

CMAT Exam Paper

Quantitative Techniques and Data Interpretation

Question 1: What is the farthest distance between two points on a cylinder of: HEIGHT 8 and RADIUS 8?

- A. $8\sqrt{5}$
- B. $8\sqrt{2}$
- C. $8\sqrt{3}$
- D. $16\sqrt{5}$

Question 2: Tom's salary is 150% of John's salary. John's salary is 80% of Steve's salary. What is the ratio of Steve's salary to Tom's salary?

- A. 6 : 5
- B. 5 : 4
- C. 5 : 6
- D. 4 : 5

Question 3: In a certain town, 40% of people have brown hair, 30% of people have brown eyes and 12% have both brown hair and brown eyes. How many people in town have neither brown hair nor brown eyes?

- A. 41%
- B. 42%
- C. 43%
- D. 44%

Question 4: 25,000/- is borrowed at compound interest at the rate of 3% for first year, 4% for 2nd year and 5% for 3rd year. Find the amount to be paid after 3 years.

- A. 28,119/-
- B. 28,120/-
- C. 28,118/-
- D. 28,117/-

Question 5: Which of the following sets of numbers can be used as the lengths of the sides of a triangle?

- A. [5, 7, 9]
- B. [2, 4, 10]
- C. [5, 7, 12]
- D. [7, 9, 17]

Question 6: The LCM and HCF of two numbers are 84 and 21 respectively. If the ratio of two numbers is 1 : 4, then the larger among two numbers is:

- A. 88
- B. 28
- C. 48
- D. 84

Question 7: X and Y are running towards each other from their houses. X can reach Y's house in 25 minutes which is half the time taken by Y to run from his house to X's house. If the two start to run towards each other at the same time, then how much more time it will be required by Y to reach the middle of houses?

- A. 18 min.
- B. 12.5 min.**
- C. 50 min.
- D. 25 min.

Question 8: A company published to its customers that at a certain compound interest rate, a sum of money deposited by anyone will become 8 times in 3 years. If the same amount is deposited at the same compound rate of interest, then in how many years will it become 16 times?

- A. 4 Years**
- B. 4.5 Years
- C. 3 Years
- D. 3.5 Years

Question 9: A shopkeeper marks his books at 25% above the cost price. Due to slump in the market, his cost reduces by 5%. And then, to boost his sale, he offered a discount of 8% due to which sales goes up by 25%. Compute the change in the shopkeepers' profit.

- A. No change**
- B. 7% change
- C. 2.5% change
- D. 8% change

Question 10: Five years ago, the average age of A, B, C and D was 45 years. By including X in the present lot their present average changes to 49 years. What is the present age of X?

- A. 45 Years**
- B. 40 Years
- C. 48 Years
- D. 49 Years

Question 11: Brother and sister both appear for an interview. The probability of the selection of brother is $\frac{1}{8}$ while the probability of rejection of sister is $\frac{4}{5}$. What is the probability that only one of them is selected ?

- A. $\frac{11}{40}$**
- B. $\frac{5}{13}$
- C. $\frac{1}{10}$
- D. $\frac{7}{40}$

Question 12: In how many different ways, can the letters of the words EXTRA be arranged so that the vowels are never together?

- A. 48
- B. 120
- C. 72**
- D. 168

Question 13: The sum of two numbers is 135 and their HCF is 9. How many such pairs of numbers can be formed?

- A. 6
- B. 2

- C. 5
- D. 4**

Question 14: Find the smallest number by which 2400 should be divided to make it a perfect cube.

- A. 300**
- B. 220
- C. 385
- D. 260

Question 15: Simplify the following: $0.3 \times 0.3 + 0.03 \times 0.03 - 0.6 \times 0.03 / 0.54$

- A. 0.03
- B. 9.37
- C. 0.982
- D. 0.135**

Question 16: If $x : y = 2 : 3$, the value of $(3x + 2y) : (2x + 5y)$ is

- A. 12/19**
- B. 11/15
- C. 11/27
- D. 12/25

Question 17: The work done by a man, woman and child are in the ratio 3: 2:1. If daily wages of 20 men, 30 women and 36 children amount to 78/-, what will be the wages of 15 men, 21 women and 30 children for 18 weeks?

- A. 7371/-**
- B. 8645/-
- C. 9000/-
- D. 7532/-

Question 18: A city has an average demand of water of 33,000 Lts. of water which lasts for 50 days. But if some people enter the city, then the demand increases to 37,000 Lts. of water for which supply will last 35 days. Give an estimation of how much minimum water should be used daily so that it could last 50 days?

- A. 24,253.00 Lts.
- B. 24,123.72 Lts.
- C. 23,666.66 Lts.**
- D. 23,662.34 Lts.

Question 19: In how many ways a committee consisting of 5 men and 6 women can be formed from 8 men and 10 women?

- A. 5041
- B. 11670
- C. 5040
- D. 11760**

Question 20: There are six teachers. Out of them, two teach physics, other two teach Chemistry and the rest two teach Mathematics. They have to stand in a row such that

Physics, Chemistry and Mathematics teachers are always in a set. The number of ways in which they can do, is :

- A. 48
- B. 36
- C. 24
- D. 12

Question 21: Two successive discounts of 8% and 12% are equal to a single discount of:

- A. 19.04%
- B. 20%
- C. 20.96%
- D. 22%

Question Label: Comprehension

Number of Boys and Girls (in hundreds) in six different years in 5 different schools data is given below:

Question 22: What is the approximate percentage decrease in the number of boys in school D in the year 2017 as compared to the previous year?

- A- 17%
- B- 12%
- C- 9%
- D- 5%

Question 23: The number of girls in school B in the year 2018 is approximately what percent of the total number of students in school E in the year 2015?

- A- 46%
- B- 52%
- C- 58%
- D- 65%

Question 24: What is the average number of girls in school A in all years taken together?

- A- 760
- B- 800
- C- 860
- D- 600

Question 25: What is the ratio of the number of boys in school C in the year 2018 to the number of girls in school A in the year 2018?

- A- 29 : 41
- B- 36 : 11
- C- 29 : 43
- D- 36 : 13