

**Directions :-**

Marks A as answer if statement I alone is sufficient to answer the question

Marks B as answer if statement II alone is sufficient to answer the question

Marks C as answer if statement I and II together are sufficient to answer the question

Marks D If both statement together is not sufficient to answer the question

Marks E If each statement alone is sufficient to answer

**Question 1.** How many people are there in the plain ?

Statement I : 25% passengers are women and 35% are children.

Statement II : There are 24 men in the plain

**Question 2.** What is the difference between monthly income of Ram and Chaaru

Statement I : Ram earns Rs 6000 less than Shaam

Statement II : Chaaru earns Rs 6000 more than Shaam.

**Question 3.** Is x divisible by 28 ?

Statement I : x is divisible by 20

Statement II : x is divisible by 84

**Question 4.** P,Q,R,S and T are five friends. Their mean age is 18. What is the age of R ?

Statement I : P's age is 18

Statement II : Q's age is 2 years less than T and T's age is 6 years less than S.

Statement III : R's age is 6 years more than B's age and 4 years more than T's age.

Is Raja older than Ramu?

I. Sita is 4 years younger than Raja and 2 years younger than Ramu.

II. The average age Raja and Ramu is 21 years.

What is the value of x?

I.  $x^2 = 16$

II.  $x > 0$

Is Babu older than Raghu?

I. The ratio of Raghu's age to Babu's age is 7 : 4.

II. In 6 years Raghu will be half as old as he is now.

What is probability of drawing a red ball, if a bag contains red, blue and green balls.

I. Total balls in the bag are 30

II. The balls are in the ratio 1:2:3

What is the volume of a right circular cylinder?

I. The area of the base of the figure is 196.

II. The height of the figure is 16.

How old is Subhash?

I. In 16 more years Subhash will be twice as old as he is today.

II. Four years ago Subhash was  $\frac{3}{4}$  times of his present age.

If x, y and z are consecutive integers, is y even?

I.  $x < y < z$

II. xz is odd integer.

Is r even?

I.  $r + s$  is odd.

II. s is even.

How many students are enrolled in Sastri's Quant class?

I. If 3 more students sign up for the class and no one drops out, more than 35 students will have enrolled in the class.

II. If 4 students drop out of the class and no more sign-up, fewer than 30 students will have enrolled in the class.

Is K a prime number?

I.  $K > 10$

II. K divided by 2 has a remainder 0.

1. What is the distance between city P and city Q?

**I.**Two persons A and B started simultaneously from P to Q, with their speeds in the ratio 4 : 5.

**II.**B reached P one hour earlier than A to Q.

**III.**The difference between speeds of A and B is 20 kmph

- 1 : I and III only
- 2 : II and III only
- 3 : I and II only
- 4 : All I, II and III together
- 5 : Data inadequate

2. What is the rate of interest on a certain sum?

**I.**The interest earned on the sum at the same rate of simple interest after 3 years is Rs.4500. **II.**If the rate of interest is 2.5% more, the simple interest earned will be Rs.900 more.

**III.**The amount received on the sum at the end of the 2 years at simple interest is Rs.15,000

- 1 : I and II only
- 2 : II and III only
- 3 : I and III only
- 4 : All I, II and III together
- 5 : Any two statements together

3. What is the area of the rectangle?

**I.**The ratio of length to breadth of the rectangle is 35 : 12.

**II.**The perimeter of the rectangle is 188 cm.

**III.**The length of diagonal of the rectangle is 74 cm

- 1 : I and II only
- 2 : I and III only
- 3 : (I and II) or (II and III)
- 4 : Any two of the three
- 5 : (I and II) or (I and III) only

4. What is the present age of Rakesh?

**I.**The ratio of the ages of Ramesh and Rakesh, three years ago, was 4 : 5.

**II.**The ratio of the ages of Rajesh and Rakesh, after two years, will be 4 : 5.

**III.**Two years ago the ratio of the ages of Rajesh and Ramesh was 12 : 13.

- 1 : I and II only
- 2 : II and III only
- 3 : I and III only
- 4 : All I, II and III
- 5 : None of these

1.  $CDED + BCD = AFGDB$ , given  $B = 8$ . Find  $B + A + D + F + G$

2. If  $DOOM + MOD = OSHO$ , then what is the value of  $M + O + O + D$  ?

3. If there are two concentric circles and the four chords of the outer circle, making a square in the outer circle, are the tangents of the inner circle at four points A, B, C and D and these points make a square in the inner circle as well. What is the ratio of the two squares made?
4. One guy has Rs. 100/- in hand. He has to buy 100 balls. One football costs Rs. 15/, One Cricket ball costs Re. 1/- and one table tennis ball costs Rs. 0.25 He spend the whole Rs. 100/- to buy the balls. How many of each balls he bought?
5. The distance between Station Atena and Station Barcena is 90 miles. A train starts from Atena towards Barcena. A bird starts at the same time from Barcena straight towards the moving train. On reaching the train, it instantaneously turns back and returns to Barcena. The bird makes these journeys from Barcena to the train and back to Barcena continuously till the train reaches Barcena. The bird finally returns to Barcena and rests. Calculate the total distance in miles the bird travels in the following two cases:
  - (a) The bird flies at 90 miles per hour and the speed of the train is 60 miles per hour.
  - (b) the bird flies at 60 miles per hour and the speed of the train is 90 miles per hour
6. A tennis championship is played on a knock-out basis, i.e., a player is out of the tournament when he loses a match.
  - (a) How many players participate in the tournament if 15 matches are totally played?
  - (b) How many matches are played in the tournament if 50 players totally participate?
7. A rich merchant had collected many gold coins. He did not want anybody to know about them. One day, his wife asked, "How many gold coins do we have?" After pausing a moment, he replied, "Well! If I divide the coins into two unequal numbers, then 37 times the difference between the two numbers equals the difference between the squares of the two numbers." The wife looked puzzled. Can you help the merchant's wife by finding out how many gold?
8. A set of football matches is to be organized in a "round-robin" fashion, i.e., every participating team plays a match against every other team once and only once. If 21 matches are totally played, how many teams participated?
9. Glenn and Jason each have a collection of cricket balls. Glenn said that if Jason would give him 2 of his balls they would have an equal number; but, if Glenn would give Jason 2 of his balls, Jason would have 2 times as many balls as Glenn. How many balls does Jason have?
10. Suppose 8 monkeys take 8 minutes to eat 8 bananas.
  - (a) How many minutes would it take 3 monkeys to eat 3 bananas?
  - (b) How many monkeys would it take to eat 48 bananas in 48 minutes
11. Everyday in his business a merchant had to weigh amounts from 1 kg to 121 kgs, to the nearest kg. What are the minimum number of weight required and how heavy should they be?
- 12.
13. there are 6 credit cards and 4 debit cards. In how many ways 5 credit cards and 3 debit cards can be selected?
14. Crypt Arithmetic If KANSAS + OHIO = OREGON given  $o=5$  • Then find the value of  $G+R+O+S+S$
15. 6 members have to be selected from different field. 10 from java, 5 from microsoft, 8 from oracle, 2 from IBM . What is the possible combination?

16. The right angled triangle PQR is to be constructed in the xy-plane, so that the right angle is at P and PR is parallel to the x-axis. The x and y coordinates of P,Q and R are to be integers that satisfy the inequality  $-4 \leq x \leq 5$  &  $6 \leq y \leq 16$ . How many different triangles with these properties could be constructed?

A. 1,100 B. 12,100 C. 10,000 D. 9,900

17. A and B came back home after their exam and their father asked them about the test.

A replied--  $\frac{1}{3}$ rd of my answers were wrong

B replied-- 5 of my answers were wrong but together we got  $\frac{3}{4}$  of answers right.

How many questions were there for the exam?

18. The Lion jumped \_\_\_\_\_ the river

a) upon

b) across

c) on

d) to

7.  $99!$  how many zero's?

8. In how many different ways can 5 girls and 5 boys form a circle such that the boys and the girls alternate?

Options

1) 2880

2) 1400

3) 1200

4) 32

9. one gear of pulley rotates at a speed of 3 rev/sec another gear rotates at 5 rev/sec. if both start together after how many seconds will they be together again

3 sec

5sec

15 sec

20 sec

10. HERE=COMES-SHE,(Assume s=8) Find the value of R+H+O

11. 7th number in the series....

99,18,36,9,18

12. apple+pear=orange

13. if is+this=here then value of numeric value of t\*e+i\*r\*h-s

14. a number divided by 84 leaves remainder 57 what is the remainder when same number divided by 12

15. the number of zeros at the end of product of prime numbers between 1 and 999999

16. After world war II three departments did as follows. First department gave some tanks to the 2nd and 3rd department equal to the number they are having. Then 2nd department gave some tanks to 1st and 3rd department equal to the number they are having. Then 3rd department gave some tanks to 1st and 2nd department equal to the number they are having. Then each department has 24 tanks. Find the initial no. of tanks of each department?

17. match problem

18. If POINT + ZERO = ENERGY, then E + N + E + R + G + Y = ?

19. 2, 7, 14, 32, 58, ?

20. Shanti's school normally FINISHES AT 4 PM. her mom drives from home to pick her up, reaching the school exactly at 4 pm. one day, a half holiday is announced and the School finishes for the day at 1 pm. Rather than sitting and Waiting , Shanti decides to start walking towards home. Her mother meets her along the way and as a result they reach home an hour earlier than normal. what is the ratio of the Shanti's walking speed to her mother's driving Speed?

21. profit and loss problem: I bought a book for Rs 60 , I sold off to a friend for Rs 70 but after a while i felt sorry , that i sold it and bought it back for Rs 80, how much loss did I incur?

22. no+no+too=late if e=2 value of o+l+e

23. USA+USSR=PEACE FIND P,E,A,C,E

24. 2,5,10,17,?,41

25. tee+let=All where E=5 find A+L+L

26. An electric wire runs for 1 km b/w some no: of poles. If one pole is removed the distance b/w each pole increases by  $1\frac{2}{6}$  (mixed fraction). How many poles were there initially?

27. Ever + Since = Darwin then D + a + r + w + i + n is

28. a rabbit is tied to one end of an equilateral triangle of side 10 m with a rope length of 8 m. The rabbit is not allowed to travel inside the triangle then find the maximum area covered by the rabbit?

a)  $(96/9)*\pi$

b)  $(480/9)*\pi$

c)  $(240/9)*\pi$

d)  $(100/9)*\pi$

e) cannot be determined

29.  $(HE)^H = SHE$

30. abcde is a five digit number and  $abcde*4 = edcba$

31. A man starts a piece of work and one more man joins him every subsequent day . If the work is completed in 11 days , find the number of days in which 6 men working together will complete the work?

a.6

b.9

c.10

d.11

32. 4,25,49,121

33. 7,14,55,110,?

34. 7 members have to be selected from 12 men and 3 women ,Such that no two women can come together .

In how many ways we can select them ?

35. 7 members have to be selected from 12 men and 3 women ,Such that no two women can come together .

In how many ways we can select them ?

36. Two dice are thrown simultaneously. What is the probability that the sum of the numbers shown on the two dices will be a prime number?

37. in how man was team of four can be formed from four boys and three girls such that atleast one boy and one girl should be there?

38. 2,4,7,10,15,18,..

39. HAT" = 58, then "KEEP" = ?

40. EAT+EAT+EAT=BEET if t=0 then what will the value of TEE+TEE

41. CROSS+ROADS=DANGER???

42. In how many ways can 4 men and 3 women can arrange with a condition that each men should not sit together and they must be in the order of their age.

43. An express A starts at 2.30 pm from nampali station and travels towards vizag station at speed of 80 kmph. Another expresstarts at 4.30 pmfrom nampali station to vizag station at speed of 100 kmph. How far awayfrom station Nampali will the two trains meet??

A.600 km

B.700 km

C.750 km

D. 800 km

44. Lucia is a wonderful grandmother.Her age is b/w 50 to 70.Each of her sons have as many sons as they have brothers.Their combined number gives Lucia's present age?what is her age?

45. A participated in cycling contest and he drove the lap at the rate of 6kmph, 12kmph, 18kmph, 24kmph..What is his average speed?

a) 15kmph b)18kmph c)14.25 d)11.52

46. In an exam 49% candidates failed in English and 36% failed in Hindi and 15% failed in both subjects. If the total number of candidates who passed in English alone is 630. What is the total number of candidates appeared in exam?

47. 5 skilled workers can build a wall in 20days; 8

semi-skilled workers can build a wall in 25 days; 10

unskilled workers can build a wall in 30days. If a te

am has 2 skilled, 6 semi-skilled and 5 unskilled

workers, how long will it take to build the wall?

48.  $1+3=2$   $2+3=10$   $3+3=30$   $4+4=68$   $5+5=?$

49.  $f(1)=1$ , where  $f(x+y)=f(x)+f(y)+8xy-2$ . then  $f(7)=?$

50. IS

+THIS

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HERE

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What is the value of T\*E+I\*R-H\*S?

51. If E A T + T H A T = A P P L E, what is the value of A+T+L ?

52. If a 10 lit. mixture contains milk and water in the ratio 2:1 then, how much more mixture should be added to change the ratio to 1:2 ?

53.  $1+1=41$

54. 1, 4, 9, 18, 35, 68, .?

55. In a cycle race there are 5 persons named as J, K, L, M, N participated for 5 positions so that in how many number of ways can M make always before N?

55, 60, 64, 68

56. 1, 1, 2, 3, 6, 7, 10, 11, ?

57. How many 4 digit numbers contain number 2.

a. 3170

b. 3172

c. 3174

d. 3168

58. Find the unit digit of product of the prime number up to 50

59. 125 small but identical cubes are put together to form a large cube. This large cube is now painted on all six faces.

(i) How many of the smaller cubes have no face painted at all.

(a) 27

(b) 64

(c) 8

(d) 36

(ii) How many of the smaller cubes have exactly three faces painted?

(a) 8

(b) 10

(c) 9

(d) 15

(iii) How many of the smaller cubes have atleast one side painted?

(a) 4

(b) 8

(c) 9

(d) 27

60. There is well of depth 30 m and frog is at bottom of the well. He jumps 3 m in one day and falls back 2 m in the same day. How many days will it take for the frog to come out of the well

61. b,x,e,u,h,\_?

62. 4, 6, 10, 14, 22, 26, 34, 38, 46, \_ ? what is next term in the series.

63. hat is the next number in the series 3,7,13,19...

64. Data Sufficiency Question:

Is w a Whole number?

Statement 1:  $3w$  is an Odd number.

Statemet 2:  $2w$  is an Even number

65. Supposing a clock takes 7 seconds to strike 7. How long will it take to strike 10?

66. There are 8 digits and 5 alphabets. In how many ways can you form an alphanumeric word using 3 digits and 2 alphabets?

67. In an Octagon the number of possible diagonals are?

68. The hour hand lies between 3 and 4. Tthe difference between hour and minute hand is 50 degree. What are the two possible timings?

69. a, b, b, c, c, c, d, d, d, d, . . . . . Find the 288th letter of this series.

70. There are three trucks A, B, C. A loads 10 kg/min. B loads  $13\frac{1}{3}$  kg/min. C unloads 5 kg/min. If three simultaneously works then what is the time taken to load 2.4 tones?

71. HERE = COMES – SHE, (Assume  $s = 8$ )

Find value of  $R + H + O$

72. A person is 80 years old in 490 and only 70 years old in 500 in which year is he born?

a) 400

b) 550

c) 570

d) 440

73. There are 16 hockey teams. find :

(1) Number of matches played when each team plays with each other twice.

(2) Number of matches played when each team plays each other once.



(3) Number of matches when knockout of 16 team is to be played

74. 1, 11, 21, 1211, 111221, 312211, . . . . what is the next term in the series?

75. 1, 4, 9, 18, 35 - - - -

76.