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| 1. | Ans: [a]  Solution: (22 x 3 + 17 x 2)/5 = 100/5 = 20. |
| 2. | Ans: [c]  Solution: (18\*8)-(15\*6)/2=  =27 |
| 3. | Ans: [d]  Solution: sum of first 97 natural numbers=  =  Average=(97\*98)/(2\*97)=49 |
| 4 | Ans: [a]  Solution: avg of 3 numb is 135  (x + y + z) / 3 = 135  diff. b/w 2 values is 25 so x = y - 25 z = y + 25  [(y-25) + y + (y+25)]/3 = 135 [y-25+y+y+25] / 3 = 135 3y/3=135 y=135  so x = 110 ; y = 135 ; z = 160  The lowest number is 110 |
| 5 | Ans: [d]  Solution: (2\*30\*40)/70=240/7=34.2 |
| 6 | Ans: [c]  Solution: (50\*25-20\*40)/30=x  (1250-800)/30=450/30=15 |
| 7 | Ans: [d]  Solution: (3000-32-12+23+11)/100=2990/100=29.90 |
| 8 | Ans: [a]  Solution: let sum of 10 members age be x  New sum of ages=x-a-b(where a and b is the age of new and old member respectively  Avg=(x-a-b)/10  4 yrs ago  Sum of ages of members=x-40  Avg=(x-40)/10  (x-40)/10=(x-a+b)/10  b-a=40 |
| 9 | Ans: [a]  Solution: {(52\*45)-(48\*5)+(54\*5)}/45=52.66 |
| 10 | Ans: []  Solution: Let the original number be ab i.e., (10a + b). After interchanging the digits, the new number becomes ba i.e., (10b + a).  The question states that the average of 10 numbers has become 3.6 less than the original average. Therefore, the sum of the original 10 numbers will be 10\*3.6 more than the sum of the 10 numbers with the digits interchanged.  i.e., 10a + b = 10b + a + 36, 9a - 9b = 36, a - b = 4 |
| 11 | Ans: []  Solution: a+b+c+d = 25\*4 = 100  d+e+f = 35\*3 = 105  a+b+c+d+e+f = 30\*6 = 180   So the fourth value d = 100 + 105 - 180 = 25. |
| 12 | Ans: []  Solution: {(24\*42)-88}/23=40 |
| 13 | Ans: []  Solution: The weight of the new man would be 19 x 3.5 kgs more than the weight of the man he replaces. New man's weight = 79 + 19 x 3.5 = 145.5 kgs. |
| 14 | Ans: []  Solution: 22\*45 = 990 the avg of 1st 10 mem is 10\*55= 550 the avg of the last 11 mem is 11\*40 = 440 Sum is = 990 11 candidate marks are Total avg - (avg of 1st 10 mem + avg of last 11 mem) i.e 990-990 = 0 |
| 15 | Ans: []  Solution: Total of Ist 10 students = 12.5 × 10  = 125  Total of other 20 students = 13.1 × 20  = 262  Total = 387  Average = 387/30  = 12.9 years |
| 16 | Ans: []  Solution: total age of all the 6 family members=22\*6=132 7 years ago the youngest member was not there and the other members were 7 years younger than now.so the total age of a family of 5 members will be 132-(7\*6)=90.therefore the average age of 5 members will be 90/5=18 |
| 17. | Ans: 75  Solution:The average weight of A,B and C = 84Kg The total weight of A, B and C = 84 x 3 = 252Kg. The average weight of A, B , C and D = 80 kg The total weight of A, B, C and D = 80 x 4 = 320 kg The weight of D = 320 – 252 = 68 kg The weight of Q = 68 + 3 = 71 kg The average weight of B, C ,D and E = 79 kg The total weight of B, C, D and E = 79 x 4 = 316 kg The total weight of A,B, C and D  – the total weight of B,C,D and E = 320 – 316 = 4 kg A – E = 4 A = 4 + E A = 4 + 71 A = 75 Kg |
| 18 | Ans: 36  Solution: tues + wed + thurs)/3=37 tues + wed + thurs=111...(1) (wed + thurs + fri)/3=38 (wed + thurs + fri) =114...(2) Given friday is 39. then, (2) - (1) Fri - Tues = 3 So 39 - Tues = 3 Tuesday =36 |
| 19 | Ans: 105  Solution: there are three workers a,b and c their average salary is a+b+c/3 = 95 a+b+c=285 a=115, b=65 c=285-115-65=105  the ans is 105 |
| 20 | Ans: 89  Solution: Total score of 15 boys is 85X15= 2245  Total score of 10 girls is 97X10 = 970  Average =( 2245+970)/ 25 = 89 Approx |
| 21 | Ans: 57.25  Solution: w/15 = 63.25 => W= 15X63.25 = 948.75  (W+N)/16= 62.875 => W+N = 1006  solving above two weight of new one is 1006- 948.75 = 57.25 |
| 22 | Ans: 148  Solution: Average of numbers = Sum/6 Average = 888/6 = 148 |
| 23 | Ans: 850  Solution: Sum of 4 investment/4 =x(average)  (Sumof 4 investment +920)/5 = x+14  solvinf above two equations 4X+920=5x+7  x=850 |
| 24 | Ans: 40  Solution: Sum of term/N=18  (Sum+100)/N+1 = 20  solving two  18N+100= 20N+20  2N=80 or N=40 |
| 25 | Ans: 49  Solution: Average of 1st n natural number is given by = ([n\*(n+1)]/2)/n Average of 1st 97 natural number is given by = {([97\*(97+1)]/2)/97} = 49 |
| 26 | Ans: 4000  Solution: Let P, Q and R represent their respective monthly incomes. Then, we have:  P + Q = (5050 x 2) = 10100 .... (i)  Q + R = (6250 x 2) = 12500 .... (ii)  P + R = (5200 x 2) = 10400 .... (iii)  Adding (i), (ii) and (iii), we get:  2(P + Q + R) = 33000  or   P + Q + R = 16500 .... (iv)  Subtracting (ii) from (iv), we get P = 4000.   P's monthly income = Rs. 4000 |
| 27 | Ans: 2.8  Solution: average weight is =2.5  total weight = 12X2.5 = 30  since lightest weight not more than 1 and heaviest not more than 6  so when we divide 30 with both values we will get answer less than 2.5 only  so 2.8 cannot be the answer |
| 28 | Ans: 420  Let the original average expenditure be Rs.xx then,  42(x−1)−35x=4242(x−1)−35x=42  ⇒7x=84⇒7x=84  ⇒x=12⇒x=12  Therefore original expenditure  =Rs.(35×12)=Rs.(35×12)  =Rs. 420 |
| 29 | Ans: []  Solution: |
| 30 | Ans: 33.5  Solution: sum/n =32 => sum =32n  (3/4)n+4 + (1/4)-6/ 2 =33.5 |
| 31 | Ans: 8  Solution: (63\*4 +77\*Y)/ 4+Y = 70  y=4 approx  so subject should be 4+4 =8 |
| 32 | Ans [b] Total food available = 35 \* 10  If 50 person joins So required = (35\*10)/50 = 7 days |
| 33 | Ans [b] Total runs scored by the player in 40 innings = 40 × 50 Total runs scored by the player in 38 innings after excluding two innings = 38 × 48 Sum of the scores of the excluded innings = 40 × 50 - 38 × 48 = 2000 - 1824 = 176  Given that the scores of the excluded innings differ by 172. Hence let's take the highest score as x + 172 and lowest score as x  Now x + 172 + x = 176 => 2x = 4 => x =4/2 = 2  Highest score = x + 172 = 2 + 172 = 174 |
| 34 | Ans [b] Required average  = Old average - Sold average = ( 250 ) - ( 10 ) = 240 |
| 35 | Ans [a] Required average = 14 yrs 6 months + 6 months = 15 yrs |
| 36 | Ans [b] since, average=(sum of n no.s)/(total no) therefore, (sum of first 10 no.s)/10 ==(sum of last 20 no)/20 hence. (sum of last 20 no.s) = 2\*(sum of first 10 no.s) |
| 37 | **Ans: b**  **Solution:** Total age of the family members = 6 x 22 = 132 yrs  Total age 7 years ago = 132 – 6 x 7 = 90 yrs  So the average = 90/6 = 18 yrs |
| 38 | **Ans: b**  **Solution:** Let the number of females be X  So as per question; 15 x 8 + 6 x X = (8+X) x 10.8   * X = 7 |
| 39 | **Ans: b**  **Solution: weight of the new person = weight of replaced person – decrease in average x number of persons**   * **Wt. of new person = 150 – 3 x 5 = 135 kg** |
| 40 | **Ans: b**  **Solution:** Let the weight of teacher be X  So 24 x 36 + X = 25 x 37   * X = 61 kg |