Five racing drivers, Alan, Bob, Chris, Don, and Eugene, enter into a contest that consists of 6 races. The results of all six races are listed below: Bob always finishes ahead of Chris. Alan finishes either first or last. Eugene finishes either first or last. There are no ties in any race. Every driver finishes each race. In each race, two points are awarded for a fifth place finish, four points for fourth, six points for third, eight points for second, and ten points for first.

1)If Eugene finishes two places ahead of Chris in the first race, all of the following will be true EXCEPT:

2)If Don finishes third in the third race, which of the following must be true of that race?

3)In each race, two points are awarded for a fifth place finish, four points for fourth, six points for third, eight points for second, and ten points for first. If Eugene's total for the six races is 36 points, which of the following must be true?

4)In each race, two points are awarded for a fifth place finish, four points for fourth, six points for third, eight points for second, and ten points for first. If Alan finishes first only once, and Don finishes second exactly twice, the lowest total number of points that Bob can earn in the race is:

5)In each race, two points are awarded for a fifth place finish, four points for fourth, six points for third, eight points for second, and ten points for first. If Alan finishes first in four races, which of the following could earn a total of fewer than 26 points in the six races?

6)In each race, two points are awarded for a fifth place finish, four points for fourth, six points for third, eight points for second, and ten points for first. If Frank enters the third race and finishes behind Chris and Don, which of the following must be true of that race?

From 7:00 AM to 11:00 AM it rained 2.25 inches. At 11:00 AM the rain increased to fall at a rate of 1.25 in. every two hours. How many inches of rain landed on the ground by 5:00 PM?

DIRECTIONS (Q1-15). A QUESTION GIVEN BELOW FOLLOWED BY DATA IN THE FORM OF TWO STATEMENTS A AND B. ANSWER AS A. IF STATEMENT 'A' ALONE IS SUFFICIENT TO ANSWER THE QUESTION B. IF STATEMENT 'B' ALONE IS SUFFICIENT TO ANSWER THE QUESTION C. IF BOTH STATEMENT 'A' & 'B' ARE NECESSARY AND EITHER OF THE TWO ALONE IS NOT SUFFICIENT TO ANSWER THE QUESTION D. IF BOTH THE STATEMENTS 'A' & 'B' ARE NOT SUFFICIENT AND MORE DATA IS REQUIRED TO ANSWER THE QUESTION.

Q1) How much water is evaporated in 2 hrs from a tank? A) capacity of the tank is 200 litres B) water evaporates at the rate of 1% of the available volume per hour a) a b) b c) c d) d

Q2) What is Alberts age ? A) In 15 years Albert would be twice as old as Alice would be B) Alice was born 5 years ago a) a b) b c) c d) d

Q3). Which cycle has the least quoted price ? A). The big Indian cycle was reduced by 10% B). The big Chinese cycle was imported at half the Indian price. a) a b) b c) c d) d

Q4). What is the 10th term of the given sequence ? A). The 5th term is 208 and 12th term is 2486 B). The 2nd term is 1/4th of 6th term a) a b) b c) c d) d

Q5). Is x < y ? (x & y are real numbers) A). x = 9 B). y2 = 121 a) a b) b c) c d) d

Q6). How old is the father ? A). His first son was born when his wife was 20 years old B). The difference between him and his wife is 5 years a). a b) b c) c d) d

Q7). What is the sum of four real numbers ? A). The average of all the four numbers is 20 B). The product of all the numbers is 2040 a) a b) b c) c d) d

Q8). Was Rajesh late for work ? A). He took 20 minutes to reach his office from his home ? B). His watch was 5 minutes fast enough he thought it was 10 minutes slow a) a b) b c) c d) d

Q9). How many daughters does Naidu have ? A). Kamala and Suvarna are daughters of Yashoda B). Yashoda was married 20 years back to Naidu a) a b) b c) c d) d

Q10). How many doctors are there in a village ? A). There is one doctor for every 200 residents B). There are 10 wards each ward having 8 doctors a) a b) b c) c d) d

Q11). Among Ravi, Raghu, Ram, Raju who is the strongest ? A). Raghu is taller than Raju but shorter than Ram B). Ravi is the shortest of all a) a b) b c) c d) d

Q12). How many children in a class are girls? A). 25% of the children wear bangles B). All the girls wear bangles a) a b) b c) c d) d

Q13). What is the loss or gain percent in the sale of maruti car? A). The selling price of 2 cars is 2 lakhs each B). 1 car is sold at 10% profit and other at 10% loss a) a b) b c) c d) d

Q14). What is the height of a cylinder? A). The volume of the cylinder is equal to its cross- sectional area B). The radius of the cylinder is more than its height a) a b) b c) C d) d

Q15). In a class, how many boys out of 52 students, scored 75% in a Mathematics test? A). Exactly 10 girls scored more than 75% in the test B). One fourth of the class scored more than 75% in the test a) a b) b c) c d) d Please Give me answer urgent

a student got 70% in one subject,80% in other.to get overall 75% how much he should get in third subject

what is the angle between teo hands of a clock when time is 8-30?

a student is ranked 13th from right and 8th from left.how many are there?

1, 2, 6, 21, 88, __?

1. if jacob sold a watch costing rs.400 to john at 15% profit and john sold the same to sudhir at 15% profit, what is the price paid by sudhir?

a.460 b.510 c.529(ans) d.560

2. In a shop 80% of the articles are sold at a profit of 10% and the remaining at a loss of 40%.what is the overall profit/loss?

a.10% profit b.10% loss c.15% profit d. no profit, no loss(ans)

3. if an article with marked price of rs.400 is sold at successive discount of 10%,25% and 15%,what is the price the customer has to pay?

a.360 b.300 c.230(ans) d.270

4. the sides of a triangle are in the ratio 37.if the perimeter is 60 cms, the longest side is

a.7 b.30 c.28(ans) d.14

5. an article with cost price of 180 is sold at 15% profit. what is the selling price?

a.198 b.200 c.204 d.207(ans)

6. what part of x*x is power(x,2/3)?

a.60% b.66.7% c.69% d.can't say(ans)

7. 15% of 75 is the same as vx% of 450.find x.

a.1 b.2.5(ans) c.3 d.5

8. if the selling price of an object is rs.2300 and the profit percent is 15,what is the cost price?

a.1995(ans) b.1945 c.2000 d.2645

9.70% of x is greater than 1/3rd of x by 110.what is x?

a.100 b.200 c.300 d.350(ans)

10. the age of a and b are in the ratio 4:5 and of b and c in the ratio 3:2.the youngedt of three is

a.a b.b c.c(ans) d.can't say

11. a man buys postage stamps of denomination of 30ps. and 50 ps. for rs.10.00. he buys 22 stamps in all. find the no of 30ps. stamps bought by him.

a.5(ans) b.6 c.17 d.8

12. the ages of a and b are in the ratio 9:4. after 7 years the ratio of their aghes will be 5:3.find b's present age.

a.18 b.8(ans) c.7 d.16

13. if 28 is divided into two parts such that one fourth of the greater part is equal to one third of the lesser part,then the greater part is

a.16(ans) b.18 c.20 d.24

14.a man and a woman, walking together start out by both taking a step with the left foot. in order to keep together, the man whose stride is longer, takes two steps while the woman takes three. how many steps will the woman have taken they are both about to step out on the right foot for the first time together?

15. for communicating with its satellite,NASA has only two codes is equal to 2 and<= is equal to 3.whenever the two symbols appear together the value is taken as sum of each symbol. for example <=<=*** is equal to 3+3+2+2+2=12.which of the following is equal to <=<=<=** minus <**?

a.<=* b.<=** c.<=**** d.<=<=(ans)

16. if i sell two articles, one at 20% profit for rs.100 and the other at 20% loss for rs.100, what is my net profit/loss?

a.4.16 profit b.4.16 loss c.8.33 profit d.8.33 loss(ans)

17. if 85% of the population of an ant colony is red, and of these 45% are females, then what % of the total ant population are male red ants?

a.46.75(ans) b.40 c.33.66 d.66.66

18. what is the cost price of an article sold at rs.199 after two successive discount of 10% and 15%?

a.260(ans) b.200 c.234 d.220

19. if A and B can do a piece of work in 10 days and A alone can do it in 15 days, how long will B take to do it?

a.25 b.20 c.15 d.30

20. if 12 men working 2 hours a day take 10 days to complete a job, how long will 8 men working 6 hours a day take to do the same work?

a.5(ans) b.8 c.12 d.3

21.a mixture contains spirit and water in the ratio 5:1. another mixture contains spirit and water in the ratio 2:1.what is the ratio in which two mixtures are added to get the mixture in the ratio 5:2

a.5:2 b.2:5(ans) c.2:7 d.3:2

22..x:y=7:11, y:z=1:7.what is the least possible integral values of x given that z is 11x.

a.3(ans) b.9 c.7 d.10

23. pqrs is a rectangle having area 50. rx=1/4sr.what is the area of pqxs?

a.37.5 b.42.5 c.12 d.3

24.what is the area of a circle having the same perimeter as that of a square whose area is 121.

1. square root of(PQ)=8 then 4 options

Ans:p+q =1: is not possible

2. equilateral triangle of side 10 units. cow is teethered with a rope of length 7 units at one of the vertex. Find the area of the field grazed. ans-77/3

3. Series till 50 terms: 2+3-5 +2+3-5+…. ans:5

4. when x is diveded by 299 remainder is 100. then when x is divided by 23 remainder is ? ans:8

5. there r 2 groups A and B. A boy goes from gp A to gp B. When he goes the ave wt of both the gps A and B increases. Then? ans:ave wt of gp A>wt of boy is>ave wt of gp B

6. (7^2)^3 and 7^2^3. What is the relation between the 2 . ie >,< ,= ans-(7^2)^3<7^2^3.

7. Train speed 36kph. Dist travelled in 3minutes in meters ans-1800m

8. with the digits 1,2,3,4,5,6 make all 6 digit nos which r not divisible by 5. The no of such 6 digit nos is ans:600

8. x 2.5 3.5 1.5

y25 49 9 then what is the relation between x and y

ans:y is directly proportional to (2x)^2

9. 18kg of fresh grapes have 90% water. dry grapes have 20% water. then the weight of the dry grapes is ans:2.25kg

10. population is 20000. Pop increases by 10% every year, then the pop after 3 years is? ans-26620

11. Dist bet 2 places A and B is given. A man P starts from place A at 9 pm and another man Q goes from B at 10pm . Speed of Q is double of that of P. Both cover 1/4 dist in the same time interval. then A travels the entire dist in time ? ans:8hrs

12. Entry fee is Re1. There r 3 rides each is of Re1. Total boys entering is 3000. Total income is Rs 7200. 800 students do all the 3 rides. 1400 go for atleast 2 rides. None go the same ride twice. Then no of students who do not go any ride is

ans:1400 (check-1000)

13. 1,23,45,67… ans:-89

14. m is div by 5, n is div by 5 ,m-n is div by 5 m*n is div by 25

ans:then m+n is not div by 10

15. Cube of side 5 cms is fully painted in alll the 6 sides. it is then cut into cubes each of side 1 cms. then prob that 2 sides r painted is ans:36/125

16. A is 25% bigger than B B is 20% less than C then the relation bet A, B, C ans 5:4:5

17. A cone and a sphere have the same radius. and in the cone we put the sphere then how much of sphere will be inside the cone

a)1/2 b)>1/2 c)<1/2 ans d)1/4

18. there r 5 papers Ratio of marks obtained in each subject is 6:7:8:9:10. Total marks obtained is 60%. 50% is pass marks. In how many subjects did he get above 50%. ans:4

19. which one is not correct a)cube rootof 343.

b)3.24 is not an integer Ans:none of these

20. A and B r 2 men who enter into business and they invest Rs 1000, Rs 2000resp. How will they divide the income of Rs 5000 .ans 5000/3 & 5000(2/3)

21. 9C2 + 9C3 +10C4=? ans 11c4

22. 10^23-7 is divided by 6, remainder is? ans-3

23. if x+y+z =1. then xy+yz+zx is

a)<1/2 ans b)>1/2 c)=1/2

24. .nos from 1 to 100.

a)find all the nos which r divisble by 3,9,27 –33

b)at least 2 –11

c) only 2 –8

d) none –67

25. 3 balls inside a bag having nos on it written 1 , 2, 3 on it. a ball is taken and then put inside it. Find probability that all 3 nos r the same when it is taken 3 times ans-1/27

26. 15c6+15c7+16c8=== 17cx ans- x== 8 or 9.

27. three men invested sum. and their ratio is 5:7:6. profit is 5400.then b's share ans–2100

28. sum of all 5 digit nos formed using 1,3,5,7,9. ans—6666600 (11111+33333+55555+77777+99999)*24. each digit occupies all the places for 24 times.

29. x and y even nos. x>y which is even. a)x+y b)x-y c) 2x/y (not)

30. 1/2 divived by 1/2 of 1/2) whole divided by 1/2 +1/2 of 1/2

ans—– 2 2/3. or 8/3.

31. trees of heights 30 and 40 sepatated by a river. fish in the river is at equal dis from top of the trees where two birds r

there.ratio of the distances from fish to the root of the tress

ans—4:3.

32. three cones (r=r,l=2r)are arranged upright so that each cone is in contact with other two .and a circle is formed passing

through its vertices. what will be its radius. ans 2r/sqrt(3)

33. What number must be added to 1/x to make it equal to x. Ans. (x2-1)x

34. Some pen bought something at loss for Rs 60.He then sold it the price of 81 and his profit was 20% of the loss.At what price did he buy the object. Ans. calculate. ans-77.50

35. one disk of 20cm radius, out of that 4 disk of 5cm are cut , find diffrence of leftout and cut out area:ans-200pi

36. (X)+(1/x)=3 then (xsquare) + 1/(xsquare) = ??ANS-7

37. a box contain 4 small bos, each small box again contain 3 box,again these box contain 2 box . total how many boxes ANS-1+4+12+24=41

38. between 100 to 200 how many no are divisible by both 3 and 2 and 100,200 are inclusive? ans-68

39. How many two digit no you make by 1,2,3,4,0 Ans=16 because 0 is not in the 10th place.

40. (25…) 32 and (25….)31 in both cases 6 in the last position. What should be in the blanks? Ans 6

41. In a GD there is no restriction in saying something between the participants. A, B, C, D, E be the participant. What's is probability to say B before A. i) 20%, ii) 40%, iii) 50%, iv) none of these. Ans. 50%.

42. You have only 1 kg weight. You have to weight 31kg. Min number of measurements you have to done. Ans. 5 as 1+2+4+8+16=31.

43. Min (a, b, c)=min of a, b, c Max (a, b, c,)=max of a, b, c then what is the value of MAX {min (2,5,7), max (-7, -2, -3), 3}. ans-3

44. The product of two consecutive odd no is -1, then what is the value of the sum of them. Ans. 0 as -1*1 becomes -1.

45. Few years ago on 31st January on her 26th birthday a lady laid a baby. Now what's the sum of their ages? i) 37, ii) 38, iii) 43, iv) 51. I am confused about the answer. It may be any even no. as (26+x)+x. So I think it are 38.

46. 81*82*83*84*85*86*87*89. What should be in the unit place in this product?

Ans. It must be 0 as 5*2=10

47. In a company ones salary increases 6/5 times in every year. After 4 year of joining average salary is 1342. Then what's the starting salary of the company? A) 900, b) 1000, c) 1100, d) 1200. Ans.= 1000

48. Perimeter of an equilateral and isosceles is 45 and 40 respectively. At least one of the sides of isosceles is equal to the equilateral. What's the base of isosceles triangle? Ans. 10. As. 45/3=15. 15+15+10=40.

49. Two people P Q start a race in a circular track in opposite way different but constant speed. First they meet 900m cw from the starting pt. Then they meet 800m ccw from the starting pt. What's the circumference of the circle.

ans-2600m

1. How many diagonals of different lengths are possible in a convex regular decagon?

1)4

2)7

3)5

4)19

5)35

2. Which of the following has the greatest value?

1) - log(25)

2) - log(125)

3) log(5)

4) log2

5) -1

3. Nineteen delegates are participating in a round table conference with a host. Two particular delegates always wish to occupy either sides of the host. One particular

delegates wants to sit just opposite the host. How many different seating arrangements are possible?

1)(17)!*(13)!

2)(16)!*(2)!

3)(17)!*(2)!

4)(18)!*(2)!

5) None of these

4. In a square ABCD, T, U, V and W are points on side AB, AD, CD and BC

such that AT: AB = AU: UD = CV: VD = CW: WB = 2:1. Further Z and X are midpoints of UT and UV respectively, while Y is a point on TW such that TY: YW = 1:2. Find the ratio of the area of the triangle XYZ to that of the square ABCD.

1) 5:54

2) 7:61

3) 2:11

4) 4:27

5) None of these

Directions : In the following question two equations are provided. On the basis of these you have to find the relation between p and q.

Give answer (1) if p = q

Give answer (2) if p > q

Give answer (3) if q > p

Give answer (4) if p ? q, and

Give answer (5) if q ? p.

5. I. $17P^2 + 15p + 2 = 4$

II. $3Q^2 + 7q + 4 = 0$

6. While finding the HCF of two coprime numbers N1 and N2, the four successive quotients are 5, 3, 7 and 9 respectively. Find the greatest number which when it divides to N1 and N2 leaves the same remainder in each case.

1) 124

2) 193

3) 217

4) 311

5) 517

7. On the portion of the straight line $x + y = 2$ which is intercepted between the axes, a square is constructed away from the origin, with this portion as one of its side. If p denotes the perpendicular of a side of this square form the origin, then the maximum value of p is

1) 2

2) 3

3) 4

4)

5) None of these

8. Find the least positive integer which has 26 divisors excluding 1 and the positive integer itself.

1) 1760

2) 234

3) 290

4) 720

5) 960

9. If N = (81)^64 – (47)^64 then N is not divisible by

1) 877

2) 85

3) 160

4) 170

5) None of these

10. Different four-digit numbers are formed with the help of digits 0, 2, 3, 5 and 7. Find the sum of all those four-digit numbers.

1) 3197300

2) 2496500

3) 2313700

4) 5456700

5) None of these

11. There are 10 identical blocks of cuboids of dimension 2cm,3cm , 5cm. The blocks are kept one on top of the other in a random fashion to form a structure. How many structures of unique height can be created using these blocks? (Neglect the instability of the structure.)

1) 29

2) 30

3) 37

4) 46

5) 60

12. S is a set of triangle such that no two triangles in this set are similar. All triangles in S are having angles in integral degrees. What is the maximum number of different triangles in S?

1) 2700

2) 1726

3) 2631

4) 1986

5) Can't say

Directions (Q. 13-17): Answer the questions on the basis of the information given below.

A photo-shoot is to be done involving 9 people A, B, C, D, E, F, G, H and I. They are sitting in a row form left to right, all facing the camera. Only 3 of them are formally dressed. furthermore, A, F and G are males. D and I are females.B is a formally dressed male and C is a formally dressed female.Males and females occupy we select 3 persons from the group such that there is at least one .

13. In how many different ways can we select 3 persons from the group such that there is atleast one male and that E and H are never selected?

1) 63

2) 32

3) 24

4) 34

5) Can't say

14. Which of the following statements provides sufficient information to determine, with respect to each and every person, whether the person is a male or female and whether the person is formally dressed or not?

1) I is a formally dressed male.

2) H is a formally dressed female.

3) A is a formally dressed male.

4) E is a formally dressed male.

5) None of these

15. If H is a male who is not formally dressed, then which of the following is/are necessarily false?

I. A sits sixth from the left in the row.

II. B sits seventh from the right in the row.

III. H sits fourth from the left in the row.

IV. D sits second from the right in the row.

1) Only I

2) Only II and III

3) Only I and III

4) Only II and IV

5) Only IV

16. Assume that E is a formally dressed female. If all the formally dressed persons must sit on the three right most seats, which of the following is/are NOT an acceptable sitting sequence(s) from left to right?

(I) ADFIGHCBE

(II) GIFDAHEBC

(III) IADFHGCBE

(IV) HGIAFDEBC

1) I, II and IV

2) II and III

3) I and IV

4) II and III

5) None of these

17. Let E be a male who is formally dressed. The photograph would not turn out to be good if three or more persons who are not formally dressed sit together. Which of the following information's is/are sufficient to infer the position at which C sat

(from left) in a photograph that turns out to be good?

I. The formally dressed person sat fifth from the left.

II. The formally dressed person sat second from the right.

III. The formally dressed person sat first from the right.

IV. The formally dressed person sat third from the right.

1) Only I

2) I and IV

3) II and III

4) III and IV

5) Only IV

Directions (Q. 18-22): Below in each question are given two statements (A) and (B). These statements may be either independent causes or may be effects of independent causes or of a common cause. One of these statements may be the effect of the other statements. Read both statements and decide which of the following answer choices correctly depicts the relationship between these two statements.

Mark answer 1): in statement (A) is the cause and statement (B) is its effect.

Mark answer 2): if statement (B) is the cause and statement (A) is its effect.

Mark answer 3): if both the statements (A) and (B) are independent causes.

Mark answer 4): if both the statements (A) and (B) are effects of independent causes.

Mark answer 5): if both the statements (A) and (B) are effects of some common cause.

18. A. XYZ state government has released Rs. 50 crores to strengthen the Panchayati Raj Institutions in the state.

B. The third State Finance Commission of the state XYZ has been constituted to improve the financial position of the state.

19. A. Some of the world's best-known names in hotels are planning to invest heavily in India.

B. Demand for hotel rooms is soaring in India as its economy blossoms.

20. A. The state XYZ has taken a new initiative to provide to pregnant women free transport facility to the nearest hospital in case of an emergency and the facility will be available round the clock.

B. The state XYZ has requested its power consumers to become a vigilant customer, and advised them to report power theft to the nearest power station.

21. A. There have been huge investment coming in the software industry, financial services and manufacturing in the country 'X'

B. The country 'X' is confident that foreign direct investment inflows during the current year will cross $11 billion.

22. A. The bank XYZ has launched 'Easy Cash Card', India's first loan disbursement card.

B. The loans disbursed through cheques or drafts compel customers often to wait for the proceeds to be credited to their accounts to be able to use the funds.

23. An empty fuel tank of a car was filled with A type of petrol. When the tank was one-third empty, it was filled with B type of petrol. Again, when the tank was one-third empty, it was filled with A type of petrol. Again, when the tank was one-third empty it was filled with B type of petrol. At this time what was the percentage of B type of petrol in the tank?

1) 51 %

2) 48 %

3) 49 %

4) 50 %

5) None of these

24. Approximately what will be the compound interest on a sum of Rs. 37,000 after four years at the rate of 12 percent per annum?

1) Rs. 17,760

2) Rs. 21,220

3) Rs. 18.870

4) Rs. 14,982

5) Rs. 19,760

25. The length of a rectangle increases by 20% and the breadth by 30%. Then the perimeter of the rectangle will increase by 1) 56%

2) 25%

3) 22 %

4) Data inadequate

5) None of these

ANSWERS: 1. (2) 2. (3) 3. (2) 4. (1) 5.(4) 6. (1) 7. (2) 8. (5) 9. (5) 10. (3) 11. (2) 12. (1) 13. (4) 14. (4) 15. (3) 16. (1) 17.(3) 18. (5) 19. (2) 20. (4) 21. (1) 22. (2) 23. (2) 24. (2) 25. (4)

1. Six years ago I was three times as old as my brother, and now I am twice as old my brother. Find my brother's age.

a) 8 years b) 24 years c) 12 years d) 16 years

2. A boy standing idle sounds a whistle to his friend at a distance of 1200 m moving away from him in a speeding car at 108 kms /hr. Find the duration after which his friend is going to hear him. (Speed of sound = 330m/sec).

a) 3.6 secs b) 4.00 secs c) 40 secs d) None of these

3. Sneh's age is 1/6th of her father's age. Sneh's father's age will be twice of Vimal's age after 10 years. If Vimal's eighth birthday was celebrated two years before, what is Sneh's present age?

a) 24 years b) 30 years c) 6 2/3 years d) None of these

4. Three years ago the average of A and B was 18 Years. With C joining them now, the average becomes 22 years. How old is C now?

a) 24 years b) 27 years c) 28 years d) 30 years

5. A train traveling at 42 kms/ hr passes a cyclist going in the same direction in 9 secs. If the cyclist had been going in the opposite direction, the train would have passed him in 5 secs. Find the length of the train.

a) 75 meters b) 60 meters c) 90 meters d) 80 meters

6. A person walks a distance of 18 kms at a particular speed. For the next 30 kms he increases his speed by 2 kmph. Had he walked the entire distance at 3 kmph more than his initial speed, he would have reached 4 hours earlier. Find his initial speed.

a) 3 kms/hr b) 2 kms/hr c) 4 kms/hr d) None of these

7. A man starts from B to K, another starts from K to B, at the same time. After passing each other they complete their journeys in 3.33 and 4.80 hours respectively. Find the speed of the second man if the speed of the first is 12 km/ hr

a) 12 kms/hr b) 10 kms/hr c) 14 kms/hr d) Data inadequate

8. A train traveling at 40 kms / hr while inside the tunnel meets another train of half its length traveling at 60 kms / hr and passes it completely in 4.5 seconds. Find the length of the tunnel if the first train passes completely through it in 4 minutes 37.5 seconds.

a) 2000 meters b) 3000 meters c) 4000 meters d) 5000 meters

9. When a stone is dropped from a building 200 m high, its speed is proportional to the time elapsed after dropping. The distance traveled is proportional to the square of the time elapsed. After 1 second the speed of the train was 10 m/sec and it was 190 m above the ground. When its speed is 25 m/sec, what would be its distance from the ground?

a) 140 m b) 137.5 m c) 125.75 m d) 142.5 m

10. The ratio of 3x years from now?

a) 18 b) 24 c) 30 d) 54

11. If A is 25 kms east of B, which is 12 kms south of C, which is 9 kms west of D. A person starts walking at 3 kms/hr from A towards D. Calculate the distance of the point from A where he is going to meet a person from D walking towards A at 2 kms / hr.

a) 20 b) 12 c) 8 d) 20 sqrt (12*8)

12. Walking at 6/7th of his usual speed, a man is 25 mins too late. His usual time is

a) 7.5 hrs b) 1.5 hrs c) 2.5 hrs d) 1.67 hrs

13. Excluding stoppages, the speed of the bus is 54 kms /hr and with stoppages, it is 45 kmph. For how many minutes does the bus stop per hour?

a) 9 b) 10 c) 12 d) 20

14. The average age of 12 students is 20 years. If the age of one more student is included, the average decreases by 1, what is the age of the new student?

a) 5 b) 7 c) 9 d) 11

15. The ratio of the ages of Mona and Sona is 4:5. Twelve years hence, their ages will be in the ratio of 5:6. What will be Sona's age after 6 years?

a) 8 b) 10 c) 12 d) 14

16. Conversation between two mathematicians:

First: I have three children. The product of their ages is 36. If you sum their ages, it is exactly same as my neighbor's door number on my left. The second mathematician verifies the door number and says that it is not sufficient. Then the first says "Ok one more clue is that my youngest is really the youngest". Immediately the second mathematician answers. Can you answer the question asked by the first mathematician? What are the children ages?

17. A train after traveling 50 kms from A meets with an accident and proceeds at 4/5th of the former speed and reaches B, 45 min late. Had the accident happened 20

kms further on, it would have arrived 12 mins sooner. Find the original speed and the distance.

18. Recently, I decided to walk down an escalator of a tube station. I did some quick calculation in my mind. I found that if I walk down twenty – six steps, I require thirty seconds to reach the bottom. However, if I am able to step down thirty – four stairs, I would only require eighteen seconds to get to the bottom. If the time is measured from the moment the top step begins to descend to the time I step off the last step at the bottom, can you

1. An aircraft is flying at a height of 3000m from the ground at an average speed of 400 km/hr while descending. It has to travel 5 kms before it can touch down the runway and start operating its break system. It will take less than 10 seconds to reach the touch down point. How far it is from the touch down point if it had been on they ground.

a)5 kms b)4 kms c)3 kms d)none of these

2. water is continuously poured from a reservoir to a locality at the steady rate of 10,000 liters per hour. When delivery exceeds demand the excess water is stored in a tank. If the demand for 8 consecutive three-hour periods is 10000,10000,45000,25000,40000,15000,60000 and 35000 liters respectively, what will be the minimum capacity required of the water tank (in 1000 litres) to meet the demand?

a)10 b)30 c)40 d)50

ans:c)40

3. Jhaveri invested in Upendra&Upendra,Celco and Winger shares at Rs. 300,Rs.200 and Rs.5 per share respectively. He bought 100 shares for Rs.1000.The number of Upendra&Upendra and Celco shares he bought are respectively

a)23.17 b)17,23 c)17,60 d)15,25

ans:b)17,23

4. a certain organization has three committees. only two persons are members of all committees, but every pair of committees have three members in common. what is the least possible no of member of members on any one committee?

a)4 b)5 c)6 d) none of these.

ans:a)4

5. one bottle is half-full of oil and another bottle with twice the capacity is one quarter full of oil. if water is added so that both the bottles are full and the contents of both are then poured into a third bottle that is empty and large enough to hold the contents of both, what fractions of the contents in the third bottle is oil?

a)1/4 b)1/3 c)3/8 d)2/3

ans:b)1/3

6. don and his wife each receive an 8 percent annual raise. if don receives a raise rs.800 and his wife receives a raise of rs. 840, what is the difference between their annual income after their raises?

a)40 b)460 c)500 d)540

ans:d)540

7. if x+y+z=9 and both y and z are positive integers greater than zero, then the maximum value x can take is?

a.7 b.3 c.8 d. data insufficient

ans:a.7

8. if 5 tomatoes are worth 8 oranges,5 oranges are worth 4 apples, 7 apples are worth 3 pineapples and 7 pineapples cost rs.203,then he approx price of each tomato is

a.16 b.5 c.19 d. none of theses

ans: a.16

9. in the relation x>y+z,x+y>p and z necessarily true?

a. y>p b .x+y>z c. y+p>x d .insufficient data

ans: b.x+y>z

10. if x,y,z are three +ve integers such that x is greater than y and y is greater than z then which of the following is definitely true?

a. x% of y is greater than y% of z

b. y% of x is greater than z% of y

c. z% of x is greater than y% of z

d. all of these(ans)

11. amar,akbar, antony eat lunch at the same restaurant everyday.if amar orders a dosa,then akbar also orders adosa.either akbar or antony always orders a dosa,but never at the same lunch.either amar or antony or both order a dosa.if antony ordes a dosa ,then amar also orders a dosa.youy can conclude that:

a. amar, akbar, antony always order adosa.

b. amar and antony sometimes order a dosa,akbar never does.

c. amar and akbar always order a dosa, antony never does.(ANS)

d. amar and antony always order adosa,akbar never does.

12.ramesh,ram,kareem and Mohan collected coins of different countries. they collected 100 together. none collected less than 10.each collected an even number. each collected a different number. based on these, we can say that the number of coins collected by the boy who collected the most could not have exceeded

a.54 b.64(ans) c.58 d.60

13. let p,q,r and s be four statements such that:

if p is true, then q is true;

if q is true,then r is true and

if s is true,then at least one of q and r is false.

then it follows that:

a. if p is true then s is false.(ans)

b. if s is falsae both q and r are true.

c. if at least one of q and r is false then s is false.

d. if q is true then s is true.

14.players a to z play a league match in which every player plays a match against every other player. a win earns 2 points, a draw 1 point and loss 0 points. there were no draws, and no two players had the same total points. the rank list of the players happens to be the alphabetical list itself. which of the following statement is true?

a. n wins over m b . m wins over n(ans)

c. m did not play against n d.none

15.an article costing rs.160 is sold at 15% discount on a mark-up price.what is the selling price after discount?

a.170(ans) b.200 c.150 d.220