Data Sufficiency

1. What is the cost of fencing a rectangular plot along all four sides @ Rs. 500 per metre?
I. The area of the plot is 1500 m2, which is 50 times the numerical value of its breadth.
II. The length of the plot is 400% of its breadth and the breadth is 25% of its length.
(A) The data even in both statements I and II together is not sufficient to answer the question.
(B) 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) The data in both statements I and II together is necessary to answer the question.
(D) The data either in statement I alone or in statement II alone is sufficient to answer the question.
(E) 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.

2. Each question is followed by two statements I and II. Choose the correct answer.
What is the present age of Riya?
I. The ratio of the present ages of Riya and her father is 7 : 16.
II. The ratio of 1/2 of Riya's present age to 1/8 of father's present age is 7 : 4.
(A) if the question can be answered by using I alone
(B) if the question can be answered by using II alone
(C) if the question can be answered by using either I or II alone
(D) if the question cannot even be answered by using both I and II together
(E) if the question can be answered by using both I and II together

3. Each question is followed by two statements I and II. Choose the correct answer.
What is the profit percent earned by selling a car for Rs. 480000?
I. The amount of profit earned on selling the car was Rs. 28000.
II. The selling price of the car was twice the cost price.
(A) if the question can be answered by using I alone
(B) if the question can be answered by using II alone
(C) if the question can be answered by using either I or II alone
(D) if the question can be answered by using both I and II together
(E) if the question cannot even be answered by using both I and II together

Direction (4-5): Given below in each question there are two statements (I) and (II). You have to determine, which statement is sufficient to give the answer of question. Also there are five alternatives given, you have choose one alternative as your answer of the questions:

4. What is the cost of painting the two adjacent walls of a rectangular hall which has no windows or doors?
I. The area of the base of hall is 24 square metres.
II. The breadth, length and the height of the hall are in the ratio of 4 : 6 : 5.
III. Area of one wall is 30 square metres.
(A) Only I   **(B)** Only II
(C) Only III   **(D)** Either I or III
(E) Data inadequate

5. A boat travels from point A to B and back from point B to A. Find speed of stream if distance between A to B is 60km.

I. Ratio of speed of boat in still water to the speed of stream is 4 : 1.

II. Time taken by boat in one direction is 2hr more than the other.

(A) Statement I alone is sufficient to answer the question but statement II alone is not sufficient to answer the question.

(B) Statement II alone is sufficient to answer the question but statement I alone is not sufficient to answer the question.

(C) Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.

(D) Either statement I or statement II by itself is sufficient to answer the question.

(E) Statements I and II taken together are not sufficient to answer the question.

Direction (6 – 7): The following questions are accompanied by three statements (I), (II), and (III). You have to determine which statement(s) is/are sufficient /necessary to answer the questions

6. What is the speed of stream?

I) distance covered by boat against the stream in 20h is 200 km

II) distance covered by boat in downstream in 20h is 400 km

III) speed of boat in downstream is 200% of the speed of boat in upstream

(A) Only I and II together

(B) Either I and III or II and III

(C) Any two of them

(D) Either II alone or I and III together

(E) All statements are required

7. What is speed of boat in still water?

I. speed of stream is two – third of speed of boat in still water

II. The boat covers 20 km in 2 hours in downstream

III. The boat covers 10 km in 5 hours in upstream.

(A) only statement II is sufficient

(B) Any two are sufficient

(C) I and II or III are sufficient

(D) Only statement III is sufficient

(E) None of these

8. Find the rate of interest per annum (take rate of interest same for Simple interest and Compound interest)?

I . When Rs. 25,000 invested for 2 years at that rate of interest, then compound interest is Rs.250 more than simple interest.

II . After 10 years amount will be double if invested at Simple interest.

(A) Statement I alone is sufficient to answer the question but statement II alone is not sufficient to answer the question.

(B) Statement II alone is sufficient to answer the question but statement I alone is not sufficient to answer the question.

(C) Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.

(D) Either statement I or statement II by itself is sufficient to answer the question.

(E) Statements I and II taken together are not sufficient to answer the question.

9. Find rate of interest per annum?

I . When Rs. 12,000 invested for 4 years at that rate of interest, then simple interest is Rs. 4800 less than the amount.

II . After $6\frac{2}{3}$ years amount will be double when invested at Simple interest.

(A) Statement I alone is sufficient to answer the question but statement II alone is not sufficient to answer the question.

(B) Statement II alone is sufficient to answer the question but statement I alone is not sufficient to answer the question.

(C) Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.

(D) Either statement I or statement II by itself is sufficient to answer the question.

(E) Statements I and II taken together are not sufficient to answer the question.

10. Arun borrowed a sum which is compounded annually, what is the amount he returned in 2 years?

I. Rate of interest is 6% per annum

II. Simple interest incurred on the sum in one year is Rs. 600

III. The borrowed sum is 10 times the amount earned as simple interest in two years.

(A) Only statement I and III are sufficient

(B) statement II is sufficient

(C) Only statement III is sufficient

(D) Any two are sufficient

(E) Statement II and either I or III are sufficient

11. A' started a business. B joined him after 3 months and C joined them after 4 months. Find the share of 'C' out of total profit?

A) 'A' invested 6000 more than 'B' while 'B' invested 3000 more than 'C'

B) A's profit is Rs. 32,000 out of total profit.

(A) Statement A alone is sufficient to answer the question but statement B alone is not sufficient to answer the questions.

(B) Statement B alone is sufficient to answer the question but statement A alone is not sufficient to answer the question.

(C) Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.

(D) Either statement A or statement B by itself is sufficient to answer the question.

(E) Statements A and B taken together are not sufficient to answer the question.

12. If 'x' is a positive integer. Is 'y' a positive integer ?

A) HCF and LCM of 'x' and 'y' is 5 and 195 respectively.

B) Average of 'x', 'y' and 'y+1' is an integer.

(A) Statement A alone is sufficient to answer the question but statement B alone is not sufficient to answer the questions.

(B) Statement B alone is sufficient to answer the question but statement A alone is not sufficient to answer the question.

(C) Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.

(D) Either statement A or statement B by itself is sufficient to answer the question.

(E) Statements A and B taken together are not sufficient to answer the question.

13. What will be average weight of all girls?

I . Average weight of 48 boys & 28 girls is 45 kg.

II . Average weight of 28 boys is 35 kg & that of remaining boys is 40 kg.

(A) Statement (I) alone is sufficient to answer the question but statement (II) alone is not sufficient to answer the questions.

(B) Statement (II) alone is sufficient to answer the question but statement (I) alone is not sufficient to answer the question.

(C) Both the statements taken together are necessary to answer the questions, but neither of the statements alone is sufficient to answer the question.

(D) Either statement (I) or statement (II) by itself is sufficient to answer the question.

(E) Statements (I) and (II) taken together are not sufficient to answer the question.

Direction (14-20): Each question is followed by two statements I and II. Choose the correct answer.

14. Three pipes A, B and C are used to fill a tank. What is the difference between the time taken to fill the tank when A & B are opened together and the time taken when B & C work are opened together?

I. Pipe A takes twice as much time as pipe B and thrice as much time as pipe C to fill a tank.

II. If they are all opened together, the tank is filled in 1 hour

(A) if the question can be answered by using I alone

(B) if the question can be answered by using II alone

(C) if the question can be answered by using either I or II alone

(D) if the question can be answered by using both I and II together

(E) if the question cannot even be answered by using both I and II together

15. Navdeep puts his money in two banks x and y at the same time. The banks provide simple interest at different rates. He withdraws the amount deposited in bank x two years earlier than he withdraws the amount deposited in bank y. The amount obtained is Rs. 2400 in each case. Find the money invested in each bank.

I. The rate of interest provided by banks x and y are 6% and 5% respectively.

II. The amount deposited in bank x is equal to the amount deposited in bank y.

(A) if the question can be answered by using I alone

(B) if the question can be answered by using II alone

(C) if the question can be answered by using either I or II alone

(D) if the question can be answered by using both I and II together

(E) if the question cannot even be answered by using both I and II together

16. Karan left home and travelled office at 3/4th of the usual speed. Karan reached office late today. What is the usual time taken by Karan to reach office?

I. It took 15 minutes more to reach office today.

II. The distance between Karan's office and home is 12 Km.

(A) if the question can be answered by using either I or II alone

(B) if the question can be answered by using II alone

(C) if the question can be answered by using I alone

(D) if the question can be answered by using both I and II together

(E) if the question cannot even be answered by using both I and II together

17. Mandeep sold an article to Ravinder at 20% profit. If Ravinder paid Rs 1440 to Mandeep, find the percentage profit of Bobby.

I. Bobby had sold the article to Mandeep at Rs 500 above his cost price.

II. Ravinder sells the article to Bobby at 20% loss, Bobby then sells it to someone else at 25% profit

(A) if the question can be answered by using I alone

(B) if the question can be answered by using II alone

(C) if the question can be answered by using either I or II alone

(D) if the question can be answered by using both I and II together

(E) if the question cannot even be answered by using both I and II together

18. Three pipes P, Q and R are used to fill a tank. What is the time taken to fill the tank when P & Q work together?

I. Pipe P takes twice as much time as pipe Q and thrice as much time as pipe R to fill a tank.

II. If they are all opened together, the tank is filled in 2 hours.

(A) if the question can be answered by using I alone

(B) if the question can be answered by using II alone

(C) if the question can be answered by using either I or II alone

(D) if the question can be answered by using both I and II together

(E) if the question cannot even be answered by using both I and II together

19. Instead of the metre scale, a dishonest cloth merchant uses 120cm scale while buying and 80 cm scale while selling. What is the net profit/loss of the cloth merchant if he gives a discount of 20% to his customers?

I. The cloth merchant is able to sell only 40 metres of the cloth out of 50m he had bought at the rate of Rs 40 per metre.

II. If the cloth merchant had used 125 cm scale while purchasing and 75 cm scale while selling and also refrained from giving any discount to his customers.

(A) if the question can be answered by using I alone

(B) if the question can be answered by using II alone

(C) if the question can be answered by using either I or II alone

(D) if the question can be answered by using both I and II together

(E) if the question cannot even be answered by using both I and II together

20. Anand borrowed some amount, which is to be paid back in three equal half yearly instalments. What is the amount of each instalment?

I. The interest in compounded half yearly at 50/3% per annum. And Amount borrowed Rs 28140.

II. Total amount returned after three years is Rs. 35777.

(A) if the question can be answered by using I alone

(B) if the question can be answered by using II alone

(C) if the question can be answered by using either I or II alone

(D) if the question can be answered by using both I and II together

(E) if the question cannot even be answered by using both I and II together