Puzzle Test Questions for SBI PO Pre, IBPS PO Pre, IBPS Clerk Mains and SBI Clerk Mains Exams.

Set No 114

Directions: Study the following information carefully and answer the questions given beside:

Five persons – Sudep, Kartik, Raghu, Hemant and Vijay, have some amount of money with them. The total amount of money they have is $450. Each one of them has at least $30.

The total amount of money that Sudep has is twice the square of a natural number and is over $100.
Hemant and Vijay have the amount of money in the ratio of 3:5.
Raghu has $4 more than thrice the square of a natural number.
Total amount of money with Hemant and Vijay are equal to the amount of money with Sudep.
Kartik has an odd amount of money, less than Raghu.

1.   Who among the following has highest amount of Money?

A. Sudep   B. Raghu   C. Hemant   D. Kartik   E. Can't be determined

2.   What is the difference between the amount of money which Raghu and Kartik have?

A. $119   B. $98   C. $116   D. $108   E. Can't be determined

3.   Who among the following has least amount of money?

A. Kartik   B. Hemant   C. Vijay   D. Either Hemant or Kartik
E. Either Kartik or Raghu

4.   What is the amount of money that Sudep has?

A. $200   B. $160   C. $128   D. Either $200 or $128
E. Either $80 or $160

5.   What is the sum of money that Hemant and Sudep have?

A. $176   B. $240   C. $168   D. $282   E. Either $168 or $208

Correct Answers:

1	2	3	4	5
B	D	A	C	A

Common explanation:

Reference:
Five persons – Sudep, Kartik, Raghu, Hemant and Vijay, have some amount of money with them. The total amount of money they have is $450. Each one of them has at least $30.

Inference:
We will keep this information in mind while solving the puzzle.

Reference:
The total amount of money that Sudep has is twice the square of a natural number and is over $100.

Total amount of money with Hemant and Vijay are equal to the amount of money with Sudep.

Inference:
Here, we have several possible scenarios in which the amount of money of Sudep can be figured out.

Possibility 1:
Sudep has 2×8^2 = $128.

If Sudep has 128$ then Hemant and Vijay together have 128$ then amount of money with Raghu and Kartik is $(450 – 128 – 128)$ = $194.

It might be possible.

Possibility 2:
Sudep has 2×9^2 = $162.

If Sudep has 162$ then Hemant and Vijay together have 162$ then amount of money with Raghu and Kartik is $(450 – 162 – 162)$ = $126.

It might be possible.

Possibility 3:
Sudep has 2×10^2 = $200.

If Sudep has 200$ then Hemant and Vijay together have 200$ then amount of money with Raghu and Kartik is $(450 – 200 – 200)$ = $50.

Which is not possible because it is given that **each one of them has at least $30**.

Reference:
Hemant and Vijay have the amount of money in the ratio of 3:5.

Inference:
Let's say that the amount of money with Hemant and Vijay is 3X and 5X respectively, where X is a natural number.

Then, total amount of money with Hemant and Vijay is 8X.

We have:

Possibility 1:
Hemant and Vijay together have $128.

Now, 8X = $128 ⇒ **X = $16**.

Then, we can say that **Hemant has $48 and Vijay has $80**.

It might be possible.

Possibility 2:
Hemant and Vijay together have $162.

Now, 8X = $162 ⇒ **X = $20.25**.

It is not possible, as X is a natural number.

At this point, we have:

Person	Amount
Sudep	$128
Vijay	$80
Hemant	$48

Also, total amount of money with Raghu and Kartik is 194$.

Reference:
Raghu has $4 more than thrice the square of a natural number.

Kartik has an odd amount of money, less than Raghu.

Inference:
As we have already figured out that **total amount of money with Raghu and Kartik is $194** and with the above information we can say that both Kartik and Raghu have odd amount of money.

Now, the possible scenarios for the amount of money with Raghu and Kartik is are:

Possibility A:
Raghu has $3 \times 3^2 + 4 = $ $31.

If Raghu has $31, then Kartik has $(194 − 31) = $153 **which is not possible as Kartik has less amount of money than Raghu**.

Possibility B:
Raghu has $3 \times 5^2 + 4 = $ $79.

If Raghu has $79, then Kartik has $(194 − 79) = $115 **which is not possible as Kartik has amount of money than Raghu**.

Possibility C:
Raghu has $3 \times 7^2 + 4 = $151.

If Raghu has $151, then Kartik has $(194 − 151) = $43 **this is the only possible scenario under the given condition**.

Now,

Person	Amount
Raghu	$151
Sudep	$128
Vijay	$80
Hemant	$48
Kartik	$43

Answers :

1. Following the final solution we can say that Raghu has highest amount of Money.

Hence, the correct answer is option **B**.

2. Following the final solution we can say that the amount of money which Raghu and Kartik have is $151 and $43 respectively.

Required Difference = $(151 − 43) **= $108**

Hence, the correct answer is option **D**.

3. Following the final solution we can say that Kartik has least amount of money.

Hence, the correct answer is option **A**.

4. Following the final solution we can say that Sudep has $128.

Hence, the correct answer is option **C**.

5. Following the final solution we can say that Hemant and Sudep have $48 and $128 respectively.

Required Sum = $(48 + 128) **= $176**

Hence, the correct answer is option **A**.