DAILY QUESTIONS

25th MAY ‘18

REASONING- DATA SUFFICIENCY
Q.1) The ratio of the prices of three different types of cars is 3: 2: 5. find the price of the car which is neither the costliest nor the cheapest.

(I) the difference between the prices of the costliest and the cheapest cars is RS. 30,000.

(II) the cheapest car costs RS. 20,000.
Solution (c)

From statement (I): If the prices are 3X, 2X and 5X, we get 5X - 2X = 30,000, hence we get X and the price of the car which is neither the costliest nor the cheapest.

From statement (II): we get 2X = RS. 20,000 hence X and then the required price.

Hence, each statement itself is sufficient.
Q. 2) What is the discount percent offered?
(I) the selling price is four times the discount.
(II) five times the marked price is equal to six times the selling price.
Solution (c)

We know that discount percentage = \( \frac{\text{discount}}{\text{MP}} \times 100 \)

Using statement (I) alone:

\[ \text{SP} = 4D \]
\[ \text{MP} = \text{SP} + D \]
\[ \text{MP} = 5D \]

Since MP is known in terms of discount, discount percentage can be found. Statement (I) alone is sufficient.

Using statement (II) alone:

\[ 5\text{MP} = 6\text{SP} \]
\[ \frac{\text{MP}}{\text{SP}} = \frac{6}{5} \]

Let MP be 6X and SP be 5X

Discount = 6X - 5X = X

As discount and MP are known in terms of X, discount percentage can be found. Hence, either statement is sufficient to give the answer.
DATA SUFFICIENCY

I.3) Direction: The question below is followed by two statements, I and II. Answer the question using the following instructions-
[a] if the question can be answered using I alone but not using II alone.
[b] if the question can be answered using II alone but not using I alone.
[c] if the question can be answered using either statement alone.
[d] if the question can be answered using I and II together.
[e] if the question cannot be answered by the given data.

Q.3) What is the compound interest on a certain sum for 2 years, compounded every 3 months?
(I) the simple interest on the same sum for is RS. 1,000 at the same rate of interest.
(II) the rate of interest is 5% p.a.
Solution (d)

Statement (I) gives an equation in terms of principal and the rate of interest.

Statement (II) gives the rate of interest.

Principal can be found using both the statements (I) and (II). As the principal and the rate of interest can be found, compound interest can be calculated.
Q.4) A train crosses a bridge in 1 minute at a speed of 20 kmph. What is the length of the bridge?
(I) the length of the train is 200 m.
(II) a man can cross the same bridge in 5 minutes.
Solution (a)
From statement (I):
Time taken to cross the bridge = length of the bridge + length of the train / speed of the train
So, with statement (I) alone we can find the length of the bridge.
Statement (II) is of no use.
Q.5) A and B together can complete a job in 10 days. How many days does A alone take to complete a job.
(I) A, B and C together take 6 days to complete the job.
(II) C works twice as fast as A.
Solution (d)

Given $A + B = 1/10........(1)$

Statement (I) alone:

$A + B + C = 1/6...............(2)$

Statement (II) alone:

$C = 2A..................(3)$

By using (1), (2) and (3), the question can be answered.

So, both statements are essential to give the answer.
Q.6) How is the girl in the photograph named Kanika related to Akash?

I) pointing to the photograph, Akash said “she is the mother of my father’s only granddaughter.”

II) Akash has no siblings.

III) pointing to the photograph Akash said “she is the only daughter in law of my mother.”

[a] only I and II
[b] only II and III
[c] only I and III
[d] either Only III or only I and II
[e] none of these
Solution (d)
Kanika is Akash’s wife.
It is clear from the III statement alone or by combining I and II statement.
Q.7) On which day of the week did Mayank visit Pune?
I) Mayank took a leave on Friday.
II) Mayank visited Pune the day after his mother’s visit to his home.
III) Mayank’s mother visited Mayank’s house neither on Wednesday nor on Saturday.
[a] only I and II
[b] only II
[c] only I and III
[d] only II and III
[e] none of these
Solution(e)

Even by combining all the statements, we cannot find the day of the week on which Mayank’s mother visited Mayank’s house.
DATA SUFFICIENCY

Q.8) Are P, Q, R, S and T facing outwards from the centre? (all are sitting in a circle)

I) P is sitting second to the left of S. R is facing outwards from the centre and is not an immediate neighbour of S.

II) Q, who is sitting between R and S, is second to the left of T, who is not an immediate neighbor of R. Q and P are facing outward. Q is sitting second to the left of P.

III) S is sitting on the immediate right of Q, who is not sitting on the immediate right of P, T is sitting on the immediate left of S.

[a] only I and III
[b] only I and II
[c] either I and II or III
[d] any two of three
[e] none of these
Solution (d)
It is clear from any two of the three statements that all are not facing outwards.
Q.9) How many students are there in the class?
I) Pravin’s rank is 21st from the bottom and is 8 ranks above Prashant’s, whose rank is 19th from the top.
II) Nilesh’s rank is exactly in the middle of the students of the class and is 5 ranks above Mita, whose rank is 11th from the bottom.

[a] only I is sufficient but II alone is not sufficient.
[b] only II is sufficient but I alone is not sufficient.
[c] either I or II is sufficient.
[d] both I and II are not sufficient.
[e] both I and II are required to give the answer.
Solution(c)

From I:
Prashant’s rank from bottom
=21-8 = 13
Prashant’s rank from top=19
Total number of students in the class
=13+19-1
=31

From II:
Nilesh’s rank from bottom
=11+5=16
Nilesh is exactly in the middle of the students.
Total number of students in the class
=16+15=31
Hence either I or II are sufficient to answer the question.
Q. 10) How many brothers does X have?
I) X is brother of E, who is the youngest in the family.
II) X has two siblings, one of whom is H.

[a] only I is sufficient but II alone is not sufficient.
[b] only II is sufficient but I alone is not sufficient.
[c] either I or II is sufficient.
[d] both I and II are not sufficient.
[e] both I and II are required to give the answer.
Solution (d)

We do not know the sex of H. Hence, both statement I and II together are not sufficient to answer the question.