**Quant Solutions**

Q60. Question Wrong

Solution: Log 1 10 = ==∞

Answer: op4) tending to infinity

Q61. Question Wrong

Solution: Log 10 0 = -∞

Answer: op1) 0

Q78. Question Wrong

Ques is If 2x = 3y = 6-z, then (1/x + 1/y + 1/z)

Solution: 2x = 3y = 6-z =a

=2, =3, =6

= X

=

-1/z=1/x+1/y

1/x+1/y+1/z=0

Answer: op4) not defined

Q80.question wrong

Ques is What will be the remainder when 1336 is divided by 2196?

Solution: 2196=133-1

Now,

==(1+)1333=1333+=1333+1330+

Similarly, on doing this process continuously we get,

1333+1330+1327+1324+........+

so we get, at the end. So the remainder is 1.

Answer: op2) 1

Q81. question wrong

The roots of the equation 4x-[3.2(x+2)]+32=0 would include?

22x-3(2x.4)+32=0

22x-12.2x+32=0

Let 2x =a

a2-12a+32=0 => (a-4)(a-8) =0

So, a=4,8

Therefore x=2,3

Answer: op1) 2,3

Q136.question incomplete

Q142. Solution: P F

The alphabets that can come in the blanks are {A,C,C,I,I}

Firstly ignoring the repeating digits we get {A,C,I}

* No. of ways of arranging 2 alphabets from a selection of 3 alphabet==6

Now, taking into account the repeating alphabets: P, C, C , F and P, I, I, F is also valid possibility so total possibilities= 6+2=8

Answer: op1) 8

Q147. Atleast one= total-none

Total= 3x3x3x3x3x3x3x3= 38 (altenative 1 or alternative 2 or none= 3 possibilities)

None=1

So possibilities are 38-1

Answer: op2) 38-1

Q157. Nine friends: F1,F2,F3,F4,F5,F6,F7,F8,F9

Assume F1 &F2 will not attend party together. So,

If F1 comes to party no of possibilities = 7C4

If F2 comes to party no of possibilities = 7C4

If neither F1 nor F2 comes to party no of possibilities= 7C5

Total= 7C4+7C4+7C5=91

Answer: op3) 91

Q176. Total possibilities are 6x6x6=216

Possibilities of rolling number 1 or 2 or 3 or 4 are 4x4x4=64

Probability =64/216=8/27

Answer: op1) 8/27

Q178. The probability will remain same on every toss =1/2

Answer: op1) 1/2

Q184. The probability will remain same on every roll =1/6

Answer: op3) 1/6

Q196. A:B=7:5 or A=7x & B=5x where x is the common factor

9lts is taken out and replaced by B.

So, Quantity of A taken out = 7x9/12=21/4

Quantity of B taken out = 5x9/12=15/4

Now

On solving x=3. So quantity of A initially was 7x3=21lts

Answer: op3) 21

Q199. Ques Incomplete

**Q. The manufacturer of a certain item can sell all he can produce at the selling price of Rs. 60 each. It costs him Rs. 40 in materials and labour to produce each item and he has overhead expenses of Rs. 3000 per week in order to operate the plant. The number of items to be produced per week in order to gain a profit of Rs.1000 is?**

Solution: Let the items produced=x

3000+40x=C.P.

60x=S.P

Profit=SP-CP

1000=60x-40x-3000

20x=4000

x=200

Answer: op1) 200

Q211. Let the population in 1970 be x

363000= x()2

x= =3,00,000

Answer: op2) 3,00,000

Q215. Question incomplete

Q239. Question incomplete

Q249. (4a2-4a+1)1/2+3a

2(1/2-a) + 3a= 1+a=1+0.1039=1.1039

Answer: op2) 1.1039

Q258. Missing

Q279. In 101 to 200,

At first digit 1 appears 99 times and 2 one time, so sum of first digit = 99 + 2 = 101.  
At second digit place 0 to 9 appear 10 times.

So, sum of second digit = (10x1+10x2....+10x9)= 450  
At third digit place 0 to 9 appear 10 times. So, sum of third digit = 450  
So, total sum = 101 + 450 + 450 = 1001

Answer: op2) 1001

Q291.incomplete question

Q292. If Amit picks up 10 and Anisha picks up 9 then  
  
(10, 9, 1) (10, 9, 2) .... (10, 9, 8) - 8 ways  
(10, 8, 1) (10, 8 2) ..... (10, 8, 7) - 7 ways  
.

.

so,  
8 + 7 + 6 + 5 + 4 + 3 + 2 + 1 = 8(9)/2 = 36  
  
If Amit picks up 9 and Anisha picks up 8 then  
  
(9, 8, 1) ..... (9, 8, 7) ... = 7 ways

(9, 7, 1)......(9, 7, 6) ...=6

.

.  
7 + 6 + 5 + 4 + 3 + 2 + 1 = 7(8)/2 = 28  
  
For 8 - (6)(7)/2 = 21  
  
For 7 - (5) (6)/2 = 15  
  
For 6 - (4) (5)/2 = 10  
  
For 5 - (3) (4)/2 = 6  
  
For 4 - (2) (3)/2 = 3  
  
For 3 - (1) (2)/2 = 1  
  
1 + 3 + 6 + 10 + 15 + 21 + 28 + 36=120

Probability is = 120/10x10x10 = 3/25

Answer: op1) 3/25

Q294. incomplete question