

CMAT Section: Quantitative Techniques & Data Interpretation previous years solved question papers for practice, CMAT Aptitude, Reasoning, English Language Questions for practice, CMAT Model Questions for practice

CMAT Section: Quantitative Techniques & Data Interpretation Questions

1. A person invested ₹1,00,000 at 8% simple interest for 5 years and reinvested the amount received at 10% simple interest for 2 years. What was the final amount received by him?

- (a) ₹1,56,000
- (b) ₹1,60,000
- (c) ₹1,68,000 -Answer**
- (d) ₹1,70,000

2. A 100 liters spirit water solution contains 75% spirit. Find the amount of water to be added to convert it into 60% spirit solution.

- (a) 15 liters
- (b) 25 liters -Answer**
- (c) 40 liters
- (d) 20 liters

3. Ajay started a firm with a capital of ₹28,000. After 5 months, Boman joined him and invested ₹40,000 in the firm. Chirag was also added as a new partner with an individual investment of 56,000 after 7 months of commencement. If at the end of the year, the profit of the firm is ₹32,000, what is the share of Boman?

- (a) ₹12,000
- (b) ₹8,000
- (c) ₹14,000
- (d) ₹10,000-Answer**

4. The price of a machine increases by 20% in a year and decreases by 15% in the following year. What is net percentage increase/decrease in the price of the machine?

- (a) 1% increase
- (b) 2% increase -Answer**
- (c) 1% decrease
- (d) 2% decrease

5. The question given below is followed by two statements, I and II. Mark the answer using the following instructions:

Mark (a) if the question can be answered by using statement I alone, but not by using statement II alone.

Mark (b) if the question can be answered by using statement II alone, but not by using statement I alone.

Mark (c) if the question can be answered by using both the statements together, but cannot be answered by using either statement alone.

Mark (d) if the question cannot be answered even by using both the statements together.

Q. In a class, the ratio of boys to girls is 13 : 10. How many boys are there in the class?

I. The number of boys is 30% more than the number of girls.

II. The number of girls is 15 less than the number of boys.

B-Answer

6. A person covers 180 km, 240 km and 300 km by car, train and bus respectively. Find the average speed of the whole journey if the speed of car, train and bus is 60 km/hr, 80 km/hr and 50 km/hr respectively.

(a) 1/63 km/hr

(b) 60 km/hr -Answer

(c) 1/62 km/hr

(d) 62 km/hr

7. When two students of a class with strength of 40 students were expelled, the average age of the class which was 18 years did not change. If one of the students was 14 years old, what was the age (in years) of the second student?

(a) 22 -Answer

(b) 24

(c) 26

(d) 20

8. The bar graph given below shows profit (in ₹00,000) of three companies for four quarters of the financial year 2011-12. Which company recorded the highest percentage increase in profit over the previous quarter during any of the four quarters?

(a) Sun Entertainment -Answer

(b) Moon Pvt. Ltd.

(c) Star International

(d) Both (a) and (b)

9. If the natural numbers starting from 1 are written one after the other to form a 121-digit number, then what will be the last digit of the resultant number?

(a) 5 -Answer

(b) 3

(c) 6

(d) 7

10. Four tables and 3 chairs cost ₹3,200 whereas 5 tables and 7 chairs cost ₹5,300. What is the price of a table?

(a) ₹600

(b) ₹500 -Answer

(c) ₹480

(d) ₹300

11. Find the value of $\frac{3a+2}{3a+2}$ in the equation $3x^2 - (3a+2)x + 7 = 0$, if one of its root is 4.

(a) 35/3

(b) 47/12 -Answer

(c) 10/3

(d) 11/3

12. The table given below shows the number of students admitted across various courses in 5 elite institutes in the year 2012. Number of students admitted in the five institutes in MBBS is what percent of the total number of students admitted in institutes A and B together?

(a) 43.33% -Answer

(b) 50%

- (c) 61.8%
- (d) 74%

13. The question given below is followed by two statements, I and II. Mark the answer using the following instructions:

Mark (a) if the question can be answered by using statement I alone, but not by using statement I alone.

Mark (b) if the question can be answered by using statement II alone, but not by using statement I alone.

Mark (c) if the question can be answered by using both the statements together, but cannot be answered by using either statement alone.

Mark (d) if the question cannot be answered even by using both the statements together.

C-Answer

Q. The average marks of three students X, Y and Z were 2025. What were the marks of each student?

I. Y and Z together secured 1324 marks.

II. X and Z together secured 1355 marks.

14. The remainder when 25 82 is divided by 27 is

- (a) 2
- (b) 25 -Answer**
- (c) 1
- (d) 0

15. The average of 5 numbers is 150. The largest number exceeds the smallest number by 100. If the five numbers are in arithmetic progression, find the smallest number.

- (a) 100 -Answer**
- (b) 150
- (c) 170
- (d) 135

16 Find the volume of water (in litres) that is flowing through a cylindrical pipe of diameter 14 meters in a minute, if water is flowing at the rate of 30 km per hour.

- (a) $7.7 \sqrt{2} \times 10^7$ -Answer
- (b) $1.54 \sqrt{2} \times 10^6$
- (c) $1.54 \sqrt{2} \times 10^7$
- (d) $7.7 \sqrt{2} \times 10^6$

17. Find the number of ways in which 14 persons can sit on 14 chairs such that 3 particular persons always sit together.

- (a) 14!
- (b) $14! \sqrt{2} 3!$
- (c) 11!
- (d) $12! \sqrt{2} 3!$ -Answer

18. Three dice are rolled simultaneously. What is the probability of getting a sum which is more than 15?

- (a) 7/216
- (b) 5/108 -Answer**
- (c) 1/6

(d) $\frac{7}{36}$

19. The pie-chart given below shows quantities (in ml) of different liquids A, B, C, D and E in a mixture.

20. If $f(x) = x^2 - 3x + 2$ and $g(x) = x^3 - 2x$, find the value of $g(f(x))$, for $x = 4$.

(a) 214

(b) 204 -Answer

(c) 212

(d) 202

21. The digit at the unit place of the product $1213 \times 135 \times 142$ is

(a) 6 -Answer

(b) 4

(c) 0

(d) 2

22. A work gets completed in 10 days if either 5 men and 4 women work on it or 7 men and 3 women work on it. How long will 10 men take to complete the work?

(a) 9 days

(b) 10 days

(c) 14 days

(d) 13 days-Answer

23. Two successive discounts of 20% and $y\%$ are given on marked price such that the selling price is ₹100. If the marked price of the article is ₹110, find the value of y .

C-Answer

24. If two pipes can fill a cistern of capacity 1,00,000 liters in 20 hours and 30 hours respectively, find the time taken by both of them to fill 75,000 liters of water in it.

(a) 24 hours

(b) 9 hours-Answer

(c) 20 hours

(d) 12 hours

25. A train travelling at a certain speed can cross a person standing on the platform in 10 seconds, while it takes 2 seconds more for the same if it travels slower by 18 km/hr. Find the length of the train.

(a) 400 m

(b) 250 m

(c) 300 m-Answer

(d) 200 m