

MATH (IBPS CLERK MAINS 14 JANUARY 2018)

Q.1. Find the time taken by the boat to cover 81 km upstream and 48 km downstream.

Statement I: The boat can cover 32 km downstream and 54 km upstream in 4 hours.

Statement II: Upstream speed of the boat is 28% less than the speed of the boat in still water.

Statement III: The boat can cover a distance of 125 km in still water in five hours.

1. The data in statements I and II together are necessary to answer the question.
2. The data in statements II and III together are necessary to answer the question.
3. The data in statements I and III together are necessary to answer the question.
4. The data either in statement I alone or statements II and III together are necessary to answer the question.
5. The data in any two statements together are necessary to answer the question.

Ans: 5

2. Inlet pipe A, inlet pipe B and outlet pipe C are connected to a tank. Find the time taken by pipe C alone to empty the full tank.

Statement I: Pipe A and B together can fill a tank in 60/7 minutes.

Statement II: Pipe A and C together can fill a tank in 30 minutes.

Statement III: Pipe A, B and C together can fill a tank in 12 minutes.

1. Data in statement I and statement II together are necessary to answer the question
2. Data in statement II and statement III together are necessary to answer the question.
3. Data in statement I and statement III together are necessary to answer the question.
4. Either option (a) or (c)
5. The data in statement I, II and III together are necessary to answer the question.

Ans: 3

3. A bag contains $(x + 5)$ black balls, $(x - 3)$ white balls, $(2x - 6)$ grey balls. Find the number of black balls in the bag.

Statement I: The probability of drawing a black ball from the bag is 0.4.

Statement II: The probability of drawing a white ball from the bag is less than or equal to 0.2.

Statement III: The probability of drawing a black ball from the bag is equal to the probability of drawing a grey ball from the bag.

1. Data in statement I and statement II together are necessary to answer the question
2. Data in statement II and statement III together are necessary to answer the question.
3. Data in statement I and statement III alone are necessary to answer the question.
4. The data in statement I, II and III together are not necessary to answer the question.
5. The data in statement I, II and III together are necessary to answer the question.

Ans: 3

4. Find the amount of milk in the final mixture.

Statement I: A 54 liters mixture contains milk and water in the ratio 4:5 respectively. Certain amount of mixture is replaced by water such that ratio of milk and water in the final mixture becomes 8:19.

Statement II: A container contains milk and water in the ratio 5:6. 20 liters of water is added to the mixture and 5 liters of pure milk is added to the mixture such that ratio of milk and water in the final mixture is 3:4

Statement III: A container contains milk and water in the ratio 2:3. If certain amount of the mixture is replaced with water, the ratio becomes 3:2.

1. Either I or II alone
2. Only III alone
3. Only I and III together
4. All I, II and III together

5. None of these

Ans: 1

5. What is the total cost of one note-book, one pen and one pencil?

Statement I: Cost of 5 note-book and 4 pen is ₹ 155, cost of 4 note-book and 8 pencil is ₹100.

Statement II: Cost of 4 pen and 10 pencil is ₹ 130, cost of one pen is ₹ 5 more than one note-book.

Statement III: Cost of 6 note-book and 12 pencil is ₹ 150, cost of 5 pen and 8 pencil is ₹140.

6. What is the total cost of one note-book, one pen and one pencil?

Statement I: Cost of 5 note-book and 4 pen is ₹ 155, cost of 4 note-book and 8 pencil is ₹100.

Statement II: Cost of 4 pen and 10 pencil is ₹ 130, cost of one pen is ₹ 5 more than one note-book.

Statement III: Cost of 6 note-book and 12 pencil is ₹ 150, cost of 5 pen and 8 pencil is ₹140.

1. All I, II and III together are sufficient
2. Either I and III or II and III together are sufficient
3. Only I and III together are sufficient
4. Any two together are sufficient
5. None are sufficient

Ans: 4

6. Train P having length 240 meter crosses train Q, then what is the speed of train Q?

Statement I: Train Q crosses a platform of length 480 meter and Train P running at a speed of 20 m/sec in opposite direction in 21 sec and 10 sec respectively.

Statement II: Train Q crosses a platform of length 280 meter and train R having length 480 meter running in opposite direction in 16 sec and 12 sec respectively.

Statement III: Train P crosses a platform of length 320 meter and Train Q running in same direction in 28 sec and 30 sec respectively considering speed of train Q is more than train P

1. All I, II and III
2. Either I or II or III
3. Only I
4. None are sufficient
5. Either I alone or II and III together

Ans: 3

7. What is the average age of Mukesh and Ramesh?

Statement I: Average age of Mukesh, Ramesh and Taran is 34. Ratio of age of Mukesh to that of Taran is 1:2.

Statement II: Ratio of age of Mukesh to that of Ramesh after 6 years will be 5:6.

Statement III: Positive difference between the age of Suresh and Mukesh (Suresh being the elder one) is equal to the positive difference between the age of Ramesh and Suresh (Ramesh being the elder one).

1. Only statement I
2. Only statement II
3. Only I and III together are sufficient
4. Only I and II together are sufficient
5. I, II and III together are sufficient

Ans: 4

8. What is the principal amount?

Statement I: The ratio of compound interest earned in the second year and the compound interest earned in the first year is 6:5

Statement II: The sum would be double in five years if it was invested in simple interest

Statement III: The difference between the compound interest and simple interest earned on same principal amount for two years at a same rate of interest p.a. is Rs 200

1. Only statement I alone is sufficient
2. Only statement II alone is sufficient
3. Only statement III is sufficient
4. Either Only I and III together or Only II and III together is sufficient
5. All I, II and III together is needed

Ans: 4

9. In how many days will 18 men do a piece of work?

Statement I: 12 men can do $\frac{4}{5}$ part of the same work in 24 days.

Statement II: 15 men can do the same work in 24 days.

Statement III: 8 men can do 20% part of the same work in 9 days.

1. Any one
2. Either I or II
3. I and II
4. Any two
5. All I, II and III

Ans: 1

10. How much is monthly profit of a company?

Statement I: Company decided to give bonus with the salary to its employees. Bonus is 12% of the monthly profit of the company.

Statement II: On the day of salary distribution, company changed its mind and gave a total of Rs.24000 as bonus which was 125% of what the company had decided earlier.

Statement III: Company gives an amount of Rs.15000 as bonus which is $\frac{3}{4}$ th of total monthly profit.

01. None of these
02. II and III together are sufficient
03. III or (I and II are sufficient)
04. All three together are sufficient
05. All three together are not sufficient

Ans: 3

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