CLAT Sample Questions

Arithmetic

1. Arun and Bhanu can complete a certain work in 15 days. Chandu and Bhanu can complete the same work in 20 days. If the ratio in the working efficiencies of Arun and Chandu is 2 : 1, then in how many days can Chandu complete it working alone?
(a) 36 days (b) 60 days (c) 45 days (d) 72 days

2. In a class of 450 students, the ratio between the number of boys and girls is 8 : 7. If 65% of the boys and 70% of the girls appear in a class test, then what percentage of students doesn't appear in the class test?
(a) 32.66% (b) 16.66% (c) 45.23% (d) 56.33%

3. Rahul purchased certain quantity of rice at the rate of Rs. 25 per kg and another 40 kg of rice at the rate of Rs. 36 per kg. He sells the mixture of the two at the rate of Rs. 40 per kg after gaining 20%. What is the quantity of rice bought at Rs. 25 per kg?
(a) 8.6 kgs (b) 7.2 kgs (c) 12.8 kgs (d) None of these

4. A sum of Rs. 360 was distributed among 2 men, 3 women and 4 children such that a woman received as much as 2 children and a man received as much as 2 women. How much does a woman receive?
(a) Rs. 20 (b) Rs. 40 (c) Rs. 80 (d) Rs. 36

5. The average salary of a DTP operator and a content editor is Rs. 6,000 and Rs. 10,500. If the total monthly salary of all the workers and the total number of workers is Rs. 1,50,000 and 16 respectively, then how many content editors are there? (Assume there are only two types of workers viz. DTP and content editors).
(a) 4 (b) 12 (c) 6 (d) 8

6. If the sum of seven consecutive years is 13,524, then how many leap years are there in the given period?
(a) 1 (b) 2 (c) 3 (d) None of these

7. How many different numbers can be formed using digits 1, 2 and 3?
(a) 39 (b) 15 (c) 18 (d) 25

8. A train running at a constant speed of 54km/hr passes a man in 15 secs. Find how long would it take to cross a platform of length 240 mts.
(a) 48 secs (b) 31 secs (c) 28 secs (d) 36 secs

9. A person has to travel a total distance of 400 km. He travels at the constant speed of 50 km/hr for first 150 minutes. If he want to cover the whole journey in 4 hour and 30 minutes, then at what speed he has to travel his rest of the journey to complete it on time?
(a) 62.5 km/hr (b) 137.5 km/hr
(c) 80 km/hr (d) Cannot be determined

10. A bag contains 11 red balls and 7 blue balls. If three balls are drawn randomly, what is the probability that all balls are blue in colour?
(a) 0.004 (b) 0.04 (c) 0.03 (d) 0.003

Answers

1. b Ratio in the working efficiencies of Arun and Chandu = 2 : 1
   Ratio in the number of days taken by Arun and Chandu to complete the work = 1 : 2
   Let us assume that Arun and Chandu can complete the work in x days and 2x days.
   or, ...(1)
   and ...(2)
   Subtracting (1) with (2) we get
   or,
   or,
   or,
   or,
   or, x = 30 days
   Hence, Chandu alone can complete the work in 2 × 30 = 60 days

2. a Total number of boys in the class = × 450 = 240
   Total number of girls in the class = × 450 = 210
   Total number of boys that doesn't appear in the test = 240 × (1 – 0.65) = 84
   Total number of girls that doesn't appear in the test = 210 × (1 – 0.70) = 63
   Percentage of students that doesn't appear in the test = × 100 = 32.66%

3. c Let the quantity of rice purchased at the rate of Rs. 25 per kg = x kg
   or, Cost-price of the mixture = = Rs.
   or,
   or,
   or, x = 12.8 kg

4. b Let us assume that a child receives Rs. X.
   Amount received by a woman = Rs. 2X
   Amount received by a man = Rs. 4X.
   or, 4 × X + 3 × 2X + 2 × 4X = 360
   or, 18X = 360 or X = Rs. 20
   Hence, the amount received by a woman = Rs. 20 × 2 = Rs. 40

5. b Let us assume that the total number of DTP operators be x and number of editors be (16 – x).
   6,000 × x + (16 – x) × 10,500 = 1,50,000