## **AVERAGES**

| 1. If the average weight of 10 men is 50 kg, and that of 20 women is 35 kg, then the average weight of                                                                                                                                                                          |                                   |                                   |                                   |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|--|--|
| <b>30 persons is:</b> A) 80 kg                                                                                                                                                                                                                                                  | B) 60 kg                          | C) 40 kg                          | D) 45 kg                          |  |  |
| 2. 2 cows and 8 goats are bought at an average of Rs.140. If the average price of a goat is Rs.60. What is the average price of a cow?                                                                                                                                          |                                   |                                   |                                   |  |  |
| A) Rs. 480                                                                                                                                                                                                                                                                      | B) Rs. 960                        | C) Rs. 460                        | D) Rs. 980                        |  |  |
| 3. A family consists of two grandparents, two parents and three grandchildren. The average age of the grandparents is 67 years, that of the parents is 35 years and that of the grandchildren is 6 years. What is the average age of the family?                                |                                   |                                   |                                   |  |  |
| A) $28^{4}/_{9}$                                                                                                                                                                                                                                                                | B) 31 <sup>5</sup> / <sub>7</sub> | C) 32 <sup>1</sup> / <sub>6</sub> | D) 31 <sup>2</sup> / <sub>3</sub> |  |  |
| 4. The average weight of 15 students in a group is 26 kg. When the teacher's weight is included it becomes 30 kg. What is the weight of the teacher?                                                                                                                            |                                   |                                   |                                   |  |  |
| A) 78                                                                                                                                                                                                                                                                           | B) 86                             | C) 62                             | D) 90                             |  |  |
| 5. If the average weight of 4 men increases by 3 kg when one of them weighing 90 kg is replaced by another man, then weight of the new man is?                                                                                                                                  |                                   |                                   |                                   |  |  |
| A) 80 kg                                                                                                                                                                                                                                                                        | B) 112 kg                         | C) 120 kg                         | D) 102 kg                         |  |  |
| 6. The average age of 8 men is increased by 2 years when one of them is replaced by a 40-year-old woman. What is the age of the man who was replaced?                                                                                                                           |                                   |                                   |                                   |  |  |
| A) 36 years                                                                                                                                                                                                                                                                     | B) 28 years                       | C) 32 years                       | D) 24 years                       |  |  |
| 7. The average age of a class of 19 students is 15 years. If the age of the teacher be included, then the average increases by 9 months. Find the age of the teacher.                                                                                                           |                                   |                                   |                                   |  |  |
| A) 40                                                                                                                                                                                                                                                                           | B) 25                             | C) 30                             | D) 35                             |  |  |
| 8. The average weight of 8 men increases by 2.5 kg when a new man comes in place of one of them weighing 65 kg. What might be the weight of the new person?                                                                                                                     |                                   |                                   |                                   |  |  |
| A) 76                                                                                                                                                                                                                                                                           | B) 76.5                           | C) 85                             | D) 95                             |  |  |
| 9. The average of weight of three men A, B and C is 84 kg. Another man D joins the group and the average now becomes 80 kg. If another man E, whose weight is 3 kg more than that of D, replaces A, then the average weight of B, C, D and E becomes 79 kg. The weight of A is: |                                   |                                   |                                   |  |  |
| A.70 kg                                                                                                                                                                                                                                                                         | B.72 kg                           | C.75 kg                           | D.80 kg                           |  |  |
| 10. The average of runs of a cricket player in 10 innings was 32. How many runs must be made in his next innings so as to increase his average of runs by 4?                                                                                                                    |                                   |                                   |                                   |  |  |
| A) 72                                                                                                                                                                                                                                                                           | B) 74                             | C) 76                             | D) 78                             |  |  |
| 11. If a cyclist cycles a distance at the speed of 20 km/hour and comes back at a speed of 30 km/hour, then his average speed:                                                                                                                                                  |                                   |                                   |                                   |  |  |
| A) 25                                                                                                                                                                                                                                                                           | B) 24                             | C) 26                             | D) 22                             |  |  |

QuanTech Origin Averages | 1

| 12. The average age of husband, wife and their child 3 years ago was 27 years and that of wife and the child 5 years ago was 20 years. The present age of the husband is:                                                                                                                                                                                                                                                                                                                                               |                                |                                    |                                                                   |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------------|-------------------------------------------------------------------|--|--|
| A) 35                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | B) 40                          | C) 50                              | D) 60                                                             |  |  |
| 13. Average cost of 5 apples and 4 mangoes is Rs. 36. The average cost of 7 apples and 8 mangoes is Rs. 48. Find the total cost of 24 apples and 24 mangoes.                                                                                                                                                                                                                                                                                                                                                            |                                |                                    |                                                                   |  |  |
| A) 1044                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | B) 2088                        | C) 720                             | D) 324                                                            |  |  |
| 13. In what ratio must a grocer mix two varieties of pulses costing Rs. 15 and Rs. 20 per kg respectively so as to get a mixture worth Rs. 16.50 kg?                                                                                                                                                                                                                                                                                                                                                                    |                                |                                    |                                                                   |  |  |
| A) 3:7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | B) 5:7                         | C) 7:3                             | D) 7:5                                                            |  |  |
| 14. The ratio in which 35% alcohol solution should be mixed with 45% solution in order to get a $41\%$ solution is:                                                                                                                                                                                                                                                                                                                                                                                                     |                                |                                    |                                                                   |  |  |
| A) 2:1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | B) 1:3                         | C) 3:1                             | D) 2:3                                                            |  |  |
| 15. A dealer buys 11 kg of wheat at Rs. 374 and mixes it with another quality of wheat in the ratio of 4:3. The price of the resulting mixture is Rs. 40 per kg. The price of the other quality of wheat is ?                                                                                                                                                                                                                                                                                                           |                                |                                    |                                                                   |  |  |
| A) Rs 48/kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | B) Rs 50/kg                    | C) Rs 42/kg                        | D) Rs. 34/kg                                                      |  |  |
| 16. The average weight of A, B and C is 45 kg. If the average weight of A and B be 40 kg and that of B and C be 43 kg, then the weight of B is:                                                                                                                                                                                                                                                                                                                                                                         |                                |                                    |                                                                   |  |  |
| A) 17                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | B) 20                          | C) 26                              | D) 31                                                             |  |  |
| 17. In a class of 25 students, in an examination in Maths, 3 students scored 95 marks each, 3 get zero each and the average of the rest was 45. What is the average of the whole class?  A) 47  B) 45.6  C) 44  D) 48                                                                                                                                                                                                                                                                                                   |                                |                                    |                                                                   |  |  |
| 18. A pupil's marks were wrongly entered as 83 instead of 63. Due to that the average marks of the                                                                                                                                                                                                                                                                                                                                                                                                                      |                                |                                    |                                                                   |  |  |
| class got increased by A) 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | half a mark. The numb<br>B) 20 | er of pupils in the class<br>C) 40 | <b>is:</b> D) 73                                                  |  |  |
| 19. Ten years ago, the ages of the members of a joint family of eight people added up to 231 years. Three years later, one member died at the age of 60 years and a child was born during the same year. After another three years, one more member died, again at 60, and a child was born during the same year. The current average age of this eight member joint family is nearest to:  A) 25  B) 24  C) 26  D) 22  20. The average wages of a worker during a fortnight comprising 15 consecutive working days was |                                |                                    |                                                                   |  |  |
| Rs.90 per day. During                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | _                              | age wages was Rs.87/da             | b consecutive working days was<br>ny and the average wages during |  |  |

QuanTech Origin Averages | 2