



## RATIO & PROPORTION\_PYQ\_CSAT\_QUESTIONS

1. An automobile owner, reduced his monthly petrol consumption when the prices went up. The price-consumption relationship is as follows:
- |                                 |    |    |    |    |
|---------------------------------|----|----|----|----|
| Price (in Rs per litre)         | 40 | 50 | 60 | 75 |
| Monthly consumption (in litres) | 60 | 48 | 40 | 75 |
- If the price goes up to Rs 80 per litre, his expected consumption (in litres) will be (CSAT 2015)
- (a) 30 (b) 28  
(c) 26 (d) 24
2. A father is nine times as old as his son and the mother is eight times as old as the son. The sum of the father's and the mother's age is 51 years. What is the age of the son? (CSAT 2015)
- (a) 7 years (b) 5 years  
(c) 4 years (d) 3 years
3. Two equal glasses of same type are respectively  $\frac{1}{3}$  and  $\frac{1}{4}$  full of milk. they are then filled up with water and the contents are mixed in a pot. What is the ratio of milk and water in the pot? (CSAT 2015)
- (a) 7 : 17 (b) 1 : 3  
(c) 9 : 21 (d) 11 : 23
4. The monthly incomes of Peter and Paul are in the ratio of 4 : 3. Their expenses are in the ratio of 3 : 2. If each saves Rs 6000 at the end of the month, their monthly incomes respectively are (in Rs) (CSAT 2015)
- (a) 24,000 and 18,000  
(b) 28,000 and 21,000  
(c) 32,000 and 24,000  
(d) 34,000 and 26,000
5. In a class, there are 18 very tall boys. If these constitute three-fourths of the boys and the total number of boys is two-thirds of the total number of students in the class, what is the number of girls in the class? (CSAT 2016)
- (a) 6 (b) 12  
(c) 18 (d) 21
6. The total emoluments of two persons are the same, but one gets allowances to the extent of 65% of his basic pay and the other gets allowances to the extent of 80 % of his basic pay. the ratio of the basic pay of the former to the basic pay of the latter is: (CSAT 2016)
- (a) 16 : 13 (b) 5 : 4  
(c) 7 : 5 (d) 12 : 11
7. 30 g sugar was mixed in 180 ml water in a vessel A, 40 g of sugar was mixed in 280 ml of water in vessel B and 20 g of sugar was mixed in 100 ml of water in vessel C. the solution in vessel B is : (CSAT 2016)
- (a) sweeter than that in C  
(b) sweeter than that in A  
(c) As sweet as that in C  
(d) less sweet than that in C
8. There is a milk sample with 50% water in it. if  $\frac{1}{3}$ <sup>rd</sup> of this milk is added to equal amount of pure milk, then water in the new mixture will fall down to : (CSAT 2017)
- (a) 25% (b) 30%  
(c) 35 % (d) 40%
9. The monthly incomes of X and Y are in the ratio of 4 : 3 and their monthly expenses are in the ratio of 3 : 2. However, each saves Rs 6000 per month. What is their total monthly income? (CSAT 2017)
- (a) Rs 28,000 (b) Rs 42,000  
(c) Rs 56,000 (d) Rs 84,000

10. In 2002, Meenu's age was one-third of the age of Meena, Whereas in 2010, Meenu's age was half the age of Meera. What is Meenu's year of birth ? (CSAT 2019)  
(a) 1992 (b) 1994  
(c) 1996 (d) 1998
11. Let  $x, y$  be the volumes;  $m, n$  be the masses of two metallic cubes P and Q respectively. Each side of Q is two times that of P and mass of Q is two times that of P. Let  $u=m/x$  and  $v=n/y$ . Which one of the following is correct ? (CSAT 2020)  
(a)  $u=4v$  (b)  $u=2v$   
(c)  $v=u$  (d)  $v=4u$
12. A vessel full of water weights 40 kg. If it is one-third filled, its weight becomes 20 kg. What is the weight of the empty vessel ? (CSAT 2020)  
(a) 10 kg (b) 15 kg  
(c) 20 kg (d) 25 kg
13. A bottle contains 20 litres of liquid A. 4 litres of liquid A is taken out of it and replaced by same quantity of liquid B. Again 4 litres of the mixture is taken out and replaced by same quantity of liquid of B. What is the ratio of quantity of liquid A to that of liquid B in the final mixture ? (CSAT 2020)  
(a) 4 : 1 (b) 5 : 1  
(c) 16 : 9 (d) 17 : 8
14. A sum of Rs 2500 is distributed among X, Y and Z in the ratio  $\frac{1}{2} : \frac{3}{4} : \frac{5}{6}$ . What is the difference between the maximum share and the minimum share ? (CSAT 2020)  
(a) Rs 300 (b) Rs 350  
(c) Rs 400 (d) Rs 450
15. A student appeared in 6 papers. The maximum marks are the same for each paper. His marks in these papers are in the proportion of 5 : 6 : 7 : 8 : 9 : 10. Overall he scored 60%. In how many number of papers did he score less than 60% of the maximum marks ? (CSAT 2021)  
(A) 2 (B) 3  
(C) 4 (D) 5
16. There are three points P, Q and R on a straight line such that  $PQ : QR = 3 : 5$ . If  $n$  is the number of possible values of  $PQ : PR$ , then what is  $n$  equal to ? (CSAT 2021)  
(A) 1 (B) 2  
(C) 3 (D) 4