10+8 / 3^{*}(2 / 3)^{\wedge} 9$

Q3) A toy train produces at least 10 different tunes when it moves around a circular toy track of radius 5 meters at 10 meters per minute. However, the toy train is defective and it now produces only two different tunes at random. What are the odds that the toy train produces 4 consecutive music tunes of the same type?
a) 1 in 16 b) 1 in 4
c) 1 in 8

Q4) 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
d) 42

Q5) 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

9
d) 10

Q6) 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
Monday
d) Sunday

Q7) A car manufacturer produces only red and blue models which come out of the final testing area completely at random. What are the odds that 5 consecutive cars of the same color will come through the test area at any one time?
a) 1 in 16
b) 1 in 125
1 in 32
d) 1 in 25

Q8) Alok is attending a workshop "How to do more with less" and today's theme is Working with fewer digits. The speakers discuss how a lot of miraculous mathematics can be achieved if mankind(as well as womankind) had only worked with fewer digits.

The problem posed at the end of the workshop is

How many four digit numbers can be formed using the digits $1,2,3,4,5$ ( but with repetition) that are divisible by 4 ?

Can you help Alok find the answer?
a) 100
b) 125
c) 75
d) 85

Q9) Rearrange the following letters to make a word and choose the category in which it Ms RAPETEKA
a) Bird
b) Vegetable
c) City
d) Fruit

Q10) 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

$$
d=4^{*} \sqrt{ }(t-9) \text { for } t \geq 9
$$

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) 12.06

Q11) In the reading room of a library, there are23 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

Q12) 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 Feraari 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.
a) 20.72
b) 5.18
c) 238.25
d) 6.18

Q13) 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.

The first 35 statements are false and the last 35 are false.

Q14) Middle - earth is a fictional land inhabited by Hobbits, Elves, dwarves and men. The Hobbits and the Elves are peaceful creatures who prefer slow, silent lives and appreciate nature and art. The dwarves and the men engage in physical games. The game is as follows. A tournol 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 a knock-out tournol how many matches were played?
a) 257
b) 256
c) 72
d) 255

Q15) A research lab in Chennai requires 100 mice and 75 sterilized cages for a certain set of laboratory experiments. To identify the mice, the lab has prepared labels with numbers 1 to 100 , by combining tags numbered 0 to 9 . The SPCA requires that the tags be made of toxin-free material and that the temperature of the cages be maintained at 27 degree Celsius. Also , not more than 2 mice can be caged together and each cage must be at least 2 sq.ft in area. The 5 experiments to be conducted by lab are to be thoroughly documented and performed only after a round of approval by authorities. The approval procedure takes around 48 hours. How many times is the tag numbered ' 4 ' used by the lab in numbering these mice?
a) 9
b) 19
c) 20
d) 21

Q16)There are two water tanks $A$ and $B, A$ is much smaller than $B$. While water fills at the rate of one litre 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 litres, second hour it has 20 , and so on). If tank $B$ is $1 / 32$ filled after 21 hours, what is the total duration required to fill it completely?
a) 26 hrs
b) 25 hrs
c) 5 hrs
d) 27 hrs

Q17) Consider two tumblers, the first containing one litre of 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 tumbler.
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.

Q18) Francois Pachet, a researcher at Sony Computer Science laboratories is also a jazz musician. He decided to build a robot able to improvise like a pro. Named Continuator, the robot can duet with a live musician in real- time. It listens to a musical phrase and then computes a complementary phrase with the same playing style. If the cost of making the robot is divided between and then computes a complementary phrase with the same playing style. If the cost of making the robot is divided between materials, labour and overheads in the ratio of 4:6:2.If the materials cost $\$ 108$. the cost of the robot is
a) $\$ 270$
b) $\$ 324$
c) $\$ 216$
d) \$ 648

Q19) 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 inspite 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 colour?
a) 50
b) 8
c) 60
d) 42

Q20) 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) 4 mph
b) 5 mph
c) 2.4 mph
d) 4.8 mph

Q21) Spores of a fungus, called late blight, grow and spread infection rapidly. These pathogens were responsible for the Irish potato famine of the mid-19 ${ }^{\text {th }}$ 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) $\$ 486$

Q22) Given a collection of 36 points $P$ in the plane and a point equidistant from all points in $P$, which of the following are necessarily true?
A. The points in $P$ lie on a circle.
B. The distance between any pair of points in $P$ is larger than the distance between $X$ and a point in $P$
a) A and B
b) Neither A nor B
c) B only
d) A only

Q23) In the year 2002, Britain was reported to have had 4.3 m closed - circuit television (CCTV) cameras - one for every 14 people in the country. This scrutiny is supposed to deter and detect crime. In one criminal case, the police interrogates two suspects. The ratio between the ages of the two suspects is $6: 5$ and the sum of their ages is $6: 5$ and the sum of their ages is 55 years. After how many years will the ratio be 8:7.?
a) 11
b) 6
c) 10
d) 5

Q24) 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

Q25) 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 O 1 and O 2 . Which of the following is true?
a) In order to win, Alok should remove O 1 on his first turn.
b) In order to win, Alok should remove one of the coins different from O 1 and O 2 on his first turn.
c) In order to win, Alok should remove O 2 on his first turn.
d) Alok has no winning strategy.

1. There is ferarri and benz car, benz speed is say 10 kmph and it cover 10 km .And if ferarri goes with 3 times faster than benz. So in how much time ferarri could take to cover same distance.
sol: as speed of ferarri is $3^{*} 10=30$ so time will be $10 / 30$
2. If one lady have 3 daughter and any of out 3 have diff, of ages is 3 .And oldest is 3 times of more than 2 than yougest after 2 years then tell the age of oldest daughter. Solution: let $x$ is youngest ,y middle,$z$ oldest. so $y-x=3, z-y=3$, and $z=2=2(x+2)$ and put the option answer try to get condition.(sorry i forgot option but pattern II be same)
3.One question like that ,there is fabonaci series and you have to find one number ..clue-it based on series
4.area of trapezium?
5.if a person moves 15 km straight and turns 45 km right and moves 15 km straight then how much distance he needs to walk to reach starting point?
6.if pqrstu implies qrstuv then abcdefg implies what?
7.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 ,how many mices are required to find the poisoned can?
.if atlantic is found in atlantic ocean ,india is found in indian ocean then which of the following cases are true
8.if $a$ and $b$ are mixed in $3: 5$ ration and $b, c$ are mixed in $8: 5$ ration if the final mixture is 35 litres,find the amount
```
{ a/b=3*8/5*8 and b/c=8*5/5*5 a/b/c=24:40:25 ans=40*35/
(24+40+35)=1400/89
```

Ans=15.79\}
of $b$ in the final mixture
$9.1!+2!+\ldots .50!=3^{*} 10^{\wedge} 64$ ?
and the rest are like passage questions ,be sure to find the answer as soon as possible within 15 seconds, if you are not able to do in 15 seconds then skip it and give a try at last. 10. There was a scientist who after doing research, found that color of skin of animals vary with change in distance.One day he started to chase a beer. He walked 1 mile towards north , then turned and walked 1 mile towards east and then caught the beer and radio-ribboned the beer Then he left the beer at that spot and returned to his base-station taking a turn
towards
south (walked 1 mile towards south).Then what was the color of beer at that spot?
a)white(ans)
b)brown
c) black
d)grey
11.) 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?

Solution: Here the question appear as an easy one, but carried a lot of unwanted sentences and unwanted datas(i dint mention above) in exam which may confuse u on solving technique.
Let $x$ be current average age of first 6 persons in queue and current age of seventh person be $y$. Then $6 x$ will become the sum of those 6 persons age.

Now, let compute the sum of those 6 persons after two years, $6 x+12$ (as each and individual increase their age by 2). hence its average become $(6 x+12) / 6=43$ (give in question itself).

So now we can compute $x$ from above equation. $(x=41,6 x=246)$
Let now we compute $y,((6 x+y) / 7)=45$, as we have value of $x$, compute $y$.
Ans: 69
12) Horse started to chase dog as it relieved stable two hrs ago. And horse started to ran with average speed $22 \mathrm{~km} / \mathrm{hr}$, horse crossed 10 mts road and two small pounds with depth 3m, and it crossed two small street with 200 mts length. After traveling 6 hrs, 2 hrs after sunset it got dog. compute the speed of dog?

Ans: As we have speed and travel time of horse, we can get distance travelled by it...
Hence d $=22 * 6=132 \mathrm{~km}$,
Exactly this 132 km was travelled by dog in 8 hours (as it started two hours earlier).

Hence speed of dog $=132 / 8=16.5 \mathrm{~km} / \mathrm{hr}$
Ans:16.5km/hr.
13) $3,22,7,45,15, ?, 31$

Solution: Here it appear simple, because it arranged in arranged in sequence manner, but the actual question was some what twist mentioning fibonacci series and more over question was in statements (no numbers).. hence first try to understand the question well.
here let group alternate terms $3,7,15,31(3+4=7,7+8=15,15+16=31)$
Similarly for second group $(22,45, ?(22+23=45,45+46=91)$ hence ans is 91 .
14) 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?

Ans:
For 1 to $10-1$ six
2 to 20-1 six
Similarly upto 59 we utilise six, 5 times
from 60 to 69 (including 66) - 11 times
from 70 to $100-3$, hence ans $=5+11+3=19$
Ans:19.
13) $((4 x+3 y)+(5 x+9 y)) /(5 x+5 y)=$ ? as $(x / 2 y)=2$

Ans: 2(simple algebra, i think $u$ no need of explanation)
15) If we subract a number with $y$, we get 4 increase of number, once it got divided by y itself.. Find that number??
Ans: 12 (we can easily predict from options, as we take y as 6)
16) Jumbled letters, parakeet(answer)

Ans: bird(category)
17) one question like. (209*144)^2 + (209*209)+(209*144)+(144*144) =?

Ans: here you can use calc, many(4 to 5) questions were depend upon calc alone.(no
need problem solving technique).
18) Im only son for my parents. (some irrelevant statements in the middle to distract u). The man in picture is my father's son.(some irrelevant statements).who is he?

Ans: he himself(blood relation type of question).ans .his son
19) 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?16
20) A man is standing in front of a painting of a man, and he tells us the following:

Brothers and sisters have I none, but this man's father is my fathers son. Who's on the painting?
a) The Son
b) The Father
c) Himself ; const html Riddle1Sol = The Solution: His son

## An Explanation

We can replace my fathers son by myself since he is the only child. Now remains: This man s father is myself, so this man is his son.
21) 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 ; Solution: 3

After first round we had second round in SJBIT college on 28-08-2010.There is we had TR and HR round happend.
TR they asked about my project and asked diff between object and class ; properties of Object oriented language and questions on my year gap.I answered ,be confident and answer honestly.I got through this round.

Then next round was HR But ,they conducted GD for us i dont know why. He gave topic Why you want to join TCS. We answered.In end Hr asked me to named one person who is your strongest contender in this GD round and also weakest. But i hesitate ,but he forced me to name one person whom i think.I answered .But i dont know whether i should said so or not .Or should i have to proposed my name?Please friend suggest your answer. what i did is correct or wrong?Or im selfish at that time or honest to tell that name? I am afraid they will select me or not .I am 2009 pass out and avg student till i couldnt placed and waiting for one opportunity.And they told they will announce result within two weeks.

Hope this experience will help you in a lot.Please pray for me also. I am trying hard to get a job.

Question 1: There is a toy train that can make 10 musical sounds. It makes 2 musical sounds after being defective. What is the probability that same musical sound would be produced 5 times consecutively? ( 1 of $\qquad$ )?

Answer: $1 / 2$ * $1 / 2$ * $1 / 2$ * $1 / 2$ * $1 / 2=1 / 32$
32 will be the answer.
(My friends got similar question with " 3 times consecutively"; for that the answer would be 8)

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Answer: 12 years.

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the following conditions are to be followed: Lilac and Balsalmic go together. Woody and Mimosaic go together, Woody and Balsalmic never go together. Lemon can be added with any material. (Actually they had also mentioned how much amount of one can be added with how much quantity of the other; but that's not needed for the question.) All of the following combinations are possible to make a perfume EXCEPT:

1) Balsalmic and Lilac
2) Woody and Lemon
3) Mimosaic and Woody
4) Mimosaic and Lilac

Answer: Mimosaic and Lilac. I have made the question here really easy to understand. But the actual question was in a twisted language and it was difficult to find the answer. It took me some time to get to the answer.
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Answer: 8 * $7=56$

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Answer:280.5625

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Answer:7 hours

Question 12: KEYWORDS: Sports readers, 10 tables,4chairs per table, each table has different number of people then how many tables will left without at least one person? Ans: 6

1. Which is the smallest no divides 2880 and gives a perfect square?
a. 1 b. 2 c .5 d. 6

Ans: c
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?
(Ans: second liquid in first bowl is smaller than the first mixture in second bowl)
3. Form 8 digit numbers from by using $1,2,3,4,5$ with repetition is allowed and must be divisible by4?
a. 31250 b. 97656 c. 78125 d. 97657

Ans: c
4. Rearrange and categorize the word 'RAPETEKA'?

Ans: bird
5. One problem on (a3-b3)/(a2+ab+b2)

Ans: ‘a-b’
6. In school there are some bicycles and 4wheeler wagons.one Tuesday there are 190 wheels in the campus. How many bicycles are there?

## Ans: 15

7. Key words in question (Fibonacci series, infinite series, in the middle of the question one number series is there....I got the series 3127 26b 15?
Ans:54
(Logic: $3 * 2+1=7$ 12*2+2=26
$7 * 2+1=1526 * 2+2=54)$
8. A lies on mon, tues, wed and speak truths on other days, B lies on thur, fri, sat and speaks truths on other days ...one day a said I lied today and B said I too lied today. What is the day?
9. Man, Bear, North, South, walks.

## Ans: White

10. A father has 7 penny's with him and 1 water melon is for 1 p, 2chickoos for 1 p, 3 grapes foe 1 p .he has three sons. How can he share the fruits equally?

## Ans: 1 watermelon,2chickoos,1grape

11. ( $1 / 2$ ) of a number is 3 times more than the $(1 / 6)$ of the same number?

## Ans: 9

12. There are two pipes $A$ and $B$. If $A$ filled 10 liters in hour $B$ can fills 20 liters in same time.

Likewise B can fill $10,20,40,80,160$....if B filled in (1/16) th of a tank in 3 hours, how much time will it take to fill completely?

## Ans:7 hours

13. KEYWORDS:T.Nagar,Chennai,1-100,prime numbers b/n 140-180,How many 2's are there?

Ans: 20 (Not only 2's, 1 's,3's,4's,5's,6's, 7's, 8's,9's,0's also 20)
14. A man is standing before a painting of a man and he says I have no bro and sis and his father is my father's son?

## Ans: His son

15. One question has last part like difference between two terms is 9 and product of two numbers is 14 , what is the squares of sum of numbers?

Ans:109
16. What is the value of $[(3 x+8 Y) /(x-2 Y)]$; if $x / 2 y=2$ ?

Ans:10 \{the numerical may change)
17. A pizza shop made pizzas with to flavours.in home there are ' N ' different flavors, in that ' $M$ ' flavors are taken to made pizza.in how many ways they can arrange?
(Logic: NcM )
18. 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:15

19. KEYWORDS: one organization ,material labor and maintenance are in the ratio of 4:6:7, the material cost is:100, what is the total cost?

Ans: 425
20. KEYWORDS: density, reluctance, sensitivity, voltage ,current, what is the resistance Formula is " $\mathrm{R}=\mathrm{V} / \mathrm{I}$ "
21. In a market 4 man are standing the average age of the four before 4years is 45 ,aftyer some days one man is added and his age is 49. what is the average weight of all?

Ans: 49
22. KEYWORDS: Sports readers, 10 tables,4chairs per table, each table has different number of people then how many tables will left without at least one person?

Ans: 6
23. KEYWORDS: Die, card, coin, b/n 2 to 12

## Ans: All are equal

24. In a school for a student out of a 100 he got 74 of average for 7 subjects and he got 79 marks in 8th subject. what is the average of all the subjects?

## Ans: 74.625

25. In a question ,last part has ,the ages of two people has the ratio of $6: 6$ and by adding the numbers we get 44 ,after how many years the ratio would be $8: 7$ ?

Ans: 8
26.One train travels 200 m from A to B with $70 \mathrm{~km} / \mathrm{ph}$. and returns to A with 80kmph, what is the average of their speed?
27. Two years before Paul's age is 2times the Alice age and the present age of Paul is 6times the Alice. what is the presents Paul's age???( 3years) "u try to solve this question once"

These are the questions that i remember.

## Test Paper :5

Paper Type: Candidate Experiences
Test Date : 21 August 2010
Test Location : ITER college bhubneswar
Posted By : MANAS RANJAN MISHRA
Dear friends, I am manas ranjan mishra, I am a MCA STUDENT FROM BPUT ODISHA, 2010 BATCH, I was selected in the off campus drive of tcs @ Iter bbsr on 21-082010, as I can memorize some of the questions of aptitude test, I am writing some of them questions (approximetly based on memory)

## Aptitude test

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 find \# shopkippers sailing different things. An apple cost 1 penny, 2 chocalate costs 1 penny.\& 3 bananas cost 1 penny. He has bought equal no. 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) 1 app,2cho,1 banana
D)
2. 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 1 mile 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 in2 hrs. Then what is the colour of the bear? I think ans is white
a)white b)black c)gray d)brown
3. In a particular city there are 100 homes numbered from 1,2,3.........100. Thecity was build by a builder from chennei. There was 45 shop in the town which was build by a builder from Mumbai. THE 2nd builder can build the in $1 / 2$ time as compared to 1st builder. If the 2nd builder builds in 15 days, then how many 2's are used by the builder from Chennai in numbering the 100 homes?
a) 17 b) 18 c) 19 ans d) 20 c) 19
4.MR dash has 3 sons whose ages are respectively a,b,c. The grandfather has bought a cycle for the eldest son, mother has bought a bag for the youngest one which cost Rs150/. The sum of two age of the elder son \& one son is 15.The difference of age of sons is $3 \& 2$. Then what is the age of the eldest son?
a) 10 , b) 11 , c) 12, d) 13
4. We all know that Arya bhatta is the greatest mathematics belongs to india. When his daughter Mayabati was in her teen age he discovered a problem. At that time the age of mayabati is a prime number,let that age is a. After some years her age becomes $b$. then Arya Bhatta was able to solve that problem wit the help of he daughter mayabati. If $a-b=5 \&$ product of $a \& b$ is 26 then what is the sum of two squares?
A) 77 b) 45 c) 89 d) 67
6.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? 5 to the power 12
5. $(40 * 40 * 40-31 * 31 * 31) /(40 * 40+40 * 31+31 * 31)=$ ? a simle calcutation
6. $x / 2 y=2 a$,then $2 x / x-2 a y=$ ?(some thing like this .very easy )
7. A direct question on blood relation. easy one(ref R.S. Agarwal)
8. A big Question describing a story.After that a number is given eg 2088.by what if we divide the number it II become a perfect square?
9. 1st a story. Then a simple ratio problem. The question was if the ratio of age of two persons is $5: 6$,sum of present age is 33 ,then in how many years the ratio of their age becomes $7: 8$ ?
a) 3 b) 4 c) 5 d) 6
10. Mr behera wants to build $A$ house for his wife. In this there are 5 rooms each having equal area. The length of each room is 4 m ,,breadth is 5 m . the height of the rooms are 2 m . if to make a sq meter we need 17 bricks, then how many bricks are needed to make the floor of a particular room?
11. A very big story.on Tuesday college parking place have only 4 wheelers \& bicycles,total no of wheels was 182 ,yhen what is the possible no of bicycles?
a)20 b 19 c 18 d 17
12. Simple question bt big one on average age.sth like a,b,c weigheted 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 avg weight of the 7 weight?
13. Arrange the jumbled letters to make a perfect word RGTEI(sth like this). Find to which category it belong?(not so easy,l was bt able 2 solve the problem .the number of the question was 34)
A)town b)vegetable c)animal d) bird
16) puzzle

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?
Ans: a Sunday b thrusday c saterday d....
17)a long story \& with in it a mathematical series present like

$$
861714353071 \text { _ } 143 .
$$

1. One man want to build a wall the length and breadth of the wall are 20, 30 respectively. He need 35 bricks for one square centimeter then how many bricks he need?
Ans:l*b*35(no of bricks needed for sqcm)
2. one person had three children.he has 7 pennis.then how he can distribute
the fruits among his child by folloing conditions.
a)he can get one water millon for 1 penny.
b)he can get 2 oranges for 1 penny.
c) he can get 3 grapes for 1 penny.

Ans:2 water millon 1 orange 1 grape
3. . $1 / 3 \mathrm{rd}$ of a number is more 3 than the $1 / 6$ th of a number then find the number?

## Ans:18

4. 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?

## Ans:

For 1 to $10-1$ six
2 to 20-1 six
Similarly upto 59 we utilise six, 5 times
from 60 to 69 (including 66) - 11 times
from 70 to $100-3$, hence ans $=5+11+3=19$
Ans:19.
5. one grand father has 3 grand child.eldest one age is 3 times of the youngest child age.sum of two youngest child age is more than two of eldest one age.find the eldest one age?
Ans: 15(we can easily predict from options, as we take y as 15)
6.difrence $\mathrm{b} / \mathrm{w}$ two nubers is 4 .and their product is 17 .then find the sum of their squers?

Ans: 70 (By using ( $x-y$ ) $2=x 2+y 2-2 x y$ )
7. I dont remember exactly the question, one logical problem stating the colour of beer?

Ans: white.
8. find category from following Jumbled letters, parakeet(answer)

Ans: bird(category)
9. which is the smallest digit when devides the 2880 gives perfect squre.?

Ans:5(we can easily predict from options, as we devides them with 2880)
10. one question like. formule?

Ans: here you can use the ( $a-b) 3=(a-b)(a 2+a b+b 2)$ formule).
11. I don't have any brothers and sisters.by pointing a picture that man said that his father is my fathers .son then who is he?
Ans:his son.
12. 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?

Solution: Here the question appear as an easy one, but carried a lot of unwanted sentences and unwanted datas(i dint mention above) in exam which may confuse $u$ on solving technique.

So now we can compute $x$ from above equation. ( $x=41,6 x=246$ )
Let now we compute $\mathrm{y},((6 \mathrm{x}+\mathrm{y}) / 7)=45$, as we have value of x , compute y .
Ans: 69
13. The ratio $\mathrm{b} / \mathrm{w}$ the ages of two pwrsons is $6: 5$. and sum of there ages is 77 then how many years later there ratio becomes 8:7?

Ans: we can easily predict from options
14. Horse started to chase dog as it relieved stable two hrs ago. And horse started to ran with average speed $22 \mathrm{~km} / \mathrm{hr}$, horse crossed 10 mts road and two small pounds with depth 3 m , and it crossed two small street with 200 mts length. After traveling 6 hrs, 2 hrs after sunset it got dog. compute the speed of dog?
Ans: As we have speed and travel time of horse, we can get distance travelled by it...
Hence d $=22^{*} 6=132 \mathrm{~km}$,
Exactly this 132 km was travelled by dog in 8 hours (as it started two hours earlier).
Hence speed of dog $=132 / 8=16.5 \mathrm{~km} / \mathrm{hr}$

## Ans:16.5km/hr.

15..six friends go to pizza corner there $r 2$ types of pizzas.and six different flavors $r$ there they has to select 2 flavors from 6 flavors what's chanses to select?

## Ans:6C2

16.3, $22,7,45,15, ?, 31$

Solution: Here it appear simple, because it arranged in arranged in sequence manner, but the actual question was some what twist mentioning fibonacci series and more over question was in statements (no numbers).. hence first try to understand the question well.
here let group alternate terms $3,7,15,31(3+4=7,7+8=15,15+16=31)$
Similarly for second group $(22,45, ?(22+23=45,45+46=91)$ hence ans is 91 .
17.cycles and 4 wheelors problem?

Ans: We can easily predict from options
18.some irrivvelent data.in last two lines problem will be there.

One man walks certain distance with 5 kmph .and walk back the same
Ans: A
19.A and $B$ tanks $r$ there. $1 / 8$ th of the tank $B$ is filled in 22 Hrs . what is time to fill the tank full?

Ans: I don't know.
20.5 friends went for week end party to Mc donalds restrurent and there they measure there weights .some irrrrrrrrrrrrrrrilevent data.finel measure is 155 kg then find the average weight of 5 people?
Ans: 155/5=31
21.2 pots $r$ there.1st pot is filled with ink and 2nd pot is filled with water.take 1 spoon of ink from 1st pot and pore it in 2nd pot.and take 1 spoon of mixture from 2nd pot and pore it
in 2nd pot then which one of following is true?
Ans: Water in 1st pot is less than the ink in 2nd pot.
22:One electronic problem?
Ans: V=IR
23.There $r$ ten spots in library and each spot has 4 tables and ten readers ar there . sorry I don't remember complete question?

Ans: None
24:lion and tiger $r$ there.lion lies on Monday,tues, wends and tiger lies on thurs,frid,sat.
Lion said that today is one of those days when I lies.
Tiger said that today is one of those days when I lie too.Then find today?
Ans: Thursday

1. Which is the smallest no divides 2880 and gives a perfect square?
a. 1 b. 2 c. 5 d. 6

Ans: c
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?
(Ans: second liquid in first bowl is smaller than the first mixture in second bowl)
3. Form 8 digit numbers from by using $1,2,3,4,5$ with repetition is allowed and must be divisible by4?

$$
\text { a. } 31250 \text { b. } 97656 \text { c. } 78125 \mathrm{~d} .97657
$$

Ans: c
4. Rearrange and categorize the word 'RAPETEKA'?

## Ans: bird

5. One problem on (a3-b3)/(a2+ab+b2)

Ans: ‘a-b’
6. In school there are some bicycles and 4 wheeler wagons.one Tuesday there are 190 wheels in the campus. How many bicycles are there?

Ans: 15
7. Key words in question (Fibonacci series, infinite series, in the middle of the question one number series is there....I got the series 312726 b 15 ?

## Ans:54

(Logic: $3 * 2+1=712 * 2+2=26$
7*2+1=15 26*2+2=54)
8. A lies on mon, tues, wed and speak truths on other days, B lies on thur,
fri, sat and speaks truths on other days ...one day a said I lied today and B said I too lied today. What is the day?
9. Man, Bear, North, South, walks.

Ans: White
10. A father has 7 penny's with him and 1 water melon is for $1 p$, 2 chickoos for 1 p, 3 grapes foe 1 p.he has three sons. How can he share the fruits equally?

Ans: 1 watermelon,2chickoos,1 grape
11. ( $1 / 2$ ) of a number is 3 times more than the ( $1 / 6$ ) of the same number?

Ans: 9 12. There are two pipes A and B. If A filled 10 liters in hour B can fills 20 liters in same time. Likewise B can fill 10, 20, 40, 80,160....if B filled in (1/16) th of a tank in 3 hours, how much time will it take to fill completely?
Ans: 7 hours
13. KEYWORDS:T.Nagar,Chennai, 1-100,prime numbers b/n 140-180,How many 2's are there?

Ans: 20 (Not only 2's ,1's,3's,4's,5's,6's,7's,8's,9's,0's also 20)
14. A man is standing before a painting of a man and he says I have no bro and sis and his father is my father's son?

## Ans: His son

15. One question has last part like difference between two terms is 9 and product of two numbers is 14 , what is the squares of sum of numbers?
Ans:109
16. What is the value of $[(3 x+8 Y) /(x-2 Y)]$; if $x / 2 y=2$ ?

Ans:10 \{the numerical may change)
17. A pizza shop made pizzas with to flavours.in home there are ' N ' different flavors, in that ' M ' flavors are taken to made pizza.in how many ways they can arrange?

## (Logic: NcM )

18. 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:15
19. KEYWORDS: one organization ,material labor and maintenance are in the ratio of $4: 6: 7$, the material cost is:100, what is the total cost?

## Ans: 425

20. KEYWORDS: density, reluctance, sensitivity, voltage ,current, what is the resistance Formula is " $\mathrm{R}=\mathrm{V} / \mathrm{l}$ "
21. In a market 4 man are standing the average age of the four before

4years is 45 ,aftyer some days one man is added and his age is 49 .what is the average weight of all?
Ans: 49
22. KEYWORDS: Sports readers, 10 tables,4chairs per table, each table has different number of people then how many tables will left without at least one person?
Ans: 6
23. KEYWORDS: Die, card, coin, b/n 2 to 12

## Ans: All are equal

24. In a school for a student out of a 100 he got 74 of average for 7 subjects and he got 79 marks in 8th subject. what is the average of all the subjects?
Ans: 74.625
25. In a question ,last part has ,the ages of two people has the ratio of 6:6 and by adding the numbers we get 44 ,after how many years the ratio would be 8:7?

Ans: 8
26. One train travels 200 m from A to B with $70 \mathrm{~km} / \mathrm{ph}$. and returns to A with 80kmph, what is the average of their speed?
27. Two years before Paul's age is 2times the Alice age and the present age of Paul is 6times the Alice. what is the presents Paul's age???
( 3years) "u try to solve this question once"

1) what number should be used to divide 2880 into two perfect squares.
a) 4
b) 5
c) 6
ans::: 5
2) A man goes in search of a bear north from his station and after seeing the beer he returns to his station which is in the south, then wat will be the color of the bear
a) black
b) white
c) brown
ans::̈:u::: white (as oly white bears can live in north and south poles)
3) (They have given some history of copper and its density and its uses and applications for five or six lines ) and then asked this question
if 7 v passes to that wire and a current of 260 mA then find the resistance. $\qquad$
ans:.........: .03k

## APTITUDE TEST:

Enlish: 32 Q,20M
10 -synnonym
10-antonym
I got anly 4 common.
For antonym U prepare from all Model test parer of barron 12 . Don't wast time for preparing synnonym becoz there are lots of synnonym so u can,t collct all synnonym.

6 -fill in the blank .Exatly this fill in the blank came in my paper.

## 2. FILL THE BLANKS:

Observe the dilemma of the fungus; it is a plant, but possesses no chlorophyll. While all other plants put the sun's energy to work for them combining the nutrients of ground and air into the body structure. $\qquad$ 1 $\qquad$ .Chlorophyll is found in these other plants which, having received their energy free from the sun, relinquish it $\qquad$ 2 _.

In this search of energy, the fungus has become the earth's major source of rot and decay. Wherever you see mould forming on a piece of bread, or a pile of leaves turning to compost, or a bloom down tree becoming pulp on the ground, $\qquad$ 3 $\qquad$ .

With fungus action, the earth would be pooled high with $\qquad$ 4 $\qquad$ .

In fact, certain plants which contain resins that are $\qquad$ 5 $\qquad$ .

Specimen of the redwood tree, for instance can still be found
$\qquad$ 6 $\qquad$ .
A. You are watching a fungus acting
B. Resting on the forest floor centuries after having been cut down
C. Responsible for decomposition of much plant life
D. Fungus must look elsewhere for an energy supply
E. Cannot produce their own store of energy
F. The dead plant life of past centuries
G. At some point in their cycle either to animal or to fungi
H. Fungus is vastly different from other plants
I. Toxic to fungi will last indefinitely.

QUANTITATIVE: 38 Q-40 M

## THERE IS 3 Q FROM VENN DIAGRAM \& 3 FROM PIE CHART.

1. Two pencils costs 8 cents, then 5 pencils cost how much

Sol: 2 pencils è 8 cents => 1 pencil è 4 cents
Therefore 5 pencils cost $=5$ * $4=20$ cents
2. A work is done by two people in 24 min . one of them can do this work a lonely in 40 min . how much time required to do the same work for the second person.
Sol: $(A+B)$ can do the work in $=1 / 24 \mathrm{~min}$.
$A$ alone can do the same work in $=1 / 40 \mathrm{~min}$.
$B$ alone can do the same work in $=(A+B)$ 's $-A ' s=1 / 24-1 / 40=$ 1/60
Therefore, $b$ can do the same work in $=60 \mathrm{~min}$
3.A car is filled with four and half gallons of oil for full round trip. Fuel is taken $1 / 4$ gallon more in going than coming. What is the fuel consumed in coming up?
Sol Before the trip, car is filled with $=41 / 2$ gallon of oil
Let ' $X$ ' be the quantity of fuel consumed for the trip in one direction
The fuel consumed while going $=X+1 / 4$
The fuel consumed while coming $=X$
Therefore, the fuel consumed for the trip $=(X+1 / 4)+X=41 / 2$
д $2 X+1 / 4=41 / 2=>2 X=41 / 2-1 / 4=>2 X=41 / 4=>X=2$. approx
Therefore the fuel consumed while coming $=2$ gallon
4. Low temperature at the night in a city is $1 / 3$ more than $1 / 2$ high as higher temperature in a day. Sum of the low temperature and highest temp. is 100 degrees. Then what is the low temp?
Sol: 40 deg.
5. A person, who decided to go to weekend trip should not exceed 8 hours driving in a day. Average speed of forward journey is $40 \mathrm{~m} / \mathrm{h}$.
Due to traffic in Sundays, the return journey average speed is $30 \mathrm{~m} / \mathrm{h}$. How far he can select a picnic spot?
a) 120 miles
b) Between 120 and 140 miles
c) 160 miles

Answer: 120 miles
6. A person was fined for exceeding the speed limit by 10 mph .

Another person was also fined for exceeding the same speed limit by twice the same. If the second person was traveling at a speed of 35 mph, find the speed limit.

Sol: Let 'x' be the speed limit
Person 'A' was fined for exceeding the speed limit by $=10 \mathrm{mph}$
Person ' $B$ ' was fined for exceeding the speed limit by = twice of ' $A$ '
$=2^{*} 10 \mathrm{mph}=20 \mathrm{mph}$ given that the second person was traveling at the
speed of $35 \mathrm{mph}=>35 \mathrm{mph}-20 \mathrm{mph}=15 \mathrm{mph}$
Therefore the speed limit is $=15 \mathrm{mph}$
7.A bus started from bus stand at 8.00am, and after 30 minutes staying at destination, it returned back to the bus stand. The destination is 27 miles from the bus stand. The speed of the bus is 18 mph . In return journey bus travels with $50 \%$ fast speed. At what time it returns to the bus stand?
Sol: 11.00am
8. In a mixture, $R$ is 2 parts $S$ is 1 part. In order to make $S$ to $25 \%$ of the mixture, how much $r$ is to be added?

Sol: One Part
9. Wind flows 160 miles in 330 min , for 80 miles how much time required.
Sol:
10. With $4 / 5$ full tank vehicle travels 12 miles, with $1 / 3$ full tank how much distance travels
Sol: ( 5 miles )
11. A storm will move with a velocity of towards the center in hours, at the same rate how much far will it move in hrs.

Sol: ( but the answer is $8 / 3$ or $22 / 3$ )
12. In a two-dimensional array, $X(9,7)$, with each element occupying 4 bytes of memory, with the address of the first element $\mathrm{X}(1,1)$ is 3000 ; find the address of $X(8,5)$.
Ans: 3212
13. In the word ORGANISATIONAL, if the first and second, third and forth, forth and fifth, fifth and sixth words are interchanged up to the last letter, what would be the tenth letter from right?
Ans:I
14. What is the largest prime number that can be stored in an 8-bit memory? Ans: 251
15. Select the odd one out.....a. Java b. Lisp c. Smalltalk d. Eiffel.
16. Select the odd one out a. SMTP b. WAP c. SAP d. ARP
17. Select the odd one out a. Oracle b. Linux c. Ingress d. DB2
18. Select the odd one out a. WAP b. HTTP c. BAAN d. ARP
19. Select the odd one out a. LINUX b. UNIX c. SOLARIS d. SQL

SEVER
20. Select the odd one out a. SQL b. DB2 c. SYBASE d. HTTP
21. The size of a program is $N$. And the memory occupied by the program is given by $\mathrm{M}=$ square root of 100 N . If the size of the program is increased by $1 \%$ then how much memory now occupied?

Ans: 0.5\%(SQRT 101N)
22. A man, a woman, and a child can do a piece of work in 6 days.

Man only can do it in 24 days. Woman can do it in 16 days and in how many days child can do the same work?
Ans: 16
23. In which of the system, decimal number 184 is equal to 1234 ?

Ans: 5
24. Find the value of the 678 to the base- 7 .

Ans: 1656
25. Number of faces, vertices and edges of a cube

Ans: 6812
26. Complete the series $2,7,24,77$,__

Ans: 238
27. Find the value of @@+25-++@16, where @ denotes "square" and + denotes "square root".
Ans: 621
28. Find the result of the following expression if, $M$ denotes modulus operation, R denotes round-off, T denotes truncation:
$\mathrm{M}(373,5)+\mathrm{R}(3.4)+\mathrm{T}(7.7)+\mathrm{R}(5.8)$
Ans:19
29. If TAFJHH is coded as RBEKGI then RBDJK can be coded as?

Ans: qcckj
30. $G(0)=-1, G(1)=1, G(N)=G(N-1)-G(N-2), G(5)=$ ?

Ans: - 2
31. What is the max possible 3 digit prime number?

Ans: 997
32. A power unit is there by the bank of the river of 750 meters width.

A cable is made from power unit to power plant opposite to that of the river and 1500 mts away from the power unit. The cost of the cable below water is Rs.15/- per meter and cost of cable on the bank is Rs.12/-per meter. Find the total of laying the cable.
Ans : 1000 (24725-cost)
33. The size of a program is $N$. And the memory occupied by the program is given by $\mathrm{M}=$ square root of 100 N . If the size of the program is increased by $1 \%$ then how much memory now occupied? Ans:0.5\%(SQRT 101N)
34. In Madras , temperature at noon varies according to $-\mathrm{t}^{\wedge} 2 / 2+8 \mathrm{t}$ +3 , where $t$ is elapsed time. Find how much temperature more or less in 4pm to 9pm.

Ans: At 9pm 7.5 more
35. The size of the bucket is Nkb . The bucket fills at the rate of 0.1 kb per millisecond. A programmer sends a program to receiver. There it waits for 10 milliseconds. And response will be back to programmer in 20 milliseconds. How much time the program takes to get a response back to the programmer, after it is sent?

Ans: 30
36. A man, a woman, and a child can do a piece of work in 6 days. Man only can do it in 24 days. Woman can do it in 16 days and in how many days child can do the same work?

Ans: 16
37. Which of the following are orthogonal pairs?
a. $3 i+2 j$ b. $i+j$ c. $2 i-3 j$ d. $-7 i+j$

Ans: a, c
38. If VXUPLVH is written as SURMISE, what is SHDVD?

Ans: PEASE
39. If $A, B$ and $C$ are the mechanisms used separately to reduce the wastage of fuel by $30 \%, 20 \%$ and $10 \%$.What will be the fuel economy if they were used combined.
Ans: 20\%
40. What is the power of 2 ? a. 2068 b. 2048 c. 2668
41. Complete the series. $3,8,--, 24,--, 48,63$. Ans: 15.35
42. Complete the series. $4,-5,11,-14,22,--$ Ans: -27
43. A, B and C are 8 bit no's. They are as follows:

A -> 11011011
B -> 01111010
C ->01101101
Find $((A-B)$ u $C)=$ ? Hint: 109.... $A-B$ is $\{A\}-\{A n B\}$
44. A Flight takes off at 2 A.M from northeast direction and travels for 11 hours to reach the destination, which is in northwest direction.
Given the latitude and longitude of source and destination. Find the
local time of destination when the flight reaches there?
Ans: 7 am
45. A can copy 50 papers in 10 hours while both A \& B can copy 70 papers in 10 hours. Then for how many hours required for $B$ to copy 26 papers?

Ans: 13
46. $A$ is twice efficient than $B$. $A$ and $B$ can both work together to complete a work in 7 days. Then find in how many days, A alone can complete the work?

Ans: 10.5
47. A finish the work in 10 days. $B$ is $60 \%$ efficient than $A$. So how many days do $B$ takes to finish the work?
Ans :100/6
48. A finishes the work in 10 days $\& B$ in 8 days individually. If $A$ works for only 6 days then how many days should B work to complete A's work?

Ans: 3.2 days
49. Given the length of the 3 sides of a triangle. Find the one that is impossible? (HINT: sum of smaller 2 sides is greater than the other one, which is larger)
50. Find the singularity matrix from a given set of matrices? (Hint
$\operatorname{det}(A)==0)$ )
51. (Momentum*Velocity)/(Acceleration * distance). Find units.

Ans: mass
52. The number 362 in decimal system is given by (1362) $x$ in the $X$

System of numbers find the value of $X$ a\} 5 b) 6 c) 7 d) 8 e) 9
53. Given \$ means Tripling and \% means change of sign then find the value of \$\%\$6-\%\$\%6
54. My flight takes of at 2am from a place at 18N 10E and landed 10 Hrs later at a place with coordinates 36N70W. What is the local time when my plane landed?

6:00 am b) 6:40am c) 7:40 d) 7:00 e) 8:00
(Hint: Every 1 deg longitude is equal to 4 minutes. If west to east add time else subtract time)
55. 7891113 ?? 19
56. there is a question like log. $42=\ldots, \log .43=\ldots$. then $\log .41==$ ?

CRITICAL REASONING:
Entirely from Barron's 12th edition 5 Model Test Papers at the end. Those who don't have
barrons, you can obtain it from the Internet and get the book in a pdf format. The questions asked are from these...

Model test 1: Section5-qns 1-4 (motorist), qns 13-16 (red and brown)

Section6 - qns 1-4 (conservative,democratic), qns 8-11 (latin, sanskrit), qns 12-18 (joe,larry,ned), qns 19-22 (a causes b)

Model test 2: Section1 - qns 19-22 (wallachia and rumelia) ---
Section6 - qns 8-12 ( ashland , liverpool), qns 13-16 (spelunker) ---
qns 17-22 (pesth) ---i got this one too
Model test 3: Section6 - qns 1-4 (all Gs are Hs)
Model test 4: Section5 - qns 8-11 (horizontal row), qns 19-22 (a,b,c cause d)
Section6 - qns 8-12 (spanish, italian), qns 13-16 (all As, Bs), qns 17-22 (progressive federal party)
Model test 5: Section3-qns8-11 (museum), qns 19-22 (A is the father)
Section7- qns 1-5 (prahtu, brahtu)
Here I am giving the answer of the puzzle which are from Barron 12
edition. Those people can't solve the puzzle just keep the answer
in ur memory . Don't worry here all ans are correct for the puzzle. I
have written the first line of the puzzle with answer.
For a motorist there are three ways :ADCE
Project Consolidated: ABECE
Red and Brown : CBAE
Letters A, B, C,D,E,F andG : BEDCCC
In country X : DDBC
Latin Sanskrit : DADB
Joe, Larry, Ned : CCBAEBE
A causes B or C but not both : DCCC
Eight varsity baseball players : ADBE
Delegations from Wallachia and Rumelia : AECE
Byram and Adoniram : CDEA
Ashalan is north of East Liverpool : BEDAC
Spelunkers International : CCBB
Mr. Pesth......: BDEAAC
On Sunday Dec 23: CDABA
Airedale, Boxer, Collie: BCCADC
All G's are H's: EECD
Hotel Miranmar: DBCA
Each word in a horizontal row: AEDE

A B C or W may causes D: AABC

Five executive of European: EADBD
All A's B's C's D's E's F's are Q's: EDBC
Progressive federal party: CADEBB
Mrs. F official hostess: EADE
Homer Meuseum: CCBB
$A$ is the father: DEEB
Prahtu and Brihtu marriage: DDABE
Seven varsity basket ball: DCCB
Mr.pict must: DECDB

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?
Solution: Here the question appear as an easy one, but carried a lot of unwanted sentences and unwanted datas(i dint mention above) in exam which may confuse $u$ on solving technique. Let $x$ be current average age of first 6 persons in queue and current age of seventh person be $y$. Then $6 x$ will become the sum of those 6 persons age.

Now, let compute the sum of those 6 persons after two years, $6 x+12$ (as each and individual increase their age by 2 ). hence its average become $(6 x+12) / 6=43$ (give in question itself).
So now we can compute $x$ from above equation. ( $x=41,6 x=246$ )
Let now we compute $y,((6 x+y) / 7)=45$, as we have value of $x$, compute $y$.
Ans: 69
2) Horse started to chase dog as it relieved stable two hrs ago. And horse started to ran with average speed $22 \mathrm{~km} / \mathrm{hr}$, horse crossed 10 mts road and two small pounds with depth 3 m , and it crossed two small street with 200 mts length. After traveling 6 hrs, 2 hrs after sunset it got dog. compute the speed of dog?
Ans: As we have speed and travel time of horse, we can get distance travelled by it...
Hence d $=22^{*} 6=132 \mathrm{~km}$,
Exactly this 132 km was travelled by dog in 8 hours (as it started two hours earlier).
Hence speed of dog $=132 / 8=16.5 \mathrm{~km} / \mathrm{hr}$

## Ans:16.5km/hr.

3) $3,22,7,45,15, ?, 31$

Solution: Here it appear simple, because it arranged in arranged in sequence manner, but the actual question was some what twist mentioning fibonacci series and more over question was in statements (no numbers).. hence first try to understand the question well.
here let group alternate terms $3,7,15,31(3+4=7,7+8=15,15+16=31)$
Similarly for second group $(22,45, ?(22+23=45,45+46=91)$ hence ans is 91 .
4) 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?

## Solution:

For 1 to $10-1$ six
2 to 20-1 six
Similarly upto 59 we utilise six, 5 times
from 60 to 69 (including 66) - 11 times
from 70 to $100-3$, hence ans $=5+11+3=19$
Ans:19.
5) $((4 x+3 y)+(5 x+9 y)) /(5 x+5 y)=$ ? as $(x / 2 y)=2$

Ans: 2(simple algebra, $i$ think $u$ no need of explanation)
6) If we subract a number with $y$, we get 4 increase of number, once it got divided by y itself..

Find that number??
Ans: 12 (we can easily predict from options, as we take y as 6)
7) I dont remember exactly the question, one logical problem stating the colour of beer?

## Ans: white.

8) Jumbled letters, parakeet(answer)

Ans: bird(category)
9) ratio proportional problem with age. Sorry, dint remember exact question.
10) one question like. $\left(209^{*} 144\right)^{\wedge} 2+\left(209^{*} 209\right)+\left(209^{*} 144\right)+\left(144^{*} 144\right)=$ ?

Ans: here you can use calc, many(4 to 5 ) questions were depend upon calc alone.(no need problem solving technique).
11) Im only son for my parents. (some irrelevant statements in the middle to distract $u$ ). The man in picture is my father's son.(some irrelevant statements).who is he?

Ans: he himself(blood relation type of question).

