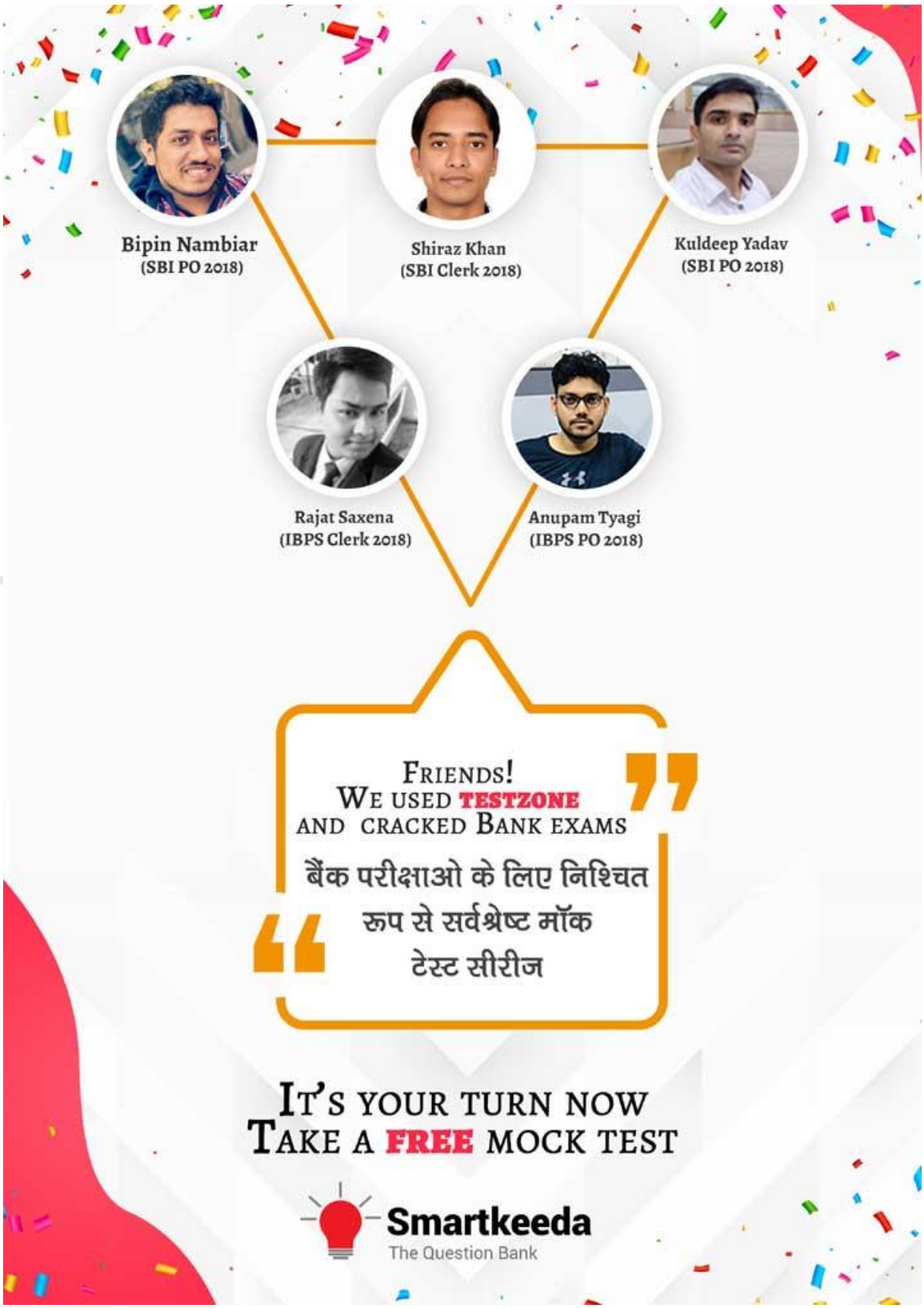
Bipin Nambiar
(SBI PO 2018)
Shiraz Khan
(SBI Clerk 2018)
Kuldeep Yadav
(SBI PO 2018)
Rajat Saxena
(IBPS Clerk 2018)
Anupam Tyagi
(IBPS PO 2018)
FRIENDS!
WE USED TESTZONE
AND CRACKED BANK EXAMS
बैंक परीक्षाओ के लिए निश्चित
रूप से सर्वश्रेष्ट मॉक
टेस्ट सीरीज
IT'S YOUR TURN NOW
TAKE A FREE MOCK TEST
Smartkeeda
The Question Bank

Data Sufficiency Questions for SBI PO Pre, RRB Scale I Pre, IBPS PO Pre, LIC AAO, RBI Assistant, IBPS Clerk Mains and SBI Clerk Mains Exams.

Data Sufficiency Quiz 13

Directions: Each of the questions below consists of a question and two statements numbered I, and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read all the statements and give answer:

1. Pranav and Pankaj started working together. After a few days, Prashant joined them and they were able to finish the work in 10 days. All of them together were paid a total of Rs. 800. Find the share of Prashant.

Statement I : Pranav can do the work in 20 days, while Pankaj can do the same work in 25 days.
Statement II : Pranav can do the work in 60 days, while Pankaj can do the same work in 15 days.

A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question
B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question
C. If the data either in statement I alone or in statement II alone is sufficient to answer the question
D. If the data in both statements I and II together are necessary to answer the question
E. If the data given in both statements I and II together are not sufficient to answer the question.

2. Two partners, P and Q entered in a business, what profit will Q get at the end of 2 years?

Statement I : P and Q started the business by investing in the ratio 4: 7 and After 2 years, P's share is Rs. 95000.
Statement II : P joined the business with an amount of Rs. 500000

A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question
B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question
C. If the data either in statement I alone or in statement II alone is sufficient to answer the question
D. If the data in both statements I and II together are necessary to answer the question
E. If the data given in both statements I and II together are not sufficient to answer the question.

3. Find the number of boys in the college, if 60% of the total boys and 40% of the total girls participated in an event.

Statement I : The number of girls participated in the event is 120. There are more than 300 boys in the college.

Statement II : The number of girls in the college is 25% more than the number of boys who participated in the event.

A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question
B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question
C. If the data either in statement I alone or in statement II alone is sufficient to answer the question
D. If the data in both statements I and II together are necessary to answer the question
E. If the data given in both statements I and II together are not sufficient to answer the question..

4. Find the total population of Kanpur.

Statement I : The ratio of the population of males and females in Kanpur is 33 : 29 and the difference between their population is 24000.

Statement II : The population of Kanpur is 60% of that of Patna, and the difference between population of Kanpur and Patna is 35000.

A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question
B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question
C. If the data either in statement I alone or in statement II alone is sufficient to answer the question
D. If the data in both statements I and II together are necessary to answer the question
E. If the data given in both statements I and II together are not sufficient to answer the question.

5. Find the speeds of trains A and B, if running in the same direction the faster train passes the slower in 54 seconds. The speed of train A is more than train B.

Statement I: Trains A and B of lengths 140 metres and 130 metres respectively are running on parallel tracks.

Statement II: When running in opposite directions, they pass each other in 24 seconds.

A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question
B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question
C. If the data either in statement I alone or in statement II alone is sufficient to answer the question
D. If the data in both statements I and II together are necessary to answer the question
E. If the data given in both statements I and II together are not sufficient to answer the question.

6. A man borrowed a total sum of Rs. 2000 in two parts. For one, he paid a simple interest of 12% p. a. and for the other a simple interest of 6% p. a. How much money did he borrow at each rate?

Statement I: The sum of interests after 1 year was Rs. 192.
Statement II: The interest on first part of sum was thrice that of another.

A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. If the data either in statement I alone or in statement II alone is sufficient to answer the question.
D. If the data in both statements I and II together are necessary to answer the question.
E. If the data given in both statements I and II together are not sufficient to answer the question.

7. What is the value of the first discount allowed by shop Q on the notebook?
Statement I: A man bought a notebook from shop P at Rs. 375. If the man would have paid Rs. 39 more, he could have bought the same notebook from shop Q.
Statement II: The marked price of a notebook in two stationery shops P and Q is same. In the shop, P notebook is available at 25% discount and that in the shop Q two successive discounts are given in which the second discount is 8%.

A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. If the data either in statement I alone or in statement II alone is sufficient to answer the question.
D. If the data in both statements I and II together are necessary to answer the question.
E. If the data given in both statements I and II together are not sufficient to answer the question.

8. Length of a train T2 is 40% more than that of the another train T1. Find the time taken by the two trains to cross each other, if both the trains are moving in opposite directions.

Statement I : The length of T1 is 'x' meter and it crosses a pole and a platform of length 'x + 100' meter in 6 and 16 seconds respectively.
Statement II: The length of T2 is 'y' meter and it crosses a pole and a platform of length 'y + 60' meter in 7 and 16 seconds respectively.

A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. If the data either in statement I alone or in statement II alone is sufficient to answer the question.
D. If the data in both statements I and II together are necessary to answer the question.
E. If the data given in both statements I and II together are not sufficient to answer the question.

9. A boat takes 4 hours to go upstream from A to B and back downstream from B to A in a canal. What is the speed of the boat in still water?

Statement I : The distance between A and B is 6 km. The boat takes 2 hours less to go downstream than upstream.
Statement II : The boat takes 2 hours less to go downstream than upstream and the speed of the water current is 2 km / h.

A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. If the data either in statement I alone or in statement II alone is sufficient to answer the question.
D. If the data in both statements I and II together are necessary to answer the question.
E. If the data given in both statements I and II together are not sufficient to answer the question.

10. Certain Quantities of iron and aluminium are mixed with some mercury to form an amalgam. The densities (weight / volume) of iron, aluminium and mercury are in the ratio 5 : 3 : 8. What part of the weight of the amalgam does aluminium account for?

Statement I : The ratio of the volumes of iron, aluminium and mercury which are mixed is 2 : 3 : 3
Statement II : The weight of mercury in 22kg of the amalgam is 6. 5 kg.

A. If the data in statement I alone is sufficient to answer the question, while the data in statement II alone is not sufficient to answer the question.
B. If the data in statement II alone is sufficient to answer the question, while the data in statement I alone is not sufficient to answer the question.
C. If the data either in statement I alone or in statement II alone is sufficient to answer the question.
D. If the data in both statements I and II together are necessary to answer the question.
E. If the data given in both statements I and II together are not sufficient to answer the question.

Correct Answers:

1	2	3	4	5	6	7	8	9	10
C	A	D	C	D	C	D	D	C	A

Explanations:

1. **From statement I:**

In 1 day, Pranav finishes $1/20^{th}$ of the work.
In 1 day, Pankaj finishes $1/25^{th}$ of the work.

The work was completed in 10 days.

Part of work completed by Pranav and Pankaj in 10 days

$= 10\left(\frac{1}{20} + \frac{1}{25}\right) = \frac{9}{10}$

Part of work completed by Prashant $= 1 - \frac{9}{10} = \frac{1}{10}$

Amount received as payment will be proportional to the amount of work done.

Amount paid to Prashant $= \frac{800 \times 1}{10} =$ Rs. 80

Similarly, from statement II we also can find the share of Prashant.
∴ Either of the statements alone is sufficient to answer this question.
Hence, option C is correct.

2. **From statement I:**
Share of profit of P and Q will be in the ratio of 4 : 7

After two years,
Let the share of profit of Q be Rs. y

$\therefore \frac{4}{7} = \frac{95000}{y}$

$\Rightarrow y = \frac{95000 \times 7}{4}$

$\Rightarrow$ y = Rs. 166250
∴ Statement I alone is sufficient to answer.

From statement II: Only P's investment is given so we can't find the profit of Q.

Hence, option A is correct.

3. **From Statements I and II:**

40% of girls participated in the event, which is equals to 120

$\therefore 100\% \Rightarrow \frac{120}{40} \times 100 = 300$

$\therefore$ Total number of girls in the college = 300

The number of boys who participated in the event

$\Rightarrow 300 \times \frac{100}{125} = 240$

Total number of boys participated is 240, which is equals to 60%

$\therefore 100\% \Rightarrow \frac{240}{60} \times 100 = 400$

$\therefore$ Total number of boys in the college = 400

$\therefore$ Statement I and II together are necessary to answer the questions.

Hence, option D is correct.

4. **From statement I:**

Let the total population of Kanpur be X.

$\Rightarrow 32X - 29X = 24000$
$\Rightarrow 4X = 24000$
$\Rightarrow X = 6000$

$\therefore$ The total population $33X + 29X = 62X$
$62X = 62 \times 6000 = 372000$

From statement II:

Let the total population of Kanpur be X.

So, population of Patna $= \frac{100X}{60} = \frac{5X}{3}$

$\therefore \frac{5X}{3} - X = 35000$

$\Rightarrow 2X = 105000$
$\Rightarrow X = 52500$
$\therefore$ Statement I or II alone is sufficient to answer the question.
Hence, option C is correct.

5. Let the speed of trains A and B be x and y respectively

From statements I:
Total distance = 140 + 130 = 270 metres
Relative speed = (x – y)
$\because$ Speed = $\frac{\text{Distance}}{\text{Time}}$

$\therefore (x - y) = \frac{270}{54}$ .....(i)

From statement II:
Relative speed = x + y
$\Rightarrow x + y = \frac{270}{24}$ .....(ii)

By using equations (i) and (ii), we can calculate the value of x and y
$\therefore$ Both the statements are required to answer this question.

Hence, option D is correct.

6. Let the first part borrowed at 12% be x and 6% be (2000 – x)

From statement I:
Total interest = Rs. 192
S. I. = $\frac{P \times r \times n}{100}$

$\frac{x \times 12 \times 1}{100} + \frac{(2000 - x) \times 6 \times 1}{100} = 192$

$\frac{12x}{100} + \frac{2000 - 6x}{100} = 192$

From here we can calculate x and hence individual amounts.

From statement II:
Interest on Rs. x = 3 × interest on Rs. (2000 – x)
Applying SI formula
$\frac{x \times 12 \times 1}{100} = 3 \times \frac{(2000 - x) \times 6 \times 1}{100}$

This gives x
$\therefore$ Statements I alone or II alone is sufficient to answer.
Hence, option C is correct.

7. Let, the marked price of note book for both shop = Rs. 100x
Selling price of note book in shop P

$= 100x \times \frac{100 - 25}{100} = \text{Rs. } 75x$

Given, 75x = 375 (given in statement I)
$\Rightarrow x = 5$
∴ Marked price of note book = Rs. 500
According to the question:
Selling price of note book on shop Q.
= Marked price of note book ×

$\frac{100 - d}{100} \times \frac{100 - 8}{100} =$

S. P. of notebook on shop P + 39

$= 500 \times \frac{100 - d}{100} \times \frac{100 - 8}{100} = 375 + 39$

$5d = 500 - 450$

$d = \frac{50}{5} \Rightarrow d = 10$

∴ Both statements I and II together are necessary to answer the question.
Hence, option D is correct.

8. **From statement I:**

$\text{Speed of T1} = \frac{x + x + 100}{16} = \frac{x}{16}$

$\Rightarrow x = 150$
∴ The length of T1 = 150

$\text{Speed of T1} = \frac{150}{6} = \frac{25 \text{ m}}{\text{s}}$

Here we are not given the speed of T2
∴ Statement I alone is not sufficient to answer the question

From statement II:

$\text{Speed of T2} = \frac{y + y + 60}{16} = \frac{y}{7}$

$\text{Speed of T2} = \frac{210}{7} = \frac{30 \text{ m}}{\text{s}}$

$\Rightarrow y = 210$
∴ The length of T2 = 210 m

So, length of T1 = 150 m [As lenght of T2 is 40% greater than T1]
Here we are not given the speed of T1
∴ Statement II alone is not sufficient to answer the question
Combining the two statements,
Time taken to cross each other

$$\frac{210 + 150}{30 + 25} = \frac{72}{11} \text{ seconds}$$

∴ Both the statements are necessary to answer the question.

Hence, option D is correct.

9. Let the speed of boat in still water be x

From statement I:

d = distance covered one way = 6 km

Let the time taken to go upstream be 'a' hours.

Time downstream = a – 2 hours
Total time = time downstream + upstream

a – 2 + a = 4
2a = 6
a = 3 hours

Let the speed of current be y

x + y = 6 / 1 (downstream)
x – y = 6 / 3 (upstream)

Solving both equations we can get x

From statements II :

Let the time taken to go upstream be 'a' hours .

Time downstream = a – 2 hours

x – 2 = d / a (upstream)

x + 2 = d / (a – 2) (downstream)
Two equations two unknowns, x can be calculated.
∴ Either statement I or statement II is sufficient.
Hence, option C is correct.

10. ⇒ Density = weight / volume

⇒ Volume = weight / density

⇒ Weight = volume × density

Statement I:

The ratio of the volumes of iron, aluminium and mercury is 2: 3: 3

The densities (weight per unit volume) of iron, aluminium and mercury are in the ratio 5: 3: 8 (given)

Ratio of weight of iron, aluminium and mercury which are mixed,

= (2 × 5) : (3 × 3) : (3 × 8)

Ratio of weight of iron, aluminium and mercury which are mixed = 10: 9: 24

∴ 9 / 43 is the part of the weight of the amalgam account for aluminium.

∴ Statement I alone is sufficient to answer the question.

Statement II:

The weight of mercury in 22kg of the amalgam is 6. 5 kg.

But it says nothing about the other metals

∴ We cannot find the fractional part by weight that aluminium accounts for.

∴ Statement II alone is not sufficient to answer the question.

Hence, option A is correct.