



# RRB NTPC 2024

# MATHS

## SUBJECT- WISE

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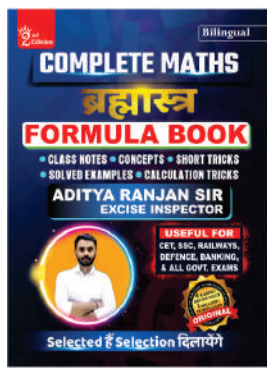


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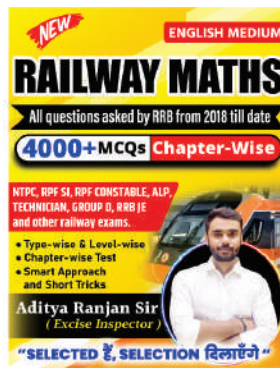
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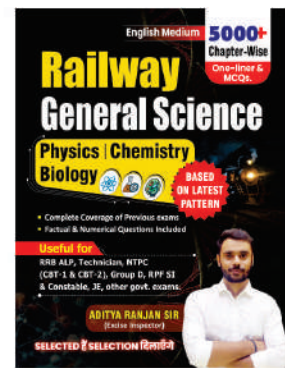
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## RRB NTPC Graduate Level I Mathematics Topic Wise Complete Questions

## Number System

Q1) Nandan had some marbles. When he distributed the marbles equally among 32 children, he found that 4 marbles were left. Had he distributed the marbles equally among 41 children and 48 children, he still would have had 13 and 20 marbles, respectively, left with him. But when he distributed them equally among 53 children, no marble was left. The number of marbles that Nandan initially had may lie between \_\_\_\_\_.

- A) 7814 and 7824 B) 7794 and 7804 C) 7864 and 7874 D) 7834 and 7854

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 11.53%

Wrong: 10.04%

Q2) Rahul had some marbles. When he distributed the marbles equally among 27 children, he found that 17 marbles were left. Had he distributed the marbles equally among 19 children and 15 children, he still would have had 9 and 5 marbles, respectively, left with him. But when he distributed them equally among 80 children, no marble was left. The number of marbles that Rahul initially had may lie between \_\_\_\_\_.

- A) 5140 and 5150 B) 5110 and 5130 C) 5070 and 5080 D) 5090 and 5100

Date: 23/06/2025

Time: 4:30 PM - 6:00 PM

Right: 11.94%

Wrong: 9.43%

Q3) Simplify:  $\frac{\sqrt[3]{5832}}{\sqrt[4]{10000}} \times \frac{5}{24} \times 78$

- A) 21 B) 13 C) 8 D) 17

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 26.14%

Wrong: 24.62%

Q4) The mean proportional between  $(11 + 5\sqrt{2})$  and  $(9 - 5\sqrt{2})$  is:

- A)  $20\sqrt{1}$  B)  $7\sqrt{1}$  C)  $18\sqrt{1}$  D)  $14\sqrt{1}$

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 27.45%

Wrong: 21.59%

Q5) The sum of the square of two positive numbers a and b (where  $a > b$ ) is 7 times of their product. Find the difference between their squares.

- A)  $\sqrt{15ab}$  B)  $5\sqrt{3ab}$  C)  $3\sqrt{5ab}$  D)  $5\sqrt{3ab}$

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 28.46%

Wrong: 13.42%

Q6) The simplified value of  $72 - (-98) \times (-31 - 58 - 19) \div [9 \times \{7 + (-2) \times (-6)\}]$  is:

- A)  $\frac{192}{19}$  B)  $\frac{182}{19}$  C)  $\frac{187}{19}$  D)  $\frac{188}{19}$

Date: 23/06/2025

Time: 4:30 PM - 6:00 PM

Right: 34.15%

Wrong: 19.58%

Q7) Simplify:  $\sqrt[6]{729} + \sqrt[4]{65536} + \sqrt[3]{5832} + \sqrt{1764}$

A) 121 B) 65 C) 133 D) 79

Date: 06/06/2025

Time: 9:00 AM - 10:30 AM

Right: 41.29%

Wrong: 15.86%

Q8) Simplify:  $\sqrt[6]{4096} + \sqrt[4]{50625} + \sqrt[3]{21952} + \sqrt{3364}$

A) 55 B) 105 C) 24 D) 75

Date: 06/06/2025

Time: 12:45 PM - 2:15 PM

Right: 46.48%

Wrong: 9.32%

Q9) Find the value of  $\frac{(0.06)^2 + (0.66)^2 + (0.666)^2}{(0.006)^2 + (0.066)^2 + (0.6666)^2}$ .

A) 60 B) 600 C) 10 D) 100

Date: 24/06/2025

Time: 4:30 PM - 6:00 PM

Right: 48.47%

Wrong: 19.03%

Q10) The simplified value of  $48 - (-18) \times (-60 - 72 - 92) \div [8 \times \{2 + (-6) \times (-9)\}]$  is:

A) 34 B) 39 C) 36 D) 37

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 51.29%

Wrong: 17.66%

Q11) If  $\frac{x+1}{x} = 17$  then  $\frac{x^2+1}{x^2}$  is:

A) 279 B) 288 C) 277 D) 287

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 52.11%

Wrong: 23.25%

Q12) Find the smallest number by which 6627 must be multiplied to make it a perfect square.

A) 4 B) 11 C) 7 D) 3

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 57.01%

Wrong: 19.81%

Q13) Find the smallest number by which 2527 must be multiplied to make it a perfect square.

A) 21 B) 15 C) 7 D) 19

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 63.70%

Wrong: 12.85%

Q14) Simplify :

$$\frac{\sqrt{0.028224}}{\sqrt{0.000784}}$$

A) 22 B) 24 C) 6 D) 19

Date: 13/06/2025

Time: 4:30 PM - 6:00 PM

Right: 64.17%

Wrong: 12.60%

Q15) Find the value of m which satisfies  $\left(\frac{11}{10}\right)^7 \times \left(\frac{10}{11}\right)^{10} \times \left(\frac{11}{10}\right)^9 = \left(\frac{10}{11}\right)^{3m+17}$ .

- A)  $-\frac{29}{3}$  B)  $-\frac{23}{3}$  C)  $-\frac{15}{3}$  D)  $-\frac{19}{3}$

Date: 06/06/2025 Time: 4:30 PM - 6:00 PM Right: 64.58% Wrong: 8.10%

Q16) Find the value of m which satisfies  $\left(\frac{29}{4}\right)^3 \times \left(\frac{4}{29}\right)^2 \times \left(\frac{29}{4}\right)^{11} = \left(\frac{4}{29}\right)^{9m+7}$ .

- A)  $-\frac{19}{9}$  B)  $-\frac{23}{9}$  C)  $-\frac{18}{9}$  D)  $-\frac{10}{9}$

Date: 05/06/2025 Time: 12:45 PM - 2:15 PM Right: 65.29% Wrong: 9.32%

Q17) Which of the following numbers is divisible by 87?

- A) 8004 B) 8088 C) 7150 D) 7835

Date: 18/06/2025 Time: 4:30 PM - 6:00 PM Right: 65.92% Wrong: 21.53%

Q18) Find the smallest number by which 4232 must be multiplied to make it a perfect square.

- A) 23 B) 3 C) 11 D) 2

Date: 18/06/2025 Time: 4:30 PM - 6:00 PM Right: 66.11% Wrong: 15.39%

Q19) Which of the following numbers is divisible by 47?

- A) 3674 B) 4416 C) 3995 D) 3816

Date: 16/06/2025 Time: 4:30 PM - 6:00 PM Right: 66.90% Wrong: 14.80%

Q20) Find the value of  $\frac{\sqrt{0.038025}}{\sqrt{0.004225}}$ .

- A) 21 B) 6 C) 11 D) 3

Date: 17/06/2025 Time: 4:30 PM - 6:00 PM Right: 67.70% Wrong: 10.06%

Q21) Find the value of  $\frac{\sqrt{0.018496}}{\sqrt{0.001156}}$ .

- A) 19 B) 18 C) 12 D) 4

Date: 16/06/2025 Time: 4:30 PM - 6:00 PM Right: 68.00% Wrong: 9.44%

Q22) Simplify the following:

$$1\frac{4}{9} \times 5\frac{2}{9} \times 324 + 9\frac{3}{4}$$

- A) 2451.25 B) 2477.55 C) 2452.85 D) 2453.75

Date: 23/06/2025 Time: 12:45 PM - 2:15 PM Right: 69.23% Wrong: 10.61%

Q23)

Simplify:  $\frac{\left(\frac{15}{18}\right)}{\left(\frac{15}{3}\right)} \div \left(\frac{3}{6} \times \frac{12}{9} + \frac{2}{6}\right) + \frac{3}{8} \div \frac{18}{15} \text{ of } \frac{15}{8}$

- A)  $\frac{7}{13}$  B)  $\frac{2}{9}$  C)  $\frac{1}{3}$  D)  $\frac{5}{7}$

Date: 24/06/2025

Time: 12:45 PM - 2:15 PM

Right: 69.78%

Wrong: 7.38%

Q24) Simplify :

$$\frac{\sqrt{0.012321}}{\sqrt{0.001369}}$$

- A) 16 B) 18 C) 23 D) 3

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 69.98%

Wrong: 8.03%

Q25) Which smallest number should be added to 25553 so that the sum is completely divisible by 38?

- A) 21 B) 22 C) 23 D) 18

Date: 24/06/2025

Time: 12:45 PM - 2:15 PM

Right: 70.84%

Wrong: 17.43%

Q26)  $2418.4 \times 795.8 \times 0.3735$  is equal in value to:

- A)  $2.4184 \times 7.958 \times 373.5$  B)  $24.184 \times 7958 \times 3.735$  C)  $241.84 \times 795.8 \times 373.5$   
D)  $2.4184 \times 79.58 \times 37.35$

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 72.41%

Wrong: 10.41%

Q27) The value of  $19^3 - 14^2 + \left(\frac{8}{2}\right)^2 - 19 + 5 \times 20 =$

- A) 6761 B) 6753 C) 6758 D) 6760

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 73.46%

Wrong: 10.95%

Q28) Find the smallest number by which 6760 must be multiplied to make it a perfect square.

- A) 28 B) 26 C) 23 D) 10

Date: 18/06/2025

Time: 9:00 AM - 10:30 AM

Right: 73.56%

Wrong: 11.53%

Q29) If the eight-digit number 32043p88 is divisible by 4, then the maximum value of p is:

- A) 7 B) 5 C) 4 D) 9

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 73.65%

Wrong: 22.53%

Q30) The value of  $17^3 - 10^2 + \left(\frac{26}{13}\right)^2 - 12 + 20 \times 12 =$

A) 5040 B) 5046 C) 5055 D) 5045

Date: 09/06/2025 Time: 9:00 AM - 10:30 AM Right: 73.70% Wrong: 8.40%

Q31) Each of the digits in the number 73412968 is arranged in the descending order from left to right. Which of the following digits will be fifth from the right in the new number thus formed?

A) 6 B) 4 C) 7 D) 3

Date: 23/06/2025 Time: 9:00 AM - 10:30 AM Right: 74.76% Wrong: 22.90%

Q32) Mahesh withdrew ₹3,200 from a bank. He received a total of 33 notes of ₹50 and ₹100 denominations. The number of ₹50 notes received by him was:

A) 10 B) 9 C) 2 D) 12

Date: 20/06/2025 Time: 9:00 AM - 10:30 AM Right: 75.05% Wrong: 9.16%

Q33) Which smallest number should be added to 13874 so that the sum is completely divisible by 67?

A) 60 B) 57 C) 64 D) 62

Date: 23/06/2025 Time: 4:30 PM - 6:00 PM Right: 75.28% Wrong: 10.90%

Q34)  $6893.5 \times 603.3 \times 0.3019$  is equal in value to:

A)  $6.8935 \times 6.033 \times 301.9$  B)  $6.8935 \times 60.33 \times 30.19$  C)  $68.935 \times 6033 \times 3.019$

D)  $689.35 \times 603.3 \times 301.9$

Date: 06/06/2025 Time: 9:00 AM - 10:30 AM Right: 75.90% Wrong: 9.26%

Q35) Each of the digits in the number 63458791 is arranged in the descending order from left to right. The position(s) of how many digits will remain unchanged in the new number thus formed as compared to that in the original number?

A) Two B) None C) One D) Three

Date: 21/06/2025 Time: 12:45 PM - 2:15 PM Right: 75.94% Wrong: 19.90%

Q36) If 1 is added to each even digit and 2 is subtracted from each odd digit in the number 72384596, how many digits will appear more than once in the new number thus formed?

A) Four B) One C) Three D) Two

Date: 21/06/2025 Time: 9:00 AM - 10:30 AM Right: 76.07% Wrong: 20.84%

Q37) Mahesh withdrew ₹3,100 from a bank. He received a total of 34 notes of ₹50 and ₹100 denominations. The number of ₹50 notes received by him was:

A) 6 B) 16 C) 13 D) 4

Date: 20/06/2025 Time: 12:45 PM - 2:15 PM Right: 77.07% Wrong: 8.01%

Q38) Which of the following numbers is divisible by 71?

- A) 5609 B) 6121 C) 6010 D) 5603

Date: 06/06/2025

Time: 4:30 PM - 6:00 PM

Right: 77.24%

Wrong: 11.00%

Q39) Simplify the following:

$$2\frac{2}{9} \times 2\frac{2}{3} \times 567 + 8\frac{3}{4}$$

- A) 3347.25 B) 3364.35 C) 3368.75 D) 3372.15

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 77.28%

Wrong: 7.96%

Q40) When one-third of a number is increased by 10, the result is 65. Find the sum of the digits of the original number.

- A) 9 B) 14 C) 11 D) 12

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 77.30%

Wrong: 11.00%

Q41) Which of the following numbers is divisible by 41?

- A) 7995 B) 7431 C) 8537 D) 7889

Date: 06/06/2025

Time: 12:45 PM - 2:15 PM

Right: 77.36%

Wrong: 11.69%

Q42) If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 5637482, how many digits will appear more than once in the new number thus formed?

- A) 5 B) 4 C) 2 D) 3

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 77.54%

Wrong: 19.51%

Q43) Each of the digits in the number 1673459 is arranged in ascending order from left to right. The position(s) of how many digits will remain unchanged as compared to that in the original number?

- A) One B) None C) Three D) Two

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 77.79%

Wrong: 19.33%

Q44) Which of the following numbers is divisible by 41?

- A) 9430 B) 9879 C) 9249 D) 10113

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 78.00%

Wrong: 11.78%

Q45) If 2 is added to each odd digit and 1 is subtracted from each even digit in the number 75246183, how many digits will appear more than once in the new number thus formed?

- A) Three B) Two C) None D) One

Date: 23/06/2025

Time: 4:30 PM - 6:00 PM

Right: 78.48%

Wrong: 18.61%

Q46) Find the value of  $\frac{\sqrt{0.011025}}{\sqrt{0.001225}}$

- A) 13 B) 17 C) 3 D) 18

Date: 16/06/2025

Time: 9:00 AM - 10:30 AM

Right: 78.52%

Wrong: 6.72%

Q47)  $7362 \times 726.8 \times 0.709$  is equal in value to:

- A)  $736.2 \times 726.8 \times 709$  B)  $7.362 \times 7.268 \times 709$  C)  $7.362 \times 72.68 \times 70.9$  D)  $73.62 \times 7268 \times 7.09$

Date: 19/06/2025

Time: 9:00 AM - 10:30 AM

Right: 78.93%

Wrong: 9.48%

Q48) If 2 is added to each even digit and 1 is subtracted from each odd digit in the number 4123957, what will be the difference between the greatest and smallest digits in the new number thus formed?

- A) 6 B) 4 C) 2 D) 8

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 79.41%

Wrong: 16.82%

Q49) If the eight-digit number 59044p22 is divisible by 6, then the maximum value of p is:

- A) 6 B) 8 C) 7 D) 3

Date: 14/06/2025

Time: 9:00 AM - 10:30 AM

Right: 79.64%

Wrong: 15.89%

Q50) Find the value of  $3\sqrt{8a^2 - 4a + 1} + 17a$ , when  $a = 2$ .

- A) 42 B) 49 C) 53 D) 46

Date: 10/06/2025

Time: 12:45 PM - 2:15 PM

Right: 80.59%

Wrong: 6.52%

Q51) Simplify the following:

$$\frac{88}{9} \times (74 + 30) + 37$$

- A)  $\frac{2230}{9}$  B)  $\frac{3872}{9}$  C)  $\frac{9485}{9}$  D)  $\frac{4205}{9}$

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 80.72%

Wrong: 7.14%

Q52) Which positive number should replace both question marks in the given equation?

$$\frac{?}{48} = \frac{243}{?}$$

- A) 105 B) 123 C) 96 D) 108

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 80.85%

Wrong: 8.52%

Q53) If 2 is added to each odd digit and 1 is subtracted from each even digit in the number 7156423, then how many digits will appear more than once in the new number thus formed?

- A) Two B) Three C) One D) None

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 81.09%

Wrong: 15.35%

Q54) Which of the following numbers is divisible by 87?

A) 7221 B) 7099 C) 6712 D) 7741

Date: 16/06/2025 Time: 9:00 AM - 10:30 AM Right: 81.31% Wrong: 8.60%

Q55) If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 1862547, then what will the difference between the highest and lowest digits in the new number thus formed be?

A) 7 B) 8 C) 9 D) 6

Date: 20/06/2025 Time: 12:45 PM - 2:15 PM Right: 81.52% Wrong: 15.13%

Q56) The fraction equivalent to  $8.27272\ldots$  is:

A)  $\frac{91}{11}$  B)  $\frac{89}{8}$  C)  $\frac{84}{17}$  D)  $\frac{83}{12}$

Date: 09/06/2025 Time: 9:00 AM - 10:30 AM Right: 81.84% Wrong: 5.50%

Q57) Which smallest number should be added to 22938 so that the sum is completely divisible by 7?

A) 5 B) 6 C) 1 D) 2

Date: 24/06/2025 Time: 4:30 PM - 6:00 PM Right: 82.01% Wrong: 13.69%

Q58) The equivalent fraction of  $2.777\ldots$  is:

A)  $\frac{28}{11}$  B)  $\frac{29}{3}$  C)  $\frac{21}{2}$  D)  $\frac{25}{9}$

Date: 10/06/2025 Time: 12:45 PM - 2:15 PM Right: 82.13% Wrong: 8.84%

Q59) If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 4568712, what will be the difference between the highest and lowest digits in the number thus formed?

A) 7 B) 6 C) 9 D) 8

Date: 20/06/2025 Time: 4:30 PM - 6:00 PM Right: 82.26% Wrong: 14.50%

Q60) Simplify:  $\left[ \left( 28 \div \frac{3}{9} \right) \times \left\{ 6 \div 2 \times \frac{18-2}{6} \right\} \div \{ 8 \times 6 \div 3 \} \right]$

A) 63 B) 84 C) 42 D) 104

Date: 19/06/2025 Time: 9:00 AM - 10:30 AM Right: 82.31% Wrong: 6.66%

Q61) If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 8132574, how many digits will appear more than once in the new number thus formed?

A) 2 B) 3 C) 1 D) 4

Date: 12/06/2025 Time: 12:45 PM - 2:15 PM Right: 82.34% Wrong: 12.86%

**Q62)** If the eight-digit number 43377p08 is divisible by 8, then the maximum value of p is:

**A) 6 B) 7 C) 8 D) 4**

Date: 12/06/2025 Time: 12:45 PM - 2:15 PM Right: 82.59% Wrong: 13.61%

**Q63)** If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 3154872, what will be the difference between the digits which are second from the left and second from the right in the new number thus formed?

**A) 5 B) 7 C) 4 D) 6**

Date: 13/06/2025 Time: 4:30 PM - 6:00 PM Right: 83.11% Wrong: 12.84%

**Q64)** If 1 is added to each even digit and 1 is subtracted from each odd digit in the number 248937615, what will be the sum of all the odd digits in the new number thus formed?

**A) 20 B) 22 C) 26 D) 24**

Date: 20/06/2025 Time: 9:00 AM - 10:30 AM Right: 83.29% Wrong: 12.60%

**Q65)** If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 1385762, then what will the sum of the digits that are second from the left and third from the right in the new number thus formed be?

**A) 13 B) 11 C) 10 D) 12**

Date: 18/06/2025 Time: 9:00 AM - 10:30 AM Right: 83.32% Wrong: 12.87%

**Q66)** Simplify:  $\left[ \left( 26 \div \frac{4}{2} \right) \times \left\{ 8 \div 2 \times \frac{12 - 2}{5} \right\} \div \{ 4 \times 4 \div 3 \} \right]$

**A) 16.5 B) 19.5 C) 30 D) 13**

Date: 19/06/2025 Time: 4:30 PM - 6:00 PM Right: 83.39% Wrong: 6.35%

**Q67)** If 2 is added to each even digit and 3 is subtracted from each odd digit in the number 596432, what will be the sum of the greatest and smallest digits in the new number thus formed?

**A) 8 B) 12 C) 6 D) 10**

Date: 12/06/2025 Time: 4:30 PM - 6:00 PM Right: 83.47% Wrong: 13.48%

**Q68)** The equivalent fraction of 6.555... is:

**A)  $\frac{59}{9}$  B)  $\frac{61}{3}$  C)  $\frac{56}{13}$  D)  $\frac{53}{17}$**

Date: 18/06/2025 Time: 9:00 AM - 10:30 AM Right: 83.90% Wrong: 5.06%

**Q69)** If 1 is added to each odd digit and 1 is subtracted from each even digit in the number 753814, what will be the sum of all the even digits in the new number thus formed?

**A) 20 B) 24 C) 16 D) 18**

Date: 11/06/2025 Time: 4:30 PM - 6:00 PM Right: 84.01% Wrong: 12.24%

**Q70)** If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 3582147, then how many digits will appear more than once in the new number thus formed?

**A) 3 B) 0 C) 1 D) 2**

Date: 14/06/2025

Time: 9:00 AM - 10:30 AM

Right: 84.17%

Wrong: 13.00%

**Q71)** Express  $0.\overline{583}$  in the form  $\frac{p}{q}$ , where  $p$  and  $q$  are integers and  $q \neq 0$ .

**A)  $\frac{583}{999}$  B)  $\frac{141}{499}$  C)  $\frac{141}{256}$  D)  $\frac{277}{333}$**

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 84.56%

Wrong: 4.04%

**Q72)** Simplify:  $71 + \frac{62}{7} + 30 - 31$

**A)  $\frac{542}{7}$  B)  $\frac{558}{7}$  C)  $\frac{552}{7}$  D)  $\frac{557}{7}$**

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 84.59%

Wrong: 10.99%

**Q73)** If 1 is added to each odd digit and 1 is subtracted from each even digit in the number 8731542, what will be the difference between the highest and lowest digits in the number thus formed?

**A) 6 B) 4 C) 5 D) 7**

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 84.76%

Wrong: 11.94%

**Q74)** If 1 is added to each even digit and 2 is subtracted from each odd digit in the number 936245, then how many digits will appear more than once in the new number thus formed?

**A) Three B) None C) One D) Two**

Date: 23/06/2025

Time: 4:30 PM - 6:00 PM

Right: 84.84%

Wrong: 12.22%

**Q75)** Simplify:  $127 - [7 \times (1 - 5 + 4)] \div 91$

**A) 135 B) 133 C) 127 D) 118**

Date: 06/06/2025

Time: 9:00 AM - 10:30 AM

Right: 84.90%

Wrong: 4.48%

**Q76)** If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 1385724, then how many digits will appear more than once in the new number thus formed?

**A) 0 B) 2 C) 3 D) 1**

Date: 20/06/2025

Time: 4:30 PM - 6:00 PM

Right: 85.01%

Wrong: 11.83%

**Q77)** If 2 is added to each even digit and 2 is added to each odd digit in the number 4713562, what will be the sum of the last two and first two digits in the new number thus formed?

**A) 23 B) 27 C) 29 D) 25**

Date: 20/06/2025 Time: 12:45 PM - 2:15 PM Right: 85.02% Wrong: 10.68%

**Q78)** If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 7452183, then what will the difference between the highest and lowest digits in the new number thus formed be?

**A) 6 B) 9 C) 8 D) 7**

Date: 14/06/2025 Time: 12:45 PM - 2:15 PM Right: 85.05% Wrong: 11.87%

**Q79)** Evaluate :  $\frac{1}{\left(\frac{7}{8}\right) + \left(\frac{4}{6}\right)} \div \frac{6}{29}$

**A)  $3\frac{5}{37}$  B)  $3\frac{10}{37}$  C)  $3\frac{13}{37}$  D)  $3\frac{1}{37}$**

Date: 24/06/2025 Time: 9:00 AM - 10:30 AM Right: 85.18% Wrong: 5.45%

**Q80)** This question is based on the five, three-digit numbers given below.

(Left) 412 366 307 241 667 (Right)

(Example: 697 – First digit = 6, second digit = 9 and third digit = 7)

(NOTE: All operations to be done from left to right.)

What will be the resultant if the first digit of the highest number is subtracted from the third digit of the lowest number?

**A) -4 B) -2 C) -6 D) -5**

Date: 06/06/2025 Time: 4:30 PM - 6:00 PM Right: 85.38% Wrong: 7.37%

**Q81)** If the eight-digit number 51880p69 is divisible by 3, then the maximum value of p is:

**A) 4 B) 8 C) 6 D) 3**

Date: 14/06/2025 Time: 12:45 PM - 2:15 PM Right: 85.66% Wrong: 11.13%

**Q82)** The equivalent fraction of 1.222... is:

**A)  $\frac{11}{9}$  B)  $\frac{7}{18}$  C)  $\frac{10}{11}$  D)  $\frac{5}{2}$**

Date: 16/06/2025 Time: 12:45 PM - 2:15 PM Right: 85.69% Wrong: 4.42%

**Q83)** If 2 is added to each even digit and 2 is added to each odd digit in the number 7153246, what will be the sum of all the odd digits in the new number thus formed?

**A) 28 B) 21 C) 19 D) 24**

Date: 14/06/2025 Time: 12:45 PM - 2:15 PM Right: 85.70% Wrong: 11.32%

**Q84)** If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 7532168, what will be the difference of the digits which are third from the left and second from the right in the new number thus formed?

**A) 1 B) 4 C) 3 D) 0**

Date: 20/06/2025 Time: 9:00 AM - 10:30 AM Right: 85.71% Wrong: 11.21%

**Q85)** If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 5673128, what will be the difference between the digits which are third from the left and second from the right in the new number thus formed?

**A) 9 B) 6 C) 7 D) 8**

Date: 09/06/2025 Time: 9:00 AM - 10:30 AM Right: 85.74% Wrong: 10.07%

**Q86)** If 1 is added to each odd digit and 1 is subtracted from each even digit in the number 2637458, what will be the sum of the greatest and the smallest digits in the new number thus formed?

**A) 9 B) 8 C) 11 D) 10**

Date: 21/06/2025 Time: 4:30 PM - 6:00 PM Right: 86.26% Wrong: 10.29%

**Q87)** If 2 is added to each even digit and 1 is subtracted from each odd digit in the number 26347591, what will be the sum of the second digit from left and third digit from right in the new number thus formed?

**A) 14 B) 10 C) 8 D) 12**

Date: 20/06/2025 Time: 4:30 PM - 6:00 PM Right: 86.64% Wrong: 10.17%

**Q88)** If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 7125843, then what will the sum of the highest and lowest digits in the new number thus formed be?

**A) 6 B) 7 C) 9 D) 8**

Date: 18/06/2025 Time: 12:45 PM - 2:15 PM Right: 86.82% Wrong: 9.50%

**Q89)** If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 3762184, what will be the sum of the highest and lowest digits in the number thus formed?

**A) 6 B) 9 C) 7 D) 8**

Date: 13/06/2025 Time: 9:00 AM - 10:30 AM Right: 86.83% Wrong: 9.87%

**Q90)** If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 8457312, what will be sum of the highest and lowest digits in the number thus formed?

**A) 7 B) 6 C) 8 D) 9**

Date: 09/06/2025 Time: 4:30 PM - 6:00 PM Right: 86.89% Wrong: 10.26%

**Q91)** If 2 is added to each odd digit and 1 is subtracted from each even digit in the number 7526318, what will be the difference between the highest and lowest digits in the number thus formed?

**A) 9 B) 8 C) 6 D) 7**

Date: 17/06/2025 Time: 12:45 PM - 2:15 PM Right: 86.91% Wrong: 9.93%

**Q92)** If 2 is added to each odd digit and 3 is subtracted from each even digit in the number 7516438, what will be the difference between the greatest and smallest digits in the new number thus formed?

**A) 6 B) 8 C) 4 D) 2**

Date: 16/06/2025 Time: 4:30 PM - 6:00 PM Right: 86.97% Wrong: 8.05%

**Q93)** If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 3518642, then what will the sum of the digits that are second from the left and second from the right in the new number thus formed be?

**A) 8 B) 9 C) 7 D) 6**

Date: 13/06/2025 Time: 12:45 PM - 2:15 PM Right: 87.09% Wrong: 7.31%

**Q94)** Which positive number should replace both question marks in the following equation?

$$\frac{?}{56} = \frac{504}{?}$$

**A) 183 B) 174 C) 168 D) 184**

Date: 20/06/2025 Time: 12:45 PM - 2:15 PM Right: 87.10% Wrong: 4.21%

**Q95)** Simplify:  $\left[ (22 \times 6) \times \left\{ 8 \div 4 \times \left( 15 - \frac{11}{4} \right) \right\} \right]$

**A) 3277 B) 3234 C) 3262 D) 3275**

Date: 18/06/2025 Time: 9:00 AM - 10:30 AM Right: 87.19% Wrong: 4.50%

**Q96)** Each of the digits in the number 31879452 is arranged in the ascending order from left to right. Which of the following digits will be third from the left in the new number thus formed?

**A) 3 B) 7 C) 4 D) 2**

Date: 21/06/2025 Time: 9:00 AM - 10:30 AM Right: 87.27% Wrong: 10.48%

Q97) Simplify:  $\left[ \left( 26 \div \frac{2}{2} \right) \times \left\{ 6 \div 2 \times \frac{12 - 2}{2} \right\} \div \{ 5 \times 6 \div 3 \} \right]$

A) 39 B) 78 C) 52 D) 65

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 87.50%

Wrong: 6.30%

Q98) If the eight-digit number 51883p47 is divisible by 9, then the maximum value of p is:

A) 8 B) 7 C) 5 D) 9

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 87.51%

Wrong: 8.78%

Q99) The simplified value of  $\frac{(19^{19} \times 7^9 \times 35^7)}{(19^{18} \times 7^8 \times 35^6)}$  is:

A) 4655 B) 4660 C) 4661 D) 4654

Date: 11/06/2025

Time: 4:30 PM - 6:00 PM

Right: 87.70%

Wrong: 4.31%

Q100) If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 6185742, then what will the sum of the highest and lowest digits in the new number thus formed be?

A) 9 B) 8 C) 7 D) 6

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 87.83%

Wrong: 8.54%

Q101) If 1 is added to each even digit and each odd digit in the number 57831426, what will be the sum of the first two and the last two digits from the left in the new number thus formed?

A) 26 B) 20 C) 24 D) 22

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 87.88%

Wrong: 6.88%

Q102) The simplified value of  $\frac{(31^{10} \times 2^{15} \times 84^6)}{(31^9 \times 2^{14} \times 84^5)}$  is:

A) 5213 B) 5208 C) 5209 D) 5217

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 87.90%

Wrong: 2.21%

Q103) If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 5364178, then what will the sum of the digits which are second from the left and second from the right in the new number thus formed be?

A) 10 B) 7 C) 9 D) 12

Date: 23/06/2025

Time: 4:30 PM - 6:00 PM

Right: 87.91%

Wrong: 7.80%

Q104) If 1 is added to each odd digit and 1 is subtracted from each even digit in the number 8146752, what will be the difference between the last and first digits from the left in the new number thus formed?

A) 3 B) 4 C) 6 D) 5

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 88.12%

Wrong: 8.99%

Q105) Simplify :

$$\frac{2^2 \times 9^3}{\sqrt{4} \times \sqrt{6561}}$$

A) 27 B) 18 C) 23 D) 21

Date: 12/06/2025 Time: 4:30 PM - 6:00 PM Right: 88.14% Wrong: 4.77%

Q106) This question is based on the five, three-digit numbers given below.

(Left) 951 474 717 497 127 (Right)

(Example- 697 – First digit = 6, second digit = 9 and third digit = 7)

(NOTE: All operations to be done from left to right.)

What will be the resultant if the first digit of the highest number is subtracted from the third digit of the lowest number?

A) -1 B) -3 C) 1 D) -2

Date: 16/06/2025 Time: 12:45 PM - 2:15 PM Right: 88.16% Wrong: 3.57%

Q107) If 2 is added to each even digit and 1 is subtracted from each odd digit in the number 3651724, what will be the sum of the second digit from the left and the first digit from the right in the new number thus formed?

A) 10 B) 14 C) 12 D) 8

Date: 12/06/2025 Time: 4:30 PM - 6:00 PM Right: 88.30% Wrong: 7.60%

Q108) This question is based on the five, three-digit numbers given below.

(Left) 657 435 578 659 619 (Right)

(Example- 697 – First digit = 6, second digit = 9 and third digit = 7)

(NOTE: All operations to be done from left to right.)

What will be the resultant if the second digit of the highest number is added to the third digit of the lowest number?

A) 13 B) 9 C) 10 D) 11

Date: 16/06/2025 Time: 4:30 PM - 6:00 PM Right: 88.33% Wrong: 5.59%

**Q109)** If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 7648135, then what will the difference between the digits that are second from the left and second from the right in the new number thus formed be?

**A)** -1 **B)** -2 **C)** 0 **D)** 1

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 88.46%

Wrong: 8.13%

**Q110)** Find the value of  $\sqrt{212} + \sqrt{139} + \sqrt{900}$ .

**A)** 25 **B)** 15 **C)** 20 **D)** 12

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 88.47%

Wrong: 4.64%

**Q111)** If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 8574162, what will be the sum of the digits which are second from the left and second from the right in the new number thus formed?

**A)** 8 **B)** 11 **C)** 10 **D)** 9

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 88.51%

Wrong: 6.97%

**Q112)** The simplified value of  $127 - 7 \times (17 + 6) + 93$  is:

**A)** 59 **B)** 57 **C)** 62 **D)** 51

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 88.91%

Wrong: 6.41%

**Q113)** The simplified value of  $139 - 15 \times (11 + 4) + 52$  is:

**A)** -24 **B)** -25 **C)** -34 **D)** -33

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 89.09%

Wrong: 6.69%

**Q114)** If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 3678154, what will be difference between the highest and lowest digits in the number thus formed?

**A)** 5 **B)** 6 **C)** 4 **D)** 7

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 89.15%

Wrong: 7.92%

**Q115)** Simplify the following:

$$\frac{96}{39}(91 + 26) - 103$$

**A)** 10 **B)** 88 **C)** 9 **D)** 185

Date: 13/06/2025

Time: 4:30 PM - 6:00 PM

Right: 89.15%

Wrong: 3.77%

**Q116)** If  $91 \div 13 \times 3^2 - 18 \times 14 \div 2 + 11 = z$ , then find value of z.

**A)** -49 **B)** -48 **C)** -51 **D)** -52

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 89.16%

Wrong: 5.34%

**Q117)** If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 1847653, what will be the sum of the highest and lowest digits in the number thus formed?

**A) 11 B) 14 C) 12 D) 10**

Date: 20/06/2025 Time: 4:30 PM - 6:00 PM Right: 89.40% Wrong: 6.93%

**Q118)** If 3 is added to each even digit and 2 is added to each odd digit in the number 7135624, what will be the sum of the last two and first two digits in the new number thus formed?

**A) 24 B) 18 C) 20 D) 22**

Date: 11/06/2025 Time: 4:30 PM - 6:00 PM Right: 89.41% Wrong: 6.28%

**Q119)** What is the value of  $\frac{3}{8} + \frac{1}{8} + \frac{5}{16} + \frac{2}{8} - 2$ ?

**A)  $-\frac{23}{16}$  B)  $-\frac{13}{16}$  C)  $-\frac{15}{16}$  D)  $-\frac{21}{16}$**

Date: 05/06/2025 Time: 9:00 AM - 10:30 AM Right: 89.43% Wrong: 5.41%

**Q120)** Find the value of  $\sqrt{125 + \sqrt{344 + \sqrt{289}}}$ .

**A) 7 B) 12 C) 8 D) 22**

Date: 14/06/2025 Time: 12:45 PM - 2:15 PM Right: 89.48% Wrong: 5.16%

**Q121)** If 1 is added to each even digit and 2 is subtracted from each odd digit in the number 9368547, what will be the sum of the digits which are third from the left and third from the right in the new number thus formed?

**A) 8 B) 10 C) 14 D) 12**

Date: 20/06/2025 Time: 12:45 PM - 2:15 PM Right: 89.59% Wrong: 6.91%

**Q122)** If 2 is added to each odd digit and 1 is subtracted from each even digit in the number 7481652, what will be the difference between the first digit from the left and the first digit from the right in the new number thus formed?

**A) 6 B) 2 C) 4 D) 8**

Date: 10/06/2025 Time: 12:45 PM - 2:15 PM Right: 89.62% Wrong: 6.91%

**Q123)** Each of the digits in the number 5123487 is arranged in ascending order from left to right. The position(s) of how many digits will remain unchanged as compared to that in the original number?

**A) Two B) One C) None D) Three**

Date: 24/06/2025 Time: 4:30 PM - 6:00 PM Right: 89.64% Wrong: 7.14%

**Q124)** If 1 is added to each even digit and 1 is subtracted from each odd digit in the number 7521432, what will be the sum of digits which are second from left and third from right in the new number thus formed?

**A) 9 B) 6 C) 10 D) 8**

Date: 24/06/2025 Time: 4:30 PM - 6:00 PM Right: 89.80% Wrong: 6.05%

**Q125)** If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 1845637, what will be the sum of the digits that are second from the left and second from the right?

**A) 6 B) 10 C) 12 D) 8**

Date: 19/06/2025 Time: 4:30 PM - 6:00 PM Right: 89.87% Wrong: 6.44%

**Q126)** If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 1836547, what will be the sum of the digits that are second from the left and second from the right in the new number thus formed?

**A) 12 B) 8 C) 10 D) 14**

Date: 19/06/2025 Time: 12:45 PM - 2:15 PM Right: 89.93% Wrong: 6.26%

**Q127)** If 1 is added to each even digit and 1 is subtracted from each odd digit in the number 8629475, what will be the sum of the highest and lowest digits in the new number thus formed?

**A) 6 B) 16 C) 12 D) 14**

Date: 11/06/2025 Time: 9:00 AM - 10:30 AM Right: 89.97% Wrong: 4.90%

**Q128)** If 2 is added to each even digit and 2 is subtracted from each odd digit in the number 6597423, what will be the sum of all the even digits in the new number thus formed?

**A) 20 B) 14 C) 16 D) 18**

Date: 21/06/2025 Time: 4:30 PM - 6:00 PM Right: 90.08% Wrong: 7.26%

**Q129)** If 1 is added to each odd digit and 1 is subtracted from each even digit in the number 1865374, which of the following digits will be third from the left in the new number thus formed?

**A) 7 B) 3 C) 5 D) 2**

Date: 20/06/2025 Time: 12:45 PM - 2:15 PM Right: 90.21% Wrong: 6.59%

**Q130)** If 2 is added to each even digit and 2 is added to each odd digit in the number 5217643, what will be the sum of the first digit from the left and the first digit from the right in the new number thus formed?

**A) 10 B) 11 C) 12 D) 13**

Date: 05/06/2025 Time: 9:00 AM - 10:30 AM Right: 90.25% Wrong: 4.89%

Q131) Simplify:

$$\frac{8^2 \times 7^3}{\sqrt{64} \times \sqrt{2401}}$$

A) 58 B) 56 C) 57 D) 47

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 90.27%

Wrong: 2.78%

Q132)

Find the value of  $\frac{\sqrt{0.04}}{\sqrt{0.0004}}$ :

A) 18 B) 29 C) 10 D) 21

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 90.31%

Wrong: 2.93%

Q133) If 1 is added to each odd digit and 1 is subtracted from each even digit in the number 8631247, what will be the sum of the digits that are third from the left and first from the right?

A) 8 B) 9 C) 11 D) 12

Date: 16/06/2025

Time: 9:00 AM - 10:30 AM

Right: 90.46%

Wrong: 6.68%

Q134) The simplified value of  $285 - 6 \times (23 + 19) + 83$  is:

A) 110 B) 106 C) 107 D) 116

Date: 20/06/2025

Time: 4:30 PM - 6:00 PM

Right: 90.47%

Wrong: 5.82%

Q135)  $\frac{\sqrt[3]{1331}}{\sqrt[4]{10000}} \times \frac{5}{33} \times 30 =$

A) 9 B) 13 C) 5 D) 6

Date: 05/06/2025

Time: 4:30 PM - 6:00 PM

Right: 90.59%

Wrong: 3.83%

Q136) Simplify:

$$144 \div \left[ \frac{8}{4} \times \{7 + 7 - (5 + 8 - (9 + 2))\} \right]$$

A) 11 B) 9 C) 6 D) 3

Date: 05/06/2025

Time: 4:30 PM - 6:00 PM

Right: 90.63%

Wrong: 5.18%

Q137) The value of  $57 + [5 + \{72 - (24 \div 6)\} \div 4]$  is:

A) 81 B) 79 C) 89 D) 82

Date: 12/06/2025

Time: 12:45 PM - 2:15 PM

Right: 90.66%

Wrong: 4.85%

Q138) Simplify:  $\left[ (24 \times 6) \times \left\{ 2 \div 2 \times \left( 18 - \frac{12}{2} \right) \right\} \right]$

- A) 432 B) 1435 C) 872 D) 1728

Date: 19/06/2025

Time: 12:45 PM - 2:15 PM

Right: 90.68%

Wrong: 3.41%

Q139) Which of the following numbers is divisible by 22?

- A) 7986 B) 7019 C) 7664 D) 8371

Date: 17/06/2025

Time: 4:30 PM - 6:00 PM

Right: 90.69%

Wrong: 6.76%

Q140) Simplify:  $\frac{93}{28} \times (70 + 42) + 82$

- A) 454 B) 464 C) 458 D) 459

Date: 10/06/2025

Time: 4:30 PM - 6:00 PM

Right: 90.71%

Wrong: 5.26%

Q141) Each of the digits in the number 8514932 is arranged in the descending order from left to right. The position(s) of how many digits will remain unchanged in the new number thus formed as compared to that in the original number?

- A) 1 B) 3 C) 4 D) 2

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 90.81%

Wrong: 6.20%

Q142) If  $72 \div 18 \times 3^2 - 21 \times 12 \div 3 + 12 = z$ , then find value of z.

- A) -28 B) -44 C) -31 D) -36

Date: 24/06/2025

Time: 4:30 PM - 6:00 PM

Right: 90.89%

Wrong: 4.53%

Q143) If 1 is added to each even digit and each odd digit in the number 76341528, what will be the sum of all the odd digits in the new number thus formed?

- A) 28 B) 22 C) 24 D) 26

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 90.97%

Wrong: 5.89%

Q144) Simplify:  $194 + [6 \times (1 - 6 + 5)] \div 12$

- A) 193 B) 194 C) 184 D) 191

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 91.01%

Wrong: 4.84%

Q145) If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 8315476, which of the following digits will be third from the right?

- A) 4 B) 6 C) 8 D) 2

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 91.15%

Wrong: 5.71%

**Q146)** If the eight-digit number 31425p99 is divisible by 9, then the maximum value of p is:

- A)** 3 **B)** 4 **C)** 5 **D)** 8

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 91.29%

Wrong: 5.31%

**Q147)** Simplify:  $81 + \frac{76}{2} + 42 - 86$

- A)** 81 **B)** 72 **C)** 75 **D)** 85

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 91.31%

Wrong: 4.79%

**Q148)** The value of  $49 + [7 + \{63 - (27 \div 9)\} \div 6]$  is:

- A)** 76 **B)** 63 **C)** 74 **D)** 66

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 91.44%

Wrong: 5.08%

**Q149)** Which of the following numbers is divisible by 38?

- A)** 1938 **B)** 1495 **C)** 2620 **D)** 2423

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 91.56%

Wrong: 4.74%

**Q150)** Each of the digits in the number 1538672 is arranged in ascending order from left to right. What will the sum of the digits which are second from the left and second from the right in the new number thus formed be?

- A)** 12 **B)** 8 **C)** 11 **D)** 9

Date: 24/06/2025

Time: 12:45 PM - 2:15 PM

Right: 91.56%

Wrong: 4.55%

**Q151)** Simplify:  $34 \div \left\{ 4 \times \left( \frac{9}{9} \text{ of } \frac{9}{8} \right) \right\}$

- A)**  $\frac{68}{9}$  **B)**  $\frac{61}{9}$  **C)**  $\frac{71}{9}$  **D)**  $\frac{76}{9}$

Date: 11/06/2025

Time: 12:45 PM - 2:15 PM

Right: 91.65%

Wrong: 3.26%

**Q152)** Which of the following numbers is divisible by 81?

- A)** 5265 **B)** 5854 **C)** 4678 **D)** 5232

Date: 20/06/2025

Time: 12:45 PM - 2:15 PM

Right: 91.66%

Wrong: 4.95%

**Q153)** Simplify the following:

$$\frac{2}{8} + \frac{2}{8} + \frac{1}{16} + \frac{2}{8} - 1$$

- A)**  $\frac{1}{16}$  **B)**  $\frac{4}{16}$  **C)**  $-\frac{3}{16}$  **D)**  $-\frac{8}{16}$

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 91.75%

Wrong: 4.83%

**Q154)** If 1 is added to each even digit and 2 is subtracted from each odd digit in the number 2756493, then which of the following digits will be second from the left in the new number thus formed?

**A) 1 B) 5 C) 3 D) 6**

Date: 23/06/2025 Time: 12:45 PM - 2:15 PM Right: 91.97% Wrong: 4.64%

**Q155)** If 3 is added to each even digit and 2 is added to each odd digit in the number 413257, what will be the sum of the first and last digits in the new number thus formed?

**A) 14 B) 12 C) 10 D) 16**

Date: 19/06/2025 Time: 4:30 PM - 6:00 PM Right: 91.98% Wrong: 5.38%

**Q156)** Simplify the following:

$$\left(\frac{2}{9}\right) \times \left(\frac{27}{10}\right) + \left(\frac{6}{5} - 5\right)$$

**A)  $-\frac{17}{4}$  B)  $-\frac{16}{5}$  C)  $-\frac{9}{8}$  D)  $-\frac{7}{9}$**

Date: 19/06/2025 Time: 12:45 PM - 2:15 PM Right: 92.01% Wrong: 2.22%

**Q157)** Simplify :

$$72 \div \left[ \frac{4}{2} \times \{9 + 2 - (4 + 7 - (1 + 8))\} \right]$$

**A) 4 B) -4 C) 12 D) -1**

Date: 06/06/2025 Time: 4:30 PM - 6:00 PM Right: 92.05% Wrong: 3.63%

**Q158)** Find the value of  $\sqrt{385 + \sqrt{213 + \sqrt{144}}}$ .

**A) 23 B) 20 C) 19 D) 24**

Date: 14/06/2025 Time: 9:00 AM - 10:30 AM Right: 92.07% Wrong: 3.46%

**Q159)** If 2 is added to each even digit and 2 is added to each odd digit in the number 7362145, what will be the sum of all the odd digits in the new number thus formed?

**A) 28 B) 26 C) 24 D) 20**

Date: 09/06/2025 Time: 4:30 PM - 6:00 PM Right: 92.23% Wrong: 4.38%

**Q160)** Which of the following numbers is divisible by 7?

**A) 2436 B) 1454 C) 3366 D) 3344**

Date: 21/06/2025 Time: 9:00 AM - 10:30 AM Right: 92.49% Wrong: 5.66%

Q161) Simplify:

$$\frac{7^2 \times 7^3}{\sqrt{49} \times \sqrt{2401}}$$

A) 58 B) 49 C) 46 D) 59

Date: 13/06/2025 Time: 12:45 PM - 2:15 PM Right: 92.78% Wrong: 1.49%

Q162) Simplify:  $10 \times (5 - 9) + \left(\frac{123}{41}\right)$ 

A) -31 B) -34 C) -35 D) -37

Date: 11/06/2025 Time: 9:00 AM - 10:30 AM Right: 92.93% Wrong: 2.89%

Q163) Find the simplified value of  $\left[(17 \times 3) \times \left\{7 \div 7 \times \left(18 - \frac{14}{2}\right)\right\}\right]$ .

A) 102 B) 441 C) 561 D) 321

Date: 18/06/2025 Time: 12:45 PM - 2:15 PM Right: 92.96% Wrong: 3.27%

Q164) The simplified value of  $118 - 5 \times (10 + 20) + 55$  is:

A) 17 B) 23 C) 33 D) 20

Date: 10/06/2025 Time: 12:45 PM - 2:15 PM Right: 92.98% Wrong: 4.17%

Q165) Find the simplified value of  $[525 \div \{19 + 7 \times (3 - 5)\}]$ .

A) 102 B) 105 C) 108 D) 104

Date: 18/06/2025 Time: 4:30 PM - 6:00 PM Right: 93.15% Wrong: 2.80%

Q166) Simplify:  $25 \div \left\{7 \times \left(\frac{3}{5} \text{ of } \frac{5}{9}\right)\right\}$ A)  $\frac{85}{7}$  B)  $\frac{68}{7}$  C)  $\frac{73}{7}$  D)  $\frac{75}{7}$ 

Date: 12/06/2025 Time: 9:00 AM - 10:30 AM Right: 93.23% Wrong: 1.80%

Q167) If 2 is added to each odd digit and 1 is subtracted from each even digit in the number 1374526, then what will the sum of the digits which are third from the left and third from the right in the new number thus formed be?

A) 8 B) 14 C) 11 D) 16

Date: 23/06/2025 Time: 9:00 AM - 10:30 AM Right: 93.44% Wrong: 3.64%

Q168) Find the simplified value of  $[160 \div \{30 + 7 \times (2 - 6)\}]$ .

A) 80 B) 79 C) 85 D) 78

Date: 17/06/2025 Time: 12:45 PM - 2:15 PM Right: 93.66% Wrong: 1.94%

**Q169)** The simplified value of  $66 - 4 \times (30 + 3) + 40$  is:

- A)** -26 **B)** -27 **C)** -29 **D)** -33

Date: 06/06/2025

Time: 12:45 PM - 2:15 PM

Right: 93.69%

Wrong: 2.69%

**Q170)** The simplified value of  $74 - 3 \times (21 + 15) + 36$  is:

- A)** 2 **B)** 11 **C)** -5 **D)** 6

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 93.74%

Wrong: 2.55%

**Q171)** The value of  $43 + [2 + \{55 - (28 \div 7)\} \div 3]$  is:

- A)** 55 **B)** 68 **C)** 62 **D)** 65

Date: 13/06/2025

Time: 4:30 PM - 6:00 PM

Right: 93.78%

Wrong: 2.51%

**Q172)** The simplified value of  $81 - 4 \times (5 + 2) + 54$  is:

- A)** 108 **B)** 110 **C)** 107 **D)** 114

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 93.94%

Wrong: 3.46%

**Q173)** Which of the following numbers is divisible by 16?

- A)** 1382 **B)** 1165 **C)** 1702 **D)** 1584

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 93.95%

Wrong: 3.91%

**Q174)** Simplify:  $50 \div \left\{ 3 \times \left( \frac{8}{6} \text{ of } \frac{6}{6} \right) \right\}$

- A)**  $\frac{31}{2}$  **B)**  $\frac{25}{2}$  **C)**  $\frac{23}{2}$  **D)**  $\frac{27}{2}$

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 94.09%

Wrong: 1.93%

**Q175)** Which of the following numbers is divisible by 11?

- A)** 2118 **B)** 1440 **C)** 2652 **D)** 1749

Date: 20/06/2025

Time: 4:30 PM - 6:00 PM

Right: 94.09%

Wrong: 3.77%

**Q176)** Simplify the following:

$$47 + \frac{49}{7} + 65 - 27$$

- A)** 92 **B)** 116 **C)** 65 **D)** 108

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 94.12%

Wrong: 2.23%

**Q177)** Evaluate:  $22 - [22 - \{22 - (22 - 22 \times 4)\}]$

- A)** 111 **B)** 92 **C)** 88 **D)** 101

Date: 14/06/2025

Time: 12:45 PM - 2:15 PM

Right: 94.13%

Wrong: 2.08%

Q178) Evaluate:  $37 - [37 - \{37 - (37 - 37 \times 2)\}]$

A) 90 B) 70 C) 65 D) 74

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 94.25%

Wrong: 1.81%

Q179) Solve :  $70 + \frac{72}{6} + 29 - 30$

A) 52 B) 81 C) 101 D) 91

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 94.43%

Wrong: 3.13%

Q180) Which of the following numbers is divisible by 44?

A) 3379 B) 2967 C) 3550 D) 3344

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 94.49%

Wrong: 2.78%

Q181) Which positive number should replace both question marks in the following equation?

$$\frac{?}{11} = \frac{275}{?}$$

A) 55 B) 54 C) 49 D) 46

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 94.58%

Wrong: 1.65%

Q182) Find the simplified value of  $[81 \div \{21 + 9 \times (5 - 7)\}]$ .

A) 27 B) 26 C) 24 D) 25

Date: 17/06/2025

Time: 4:30 PM - 6:00 PM

Right: 94.63%

Wrong: 2.08%

Q183) Simplify:  $10 \times (24 - 12) + \left(\frac{165}{33}\right)$

A) 125 B) 127 C) 122 D) 126

Date: 11/06/2025

Time: 4:30 PM - 6:00 PM

Right: 95.03%

Wrong: 2.17%

Q184) Simplify:  $\frac{36}{9} \times (74 + 12) + 99$

A) 446 B) 449 C) 444 D) 443

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 95.37%

Wrong: 2.49%

Q185) Evaluate:  $30 - [30 - \{30 - (30 - 30 \times 4)\}]$

A) 141 B) 118 C) 120 D) 132

Date: 14/06/2025

Time: 9:00 AM - 10:30 AM

Right: 95.56%

Wrong: 1.33%

Q186) Which of the following numbers is divisible by 7?

A) 894 B) 87 C) 875 D) 687

Date: 05/06/2025

Time: 4:30 PM - 6:00 PM

Right: 95.66%

Wrong: 3.06%

Q187) Evaluate:  $86 \times 104$ 

A) 8944 B) 9044 C) 8954 D) 8934

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 95.66%

Wrong: 2.73%

Q188) Which of the following numbers is divisible by 12?

A) 2800 B) 2349 C) 1264 D) 2184

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 95.72%

Wrong: 2.58%

Q189) Evaluate:  $30 - [30 - \{30 - (30 - 30 \times 3)\}]$ 

A) 90 B) 109 C) 107 D) 105

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 96.36%

Wrong: 1.04%

Q190) Evaluate:  $81 \times 112$ 

A) 9072 B) 9062 C) 9082 D) 9172

Date: 20/06/2025

Time: 12:45 PM - 2:15 PM

Right: 96.56%

Wrong: 2.17%

Q191) Which of the following numbers is divisible by 64?

A) 5129 B) 4797 C) 5760 D) 5327

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 96.64%

Wrong: 1.42%

Q192) The value of  $891 \times 909$  is:

A) 809919 B) 811232 C) 809126 D) 811716

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 97.38%

Wrong: 0.64%

Q193) Evaluate:  $82 \times 111$ 

A) 9092 B) 9202 C) 9102 D) 9112

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 98.00%

Wrong: 1.07%

**Answer Key (Q1 to Q193) Number System**

Q1: 4	Q2: 2	Q3: 2	Q4: 2	Q5: 3
Q6: 1	Q7: 4	Q8: 2	Q9: 4	Q10: 2
Q11: 4	Q12: 4	Q13: 3	Q14: 3	Q15: 2
Q16: 1	Q17: 1	Q18: 4	Q19: 3	Q20: 4
Q21: 4	Q22: 4	Q23: 3	Q24: 4	Q25: 1
Q26: 2	Q27: 4	Q28: 4	Q29: 4	Q30: 4
Q31: 1	Q32: 3	Q33: 4	Q34: 3	Q35: 3

Q36: 3	Q37: 1	Q38: 1	Q39: 3	Q40: 4
Q41: 1	Q42: 3	Q43: 4	Q44: 1	Q45: 1
Q46: 3	Q47: 4	Q48: 4	Q49: 3	Q50: 2
Q51: 3	Q52: 4	Q53: 1	Q54: 1	Q55: 2
Q56: 1	Q57: 3	Q58: 4	Q59: 4	Q60: 3
Q61: 1	Q62: 3	Q63: 4	Q64: 4	Q65: 4
Q66: 2	Q67: 1	Q68: 1	Q69: 1	Q70: 4
Q71: 1	Q72: 3	Q73: 4	Q74: 4	Q75: 3
Q76: 2	Q77: 2	Q78: 3	Q79: 1	Q80: 4
Q81: 2	Q82: 1	Q83: 4	Q84: 4	Q85: 4
Q86: 1	Q87: 4	Q88: 4	Q89: 4	Q90: 3
Q91: 2	Q92: 2	Q93: 1	Q94: 3	Q95: 2
Q96: 1	Q97: 1	Q98: 4	Q99: 1	Q100: 2
Q101: 3	Q102: 2	Q103: 4	Q104: 3	Q105: 2
Q106: 4	Q107: 2	Q108: 3	Q109: 3	Q110: 2
Q111: 3	Q112: 1	Q113: 3	Q114: 2	Q115: 4
Q116: 4	Q117: 4	Q118: 1	Q119: 3	Q120: 2
Q121: 2	Q122: 4	Q123: 3	Q124: 1	Q125: 2
Q126: 2	Q127: 3	Q128: 4	Q129: 3	Q130: 3
Q131: 2	Q132: 3	Q133: 4	Q134: 4	Q135: 3
Q136: 3	Q137: 2	Q138: 4	Q139: 1	Q140: 1
Q141: 1	Q142: 4	Q143: 3	Q144: 2	Q145: 4
Q146: 1	Q147: 3	Q148: 4	Q149: 1	Q150: 4
Q151: 1	Q152: 1	Q153: 3	Q154: 2	Q155: 4
Q156: 2	Q157: 1	Q158: 2	Q159: 3	Q160: 1
Q161: 2	Q162: 4	Q163: 3	Q164: 2	Q165: 2
Q166: 4	Q167: 4	Q168: 1	Q169: 1	Q170: 1

Q171: 3	Q172: 3	Q173: 4	Q174: 2	Q175: 4
Q176: 1	Q177: 3	Q178: 4	Q179: 2	Q180: 4
Q181: 1	Q182: 1	Q183: 1	Q184: 4	Q185: 3
Q186: 3	Q187: 1	Q188: 4	Q189: 1	Q190: 1
Q191: 3	Q192: 1	Q193: 3		

## L.C.M and H.C.F

**Q1)** When 1063, 2815 and 3451 are divided by the greatest number  $x$ , the remainder in each case is  $y$ . What is the value of  $(3x - 14y)$ ?

**A)** -65 **B)** -60 **C)** -62 **D)** -66

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 5.65%

Wrong: 11.07%

**Q2)** When 1272, 2636 and 4209 are divided by the greatest number  $x$ , the remainder in each case is  $y$ . What is the value of  $(3x - 14y)$ ?

**A)** -63 **B)** -65 **C)** -60 **D)** -61

Date: 10/06/2025

Time: 4:30 PM - 6:00 PM

Right: 6.41%

Wrong: 10.40%

**Q3)** When 1278, 2368 and 4318 are divided by the greatest number  $x$ , the remainder in each case is  $y$ . What is the value of  $(3x - 14y)$ ?

**A)** -82 **B)** -85 **C)** -79 **D)** -86

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 10.25%

Wrong: 6.98%

**Q4)** In finding the HCF of two numbers by division method, the quotients are 1, 4, and 6, respectively, and the last divisor is 29. What is the LCM of the two numbers?

**A)** 22475 **B)** 22480 **C)** 22470 **D)** 22476

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 14.81%

Wrong: 21.57%

**Q5)** In finding the HCF of two numbers by division method, the quotients are 1, 5, and 8, respectively, and the last divisor is 57. What is the LCM of the two numbers?

**A)** 114509 **B)** 114517 **C)** 114511 **D)** 114513

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 23.56%

Wrong: 10.32%

Q6) Two positive numbers differ by 2858. When the greater number is divided by the smaller number, the quotient is 5 and the remainder is 178. What is the HCF of the greater of the two given numbers and 3828?

A) 17 B) 13 C) 12 D) 11

Date: 11/06/2025 Time: 12:45 PM - 2:15 PM Right: 30.00% Wrong: 24.78%

Q7) In finding the HCF of two numbers by division method, the quotients are 4, 5, and 9, respectively, and the last divisor is 18. What is the LCM of the two numbers?

A) 159806 B) 159807 C) 159804 D) 159803

Date: 20/06/2025 Time: 12:45 PM - 2:15 PM Right: 35.66% Wrong: 6.94%

Q8) Two positive numbers differ by 2880. When the greater number is divided by the smaller number, the quotient is 6 and the remainder is 120. What is the HCF of the greater of the two given numbers and 3916?

A) 45 B) 44 C) 42 D) 48

Date: 13/06/2025 Time: 4:30 PM - 6:00 PM Right: 36.41% Wrong: 16.12%

Q9) Two positive numbers differ by 2134. When the greater number is divided by the smaller number, the quotient is 2 and the remainder is 147. What is the HCF of the greater of the two given numbers and 4225?

A) 16 B) 11 C) 10 D) 13

Date: 12/06/2025 Time: 12:45 PM - 2:15 PM Right: 45.18% Wrong: 12.74%

Q10) Manoj has 200 litres of Oil A and 274 litres of Oil B. He fills a number of identical containers with the two types of oil in a manner that each container has only one type of oil, and all containers are completely filled. What can be the maximum volume (in litres) of each container that Manoj uses, so that all the oil that Manoj has, of both the types, can be poured into these containers?

A) 2 B) 10 C) 8 D) 3

Date: 06/06/2025 Time: 9:00 AM - 10:30 AM Right: 60.42% Wrong: 8.88%

Q11) Surendra has 102 litres of Oil A and 224 litres of Oil B. He fills a number of identical containers with the two types of oil in a manner that each container has only one type of oil, and all containers are completely filled. What can be the maximum volume (in litres) of each container that Surendra uses, so that all the oil that Surendra has, of both the types, can be poured into these containers?

A) 1 B) 8 C) 9 D) 2

Date: 06/06/2025 Time: 12:45 PM - 2:15 PM Right: 63.12% Wrong: 7.08%

**Q12)** Deepesh has 168 litres of Oil A and 234 litres of Oil B. He fills a number of identical containers with the two types of oil in a manner that each container has only one type of oil, and all containers are completely filled. What can be the maximum volume (in litres) of each container that Deepesh uses, so that all the oil that Deepesh has, of both the types, can be poured into these containers?

**A)** 10 **B)** 6 **C)** 14 **D)** 5

Date: 09/06/2025 Time: 9:00 AM - 10:30 AM Right: 64.71% Wrong: 7.28%

**Q13)** Rajesh has 156 litres of Oil A and 256 litres of Oil B. He fills a number of identical containers with the two types of oil in a manner that each container has only one type of oil, and all containers are completely filled. What can be the maximum volume (in litres) of each container that Rajesh uses, so that all the oil that Rajesh has, of both the types, can be poured into these containers?

**A)** 13 **B)** 4 **C)** 10 **D)** 6

Date: 05/06/2025 Time: 12:45 PM - 2:15 PM Right: 66.06% Wrong: 10.23%

**Q14)** The LCM of 40, 78 and another number, x, is 7800. Which of the following can be the value of x?

**A)** 180 **B)** 200 **C)** 127 **D)** 152

Date: 24/06/2025 Time: 4:30 PM - 6:00 PM Right: 68.10% Wrong: 14.61%

**Q15)** If the ratio of two numbers is 3 : 16 and the product of their LCM and their HCF is 432, then the sum of the reciprocals of the LCM and the HCF is:

**A)**  $\frac{49}{151}$  **B)**  $\frac{49}{145}$  **C)**  $\frac{49}{144}$  **D)**  $\frac{49}{159}$

Date: 09/06/2025 Time: 4:30 PM - 6:00 PM Right: 69.93% Wrong: 4.99%

**Q16)** If the ratio of two numbers is 5 : 3 and the product of their LCM and their HCF is 135, then the sum of the reciprocals of the LCM and the HCF is:

**A)**  $\frac{16}{45}$  **B)**  $\frac{16}{85}$  **C)**  $\frac{16}{61}$  **D)**  $\frac{16}{73}$

Date: 05/06/2025 Time: 9:00 AM - 10:30 AM Right: 70.60% Wrong: 5.45%

**Q17)** Three numbers are in the ratio 2 : 14 : 3, and their LCM is 4116. Their HCF is:

**A)** 98 **B)** 100 **C)** 108 **D)** 95

Date: 16/06/2025 Time: 9:00 AM - 10:30 AM Right: 70.74% Wrong: 12.03%

**Q18)** The LCM of 48, 88 and another number, x, is 4752. Which of the following can be the value of x?

**A)** 202 **B)** 307 **C)** 216 **D)** 123

Date: 23/06/2025 Time: 12:45 PM - 2:15 PM Right: 70.75% Wrong: 10.67%

**Q19)** If the ratio of two numbers is 18 : 5 and the product of their LCM and their HCF is 360, then the sum of the reciprocals of the LCM and the HCF is:

- A)  $\frac{91}{180}$  B)  $\frac{91}{185}$  C)  $\frac{91}{204}$  D)  $\frac{91}{193}$

Date: 10/06/2025

Time: 12:45 PM - 2:15 PM

Right: 72.06%

Wrong: 4.94%

**Q20)** Three numbers are in the ratio 1 : 11 : 19, and their LCM is 8778. Their HCF is \_\_\_\_\_.

- A) 42 B) 36 C) 54 D) 50

Date: 19/06/2025

Time: 12:45 PM - 2:15 PM

Right: 72.27%

Wrong: 7.71%

**Q21)** Three numbers are in the ratio 3 : 2 : 13, and their LCM is 4758. Their HCF is \_\_\_\_\_.

- A) 46 B) 64 C) 61 D) 75

Date: 18/06/2025

Time: 4:30 PM - 6:00 PM

Right: 73.15%

Wrong: 10.12%

**Q22)** Three numbers are in the ratio 1 : 3 : 5, and their LCM is 285. Their HCF is \_\_\_\_\_.

- A) 19 B) 15 C) 17 D) 24

Date: 18/06/2025

Time: 9:00 AM - 10:30 AM

Right: 74.64%

Wrong: 18.56%

**Q23)** Three numbers are in the ratio 5 : 1 : 7, and their LCM is 7595. Their HCF is:

- A) 259 B) 208 C) 217 D) 236

Date: 11/06/2025

Time: 4:30 PM - 6:00 PM

Right: 75.62%

Wrong: 9.90%

**Q24)** The LCM of 44, 86 and another number, x, is 7568. Which of the following can be the value of x?

- A) 145 B) 101 C) 165 D) 176

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 75.75%

Wrong: 6.08%

**Q25)** Which of the following numbers is divisible by both 43 and 32?

- A) 135131 B) 136224 C) 137005 D) 137868

Date: 11/06/2025

Time: 4:30 PM - 6:00 PM

Right: 76.05%

Wrong: 12.37%

**Q26)** Three numbers are in the ratio 8 : 2 : 1, and their LCM is 7552. Their HCF is:

- A) 502 B) 472 C) 486 D) 456

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 76.05%

Wrong: 7.66%

**Q27)** Which of the following numbers is divisible by both 27 and 19?

- A) 35691 B) 33488 C) 34371 D) 34962

Date: 10/06/2025

Time: 4:30 PM - 6:00 PM

Right: 76.97%

Wrong: 12.00%

**Q28)** If the ratio of two numbers is 17 : 6 and the product of their LCM and their HCF is 102, then the sum of the reciprocals of the LCM and the HCF is:

- A)  $\frac{103}{109}$  B)  $\frac{103}{105}$  C)  $\frac{103}{102}$  D)  $\frac{103}{132}$

Date: 05/06/2025 Time: 4:30 PM - 6:00 PM Right: 77.61% Wrong: 4.34%

**Q29)** Three numbers are in the ratio 1 : 15 : 7, and their LCM is 4830. Their HCF is:

- A) 43 B) 41 C) 49 D) 46

Date: 13/06/2025 Time: 9:00 AM - 10:30 AM Right: 77.61% Wrong: 9.12%

**Q30)** Three numbers are in the ratio 2 : 7 : 13, and their LCM is 3094. Their HCF is \_\_\_\_.

- A) 17 B) 20 C) 9 D) 18

Date: 17/06/2025 Time: 12:45 PM - 2:15 PM Right: 78.30% Wrong: 7.38%

**Q31)** If the ratio of two numbers is 17 : 7 and the product of their LCM and their HCF is 119, then the sum of the reciprocals of the LCM and the HCF is:

- A)  $\frac{120}{119}$  B)  $\frac{120}{137}$  C)  $\frac{120}{161}$  D)  $\frac{120}{139}$

Date: 06/06/2025 Time: 4:30 PM - 6:00 PM Right: 78.90% Wrong: 4.44%

**Q32)** The least number which, when diminished by 8, is divisible by 15, 12, 18 and 29 is:

- A) 5263 B) 5275 C) 5228 D) 5187

Date: 19/06/2025 Time: 9:00 AM - 10:30 AM Right: 79.15% Wrong: 9.11%

**Q33)** Three numbers are in the ratio 5 : 4 : 3, and their LCM is 4980. Their HCF is:

- A) 132 B) 83 C) 101 D) 125

Date: 17/06/2025 Time: 9:00 AM - 10:30 AM Right: 79.24% Wrong: 10.56%

**Q34)** Three numbers are in the ratio 1 : 9 : 7, and their LCM is 6930. Their HCF is:

- A) 116 B) 110 C) 101 D) 109

Date: 16/06/2025 Time: 12:45 PM - 2:15 PM Right: 79.38% Wrong: 6.59%

**Q35)** Three numbers are in the ratio 1 : 5 : 6, and their LCM is 5250. Their HCF is:

- A) 183 B) 175 C) 171 D) 193

Date: 12/06/2025 Time: 4:30 PM - 6:00 PM Right: 83.44% Wrong: 5.16%

**Q36)** The least number which, when diminished by 9, is divisible by 13, 20, 10 and 23 is:

- A) 5989 B) 6035 C) 6010 D) 6015

Date: 11/06/2025 Time: 9:00 AM - 10:30 AM Right: 83.99% Wrong: 6.02%

**Q37)** Three numbers are in the ratio 2 : 1 : 5, and their LCM is 5380. Their HCF is:

**A)** 538 **B)** 537 **C)** 541 **D)** 539

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 84.04%

Wrong: 3.37%

**Q38)** Find the greatest number by which when the numbers 247 and 189 are divided, it leaves remainders 3 and 6, respectively.

**A)** 62 **B)** 63 **C)** 61 **D)** 64

Date: 20/06/2025

Time: 4:30 PM - 6:00 PM

Right: 85.41%

Wrong: 6.74%

**Q39)** The least number which, when diminished by 7, is divisible by 16, 20, 10 and 27 is:

**A)** 2167 **B)** 2155 **C)** 2216 **D)** 2146

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 87.00%

Wrong: 5.31%

**Q40)** The greatest number that divides 93 and 190 leaving remainders 5 and 3, respectively, is:

**A)** 21 **B)** 17 **C)** 14 **D)** 11

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 87.52%

Wrong: 6.59%

**Q41)** The greatest number that divides 48 and 46 leaving remainders 9 and 7, respectively, is:

**A)** 46 **B)** 47 **C)** 43 **D)** 39

Date: 17/06/2025

Time: 4:30 PM - 6:00 PM

Right: 87.93%

Wrong: 3.74%

**Q42)** The greatest number that divides 152 and 181 leaving remainders 2 and 6, respectively, is:

**A)** 33 **B)** 35 **C)** 25 **D)** 34

Date: 14/06/2025

Time: 12:45 PM - 2:15 PM

Right: 88.26%

Wrong: 6.32%

**Q43)** Which of the following is the greatest number that divides 137 and 198 and leaves 7 and 3 as respective remainders?

**A)** 67 **B)** 68 **C)** 65 **D)** 71

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 88.38%

Wrong: 4.90%

**Q44)** Which of the following numbers is divisible by both 37 and 8?

**A)** 15370 **B)** 14208 **C)** 13702 **D)** 15659

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 88.56%

Wrong: 4.88%

**Q45)** Which of the following is the greatest number that divides 104 and 133 and leaves 8 and 5 as respective remainders?

**A)** 42 **B)** 32 **C)** 41 **D)** 40

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 89.40%

Wrong: 4.46%

**Q46)** Find the greatest number by which when the numbers 176 and 273 are divided, it leaves remainders 5 and 3, respectively.

**A) 12 B) 14 C) 10 D) 9**

Date: 24/06/2025 Time: 12:45 PM - 2:15 PM Right: 89.44% Wrong: 4.40%

**Q47)** The least number which, when diminished by 5, is divisible by 20, 15, 14 and 22 is:

**A) 4578 B) 4612 C) 4625 D) 4586**

Date: 14/06/2025 Time: 9:00 AM - 10:30 AM Right: 89.63% Wrong: 3.62%

**Q48)** Which of the following numbers is divisible by both 6 and 31?

**A) 3720 B) 2132 C) 4916 D) 2858**

Date: 11/06/2025 Time: 12:45 PM - 2:15 PM Right: 91.33% Wrong: 4.75%

**Q49)** Which of the following is the greatest number that divides 59 and 133 and leaves 5 and 7 as respective remainders?

**A) 18 B) 22 C) 19 D) 20**

Date: 21/06/2025 Time: 4:30 PM - 6:00 PM Right: 91.93% Wrong: 2.78%

### Answer Key (Q1 to Q49) L.C.M and H.C.F

Q1: 3	Q2: 2	Q3: 1	Q4: 1	Q5: 4
Q6: 3	Q7: 3	Q8: 2	Q9: 4	Q10: 1
Q11: 4	Q12: 2	Q13: 2	Q14: 2	Q15: 3
Q16: 1	Q17: 1	Q18: 3	Q19: 1	Q20: 1
Q21: 3	Q22: 1	Q23: 3	Q24: 4	Q25: 2
Q26: 2	Q27: 3	Q28: 3	Q29: 4	Q30: 1
Q31: 1	Q32: 3	Q33: 2	Q34: 2	Q35: 2
Q36: 1	Q37: 1	Q38: 3	Q39: 1	Q40: 4
Q41: 4	Q42: 3	Q43: 3	Q44: 2	Q45: 2
Q46: 4	Q47: 3	Q48: 1	Q49: 1	

## Percentage

Q1) Kavita buys 2 apples and 5 mangoes for ₹239. When the cost of an apple is decreased by 50% and that of a mango remains the same, then the cost of 2 apples and 4 mangoes is ₹184. What is the original cost of 8 apples and 8 mangoes?

A) ₹438 B) ₹440 C) ₹436 D) ₹441

Date: 20/06/2025 Time: 4:30 PM - 6:00 PM Right: 31.14% Wrong: 8.67%

Q2) What will be the difference in population 3 years ago and 2 years ago of a town whose current population of 2,60,000 is increasing at a rate of 25% every year?

A) 33,280 B) 32,530 C) 33,630 D) 32,730

Date: 19/06/2025 Time: 12:45 PM - 2:15 PM Right: 34.34% Wrong: 13.59%

Q3) What will be the difference in population 3 years ago and 2 years ago of a town whose current population of 1,40,000 is increasing at a rate of 25% every year?

A) 17,170 B) 17,370 C) 18,270 D) 17,920

Date: 20/06/2025 Time: 9:00 AM - 10:30 AM Right: 36.99% Wrong: 13.24%

Q4) The present cost of a plot area is ₹1,12,079. After a year, its cost increased to ₹1,89,297. The percentage increase (rounded off to the nearest integer) in the cost of the plot area is:

A) 73% B) 67% C) 69% D) 57%

Date: 19/06/2025 Time: 9:00 AM - 10:30 AM Right: 37.14% Wrong: 41.08%

Q5) Atul's salary is ₹10,000 per month. He spends ₹6,000 on house rent and ₹2,500 on bills, and the rest of the amount is his monthly savings. Find his savings (in ₹) in a year, if in the month of his birthday, he spent all his monthly savings on birthday celebrations.

A) 18,000 B) 16,500 C) 13,500 D) 15,000

Date: 05/06/2025 Time: 12:45 PM - 2:15 PM Right: 37.51% Wrong: 56.77%

Q6) Ashish's salary is ₹11,000 per month. He spends ₹4,000 on house rent and ₹1,500 on bills, and the rest of the amount is his monthly savings. Find his savings (in ₹) in a year, if in the month of his birthday, he spent all his monthly savings on birthday celebrations.

A) 55,000 B) 66,000 C) 60,500 D) 49,500

Date: 09/06/2025 Time: 4:30 PM - 6:00 PM Right: 40.11% Wrong: 52.40%

Q7) What will be the difference in population 3 years ago and 2 years ago of a town whose current population of 1,60,000 is increasing at a rate of 25% every year?

A) 20,830 B) 20,480 C) 19,930 D) 19,730

Date: 10/06/2025 Time: 9:00 AM - 10:30 AM Right: 40.51% Wrong: 10.22%

Q8) What will be the difference in population 3 years ago and 2 years ago of a town whose current population of 2,50,000 is increasing at a rate of 25% every year?

- A) 31,450 B) 31,250 C) 32,350 D) 32,000

Date: 18/06/2025 Time: 12:45 PM - 2:15 PM Right: 43.48% Wrong: 20.68%

Q9) Manjit's salary is ₹10,000 per month. He spends ₹6,000 on house rent and ₹3,000 on bills, and the rest of the amount is his monthly savings. Find his savings (in ₹) in a year, if in the month of his birthday, he spent all his monthly savings on birthday celebrations.

- A) 10,000 B) 12,000 C) 9,000 D) 11,000

Date: 06/06/2025 Time: 12:45 PM - 2:15 PM Right: 46.58% Wrong: 48.07%

Q10) Chetan gets a 2% increase in his sale amount in the first year and a 20% increase in the second year; with that his present sale is ₹1,76,800. What was his sale (in ₹) two years ago? (Correct to two decimal places.)

- A) 1,24,444.44 B) 1,73,333.33 C) 1,47,333.33 D) 1,44,444.44

Date: 09/06/2025 Time: 12:45 PM - 2:15 PM Right: 47.10% Wrong: 20.50%

Q11) Shivam's salary is ₹12,000 per month. He spends ₹4,000 on house rent and ₹1,500 on bills, and the rest of the amount is his monthly savings. Find his savings (in ₹) in a year, if in the month of his birthday, he spent all his monthly savings on birthday celebrations.

- A) 58,500 B) 78,000 C) 71,500 D) 65,000

Date: 16/06/2025 Time: 12:45 PM - 2:15 PM Right: 48.38% Wrong: 42.71%

Q12) Mahesh gets a 2% increase in his sale amount in the first year and a 20% increase in the second year, and with that his present sale is ₹1,90,400. What was his sale (in ₹) two years ago? (Rounded off to two decimal places.)

- A) 1,86,666.67 B) 1,58,666.67 C) 1,55,555.56 D) 1,35,555.56

Date: 14/06/2025 Time: 12:45 PM - 2:15 PM Right: 48.40% Wrong: 19.85%

Q13) Anwar's salary is ₹11,000 per month. He spends ₹6,000 on house rent and ₹3,000 on bills, and the rest of the amount is his monthly savings. Find his savings (in ₹) in a year, if in the month of his birthday, he spent all his monthly savings on birthday celebrations.

- A) 24,000 B) 18,000 C) 20,000 D) 22,000

Date: 14/06/2025 Time: 9:00 AM - 10:30 AM Right: 49.73% Wrong: 44.24%

Q14) Kanchan's salary is ₹12,000 per month. He spends ₹4,000 on house rent and ₹2,000 on bills, and the rest of the amount is his monthly savings. Find his savings (in ₹) in a year, if in the month of his birthday, he spent all his monthly savings on birthday celebrations.

- A) 66,000 B) 60,000 C) 72,000 D) 54,000

Date: 16/06/2025 Time: 9:00 AM - 10:30 AM Right: 52.63% Wrong: 42.18%

**Q15)** Keshav's salary is ₹13,000 per month. He spends ₹4,000 on house rent, ₹1,500 on bills and the rest of the amount is his monthly savings. Find his savings (in ₹) in a year, if in the month of his birthday, he spent his complete monthly savings for the birthday celebration.

**A)** 75,000 **B)** 67,500 **C)** 82,500 **D)** 90,000

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 53.52%

Wrong: 36.04%

**Q16)** A man spends 74% of his monthly salary on house rent. If every month, he also spends ₹385 on conveyance and ₹2,725 on grocery and saves the remaining ₹621, his monthly salary is:

**A)** ₹14,287 **B)** ₹14,350 **C)** ₹14,389 **D)** ₹14,373

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 54.25%

Wrong: 9.57%

**Q17)** A man spends 28% of his monthly salary on house rent. If every month, he also spends ₹687 on conveyance and ₹7,483 on grocery and saves the remaining ₹218, his monthly salary is:

**A)** ₹11,738 **B)** ₹11,650 **C)** ₹11,594 **D)** ₹11,743

Date: 17/06/2025

Time: 4:30 PM - 6:00 PM

Right: 54.64%

Wrong: 10.77%

**Q18)** A man spends 76% of his monthly salary on the rent of his house. If every month he also spends ₹627 on his conveyance and ₹3,947 on his grocery and saves the remaining ₹712, his monthly salary is:

**A)** ₹22,111 **B)** ₹22,025 **C)** ₹22,119 **D)** ₹22,023

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 55.16%

Wrong: 9.94%

**Q19)** A man spends 12% of his monthly salary on house rent. If every month, he also spends ₹407 on conveyance and ₹8,657 on grocery and saves the remaining ₹924, his monthly salary is:

**A)** ₹11,350 **B)** ₹11,413 **C)** ₹11,449 **D)** ₹11,377

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 57.09%

Wrong: 8.98%

**Q20)** Amit's salary is ₹13,000 per month. He spends ₹4,000 on house rent, ₹2,000 on bills, and the rest of the amount is his monthly savings. Find his savings (in ₹) in a year, if in the month of his birthday he spent his complete monthly savings for a birthday celebration.

**A)** 70,000 **B)** 77,000 **C)** 84,000 **D)** 63,000

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 59.74%

Wrong: 32.92%

**Q21)** Rakesh's salary is ₹12,000 per month. He spends ₹6,000 on house rent, ₹3,000 on bills and the rest of the amount is his monthly savings. Find his savings (in ₹) in a year, if in the month of his birthday, he spent his complete monthly savings for the birthday celebration.

**A)** 33,000 **B)** 36,000 **C)** 27,000 **D)** 30,000

Date: 19/06/2025

Time: 9:00 AM - 10:30 AM

Right: 61.74%

Wrong: 31.07%

**Q22)** A man spends 40% of his monthly salary on house rent. If every month, he also spends ₹442 on conveyance and ₹9,115 on grocery and saves the remaining ₹946, his monthly salary is:

- A)** ₹17,603 **B)** ₹17,468 **C)** ₹17,505 **D)** ₹17,475

Date: 11/06/2025

Time: 12:45 PM - 2:15 PM

Right: 61.93%

Wrong: 10.32%

**Q23)** A man spends 75% of his monthly salary on house rent. If every month, he also spends ₹653 on conveyance and ₹6,229 on grocery and saves the remaining ₹446, his monthly salary is:

- A)** ₹29,312 **B)** ₹29,308 **C)** ₹29,251 **D)** ₹29,230

Date: 13/06/2025

Time: 4:30 PM - 6:00 PM

Right: 62.79%

Wrong: 8.89%

**Q24)** The present cost of a house is ₹1,23,016. After a year, its cost will increase to ₹1,40,203. The percentage increase (rounded off to the nearest integer) in the cost of the house is:

- A)** 10% **B)** 14% **C)** 8% **D)** 17%

Date: 20/06/2025

Time: 12:45 PM - 2:15 PM

Right: 63.63%

Wrong: 19.70%

**Q25)** The population of a town in 1930 was 3,48,000. If its population increased in two successive decades by 95% in each decade, the population of the town in 1950 was:

- A)** 13,23,273 **B)** 13,23,270 **C)** 13,23,267 **D)** 13,23,272

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 65.08%

Wrong: 12.41%

**Q26)** Due to decrease in manpower, the production in a factory decreases by 12%. By what percentage (rounded off to two decimal places) should the working hours be increased to restore the original production?

- A)** 16.67% **B)** 12.33% **C)** 13.64% **D)** 23.23%

Date: 11/06/2025

Time: 4:30 PM - 6:00 PM

Right: 65.76%

Wrong: 16.25%

**Q27)** A man spends 30% of his monthly salary on house rent. If every month, he also spends ₹751 on conveyance and ₹8,481 on grocery and saves the remaining ₹715, his monthly salary is:

- A)** ₹14,261 **B)** ₹14,210 **C)** ₹14,301 **D)** ₹14,206

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 66.18%

Wrong: 8.23%

**Q28)** The present cost of a hospital is ₹1,82,590. After a year, its cost increased to ₹1,95,382. The percentage increase (rounded off to the nearest integer) in the cost of the hospital is:

- A)** 5% **B)** 16% **C)** 3% **D)** 7%

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 66.60%

Wrong: 19.55%

**Q29)** After 51 litres of petrol was poured into an empty storage tank, it was still 1% empty. How much petrol (in litres, rounded off to two decimal places) must be poured into the storage tank in order to fill it?

- A)** 50.52 **B)** 52.52 **C)** 51.52 **D)** 52.05

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 71.56%

Wrong: 13.64%

**Q30)** A person who spends 33% of his monthly income is able to save ₹6,298 per month. His monthly expenses (in ₹) are:

- A)** 3,195 **B)** 3,083 **C)** 3,102 **D)** 3,024

Date: 10/06/2025

Time: 12:45 PM - 2:15 PM

Right: 71.98%

Wrong: 14.32%

**Q31)** Gopal gets a 2% increase in his sale amount in the first year and a 20% increase in the second year, and with that his present sale is ₹1,83,600. What was his sale (in ₹) two years ago?

- A)** 1,50,000 **B)** 1,80,000 **C)** 1,53,000 **D)** 1,30,000

Date: 10/06/2025

Time: 12:45 PM - 2:15 PM

Right: 73.49%

Wrong: 12.81%

**Q32)** Kalpana and Sudha got 656 and 697 marks, respectively, in the same examination. If Kalpana scored 32% marks, then what is the percentage of marks scored by Sudha?

- A)** 32% **B)** 35% **C)** 34% **D)** 37%

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 74.83%

Wrong: 12.89%

**Q33)** 2% of 50% of a number is what percentage of that number?

- A)** 100% **B)** 0.1% **C)** 1% **D)** 52%

Date: 06/06/2025

Time: 12:45 PM - 2:15 PM

Right: 75.38%

Wrong: 21.64%

**Q34)** If A's salary is 16% more than that of B, then by what percentage is B's salary less than that of A (correct to two decimal places)?

- A)** 13.79% **B)** 13.62% **C)** 15.05% **D)** 12.72%

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 75.71%

Wrong: 16.16%

**Q35)** A man spends 50% of his monthly salary on the rent of his house. If every month he also spends ₹780 on his conveyance and ₹9,800 on his groceries and saves the remaining ₹110, his monthly salary is:

- A)** ₹21,430 **B)** ₹21,307 **C)** ₹21,282 **D)** ₹21,380

Date: 23/06/2025

Time: 4:30 PM - 6:00 PM

Right: 76.22%

Wrong: 5.83%

**Q36)** Keshav gets a 4% increase in his sale amount in the first year and a 20% increase in the second year, and with that his present sale is ₹1,56,000. What was his sale (in ₹) two years ago?

- A)** 1,25,000 **B)** 1,30,000 **C)** 1,05,000 **D)** 1,50,000

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 76.57%

Wrong: 9.28%

**Q37)** A person who spends 52% of his monthly income is able to save ₹7,740 per month. His monthly expenses (in ₹) are:

- A)** 8,348 **B)** 8,385 **C)** 8,344 **D)** 8,460

Date: 19/06/2025

Time: 12:45 PM - 2:15 PM

Right: 76.74%

Wrong: 11.75%

**Q38)** The present cost of an apartment is ₹1,70,014. After a year, its cost increased to ₹1,93,900. The percentage increase (rounded off to the nearest integer) in the cost of the apartment is:

- A)** 28% **B)** 3% **C)** 14% **D)** 22%

Date: 18/06/2025

Time: 9:00 AM - 10:30 AM

Right: 77.28%

Wrong: 8.98%

**Q39)** If A's salary is 51% more than that of B, then by what percentage is B's salary less than that of A (correct to two decimal places)?

- A)** 36.52% **B)** 33.77% **C)** 34.80% **D)** 32.75%

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 77.53%

Wrong: 13.48%

**Q40)** The population of a town in the year 1921 was 3,47,900. If its population increased in two successive decades by 50% in each decade, the population of the town in the year 1941 was:

- A)** 7,82,777 **B)** 7,82,775 **C)** 7,82,778 **D)** 7,82,776

Date: 19/06/2025

Time: 12:45 PM - 2:15 PM

Right: 77.69%

Wrong: 5.80%

**Q41)** A number when increased by  $57\frac{1}{2}\%$ , gives 378. The number is:

- A)** 240 **B)** 200 **C)** 400 **D)** 100

Date: 24/06/2025

Time: 4:30 PM - 6:00 PM

Right: 79.88%

Wrong: 5.62%

**Q42)** A person who spends 32% of his monthly income is able to save ₹7,752 per month. His monthly expenses (in ₹) are:

- A)** 3,846 **B)** 3,864 **C)** 3,648 **D)** 3,684

Date: 18/06/2025

Time: 4:30 PM - 6:00 PM

Right: 80.06%

Wrong: 9.03%

**Q43)** If 25% of k is 10 less than 1200% of 25, then k is:

- A)** 1200 **B)** 1120 **C)** 1140 **D)** 1160

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 80.42%

Wrong: 12.22%

**Q44)** If A's salary is 12% more than that of B, then by what percentage is B's salary less than that of A (correct to two decimal places)?

- A)** 13.26% **B)** 10.71% **C)** 11.73% **D)** 12.47%

Date: 24/06/2025

Time: 4:30 PM - 6:00 PM

Right: 80.48%

Wrong: 12.38%

Q45) If 25% of  $k$  is 10 less than 1800% of 10, then  $k$  is:

- A) 640 B) 680 C) 660 D) 720

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 80.57%

Wrong: 11.93%

Q46) Income of Amit in 2019 was ₹22,000. He gets an increment of 20% every year. What was his income (in ₹) in 2021?

- A) 26,400 B) 30,800 C) 31,680 D) 22,000

Date: 16/06/2025

Time: 9:00 AM - 10:30 AM

Right: 80.83%

Wrong: 16.07%

Q47) The population of a town in 1968 was 4,85,000. If its population increased in two successive decades by 20% in each decade, the population of the town in 1988 was:

- A) 6,98,405 B) 6,98,395 C) 6,98,400 D) 6,98,397

Date: 18/06/2025

Time: 4:30 PM - 6:00 PM

Right: 80.97%

Wrong: 4.98%

Q48) Income of Amit in 2019 was ₹22,000. He gets an increment of 10% every year. What was his income (in ₹) in 2021?

- A) 22,000 B) 26,400 C) 24,200 D) 26,620

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 81.09%

Wrong: 14.77%

Q49) X has planned his expenditure as follows: 30% of salary for house rent; 25% for food; 15% for medical expenditure and 16% for others. If he can save ₹42,000 every month, then his monthly salary (in ₹) is:

- A) 3,30,000 B) 3,00,000 C) 3,50,000 D) 4,20,000

Date: 06/06/2025

Time: 4:30 PM - 6:00 PM

Right: 81.75%

Wrong: 6.75%

Q50) After 50 litres of petrol was poured into an empty storage tank, it was still 10% empty. How much petrol (in litres, rounded off to two decimal places) must be poured into the storage tank in order to fill it?

- A) 55.56 B) 51.33 C) 56.56 D) 54.56

Date: 06/06/2025

Time: 4:30 PM - 6:00 PM

Right: 81.83%

Wrong: 7.37%

Q51) If A's salary is 17% more than that of B, then by what percentage is B's salary less than that of A (rounded off to two decimal places)?

- A) 16.39% B) 11.57% C) 14.53% D) 17.11%

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 82.01%

Wrong: 10.59%

Q52) The population of a town in the year 1956 was 2,07,300. If its population increased in two successive decades by 20% in each decade, the population of the town in the year 1976 was:

- A) 2,98,513 B) 2,98,512 C) 2,98,511 D) 2,98,507

Date: 20/06/2025

Time: 4:30 PM - 6:00 PM

Right: 82.04%

Wrong: 4.66%

**Q53)** If 20% of k is 10 less than 1200% of 10, then k is:

- A)** 590 **B)** 550 **C)** 510 **D)** 530

Date: 12/06/2025

Time: 12:45 PM - 2:15 PM

Right: 82.47%

Wrong: 9.49%

**Q54)** Kalpana and Sudha got 621 and 522 marks, respectively, in the same examination. If Kalpana scored 69% marks, then what is the percentage of marks scored by Sudha?

- A)** 58% **B)** 59% **C)** 60% **D)** 55%

Date: 20/06/2025

Time: 12:45 PM - 2:15 PM

Right: 82.47%

Wrong: 6.91%

**Q55)** The income of a person increases by 15% annually. If the initial income is ₹70,000, calculate the income after 2 years.

- A)** ₹91,875 **B)** ₹91,575 **C)** ₹92,575 **D)** ₹92,175

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 82.66%

Wrong: 10.69%

**Q56)** A cook earns ₹8,400 per month. If she spends 60% of it each month, how much will she save (in ₹) by one-fourth of a year?

- A)** 10,080 **B)** 7,200 **C)** 12000 **D)** 5,040

Date: 05/06/2025

Time: 4:30 PM - 6:00 PM

Right: 82.82%

Wrong: 9.92%

**Q57)** Kalpana and Sudha got 696 and 584 marks, respectively, in the same examination. If Kalpana scored 87% marks, then what is the percentage of marks scored by Sudha?

- A)** 73% **B)** 72% **C)** 76% **D)** 74%

Date: 18/06/2025

Time: 9:00 AM - 10:30 AM

Right: 83.12%

Wrong: 8.37%

**Q58)** Due to decrease in manpower, the production in a factory decreases by 20%. By what percentage should the working hours be increased to restore the original production?

- A)** 40% **B)** 20% **C)** 25% **D)** 80%

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 83.44%

Wrong: 10.56%

**Q59)** Vijay's salary was first reduced by 16% and subsequently raised by 11%. What percentage was his final salary lower compared to his initial salary?

- A)** 6.76% **B)** 16% **C)** 1.76% **D)** 11%

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 83.54%

Wrong: 6.80%

**Q60)** Due to decrease in manpower, the production in a factory decreases by 10%. By what percentage should the working hours be increased to restore the original production?

- A)**  $16\frac{2}{3}\%$  **B)**  $8\frac{1}{3}\%$  **C)**  $11\frac{1}{9}\%$  **D)** 10%

Date: 10/06/2025

Time: 4:30 PM - 6:00 PM

Right: 84.52%

Wrong: 8.00%

**Q61)** Kalpana and Sudha got 624 and 720 marks, respectively, in the same examination. If Kalpana scored 26% marks, then what is the percentage of marks scored by Sudha?

- A)** 30% **B)** 29% **C)** 33% **D)** 27%

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 84.72%

Wrong: 7.25%

**Q62)** The population of a village was 1,10,000. It increased by 5% in the first year and increased by 25% in the second year. Its population after two years is \_\_\_\_\_.

- A)** 1,44,375 **B)** 1,37,500 **C)** 1,15,500 **D)** 1,43,000

Date: 11/06/2025

Time: 12:45 PM - 2:15 PM

Right: 84.84%

Wrong: 10.09%

**Q63)** The population of a village was 1,10,000. It increased by 5% in the first year and increased by 30% in the second year. Its population after two years is \_\_\_\_\_.

- A)** 1,50,150 **B)** 1,15,500 **C)** 1,48,500 **D)** 1,43,000

Date: 20/06/2025

Time: 4:30 PM - 6:00 PM

Right: 84.86%

Wrong: 9.78%

**Q64)** The population of a village was 1,20,000. It increased by 10% in the first year and increased by 30% in the second year. Its population after two years is \_\_\_\_\_.

- A)** 1,68,000 **B)** 1,32,000 **C)** 1,71,600 **D)** 1,56,000

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 85.57%

Wrong: 10.52%

**Q65)** In an election, there were two candidates. One of the candidates secured 48% of the votes and was defeated by the other candidate by 756 votes. Find the total number of votes polled.

- A)** 17,800 **B)** 19,500 **C)** 15,600 **D)** 18,900

Date: 05/06/2025

Time: 4:30 PM - 6:00 PM

Right: 85.96%

Wrong: 5.87%

**Q66)** A person who spends 55% of his monthly income is able to save ₹6,408 per month. His monthly expenses (in ₹) are:

- A)** 7,832 **B)** 7,834 **C)** 7,873 **D)** 7,843

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 86.04%

Wrong: 6.72%

**Q67)** David's salary was first reduced by 17% and subsequently raised by 10%. How much percentage was his final salary lower compared to his initial salary?

- A)** 1.7% **B)** 17% **C)** 8.7% **D)** 10%

Date: 24/06/2025

Time: 12:45 PM - 2:15 PM

Right: 86.26%

Wrong: 7.07%

**Q68)** The population of a village was 1,20,000. It increased by 15% in the first year and increased by 20% in the second year. Its population after two years is \_\_\_\_\_.

- A)** 1,65,600 **B)** 1,38,000 **C)** 1,62,000 **D)** 1,44,000

Date: 24/06/2025

Time: 12:45 PM - 2:15 PM

Right: 86.46%

Wrong: 8.29%

**Q69)** Salil's salary was first reduced by 15% and subsequently raised by 10%. What percentage was his final salary lower compared to his initial salary?

- A)** 10% **B)** 1.5% **C)** 6.5% **D)** 15%

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 86.87%

Wrong: 6.79%

**Q70)** Sachin's salary was first reduced by 16% and subsequently raised by 10%. What percentage was his final salary lower compared to his initial salary?

- A)** 16% **B)** 10% **C)** 1.6% **D)** 7.6%

Date: 06/06/2025

Time: 9:00 AM - 10:30 AM

Right: 86.91%

Wrong: 6.49%

**Q71)** By how much is 60% of 40 greater than  $\frac{3}{5}$  of 15?

- A)** 12 **B)** 15 **C)** 9 **D)** 13

Date: 23/06/2025

Time: 4:30 PM - 6:00 PM

Right: 87.25%

Wrong: 8.71%

**Q72)** A person who spends 75% of his monthly income is able to save ₹5,538 per month. His monthly expenses (in ₹) are:

- A)** 16,539 **B)** 16,589 **C)** 16,688 **D)** 16,614

Date: 11/06/2025

Time: 4:30 PM - 6:00 PM

Right: 87.50%

Wrong: 5.89%

**Q73)** A person who spends 80% of his monthly income is able to save ₹6,738 per month. His monthly expenses (in ₹) are:

- A)** 26,925 **B)** 26,952 **C)** 26,921 **D)** 26,876

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 88.10%

Wrong: 4.96%

**Q74)**  $\frac{1}{20}$  is what percentage of  $\frac{1}{30}$ ?

- A)** 150% **B)** 300% **C)** 165% **D)** 160%

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 88.40%

Wrong: 6.83%

**Q75)** By how much is 60% of 40 greater than  $\frac{1}{5}$  of 15?

- A)** 19 **B)** 21 **C)** 18 **D)** 15

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 89.09%

Wrong: 5.84%

**Q76)** A man receives ₹6,150 per month as salary. He saves 46% of his salary every month. His expenditure per month is:

- A)** ₹3,321 **B)** ₹3,260 **C)** ₹3,295 **D)** ₹3,371

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 89.82%

Wrong: 5.37%

**Q77)** A man receives ₹5,140 per month as salary. He saves 35% of his salary every month. His expenditure per month is:

- A)** ₹3,251 **B)** ₹3,361 **C)** ₹3,380 **D)** ₹3,341

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 89.95%

Wrong: 5.28%

**Q78)** Kiran spends 45% of his income. If he saves ₹66,000, then his income (in ₹) is:

- A)** 1,21,000 **B)** 1,19,000 **C)** 29,700 **D)** 1,20,000

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 90.47%

Wrong: 5.08%

**Q79)** A man receives ₹2,580 per month as salary. He saves 45% of his salary every month. His expenditure per month is:

- A)** ₹1,455 **B)** ₹1,517 **C)** ₹1,399 **D)** ₹1,419

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 90.48%

Wrong: 5.38%

**Q80)** The original price of a music set is ₹8,000. The price is decreased by 12% and then raised by 25%. What is its new price (in ₹)?

- A)** 8,100 **B)** 8,300 **C)** 8,800 **D)** 9,300

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 90.49%

Wrong: 4.35%

**Q81)** By how much is 60% of 40 greater than  $\frac{2}{5}$  of 55?

- A)** 4 **B)** 2 **C)** 1 **D)** 3

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 90.50%

Wrong: 4.67%

**Q82)** The population of a village was 1,00,000. It increased by 5% in the first year and increased by 20% in the second year. Its population after two years is \_\_\_\_\_.

- A)** 1,26,000 **B)** 1,25,000 **C)** 1,05,000 **D)** 1,20,000

Date: 10/06/2025

Time: 4:30 PM - 6:00 PM

Right: 90.74%

Wrong: 6.96%

**Q83)** A person saves 20% of his income. If his expenditure is ₹960, then his income (in ₹) is:

- A)** 192 **B)** 768 **C)** 1,200 **D)** 1,240

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 91.34%

Wrong: 5.56%

**Q84)** A man receives ₹7,915 per month as salary. He saves 20% of his salary every month. His expenditure per month is:

- A)** ₹6,420 **B)** ₹6,332 **C)** ₹6,270 **D)** ₹6,346

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 91.44%

Wrong: 4.30%

**Q85)** A person saves 30% of his income. If his expenditure is ₹840, then his income (in ₹) is:

- A)** 1,240 **B)** 588 **C)** 252 **D)** 1,200

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 91.51%

Wrong: 5.38%

**Q86)** The original price of a music set is ₹8,000. The price is decreased by 12% and then raised by 20%. What is its new price (in ₹)?

- A)** 7,748 **B)** 7,948 **C)** 8,948 **D)** 8,448

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 91.63%

Wrong: 3.85%

**Q87)** David spends 55% of his income. If he saves ₹36,000, then his income (in ₹) is:

- A)** 80,000 **B)** 81,000 **C)** 19,800 **D)** 79,000

Date: 14/06/2025

Time: 9:00 AM - 10:30 AM

Right: 91.82%

Wrong: 4.73%

**Q88)** A person saves 40% of his income. If his expenditure is ₹960, then his income (in ₹) is:

- A)** 1,640 **B)** 576 **C)** 1,600 **D)** 384

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 91.86%

Wrong: 4.75%

**Q89)** A person saves 40% of his income. If his expenditure is ₹480, then his income (in ₹) is:

- A)** 800 **B)** 192 **C)** 288 **D)** 840

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 91.98%

Wrong: 5.27%

**Q90)** Vipul spends 55% of his income. If he saves ₹18,000, then his income (in ₹) is:

- A)** 9,900 **B)** 39,000 **C)** 40,000 **D)** 41,000

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 92.21%

Wrong: 4.14%

**Q91)**  $\frac{1}{20}$  is what percentage of  $\frac{1}{40}$ ?

- A)** 400% **B)** 215% **C)** 200% **D)** 210%

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 92.25%

Wrong: 4.19%

**Q92)** A person saves 40% of his income. If his expenditure is ₹360, then his income (in ₹) is:

- A)** 600 **B)** 144 **C)** 216 **D)** 640

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 92.31%

Wrong: 5.22%

**Q93)** A person saves 30% of his income. If his expenditure is ₹560, then his income (in ₹) is:

- A)** 840 **B)** 800 **C)** 168 **D)** 392

Date: 17/06/2025

Time: 4:30 PM - 6:00 PM

Right: 92.35%

Wrong: 4.89%

**Q94)** A man receives ₹4,900 per month as salary. He saves 17% of his salary every month. His expenditure per month is:

- A)** ₹4,132 **B)** ₹4,112 **C)** ₹3,972 **D)** ₹4,067

Date: 13/06/2025

Time: 4:30 PM - 6:00 PM

Right: 92.95%

Wrong: 2.76%

**Q95)** A person who spends 50% of his monthly income is able to save ₹7,056 per month. His monthly expenses (in ₹) are:

- A)** 7,056 **B)** 6,987 **C)** 7,024 **D)** 7,039

Date: 12/06/2025

Time: 12:45 PM - 2:15 PM

Right: 93.60%

Wrong: 2.29%

**Q96)** Manjit spends 40% of his income. If he saves ₹18,000, then his income (in ₹) is:

- A)** 31,000 **B)** 30,000 **C)** 29,000 **D)** 7,200

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 93.66%

Wrong: 3.57%

**Q97)** A person saves 50% of his income. If his expenditure is ₹320, then his income (in ₹) is:

- A)** 160 **B)** 640 **C)** 680 **D)** 600

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 93.66%

Wrong: 3.84%

**Q98)** Akshay spends 40% of his income. If he saves ₹24,000, then his income (in ₹) is:

- A)** 9,600 **B)** 40,000 **C)** 41,000 **D)** 39,000

Date: 06/06/2025

Time: 9:00 AM - 10:30 AM

Right: 94.04%

Wrong: 3.34%

**Q99)** If 4% of  $x = 24$ , then  $x$  is equal to:

- A)** 1300 **B)** 700 **C)** 600 **D)** 1200

Date: 14/06/2025

Time: 12:45 PM - 2:15 PM

Right: 95.89%

Wrong: 2.02%

**Q100)** If 2% of  $x = 360$ , then  $x$  is equal to:

- A)** 36000 **B)** 18000 **C)** 18100 **D)** 36100

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 96.02%

Wrong: 1.72%

**Q101)** If 2% of  $x = 24$ , then  $x$  is equal to:

- A)** 1300 **B)** 2500 **C)** 1200 **D)** 2400

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 96.70%

Wrong: 1.58%

### Answer Key (Q1 to Q101) Percentage

Q1: 2	Q2: 1	Q3: 4	Q4: 3	Q5: 2
Q6: 3	Q7: 2	Q8: 4	Q9: 4	Q10: 4
Q11: 3	Q12: 3	Q13: 4	Q14: 1	Q15: 3

Q16: 2	Q17: 2	Q18: 2	Q19: 1	Q20: 2
Q21: 1	Q22: 3	Q23: 1	Q24: 2	Q25: 2
Q26: 3	Q27: 2	Q28: 4	Q29: 3	Q30: 3
Q31: 1	Q32: 3	Q33: 3	Q34: 1	Q35: 4
Q36: 1	Q37: 2	Q38: 3	Q39: 2	Q40: 2
Q41: 1	Q42: 3	Q43: 4	Q44: 2	Q45: 2
Q46: 3	Q47: 3	Q48: 4	Q49: 2	Q50: 1
Q51: 3	Q52: 2	Q53: 2	Q54: 1	Q55: 3
Q56: 1	Q57: 1	Q58: 3	Q59: 1	Q60: 3
Q61: 1	Q62: 1	Q63: 1	Q64: 3	Q65: 4
Q66: 1	Q67: 3	Q68: 1	Q69: 3	Q70: 4
Q71: 2	Q72: 4	Q73: 2	Q74: 1	Q75: 2
Q76: 1	Q77: 4	Q78: 4	Q79: 4	Q80: 3
Q81: 2	Q82: 1	Q83: 3	Q84: 2	Q85: 4
Q86: 4	Q87: 1	Q88: 3	Q89: 1	Q90: 3
Q91: 3	Q92: 1	Q93: 2	Q94: 4	Q95: 1
Q96: 2	Q97: 2	Q98: 2	Q99: 3	Q100: 2
Q101: 3				

## Ratio and Proportion

**Q1)** Rahul's age is three times the age of his daughter. After 8 years from now, his age will be 5 years more than twice the age of his daughter. Find the present age of Rahul.

**A)** 36 years **B)** 30 years **C)** 33 years **D)** 39 years

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 4.23%

Wrong: 75.82%

**Q2)** Which of the following ratios is greatest?

**A)** 16 : 57 **B)** 24 : 54 **C)** 17 : 53 **D)** 28 : 60

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 13.11%

Wrong: 80.50%

Q3) When  $x$  is added to each of 22, 26, 19 and 21, then the numbers so obtained, in this order, are in proportion. Then, if  $2x : y :: y : (4x-8)$ , and  $y > 0$ , what is the value of  $y$ ?

A) 48 B) 37 C) 46 D) 54

Date: 06/06/2025 Time: 9:00 AM - 10:30 AM Right: 19.09% Wrong: 6.83%

Q4) 5 times the present age of Sujatha is 5 years more than 2 times the present age of Vanita. After 4 years, 3 times the age of Vanita will be 8 years less than 5 times the age of Sujatha. The age of Vanita is  $k$  years more than that of Sujatha. What is the value of  $k$ ?

A) 2 B) 3 C) 4 D) 5

Date: 18/06/2025 Time: 9:00 AM - 10:30 AM Right: 22.46% Wrong: 14.12%

Q5) 6 times the present age of Sujatha is 6 years more than 3 times the present age of Vanita. After 7 years, 4 times the age of Vanita will be 6 years less than 6 times the age of Sujatha. The age of Vanita is  $k$  years more than that of Sujatha. What is the value of  $k$ ?

A) 2 B) 6 C) 7 D) 4

Date: 18/06/2025 Time: 12:45 PM - 2:15 PM Right: 23.32% Wrong: 12.92%

Q6) When  $x$  is added to each of 20, 34, 11 and 16, then the numbers so obtained, in this order, are in proportion. Then, if  $3x : y :: y : (2x-6)$ , and  $y > 0$ , what is the value of  $y$ ?

A) 29 B) 10 C) 18 D) 2

Date: 06/06/2025 Time: 4:30 PM - 6:00 PM Right: 25.69% Wrong: 11.34%

Q7)  $X$  is directly proportional to  $A^2$  and  $A$  is inversely proportional to  $Y$ . If  $X$  is 97 when  $Y$  is 6, find  $X$  when  $Y$  is 2.

A) 873 B) 871 C) 872 D) 875

Date: 09/06/2025 Time: 9:00 AM - 10:30 AM Right: 26.11% Wrong: 10.25%

Q8) 2 times the present age of  $X$  is 7 years less than 6 times the present age of  $Y$ . At present,  $P$  is 2 times as old as  $X$ , and  $Y$  is 8 years younger than  $Q$ . If  $P$  is 50 years older than  $Q$ , then the present age (in years) of  $Y$  is:

A) 18 B) 13 C) 5 D) 12

Date: 14/06/2025 Time: 9:00 AM - 10:30 AM Right: 27.21% Wrong: 10.72%

Q9) The sum of nine times the present age of  $A$  and eight times the present age of  $B$  is 29 years. Two times the present age of  $B$  exceeds two times the present age of  $A$  by 20 years. What will be the sum of the ages (in years) of  $A$  and  $B$ , 6 years from now?

A) 14 B) 10 C) 16 D) 12

Date: 21/06/2025 Time: 12:45 PM - 2:15 PM Right: 27.26% Wrong: 11.45%

**Q10)** When  $x$  is added to each of 30, 15, 21 and 11, then the numbers so obtained, in this order, are in proportion. Then, if  $6x : y :: y : (3x-9)$ , and  $y > 0$ , what is the value of  $y$ ?

**A) 18 B) 24 C) 10 D) 37**

Date: 05/06/2025 Time: 9:00 AM - 10:30 AM Right: 27.29% Wrong: 8.60%

**Q11)** The sum of the present ages of a father and his son is 19 years more than 2 times the present age of the son. After 15 years, 12 times the father's age will be 17 years less than 13 times the son's age. The difference (in years) between the present ages of the father and the son is:

**A) 14 B) 24 C) 19 D) 21**

Date: 09/06/2025 Time: 12:45 PM - 2:15 PM Right: 27.38% Wrong: 7.16%

**Q12)** 7 times the present age of  $X$  is 6 years less than 2 times the present age of  $Y$ . At present,  $P$  is 7 times as old as  $X$ , and  $Y$  is 6 years younger than  $Q$ . If  $P$  is 70 years older than  $Q$ , then the present age (in years) of  $Y$  is:

**A) 73 B) 75 C) 82 D) 78**

Date: 16/06/2025 Time: 9:00 AM - 10:30 AM Right: 27.56% Wrong: 13.67%

**Q13)** The sum of the present ages of a father and his son is 18 years more than 4 times the present age of the son. After 5 years, 4 times the father's age will be 8 years less than 14 times the son's age. The difference (in years) between the present ages of the father and the son is:

**A) 49 B) 45 C) 48 D) 53**

Date: 06/06/2025 Time: 12:45 PM - 2:15 PM Right: 27.84% Wrong: 9.14%

**Q14)** 4 times the present age of  $P$  exceeds the present age of  $Q$  by 35 years. After 8 years, 2 times the age of  $Q$  will be 40 years less than 6 times the age of  $P$ . The present age of  $Q$  (in years) is:

**A) 84 B) 97 C) 89 D) 80**

Date: 17/06/2025 Time: 4:30 PM - 6:00 PM Right: 29.34% Wrong: 12.84%

**Q15)** When  $x$  is added to each of 29, 31, 7 and 8, then the numbers so obtained, in this order, are in proportion. Then, if  $5x : y :: y : (2x-3)$ , and  $y > 0$ , what is the value of  $y$ ?

**A) 29 B) 35 C) 45 D) 56**

Date: 10/06/2025 Time: 4:30 PM - 6:00 PM Right: 30.77% Wrong: 7.81%

**Q16)** 3 years ago from now, the age of father was 14 years more than twice his son's age. After how many years, from now, will he be twice his son's age?

**A) 12 B) 14 C) 8 D) 11**

Date: 10/06/2025 Time: 12:45 PM - 2:15 PM Right: 33.46% Wrong: 22.77%

**Q17)** X is directly proportional to  $A^2$  and A is inversely proportional to Y. If X is 39 when Y is 20, find X when Y is 2.

**A)** 3902 **B)** 3901 **C)** 3897 **D)** 3900

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 34.51%

Wrong: 9.42%

**Q18)** 3 years ago from now, the age of father was 30 years more than twice his son's age. After how many years, from now, will he be twice his son's age?

**A)** 23 **B)** 24 **C)** 29 **D)** 27

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 34.74%

Wrong: 15.72%

**Q19)** The sum of 2 times Priya's present age and Jaya's present age is 48 years. Sanjay's is presently 2 times as old as Jaya. Mohit's present age is 4 years more than Priya's present age. The sum of the present ages of Sanjay and Mohit is 46 years. What is the sum of the present ages (in years) of Priya and Jaya?

**A)** 40 **B)** 38 **C)** 30 **D)** 15

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 37.47%

Wrong: 11.04%

**Q20)** The ratio of incomes of Seema and Darshan is 7 : 8. They save ₹15,000 and ₹9,000, respectively. If the ratio of their expenditures is 11 : 16, then what is the total expenditure (in ₹) of Seema and Darshan?

**A)** 68,000 **B)** 64,000 **C)** 64,125 **D)** 63,000

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 37.96%

Wrong: 19.87%

**Q21)** 2 times the present age of Urvashi is 6 years more than the present age of Ayushi. The present age of Mohan is 4 times the present age of Urvashi, and Ayushi is 8 years younger than Sanju. If the sum of the present ages of Mohan and Sanju is 50 years, then Urvashi's present age (in years) is:

**A)** 8 **B)** 7 **C)** 14 **D)** 15

Date: 13/06/2025

Time: 4:30 PM - 6:00 PM

Right: 38.12%

Wrong: 10.48%

**Q22)** A certain number is divided into two parts such that 5 times the first part added to 14 times the second part makes 7 times the whole. The ratio of the second part to the first part is:

**A)** 1 : 7 **B)** 2 : 7 **C)** 7 : 1 **D)** 7 : 2

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 38.47%

Wrong: 38.89%

**Q23)** When x is added to each of 26, 40, 22 and 34, then the numbers so obtained, in this order, are in proportion. Then, if  $4x : y :: y : (7x-6)$ , and  $y > 0$ , what is the value of y?

**A)** 2 **B)** 8 **C)** 3 **D)** 9

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 40.17%

Wrong: 12.31%

**Q24)** The sum of 6 times the present age of A and 4 times the present age of B is 156 years. 2 times the present age of B exceeds 9 times the present age of A by 30 years. What will be the sum of the ages (in years) of A and B, 9 years from now?

**A)** 50 **B)** 51 **C)** 46 **D)** 55

Date: 19/06/2025 Time: 12:45 PM - 2:15 PM Right: 40.75% Wrong: 13.22%

**Q25)** Seven times the present age of Anjali is 14 years more than six times the present age of Kamal, and seven times the present age of Kamal is 7 years less than seven times the present age of Anjali. What is the sum of the present ages (in years) of Anjali and Kamal?

**A)** 20 **B)** 15 **C)** 12 **D)** 13

Date: 23/06/2025 Time: 4:30 PM - 6:00 PM Right: 44.17% Wrong: 12.00%

**Q26)** The average price of three items of furniture is ₹15,255. If their prices are in the ratio 3 : 5 : 7, the price of the cheapest item (in ₹) is:

**A)** 9,153 **B)** 7,119 **C)** 3,051 **D)** 5,085

Date: 11/06/2025 Time: 4:30 PM - 6:00 PM Right: 45.86% Wrong: 48.65%

**Q27)** The mean proportional between  $(21 + 16\sqrt{2})$  and  $(16 - 7\sqrt{2})$  is:

**A)**  $17\sqrt{7}$  **B)**  $\sqrt{112 + 109\sqrt{2}}$  **C)**  $\sqrt{109 + 112\sqrt{2}}$  **D)**  $4\sqrt{7}$

Date: 16/06/2025 Time: 9:00 AM - 10:30 AM Right: 47.37% Wrong: 9.88%

**Q28)** Sohiti and Rohit have a certain sum of money in the ratio of 17 : 14 and they spend their money on purchasing books in the ratio of 12 : 8. After purchasing books each of them has ₹3,392. Find the amount of money that Sohiti initially had.

**A)** ₹7,274 **B)** ₹7,208 **C)** ₹7,256 **D)** ₹7,218

Date: 24/06/2025 Time: 4:30 PM - 6:00 PM Right: 48.26% Wrong: 11.78%

**Q29)** The mean proportional between  $(18 + 10\sqrt{7})$  and  $(18 - 4\sqrt{7})$  is:

**A)**  $\sqrt{44 + 108\sqrt{7}}$  **B)**  $\sqrt{4 + 56\sqrt{7}}$  **C)**  $\sqrt{44 + 56\sqrt{7}}$  **D)**  $\sqrt{10 + 56\sqrt{7}}$

Date: 14/06/2025 Time: 12:45 PM - 2:15 PM Right: 48.40% Wrong: 11.83%

**Q30)** X varies inversely as Y and Y varies inversely as Z. In a particular case,

$X = \frac{1}{2}$  and  $Z = \frac{1}{74}$ . What will be the value of X when  $Z = 7$ ?

**A)** 259 **B)** 262 **C)** 260 **D)** 257

Date: 24/06/2025 Time: 9:00 AM - 10:30 AM Right: 50.39% Wrong: 5.97%

**Q31)** The ratio of incomes of Seema and Darshan is 2 : 3. They save ₹15,000 and ₹9,000, respectively. If the ratio of their expenditures is 12 : 19, then what is the total expenditure (in ₹) of Seema and Darshan?

- A)** 4,21,000 **B)** 4,18,500 **C)** 4,18,000 **D)** 4,22,000

Date: 14/06/2025

Time: 9:00 AM - 10:30 AM

Right: 50.59%

Wrong: 10.24%

**Q32)** The average price of three items of furniture is ₹15,135. If their prices are in the ratio 3 : 5 : 7, the price of the cheapest item (in ₹) is:

- A)** 7,063 **B)** 3,027 **C)** 9,081 **D)** 5,045

Date: 14/06/2025

Time: 12:45 PM - 2:15 PM

Right: 51.51%

Wrong: 43.91%

**Q33)** The cost of 5 shirts and 7 trousers together is ₹6,150 and the cost of 3 shirts is equal to the cost of 4 trousers. What is the cost (in ₹) of 2 shirts and 2 trousers together?

- A)** 2,150 **B)** 2,400 **C)** 2,100 **D)** 2,250

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 51.66%

Wrong: 11.19%

**Q34)** The average price of three items of furniture is ₹15,015. If their prices are in the ratio 3 : 5 : 7, the price of the costliest item (in ₹) is:

- A)** 7,007 **B)** 9,009 **C)** 21,021 **D)** 5,005

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 51.92%

Wrong: 43.92%

**Q35)** The average price of three items of furniture is ₹15,165. If their prices are in the ratio 3 : 5 : 7, the price of the costliest item (in ₹) is:

- A)** 5,055 **B)** 9,099 **C)** 21,231 **D)** 7,077

Date: 14/06/2025

Time: 9:00 AM - 10:30 AM

Right: 52.87%

Wrong: 42.63%

**Q36)** The mean proportional between  $(18 + 8\sqrt{2})$  and  $(15 - 2\sqrt{2})$  is:

- A)**  $\sqrt{238 + 84\sqrt{2}}$  **B)**  $\sqrt{238 + 36\sqrt{2}}$  **C)**  $\sqrt{238 + 110\sqrt{2}}$  **D)**  $\sqrt{238 + 120\sqrt{2}}$

Date: 11/06/2025

Time: 12:45 PM - 2:15 PM

Right: 53.13%

Wrong: 9.24%

**Q37)** C is the third proportional of 57 and B. If B is the sum of the first three even natural numbers, then find the value of C.

(Rounded off to two decimal places)

- A)** 2.53 **B)** 1.33 **C)** 0.65 **D)** 0.07

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 53.88%

Wrong: 11.68%

**Q38)** The ratio of incomes of Seema and Darshan is 4 : 3. They save ₹15,000 and ₹9,000, respectively. If the ratio of their expenditures is 16 : 17, then what is the total expenditure (in ₹) of Seema and Darshan?

- A)** 14,850 **B)** 13,000 **C)** 15,000 **D)** 16,000

Date: 10/06/2025

Time: 4:30 PM - 6:00 PM

Right: 54.98%

Wrong: 8.11%

**Q39)** The mean proportional between  $(13 + 8\sqrt{5})$  and  $(10 - 2\sqrt{5})$  is:

- A)**  $10\sqrt{2}$  **B)**  $5\sqrt{2}$  **C)**  $\sqrt{54 + 50\sqrt{5}}$  **D)**  $\sqrt{50 + 54\sqrt{5}}$

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 55.00%

Wrong: 9.48%

**Q40)** C is the third proportional of 29 and B. If B is the sum of the first three even natural numbers, then find the value of C.

(Rounded off to two decimal places)

- A)** 3.53 **B)** 3.85 **C)** 7.64 **D)** 4.97

Date: 11/06/2025

Time: 12:45 PM - 2:15 PM

Right: 56.27%

Wrong: 10.28%

**Q41)** Which of the following ratios is greatest?

- A)** 17 : 42 **B)** 20 : 36 **C)** 21 : 45 **D)** 25 : 50

Date: 16/06/2025

Time: 9:00 AM - 10:30 AM

Right: 57.73%

Wrong: 39.14%

**Q42)** Which of the following ratios is the greatest?

- A)** 33 : 51 **B)** 37 : 64 **C)** 32 : 86 **D)** 26 : 59

Date: 11/06/2025

Time: 12:45 PM - 2:15 PM

Right: 57.75%

Wrong: 33.01%

**Q43)** The mean proportional between  $9 + 3\sqrt{7}$  and  $18 - 6\sqrt{7}$  is:

- A)** 6 **B)** 1 **C)** 13 **D)** 9

Date: 24/06/2025

Time: 4:30 PM - 6:00 PM

Right: 58.02%

Wrong: 13.79%

**Q44)** The ratio of the age of a son after 15 years and the present age of his father is 2 : 3. 5 years ago, the age of the father was 4 times the age of the son. The present ages (in years) of the father and the son, respectively, are:

- A)** 45; 15 **B)** 40; 10 **C)** 32; 8 **D)** 50; 20

Date: 06/06/2025

Time: 4:30 PM - 6:00 PM

Right: 59.68%

Wrong: 15.05%

**Q45)** The mean proportional between  $(9 + 4\sqrt{5})$  and  $(18 - 8\sqrt{5})$  is:

- A)**  $\sqrt{5}$  **B)**  $\sqrt{15}$  **C)**  $\sqrt{17}$  **D)**  $\sqrt{2}$

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 60.57%

Wrong: 12.51%

Q46) The mean proportional between  $4 + 2\sqrt{3}$  and  $16 - 8\sqrt{3}$  is:

A) 4 B) 8 C) 9 D) 14

Date: 24/06/2025

Time: 12:45 PM - 2:15 PM

Right: 60.69%

Wrong: 14.05%

Q47) C is the third proportional of 44 and B. If B is the sum of the first three even natural numbers, then find the value of C.

(Round off your answer to two decimal places)

A) 3.27 B) 0.98 C) 1.98 D) 4.58

Date: 10/06/2025

Time: 12:45 PM - 2:15 PM

Right: 61.06%

Wrong: 10.03%

Q48) If 260 is the mean proportion between x and 338, what is the value of x?

A) 200 B) 198 C) 199 D) 201

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 61.10%

Wrong: 11.57%

Q49) M is inversely proportional to N. If M is 18, then N is 21. If N = 27, then what is the value of M?

A) 14 B) 12 C) 13 D) 16

Date: 16/06/2025

Time: 9:00 AM - 10:30 AM

Right: 61.17%

Wrong: 22.73%

Q50) If 276 is the mean proportion between x and 368, what is the value of x?

A) 207 B) 205 C) 209 D) 208

Date: 06/06/2025

Time: 4:30 PM - 6:00 PM

Right: 61.23%

Wrong: 13.27%

Q51) If  $2.5 : 40.6 :: 40.6 : x$ , then find the value of x.

A) 665.032 B) 658.357 C) 655.425 D) 659.344

Date: 13/06/2025

Time: 4:30 PM - 6:00 PM

Right: 61.60%

Wrong: 17.28%

Q52) Three numbers are in the ratio  $\frac{5}{14} : \frac{16}{13} : \frac{20}{14}$ . The difference between the largest and the smallest number is 30.

Find the largest number.

A) 40 B) 39 C) 41 D) 42

Date: 12/06/2025

Time: 12:45 PM - 2:15 PM

Right: 61.94%

Wrong: 12.77%

Q53) Three numbers are in the ratio  $\frac{4}{14} : \frac{7}{14} : \frac{16}{15}$ . The difference between the largest and the smallest number is 41.

Find the largest number.

A) 54 B) 58 C) 56 D) 55

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 62.73%

Wrong: 8.63%

**Q54)** Which of the following ratios is the greatest?

**A)** 38 : 77 **B)** 34 : 51 **C)** 27 : 76 **D)** 31 : 72

Date: 12/06/2025 Time: 12:45 PM - 2:15 PM Right: 63.36% Wrong: 27.55%

**Q55)** Hitesh is three times as old as his son, and his daughter is 3 years younger than the son. If the sum of the ages of these three people 3 years ago was 123 years, then Hitesh's present age (in years) is:

**A)** 81 **B)** 72 **C)** 88 **D)** 91

Date: 24/06/2025 Time: 4:30 PM - 6:00 PM Right: 65.49% Wrong: 14.50%

**Q56)** If A varies directly as B, and A = 210 when B = 51, then find A when B = 136.

**A)** 563 **B)** 560 **C)** 558 **D)** 559

Date: 24/06/2025 Time: 4:30 PM - 6:00 PM Right: 66.85% Wrong: 9.71%

**Q57)** Which of the following ratios is greatest?

**A)** 18 : 57 **B)** 27 : 57 **C)** 27 : 54 **D)** 30 : 49

Date: 13/06/2025 Time: 12:45 PM - 2:15 PM Right: 66.93% Wrong: 27.77%

**Q58)** Which of the following ratios is greatest?

**A)** 19 : 37 **B)** 10 : 15 **C)** 15 : 33 **D)** 18 : 37

Date: 18/06/2025 Time: 9:00 AM - 10:30 AM Right: 67.02% Wrong: 28.30%

**Q59)** The mean proportional between  $12 + 3\sqrt{4}$  and  $16 - 4\sqrt{4}$  is:

**A)** 7 **B)** 22 **C)** 19 **D)** 12

Date: 24/06/2025 Time: 9:00 AM - 10:30 AM Right: 67.73% Wrong: 5.61%

**Q60)** The fourth proportion to 9, 3 and 27 is the same as the third proportion to A and 24. What is the value of A?

**A)** 61 **B)** 63 **C)** 62 **D)** 64

Date: 18/06/2025 Time: 9:00 AM - 10:30 AM Right: 68.36% Wrong: 11.65%

**Q61)** Three numbers are in the ratio  $\frac{5}{20} : \frac{8}{16} : \frac{8}{14}$ . The difference between the largest and the smallest number is 54.

Find the largest number.

**A)** 97 **B)** 98 **C)** 94 **D)** 96

Date: 17/06/2025 Time: 9:00 AM - 10:30 AM Right: 69.16% Wrong: 9.22%

**Q62)** Which of the following ratios is greatest?

**A)** 18 : 37 **B)** 23 : 25 **C)** 25 : 26 **D)** 13 : 32

Date: 20/06/2025 Time: 4:30 PM - 6:00 PM Right: 69.51% Wrong: 23.44%

Q63) Which of the following ratios is greatest?

A) 41 : 64 B) 50 : 59 C) 26 : 90 D) 40 : 70

Date: 05/06/2025 Time: 4:30 PM - 6:00 PM Right: 71.33% Wrong: 22.17%

Q64) If  $a : b :: b : c$ ;  $c = 4a$  and  $b = 10$ , find the positive value of  $c$ .

A) 21 B) 20 C) 24 D) 25

Date: 16/06/2025 Time: 12:45 PM - 2:15 PM Right: 71.69% Wrong: 16.26%

Q65)  $y$  varies directly as  $(x + 3)$ , and  $y = 8$  when  $x = 1$ . What is the value of  $y$  when  $x = 2$ ?

A) 10 B) 5 C) 8 D) 2

Date: 09/06/2025 Time: 4:30 PM - 6:00 PM Right: 72.07% Wrong: 12.93%

Q66) If the third proportional of 36 and  $Z$  is 4, then what is the positive value of  $Z$ ?

A) 14 B) 11 C) 9 D) 12

Date: 13/06/2025 Time: 9:00 AM - 10:30 AM Right: 72.56% Wrong: 21.11%

Q67)  $6 : 42 :: 7.6 : x$  and  $3 : 6 :: 6 : y$ . What is the ratio of  $x$  to  $y$ ?

A) 133 : 30 B) 135 : 32 C) 134 : 28 D) 137 : 40

Date: 11/06/2025 Time: 4:30 PM - 6:00 PM Right: 72.93% Wrong: 6.48%

Q68) If 68 is the mean proportion between  $x$  and 272, what is the value of  $x$ ?

A) 17 B) 19 C) 16 D) 15

Date: 06/06/2025 Time: 9:00 AM - 10:30 AM Right: 73.78% Wrong: 14.84%

Q69) Which of the following ratios is greatest?

A) 9 : 11 B) 10 : 27 C) 11 : 11 D) 31 : 38

Date: 23/06/2025 Time: 4:30 PM - 6:00 PM Right: 74.47% Wrong: 21.80%

Q70) In a bag containing red, green, and pink tokens, the ratio of red to green tokens was 7 : 20, while the ratio of pink to red tokens was 15 : 12. What was the ratio of green to pink tokens?

A) 19 : 12 B) 11 : 5 C) 16 : 7 D) 25 : 7

Date: 05/06/2025 Time: 4:30 PM - 6:00 PM Right: 75.67% Wrong: 11.60%

Q71) If  $4 : 16 :: 7.3 : x$  and  $4 : 32 :: 7 : y$ . What is the ratio of  $x$  to  $y$ ?

A) 73 : 140 B) 71 : 141 C) 74 : 138 D) 77 : 150

Date: 14/06/2025 Time: 12:45 PM - 2:15 PM Right: 75.95% Wrong: 5.16%

**Q72)** Four numbers are in the ratio of 11 : 19 : 5 : 7 respectively. If the sum of these four numbers is 2289, then what is the sum of the first and the third number?

**A)** 872 **B)** 848 **C)** 816 **D)** 887

Date: 19/06/2025

Time: 9:00 AM - 10:30 AM

Right: 76.15%

Wrong: 9.85%

**Q73)** If  $7.5 : 19.5 :: 16 : x$ , find the value of  $x$ .

**A)** 39.4 **B)** 41.1 **C)** 41.6 **D)** 45.1

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 76.20%

Wrong: 13.09%

**Q74)** The mean proportional between 0.09 and 16 is:

**A)** 120 **B)** 12 **C)** 1.2 **D)** 0.12

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 76.27%

Wrong: 14.05%

**Q75)** If  $9.8 : 14.7 :: 15 : x$ , find the value of  $x$ .

**A)** 19.9 **B)** 23.2 **C)** 22.5 **D)** 21.7

Date: 06/06/2025

Time: 4:30 PM - 6:00 PM

Right: 76.50%

Wrong: 16.17%

**Q76)** If  $7 : 14 :: 8.7 : x$  and  $5 : 35 :: 7 : y$ . What is the ratio of  $x$  to  $y$ ?

**A)** 91 : 255 **B)** 85 : 246 **C)** 87 : 245 **D)** 88 : 243

Date: 17/06/2025

Time: 4:30 PM - 6:00 PM

Right: 76.65%

Wrong: 6.73%

**Q77)** A bag contains 50 Paisa, 25 Paisa and 10 Paisa coins in the ratio 16 : 8 : 20, amounting to ₹384. Find the number of 10 Paisa coins.

**A)** 660 **B)** 668 **C)** 640 **D)** 696

Date: 20/06/2025

Time: 12:45 PM - 2:15 PM

Right: 77.19%

Wrong: 6.47%

**Q78)** M is inversely proportional to N. If M is 18, then N is 10. If N = 9, then what is the value of M?

**A)** 22 **B)** 21 **C)** 23 **D)** 20

Date: 13/06/2025

Time: 4:30 PM - 6:00 PM

Right: 77.29%

Wrong: 6.53%

**Q79)** If  $5.1 : 96.9 :: 96.9 : x$ , then find the value of  $x$ .

**A)** 1845.8 **B)** 1837.9 **C)** 1844.3 **D)** 1841.1

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 78.43%

Wrong: 8.39%

**Q80)** A total profit of ₹25,300 is to be distributed amongst P, Q, and R such that  $P : Q = 9 : 7$  and  $Q : R = 3 : 12$ . The share (in ₹) of R in the profit is:

**A)** 16,150 **B)** 16,100 **C)** 16,000 **D)** 16,050

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 79.08%

Wrong: 8.79%

**Q81)** The ratio of three numbers is 10 : 15 : 13. If 10 percent of the first number is 66, what would be 50 percent of the difference of the third and second number?

**A)** 65 **B)** 66 **C)** 64 **D)** 68

Date: 19/06/2025 Time: 4:30 PM - 6:00 PM Right: 79.25% Wrong: 7.26%

**Q82)** The ratio of three numbers is 5 : 16 : 21. If 20 percent of the first number is 26, what would be 40 percent of the difference of the third and second number?

**A)** 54 **B)** 52 **C)** 50 **D)** 51

Date: 18/06/2025 Time: 9:00 AM - 10:30 AM Right: 79.43% Wrong: 5.98%

**Q83)** If 674 bananas were distributed among three monkeys in the ratio  $\frac{17}{2} : \frac{14}{6} : \frac{2}{5}$  respectively, how many bananas did the third monkey get?

**A)** 24 **B)** 23 **C)** 22 **D)** 25

Date: 21/06/2025 Time: 12:45 PM - 2:15 PM Right: 79.81% Wrong: 5.43%

**Q84)** Two numbers are in the ratio 7 : 11. If the first number is increased by 10 and the second number is decreased by 20, then the ratio becomes 2 : 3. What is the sum of the original two numbers?

**A)** 1240 **B)** 1254 **C)** 1260 **D)** 1268

Date: 19/06/2025 Time: 9:00 AM - 10:30 AM Right: 80.05% Wrong: 5.86%

**Q85)** The fourth proportion to 3, 9 and 4 is the same as the third proportion to A and 12. What is the value of A?

**A)** 12 **B)** 9 **C)** 15 **D)** 13

Date: 20/06/2025 Time: 9:00 AM - 10:30 AM Right: 80.28% Wrong: 6.54%

**Q86)** The ratio between the fourth proportional of 2, 8 and 12 to the mean proportional of 9 and 4 is:

**A)** 10 : 3 **B)** 11 : 3 **C)** 8 : 1 **D)** 9 : 2

Date: 17/06/2025 Time: 9:00 AM - 10:30 AM Right: 80.70% Wrong: 7.37%

**Q87)** If  $a : b :: b : c$ ;  $c = 25a$  and  $b = 20$ , find the positive value of  $c$ .

**A)** 99 **B)** 98 **C)** 100 **D)** 101

Date: 17/06/2025 Time: 12:45 PM - 2:15 PM Right: 80.90% Wrong: 3.26%

**Q88)** The ratio of the market prices of gram and pea is 2 : 5, and the ratio of the quantities consumed by a family is 4 : 3. Find the ratio of the expenditure on gram to pea.

**A)** 9 : 16 **B)** 3 : 4 **C)** 8 : 15 **D)** 17 : 10

Date: 06/06/2025 Time: 12:45 PM - 2:15 PM Right: 81.23% Wrong: 6.41%

**Q89)** The fourth proportion to 7, 5 and 14 is the same as the third proportion to A and 10. What is the value of A?

**A) 11 B) 8 C) 13 D) 10**

Date: 19/06/2025 Time: 12:45 PM - 2:15 PM Right: 81.47% Wrong: 5.02%

**Q90)** The ratio of market prices of jowar and gram is 2 : 5 and the ratio of quantities consumed in a family is 4 : 7. Find the ratio of expenditure of jowar and gram.

**A) 9 : 36 B) 1 : 2 C) 8 : 35 D) 37 : 10**

Date: 11/06/2025 Time: 4:30 PM - 6:00 PM Right: 81.55% Wrong: 4.90%

**Q91)** The ratio of three numbers is 20 : 14 : 6. If 65 percent of the first number is 39, what would be 50 percent of the difference of the third and second number?

**A) 11 B) 14 C) 12 D) 10**

Date: 14/06/2025 Time: 9:00 AM - 10:30 AM Right: 81.70% Wrong: 5.90%

**Q92)** If 66% of a number is equal to  $\frac{5}{7}$  of another number, then what is the ratio of the first number to the second number?

**A) 246 : 229 B) 249 : 235 C) 250 : 231 D) 252 : 233**

Date: 20/06/2025 Time: 9:00 AM - 10:30 AM Right: 82.15% Wrong: 5.78%

**Q93)** A pouch contains 50 Paisa, 25 Paisa and 10 Paisa coins in the ratio 18 : 12 : 10, amounting to ₹130. Find the number of 10 Paisa coins.

**A) 149 B) 184 C) 100 D) 180**

Date: 21/06/2025 Time: 9:00 AM - 10:30 AM Right: 82.86% Wrong: 5.18%

**Q94)** If  $a : b :: b : c$ ,  $c = 9a$  and  $b = 6$ , then find the positive value of  $c$ .

**A) 17 B) 18 C) 22 D) 15**

Date: 23/06/2025 Time: 12:45 PM - 2:15 PM Right: 82.95% Wrong: 4.73%

**Q95)** The mean proportional between 0.06 and 6 is:

**A) 0.06 B) 0.6 C) 60 D) 6**

Date: 06/06/2025 Time: 12:45 PM - 2:15 PM Right: 83.24% Wrong: 9.49%

**Q96)** If  $18 : A :: A : 128$ , find the positive value of A.

**A) 50 B) 48 C) 45 D) 47**

Date: 14/06/2025 Time: 9:00 AM - 10:30 AM Right: 83.32% Wrong: 4.44%

**Q97)** Arvind is now 40 years old and Asha is 25 years old. How many years ago from now was Arvind four times as old as Asha?

- A)** 10 years **B)** 20 years **C)** 15 years **D)** 25 years

Date: 05/06/2025

Time: 4:30 PM - 6:00 PM

Right: 83.59%

Wrong: 10.07%

**Q98)** If 56% of a number is equal to  $\frac{5}{9}$  of another number, then what is the ratio of the first number to the second number?

- A)** 123 : 128 **B)** 128 : 125 **C)** 130 : 131 **D)** 125 : 126

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 84.12%

Wrong: 6.25%

**Q99)** If 425 bananas were distributed among three monkeys in the ratio  $\frac{8}{3} : \frac{7}{5} : \frac{8}{5}$  in the mentioned order, how many bananas did the third monkey get?

- A)** 118 **B)** 119 **C)** 121 **D)** 120

Date: 19/06/2025

Time: 12:45 PM - 2:15 PM

Right: 84.30%

Wrong: 4.79%

**Q100)** If the fourth proportion to P, 4 and 3 is 6, then find the value of P.

- A)** 5 **B)** 4 **C)** 3 **D)** 2

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 84.39%

Wrong: 7.02%

**Q101)** In a bag containing red, green, and pink tokens, the ratio of red to green tokens is 7 : 4, while the ratio of pink to red tokens is 20 : 11. What is the ratio of green to pink tokens?

- A)** 12 : 37 **B)** 11 : 35 **C)** 9 : 38 **D)** 12 : 41

Date: 14/06/2025

Time: 12:45 PM - 2:15 PM

Right: 84.48%

Wrong: 4.62%

**Q102)** If  $a : b :: b : c$ ;  $c = 4a$  and  $b = 18$ , find the positive value of c.

- A)** 36 **B)** 34 **C)** 38 **D)** 31

Date: 20/06/2025

Time: 12:45 PM - 2:15 PM

Right: 84.54%

Wrong: 2.49%

**Q103)** The salaries of X, Y, and Z are in the ratio 10 : 20 : 20. If the increments of 82%, 50%, and 19% are allowed respectively in their salaries, what will be the new ratio of their salaries?

- A)** 88 : 151 : 123 **B)** 91 : 150 : 119 **C)** 90 : 153 : 126 **D)** 92 : 154 : 120

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 84.60%

Wrong: 5.47%

**Q104)** If  $3.5 : 17.4 :: 14 : x$ , find the value of x.

- A)** 65.9 **B)** 72.9 **C)** 69.6 **D)** 67.9

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 84.63%

Wrong: 7.28%

**Q105)** If 38% of a number is equal to  $\frac{5}{9}$ th of another number, what is the ratio of the first number to the second number?

- A)** 250 : 171 **B)** 247 : 175 **C)** 251 : 174 **D)** 246 : 169

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 84.94%

Wrong: 3.85%

**Q106)** Suppose  $x : y = 2 : 5$ ;  $y : z = 4 : 7$ . If ₹15,120 is distributed among x, y and z, then the amounts received by x, y and z, respectively, are (in ₹):

- A)** 2,700, 6,000 and 6,420 **B)** 2,500, 5,200 and 7,420 **C)** 2,820, 4,500 and 7,800

- D)** 1,920, 4,800 and 8,400

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 85.14%

Wrong: 4.73%

**Q107)** What is the third proportional of  $2x^2$  and  $12xy$ ?

- A)**  $73y^2$  **B)**  $74y^2$  **C)**  $71y^2$  **D)**  $72y^2$

Date: 12/06/2025

Time: 12:45 PM - 2:15 PM

Right: 85.53%

Wrong: 2.66%

**Q108)** Four numbers are in the ratio of 16 : 10 : 9 : 17 respectively. If the sum of these four numbers is 6292, then what is the sum of the first and the third number?

- A)** 3025 **B)** 3070 **C)** 3031 **D)** 3074

Date: 13/06/2025

Time: 4:30 PM - 6:00 PM

Right: 86.09%

Wrong: 5.36%

**Q109)** What is the third proportional of  $6x^2$  and  $18xy$ ?

- A)**  $52y^2$  **B)**  $53y^2$  **C)**  $54y^2$  **D)**  $51y^2$

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 86.25%

Wrong: 2.30%

**Q110)** What is the third proportional of  $10x^2$  and  $30xy$ ?

- A)**  $92y^2$  **B)**  $87y^2$  **C)**  $93y^2$  **D)**  $90y^2$

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 86.40%

Wrong: 1.99%

**Q111)** If 22% of a number is equal to  $\frac{4}{9}$ th of another number, what is the ratio of the first number to the second number?

- A)** 201 : 98 **B)** 198 : 97 **C)** 199 : 101 **D)** 200 : 99

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 86.85%

Wrong: 4.92%

**Q112)** Two numbers are respectively 46% and 54% more than a third number. The ratio of the two numbers is:

- A)** 73 : 77 **B)** 83 : 75 **C)** 69 : 68 **D)** 67 : 86

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 87.05%

Wrong: 4.52%

**Q113)** If the third proportional of 40 and Z is 10, then what is the positive value of Z?

**A)** 21 **B)** 19 **C)** 20 **D)** 17

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 87.21%

Wrong: 1.94%

**Q114)** A sum of money is to be distributed among A, B, C, and D in the ratio of 14 : 7 : 11 : 10. If C gets ₹196 more than B, how much did A receive?

**A)** ₹684 **B)** ₹686 **C)** ₹688 **D)** ₹685

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 88.03%

Wrong: 4.87%

**Q115)** Two numbers are respectively 30% and 18% more than a third number. The ratio of the two numbers is:

**A)** 55 : 64 **B)** 58 : 63 **C)** 65 : 59 **D)** 73 : 74

Date: 10/06/2025

Time: 12:45 PM - 2:15 PM

Right: 88.19%

Wrong: 3.28%

**Q116)** Some marbles are to be packed in four boxes, A, B, C and D, in the proportion of 6 : 3 : 7 : 5. If box B has 400 less marbles than box D, then how many marbles are there in total in all the boxes?

**A)** 4000 **B)** 4100 **C)** 4200 **D)** 3900

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 88.37%

Wrong: 4.12%

**Q117)** If 18% of a number is equal to  $\frac{4}{5}$  of another number, then what is the ratio of the first number to the second number?

**A)** 42 : 13 **B)** 41 : 6 **C)** 40 : 9 **D)** 43 : 5

Date: 19/06/2025

Time: 12:45 PM - 2:15 PM

Right: 88.80%

Wrong: 3.15%

**Q118)** The ratio of 39 hours to 17 days is:

**A)** 12 : 142 **B)** 39 : 17 **C)** 14 : 143 **D)** 13 : 136

Date: 17/06/2025

Time: 4:30 PM - 6:00 PM

Right: 88.85%

Wrong: 6.70%

**Q119)** The salaries of A, B, and C are in the ratio 3 : 10 : 8. If increments of 10%, 61%, and 20% are allowed respectively in their salaries, what will be the new ratio of their salaries?

**A)** 30 : 165 : 98 **B)** 35 : 163 : 102 **C)** 34 : 167 : 103 **D)** 33 : 161 : 96

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 89.26%

Wrong: 3.96%

**Q120)** If  $7.4 : 3.7 :: 3.7 : x$ , then find the value of x.

**A)** 5.27 **B)** 6.88 **C)** 1.85 **D)** 0.58

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 89.38%

Wrong: 4.14%

**Q121)** A total profit of ₹12,200 is to be distributed amongst P, Q, and R such that  $P : Q = 15 : 4$  and  $Q : R = 3 : 1$ . The share (in ₹) of R in the profit is:

- A)** 700 **B)** 800 **C)** 650 **D)** 750

Date: 21/06/2025 Time: 4:30 PM - 6:00 PM Right: 89.45% Wrong: 4.26%

**Q122)** A sum of money is to be distributed among A, B, C, and D in the ratio of  $10 : 4 : 8 : 5$ . If C gets ₹24 more than B, how much did A receive?

- A)** ₹63 **B)** ₹59 **C)** ₹60 **D)** ₹58

Date: 23/06/2025 Time: 4:30 PM - 6:00 PM Right: 89.47% Wrong: 3.29%

**Q123)** If the third proportional of 81 and Z is 9, then what is the positive value of Z?

- A)** 25 **B)** 28 **C)** 27 **D)** 30

Date: 18/06/2025 Time: 4:30 PM - 6:00 PM Right: 89.94% Wrong: 2.55%

**Q124)** Two numbers are respectively 47% and 25% more than a third number. The ratio of the two numbers is:

- A)** 161 : 137 **B)** 155 : 132 **C)** 149 : 124 **D)** 147 : 125

Date: 16/06/2025 Time: 4:30 PM - 6:00 PM Right: 90.37% Wrong: 2.68%

**Q125)** The ratio of 76 hours to 7 days is:

- A)** 76 : 7 **B)** 19 : 42 **C)** 22 : 43 **D)** 21 : 48

Date: 16/06/2025 Time: 12:45 PM - 2:15 PM Right: 90.51% Wrong: 5.98%

**Q126)** If 20% of a number is equal to  $\frac{3}{4}$  of another number, then what is the ratio of the first number to the second number?

- A)** 15 : 4 **B)** 13 : 5 **C)** 20 : 1 **D)** 10 : 7

Date: 21/06/2025 Time: 4:30 PM - 6:00 PM Right: 90.86% Wrong: 3.48%

**Q127)** What will come in place of 'A' in the given ratio?

$$\frac{138}{A} = \frac{4}{50}$$

- A)** 1724 **B)** 1725 **C)** 1726 **D)** 1723

Date: 24/06/2025 Time: 12:45 PM - 2:15 PM Right: 92.32% Wrong: 3.08%

**Q128)** If  $a : b = 3 : 4$  and  $b : c = 4 : 7$ , then  $\frac{a+b+c}{c}$  is equal to:

- A)**  $\frac{7}{2}$  **B)**  $\frac{14}{3}$  **C)** 14 **D)** 2

Date: 09/06/2025 Time: 4:30 PM - 6:00 PM Right: 93.05% Wrong: 3.74%

Q129) If 48, 96, 20, and y are in proportion, then the value of y is:

A) 38 B) 37 C) 34 D) 40

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 93.14%

Wrong: 2.25%

Q130) If 12, 60, 13, and y are in proportion, then the value of y is:

A) 63 B) 65 C) 72 D) 56

Date: 18/06/2025

Time: 4:30 PM - 6:00 PM

Right: 93.21%

Wrong: 2.68%

Q131) If  $14 : A :: A : 56$ , find the positive value of A.

A) 29 B) 31 C) 28 D) 26

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 93.71%

Wrong: 1.50%

Q132) If the ratio of two numbers a and b is 5 : 3, then find the value of  $(3a - 2b) : (6a + 2b)$ .

A) 4 : 5 B) 2 : 3 C) 1 : 3 D) 1 : 4

Date: 13/06/2025

Time: 4:30 PM - 6:00 PM

Right: 93.99%

Wrong: 2.73%

Q133) If 14, 7, 12, and y are in proportion, then the value of y is:

A) 10 B) 6 C) 16 D) 2

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 94.19%

Wrong: 2.36%

Q134) The ratio of numbers of girls and boys participating in sports of a school is 1 : 5. If the number of girls is 201, determine the number of boys participating in the sports.

A) 980 B) 1025 C) 1005 D) 1035

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 94.80%

Wrong: 2.63%

Q135) Which of the following is the equivalent ratio of 7 : 9?

A) 67 : 93 B) 67 : 91 C) 72 : 95 D) 70 : 90

Date: 19/06/2025

Time: 9:00 AM - 10:30 AM

Right: 94.80%

Wrong: 1.70%

Q136) If  $10 : A :: A : 40$ , find the positive value of A.

A) 23 B) 21 C) 18 D) 20

Date: 10/06/2025

Time: 4:30 PM - 6:00 PM

Right: 95.67%

Wrong: 1.04%

Q137) The ratio of numbers of girls and boys participating in sports of a school is 1 : 5. If the number of girls is 200, determine the number of boys participating in the sports.

A) 1020 B) 1000 C) 975 D) 1030

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 95.86%

Wrong: 1.58%

**Q138)** Which of the following is the equivalent ratio of 6 : 4?

**A)** 60 : 40   **B)** 66 : 56   **C)** 61 : 41   **D)** 62 : 46

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 96.22%

Wrong: 1.44%

### Answer Key (Q1 to Q138) Ratio and Proportion

Q1: 2	Q2: 2	Q3: 1	Q4: 1	Q5: 2
Q6: 3	Q7: 1	Q8: 2	Q9: 3	Q10: 1
Q11: 3	Q12: 3	Q13: 3	Q14: 3	Q15: 3
Q16: 4	Q17: 4	Q18: 4	Q19: 3	Q20: 3
Q21: 1	Q22: 2	Q23: 2	Q24: 4	Q25: 2
Q26: 1	Q27: 2	Q28: 2	Q29: 1	Q30: 1
Q31: 2	Q32: 3	Q33: 3	Q34: 3	Q35: 3
Q36: 1	Q37: 1	Q38: 1	Q39: 4	Q40: 4
Q41: 2	Q42: 1	Q43: 1	Q44: 1	Q45: 4
Q46: 1	Q47: 1	Q48: 1	Q49: 1	Q50: 1
Q51: 4	Q52: 1	Q53: 3	Q54: 2	Q55: 1
Q56: 2	Q57: 4	Q58: 2	Q59: 4	Q60: 4
Q61: 4	Q62: 3	Q63: 2	Q64: 2	Q65: 1
Q66: 4	Q67: 1	Q68: 1	Q69: 3	Q70: 3
Q71: 1	Q72: 1	Q73: 3	Q74: 3	Q75: 3
Q76: 3	Q77: 3	Q78: 4	Q79: 4	Q80: 2
Q81: 2	Q82: 2	Q83: 1	Q84: 3	Q85: 1
Q86: 3	Q87: 3	Q88: 3	Q89: 4	Q90: 3
Q91: 3	Q92: 3	Q93: 3	Q94: 2	Q95: 2
Q96: 2	Q97: 2	Q98: 4	Q99: 4	Q100: 4
Q101: 2	Q102: 1	Q103: 2	Q104: 3	Q105: 1
Q106: 4	Q107: 4	Q108: 1	Q109: 3	Q110: 4
Q111: 4	Q112: 1	Q113: 3	Q114: 2	Q115: 3

Q116: 3	Q117: 3	Q118: 4	Q119: 4	Q120: 3
Q121: 2	Q122: 3	Q123: 3	Q124: 4	Q125: 2
Q126: 1	Q127: 2	Q128: 4	Q129: 4	Q130: 2
Q131: 3	Q132: 4	Q133: 2	Q134: 3	Q135: 4
Q136: 4	Q137: 2	Q138: 1		

## Profit and Loss

Q1) If the selling price of a bed is 2-times of initial, then the profit is 7-times of initial. Find the initial profit percentage (in %).

A) 250 B) 20 C) 28.57 D) 350

Date: 19/06/2025

Time: 9:00 AM - 10:30 AM

Right: 18.25%

Wrong: 41.70%

Q2) If the selling price of a bed is 2-times of initial, then the profit is 6-times of initial. Find the initial profit percentage (in %).

A) 33.33 B) 300 C) 200 D) 25

Date: 18/06/2025

Time: 9:00 AM - 10:30 AM

Right: 19.52%

Wrong: 47.04%

Q3) If the selling price of a bed is 2-times of initial, then the profit is 10-times of initial. Find the initial profit percentage (in %).

A) 400 B) 20 C) 12.5 D) 500

Date: 05/06/2025

Time: 4:30 PM - 6:00 PM

Right: 19.99%

Wrong: 38.40%

Q4) Yashika buys 6 apples and 6 mangoes for ₹216. When the cost of an apple is decreased by 30% and that of a mango remains the same, then the cost of 5 apples and 8 mangoes is ₹162. What is the original cost of 7 apples and 2 mangoes?

A) ₹211 B) ₹217 C) ₹212 D) ₹214

Date: 19/06/2025

Time: 9:00 AM - 10:30 AM

Right: 20.69%

Wrong: 8.55%

Q5) If the manufacturer gains 10%, the wholesale gains 15% and the retailer gains 25%, then find the cost of production of a table (in ₹), whose retail price for the customer is ₹31,900.

(NOTE: Manufacturer sells to wholesaler, wholesaler sells to retailer and retailer sells to customers.)

A) 20,000 B) 23,200 C) 25,000 D) 22,000

Date: 17/06/2025

Time: 4:30 PM - 6:00 PM

Right: 22.07%

Wrong: 27.41%

**Q6)** Gaurav bought the first pen for ₹444 and the second pen for ₹356, respectively. He sells the first pen at 75% of the profit but the buyer bargains for the price, and he has to offer a 14% discount and the second pen at 48% of the profit. Find the total profit he had in this transaction (correct to two decimal places).

**A)** ₹396.11 **B)** ₹399.02 **C)** ₹394.67 **D)** ₹395.10

Date: 06/06/2025

Time: 4:30 PM - 6:00 PM

Right: 22.22%

Wrong: 15.78%

**Q7)** Govind bought two items at a total cost of ₹4,800. He sold one item at 34% profit and the other at 10% loss. If Govind sold both the items together for ₹5,442, then what is the difference between the cost price (in ₹) of both the items?

**A)** 350 **B)** 300 **C)** 275 **D)** 325

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 23.65%

Wrong: 16.47%

**Q8)** Sachin bought the first pen for ₹630 and the second pen for ₹722, respectively. He sells the first pen at 70% of the profit but the buyer bargains for the price, and he has to offer a 9% discount and the second pen at 71% of the profit. Find the total profit he had in this transaction (correct to two decimal places).

**A)** ₹855.49 **B)** ₹857.23 **C)** ₹856.32 **D)** ₹854.79

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 24.40%

Wrong: 14.64%

**Q9)** Anand purchased an item and incurred ₹127 in repair expenses. Subsequently, he sold it to Bharath with a 52% profit. Eventually, Bharath sold the item for ₹4,788, making a 44% loss. What was the original cost (in ₹) of the item for Anand?

**A)** 5,498 **B)** 5,523 **C)** 5,625 **D)** 5,628

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 24.40%

Wrong: 20.14%

**Q10)** If the selling price of a bed is 2-times of initial, then the profit is 8-times of initial. Find the initial profit percentage (in %).

**A)** 300 **B)** 400 **C)** 25 **D)** 16.67

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 25.11%

Wrong: 36.24%

**Q11)** Umesh sold an article at a loss of 22%. If he had bought the item at 5% less and had sold it for ₹935 more, then he would have gained 15%. Find the cost price (in ₹) of the article.

**A)** 2,992 **B)** 2,839 **C)** 3,488 **D)** 3,241

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 25.87%

Wrong: 13.50%

**Q12)** Anil bought the first pen for ₹100 and the second pen for ₹160, respectively. He sells the first pen at 15% of the profit but the buyer bargains for the price, and he has to offer a 29% discount and the second pen at 58% of the profit. Find the total profit he had in this transaction (correct to two decimal places).

**A)** ₹74.26 **B)** ₹74.45 **C)** ₹77.75 **D)** ₹72.91

Date: 10/06/2025 Time: 12:45 PM - 2:15 PM Right: 26.28% Wrong: 14.24%

**Q13)** On selling a stool for ₹8,378, the value of gain is 20% more than the value of loss incurred on selling it for ₹1,756. In order to gain 50%, find the selling price (in ₹).

**A)** 7,150 **B)** 7,148 **C)** 7,151 **D)** 7,149

Date: 12/06/2025 Time: 12:45 PM - 2:15 PM Right: 27.27% Wrong: 12.15%

**Q14)** The marked price of a bed is ₹744, which is 31% above the cost price. If the profit percentage is 9%. Find the discount percentage. (rounded off to two decimal places)

**A)** 15.52% **B)** 18.65% **C)** 14.59% **D)** 16.79%

Date: 10/06/2025 Time: 9:00 AM - 10:30 AM Right: 27.63% Wrong: 15.14%

**Q15)** On selling a wardrobe at ₹3,437, the value of gain is 75% more than the value of loss incurred on selling it at ₹3,338. In order to gain 50%, find the selling price (in ₹).

**A)** 5,061 **B)** 5,058 **C)** 5,062 **D)** 5,059

Date: 06/06/2025 Time: 12:45 PM - 2:15 PM Right: 28.20% Wrong: 13.28%

**Q16)** The marked price of a bed is ₹568, which is 26% above the cost price. If the profit percentage is 13%. Find the discount percentage (rounded off to two decimal places).

**A)** 13.33% **B)** 10.32% **C)** 8.98% **D)** 10.93%

Date: 10/06/2025 Time: 4:30 PM - 6:00 PM Right: 29.73% Wrong: 23.47%

**Q17)** The marked price of a sofa is ₹578, which is 34% above the cost price. If the profit percentage is 10%, find the discount percentage (rounded off to two decimal places).

**A)** 20.61% **B)** 17.91% **C)** 21.84% **D)** 15.83%

Date: 13/06/2025 Time: 4:30 PM - 6:00 PM Right: 30.09% Wrong: 21.61%

**Q18)** On selling a bed at ₹8,845, the value of gain is 25% more than the value of loss incurred on selling it at ₹1,987. In order to gain 20%, find the selling price (in ₹).

**A)** 6,042 **B)** 6,039 **C)** 6,044 **D)** 6,043

Date: 10/06/2025 Time: 4:30 PM - 6:00 PM Right: 30.40% Wrong: 10.29%

**Q19)** The marked price of a bookshelf is ₹397, which is 28% above the cost price. If the profit percentage is 3%. Find the discount percentage (rounded off to two decimal places).

**A)** 21.31% **B)** 16.89% **C)** 18.13% **D)** 19.53%

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 31.10%

Wrong: 20.66%

**Q20)** Akash sold an article at a loss of 21%. If he had bought the item at 8% less and had sold it for ₹198 more, then he would have gained 5%. Find the cost price (in ₹) of the article.

**A)** 1,419 **B)** 686 **C)** 1,125 **D)** 685

Date: 16/06/2025

Time: 9:00 AM - 10:30 AM

Right: 32.57%

Wrong: 13.73%

**Q21)** If the selling price of a bed is 3-times of initial, then the profit is 4-times of initial. Find the initial profit percentage (in %).

**A)** 75 **B)** 133.33 **C)** 200 **D)** 33.33

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 32.73%

Wrong: 38.49%

**Q22)** The marked price of a bed is ₹517, which is 30% above the cost price. If the profit percent is 2%. Find the discount percentage. (rounded off to two decimal places)

**A)** 18.57% **B)** 24.06% **C)** 20.36% **D)** 21.54%

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 33.30%

Wrong: 20.73%

**Q23)** The retail price of a water geyser is ₹11,300. If the manufacturer gains 5%, the wholesale dealer gains 10% and the retailer gains 15%, then find the cost price of the water geyser (rounded off to two decimal places.)

(Note: Manufacturer sells to wholesaler, wholesaler sells to retailer and retailer sells to customer.)

**A)** ₹9,500.75 **B)** ₹8,507.43 **C)** ₹10,110.11 **D)** ₹6,050.25

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 34.45%

Wrong: 22.41%

**Q24)** The marked price of a wardrobe is ₹668, which is 22% above the cost price. If the profit percentage is 7%, find the discount percentage (rounded off to two decimal places).

**A)** 9.52% **B)** 12.30% **C)** 9.87% **D)** 11.79%

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 34.63%

Wrong: 15.27%

**Q25)** A vendor buys 42 laptop bags for ₹41,622 and sells them at 35 for ₹37,345. How many laptop bags should be bought and sold to earn a profit of ₹3,952?

**A)** 52 **B)** 16 **C)** 34 **D)** 76

Date: 12/06/2025

Time: 12:45 PM - 2:15 PM

Right: 35.22%

Wrong: 11.56%

**Q26)** A dealer sells two dryers at the rate of ₹63,000 per dryer. On one, he earns a profit of 5% and on the other he loses 30%. What is his loss percentage in the whole transaction?

- A)** 14% **B)** 17% **C)** 15% **D)** 16%

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 36.67%

Wrong: 28.81%

**Q27)** If the manufacturer gains 10%, the wholesaler gains 15%, and the retailer gains 28%, then find the cost of production of a table (in ₹), whose retail price for the customer is ₹75,900. (NOTE: Manufacturer sells to wholesaler, wholesaler sells to retailer and retailer sells to customers.)

- A)** 60,000 **B)** 53,906.25 **C)** 46,875 **D)** 51,562.5

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 38.78%

Wrong: 18.81%

**Q28)** A dishonest shopkeeper claims that he sells rock salt at ₹17/kg, which costs him ₹20/kg. But he gives 567 g instead of 1134 g. What is his profit percentage?

- A)** Profit of 68% **B)** Profit of 73% **C)** Profit of 70% **D)** Profit of 69%

Date: 19/06/2025

Time: 12:45 PM - 2:15 PM

Right: 41.50%

Wrong: 17.78%

**Q29)** A shopkeeper purchased 59 dozens of articles at the rate of ₹728 per dozen. He sold each one of them at the rate of ₹91. What percentage profit did he make?

- A)** 50% **B)** 52% **C)** 48% **D)** 49%

Date: 14/06/2025

Time: 12:45 PM - 2:15 PM

Right: 41.69%

Wrong: 23.86%

**Q30)** Jitesh sold an article at a loss of 11%. If he had bought the item at 5% less and had sold it for ₹739 more, then he would have gained 20%. Find the cost price (in ₹) of the article.

- A)** 3,361 **B)** 2,619 **C)** 2,956 **D)** 3,204

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 41.96%

Wrong: 9.87%

**Q31)** Akash sold an article at a loss of 17%. If he had bought the item at 5% less and had sold it for ₹310 more, then he would have gained 20%. Find the cost price (in ₹) of the article.

- A)** 674 **B)** 785 **C)** 1,000 **D)** 1,215

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 42.90%

Wrong: 16.13%

**Q32)** A vendor buys 44 laptop bags for ₹48,884 and sells them at 28 for ₹35,252. How many laptop bags should be bought and sold to earn a profit of ₹6,956?

- A)** 17 **B)** 37 **C)** 47 **D)** 20

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 43.38%

Wrong: 14.09%

**Q33)** If the selling price of a bed is 2-times of initial, then the profit is 11-times of initial. Find the initial profit percentage.

- A)**  $9\frac{2}{11}\%$  **B)** 11% **C)**  $11\frac{1}{9}\%$  **D)** 9%

Date: 06/06/2025

Time: 9:00 AM - 10:30 AM

Right: 43.49%

Wrong: 21.94%

**Q34)** Anand purchased an item and incurred ₹169 in repair expenses. Subsequently, he sold it to Bharath with a 25% profit. Eventually, Bharath sold the item for ₹4,480, making a 44% loss. What was the original cost (in ₹) of the item for Anand?

- A)** 6,397 **B)** 6,231 **C)** 6,400 **D)** 6,403

Date: 20/06/2025

Time: 4:30 PM - 6:00 PM

Right: 45.23%

Wrong: 17.01%

**Q35)** What price should Kunal mark on a pair of pants which costs him ₹3,300, so as to gain 33% after allowing a successive discount of 25% and 30%?

- A)** ₹8,310 **B)** ₹8,360 **C)** ₹8,256 **D)** ₹8,290

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 47.93%

Wrong: 12.10%

**Q36)** A shopkeeper expects a gain of 34% on his cost price. If, in a week, his sales proceeds were ₹3,417, what was his profit (in ₹)?

- A)** 865 **B)** 867 **C)** 870 **D)** 864

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 49.06%

Wrong: 10.53%

**Q37)** After allowing a discount of 76%, the value of a ceiling fan is ₹3,330. If no discount is allowed, then the shopkeeper gains 50%. Find the cost price (in ₹) of the ceiling fan.

- A)** 9,247 **B)** 9,248 **C)** 9,252 **D)** 9,250

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 49.54%

Wrong: 11.91%

**Q38)** A shopkeeper purchased 83 dozens of articles at the rate of ₹560 per dozen. He sold each one of them at the rate of ₹49. What percentage profit did he make?

- A)** 8% **B)** 3% **C)** 5% **D)** 7%

Date: 14/06/2025

Time: 9:00 AM - 10:30 AM

Right: 51.73%

Wrong: 18.30%

**Q39)** After allowing a discount of 80%, the value of an oven is ₹5,180. If no discount is allowed, then the shopkeeper gains 48%. Find the cost price (in ₹) of the oven.

- A)** 17,502 **B)** 17,503 **C)** 17,501 **D)** 17,500

Date: 11/06/2025

Time: 12:45 PM - 2:15 PM

Right: 51.99%

Wrong: 17.22%

**Q40)** A dealer purchased a washing machine for ₹1,301. After allowing a discount of 53% on its marked price, he still gains 41%. Find the marked price of the washing machine.

**A)** ₹3,940 **B)** ₹3,886 **C)** ₹3,917 **D)** ₹3,903

Date: 23/06/2025 Time: 4:30 PM - 6:00 PM Right: 53.20% Wrong: 11.84%

**Q41)** The percentage profit earned by selling an article for ₹6,833 is equal to the percentage loss incurred by selling the same article for ₹1,447. At what price should the article be sold (in ₹) to make a 45% profit?

**A)** 6,003 **B)** 6,001 **C)** 6,002 **D)** 6,005

Date: 13/06/2025 Time: 9:00 AM - 10:30 AM Right: 53.25% Wrong: 10.56%

**Q42)** If the manufacturer gains 10%, the wholesale gains 16% and the retailer gains 25%, then find the cost of production of a table (in ₹), whose retail price for the customer is ₹63,800.  
(NOTE: Manufacturer sells to wholesaler, wholesaler sells to retailer and retailer sells to customer.)

**A)** 40,000 **B)** 50,000 **C)** 44,000 **D)** 46,400

Date: 18/06/2025 Time: 4:30 PM - 6:00 PM Right: 53.96% Wrong: 13.71%

**Q43)** If goods are purchased at ₹450 and  $\frac{1}{3}$  are sold at a loss of 10%, at what gain percentage should the remainder be sold so as to gain 20% on the whole transaction?

**A)** 32% **B)** 28% **C)** 26% **D)** 35%

Date: 09/06/2025 Time: 9:00 AM - 10:30 AM Right: 54.90% Wrong: 15.56%

**Q44)** An article is sold for ₹x. If it is sold at 40% of this price, there is a loss of 50%. What is the percentage profit when it is sold for ₹x?

**A)** 25% **B)** 22% **C)** 28% **D)** 27%

Date: 20/06/2025 Time: 4:30 PM - 6:00 PM Right: 59.06% Wrong: 7.75%

**Q45)** A shopkeeper marked his goods at X% above their cost price and sold them at a discount of 60%. If he gained 84% profit, then find the value of X.

**A)** 362 **B)** 360 **C)** 359 **D)** 361

Date: 16/06/2025 Time: 4:30 PM - 6:00 PM Right: 59.37% Wrong: 6.37%

**Q46)** A dealer purchased a water cooler for ₹56,000. He allows a discount of 81% on its marked price and still gains 71%. Find the marked price of the water cooler.

**A)** ₹5,03,937 **B)** ₹5,03,908 **C)** ₹5,04,030 **D)** ₹5,04,000

Date: 20/06/2025 Time: 9:00 AM - 10:30 AM Right: 59.57% Wrong: 9.16%

**Q47)** A dealer purchased a water heater for ₹2,107. After allowing a discount of 79% on its marked price, he still gains 89%. Find the marked price of the water heater.

**A)** ₹19,065 **B)** ₹18,987 **C)** ₹18,948 **D)** ₹18,963

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 59.57%

Wrong: 7.40%

**Q48)** A shopkeeper marks the price of an article at ₹5,180. Find the cost price if after allowing a discount of 31% he still gains 5% on the cost price.

**A)** ₹3,387 **B)** ₹3,470 **C)** ₹3,404 **D)** ₹3,376

Date: 12/06/2025

Time: 12:45 PM - 2:15 PM

Right: 59.65%

Wrong: 16.08%

**Q49)** A dealer purchased a ceiling fan for ₹66,000. He allows a discount of 56% on its marked price and still gains 69%. Find the marked price of the ceiling fan.

**A)** ₹2,53,597 **B)** ₹2,53,394 **C)** ₹2,53,426 **D)** ₹2,53,500

Date: 19/06/2025

Time: 9:00 AM - 10:30 AM

Right: 60.47%

Wrong: 9.98%

**Q50)** The marked price of a desk is ₹7,725, which is 25% above the cost price. It is sold at a discount of 4% on the marked price. Find the profit percentage.

**A)** 21% **B)** 19% **C)** 20% **D)** 22%

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 61.36%

Wrong: 18.65%

**Q51)** The percentage profit earned by selling an article for ₹3,471 is equal to the percentage loss incurred by selling the same article for ₹2,577. At what price should the article be sold (in ₹) to make a 25% profit?

**A)** 3,783 **B)** 3,780 **C)** 3,778 **D)** 3,781

Date: 13/06/2025

Time: 4:30 PM - 6:00 PM

Right: 62.09%

Wrong: 6.71%

**Q52)** Rohit marks the price of his article 60% more than its cost price. If he sells the article for ₹18,510 after allowing a discount of 85%, then what will be the cost price (in ₹) of the article?

**A)** 77,124 **B)** 77,128 **C)** 77,127 **D)** 77,125

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 62.83%

Wrong: 9.02%

**Q53)** An article is sold for ₹x. If it is sold at 25% of this price, there is a loss of 50%. What is the percentage profit when it is sold for ₹x?

**A)** 100% **B)** 101% **C)** 97% **D)** 98%

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 63.01%

Wrong: 7.25%

**Q54)** The percentage profit earned by selling a table lamp for ₹214 is equal to the percentage loss incurred by selling the same table lamp for ₹146. At what price (in ₹) should the table lamp be sold to make 55% profit?

**A)** 278 **B)** 282 **C)** 279 **D)** 276

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 63.27%

Wrong: 8.59%

**Q55)** A retailer allows a 22% discount on the marked price. What should be the marked price (in ₹) of an item whose cost price is ₹546, in order to make a profit of 60%?

**A)** 1,122 **B)** 1,120 **C)** 1,118 **D)** 1,123

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 63.41%

Wrong: 11.12%

**Q56)** A dealer purchased an oven for ₹605. After allowing a discount of 45% on its marked price, he still gains 37%. Find the marked price of the oven.

**A)** ₹1,421 **B)** ₹1,502 **C)** ₹1,537 **D)** ₹1,507

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 64.39%

Wrong: 9.15%

**Q57)** A manufacturer fixes his selling price at 30% over the cost of production. If the cost of production goes up by 30%, and the manufacturer raises his selling price by 70%, find the profit percentage.

**A)** 70% **B)** 73% **C)** 69% **D)** 71%

Date: 24/06/2025

Time: 4:30 PM - 6:00 PM

Right: 64.45%

Wrong: 12.21%

**Q58)** The profit made on a product is 66%. What is the loss percentage (rounded off to two decimal place) incurred on the sale if the figures of both the cost price and the selling price are interchanged?

**A)** 39.76% **B)** 38.40% **C)** 41.12% **D)** 38.57%

Date: 24/06/2025

Time: 12:45 PM - 2:15 PM

Right: 64.68%

Wrong: 14.70%

**Q59)** A retailer allows a 10% discount on the marked price. What price (in ₹) must be marked on an item whose cost price is ₹626 to make a profit of 35%?

**A)** 939 **B)** 938 **C)** 937 **D)** 942

Date: 24/06/2025

Time: 12:45 PM - 2:15 PM

Right: 65.59%

Wrong: 11.02%

**Q60)** Mukesh sold a car for ₹2,03,700 at 10% loss. For what price (in ₹) should he sell the car to gain 68% profit?

**A)** 3,80,238 **B)** 3,80,240 **C)** 3,80,237 **D)** 3,80,243

Date: 23/06/2025

Time: 4:30 PM - 6:00 PM

Right: 65.98%

Wrong: 11.65%

**Q61)** A dealer marks his goods at 5% above the cost price and allows a discount of 67% on the marked price. What is his gain or loss percentage (correct to two decimal places)?

**A)** 66.14% loss **B)** 68.42% loss **C)** 65.35% loss **D)** 66.1% loss

Date: 14/06/2025

Time: 12:45 PM - 2:15 PM

Right: 66.07%

Wrong: 15.75%

**Q62)** A shopkeeper marked his goods at  $X\%$  above their cost price and sold them at a discount of 16%. If he gained 68% profit, then find the value of  $X$ .

**A)** 101 **B)** 100 **C)** 99 **D)** 102

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 66.19%

Wrong: 10.94%

**Q63)** A shopkeeper marked his goods at  $X\%$  above their cost price and sold them at a discount of 10%. If he gained 71% profit, then find the value of  $X$ .

**A)** 91 **B)** 89 **C)** 92 **D)** 90

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 66.64%

Wrong: 10.18%

**Q64)** Arjun marks the price of his article 50% more than its cost price. If he sells the article for ₹86,580 after allowing a discount of 26%, then what will be the cost price (in ₹) of the article?

**A)** 77,999 **B)** 78,002 **C)** 78,003 **D)** 78,000

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 66.88%

Wrong: 10.10%

**Q65)** A shopkeeper buys 20 pens at ₹15 each and another 30 pens at ₹10 each. He mixes all the pens and sells them at ₹14 each. What is the profit or loss per pen he makes on an average?

**A)** ₹0.50 loss **B)** ₹1 profit **C)** ₹0.20 loss **D)** ₹2 profit

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 67.38%

Wrong: 13.44%

**Q66)** The profit made on a product is 79%. What is the loss percentage (correct to two decimal places) incurred on the sale if the figures of both the cost price and the selling price are interchanged?

**A)** 45.77% **B)** 46.79% **C)** 45.18% **D)** 44.13%

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 67.67%

Wrong: 8.67%

**Q67)** The percentage profit earned by selling a table lamp for ₹863 is equal to the percentage loss incurred by selling the same table lamp for ₹433. At what price (in ₹) should the table lamp be sold to make 25% profit?

**A)** 812 **B)** 810 **C)** 811 **D)** 813

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 67.91%

Wrong: 5.99%

**Q68)** A retailer allows a 22% discount on the marked price. What should be the marked price (in ₹) of an item whose cost price is ₹780, in order to make a profit of 26%?

**A)** 1,257 **B)** 1,258 **C)** 1,260 **D)** 1,261

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 68.15%

Wrong: 7.52%

**Q69)** The marked price of a bookshelf is ₹3,100, which is 25% above the cost price. It is sold at a discount of 12% on the marked price. Find the profit percentage.

**A)** 11% **B)** 8% **C)** 9% **D)** 10%

Date: 06/06/2025

Time: 9:00 AM - 10:30 AM

Right: 68.16%

Wrong: 13.81%

**Q70)** A shopkeeper marks the price of an article at ₹5,960. Find the cost price if after allowing a discount of 9% he still gains 30% on the cost price.

**A)** ₹4,277 **B)** ₹4,154 **C)** ₹4,172 **D)** ₹4,142

Date: 11/06/2025 Time: 12:45 PM - 2:15 PM Right: 68.58% Wrong: 9.46%

**Q71)** After allowing a discount of 64%, the value of a water cooler is ₹6,480. If no discount is allowed, then the shopkeeper gains 20%. Find the cost price (in ₹) of the water cooler.

**A)** 15,000 **B)** 14,998 **C)** 14,999 **D)** 14,997

Date: 11/06/2025 Time: 4:30 PM - 6:00 PM Right: 68.95% Wrong: 9.11%

**Q72)** A vendor bought lemons at 7 for ₹1. How many lemons must he sell for ₹1 to gain 75%?

**A)** 8 **B)** 4 **C)** 5 **D)** 6

Date: 05/06/2025 Time: 9:00 AM - 10:30 AM Right: 69.71% Wrong: 15.83%

**Q73)** A dealer marks his goods at 65% above the cost price and allows a discount of 59% on the marked price. What is his gain or loss percentage (correct to two decimal places)?

**A)** 33.53% loss **B)** 33.88% gain **C)** 32.35% loss **D)** 32.07% gain

Date: 14/06/2025 Time: 9:00 AM - 10:30 AM Right: 69.74% Wrong: 14.21%

**Q74)** The marked price of a bed is ₹1,600, which is 25% above the cost price. It is sold at a discount of 16% on the marked price. Find the profit percentage.

**A)** 5% **B)** 4% **C)** 6% **D)** 7%

Date: 06/06/2025 Time: 12:45 PM - 2:15 PM Right: 71.27% Wrong: 13.85%

**Q75)** A shopkeeper fixes the marked price of an item 52% above its cost price. What percentage of discount on the marked price should be allowed to gain 14%?

**A)** 28% **B)** 22% **C)** 27% **D)** 25%

Date: 18/06/2025 Time: 12:45 PM - 2:15 PM Right: 72.13% Wrong: 12.34%

**Q76)** Rahul marks the price of his article 64% more than its cost price. If he sells the article for ₹59,860 after allowing a discount of 50%, then what will be the cost price (in ₹) of the article?

**A)** 72,999 **B)** 73,001 **C)** 72,997 **D)** 73,000

Date: 12/06/2025 Time: 9:00 AM - 10:30 AM Right: 72.21% Wrong: 6.95%

**Q77)** A sells a camera to B at a loss of 60% and B sells the camera to C at a profit of 25%. If C purchased the camera for ₹62,616, then what was the cost (in ₹) of the camera for A?

**A)** 1,25,229 **B)** 1,25,230 **C)** 1,25,226 **D)** 1,25,232

Date: 23/06/2025 Time: 4:30 PM - 6:00 PM Right: 72.53% Wrong: 9.18%

**Q78)** A vendor sold 5 chocolates for ₹1, thereby gaining 40%. How many chocolates did he buy for ₹1?

**A)** 9 **B)** 11 **C)** 13 **D)** 7

Date: 05/06/2025 Time: 12:45 PM - 2:15 PM Right: 73.42% Wrong: 13.44%

**Q79)** A sells a printer to B at a loss of 60% and B sells the printer to C at a profit of 25%. If C purchased the printer for ₹89,569 then what was the cost (in ₹) of the printer for A?

**A)** 1,79,141 **B)** 1,79,140 **C)** 1,79,138 **D)** 1,79,134

Date: 21/06/2025 Time: 9:00 AM - 10:30 AM Right: 73.46% Wrong: 7.15%

**Q80)** A shopkeeper expects a gain of 30% on his cost price. If, in a week, his sales proceeds were ₹2,938, what was his profit (in ₹)?

**A)** 680 **B)** 676 **C)** 678 **D)** 679

Date: 12/06/2025 Time: 9:00 AM - 10:30 AM Right: 73.77% Wrong: 9.08%

**Q81)** A grocer marked his goods 40% above their cost price and sold them at a discount of X%. If he gained 33% profit, then find the value of X.

**A)** 4 **B)** 2 **C)** 5 **D)** 3

Date: 24/06/2025 Time: 12:45 PM - 2:15 PM Right: 74.18% Wrong: 7.98%

**Q82)** A grocer marked his goods at 70% above the cost price and sold them at a discount of X%. If he gained 53% profit, then find the value of X.

**A)** 11 **B)** 9 **C)** 10 **D)** 7

Date: 24/06/2025 Time: 4:30 PM - 6:00 PM Right: 74.32% Wrong: 10.85%

**Q83)** The selling price of 20 books is equal to the cost price of 6 books. Find the loss or gain percentage.

**A)** 70% gain **B)**  $\frac{50}{7}$ % gain **C)**  $\frac{50}{7}$ % loss **D)** 70% loss

Date: 20/06/2025 Time: 12:45 PM - 2:15 PM Right: 74.78% Wrong: 17.35%

**Q84)** Rohit bought an article for ₹4,400. He spent ₹3,600 on it. He marked the price 25% above his total cost price. He then allowed two successive discounts of 19% on it. Find the selling price (in ₹) of the article.

**A)** 6,560 **B)** 6,563 **C)** 6,561 **D)** 6,564

Date: 09/06/2025 Time: 12:45 PM - 2:15 PM Right: 74.83% Wrong: 6.88%

**Q85)** An article was bought for ₹8,100. Its price was marked up by 40%. Thereafter it was sold at a discount of 15% on the marked price. What was the percentage profit on the transaction?

**A)** 20% **B)** 17% **C)** 18% **D)** 19%

Date: 06/06/2025 Time: 4:30 PM - 6:00 PM Right: 75.08% Wrong: 12.31%

**Q86)** A shopkeeper fixes the marked price of an item 50% above its cost price. What percentage of discount on the marked price should be allowed to gain 14%?

- A)** 21% **B)** 27% **C)** 26% **D)** 24%

Date: 18/06/2025

Time: 9:00 AM - 10:30 AM

Right: 75.31%

Wrong: 13.63%

**Q87)** A dealer purchased an oven for ₹54,000. He allows a discount of 10% on its marked price and still gains 75%. Find the marked price of the oven.

- A)** ₹1,04,868 **B)** ₹1,04,968 **C)** ₹1,05,000 **D)** ₹1,04,961

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 75.49%

Wrong: 6.43%

**Q88)** The selling price of 30 books is equal to the cost price of 36 books. Find the loss or gain percentage.

- A)** 20% loss **B)**  $\frac{50}{3}\%$  gain **C)**  $\frac{50}{3}\%$  loss **D)** 20% gain

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 76.19%

Wrong: 18.71%

**Q89)** The selling price of 34 books is equal to the cost price of 17 books. Find the loss or gain percentage.

- A)** 50% loss **B)**  $\frac{100}{17}\%$  gain **C)** 50% gain **D)**  $\frac{100}{17}\%$  loss

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 76.54%

Wrong: 18.00%

**Q90)** A vendor sells oranges at ₹29 each and incurs a loss of 75%. If he wants to make a profit of 75%, at what price (in ₹) should he sell each orange?

- A)** 201 **B)** 206 **C)** 203 **D)** 205

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 76.60%

Wrong: 8.02%

**Q91)** A sells a smartphone to B at a loss of 60% and B sells the smartphone to C at a profit of 25%. If C purchased the smartphone for ₹42,206, then what was the cost (in ₹) of the smartphone for A?

- A)** 84,412 **B)** 84,415 **C)** 84,407 **D)** 84,406

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 77.17%

Wrong: 5.95%

**Q92)** A shopkeeper marks the price of an article at ₹3,930. Find the cost price if after allowing a discount of 40% he still gains 20% on the cost price.

- A)** ₹1,899 **B)** ₹1,965 **C)** ₹1,989 **D)** ₹1,981

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 77.59%

Wrong: 7.00%

**Q93)** A grocer marked his goods at 60% above their cost price and sold them at a discount of X%. If he gained 52% profit, then find the value of X.

- A)** 7 **B)** 5 **C)** 2 **D)** 3

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 77.68%

Wrong: 6.74%

**Q94)** A man sold an article at a gain of 39%. If he had sold it for ₹558 more, he would have gained 64%. The cost price (in ₹) of the article is:

- A)** 2,230 **B)** 2,232 **C)** 2,231 **D)** 2,233

Date: 21/06/2025 Time: 4:30 PM - 6:00 PM Right: 78.01% Wrong: 4.78%

**Q95)** An article's cost price is ₹285, and the marked price is mentioned as ₹1,140. What is the profit percentage of the seller if he sells it by allowing a discount of 70% on the marked price?

- A)** 17% **B)** 19% **C)** 23% **D)** 20%

Date: 18/06/2025 Time: 4:30 PM - 6:00 PM Right: 78.07% Wrong: 10.06%

**Q96)** A vendor bought lemons at 6 for ₹1. How many lemons must he sell for ₹1 to gain 100%?

- A)** 3 **B)** 7 **C)** 4 **D)** 5

Date: 06/06/2025 Time: 12:45 PM - 2:15 PM Right: 78.18% Wrong: 13.18%

**Q97)** The selling price of 35 books is equal to the cost price of 28 books. Find the loss or gain percentage.

- A)** 20% loss **B)**  $\frac{100}{7}$ % gain **C)** 20% gain **D)**  $\frac{100}{7}$ % loss

Date: 23/06/2025 Time: 9:00 AM - 10:30 AM Right: 78.20% Wrong: 17.37%

**Q98)** A man sold an article at a gain of 57%. If he had sold it for ₹238 more, he would have gained 82%. The cost price (in ₹) of the article is:

- A)** 955 **B)** 952 **C)** 949 **D)** 950

Date: 20/06/2025 Time: 12:45 PM - 2:15 PM Right: 78.26% Wrong: 4.92%

**Q99)** By selling cloth at ₹344/m, a shopkeeper loses 57%. Find the rate (in ₹/m) at which it should be sold so as to earn a profit of 71%.

- A)** 1,368 **B)** 1,365 **C)** 1,366 **D)** 1,367

Date: 24/06/2025 Time: 9:00 AM - 10:30 AM Right: 78.73% Wrong: 5.81%

**Q100)** A vendor bought lemons at 7 for ₹1. How many lemons must he sell for ₹1 to gain 40%?

- A)** 6 **B)** 9 **C)** 5 **D)** 7

Date: 06/06/2025 Time: 9:00 AM - 10:30 AM Right: 79.01% Wrong: 10.25%

**Q101)** A seller marks their goods 45% above the cost price. On customer demand, they offer a 60% reduction on the bills. What percentage of profit or loss does the seller make?

- A)** 45% loss **B)** 42% loss **C)** 39% profit **D)** 41% loss

Date: 17/06/2025 Time: 4:30 PM - 6:00 PM Right: 79.32% Wrong: 8.45%

**Q102)** An article was bought for ₹1,300. Its price was marked up by 35%. Thereafter it was sold at a discount of 20% on the marked price. What was the percentage profit on the transaction?

- A)** 7% **B)** 10% **C)** 6% **D)** 8%

Date: 05/06/2025 Time: 4:30 PM - 6:00 PM Right: 79.54% Wrong: 7.84%

**Q103)** A vendor sold 5 chocolates for ₹1, thereby gaining 20%. How many chocolates did he buy for ₹1?

- A)** 12 **B)** 10 **C)** 8 **D)** 6

Date: 06/06/2025 Time: 4:30 PM - 6:00 PM Right: 79.71% Wrong: 11.27%

**Q104)** A vendor sells oranges at ₹44 each and incurs a loss of 78%. If he wants to make a profit of 78%, at what price (in ₹) should he sell each orange?

- A)** 356 **B)** 358 **C)** 355 **D)** 354

Date: 16/06/2025 Time: 9:00 AM - 10:30 AM Right: 79.98% Wrong: 5.53%

**Q105)** A shopkeeper fixes the marked price of an item 50% above its cost price. What percentage of discount on the marked price should be allowed to gain 8%?

- A)** 29% **B)** 30% **C)** 28% **D)** 27%

Date: 24/06/2025 Time: 4:30 PM - 6:00 PM Right: 80.43% Wrong: 8.07%

**Q106)** A dealer marks his goods 65% above the cost price and allows a discount of 8% on the marked price. What is his gain or loss percentage?

- A)** 53.34% gain **B)** 51.8% gain **C)** 51.74% loss **D)** 52.07% loss

Date: 09/06/2025 Time: 12:45 PM - 2:15 PM Right: 80.69% Wrong: 8.63%

**Q107)** A vendor sold 4 chocolates for ₹1, thereby gaining 100%. How many chocolates did he buy for ₹1?

- A)** 12 **B)** 14 **C)** 8 **D)** 10

Date: 05/06/2025 Time: 4:30 PM - 6:00 PM Right: 80.82% Wrong: 8.10%

**Q108)** The selling price of 24 books is equal to the cost price of 30 books. Find the loss or gain percentage.

- A)** 25% gain **B)**  $\frac{50}{3}$ % loss **C)** 25% loss **D)**  $\frac{50}{3}$ % gain

Date: 13/06/2025 Time: 4:30 PM - 6:00 PM Right: 82.22% Wrong: 12.23%

**Q109)** A shopkeeper sold a book for ₹544 at a loss of 36%. At what price (in ₹) should he sell it to gain 24% on it?

- A)** 1,054 **B)** 1,057 **C)** 1,056 **D)** 1,055

Date: 19/06/2025 Time: 9:00 AM - 10:30 AM Right: 82.53% Wrong: 6.29%

**Q110)** By selling cloth at ₹483/m, a shopkeeper loses 31%. Find the rate (in ₹/m) at which it should be sold so as to earn a profit of 34%.

**A)** 939 **B)** 935 **C)** 937 **D)** 938

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 83.27%

Wrong: 4.62%

**Q111)** A seller marks their goods 28% above the cost price. On customer demand, they offer a 25% reduction on the bills. What percentage of profit or loss does the seller make?

**A)** 7% loss **B)** 6% loss **C)** 4% loss **D)** 1% profit

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 84.20%

Wrong: 6.77%

**Q112)** A salesman marks his good 64% above the cost price and gives a discount of 25% on them. Find the percentage of this gain or loss.

**A)** 21% gain **B)** 23% gain **C)** 20% loss **D)** 24% gain

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 84.31%

Wrong: 7.84%

**Q113)** The selling price of 10 books is equal to the cost price of 16 books. Find the loss or gain percentage.

**A)** 60% gain **B)** 60% loss **C)**  $\frac{50}{3}$ % gain **D)**  $\frac{50}{3}$ % loss

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 84.91%

Wrong: 10.47%

**Q114)** By selling an article for ₹112, a man loses 30%. At what price (in ₹) should he sell it to gain 15%?

**A)** 184 **B)** 194 **C)** 174 **D)** 204

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 85.28%

Wrong: 7.96%

**Q115)** By selling an article for ₹112, a man loses 25%. At what price (in ₹) should he sell it to gain 50%?

**A)** 234 **B)** 224 **C)** 244 **D)** 214

Date: 10/06/2025

Time: 4:30 PM - 6:00 PM

Right: 85.60%

Wrong: 8.15%

**Q116)** A salesman marks his good 84% above the cost price and gives a discount of 50% on them. Find the percentage of this gain or loss.

**A)** 5% gain **B)** 9% loss **C)** 8% loss **D)** 6% gain

Date: 18/06/2025

Time: 4:30 PM - 6:00 PM

Right: 85.92%

Wrong: 6.04%

**Q117)** Mukesh sold a car for ₹1,20,000 at 40% loss. For what price (in ₹) should he sell the car to gain 55% profit?

**A)** 3,09,999 **B)** 3,10,002 **C)** 3,10,000 **D)** 3,09,998

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 86.38%

Wrong: 4.76%

**Q118)** An article's cost price is ₹300, and the marked price is mentioned as ₹1,032. What is the profit percentage of the seller if he sells it by allowing a discount of 50% on the marked price?

**A)** 69% **B)** 73% **C)** 70% **D)** 72%

Date: 19/06/2025 Time: 4:30 PM - 6:00 PM Right: 87.08% Wrong: 5.57%

**Q119)** A trader lost 5% by selling a shirt for ₹950. He will gain x% by selling it for ₹1,360. The value of x is:

**A)** 51 **B)** 46 **C)** 36 **D)** 26

Date: 11/06/2025 Time: 12:45 PM - 2:15 PM Right: 87.15% Wrong: 4.53%

**Q120)** A trader lost 5% by selling a shirt for ₹950. He will gain x% by selling it for ₹1,340. The value of x is:

**A)** 49 **B)** 44 **C)** 24 **D)** 34

Date: 11/06/2025 Time: 4:30 PM - 6:00 PM Right: 87.30% Wrong: 5.03%

**Q121)** A trader lost 5% by selling a shirt for ₹950. He will gain x% by selling it for ₹1,350. The value of x is:

**A)** 50 **B)** 35 **C)** 25 **D)** 45

Date: 11/06/2025 Time: 9:00 AM - 10:30 AM Right: 87.52% Wrong: 4.79%

**Q122)** A shopkeeper sold a book for ₹225 at a loss of 10%. At what price (in ₹) should he have to sell it to gain 24% on it?

**A)** 310 **B)** 307 **C)** 311 **D)** 308

Date: 19/06/2025 Time: 12:45 PM - 2:15 PM Right: 88.11% Wrong: 5.02%

**Q123)** By selling an article for ₹112, a man loses 20%. At what price (in ₹) should he sell it to gain 50%?

**A)** 220 **B)** 210 **C)** 200 **D)** 230

Date: 10/06/2025 Time: 12:45 PM - 2:15 PM Right: 88.27% Wrong: 6.10%

**Q124)** A salesman marks his good 20% above the cost price and gives a discount of 25% on them. Find the percentage of this gain or loss.

**A)** 9% gain **B)** 10% loss **C)** 11% loss **D)** 12% loss

Date: 18/06/2025 Time: 9:00 AM - 10:30 AM Right: 89.80% Wrong: 4.59%

### Answer Key (Q1 to Q124) Profit and Loss

Q1: 2	Q2: 4	Q3: 3	Q4: 3	Q5: 1
Q6: 4	Q7: 2	Q8: 2	Q9: 1	Q10: 4
Q11: 1	Q12: 2	Q13: 4	Q14: 4	Q15: 1
Q16: 2	Q17: 2	Q18: 1	Q19: 4	Q20: 3
Q21: 3	Q22: 4	Q23: 2	Q24: 2	Q25: 1

Q26: 4	Q27: 3	Q28: 3	Q29: 1	Q30: 3
Q31: 3	Q32: 3	Q33: 3	Q34: 2	Q35: 2
Q36: 2	Q37: 4	Q38: 3	Q39: 4	Q40: 4
Q41: 1	Q42: 1	Q43: 4	Q44: 1	Q45: 2
Q46: 4	Q47: 4	Q48: 3	Q49: 4	Q50: 3
Q51: 2	Q52: 4	Q53: 1	Q54: 3	Q55: 2
Q56: 4	Q57: 1	Q58: 1	Q59: 1	Q60: 2
Q61: 3	Q62: 2	Q63: 4	Q64: 4	Q65: 4
Q66: 4	Q67: 2	Q68: 3	Q69: 4	Q70: 3
Q71: 1	Q72: 2	Q73: 3	Q74: 1	Q75: 4
Q76: 4	Q77: 4	Q78: 4	Q79: 3	Q80: 3
Q81: 3	Q82: 3	Q83: 4	Q84: 3	Q85: 4
Q86: 4	Q87: 3	Q88: 4	Q89: 1	Q90: 3
Q91: 1	Q92: 2	Q93: 2	Q94: 2	Q95: 4
Q96: 1	Q97: 1	Q98: 2	Q99: 1	Q100: 3
Q101: 2	Q102: 4	Q103: 4	Q104: 1	Q105: 3
Q106: 2	Q107: 3	Q108: 1	Q109: 1	Q110: 4
Q111: 3	Q112: 2	Q113: 1	Q114: 1	Q115: 2
Q116: 3	Q117: 3	Q118: 4	Q119: 3	Q120: 4
Q121: 2	Q122: 1	Q123: 2	Q124: 2	

## Discount

**Q1)** Find the effective price percentage of the marked price after three consecutive discounts of 18%, 24% and 18%. (Rounded up to two decimal places.)

**A)** 51.10% **B)** 54.41% **C)** 48.56% **D)** 53.54%

Date: 19/06/2025

Time: 12:45 PM - 2:15 PM

Right: 22.54%

Wrong: 56.33%

**Q2)** Find a single discount (rounded up to two decimal places) equal to three consecutive discounts of 26%, 29% and 2%.

**A)** 47.56% **B)** 47.12% **C)** 48.51% **D)** 48.86%

Date: 17/06/2025

Time: 4:30 PM - 6:00 PM

Right: 47.79%

Wrong: 25.60%

**Q3)** A retailer offers the following discount schemes for buyers on an article.

- I. Two successive discounts of 27%.
  - II. A discount of 36% followed by a discount of 45%.
  - III. Successive discounts of 19% and 32%.
  - IV. A discount of 34% followed by a discount of 7%.
- Which scheme will fetch the maximum selling price?

**A)** III **B)** I **C)** IV **D)** II

Date: 10/06/2025

Time: 12:45 PM - 2:15 PM

Right: 48.55%

Wrong: 27.87%

**Q4)** Find a single discount (rounded up to two decimal places) equal to three consecutive discounts of 3%, 27% and 23%.

**A)** 43.03% **B)** 45.34% **C)** 45.73% **D)** 45.48%

Date: 16/06/2025

Time: 9:00 AM - 10:30 AM

Right: 49.01%

Wrong: 27.16%

**Q5)** The successive discounts of 24%, 18% and 20% are equivalent to a single discount of: (Rounded up to two decimal places.)

**A)** 51.51% **B)** 52.84% **C)** 49.27% **D)** 50.14%

Date: 20/06/2025

Time: 4:30 PM - 6:00 PM

Right: 50.44%

Wrong: 31.41%

**Q6)** Find a single discount (rounded up to two decimal places) to equal three consecutive discounts of 29%, 28% and 13%.

**A)** 58.85% **B)** 57.27% **C)** 55.53% **D)** 56.92%

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 53.05%

Wrong: 19.28%

**Q7)** Find the effective price percentage of the marked price after three consecutive discounts of 8%, 17% and 17%. (Rounded up to two decimal places.)

**A)** 64.53% **B)** 64.71% **C)** 63.38% **D)** 64.51%

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 53.12%

Wrong: 15.67%

**Q8)** Find a single discount (rounded up to two decimal places) to equal three consecutive discounts of 6%, 28% and 15%.

**A)** 44.65% **B)** 42.63% **C)** 45.25% **D)** 42.47%

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 54.50%

Wrong: 23.98%

**Q9)** Find the effective price percentage of the marked price after three consecutive discounts of 8%, 16% and 3%. (Rounded up to two decimal places.)

**A)** 73.29% **B)** 74.96% **C)** 72.61% **D)** 74.13%

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 56.17%

Wrong: 22.68%

**Q10)** The successive discounts of 29%, 18% and 9% are equivalent to a single discount of: (Rounded up to two decimal places.)

**A)** 47.02% **B)** 48.05% **C)** 49.36% **D)** 44.35%

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 56.46%

Wrong: 23.12%

**Q11)** Find a single discount (rounded up to two decimal places) equal to three consecutive discounts of 13%, 20% and 4%.

**A)** 36.92% **B)** 33.67% **C)** 33.18% **D)** 31.96%

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 59.24%

Wrong: 25.26%

**Q12)** A retailer offers the following discount schemes for buyers on an article.

- I. Two successive discounts of 27%
  - II. A discount of 7% followed by a discount of 6%
  - III. Successive discounts of 45% and 29%
  - IV. A discount of 20% followed by a discount of 38%
- Which scheme will fetch the maximum selling price?

**A)** IV **B)** III **C)** I **D)** II

Date: 11/06/2025

Time: 4:30 PM - 6:00 PM

Right: 60.00%

Wrong: 20.03%

**Q13)** Find a single discount equal to three consecutive discounts of 20%, 13% and 20%.

**A)** 44.95% **B)** 42.74% **C)** 48.08% **D)** 44.32%

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 72.50%

Wrong: 16.32%

**Q14)** The successive discounts of 28%, 20% and 10% are equivalent to a single discount of:

**A)** 50.59% **B)** 48.16% **C)** 46.1% **D)** 46.69%

Date: 20/06/2025

Time: 12:45 PM - 2:15 PM

Right: 75.50%

Wrong: 14.33%

**Q15)** The marked price of a laptop is ₹750. It sells with two successive discounts of 4% and 25%. An additional 25% discount is given on cash payment. What is the selling price (in ₹) of the laptop on cash payment?

**A)** 402 **B)** 406 **C)** 405 **D)** 407

Date: 14/06/2025

Time: 12:45 PM - 2:15 PM

Right: 77.49%

Wrong: 6.29%

**Q16)** The marked price of a smartwatch set is ₹640. It sells with two successive discounts of 30% and 25%. An additional 25% discount is given on cash payment. What is the selling price (in ₹) of the smartwatch set on cash payment?

**A)** 249 **B)** 252 **C)** 253 **D)** 251

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 79.76%

Wrong: 6.23%

**Q17)** The marked price of a touchscreen tablet is ₹500. It sells with two successive discounts of 20% and 25%. An additional 19% discount is given on cash payment. What is the selling price (in ₹) of the touchscreen tablet on cash payment?

**A)** 246 **B)** 242 **C)** 245 **D)** 243

Date: 14/06/2025

Time: 9:00 AM - 10:30 AM

Right: 82.56%

Wrong: 7.10%

### Answer Key (Q1 to Q17) Discount

Q1: 1	Q2: 3	Q3: 3	Q4: 4	Q5: 4
Q6: 3	Q7: 3	Q8: 4	Q9: 2	Q10: 1
Q11: 3	Q12: 4	Q13: 4	Q14: 2	Q15: 3
Q16: 2	Q17: 4			

### Simple and Compound Interest

**Q1)** A bank offers 7.8% compound interest per annum calculated on a half-yearly basis. A customer deposits ₹9,920 each on 1 January and 1 July of a year. At the end of the year, the amount he would have gained by way of interest is \_\_\_\_\_ (give your answer correct to 2 decimal places).

**A)** ₹1,175.73 **B)** ₹1,185.69 **C)** ₹1,174.16 **D)** ₹1,183.37

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 6.66%

Wrong: 13.67%

**Q2)** A bank offers 1.1% compound interest per annum calculated on a half-yearly basis. A customer deposits ₹7,745 each on 1 January and 1 July of a year. At the end of the year, the amount he would have gained by way of interest is \_\_\_\_\_. (Rounded up to the 2 decimal places.)

**A)** ₹121.87 **B)** ₹128.03 **C)** ₹131.93 **D)** ₹109.99

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 7.74%

Wrong: 14.74%

**Q3)** A bank offers 7.4% compound interest per annum calculated on a half-yearly basis. A customer deposits ₹8,022 each on 1 January and 1 July of a year. At the end of the year, the amount he would have gained by way of interest is \_\_\_\_\_ (give your answer correct to 2 decimal places).

**A)** ₹918.48 **B)** ₹901.42 **C)** ₹919.85 **D)** ₹903.07

Date: 19/06/2025

Time: 9:00 AM - 10:30 AM

Right: 9.05%

Wrong: 14.03%

Q4) Rishi has ₹1,612 with him. He divided it amongst his sons Shan and Piyush and asked them to invest it at 8% rate of interest per annum, compounded annually. It was seen that Shan and Piyush got the same amount after 19 and 20 years, respectively. How much (in ₹) did Rishi give to Shan?

A) ₹775 B) ₹875 C) ₹687 D) ₹837

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 25.07%

Wrong: 17.64%

Q5) Anand has ₹1,617 with him. He divided it amongst his sons Anil and Ashok and asked them to invest it at 10% rate of interest per annum, compounded annually. It was seen that Anil and Ashok got same amount after 12 and 13 years, respectively. How much (in ₹) did Anand give to Anil?

A) ₹847 B) ₹770 C) ₹870 D) ₹697

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 27.54%

Wrong: 20.17%

Q6) The difference between the simple interest and the compound interest, compounded annually, on a certain sum of money for 2 years at 16% per annum is ₹797. Find the sum (rounded off to the nearest integer).

A) ₹31,113 B) ₹31,130 C) ₹31,137 D) ₹31,133

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 28.59%

Wrong: 22.02%

Q7) Akshay has ₹1,218 with him. He divided it amongst his sons Arjun and Kartik and asked them to invest it at 10% rate of interest per annum, compounded annually. It was seen that Arjun and Kartik got the same amount after 12 and 13 years, respectively. How much amount (in ₹) did Akshay give to Kartik?

A) ₹430 B) ₹580 C) ₹638 D) ₹738

Date: 11/06/2025

Time: 12:45 PM - 2:15 PM

Right: 28.86%

Wrong: 20.22%

Q8) At what rate of interest per annum will a sum of ₹15,625 amount to ₹19,683 in 1 year and 6 months, if the interest is compounded half-yearly?

A) 8% B) 20% C) 16% D) 19%

Date: 16/06/2025

Time: 9:00 AM - 10:30 AM

Right: 29.47%

Wrong: 36.52%

Q9) Ashish has ₹1,218 with him. He divides it amongst his sons Arun and Mahesh and asks them to invest it at 10% rate of interest compounded annually. It was seen that Arun and Mahesh got same amount after 11 and 12 years, respectively. How much (in ₹) did Ashish give to Mahesh?

A) 430 B) 580 C) 638 D) 738

Date: 06/06/2025

Time: 12:45 PM - 2:15 PM

Right: 30.15%

Wrong: 19.52%

**Q10)** Raj has ₹1,218 with him. He divided it amongst his sons Varun and Ashish and asked them to invest it at 10% rate of interest per annum, compounded annually. It was seen that Varun and Ashish got the same amount after 13 and 14 years, respectively. How much (in ₹) did Raj give to Ashish?

**A)** ₹580 **B)** ₹638 **C)** ₹738 **D)** ₹430

Date: 09/06/2025 Time: 4:30 PM - 6:00 PM Right: 31.07% Wrong: 18.38%

**Q11)** Shan has ₹1,617 with him. He divided it amongst his sons Piyush and Manoj and asked them to invest it at 10% rate of interest per annum, compounded annually. It was seen that Piyush and Manoj got the same amount after 11 and 12 years, respectively. How much (in ₹) did Shan give to Piyush?

**A)** ₹697 **B)** ₹847 **C)** ₹870 **D)** ₹770

Date: 12/06/2025 Time: 4:30 PM - 6:00 PM Right: 34.12% Wrong: 22.29%

**Q12)** A sum of ₹x amounts to ₹83,853 in  $2\frac{1}{2}$  years at 12% p.a., interest compounded 10 – monthly. What is the value of x?

**A)** 62,000 **B)** 64,000 **C)** 61,000 **D)** 63,000

Date: 23/06/2025 Time: 12:45 PM - 2:15 PM Right: 34.55% Wrong: 18.01%

**Q13)** When the difference between compound interest, compounded annually, and simple interest for three years is ₹228 at 4% interest per annum, the principal is ₹\_\_\_\_\_.

**A)** 46,300 **B)** 48,075 **C)** 47,295 **D)** 46,875

Date: 18/06/2025 Time: 4:30 PM - 6:00 PM Right: 36.14% Wrong: 21.37%

**Q14)** The difference between the simple interest and the compound interest, compounded annually, on a certain sum of money for 2 years at 17% per annum is ₹967. Find the sum [rounded off to the nearest integer].

**A)** ₹33,480 **B)** ₹33,460 **C)** ₹33,473 **D)** ₹33,454

Date: 11/06/2025 Time: 4:30 PM - 6:00 PM Right: 38.55% Wrong: 26.71%

**Q15)** The compound interest earned in 1 year on ₹4,80,000 at the rate of 20% per annum, compounded quarterly, is:

**A)** ₹1,03,443 **B)** ₹1,04,227 **C)** ₹1,04,435 **D)** ₹1,04,200

Date: 13/06/2025 Time: 4:30 PM - 6:00 PM Right: 47.41% Wrong: 18.48%

**Q16)** The difference between the simple interest and the compound interest, compounded annually, on a certain sum of money for 2 years at 19% per annum is ₹590. Find the sum [rounded off to the nearest integer].

**A)** ₹16,358 **B)** ₹16,335 **C)** ₹16,343 **D)** ₹16,336

Date: 09/06/2025 Time: 12:45 PM - 2:15 PM Right: 47.67% Wrong: 17.87%

Q17) When the difference between compound interest, compounded annually, and simple interest for three years is ₹152 at 4% interest per annum, the principal is ₹\_\_\_\_\_.

- A) 30,675 B) 32,450 C) 31,670 D) 31,250

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 48.56%

Wrong: 15.30%

Q18) Govind invested some money in a bank at 4% per annum rate of interest. What would be the corresponding simple interest (in ₹) if after 2 years, Govind got ₹280.5 as compound interest, considering annual compounding?

- A) 275 B) 290 C) 270 D) 285

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 52.11%

Wrong: 19.19%

Q19) At what rate of interest per annum will a sum of ₹1,000 amount to ₹1,728 in 1 year and 6 months, if the interest is compounded half-yearly?

- A) 42% B) 22% C) 52% D) 40%

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 52.58%

Wrong: 25.14%

Q20) What sum of money (in ₹) will amount to ₹840 at 4% per annum simple interest in 3 years?

- A) 750 B) 700 C) 800 D) 7,000

Date: 11/06/2025

Time: 4:30 PM - 6:00 PM

Right: 52.76%

Wrong: 41.81%

Q21) At what rate of interest per annum will a sum of ₹8,000 amount to ₹15,625 in 1 year and 6 months, if the interest is compounded half-yearly?

- A) 65% B) 50% C) 67% D) 70%

Date: 14/06/2025

Time: 12:45 PM - 2:15 PM

Right: 54.01%

Wrong: 18.92%

Q22) Find the simple interest (in ₹) on ₹900 at an interest rate of 6% per month in 12 months.

- A) 108 B) 648 C) 54 D) 74

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 54.19%

Wrong: 43.54%

Q23) Find the simple interest (in ₹) on ₹1,200 at an interest rate of 3% per month in 1 month.

- A) 6 B) 36 C) 23 D) 3

Date: 10/06/2025

Time: 12:45 PM - 2:15 PM

Right: 55.23%

Wrong: 42.65%

Q24) Find the simple interest (in closest integral ₹) on ₹3,000 at 8% per annum rate of interest for the period from 14 February 2024 to 15 April 2024.

- A) 39 B) 40 C) 38 D) 41

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 60.34%

Wrong: 22.92%

**Q25)** The compound interest earned in 1 year on ₹2,40,000 at the rate of 40% per annum, compounded quarterly, is:

**A)** ₹1,12,281 **B)** ₹1,11,384 **C)** ₹1,10,519 **D)** ₹1,12,269

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 63.41%

Wrong: 8.72%

**Q26)** Find the simple interest (in closest integral ₹) on ₹3,000 at 6% per annum rate of interest for the period from 9 February 2024 to 10 April 2024.

**A)** 29 **B)** 28 **C)** 30 **D)** 31

Date: 20/06/2025

Time: 12:45 PM - 2:15 PM

Right: 64.43%

Wrong: 19.88%

**Q27)** Akshat invested ₹90,625 at 8% p.a. for 1 year at compound interest, compounded half-yearly. The amount received by him is:

**A)** ₹98,020 **B)** ₹98,802 **C)** ₹98,837 **D)** ₹98,984

Date: 05/06/2025

Time: 4:30 PM - 6:00 PM

Right: 64.95%

Wrong: 13.49%

**Q28)** Find the simple interest (in ₹) on ₹2,000 at 5.75% per annum rate of interest for the period from 15 February 2023 to 29 April 2023.

**A)** 24 **B)** 21 **C)** 22 **D)** 23

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 65.91%

Wrong: 13.16%

**Q29)** Yogesh invested some money in a bank at 5% per annum rate of interest. What would be the corresponding simple interest (in ₹) if after 2 years, Yogesh got ₹102.5 as compound interest, considering annual compounding?

**A)** 95 **B)** 115 **C)** 100 **D)** 110

Date: 23/06/2025

Time: 4:30 PM - 6:00 PM

Right: 67.07%

Wrong: 13.38%

**Q30)** A sum when invested at the rate of 12% simple interest per annum, amounts to ₹8,500 after 3 years. The simple interest (in ₹) for the given time period is:

**A)** 2,150 **B)** 2,350 **C)** 2,250 **D)** 2,450

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 67.73%

Wrong: 11.99%

**Q31)** Amit had invested same amount of sums at simple as well as compound interest, compounded annually. The time period of investment for both the sums was 2 years and rate of interest too was the same, 4% per annum. At the end, he found a difference of ₹43 in both the interests received. What were the sums (in ₹) invested?

**A)** ₹25,975 **B)** ₹27,225 **C)** ₹26,125 **D)** ₹26,875

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 67.97%

Wrong: 6.83%

**Q32)** Nirmal invested ₹1,380 at 3% per annum simple interest in a bank. What amount (in ₹) will he get after 3 years?

- A)** 124.2 **B)** 1,504.2 **C)** 1,404.2 **D)** 224.2

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 68.04%

Wrong: 27.82%

**Q33)** On simple interest, a certain sum of money amounts to ₹1,250 in 2 years and to ₹2,000 in 4 years. Find the rate of interest per annum.

- A)** 70% **B)** 75% **C)** 85% **D)** 80%

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 68.61%

Wrong: 14.59%

**Q34)** On simple interest, a certain sum of money amounts to ₹1,300 in 2 years and to ₹2,100 in 4 years. Find the rate of interest per annum.

- A)** 80% **B)** 75% **C)** 90% **D)** 85%

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 70.13%

Wrong: 10.19%

**Q35)** What sum of money (in ₹) will amount to ₹720 at 4% per annum simple interest in 5 years?

- A)** 600 **B)** 650 **C)** 550 **D)** 3,600

Date: 11/06/2025

Time: 12:45 PM - 2:15 PM

Right: 70.19%

Wrong: 25.38%

**Q36)** Amit had invested same amount of sums at simple as well as compound interest, compounded annually. The time period of both the sums was 2 years and rate of interest too was the same, 4% per annum. At the end, he found a difference of ₹45 in both the interests received. What were the sums (in ₹) invested?

- A)** 27,375 **B)** 28,125 **C)** 27,225 **D)** 28,475

Date: 18/06/2025

Time: 9:00 AM - 10:30 AM

Right: 71.59%

Wrong: 6.39%

**Q37)** A sum, when invested at 20% simple interest per annum, amounts to ₹8,640 after 3 years. What is the simple interest (in ₹) on the same sum at the same rate in 2 years?

- A)** 4,320 **B)** 2,160 **C)** 8,640 **D)** 1,080

Date: 19/06/2025

Time: 12:45 PM - 2:15 PM

Right: 71.98%

Wrong: 13.33%

**Q38)** On simple interest, a certain sum of money amounts to ₹1,750 in 2 years and to ₹3,250 in 4 years. Find the rate of interest per annum.

- A)** 302% **B)** 299% **C)** 300% **D)** 301%

Date: 16/06/2025

Time: 9:00 AM - 10:30 AM

Right: 72.53%

Wrong: 6.08%

**Q39)** When the difference between compound interest, compounded annually, and simple interest for three years is ₹217 at 10% interest per annum, the principal is ₹\_\_\_\_\_.

- A)** 8,200 **B)** 7,420 **C)** 7,000 **D)** 6,425

Date: 14/06/2025

Time: 9:00 AM - 10:30 AM

Right: 72.60%

Wrong: 9.71%

**Q40)** A sum, when invested at 20% simple interest per annum, amounts to ₹4,800 after 3 years. What is the simple interest (in ₹) on the same sum at the same rate in 1 year?

**A)** 2,400 **B)** 1,200 **C)** 600 **D)** 300

Date: 18/06/2025 Time: 4:30 PM - 6:00 PM Right: 72.74% Wrong: 14.83%

**Q41)** At what rate (in percentage) per annum simple interest will a sum of money triple itself in 8 years?

**A)** 24 **B)** 37.5 **C)** 25 **D)** 36.5

Date: 20/06/2025 Time: 4:30 PM - 6:00 PM Right: 72.76% Wrong: 20.63%

**Q42)** When the difference between compound interest, compounded annually, and simple interest for three years is ₹186 at 10% interest per annum, the principal is ₹\_\_\_\_\_.

**A)** 5,425 **B)** 6,000 **C)** 6,420 **D)** 7,200

Date: 13/06/2025 Time: 12:45 PM - 2:15 PM Right: 73.25% Wrong: 10.80%

**Q43)** Anuj gets double the amount in 10 years when invested at compound interest, compounded annually. In how many years will the amount become four times itself?

**A)** 39 **B)** 19 **C)** 20 **D)** 40

Date: 24/06/2025 Time: 12:45 PM - 2:15 PM Right: 73.37% Wrong: 15.16%

**Q44)** Find the simple interest (in ₹) on ₹2,000 at 6% per annum rate of interest for the period from 3 February 2023 to 17 April 2023.

**A)** 25 **B)** 24 **C)** 23 **D)** 22

Date: 19/06/2025 Time: 9:00 AM - 10:30 AM Right: 73.57% Wrong: 11.93%

**Q45)** Mohan invested ₹1,320 at 6% per annum simple interest in a bank. What amount (in ₹) will he get after 6 years?

**A)** 1,695.2 **B)** 1,795.2 **C)** 575.2 **D)** 475.2

Date: 12/06/2025 Time: 12:45 PM - 2:15 PM Right: 73.96% Wrong: 20.01%

**Q46)** Tejas gets double the amount in 11 years when invested at compound interest, compounded annually. In how many years will the amount become four times itself?

**A)** 21 **B)** 44 **C)** 43 **D)** 22

Date: 24/06/2025 Time: 4:30 PM - 6:00 PM Right: 74.10% Wrong: 16.30%

**Q47)** Amit had invested the same amount of sums at simple as well as compound interest, compounded annually. The time period of investment for both the sums was 2 years and rate of interest too was same, 4% per annum. At the end, he found a difference of ₹44 in both the interests received. What were the sums (in ₹) invested?

**A)** ₹26,600 **B)** ₹27,850 **C)** ₹27,500 **D)** ₹26,750

Date: 17/06/2025 Time: 4:30 PM - 6:00 PM Right: 74.40% Wrong: 5.52%

**Q48)** If a sum of ₹8,20,000 is invested for a year at 6% per annum compounded half yearly, then find the compound interest.

**A)** ₹50,028 **B)** ₹49,938 **C)** ₹49,685 **D)** ₹48,444

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 75.05%

Wrong: 9.33%

**Q49)** How long (in years) will it take for ₹1,440 to become ₹2,700 at a rate of 10% per annum simple interest?

**A)** 10.75 **B)** 7.75 **C)** 9.75 **D)** 8.75

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 75.21%

Wrong: 17.21%

**Q50)** At what rate (in percentage) per annum on simple interest will a sum of money triple itself in 10 years?

**A)** 20% **B)** 30% **C)** 29% **D)** 19%

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 75.42%

Wrong: 19.18%

**Q51)** On simple interest, a certain sum of money amounts to ₹1,750 in 2 years and to ₹3,000 in 4 years. Find the rate of interest per annum.

**A)** 125% **B)** 127% **C)** 126% **D)** 124%

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 75.53%

Wrong: 5.82%

**Q52)** If a sum of ₹6,70,000 is invested for a year at 2% per annum compounded half yearly, then find the compound interest.

**A)** ₹12,805 **B)** ₹13,467 **C)** ₹11,545 **D)** ₹13,630

Date: 20/06/2025

Time: 12:45 PM - 2:15 PM

Right: 75.53%

Wrong: 8.93%

**Q53)** The difference between the compound interest, compounded annually and the simple interest if ₹47,100 is deposited at 9% rate of interest per annum for 2 years is:

**A)** ₹382.71 **B)** ₹391.21 **C)** ₹381.51 **D)** ₹391.81

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 76.11%

Wrong: 8.63%

**Q54)** If a sum of ₹9,10,000 is invested for a year at 2% per annum compounded half yearly, then find the compound interest.

**A)** ₹18,291 **B)** ₹20,081 **C)** ₹17,125 **D)** ₹18,828

Date: 20/06/2025

Time: 4:30 PM - 6:00 PM

Right: 76.65%

Wrong: 8.09%

**Q55)** At what rate of interest (rounded off to two decimal places) per year will a sum of money double itself in 12 years on simple interest?

**A)** 6.33% **B)** 8.33% **C)** 16.67% **D)** 10.33%

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 76.84%

Wrong: 13.95%

**Q56)** The difference between the compound interest, compounded annually and the simple interest if ₹17,700 is deposited at 4% rate of interest per annum for 2 years is:

- A)** ₹27.62 **B)** ₹28.32 **C)** ₹33.42 **D)** ₹18.12

Date: 06/06/2025

Time: 9:00 AM - 10:30 AM

Right: 78.18%

Wrong: 8.27%

**Q57)** If at the same rate of interest, in 2 years, the simple interest is ₹40 and compound interest, compounded annually, is ₹41, then what is the principal (in ₹)?

- A)** 400 **B)** 395 **C)** 393 **D)** 404

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 78.31%

Wrong: 6.11%

**Q58)** How long (in years) will it take for ₹1,680 to become ₹2,100 at a rate of 4% per annum simple interest?

- A)** 6.25 **B)** 7.25 **C)** 8.25 **D)** 5.25

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 78.38%

Wrong: 13.29%

**Q59)** How much will a sum of ₹72,000 become after one year if the interest is compounded half-yearly at 10% per annum compound interest?

- A)** ₹79,510 **B)** ₹78,632 **C)** ₹80,378 **D)** ₹79,380

Date: 12/06/2025

Time: 12:45 PM - 2:15 PM

Right: 78.39%

Wrong: 10.88%

**Q60)** If a sum of ₹6,60,000 is invested for a year at 2% per annum compounded half yearly, then find the compound interest.

- A)** ₹11,987 **B)** ₹12,824 **C)** ₹13,266 **D)** ₹12,931

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 78.45%

Wrong: 7.70%

**Q61)** How much will a sum of ₹60,000 become after one year if the interest is compounded half-yearly at 18% per annum compound interest?

- A)** ₹72,166 **B)** ₹71,286 **C)** ₹71,391 **D)** ₹70,471

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 78.65%

Wrong: 7.87%

**Q62)** Mohan invests a sum of ₹5,000 and Varun invests a sum of ₹9,000 at the same rate of simple interest per annum. If, at the end of 3 years, Varun gets ₹480 more interest than Mohan, then find the rate of interest per annum (in percentage).

- A)** 3% **B)** 4% **C)** 2% **D)** 6%

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 79.08%

Wrong: 9.09%

**Q63)** Two banks, A and B, offered loans at 3.5% and 6% per annum, respectively. Atul borrowed an amount of ₹5,00,000 from each bank. Find the positive difference between the amounts of simple interest paid to the two banks by Atul after 4 years.

**A)** 50,000 **B)** 51,000 **C)** 51,500 **D)** 49,500

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 79.20%

Wrong: 5.16%

**Q64)** A man has invested ₹50,500 at a rate of 6% per annum simple interest for 2 years. Find the amount (in ₹) that he will receive after 2 years.

**A)** 57,560 **B)** 6,060 **C)** 56,560 **D)** 7,060

Date: 14/06/2025

Time: 9:00 AM - 10:30 AM

Right: 79.32%

Wrong: 16.90%

**Q65)** A sum when invested at the rate of 12.5% simple interest per annum, amounts to ₹7,500 after 2 years. The simple interest (in ₹) for the given time period is:

**A)** 1,500 **B)** 1,600 **C)** 1,700 **D)** 1,400

Date: 17/06/2025

Time: 4:30 PM - 6:00 PM

Right: 79.50%

Wrong: 8.28%

**Q66)** Rakesh invests a sum of ₹5,000 and Shivam invests a sum of ₹9,000 at the same rate of simple interest per annum. If, at the end of 3 years, Shivam gets ₹360 more interest than Rakesh, then find the rate of interest per annum (in percentage).

**A)** 1% **B)** 2% **C)** 3% **D)** 5%

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 79.64%

Wrong: 7.47%

**Q67)** Tushar has borrowed an amount of ₹2,00,000 from a bank to start a business. How much simple interest (in ₹) will he pay at a rate of 8% per annum after 4 years?

**A)** 65,000 **B)** 64,000 **C)** 63,000 **D)** 2,64,000

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 80.66%

Wrong: 15.78%

**Q68)** Manjit has borrowed an amount of ₹2,20,000 from a bank to start a business. How much simple interest (in ₹) will he pay at a rate of 4% per annum after 2 years?

**A)** 17,600 **B)** 18,600 **C)** 16,600 **D)** 2,37,600

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 81.25%

Wrong: 14.33%

**Q69)** Two banks, A and B, offered loans at 3.5% and 6.5% per annum, respectively. Keshav borrowed an amount of ₹2,00,000 from each bank. Find the positive difference between the amounts of simple interest paid to the two banks by Keshav after 2 years.

**A)** 13,500 **B)** 13,000 **C)** 11,500 **D)** 12,000

Date: 18/06/2025

Time: 9:00 AM - 10:30 AM

Right: 81.61%

Wrong: 4.97%

**Q70)** A man has invested ₹50,000 at a rate of 12% per annum simple interest for 4 years. Find the amount (in ₹) that he will receive after 4 years.

**A)** 75,000 **B)** 74,000 **C)** 25,000 **D)** 24,000

Date: 14/06/2025 Time: 12:45 PM - 2:15 PM Right: 81.78% Wrong: 14.02%

**Q71)** If at the same rate of interest, in 2 years, the simple interest is ₹40 and compound interest, compounded annually, is ₹42, then what is the principal (in ₹)?

**A)** 200 **B)** 193 **C)** 195 **D)** 204

Date: 23/06/2025 Time: 9:00 AM - 10:30 AM Right: 81.87% Wrong: 4.10%

**Q72)** Find the duration (in years) in which ₹1,200 will amount to ₹2,280 at a rate of 4% per annum simple interest.

**A)** 22.5 **B)** 21.5 **C)** 23.5 **D)** 24.5

Date: 05/06/2025 Time: 9:00 AM - 10:30 AM Right: 81.98% Wrong: 8.49%

**Q73)** What will the amount after 1 year be, if ₹2,400 is invested at 20% compound interest per annum, compounded half-yearly?

**A)** ₹2,460 **B)** ₹2,904 **C)** ₹3,071 **D)** ₹2,950

Date: 10/06/2025 Time: 12:45 PM - 2:15 PM Right: 82.40% Wrong: 8.57%

**Q74)** At what rate of interest (in percentage) per year will a sum of money double itself in 5 years on simple interest?

**A)** 40% **B)** 20% **C)** 22% **D)** 18%

Date: 05/06/2025 Time: 4:30 PM - 6:00 PM Right: 82.71% Wrong: 10.94%

**Q75)** Mahesh borrowed a sum of ₹14,000 at a certain rate of simple interest for 4 years. If he paid an interest of ₹3,500 at the end of the period at x% per annum rate of interest, the value of x is:

**A)** 8.25 **B)** 6.25 **C)** 5.25 **D)** 7.25

Date: 13/06/2025 Time: 4:30 PM - 6:00 PM Right: 83.51% Wrong: 6.71%

**Q76)** Find the duration (in years) in which ₹1,200 will amount to ₹2,220 at a rate of 20% per annum simple interest.

**A)** 6.25 **B)** 3.25 **C)** 4.25 **D)** 5.25

Date: 06/06/2025 Time: 12:45 PM - 2:15 PM Right: 83.88% Wrong: 9.39%

**Q77)** The difference between the simple interest and the compound interest, compounded annually, on a certain sum of money for 2 years at 10% per annum is ₹407. Find the sum [rounded off to the nearest integer].

**A)** ₹40,700 **B)** ₹40,719 **C)** ₹40,680 **D)** ₹40,698

Date: 10/06/2025 Time: 4:30 PM - 6:00 PM Right: 84.04% Wrong: 5.26%

**Q78)** What will be the amount after 1 year if ₹9,900 is invested at 20% compound interest per annum, compounded half-yearly?

**A)** ₹12,940 **B)** ₹12,495 **C)** ₹11,307 **D)** ₹11,979

Date: 06/06/2025 Time: 4:30 PM - 6:00 PM Right: 84.22% Wrong: 5.83%

**Q79)** At what rate of interest (in percentage) per year will a sum of money double itself in 4 years on simple interest?

**A)** 25% **B)** 50% **C)** 27% **D)** 23%

Date: 06/06/2025 Time: 4:30 PM - 6:00 PM Right: 84.38% Wrong: 11.15%

**Q80)** Kiran borrowed a sum of ₹16,000 at a certain rate of simple interest for 2 years. If he paid an interest of ₹4,000 at the end of the period at x% per annum rate of interest, the value of x is:

**A)** 11.5 **B)** 13.5 **C)** 12.5 **D)** 14.5

Date: 13/06/2025 Time: 12:45 PM - 2:15 PM Right: 88.55% Wrong: 2.92%

**Q81)** In what time (in years) will ₹2,500 fetch an interest of ₹1,000 at 10% per year simple interest?

**A)** 6 **B)** 7 **C)** 4 **D)** 5

Date: 23/06/2025 Time: 12:45 PM - 2:15 PM Right: 91.68% Wrong: 4.29%

**Q82)** In what time (in years) will ₹2,800 fetch an interest of ₹700 at 5% per year simple interest?

**A)** 5 **B)** 6 **C)** 7 **D)** 8

Date: 23/06/2025 Time: 9:00 AM - 10:30 AM Right: 93.02% Wrong: 3.52%

**Q83)** At what rate (in percentage) per annum will ₹1,250 give ₹500 as simple interest in 10 years?

**A)** 6% **B)** 4% **C)** 3% **D)** 7%

Date: 21/06/2025 Time: 12:45 PM - 2:15 PM Right: 93.23% Wrong: 3.09%

**Q84)** Find the simple interest (in ₹) if a sum of ₹350 is borrowed for 1.5 years at 20% per annum rate of interest.

**A)** 85 **B)** 155 **C)** 105 **D)** 205

Date: 06/06/2025 Time: 9:00 AM - 10:30 AM Right: 94.04% Wrong: 2.16%

**Q85)** At what rate (in percentage) per annum will ₹1,300 give ₹650 as simple interest in 10 years?

**A)** 8% **B)** 4% **C)** 7% **D)** 5%

Date: 21/06/2025 Time: 9:00 AM - 10:30 AM Right: 94.10% Wrong: 2.49%

**Q86)** At what rate (in percentage) per annum will ₹1,400 give ₹700 as simple interest in 5 years?

**A)** 10% **B)** 12% **C)** 9% **D)** 13%

Date: 23/06/2025 Time: 4:30 PM - 6:00 PM Right: 94.20% Wrong: 2.29%

**Q87)** What sum (in ₹) will earn an interest of ₹420 in 2 years at 5% simple interest per year?

**A)** ₹4,350 **B)** ₹4,400 **C)** ₹4,000 **D)** ₹4,200

Date: 24/06/2025

Time: 12:45 PM - 2:15 PM

Right: 94.39%

Wrong: 2.43%

**Q88)** Find the simple interest (in ₹) if a sum of ₹350 is borrowed for 2.5 years at 4% per annum rate of interest.

**A)** 135 **B)** 15 **C)** 85 **D)** 35

Date: 10/06/2025

Time: 4:30 PM - 6:00 PM

Right: 94.74%

Wrong: 2.37%

**Q89)** The simple interest (in ₹) on ₹2,200 at the rate of 7% per annum in 2 years is:

**A)** ₹358 **B)** ₹258 **C)** ₹408 **D)** ₹308

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 95.34%

Wrong: 2.25%

**Q90)** The simple interest (in ₹) on ₹2,200 at the rate of 5% per annum in 2 years is:

**A)** ₹220 **B)** ₹320 **C)** ₹170 **D)** ₹270

Date: 24/06/2025

Time: 4:30 PM - 6:00 PM

Right: 96.62%

Wrong: 0.87%

### Answer Key (Q1 to Q90) Simple and Compound Interest

Q1: 1	Q2: 2	Q3: 2	Q4: 4	Q5: 1
Q6: 4	Q7: 2	Q8: 3	Q9: 2	Q10: 1
Q11: 2	Q12: 4	Q13: 4	Q14: 2	Q15: 1
Q16: 3	Q17: 4	Q18: 1	Q19: 4	Q20: 1
Q21: 2	Q22: 2	Q23: 2	Q24: 2	Q25: 2
Q26: 3	Q27: 1	Q28: 4	Q29: 3	Q30: 3
Q31: 4	Q32: 2	Q33: 2	Q34: 1	Q35: 1
Q36: 2	Q37: 2	Q38: 3	Q39: 3	Q40: 3
Q41: 3	Q42: 2	Q43: 3	Q44: 2	Q45: 2
Q46: 4	Q47: 3	Q48: 2	Q49: 4	Q50: 1
Q51: 1	Q52: 2	Q53: 3	Q54: 1	Q55: 2
Q56: 2	Q57: 1	Q58: 1	Q59: 4	Q60: 3
Q61: 2	Q62: 2	Q63: 1	Q64: 3	Q65: 1
Q66: 3	Q67: 2	Q68: 1	Q69: 4	Q70: 2

Q71: 1	Q72: 1	Q73: 2	Q74: 2	Q75: 2
Q76: 3	Q77: 1	Q78: 4	Q79: 1	Q80: 3
Q81: 3	Q82: 1	Q83: 2	Q84: 3	Q85: 4
Q86: 1	Q87: 4	Q88: 4	Q89: 4	Q90: 1

## Distance, Time, and Speed

**Q1)** One-third of a journey is covered at a speed of 67 km/hr, the next one-third of the journey is covered at a speed of 66 km/hr, and the remaining journey is covered at a speed of 17 km/hr. The average speed (in km/hr, rounded off to one decimal place) for the entire journey is:

**A)** 43.7 **B)** 28.6 **C)** 33.7 **D)** 29.6

Date: 20/06/2025 Time: 4:30 PM - 6:00 PM Right: 13.79% Wrong: 18.94%

**Q2)** Rishika travels a certain distance at a speed of 52 km/hr and double the earlier distance at 39 km/hr. She then returns to the starting point through the same route. If her average speed for the entire journey is 56 km/h, then what is her speed (in km/hr) for the return journey?

**A)** 87 **B)** 81.9 **C)** 76 **D)** 83.8

Date: 17/06/2025 Time: 4:30 PM - 6:00 PM Right: 14.45% Wrong: 12.93%

**Q3)** From a taxi stand, two cabs start at a speed of 74 km/hr at an interval of 28 minutes, both cabs travelling in the same direction. A man coming in the opposite direction towards the taxi stand meets the cabs at an interval of 10 minutes. Find the speed (in km/hr) of the man.

**A)** 128.8 **B)** 133.2 **C)** 143.1 **D)** 125.5

Date: 05/06/2025 Time: 12:45 PM - 2:15 PM Right: 15.88% Wrong: 11.03%

**Q4)** Amita travels a certain distance at a speed of 84 km/hr and double the earlier distance at 28 km/hr. She then returns to the starting point through the same route. If her average speed for the entire journey is 24 km/hr, then what is her speed (in km/hr) for the return journey?

**A)** 17.2 **B)** 16 **C)** 18 **D)** 21.5

Date: 18/06/2025 Time: 9:00 AM - 10:30 AM Right: 16.12% Wrong: 18.30%

**Q5)** From a taxi stand, two cabs start at a speed of 54 km/hr at an interval of 29 minutes, both cabs travelling in the same direction. A man coming in the opposite direction towards the taxi stand meets the cabs at an interval of 12 minutes. Find the speed (in km/hr) of the man.

**A)** 74.8 **B)** 82.1 **C)** 76.5 **D)** 80.4

Date: 05/06/2025 Time: 4:30 PM - 6:00 PM Right: 16.41% Wrong: 10.39%

Q6) While covering a distance of 39 km, a man noticed that after cycling for 5 hour 5 minutes, the distance covered by him was  $\frac{5}{4}$  of the remaining distance. What was his speed (in km/hr, rounded off to one decimal place)?

- A) 1.9 B) 4.3 C) 3.2 D) 6.5

Date: 23/06/2025

Time: 4:30 PM - 6:00 PM

Right: 16.76%

Wrong: 21.99%

Q7) Namita travels a certain distance at a speed of 88 km/hr and double the earlier distance at 16 km/hr. She then returns to the starting point through the same route. If her average speed for the entire journey is 33 km/hr, then what is her speed (in km/hr) for the return journey?

- A) 64 B) 65.4 C) 66 D) 71.2

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 17.58%

Wrong: 12.08%

Q8) While covering a distance of 37 km, a man noticed that after cycling for 1 hour 5 minutes, the distance covered by him was  $\frac{4}{3}$  of the remaining distance. What was his speed (in km/hr, rounded off to one decimal place)?

- A) 21.5 B) 19.5 C) 23.1 D) 14.5

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 19.08%

Wrong: 18.86%

Q9) In a 2295 m circular race, Siddharth finishes one round in 85 seconds and Yash finishes one round in 45 seconds. How many different meeting points are there on the circumference if they are running in the opposite directions?

- A) 36 B) 20 C) 26 D) 33

Date: 06/06/2025

Time: 4:30 PM - 6:00 PM

Right: 19.21%

Wrong: 20.45%

Q10) Babita travels a certain distance at a speed of 11 km/hr and double the earlier distance at 44 km/hr. She then returns to the starting point through the same route. If her average speed for the entire journey is 34 km/hr, then what is her speed (in km/hr) for the return journey?

- A) 70 B) 79 C) 74.8 D) 76.8

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 20.73%

Wrong: 10.33%

Q11) In a 2100 m circular race, Amit finishes one round in 42 seconds and Sumit finishes one round in 75 seconds. How many different meeting points are there on the circumference if they are running in the opposite directions?

- A) 29 B) 39 C) 38 D) 49

Date: 11/06/2025

Time: 4:30 PM - 6:00 PM

Right: 21.55%

Wrong: 20.26%

Q12) The downstream speed is 41 km/hr and the upstream speed is 20.5 km/hr. It takes a boat a total of 13 hours to go to a place and come back. What is the total distance travelled by the boat?

- A)  $\frac{529}{4}$  km B)  $\frac{1086}{3}$  km C)  $\frac{533}{3}$  km D)  $\frac{1066}{3}$  km

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 22.56%

Wrong: 35.17%

**Q13)** While covering a distance of 54 km, a man noticed that after cycling for 1 hour 15 minutes, the distance covered by him was  $\frac{7}{9}$  of the remaining distance. What was his speed (in km/hr)?

**A)** 18.7 **B)** 18.9 **C)** 19.9 **D)** 19.5

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 23.92%

Wrong: 12.18%

**Q14)** One-third of a journey is covered at a speed of 31 km/hr, the next one-third of the journey is covered at a speed of 4 km/hr, and the remaining journey is covered at a speed of 34 km/hr. The average speed (in km/hr, rounded off to one decimal place) for the entire journey is:

**A)** 3.1 **B)** 7.1 **C)** 6.3 **D)** 9.6

Date: 19/06/2025

Time: 12:45 PM - 2:15 PM

Right: 24.30%

Wrong: 20.14%

**Q15)** A man covers distances of 1980 km, 1306 km, and 540 km at the speed of 12 km/hr, x km/hr, and 36 km/hr, respectively. If his average speed for the whole journey is 14 km/hr, then what is the value of x?

**A)** 19 **B)** 13 **C)** 10 **D)** 14

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 26.72%

Wrong: 17.79%

**Q16)** While covering a distance of 35 km, a man noticed that after cycling for 4 hour 15 minutes, the distance covered by him was  $\frac{4}{3}$  of the remaining distance. What was his speed (in km/hr, rounded off to one decimal place)?

**A)** 5.1 **B)** 7.9 **C)** 8.4 **D)** 4.7

Date: 06/06/2025

Time: 4:30 PM - 6:00 PM

Right: 27.89%

Wrong: 21.14%

**Q17)** A motorist covers a distance of 30 km in 50 minutes by moving at a speed of x km/hr for the first 13 minutes, then moving at the speed of 2x km/hr for the next 25 minutes and then again moving at the speed of x km/hr for the rest of the journey. The value of x is equal to:

**A)** 29 **B)** 27 **C)** 21 **D)** 24

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 28.10%

Wrong: 11.72%

**Q18)** In covering a distance of 90 km, Anirudh takes 3 hours more than Burhan. If Anirudh doubles his speed, then he would take 2 hours less than Burhan. Anirudh's initial speed is:

**A)** 18 km/hr **B)** 6 km/hr **C)** 9 km/hr **D)** 2 km/hr

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 42.69%

Wrong: 21.16%

**Q19)** In covering a distance of 162 km, Abhay takes 6 hours more than Sameer. If Abhay doubles his speed, then he would take 3 hours less than Sameer. Abhay's initial speed is:

**A)** 8 km/hr **B)** 4 km/hr **C)** 18 km/hr **D)** 9 km/hr

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 45.00%

Wrong: 19.23%

**Q20)** A local train without stoppages runs at an average speed of 88 km/hr, and with stoppages, at an average speed of 24 km/hr. What is the total time (in hours) taken by the local train for stoppages on a route of length 528 km?

**A) 7   B) 10   C) 16   D) 25**

Date: 13/06/2025   Time: 4:30 PM - 6:00 PM   Right: 47.20%   Wrong: 14.28%

**Q21)** A person drove at 23 km/hr for 4.5 hours, then increased his speed by 11 km/hr, and reached the destination in another hour. Find the average speed (in km/hr) of the person during the entire journey.

**A) 22   B) 25   C) 26   D) 21**

Date: 23/06/2025   Time: 4:30 PM - 6:00 PM   Right: 50.22%   Wrong: 16.38%

**Q22)** A person drove at 77 km/hr for 3.5 hours, then increased his speed by 9 km/hr, and reached the destination in another hour. Find the average speed (in km/hr) of the person during the entire journey.

**A) 82   B) 75   C) 77   D) 79**

Date: 24/06/2025   Time: 9:00 AM - 10:30 AM   Right: 50.50%   Wrong: 18.70%

**Q23)** A man walks to a viewpoint and returns to the starting point by his car and thus takes a total time of 8 hours 15 minutes. He would have gained 5 hours by driving both ways. How long would he have taken to walk both ways?

**A) 13 hours 45 minutes   B) 14 hours 30 minutes   C) 12 hours 15 minutes   D) 13 hours 15 minutes**

Date: 21/06/2025   Time: 4:30 PM - 6:00 PM   Right: 52.80%   Wrong: 15.99%

**Q24)** A man has to cover a distance of 519 km in 7 hours. If he covers two – third of this distance in  $\frac{5}{7}$  of the time, then what should his speed (in km/hr) be to cover the remaining distance in the time left?

**A) 86.5   B) 46.5   C) 66.5   D) 34.5**

Date: 05/06/2025   Time: 9:00 AM - 10:30 AM   Right: 52.87%   Wrong: 13.05%

**Q25)** A man covers distances of 100 km, 408 km, and 1460 km at the speeds of 20 km/hr, x km/hr, and 20 km/hr, respectively. If his average speed for the whole journey is 20 km/hr, then what is the value of x?

**A) 22   B) 25   C) 20   D) 15**

Date: 10/06/2025   Time: 12:45 PM - 2:15 PM   Right: 53.92%   Wrong: 14.59%

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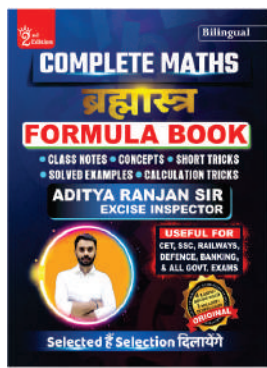
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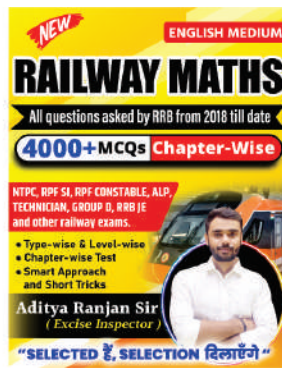




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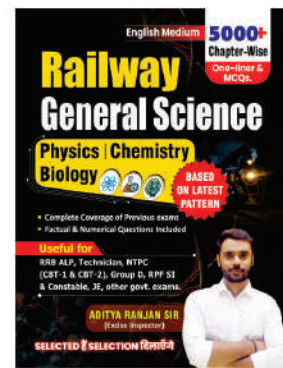
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**Q26)** On a circular path of 2742 m, Riya and Trisha start walking from the same point but in opposite directions at the speed of 4.6 m/s and X m/s, respectively. They will meet for the first time after 457 seconds. Find the value of X.

**A)** 0.8 **B)** 2.2 **C)** 1.1 **D)** 1.4

Date: 24/06/2025 Time: 4:30 PM - 6:00 PM Right: 56.38% Wrong: 7.74%

**Q27)** A man has to cover a distance of 222 km in 14 hours. If he covers two — third of this distance in  $\frac{3}{7}$  of the time, then what should his speed (in km/hr) be to cover the remaining distance in the time left?

**A)** 21.3 **B)** 3.75 **C)** 9.25 **D)** 12.3

Date: 10/06/2025 Time: 4:30 PM - 6:00 PM Right: 56.57% Wrong: 13.00%

**Q28)** A man has to cover a distance of 387 km in 21 hours. If he covers two — third of this distance in  $\frac{5}{7}$  of the time, then what should his speed (in km/hr) be to cover the remaining distance in the time left?

**A)** 21.5 **B)** 8.6 **C)** 11.5 **D)** 15.5

Date: 06/06/2025 Time: 9:00 AM - 10:30 AM Right: 57.08% Wrong: 10.85%

**Q29)** A man has to cover a distance of 549 km in 8 hours. If he covers  $\frac{2}{3}$  of this distance in  $\frac{3}{4}$  of the time, then what should be his speed (in km/hr) to cover the remaining distance in the time left?

**A)** 91.5 **B)** 96.5 **C)** 71.5 **D)** 82.5

Date: 18/06/2025 Time: 4:30 PM - 6:00 PM Right: 58.75% Wrong: 7.88%

**Q30)** A local train without stoppages runs at an average speed of 70 km/hr, and with stoppages, at an average speed of 30 km/hr. What is the total time (in hours) taken by the local train for stoppages on a route of length 630 km?

**A)** 19 **B)** 12 **C)** 10 **D)** 8

Date: 16/06/2025 Time: 9:00 AM - 10:30 AM Right: 60.71% Wrong: 10.94%

**Q31)** A man has to cover a distance of 387 km in 18 hours. If he covers two — third of this distance in  $\frac{6}{9}$  of the time, then what should his speed (in km/hr) be to cover the remaining distance in the time left?

**A)** 21.5 **B)** 6.3 **C)** 23.7 **D)** 10.7

Date: 24/06/2025 Time: 4:30 PM - 6:00 PM Right: 61.67% Wrong: 11.50%

**Q32)** Shanu walks to his office 5 km away from home. In the morning, he covers the distance in 1 hour whereas, while returning home in the evening, he takes 30 more minutes to cover the same distance. Find his average speed (in km/hr) during the two-way journey.

**A)** 5 **B)** 4.5 **C)** 5.5 **D)** 4

Date: 16/06/2025 Time: 12:45 PM - 2:15 PM Right: 64.80% Wrong: 20.01%

**Q33)** Daksh travels 445 km at 89 km/hr, the next 495 km at 55 km/hr and the next 250 km at 50 km/hr. What is his average speed (in km/hr) for the whole journey? (Corrected to two decimal places)

**A)** 62.63 **B)** 66.77 **C)** 57.21 **D)** 61.14

Date: 11/06/2025 Time: 9:00 AM - 10:30 AM Right: 65.25% Wrong: 14.21%

**Q34)** Yash travels 204 km at 68 km/hr, the next 424 km at 53 km/hr and the next 366 km at 61 km/hr. What is his average speed (in km/hr) for the whole journey? (Corrected to two decimal places)

**A)** 67.92 **B)** 57.62 **C)** 58.47 **D)** 65.87

Date: 12/06/2025 Time: 9:00 AM - 10:30 AM Right: 67.89% Wrong: 12.33%

**Q35)** A man has to cover a distance of 753 km in 12 hours. If he covers two — third of this distance in  $\frac{2}{3}$  of the time, then what should his speed (in km/hr) be to cover the remaining distance in the time left?

**A)** 41.8 **B)** 31.3 **C)** 52.25 **D)** 62.75

Date: 06/06/2025 Time: 12:45 PM - 2:15 PM Right: 68.30% Wrong: 10.13%

**Q36)** Anushka walks to her office 5 km away from home. In the morning she covers the distance in 1 hour, whereas while returning home in the evening, she takes 15 more minutes to cover the same distance. Find her average speed (in km/hr) during the two-way journey.

**A)**  $\frac{38}{9}$  **B)**  $\frac{40}{9}$  **C)**  $\frac{40}{11}$  **D)**  $\frac{41}{9}$

Date: 24/06/2025 Time: 12:45 PM - 2:15 PM Right: 68.62% Wrong: 6.87%

**Q37)** Walking at  $\frac{5}{7}$  of his normal speed, Manish is 20 minutes late in reaching his office.

The usual time taken by him to cover the distance between his home and his office is:

**A)** 56 minutes **B)** 42 minutes **C)** 50 minutes **D)** 49 minutes

Date: 11/06/2025 Time: 12:45 PM - 2:15 PM Right: 70.06% Wrong: 13.51%

**Q38)** Ravi travels from City A to City B. If Ravi drives his car at  $\frac{2}{7}$  of his normal speed, then he reaches City B 30 minutes late. Find the time (in minutes) that Ravi would have taken to travel from City A to City B if he drove at his normal speed.

**A)** 5 **B)** 12 **C)** 3 **D)** 19

Date: 12/06/2025 Time: 12:45 PM - 2:15 PM Right: 70.16% Wrong: 7.30%

**Q39)** Chetan travels from City A to City B. If Chetan drives his car at  $\frac{2}{3}$  of his normal speed, then he reaches City B 46 minutes late. Find the time (in minutes) that Chetan would have taken to travel from City A to City B if he drove at his normal speed.

**A)** 92 **B)** 82 **C)** 85 **D)** 99

Date: 16/06/2025 Time: 4:30 PM - 6:00 PM Right: 71.23% Wrong: 7.79%

**Q40)** T travelled 576 km, 630 km and 315 km at the speeds of 16 km/hr, 7 km/hr and 9 km/hr, respectively. Find his average speed in km/hr.

- A)  $10\frac{78}{161}$  B)  $10\frac{70}{161}$  C)  $9\frac{72}{161}$  D)  $9\frac{73}{161}$

Date: 11/06/2025

Time: 12:45 PM - 2:15 PM

Right: 71.52%

Wrong: 7.44%

**Q41)** Rati travels from City A to City B. If Rati drives her car at  $\frac{1}{3}$  of her normal speed, then she reaches City B 50 minutes late. Find the time (in minutes) that Rati would take to travel from City A to City B if she drove at her normal speed.

- A) 25 B) 34 C) 35 D) 26

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 71.61%

Wrong: 4.98%

**Q42)** A truck travels 80 km at the speed of 40 km/hr and the next 44 km at the speed of 9 km/hr. What is its average speed (in km/hr)?

- A) 24 B) 12 C) 22 D) 18

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 72.47%

Wrong: 11.60%

**Q43)** Walking at  $\frac{2}{5}$  of his normal speed, Abhijeet is 18 minutes late in reaching his office.

The usual time taken by him to cover the distance between his home and his office is:

- A) 12 minutes B) 2 minutes C) 9 minutes D) 11 minutes

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 75.81%

Wrong: 10.15%

**Q44)** Walking at  $\frac{2}{5}$  of his normal speed, Abhijeet is 48 minutes late in reaching his office.

The usual time taken by him to cover the distance between his home and his office is:

- A) 37 minutes B) 32 minutes C) 40 minutes D) 33 minutes

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 76.06%

Wrong: 8.34%

**Q45)** Walking at  $\frac{2}{7}$  of his normal speed, Abhijeet is 70 minutes late in reaching his office.

The usual time taken by him to cover the distance between his home and his office is:

- A) 28 minutes B) 37 minutes C) 21 minutes D) 33 minutes

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 76.52%

Wrong: 7.09%

**Q46)** Hari travels from City A to City B. If Hari drives his car at  $\frac{1}{4}$  of his normal speed, then he reaches City B 39 minutes late. Find the time (in minutes) that Hari would take to travel from City A to City B if he drove at his normal speed.

- A) 4 B) 20 C) 13 D) 19

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 76.53%

Wrong: 4.04%

**Q47)** A car covers a distance of 1032 km in 8 hours. The speed of a train is double the speed of the car. One-third the speed of the train is equal to the speed of a bike. How much distance will the bike cover in 17 hours?

**A)** 1460 km **B)** 1452 km **C)** 1462 km **D)** 1458 km

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 77.13%

Wrong: 6.83%

**Q48)** Walking at  $\frac{2}{3}$  of his normal speed, Abhijeet is 28 minutes late in reaching his office.

The usual time taken by him to cover the distance between his home and his office is:

**A)** 49 minutes **B)** 62 minutes **C)** 56 minutes **D)** 55 minutes

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 79.68%

Wrong: 5.16%

**Q49)** Walking at  $\frac{4}{5}$  of his normal speed, Vishal is 25 minutes late in reaching his office. The usual time taken by him to cover the distance between his home and his office is:

**A)** 100 minutes **B)** 104 minutes **C)** 92 minutes **D)** 103 minutes

Date: 11/06/2025

Time: 4:30 PM - 6:00 PM

Right: 79.90%

Wrong: 4.77%

**Q50)** The speed limit on a highway has the dimension of:

**A)** Time **B)** Length over time **C)** Time over length **D)** Mass

Date: 18/06/2025

Time: 9:00 AM - 10:30 AM

Right: 80.36%

Wrong: 12.35%

**Q51)** A bike can finish a certain journey in 20 hours at the speed of 66 km/hr. In order to cover the same distance in 15 hours, the speed of the bike (in km/hr) must be increased by \_\_\_\_.

**A)** 25 **B)** 18 **C)** 14 **D)** 22

Date: 18/06/2025

Time: 4:30 PM - 6:00 PM

Right: 83.43%

Wrong: 7.57%

**Q52)** A byke travels 80 km at the speed of 40 km/hr and the next 45 km at the speed of 15 km/hr. What is its average speed (in km/hr)?

**A)** 25 **B)** 31 **C)** 29 **D)** 19

Date: 19/06/2025

Time: 9:00 AM - 10:30 AM

Right: 83.64%

Wrong: 5.79%

**Q53)** A bike can finish a certain journey in 6 hours at the speed of 92 km/hr. In order to cover the same distance in 3 hours, the speed of the bike (in km/hr) must be increased by \_\_\_\_.

**A)** 86 **B)** 98 **C)** 92 **D)** 85

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 85.83%

Wrong: 7.44%

### Answer Key (Q1 to Q53) Distance, Time, and Speed

Q1: 3	Q2: 2	Q3: 2	Q4: 3	Q5: 3
Q6: 2	Q7: 3	Q8: 2	Q9: 3	Q10: 3

Q11: 2	Q12: 4	Q13: 2	Q14: 4	Q15: 4
Q16: 4	Q17: 4	Q18: 3	Q19: 4	Q20: 3
Q21: 2	Q22: 4	Q23: 4	Q24: 1	Q25: 3
Q26: 4	Q27: 3	Q28: 1	Q29: 1	Q30: 2
Q31: 1	Q32: 4	Q33: 1	Q34: 3	Q35: 4
Q36: 2	Q37: 3	Q38: 2	Q39: 1	Q40: 3
Q41: 1	Q42: 4	Q43: 1	Q44: 2	Q45: 1
Q46: 3	Q47: 3	Q48: 3	Q49: 1	Q50: 2
Q51: 4	Q52: 1	Q53: 3		

### Problems based on Train, Boat, and Stream

**Q1)** A boat takes 27 minutes to go 37.2 km upstream. The ratio of the speed of the boat in still water to that of the stream is 8 : 5. How much total time (in hours) will the boat take to go 79.4 km upstream and 85.8 km downstream?

**A)** 4.2 **B)** 1.2 **C)** 3.9 **D)** 2.6

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 9.37%

Wrong: 14.93%

**Q2)** A boat takes 76 minutes to go 32.2 km upstream. The ratio of the speed of the boat in still water to that of the stream is 9 : 8. How much approximate total time (in hours) will the boat take to go 44.9 km upstream and 57.8 km downstream?

**A)** 1.9 **B)** 4.3 **C)** 0.2 **D)** 2.2

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 9.78%

Wrong: 13.24%

**Q3)** A boat takes 83 minutes to go 33.2 km upstream. The ratio of the speed of the boat in still water to that of the stream is 8 : 5. How much total time (in hours) will the boat take to go 47.1 km upstream and 55.9 km downstream?

**A)** 6.8 **B)** 2.5 **C)** 3.5 **D)** 1.5

Date: 10/06/2025

Time: 4:30 PM - 6:00 PM

Right: 10.92%

Wrong: 18.40%

**Q4)** A boat takes 27 minutes to go 40.6 km upstream. The ratio of the speed of the boat in still water to that of the stream is 8 : 7. How much total time (in hours) will the boat take to go 77.7 km upstream and 52.5 km downstream?

**A)** 3.7 **B)** 0.9 **C)** 2.2 **D)** 1.1

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 11.55%

Wrong: 14.39%

**Q5)** A boat takes 39 minutes to go 27.9 km upstream. The ratio of the speed of the boat in still water to that of the stream is 9 : 4. How much total time (in hours) will the boat take to go 18.9 km upstream and 51.3 km downstream?

**A)** 4.3 **B)** 0.9 **C)** 2.6 **D)** 1.9

Date: 20/06/2025 Time: 12:45 PM - 2:15 PM Right: 12.87% Wrong: 13.32%

**Q6)** A train P going at the speed of 58 km/hr completely passes train Q of length 238 m, going in the same direction on parallel tracks, at 27 km/hr, in 7.5 minutes. How much time (in seconds) will P take to cross completely train R of length 123 m, going at 38 km/hr in the opposite direction?

**A)** 161 **B)** 132 **C)** 141 **D)** 134

Date: 16/06/2025 Time: 4:30 PM - 6:00 PM Right: 14.80% Wrong: 9.60%

**Q7)** A boat takes 75 minutes to go 62.3 km upstream. The ratio of the speed of the boat in still water to that of the stream is 3 : 2. How much total time (in hours) will the boat take to go 67.6 km upstream and 35.8 km downstream?

**A)** 2.4 **B)** 1.5 **C)** 4.1 **D)** 0.6

Date: 12/06/2025 Time: 4:30 PM - 6:00 PM Right: 18.31% Wrong: 15.02%

**Q8)** A boat takes 18 minutes to go 59.4 km upstream. The ratio of the speed of the boat in still water to that of the stream is 3 : 2. How much total time (in hours) will the boat take to go 29.3 km upstream and 51.5 km downstream?

**A)** 3.5 **B)** 2.6 **C)** 4.5 **D)** 0.2

Date: 18/06/2025 Time: 12:45 PM - 2:15 PM Right: 21.06% Wrong: 13.56%

**Q9)** The downstream speed is 22 km/hr and the upstream speed is 5.5 km/hr. It takes a boat a total of 8 hours to go to a place and come back. What is the total distance travelled by the boat?

**A)**  $\frac{366}{5}$  km **B)**  $\frac{352}{5}$  km **C)**  $\frac{176}{5}$  km **D)**  $\frac{172}{6}$  km

Date: 10/06/2025 Time: 12:45 PM - 2:15 PM Right: 21.27% Wrong: 38.40%

**Q10)** A train overtakes two persons walking along a railway track. The first one walks at 12.6 km/hr. The other one walks at 27 km/hr. The train takes 12.5 and 14 seconds, respectively, to overtake them. What is the speed of the train if both the persons are walking in the same direction as the train?

**A)** 142 km/hr **B)** 147 km/hr **C)** 154 km/hr **D)** 143 km/hr

Date: 13/06/2025 Time: 4:30 PM - 6:00 PM Right: 21.48% Wrong: 13.70%

**Q11)** A train P going at the speed of 78 km/hr completely passes train Q of length 120 m, going in the same direction on parallel tracks, at 62 km/hr, in 4.5 minutes. How much time (in seconds) will P take to cross completely train R of length 245 m, going at 81 km/hr in the opposite direction?

**A)** 49 **B)** 28 **C)** 30 **D)** 15

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 23.86%

Wrong: 11.09%

**Q12)** A boat takes 90 minutes to go 49.2 km upstream. The ratio of the speed of the boat in still water to that of the stream is 3 : 2. How much total time (in hours) will the boat take to go 44.8 km upstream and 71.2 km downstream?

**A)** 5.4 **B)** 0.1 **C)** 1.8 **D)** 3.8

Date: 19/06/2025

Time: 9:00 AM - 10:30 AM

Right: 24.19%

Wrong: 14.06%

**Q13)** A boat takes 51 minutes to go 10.2 km upstream. The ratio of the speed of the boat in still water to that of the stream is 7 : 6. How much total time (in hours) will the boat take to go 17.7 km upstream and 66.3 km downstream?

**A)** 3.4 **B)** 2.1 **C)** 1.9 **D)** 0.3

Date: 05/06/2025

Time: 4:30 PM - 6:00 PM

Right: 24.65%

Wrong: 15.35%

**Q14)** A train P going at the speed of 30 km/hr completely passes train Q of length 296 m, going in the same direction on parallel tracks, at 21 km/hr, in 6.5 minutes. How much time (in seconds) will P take to cross completely train R of length 196 m, going at 96 km/hr in the opposite direction?

**A)** 42 **B)** 21 **C)** 25 **D)** 22

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 26.62%

Wrong: 11.96%

**Q15)** Train A running at a speed of 99 km/hr takes 46 seconds to completely cross train B running at 72 km/hr in the opposite direction. The length of train B is 1.5 times the length of train A. Train B crosses a bridge completely in 82 seconds. The length of the bridge (in m) is:

**A)** 426 **B)** 424 **C)** 369 **D)** 329

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 30.28%

Wrong: 13.25%

**Q16)** A train overtakes two persons walking along a railway track. The first one walks at 12.6 km/hr. The other one walks at 30.6 km/hr. The train takes 19.8 and 25.8 seconds, respectively, to overtake them. What is the speed of the train if both the persons are walking in the same direction as the train?

**A)** 94 km/hr **B)** 96 km/hr **C)** 90 km/hr **D)** 80 km/hr

Date: 14/06/2025

Time: 9:00 AM - 10:30 AM

Right: 30.99%

Wrong: 10.28%

**Q17)** A 120 m long train overtakes a man moving at a speed of 9 km/hr (in same direction) in 18 seconds. How much time (in seconds) will this train take to completely cross another 230 m long train, moving in the opposite direction at a speed of 27 km/hr?

**A) 17 B) 35 C) 21 D) 33**

Date: 12/06/2025 Time: 4:30 PM - 6:00 PM Right: 35.23% Wrong: 28.87%

**Q18)** Train A running at a speed of 72 km/hr takes 24 seconds to completely cross train B running at 63 km/hr in the opposite direction. The length of train B is 1.5 times the length of train A. Train B crosses a bridge completely in 62 seconds. The length of the bridge (in m) is:

**A) 626 B) 445 C) 433 D) 545**

Date: 11/06/2025 Time: 9:00 AM - 10:30 AM Right: 36.04% Wrong: 10.00%

**Q19)** Train A, running at a speed of 32 km/hr, takes 33 seconds to completely cross train B, running at 28 km/hr in the opposite direction. The length of train B is 1.5 times the length of train A. Train B crosses a bridge completely in 54 seconds. What is the length of the bridge (in m)?

**A) 109 B) 177 C) 154 D) 90**

Date: 10/06/2025 Time: 9:00 AM - 10:30 AM Right: 39.24% Wrong: 12.45%

**Q20)** A 250 m long train overtakes a man moving at a speed of 7 km/hr (in same direction) in 50 seconds. How much time (in seconds) will this train take to completely cross another 280 m long train, moving in the opposite direction at a speed of 28 km/hr?

**A) 36 B) 54 C) 49 D) 50**

Date: 14/06/2025 Time: 9:00 AM - 10:30 AM Right: 39.87% Wrong: 16.05%

**Q21)** If Ishwar covers 721 km in a boat in 42 hours against the stream and he takes 15 hours with the stream, then find the speed of the stream.

**A) 7.38 km/hr B) 19.25 km/hr C) 22.48 km/hr D) 15.45 km/hr**

Date: 05/06/2025 Time: 9:00 AM - 10:30 AM Right: 41.45% Wrong: 18.43%

**Q22)** A 100 m long train overtakes a man moving at a speed of 9 km/hr (in same direction) in 30 seconds. How much time (in seconds) will this train take to completely cross another 220 m long train, moving in the opposite direction at a speed of 51 km/hr?

**A) 34 B) 5 C) 10 D) 16**

Date: 14/06/2025 Time: 12:45 PM - 2:15 PM Right: 44.23% Wrong: 12.35%

**Q23)** If Vishal covers 184 km in a boat in 48 hours against the stream and he takes 12 hours with the stream, then find the speed of the stream.

**A) 13.66 km/hr B) 14.36 km/hr C) 10.64 km/hr D) 5.75 km/hr**

Date: 06/06/2025 Time: 9:00 AM - 10:30 AM Right: 51.76% Wrong: 19.73%

**Q24)** A train is 1495 m and it crosses a platform in 2.8 minutes running at the speed of 54 km/hr. Find the difference between the length of the train and the platform.

**A)** 470 m **B)** 467 m **C)** 461 m **D)** 472 m

Date: 19/06/2025

Time: 12:45 PM - 2:15 PM

Right: 55.24%

Wrong: 9.21%

**Q25)** A train is 591 m and it crosses a platform in 1.7 minutes running at the speed of 36 km/hr. Find the difference between the length of the train and the platform.

**A)** 162 m **B)** 171 m **C)** 170 m **D)** 159 m

Date: 18/06/2025

Time: 9:00 AM - 10:30 AM

Right: 56.57%

Wrong: 17.40%

**Q26)** The speed of a boat in still water is 17 km/hr and the speed of the stream is 16 km/hr. A man rows to a place at a distance of 26.4 km and comes back to the starting point. Find the total time (in hours) taken by him.

**A)** 23.4 **B)** 17.8 **C)** 25.4 **D)** 27.2

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 57.96%

Wrong: 12.58%

**Q27)** The speed of a boat in still water is 12 km/hr and the speed of the stream is 10 km/hr. A man rows to a place at a distance of 24.2 km and comes back to the starting point. Find the total time (in hours) taken by him.

**A)** 5.8 **B)** 7.8 **C)** 13.2 **D)** 4.1

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 62.61%

Wrong: 9.68%

**Q28)** The speed of a boat in still water is 7 km/hr and the speed of the stream is 5 km/hr. A man rows to a place at a distance of 52.8 km and comes back to the starting point. Find the total time (in hours) taken by him.

**A)** 40.6 **B)** 23.6 **C)** 29.9 **D)** 30.8

Date: 14/06/2025

Time: 12:45 PM - 2:15 PM

Right: 64.59%

Wrong: 11.03%

**Q29)** The speed of a boat in still water is 9 km/hr and the speed of the stream is 5 km/hr. A man rows to a place at a distance of 75.6 km and comes back to the starting point. Find the total time (in hours) taken by him.

**A)** 24.3 **B)** 26.6 **C)** 19.3 **D)** 20.8

Date: 16/06/2025

Time: 9:00 AM - 10:30 AM

Right: 66.21%

Wrong: 12.03%

**Q30)** Two trains having lengths of 100 m and 500 m are running at speeds of 100 km/hr and 110 km/hr, respectively, in the same direction. The time taken (in minutes) by the faster train, coming from behind, to completely cross the other train is:

**A)** 9.3 **B)** 1.4 **C)** 3.6 **D)** 6

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 68.98%

Wrong: 13.09%

**Q31)** A boat travels 14 km upstream in 14 hours and 171 km downstream in 9 hours. What is the speed of the boat in still water?

**A)** 18 km/hf **B)** 6 km/hr **C)** 17 km/hf **D)** 10 km/hr

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 75.25%

Wrong: 12.68%

**Q32)** A man takes 6 hours to swim 66 km downstream. He swims 42 km upstream in the same time. What is the speed (in km/hr) of the boat in still water?

**A)** 13 **B)** 9 **C)** 16 **D)** 17

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 79.11%

Wrong: 8.42%

**Q33)** A man takes 13 hours to swim 91 km downstream. He swims 39 km upstream in the same time. What is the speed (in km/hr) of the boat in still water?

**A)** 5 **B)** 8 **C)** 1 **D)** 9

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 79.55%

Wrong: 7.65%

**Q34)** In one hour, a boat goes 47 km/hr in the direction of the stream and 19 km/hr against the direction of the stream. What will be the speed of the current?

**A)** 14 km/hr **B)** 20 km/hr **C)** 19 km/hr **D)** 11 km/hr

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 81.34%

Wrong: 7.29%

**Q35)** A boat travels 176 km upstream in 16 hours and 85 km downstream in 5 hours. What is the speed of the boat in still water?

**A)** 24 km/hr **B)** 20 km/hr **C)** 14 km/hr **D)** 23 km/hr

Date: 17/06/2025

Time: 4:30 PM - 6:00 PM

Right: 82.85%

Wrong: 4.98%

**Q36)** In one hour, a boat goes 46 km/hr in the direction of the stream and 36 km/hr against the direction of the stream. What will be the speed of the current?

**A)** 5 km/hr **B)** 4 km/hr **C)** 11 km/hr **D)** 2 km/hr

Date: 24/06/2025

Time: 12:45 PM - 2:15 PM

Right: 84.54%

Wrong: 5.51%

**Q37)** A swimmer can swim downstream at 40 km/hr and upstream at 26 km/hr. What is the speed of the swimmer in still water?

**A)** 33 km/hr **B)** 26 km/hr **C)** 42 km/hr **D)** 40 km/hr

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 87.98%

Wrong: 4.76%

**Q38)** A swimmer can swim downstream at 37 km/hr and upstream at 27 km/hr. What is the speed of the swimmer in still water?

**A)** 26 km/hr **B)** 33 km/hr **C)** 32 km/hr **D)** 31 km/hr

Date: 12/06/2025

Time: 12:45 PM - 2:15 PM

Right: 88.37%

Wrong: 3.93%

**Answer Key (Q1 to Q38) Problems based on Train, Boat, and Stream**

Q1: 2	Q2: 1	Q3: 2	Q4: 2	Q5: 2
Q6: 3	Q7: 2	Q8: 4	Q9: 2	Q10: 2
Q11: 3	Q12: 3	Q13: 3	Q14: 3	Q15: 4
Q16: 3	Q17: 3	Q18: 4	Q19: 4	Q20: 1
Q21: 4	Q22: 4	Q23: 4	Q24: 1	Q25: 1
Q26: 4	Q27: 3	Q28: 4	Q29: 1	Q30: 3
Q31: 4	Q32: 2	Q33: 1	Q34: 1	Q35: 3
Q36: 1	Q37: 1	Q38: 3		

**Time and Work**

**Q1)** Robert, Chris and Jeremy can finish a certain piece of work in 10, 14 and 21 days, respectively. All three of them started the work together. Robert left the work after 5 days and Chris left just 2 days before the work was completed. Find the total number of days taken for the work to be completed.

**A)** 9.5 **B)** 1.7 **C)** 10.9 **D)** 5.4

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 36.24%

Wrong: 22.25%

**Q2)** 9 men or 8 women can do a job in 19 days. 9 men work for 9 days and leave. The number of women required to complete the remaining work in 8 days is:

**A)** 12 **B)** 11 **C)** 10 **D)** 8

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 45.07%

Wrong: 17.69%

**Q3)** A, B and C alone can do a piece of work in 11, 33 and 48 days, respectively. They all started the work together, but A left after 2 days. In how many days was the remaining work completed?

**A)** 16 **B)** 13 **C)** 14 **D)** 15

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 50.07%

Wrong: 29.20%

**Q4)** 2 men or 9 women can do a job in 14 days. 2 men work for 9 days and leave. The number of women required to complete the remaining work in 9 days is:

**A)** 2 **B)** 3 **C)** 5 **D)** 4

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 52.19%

Wrong: 13.97%

Q5) A can do a certain work at the same time in which B and C together can do it. If A and B together can do it in 7 days and C alone in 9 days, then B alone can do it in \_\_\_\_\_ days.

A) 252 B) 63 C) 189 D) 126

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 55.03%

Wrong: 15.64%

Q6) Nick, Kevin, and Joe can finish a certain piece of work in 3, 9, and 27 days respectively. All three of them started the work together. Nick left after working for 1 day, and Kevin left 2 days before the work was completed. Find the total number of days taken to complete the work.

A) 7 B) 5 C) 4 D) 6

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 56.71%

Wrong: 26.40%

Q7) Sharad can complete a piece of work alone in 13 days and Varad can complete the same piece of work alone in 9 days. They started the work together, but Varad had to leave 11 days before the completion of the work. In how many days will the work complete?

A)  $9\frac{10}{11}$  B)  $10\frac{5}{11}$  C)  $11\frac{9}{11}$  D)  $12\frac{2}{11}$

Date: 24/06/2025

Time: 4:30 PM - 6:00 PM

Right: 62.05%

Wrong: 13.74%

Q8) A and B complete a work in 14 days. If A alone can do it in 63 days, then B alone can do it half of the same work in \_\_\_\_\_ days.

A) 9 B) 36 C) 27 D) 18

Date: 19/06/2025

Time: 9:00 AM - 10:30 AM

Right: 62.61%

Wrong: 31.26%

Q9) 3 men and 14 women can complete a piece of work in 18 days, and 11 men and 8 women can complete the same work in 12 days. The work of how many women is equivalent to that of one man?

A) 5 B) 2 C) 3 D) 4

Date: 18/06/2025

Time: 4:30 PM - 6:00 PM

Right: 65.86%

Wrong: 11.96%

Q10) A and B can do a piece of work in 12 days and 18 days, respectively. Both work for 2 days and then A goes away and B completed the remaining work alone. The whole work was completed in \_\_\_\_\_ days.

A) 13 B) 14 C) 15 D) 16

Date: 18/06/2025

Time: 9:00 AM - 10:30 AM

Right: 66.27%

Wrong: 28.38%

Q11) A can complete a piece of work in 24 days and B can complete it in 28 days. If they work on alternate days, starting with B on the first day, then in how many days will the work be finished?

A)  $25\frac{6}{7}$  B)  $25\frac{1}{6}$  C)  $24\frac{6}{7}$  D)  $24\frac{1}{6}$

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 66.53%

Wrong: 19.84%

**Q12)** A can complete a piece of work in 18 days and B can complete it in 22 days. If they work on alternate days, starting with B on the first day, then in how many days will the work be finished?

- A)  $18\frac{2}{9}$  B)  $19\frac{2}{9}$  C)  $18\frac{9}{11}$  D)  $19\frac{9}{11}$

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 66.98%

Wrong: 19.55%

**Q13)** 13 men and 3 women can complete a piece of work in 7 days, and 5 men and 6 women can complete the same work in 18 days. The work of how many women is equivalent to that of one man?

- A) 87 B) 84 C) 88 D) 90

Date: 18/06/2025

Time: 9:00 AM - 10:30 AM

Right: 67.37%

Wrong: 9.09%

**Q14)** A can do a piece of work in 57 hours, B and C together can do it in 28 hours, while A and C together can do it in 19 hours. How long (in hours) will B alone take to do it?

- A) 1597 B) 1595 C) 1596 D) 1598

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 67.72%

Wrong: 5.52%

**Q15)** Nirbhay can complete a piece of work alone in 19 days and Vismay can complete the same piece of work alone in 6 days. They started the work together, but Nirbhay had to leave 4 days before the completion of the work. In how many days will the work get completed?

- A)  $5\frac{13}{25}$  days B)  $5\frac{6}{25}$  days C)  $5\frac{8}{25}$  days D)  $5\frac{24}{25}$  days

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 69.07%

Wrong: 10.41%

**Q16)** Ramesh can complete a piece of work alone in 16 days and Suresh can complete the same piece of work alone in 10 days. They started the work together, but Ramesh had to leave 4 days before the completion of the work. In how many days will the work get completed?

- A)  $7\frac{5}{13}$  days B)  $7\frac{9}{13}$  days C)  $7\frac{8}{13}$  days D)  $7\frac{2}{13}$  days

Date: 17/06/2025

Time: 4:30 PM - 6:00 PM

Right: 69.92%

Wrong: 14.12%

**Q17)** A, B and C alone can do a piece of work in 5, 55 and 66 days, respectively. They all started the work together, but A left after 4 days. In how many days was the whole work completed?

- A) 7 B) 3 C) 2 D) 6

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 72.11%

Wrong: 14.20%

**Q18)** Varun and Ashish together can paint a hall in 3 days. Varun alone can paint it in 7 days. In how many days can Ashish alone paint 4 such halls?

- A) 5.25 B) 6.25 C) 22 D) 21

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 73.12%

Wrong: 18.72%

**Q19)** Jitesh and Kamal can complete a certain piece of work in 5 and 18 days, respectively. They started to work together, and after 3 days, Kamal left. In how many days will Jitesh complete the remaining work?

- A)  $\frac{11}{6}$  B)  $\frac{13}{6}$  C)  $\frac{7}{6}$  D)  $\frac{25}{6}$

Date: 19/06/2025

Time: 9:00 AM - 10:30 AM

Right: 76.33%

Wrong: 14.13%

**Q20)** A can complete a piece of work in 14 days and B can complete it in 10 days. If they work on alternate days, starting with B on the first day, then in how many days will the work be finished?

- A)  $11\frac{2}{3}$  B)  $10\frac{2}{3}$  C)  $11\frac{3}{5}$  D)  $10\frac{3}{5}$

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 77.30%

Wrong: 13.02%

**Q21)** A and B complete a work in 20 days. If A alone can do it in 45 days, then B alone can do one-third of the same work in \_\_\_\_\_ days.

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

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 77.56%

Wrong: 17.34%

**Q22)** A can do a piece of work in 63 hours, B and C together can do it in 42 hours, while A and C together can do it in 27 hours. How long (in hours) will B alone take to do it?

- A) 377 B) 380 C) 379 D) 378

Date: 10/06/2025

Time: 4:30 PM - 6:00 PM

Right: 78.45%

Wrong: 4.48%

**Q23)** A and B can complete a work in 11 days and 33 days, respectively. They started doing the work together, but after 3 days, B had to leave, and A completed the remaining work alone. The remaining work was completed in \_\_\_\_\_ days.

- A) 7 B) 11 C) 10 D) 12

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 78.73%

Wrong: 15.93%

**Q24)** A and B complete a work in 18 days. If A alone can do it in 24 days, then B alone can do one-fourth of the same work in \_\_\_\_\_ days.

- A) 18 B) 72 C) 36 D) 54

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 79.40%

Wrong: 16.42%

**Q25)** A and B complete a work in 2 days. If A alone can do it in 38 days, then B alone can do 9-times of the same work in \_\_\_\_\_ days.

- A) 10 B) 9 C) 20 D) 19

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 81.23%

Wrong: 9.27%

**Q26)** A and B complete a work in 15 days. If A alone can do it in 17 days, then B alone can do two-third of the same work in \_\_\_\_\_ days.

- A)** 85 **B)** 340 **C)** 255 **D)** 170

Date: 20/06/2025 Time: 12:45 PM - 2:15 PM Right: 81.34% Wrong: 9.88%

**Q27)** Mohan can do a piece of work in 9 hours. Pramod can do it in 21 hours. With the assistance of Ashish, they completed the work in 6 hours. In how many hours can Ashish alone do twice the same work?

- A)** 251 **B)** 252 **C)** 254 **D)** 253

Date: 24/06/2025 Time: 4:30 PM - 6:00 PM Right: 82.22% Wrong: 4.14%

**Q28)** A and B complete a work in 14 days. If A alone can do it in 56 days, then B alone can do three-fourth of the same work in \_\_\_\_\_ days.

- A)** 14 **B)** 42 **C)** 56 **D)** 28

Date: 19/06/2025 Time: 12:45 PM - 2:15 PM Right: 82.71% Wrong: 12.12%

**Q29)** A and B can do a job in 25 days and 18 days, respectively. A works alone for 4 days and leaves. The number of days required by B to complete the remaining job is:

- A)**  $15\frac{3}{25}$  **B)**  $15\frac{3}{26}$  **C)**  $17\frac{4}{26}$  **D)**  $16\frac{3}{25}$

Date: 06/06/2025 Time: 9:00 AM - 10:30 AM Right: 83.23% Wrong: 6.60%

**Q30)** Hemant and Irfan can complete a certain piece of work in 6 and 10 days, respectively. They started to work together, and after 2 days, Irfan left. In how many days will Hemant complete the remaining work?

- A)**  $\frac{9}{5}$  **B)**  $\frac{17}{5}$  **C)**  $\frac{11}{5}$  **D)**  $\frac{14}{5}$

Date: 24/06/2025 Time: 12:45 PM - 2:15 PM Right: 86.10% Wrong: 6.01%

**Q31)** A can lay a railway track between two given stations in 8 days and B can do the same job in 24 days. With the help of C, they can do the job in 3 days. C alone can do the job in:

- A)** 7 days **B)** 8 days **C)** 6 days **D)** 9 days

Date: 09/06/2025 Time: 9:00 AM - 10:30 AM Right: 86.33% Wrong: 8.10%

**Q32)** A and B can do a piece of work in 13 days and 52 days, respectively. Both work for 2 days and then A goes away. How long (in days) will B take to complete the remaining work?

- A)** 42 **B)** 44 **C)** 43 **D)** 41

Date: 18/06/2025 Time: 4:30 PM - 6:00 PM Right: 87.38% Wrong: 6.36%

**Q33)** A can finish a work in 2 days and B can do the same work in 52 days. B worked alone for 26 days and left the job. In how many days can A alone finish the remaining work?

**A) 3 B) 2 C) 1 D) 4**

Date: 11/06/2025 Time: 12:45 PM - 2:15 PM Right: 87.78% Wrong: 7.78%

**Q34)** Robin and Varun together can paint a hall in 6 days. Robin alone can paint it in 42 days. In how many days can Varun alone paint it?

**A) 7 B) 9 C) 10 D) 8**

Date: 05/06/2025 Time: 4:30 PM - 6:00 PM Right: 93.98% Wrong: 2.88%

**Q35)** A and B complete a work in 6 days. If A alone can do it in 7 days, then B alone can do it in \_\_\_\_\_ days.

**A) 44 B) 42 C) 43 D) 41**

Date: 18/06/2025 Time: 12:45 PM - 2:15 PM Right: 95.71% Wrong: 1.59%

### Answer Key (Q1 to Q35) Time and Work

Q1: 4	Q2: 3	Q3: 3	Q4: 3	Q5: 2
Q6: 4	Q7: 3	Q8: 1	Q9: 2	Q10: 3
Q11: 1	Q12: 4	Q13: 1	Q14: 3	Q15: 1
Q16: 2	Q17: 4	Q18: 4	Q19: 3	Q20: 3
Q21: 2	Q22: 4	Q23: 1	Q24: 1	Q25: 4
Q26: 1	Q27: 2	Q28: 1	Q29: 1	Q30: 4
Q31: 3	Q32: 1	Q33: 3	Q34: 1	Q35: 2

### Pipe and Cistern

**Q1)** A booster pump can be used for filling as well as for emptying a tank. The capacity of the tank is 1800  $\text{m}^3$ . The emptying capacity of the tank is 10  $\text{m}^3/\text{min}$  higher than its filling capacity, and the pump needs 6 minutes lesser to empty the tank than it needs to fill it. What is the filling capacity of the pump in  $\text{m}^3/\text{min}$ ?

**A) 65 B) 27 C) 50 D) 18**

Date: 20/06/2025 Time: 4:30 PM - 6:00 PM Right: 15.51% Wrong: 16.15%

**Q2)** Two taps, X and Y, can fill a tank in 12 hours and 24 hours, respectively. If both the taps are open, then due to leakage, it takes 30 minutes more to fill the tank. If the tank is full, how long will it take for the leakage alone to empty the tank?

- A)** 100 hours **B)** 75 hours **C)** 36 hours **D)** 136 hours

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 28.73%

Wrong: 23.92%

**Q3)** Two pipes, A and B, can fill a tank of 3700 litres in 9 hours and 6 hours, respectively. If they are opened together, how many hours will they take to fill an empty tank of 6400 litres?

- A)**  $\frac{1152}{185}$  hours **B)**  $\frac{1149}{185}$  hours **C)**  $\frac{1159}{185}$  hours **D)**  $\frac{1153}{185}$  hours

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 37.84%

Wrong: 9.54%

**Q4)** Pipes A and B can fill an empty cistern in 72 minutes and 76 minutes, respectively. Both Pipe A and Pipe B are opened together. After how much time should Pipe B be turned off so that the empty cistern is completely filled in a total of 54 minutes?

- A)** 13 minutes **B)** 17 minutes **C)** 19 minutes **D)** 23 minutes

Date: 11/06/2025

Time: 4:30 PM - 6:00 PM

Right: 42.47%

Wrong: 14.93%

**Q5)** A tank can be filled by two pipes C and D in 60 minutes and 40 minutes, respectively. How much time will it take to fill the tank from the empty state if D is used for half the time and C and D fill it together for the other half?

- A)** 50 minutes **B)** 30 minutes **C)** 15 minutes **D)** 1 hour

Date: 23/06/2025

Time: 4:30 PM - 6:00 PM

Right: 43.20%

Wrong: 25.16%

**Q6)** Two pipes, A and B, can fill a tank of 7800 litres in 12 hours and 10 hours, respectively. If they are opened together, how many hours will they take to fill an empty tank of 8800 litres?

- A)**  $\frac{70}{13}$  hours **B)**  $\frac{89}{13}$  hours **C)**  $\frac{88}{13}$  hours **D)**  $\frac{80}{13}$  hours

Date: 05/06/2025

Time: 4:30 PM - 6:00 PM

Right: 44.89%

Wrong: 26.66%

**Q7)** Pipes A and B can fill an empty cistern in 84 minutes and 36 minutes, respectively. Both Pipe A and Pipe B are opened together. After how much time should Pipe B be turned off so that the empty cistern is completely filled in a total of 42 minutes?

- A)** 18 minutes **B)** 12 minutes **C)** 15 minutes **D)** 24 minutes

Date: 11/06/2025

Time: 12:45 PM - 2:15 PM

Right: 56.77%

Wrong: 18.16%

**Q8)** Pipe A can fill an empty cistern alone in 26 hours and pipe B can fill the same cistern alone in 36 hours. The time taken by them to fill half of the cistern by operating together will be:

- A)**  $15\frac{17}{31}$  hours **B)**  $11\frac{17}{31}$  hours **C)**  $7\frac{17}{31}$  hours **D)**  $16\frac{17}{31}$  hours

Date: 24/06/2025

Time: 12:45 PM - 2:15 PM

Right: 57.45%

Wrong: 20.52%

**Q9)** Two pipes can fill a cistern, individually, in 98 min and 28 min, respectively. There is a pipe located at the bottom of the cistern to empty it. If all the three pipes are opened simultaneously, then the empty cistern gets filled in 21 min. How long will the pipe at the bottom of the cistern take to empty the completely filled cistern if no other pipe is then open?

- A)** 583 min **B)** 606 min **C)** 588 min **D)** 577 min

Date: 10/06/2025

Time: 12:45 PM - 2:15 PM

Right: 58.43%

Wrong: 5.13%

**Q10)** Two pipes can fill a cistern, individually, in 35 min and 15 min, respectively. There is a pipe located at the bottom of the cistern to empty it. If all the three pipes are opened simultaneously, then the empty cistern gets filled in 6 min. How long will the pipe at the bottom of the cistern take to empty the completely filled cistern if no other pipe is then open?

- A)** 14 min **B)** 5 min **C)** 8 min **D)** 17 min

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 58.99%

Wrong: 12.26%

**Q11)** An electric pump can fill a tank in 6 hours. Due to a leakage in the tank, it takes  $7\frac{1}{3}$  hours to fill the tank. How much time will this leak take to empty the full tank if water does not get in or out of the tank through any other point during this period?

- A)** 28 hours **B)** 16 hours **C)** 22 hours **D)** 33 hours

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 59.94%

Wrong: 16.56%

**Q12)** A water tank can be filled in 38 minutes by using 44 pipes of the same capacity. In how many minutes (rounded off to two decimal places) will the water tank be filled if we use 37 pipes of the same capacity as above?

- A)** 49.75 **B)** 39.05 **C)** 43.91 **D)** 45.19

Date: 14/06/2025

Time: 12:45 PM - 2:15 PM

Right: 60.42%

Wrong: 21.87%

**Q13)** Two pipes can fill a cistern, individually, in 44 min and 84 min, respectively. There is a pipe located at the bottom of the cistern to empty it. If all the three pipes are opened simultaneously, then the empty cistern gets filled in 28 min. How long will the pipe at the bottom of the cistern take to empty the completely filled cistern if no other pipe is then open?

- A)** 916 min **B)** 921 min **C)** 920 min **D)** 924 min

Date: 10/06/2025

Time: 4:30 PM - 6:00 PM

Right: 65.64%

Wrong: 6.11%

**Q14)** A water tank can be filled in 19 minutes by using 39 pipes of the same capacity. In how many minutes (rounded off to two decimal places) will the water tank be filled if we use 23 pipes of the same capacity as above?

**A)** 24.73 **B)** 32.22 **C)** 27.49 **D)** 37.03

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 65.91%

Wrong: 12.86%

**Q15)** Pipes A and B can fill an empty cistern in 21 minutes and 42 minutes, respectively. Both Pipe A and Pipe B are opened together. After how much time should Pipe B be turned off so that the empty cistern is completely filled in a total of 16 minutes?

**A)** 5 minutes **B)** 10 minutes **C)** 15 minutes **D)** 12 minutes

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 67.78%

Wrong: 18.85%

**Q16)** An electric pump can fill a tank in 4 hours. Due to a leakage in the tank, it takes  $9\frac{1}{3}$  hours to fill the tank. How much time will this leak take to empty the full tank if water does not get in or out of the tank through any other point during this period?

**A)** 15 hours **B)** 2 hours **C)** 17 hours **D)** 7 hours

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 68.02%

Wrong: 8.26%

**Q17)** An electric pump can fill a tank in 3 hours. Due to a leakage in the tank, it takes  $5\frac{1}{4}$  hours to fill the tank.

How much time will this leak take to empty the full tank if water does not get in or out of the tank through any other point during this period?

**A)** 24 hours **B)** 7 hours **C)** 17 hours **D)** 10 hours

Date: 16/06/2025

Time: 9:00 AM - 10:30 AM

Right: 68.31%

Wrong: 9.60%

**Q18)** A water tank can be filled in 40 minutes by using 43 pipes of the same capacity. In how many minutes (rounded off to two decimal places) will the water tank be filled if we use 9 pipes of the same capacity as above?

**A)** 191.11 **B)** 196.95 **C)** 200.02 **D)** 189.13

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 68.67%

Wrong: 9.09%

**Q19)** An electric pump can fill a tank in 8 hours. Due to a leakage in the tank, it takes  $9\frac{1}{3}$  hours to fill the tank.

How much time will this leak take to empty the full tank if water does not get in or out of the tank through any other point during this period?

**A)** 50 hours **B)** 56 hours **C)** 52 hours **D)** 39 hours

Date: 19/06/2025

Time: 12:45 PM - 2:15 PM

Right: 68.80%

Wrong: 7.42%

**Q20)** A pipe can fill a tank in 12 hours. Another pipe can empty the filled tank in 21 hours. If both the pipes are opened simultaneously, then the time (in hours) in which the tank will be half filled, is:

**A)** 28 **B)** 14 **C)** 15 **D)** 29

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 71.49%

Wrong: 21.07%

**Q21)** Two taps can fill a cistern in 3 hours and 57 hours, respectively. A third tap can empty it in 3 hours. How long (in hours) will it take to fill one-third of the empty cistern, if all of them are opened together?

**A)** 19 **B)** 58 **C)** 57 **D)** 20

Date: 17/06/2025 Time: 4:30 PM - 6:00 PM Right: 72.50% Wrong: 15.99%

**Q22)** A water tank can be filled in 48 minutes by using 4 pipes of the same capacity. In how many minutes (rounded off to two decimal places) will the water tank be filled if we use 26 pipes of the same capacity as above?

**A)** 3.17 **B)** 16.48 **C)** 7.38 **D)** 11.99

Date: 14/06/2025 Time: 9:00 AM - 10:30 AM Right: 73.39% Wrong: 10.34%

**Q23)** One pipe can fill the tank in 18 minutes while another pipe can empty the completely filled tank in 19 minutes. If both the pipes are operated together on empty tank, how long (in minutes) will it take to fill one-third of the tank?

**A)** 114 **B)** 342 **C)** 456 **D)** 228

Date: 11/06/2025 Time: 9:00 AM - 10:30 AM Right: 74.02% Wrong: 16.25%

**Q24)** A water tank can be filled in 29 minutes by using 23 pipes of the same capacity. In how many minutes (rounded off to two decimal places) will the water tank be filled if we use 47 pipes of the same capacity as above?

**A)** 21.97 **B)** 17.43 **C)** 14.19 **D)** 24.44

Date: 09/06/2025 Time: 9:00 AM - 10:30 AM Right: 74.03% Wrong: 8.28%

**Q25)** An electric pump can fill a tank in 6 hours. Due to a leakage in the tank, it takes  $7\frac{1}{5}$  hours to fill the tank.

How much time will this leak take to empty the full tank if water does not get in or out of the tank through any other point during this period?

**A)** 16 hours **B)** 28 hours **C)** 36 hours **D)** 42 hours

Date: 18/06/2025 Time: 12:45 PM - 2:15 PM Right: 74.13% Wrong: 7.39%

**Q26)** One pipe can fill the tank in 19 minutes while another pipe can empty the completely filled tank in 21 minutes. If both the pipes are operated together on empty tank, how long (in minutes) will it take to fill two-third of the tank?

**A)** 266 **B)** 532 **C)** 399 **D)** 133

Date: 11/06/2025 Time: 4:30 PM - 6:00 PM Right: 74.24% Wrong: 14.90%

**Q27)** An electric pump can fill a tank in 6 hours. Due to a leakage in the tank, it takes  $7\frac{1}{2}$  hours to fill the tank. How much time will this leak take to empty the full tank if water does not get in or out of the tank through any other point during this period?

**A)** 39 hours **B)** 33 hours **C)** 30 hours **D)** 44 hours

Date: 20/06/2025 Time: 12:45 PM - 2:15 PM Right: 74.49% Wrong: 6.35%

**Q28)** Pipe A can fill a tank in 18 minutes, while pipe B can empty the completely filled tank in 20 minutes. Initially, pipe A is opened and after 6 minutes pipe B is also opened. In how much time (in minutes) will the remaining tank be filled completely?

**A)** 120 **B)** 137 **C)** 107 **D)** 127

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 75.19%

Wrong: 8.23%

**Q29)** A tap fills a cistern in 18 hours. Another tap empties the full tank in 19 hours. How long (in hours) will it take to fill one-third of the tank, if the tank is empty initially and both the taps are open together?

**A)** 114 **B)** 342 **C)** 456 **D)** 228

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 75.52%

Wrong: 13.92%

**Q30)** A pipe can fill a tank in 27 hours. Another pipe can empty the filled tank in 28 hours. If both the pipes are opened simultaneously, then the time (in hours) in which the tank will be one-fourth filled, is:

**A)** 567 **B)** 378 **C)** 756 **D)** 189

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 75.75%

Wrong: 14.17%

**Q31)** Two taps can fill a cistern in 2 hours and 64 hours, respectively. A third tap can empty it in 2 hours. How long (in hours) will it take to fill half of the empty cistern, if all of them are opened together?

**A)** 96 **B)** 32 **C)** 128 **D)** 64

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 75.76%

Wrong: 15.51%

**Q32)** A tap fills a cistern in 15 hours. Another tap empties the full tank in 17 hours. How long (in hours) will it take to fill two-third of the tank, if the tank is empty initially and both the taps are open together?

**A)** 340 **B)** 85 **C)** 170 **D)** 255

Date: 14/06/2025

Time: 12:45 PM - 2:15 PM

Right: 76.20%

Wrong: 12.64%

**Q33)** One pipe can fill the tank in 21 minutes while another pipe can empty completely filled tank in 24 minutes. If both the pipes are operated together on empty tank, how long (in minutes) will it take to fill one-fourth of the tank?

**A)** 42 **B)** 126 **C)** 84 **D)** 168

Date: 06/06/2025

Time: 9:00 AM - 10:30 AM

Right: 77.34%

Wrong: 14.35%

**Q34)** Two taps can fill a cistern in 4 hours and 32 hours, respectively. A third tap can empty it in 4 hours. How long (in hours) will it take to fill one-fourth of the empty cistern, if all of them are opened together?

**A)** 16 **B)** 32 **C)** 8 **D)** 24

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 78.31%

Wrong: 12.51%

**Q35)** Pipe A can fill a tank in 9 minutes, while pipe B can empty the completely filled tank in 10 minutes. Initially, pipe A is opened and after 3 minutes pipe B is also opened. In how much time (in minutes) will the remaining tank be filled completely?

**A) 47 B) 60 C) 73 D) 61**

Date: 06/06/2025 Time: 4:30 PM - 6:00 PM Right: 78.40% Wrong: 9.80%

**Q36)** Two taps can fill a cistern in 3 hours and 36 hours, respectively. A third tap can empty it in 4 hours. How long (in hours) will it take to fill two-third of the empty cistern, if all of them are opened together?

**A) 24 B) 18 C) 6 D) 12**

Date: 20/06/2025 Time: 4:30 PM - 6:00 PM Right: 78.55% Wrong: 10.85%

**Q37)** One pipe can fill the tank in 9 minutes while another pipe can empty completely filled tank in 90 minutes. If both the pipes are operated together on empty tank, how long (in minutes) will it take to fill half of the tank?

**A) 5 B) 10 C) 6 D) 11**

Date: 06/06/2025 Time: 12:45 PM - 2:15 PM Right: 78.71% Wrong: 15.52%

**Q38)** A tap fills a cistern in 9 hours. Another tap empties the full tank in 90 hours. How long (in hours) will it take to fill twice the volume of the tank, if the tank is empty initially and both the taps are open together?

**A) 10 B) 5 C) 15 D) 20**

Date: 12/06/2025 Time: 12:45 PM - 2:15 PM Right: 79.00% Wrong: 13.02%

**Q39)** A pipe can fill a tank in 15 hours. Another pipe can empty the filled tank in 40 hours. If both the pipes are opened simultaneously, then the time (in hours) in which the tank will be one-third filled, is:

**A) 8 B) 32 C) 24 D) 16**

Date: 23/06/2025 Time: 4:30 PM - 6:00 PM Right: 79.29% Wrong: 13.31%

**Q40)** A tap fills a cistern in 18 hours. Another tap empties the full tank in 24 hours. How long (in hours) will it take to fill one-fourth of the tank, if the tank is empty initially and both the taps are open together?

**A) 36 B) 72 C) 54 D) 18**

Date: 13/06/2025 Time: 4:30 PM - 6:00 PM Right: 81.61% Wrong: 11.52%

**Q41)** Two taps can fill a cistern in 3 hours and 18 hours, respectively. A third tap can empty it in 72 hours. How long (in hours) will it take to fill three-fourth of the empty cistern, if all of them are opened together?

**A) 4 B) 8 C) 6 D) 2**

Date: 16/06/2025 Time: 9:00 AM - 10:30 AM Right: 82.19% Wrong: 7.84%

**Q42)** Pipe A can fill a tank in 18 minutes, while pipe B can empty the completely filled tank in 27 minutes. Initially, pipe A is opened and after 6 minutes pipe B is also opened. In how much time (in minutes) will the remaining tank be filled completely?

**A) 36 B) 32 C) 35 D) 21**

Date: 06/06/2025 Time: 12:45 PM - 2:15 PM Right: 82.47% Wrong: 6.70%

**Q43)** One pipe can fill the tank in 7 minutes while another pipe can empty the completely filled tank in 56 minutes. If both the pipes are operated together on empty tank, how long (in minutes) will it take to fill three-fourth of the tank?

**A) 7 B) 12 C) 6 D) 13**

Date: 09/06/2025 Time: 12:45 PM - 2:15 PM Right: 83.50% Wrong: 8.28%

**Q44)** There are two pumps to fill a tank with water. The first pump can fill the empty tank in 6 hours, while the second in 8 hours. If both the pumps are opened at the same time and kept open for 2 hours, the part of tank that will be filled up is:

**A)  $\frac{9}{10}$  B)  $\frac{9}{12}$  C)  $\frac{7}{12}$  D)  $\frac{7}{10}$**

Date: 24/06/2025 Time: 9:00 AM - 10:30 AM Right: 83.87% Wrong: 8.17%

**Q45)** A pipe can fill a tank in 12 hours. Another pipe can empty the filled tank in 24 hours. If both the pipes are opened simultaneously, then the time (in hours) in which the tank will be two-third filled, is:

**A) 16 B) 64 C) 48 D) 32**

Date: 24/06/2025 Time: 9:00 AM - 10:30 AM Right: 84.97% Wrong: 8.33%

**Q46)** A tap fills a cistern in 18 hours. Another tap empties the full tank in 24 hours. How long (in hours) will it take to fill three-fourth of the tank, if the tank is empty initially and both the taps are open together?

**A) 108 B) 162 C) 54 D) 216**

Date: 13/06/2025 Time: 12:45 PM - 2:15 PM Right: 85.24% Wrong: 5.93%

**Q47)** A pipe can fill a tank in 8 hours. Another pipe can empty the filled tank in 16 hours. If both the pipes are opened simultaneously, then the time (in hours) in which the tank will be three-fourth filled, is:

**A) 48 B) 36 C) 24 D) 12**

Date: 23/06/2025 Time: 9:00 AM - 10:30 AM Right: 86.03% Wrong: 7.32%

**Q48)** One pipe can fill the tank in 8 minutes while another pipe can empty the completely filled tank in 11 minutes. If both the pipes are operated together on empty tank, how long (in minutes) will it take to fill three-fourth of the tank?

**A) 22 B) 45 C) 44 D) 23**

Date: 10/06/2025 Time: 12:45 PM - 2:15 PM Right: 86.30% Wrong: 5.36%

**Q49)** Three taps A, B and C together can fill an empty cistern in 20 minutes. Tap A alone can fill it in 50 minutes and tap B alone in 60 minutes. How long will tap C alone take to fill it (in minutes)?

**A)** 70 **B)** 72 **C)** 80 **D)** 75

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 87.00%

Wrong: 6.13%

**Q50)** Three water pipes m, n and p, take 5, 6 and 12 hours, respectively, to fill a water tank. If all three pipes are opened at the same time, then the required time to fill the water tank will be:

**A)**  $2\frac{2}{7}$  hours **B)**  $1\frac{1}{9}$  hours **C)**  $2\frac{1}{9}$  hours **D)**  $2\frac{2}{9}$  hours

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 87.52%

Wrong: 5.82%

**Q51)** A cistern has a hole in the bottom through which the water is leaking. A tap can fill the cistern in 6 hours and the hole in the bottom can empty the fully filled cistern in 15 hours. If both the tap and the hole are open, then what will be the time taken to completely fill the empty cistern?

**A)** 14 hours **B)** 22 hours **C)** 10 hours **D)** 26.1 hours

Date: 12/06/2025

Time: 12:45 PM - 2:15 PM

Right: 87.69%

Wrong: 4.36%

**Q52)** A cistern has a hole in the bottom through which the water is leaking. A tap can fill the cistern in 8 hours and the hole in the bottom can empty the fully filled cistern in 10 hours. If both the tap and the hole are open, then what will be the time taken to completely fill the empty cistern?

**A)** 21.5 hours **B)** 34 hours **C)** 40 hours **D)** 48.5 hours

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 87.83%

Wrong: 3.76%

**Q53)** A cistern has a hole in the bottom through which the water is leaking. A tap can fill the cistern in 8 hours and the hole in the bottom can empty the fully filled cistern in 12 hours. If both the tap and the hole are open, then what will be the time taken to completely fill the empty cistern?

**A)** 44.7 hours **B)** 36 hours **C)** 30.9 hours **D)** 24 hours

Date: 13/06/2025

Time: 4:30 PM - 6:00 PM

Right: 88.48%

Wrong: 3.06%

**Q54)** Two taps can fill a cistern in 2 hours and 81 hours, respectively. A third tap can empty it in 81 hours. How long (in hours) will it take to fill the empty cistern, if all of the taps are opened together?

**A)** 3 **B)** 4 **C)** 5 **D)** 2

Date: 14/06/2025

Time: 9:00 AM - 10:30 AM

Right: 88.58%

Wrong: 3.90%

**Q55)** A tap fills a cistern in 14 hours. Another tap empties the full tank in 18 hours. How long (in hours) will it take to fill the tank completely, if the tank is empty and both the taps are open together?

**A)** 63 **B)** 64 **C)** 65 **D)** 66

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 88.85%

Wrong: 4.82%

**Q56)** A cistern can be filled with water by a pipe in 10 hours, and it can be emptied by a second pipe in 8 hours. If both the pipes are opened when the cistern is full, the time in which it will be emptied is:

**A)** 45 hours **B)** 42 hours **C)** 44 hours **D)** 40 hours

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 90.57%

Wrong: 3.27%

**Q57)** One pipe can fill the tank in 9 minutes while another pipe can empty completely filled tank in 90 minutes. If both the pipes are operated together on empty tank, how long (in minutes) will it take to fill the tank completely?

**A)** 13 **B)** 11 **C)** 12 **D)** 10

Date: 06/06/2025

Time: 4:30 PM - 6:00 PM

Right: 91.20%

Wrong: 3.86%

**Q58)** A pipe can fill a tank in 12 hours. Another pipe can empty the filled tank in 14 hours. If both the pipes are opened simultaneously, then the time (in hours) in which the tank will be filled is:

**A)** 86 **B)** 87 **C)** 85 **D)** 84

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 91.21%

Wrong: 2.40%

**Q59)** One pipe can fill the tank in 10 minutes while another pipe can empty completely filled tank in 20 minutes. If both the pipes are operated together on empty tank, how long (in minutes) will it take to fill the tank completely?

**A)** 22 **B)** 21 **C)** 23 **D)** 20

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 92.10%

Wrong: 3.39%

### Answer Key (Q1 to Q59) Pipe and Cistern

Q1: 3	Q2: 4	Q3: 1	Q4: 3	Q5: 2
Q6: 4	Q7: 1	Q8: 3	Q9: 3	Q10: 1
Q11: 4	Q12: 4	Q13: 4	Q14: 2	Q15: 2
Q16: 4	Q17: 2	Q18: 1	Q19: 2	Q20: 2
Q21: 1	Q22: 3	Q23: 1	Q24: 3	Q25: 3
Q26: 4	Q27: 3	Q28: 1	Q29: 1	Q30: 4
Q31: 2	Q32: 2	Q33: 1	Q34: 3	Q35: 2
Q36: 3	Q37: 1	Q38: 4	Q39: 1	Q40: 4
Q41: 4	Q42: 1	Q43: 3	Q44: 3	Q45: 1
Q46: 3	Q47: 4	Q48: 1	Q49: 4	Q50: 4
Q51: 3	Q52: 3	Q53: 4	Q54: 4	Q55: 1

Q56: 4

Q57: 4

Q58: 4

Q59: 4

## Partnership

**Q1)** Three persons P, Q, and R started a business with their shares in the ratio 11 : 8 : 20. After 9 months, Q withdrew his 35% share, while R withdrew his 14% share 7 months prior to completion of the year. If the total profit at the end of the year is ₹40,700, find the share of R (in ₹) in the profit.

**A)** 20,387 **B)** 20,606 **C)** 20,529 **D)** 20,246

Date: 11/06/2025

Time: 4:30 PM - 6:00 PM

Right: 13.39%

Wrong: 12.47%

**Q2)** Three persons X, Y, and Z started a business with their shares in the ratio 13 : 20 : 15. After 7 months, Y withdrew his 33% share, while Z withdrew his 24% share 5 months prior to the completion of the year. If the total profit at the end of year is ₹16,100, find the share of Z (in ₹) in the profit.

**A)** 4,888 **B)** 5,250 **C)** 5,063 **D)** 4,968

Date: 10/06/2025

Time: 12:45 PM - 2:15 PM

Right: 17.21%

Wrong: 18.18%

**Q3)** Alok, Gita, and Suresh invest ₹56,000, ₹52,000, and ₹69,000 respectively to start a business. At the end of the year, the total profit earned is ₹76,700. 31% of the total profit earned is given to charity and the rest is divided among them in the ratio of their investment. What will be the share of Suresh (in ₹)?

**A)** 20,631 **B)** 20,693 **C)** 20,551 **D)** 20,727

Date: 05/06/2025

Time: 4:30 PM - 6:00 PM

Right: 40.81%

Wrong: 17.61%

**Q4)** A and B invested money in a business in the ratio of 8 : 5. If 35% of the total profit goes for charity, and A's share in the profit is ₹7,770, what is the total profit?

**A)** ₹19,426 **B)** ₹19,423 **C)** ₹19,425 **D)** ₹19,422

Date: 24/06/2025

Time: 12:45 PM - 2:15 PM

Right: 42.14%

Wrong: 17.08%

**Q5)** Three persons X, Y, and Z started a business with their shares in the ratio 3 : 4 : 10. After 6 months, Y withdrew his 50% share, while Z withdrew his 40% share 9 months prior to completion of the year. If the total profit at the end of the year is ₹23,400, find the share of Z (in ₹) in the profit.

**A)** 12,600 **B)** 12,366 **C)** 12,510 **D)** 12,559

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 44.72%

Wrong: 8.19%

**Q6)** Reena, Naveen and Arpita started a business in partnership, investing in the ratio of 5 : 6 : 13, respectively. At the end of the year, they earned a profit of ₹36,400, which is 14% of their total investment. How much did Naveen invest (in ₹)?

**A)** ₹65,000 **B)** ₹65,105 **C)** ₹64,769 **D)** ₹64,818

Date: 20/06/2025

Time: 4:30 PM - 6:00 PM

Right: 54.67%

Wrong: 19.61%

**Q7)** Pankaj, Meera, and Ashok invest ₹41,000, ₹39,000, and ₹84,000 respectively to start a business. At the end of the year, the total profit earned is ₹49,200. 29% of the total profit earned is given to charity and the rest is divided among them in the ratio of their investments. What will be the share of Ashok (in ₹)?

**A)** 17,754 **B)** 17,670 **C)** 18,168 **D)** 17,892

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 57.78%

Wrong: 13.36%

**Q8)** X, Y and Z invest a sum in the ratio 45 : 37 : 71 respectively. If they earned total profit of ₹2,790 at the end of year, then what is the difference between the share of Y and Z?

**A)** ₹599 **B)** ₹620 **C)** ₹644 **D)** ₹728

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 68.22%

Wrong: 12.57%

**Q9)** Ashish, Lalita and Pranav started a business in partnership, investing in the ratio of 21 : 9 : 20, respectively. At the end of the year, they earned a profit of ₹84,700, which is 28% of their total investment. How much did Lalita invest (in ₹)?

**A)** ₹54,352 **B)** ₹54,498 **C)** ₹54,442 **D)** ₹54,450

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 71.88%

Wrong: 6.07%

**Q10)** Vikram, Anjali and Raj started a business in partnership, investing in the ratio of 7 : 3 : 20, respectively. At the end of the year, they earned a profit of ₹28,800, which is 25% of their total investment. How much did Anjali invest (in ₹)?

**A)** ₹11,472 **B)** ₹11,564 **C)** ₹11,520 **D)** ₹11,682

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 72.02%

Wrong: 7.75%

**Q11)** X, Y and Z invest a sum in the ratio 6 : 59 : 41 respectively. If they earned total profit of ₹3,180 at the end of year, then what is the difference between the share of Y and Z?

**A)** ₹634 **B)** ₹484 **C)** ₹432 **D)** ₹540

Date: 06/06/2025

Time: 9:00 AM - 10:30 AM

Right: 88.58%

Wrong: 4.02%

### Answer Key (Q1 to Q11) Partnership

Q1: 1	Q2: 4	Q3: 1	Q4: 3	Q5: 1
Q6: 1	Q7: 4	Q8: 2	Q9: 4	Q10: 3
Q11: 4				

**Average**

Q1) The average weight of 10 boys is 70 kg. But later, it was found that at two places the weight 54 kg was read as 44 kg and at one place weight 35 kg was read as 40 kg. Find the correct average weight (in kg) of the 10 boys.

A) 67.5 B) 71.5 C) 68.5 D) 70.5

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 15.76%

Wrong: 72.73%

Q2) The average of first 14 whole numbers is:

A) 6.5 B) 7.5 C) 7 D) 5.5

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 32.48%

Wrong: 60.99%

Q3) The average of first 13 whole numbers is:

A) 6 B) 6.5 C) 5 D) 7

Date: 06/06/2025

Time: 12:45 PM - 2:15 PM

Right: 33.55%

Wrong: 61.64%

Q4) What is the mean of the following distribution?

Marks	12	22	58	79	89
No. of Students	98	74	17	28	44

A) 53 B) 60 C) 22 D) 38

Date: 13/06/2025

Time: 4:30 PM - 6:00 PM

Right: 34.57%

Wrong: 12.84%

Q5) A man covers distances of 819 km, 1476 km, and 1053 km at the speeds of 63 km/hr,  $x$  km/hr, and 81 km/hr, respectively. If his average speed for the whole journey is 54 km/hr, then what is the value of  $x$ ?

A) 43 B) 41 C) 46 D) 38

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 38.29%

Wrong: 19.36%

Q6) The average weight of M and his three friends is 65 kg. If M's weight is 8 kg more than the average weight of his three friends, what is M's weight (in kg)?

A) 70 B) 71 C) 68 D) 69

Date: 18/06/2025

Time: 4:30 PM - 6:00 PM

Right: 56.36%

Wrong: 18.38%

Q7) A company produces two products A and B with prices of ₹156 and ₹220, respectively. If 55% of the products sold are A and 45% of the products sold are B. Find the weighted average price?

A) ₹169.50 B) ₹184.80 C) ₹174.60 D) ₹165.30

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 56.50%

Wrong: 8.58%

Q8) Two years ago, the average age of A, B and C was 66 years. Two years from now, the average age of A and C will be 89 years. What will be the age (in years) of B, four years from now?

A) 37 B) 30 C) 34 D) 31

Date: 24/06/2025

Time: 12:45 PM - 2:15 PM

Right: 57.66%

Wrong: 22.59%

**Q9)** Mohan bought 51 books at ₹1,120 per book from one shop and 48 books at ₹900 per book from another. What is the average price (rounded off to two decimal places, in ₹) he paid per book?

- A)** 1,028.33 **B)** 1,003.33 **C)** 1,013.33 **D)** 1,023.33

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 59.50%

Wrong: 17.42%

**Q10)** A woman travelled at a speed of 20 m/min for 80 min, and at a speed of 65 m/min for 64 min. Her average speed (in m/min) is:

- A)** 40 **B)** 44 **C)** 46 **D)** 33

Date: 20/06/2025

Time: 12:45 PM - 2:15 PM

Right: 61.73%

Wrong: 13.17%

**Q11)** Gopal bought 51 books at ₹1,120 per book from one shop and 45 books at ₹920 per book from another. What is the average price (in ₹) he paid per book?

- A)** 1,026.25 **B)** 1,041.25 **C)** 1,036.25 **D)** 1,016.25

Date: 12/06/2025

Time: 12:45 PM - 2:15 PM

Right: 61.87%

Wrong: 14.19%

**Q12)** A woman travelled at a speed of 20 m/min for 80 min, and at a speed of 65 m/min for 70 min. Her average speed (in m/min) is:

- A)** 47 **B)** 45 **C)** 41 **D)** 34

Date: 20/06/2025

Time: 4:30 PM - 6:00 PM

Right: 68.10%

Wrong: 11.12%

**Q13)** The average weight of 14 boys in a class is 40.25 kg and that of the remaining 4 boys is 33.5 kg. Find the average weight (in kg, rounded off to two decimal place) of all the boys in the class.

- A)** 38.75 **B)** 37.75 **C)** 39.75 **D)** 40.75

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 69.32%

Wrong: 19.13%

**Q14)** The average salary of all the workers in a factory is ₹14,000. The average salary of 80 skilled workers is ₹15,000 and the average salary of the remaining workers is ₹12,000. Find the total number of workers in the factory.

- A)** 140 **B)** 150 **C)** 110 **D)** 120

Date: 14/06/2025

Time: 9:00 AM - 10:30 AM

Right: 69.84%

Wrong: 10.56%

**Q15)** Sachin bought 51 books at ₹1,120 per book from one shop and 49 books at ₹905 per book from another. What is the average price (in ₹) he paid per book?

- A)** 1,024.65 **B)** 1,014.65 **C)** 1,029.65 **D)** 1,004.65

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 70.47%

Wrong: 9.52%

**Q16)** Mr. W travelled 370 km, 390 km and 720 km at speeds of 37 km/hr, 5 km/hr and 8 km/hr, respectively. Find his average speed in km/hr.

- A)**  $9\frac{21}{89}$  **B)**  $9\frac{30}{89}$  **C)**  $8\frac{27}{89}$  **D)**  $8\frac{28}{89}$

Date: 06/06/2025

Time: 12:45 PM - 2:15 PM

Right: 71.09%

Wrong: 8.40%

**Q17)** The average of eight numbers is 124. Find the least number if it is one-sixteenth of the sum of the numbers.

- A)** 64 **B)** 65 **C)** 62 **D)** 63

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 71.87%

Wrong: 10.38%

**Q18)** The average of fifty numbers is 34. If two numbers, namely 34 and 22 are discarded, the average of the remaining numbers is:

- A)** 32.25 **B)** 35.25 **C)** 34.25 **D)** 31.25

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 73.63%

Wrong: 16.46%

**Q19)** The average score of 50 students in a class test is 45. Later, it was found that in one instance, a score of 25 was wrongly recorded as 35, and in another instance, a score of 30 was wrongly recorded as 28. Find the actual average score of the class.

- A)** 43.86 **B)** 44.56 **C)** 44.64 **D)** 44.84

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 73.68%

Wrong: 10.64%

**Q20)** The average of first 17 multiples of 13 is:

- A)** 127 **B)** 137 **C)** 117 **D)** 128

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 73.90%

Wrong: 8.86%

**Q21)** Amit bought 51 books at ₹1,120 per book from one shop and 49 books at ₹900 per book from another. What is the average price (in ₹) he paid per book?

- A)** 1,022.2 **B)** 1,027.2 **C)** 1,012.2 **D)** 1,002.2

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 74.01%

Wrong: 9.73%

**Q22)** The arithmetic mean of the observations 83, 17, 62, 87, 62, 96, 86, 92 and 90 is:

- A)** 79 **B)** 75 **C)** 74 **D)** 85

Date: 12/06/2025

Time: 12:45 PM - 2:15 PM

Right: 74.34%

Wrong: 12.28%

**Q23)** There are two sections A and B of a class, consisting of 22 and 44 students, respectively. If the average weight of section A is 40 kg and that of section B is 37 kg, find the average weight of the whole class (in kg).

- A)** 37.5 **B)** 38 **C)** 38.5 **D)** 39

Date: 20/06/2025

Time: 4:30 PM - 6:00 PM

Right: 74.38%

Wrong: 18.05%

**Q24)** A man bought 8 shirts at ₹550 each, 10 pants at ₹1,000 each and 12 pairs of shoes at ₹850 each pair. What is the average expenditure per article?

**A)** ₹820 **B)** ₹840 **C)** ₹826 **D)** ₹836

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 75.56%

Wrong: 8.62%

**Q25)** The arithmetic mean of the observations 79, 92, 39, 57, 91, 28, 74, 90 and 44 is:

**A)** 59 **B)** 61 **C)** 66 **D)** 71

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 76.41%

Wrong: 9.66%

**Q26)** A group of people consists of men, women and children. Among them, 20% are men, 50% are women and the rest are children, and their average weights are 45 kg, 60 kg and 20 kg, respectively. The average weight (in kg) of the group is:

**A)** 44 **B)** 45 **C)** 43 **D)** 42

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 76.47%

Wrong: 10.67%

**Q27)** The arithmetic mean of the observations 28, 31, 40, 63, 57, 37, 34, 70 and 99 is:

**A)** 55 **B)** 50 **C)** 41 **D)** 51

Date: 06/06/2025

Time: 9:00 AM - 10:30 AM

Right: 76.74%

Wrong: 10.97%

**Q28)** The average weight of 14 boys in a class is 40.25 kg and that of the remaining 4 boys is 38 kg. Find the average weight (in kg, rounded off to two decimal place) of all the boys in the class.

**A)** 41.75 **B)** 40.75 **C)** 39.75 **D)** 38.75

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 76.89%

Wrong: 13.88%

**Q29)** A group of people consists of men, women and children. Among them, 20% are men, 50% are women and the rest are children, and their average weights are 45 kg, 50 kg and 50 kg, respectively. The average weight (in kg) of the group is:

**A)** 51 **B)** 50 **C)** 48 **D)** 49

Date: 05/06/2025

Time: 4:30 PM - 6:00 PM

Right: 77.21%

Wrong: 11.23%

**Q30)** If the average of 6 consecutive odd numbers is 30, the difference between the largest and the smallest numbers is:

**A)** 15 **B)** 16 **C)** 10 **D)** 18

Date: 20/06/2025

Time: 12:45 PM - 2:15 PM

Right: 77.69%

Wrong: 8.84%

**Q31)** The average marks of 30 students in a mathematics test were found to be 55. However, it was later discovered that a mark of 72 was mistakenly recorded as 27, and another mark of 64 was mistakenly recorded as 46. What is the actual average score?

**A)** 60.2 **B)** 55.5 **C)** 63.4 **D)** 57.1

Date: 18/06/2025

Time: 9:00 AM - 10:30 AM

Right: 77.89%

Wrong: 9.70%

**Q32)** A group of people consists of men, women and children. Among them, 20% are men, 30% are women and the rest are children, and their average weights are 50 kg, 40 kg and 30 kg, respectively. The average weight of the group (in kg) is:

**A) 37   B) 36   C) 34   D) 35**

Date: 19/06/2025   Time: 4:30 PM - 6:00 PM   Right: 78.95%   Wrong: 8.05%

**Q33)** There are two sections A and B of a class, consisting of 22 and 44 students, respectively. If the average weight of section A is 40 kg and that of section B is 34 kg, find the average weight of the whole class (in kg).

**A) 35.5   B) 36   C) 37   D) 36.5**

Date: 09/06/2025   Time: 4:30 PM - 6:00 PM   Right: 79.87%   Wrong: 14.00%

**Q34)** The average height of 15 boys out of a class of 50 is 160 cm. If the average height of the remaining boys is 168 cm, the average height (in cm) of all the boys of the class is:

**A) 165   B) 165.6   C) 166.6   D) 164**

Date: 24/06/2025   Time: 4:30 PM - 6:00 PM   Right: 80.04%   Wrong: 9.87%

**Q35)** A student scored the following marks: 78, 85, 69, and 90 in four subjects. What score is required in the fifth subject to achieve an average of 80 marks across all five subjects?

**A) 88   B) 94   C) 78   D) 82**

Date: 23/06/2025   Time: 12:45 PM - 2:15 PM   Right: 80.34%   Wrong: 13.43%

**Q36)** The average weight of A, B and C is 45 kg. If the average weight of A and B is 39 kg and that of B and C is 48 kg, then the weight of B (in kg) is:

**A) 54   B) 39   C) 29   D) 49**

Date: 23/06/2025   Time: 4:30 PM - 6:00 PM   Right: 80.48%   Wrong: 9.99%

**Q37)** The average of 36 numbers is 45. If two numbers 37 and 53 are discarded, find the average of the remaining numbers.

**A) 45   B) 43   C) 42   D) 40**

Date: 13/06/2025   Time: 12:45 PM - 2:15 PM   Right: 80.67%   Wrong: 10.53%

**Q38)** A group of people consists of men, women and children. Among them, 20% are men, 30% are women and the rest are children, and their average weights are 50 kg, 40 kg and 40 kg, respectively. The average weight of the group (in kg) is:

**A) 39   B) 37   C) 42   D) 38**

Date: 19/06/2025   Time: 12:45 PM - 2:15 PM   Right: 80.84%   Wrong: 5.63%

**Q39)** If 600 bananas were distributed among three monkeys in the ratio  $\frac{1}{14} : \frac{1}{2} : \frac{9}{3}$  respectively, how many bananas did the third monkey get?

**A) 506 B) 505 C) 503 D) 504**

Date: 20/06/2025 Time: 4:30 PM - 6:00 PM Right: 81.09% Wrong: 5.42%

**Q40)** A student scores 80 marks in a subject with a weightage of 3 and 90 marks in another subject with a weightage of 2. What is the weighted average score of the student?

**A) 84 B) 88 C) 86 D) 82**

Date: 18/06/2025 Time: 9:00 AM - 10:30 AM Right: 81.32% Wrong: 7.15%

**Q41)** The average height of 15 boys out of a class of 50 is 163 cm. If the average height of the remaining boys is 165 cm, the average height (in cm) of all the boys of the class is:

**A) 164.4 B) 165 C) 164 D) 165.4**

Date: 10/06/2025 Time: 12:45 PM - 2:15 PM Right: 81.47% Wrong: 10.42%

**Q42)** The arithmetic mean of the observations 78, 56, 52, 45, 97, 19, 37, 46 and 74 is:

**A) 56 B) 64 C) 61 D) 48**

Date: 09/06/2025 Time: 12:45 PM - 2:15 PM Right: 81.89% Wrong: 6.70%

**Q43)** The average weight of A, B and C is 45 kg. If the average weight of A and B is 40 kg and that of B and C is 42 kg, then the weight of B (in kg) is:

**A) 39 B) 44 C) 29 D) 19**

Date: 09/06/2025 Time: 9:00 AM - 10:30 AM Right: 82.39% Wrong: 9.55%

**Q44)** The average weight of A, B and C is 45 kg. If the average weight of A and B is 37 kg and that of B and C is 47 kg, then the weight of B (in kg) is:

**A) 43 B) 23 C) 48 D) 33**

Date: 21/06/2025 Time: 12:45 PM - 2:15 PM Right: 82.41% Wrong: 10.19%

**Q45)** The arithmetic mean of the observations 69, 60, 39, 58, 55, 31, 84, 64 and 80 is:

**A) 59 B) 53 C) 50 D) 60**

Date: 10/06/2025 Time: 9:00 AM - 10:30 AM Right: 82.67% Wrong: 8.72%

**Q46)** The average of three numbers is 154. The first number is twice the second and the second number is twice the third. What is the first number?

**A) 252 B) 268 C) 258 D) 264**

Date: 21/06/2025 Time: 4:30 PM - 6:00 PM Right: 82.71% Wrong: 7.26%

**Q47)** The sum of five numbers is 655. The average of the first two numbers is 77 and the third number is 128. Find the average of the remaining two numbers.

- A)** 187.5 **B)** 186.5 **C)** 206 **D)** 205

Date: 13/06/2025

Time: 4:30 PM - 6:00 PM

Right: 82.72%

Wrong: 6.62%

**Q48)** The sum of five numbers is 655. The average of the first two numbers is 77 and the third number is 102. Find the average of the remaining two numbers.

- A)** 199.5 **B)** 200.5 **C)** 179 **D)** 180

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 82.76%

Wrong: 6.50%

**Q49)** What is the average of the first 10 prime numbers?

- A)** 15.8 **B)** 14 **C)** 16 **D)** 12.9

Date: 06/06/2025

Time: 9:00 AM - 10:30 AM

Right: 82.85%

Wrong: 10.74%

**Q50)** A class of 30 students appeared in a test. The average score of 12 students is 60, and that of the rest is 62. What is the average score of the class?

- A)** 61.2 **B)** 62.2 **C)** 60.2 **D)** 59.2

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 83.24%

Wrong: 9.16%

**Q51)** 20 dual desks and 12 chairs were bought for ₹79,600. If the average cost of a dual desk was ₹3,500, find the average cost of a chair.

- A)** ₹850 **B)** ₹920 **C)** ₹950 **D)** ₹800

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 83.36%

Wrong: 4.77%

**Q52)** What is the average of all the natural numbers from 1 to 17?

- A)** 9 **B)** 9.5 **C)** 8.5 **D)** 10

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 83.59%

Wrong: 13.03%

**Q53)** The sum of five numbers is 655. The average of the first two numbers is 77 and the third number is 101. Find the average of the remaining two numbers.

- A)** 178 **B)** 201 **C)** 200 **D)** 179

Date: 17/06/2025

Time: 4:30 PM - 6:00 PM

Right: 83.74%

Wrong: 6.76%

**Q54)** The average of 10 observations is 40. It was realised later that an observation was misread as 34 in place of 43. Find the correct average.

- A)** 39.9 **B)** 43.9 **C)** 41.9 **D)** 40.9

Date: 06/06/2025

Time: 12:45 PM - 2:15 PM

Right: 84.17%

Wrong: 9.21%

**Q55)** The sum of five numbers is 655. The average of the first two numbers is 77 and the third number is 129. Find the average of the remaining two numbers.

**A)** 187 **B)** 186 **C)** 206 **D)** 207

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 84.24%

Wrong: 5.64%

**Q56)** The average of eight numbers is 80. Find the least number if it is  $\frac{1}{16}$  of the sum of the numbers.

**A)** 40 **B)** 41 **C)** 43 **D)** 42

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 84.25%

Wrong: 3.59%

**Q57)** A class of 30 students appeared in a test. The average score of 12 students is 70, and that of the rest is 64. What is the average score of the class?

**A)** 66.4 **B)** 67.4 **C)** 65.4 **D)** 64.4

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 84.45%

Wrong: 9.40%

**Q58)** The average of 10 observations is 40. It was realised later that an observation was misread as 32 in place of 43. Find the correct average.

**A)** 44.1 **B)** 41.1 **C)** 42.1 **D)** 40.1

Date: 20/06/2025

Time: 12:45 PM - 2:15 PM

Right: 84.49%

Wrong: 7.65%

**Q59)** A class of 30 students appeared in a test. The average score of 12 students is 70, and that of the rest is 62. What is the average score of the class?

**A)** 64.2 **B)** 66.2 **C)** 65.2 **D)** 63.2

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 85.35%

Wrong: 8.69%

**Q60)** The average of 10 observations is 40. It was realised later that an observation was misread as 31 in place of 50. Find the correct average.

**A)** 41.9 **B)** 44.9 **C)** 40.9 **D)** 42.9

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 85.39%

Wrong: 7.51%

**Q61)** A shop sells candles in two packs: Pack A: 5 candles at ₹4 each and Pack B: 5 candles at ₹6 each. What is the average price per candle?

**A)** ₹6 **B)** ₹5 **C)** ₹5.5 **D)** ₹4

Date: 19/06/2025

Time: 9:00 AM - 10:30 AM

Right: 85.63%

Wrong: 8.24%

**Q62)** The average of 10 observations is 40. It was realised later that an observation was misread as 33 in place of 50. Find the correct average.

**A)** 44.7 **B)** 40.7 **C)** 42.7 **D)** 41.7

Date: 06/06/2025

Time: 9:00 AM - 10:30 AM

Right: 85.96%

Wrong: 6.15%

**Q63)** The average score of 10 players was initially recorded as 55. However, it was later discovered that a score of 84 had been mistakenly read as 48. Determine the correct average score.

**A)** 50 **B)** 55.5 **C)** 48.5 **D)** 58.6

Date: 17/06/2025

Time: 4:30 PM - 6:00 PM

Right: 86.38%

Wrong: 5.58%

**Q64)** The average of first 12 natural numbers is:

**A)** 6 **B)** 6.5 **C)** 7 **D)** 7.5

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 87.36%

Wrong: 9.53%

**Q65)** The average weight of 5 students is 60 kg. After a new student joins the group, the average becomes 62 kg. What is the weight of the new student?

**A)** 70 kg **B)** 62 kg **C)** 68 kg **D)** 72 kg

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 87.64%

Wrong: 9.06%

**Q66)** The average of 9 numbers is 17. The average of 7 of these numbers is 16. The average of the remaining two numbers is:

**A)** 19.5 **B)** 20.5 **C)** 21.5 **D)** 22.5

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 87.69%

Wrong: 6.70%

**Q67)** The average age of Amit, Arjun and Anya is 30 years. If the average age of Amit and Anya is 35 years, what will be Arjun's age after 2 years?

**A)** 30 years **B)** 24 years **C)** 22 years **D)** 28 years

Date: 19/06/2025

Time: 9:00 AM - 10:30 AM

Right: 87.73%

Wrong: 5.64%

**Q68)** The average of five numbers is 56. Four of the numbers are 35, 42, 32, and 26. What is the fifth number?

**A)** 145 **B)** 135 **C)** 68 **D)** 55

Date: 20/06/2025

Time: 4:30 PM - 6:00 PM

Right: 87.93%

Wrong: 7.94%

**Q69)** The average age of 4 people is 52 years. Another group has 6 people with an average age of 58 years. When both groups are combined, what is the average age of all the people?

**A)** 54.6 years **B)** 55.6 years **C)** 54.9 years **D)** 54.2 years

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 88.14%

Wrong: 5.75%

**Q70)** In a class of 30 students, the average score on a test is 75. If 20 students scored an average of 80, what is the average score of the remaining 10 students?

**A)** 65 **B)** 70 **C)** 72 **D)** 60

Date: 18/06/2025

Time: 4:30 PM - 6:00 PM

Right: 88.47%

Wrong: 5.55%

**Q71)** A car travels 60 km in the first hour, 80 km in the second hour, and 100 km in the third hour. What is the average speed of the car over the 3 hours?

**A)** 85 km/hr **B)** 90 km/hr **C)** 75 km/hr **D)** 80 km/hr

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 88.81%

Wrong: 4.83%

**Q72)** The average weight of 7 boys of a group is 54 kg. When a new boy joined the group, the average weight increased by 2 kg. Find the weight of the new boy.

**A)** 70 kg **B)** 74 kg **C)** 72 kg **D)** 77 kg

Date: 12/06/2025

Time: 12:45 PM - 2:15 PM

Right: 89.05%

Wrong: 6.12%

**Q73)** Ravi spends ₹250 on Monday, ₹300 on Tuesday, ₹275 on Wednesday, ₹325 on Thursday, and ₹350 on Friday. What is his average daily expenditure over these five days?

**A)** ₹310 **B)** ₹320 **C)** ₹300 **D)** ₹280

Date: 23/06/2025

Time: 4:30 PM - 6:00 PM

Right: 89.57%

Wrong: 6.64%

**Q74)** Three numbers are in the ratio 4 : 5 : 6 and their average is 40. The largest number is:

**A)** 42 **B)** 44 **C)** 48 **D)** 32

Date: 19/06/2025

Time: 12:45 PM - 2:15 PM

Right: 89.78%

Wrong: 5.17%

**Q75)** The average of 6 numbers is 18. If each number is increased by 5, what will be the new average?

**A)** 20 **B)** 25 **C)** 23 **D)** 18

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 89.80%

Wrong: 6.34%

**Q76)** The average of eight numbers is 15. The average of five of these numbers is 18. The average of the remaining three numbers is:

**A)** 12 **B)** 11 **C)** 9 **D)** 10

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 90.63%

Wrong: 4.88%

**Q77)** A runner covers 5 km, 8 km, 6 km, 7 km, and 9 km in five races. What is the average distance covered per race?

**A)** 6 km **B)** 8 km **C)** 7 km **D)** 5 km

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 90.63%

Wrong: 5.83%

**Q78)** If Ojaswita received the following marks in five assignments: 82, 86, 92, 75, and 95, what is her average score?

**A)** 84 **B)** 86 **C)** 87 **D)** 89

Date: 24/06/2025

Time: 12:45 PM - 2:15 PM

Right: 90.75%

Wrong: 6.01%

**Q79)** The average of nine numbers is 17. The average of seven of these numbers is 17. The average of the remaining two numbers is:

**A)** 17 **B)** 19 **C)** 16 **D)** 18

Date: 10/06/2025 Time: 4:30 PM - 6:00 PM Right: 91.71% Wrong: 4.04%

**Q80)** Given are the ages (in years) of five people: 20, 30, 35, 40 and 45. Calculate the average age in years.

**A)** 34 **B)** 30 **C)** 32.5 **D)** 35

Date: 05/06/2025 Time: 4:30 PM - 6:00 PM Right: 91.79% Wrong: 6.24%

**Q81)** The average of 8 numbers is 16. The average of 6 of these numbers is 16. The average of the remaining two numbers is:

**A)** 17 **B)** 15 **C)** 16 **D)** 18

Date: 24/06/2025 Time: 9:00 AM - 10:30 AM Right: 91.93% Wrong: 3.88%

**Q82)** The average of Sachin's marks in 7 subjects is 76. His average in six subjects excluding English is 70. How many marks did he get in English?

**A)** 113 **B)** 111 **C)** 112 **D)** 114

Date: 24/06/2025 Time: 12:45 PM - 2:15 PM Right: 92.02% Wrong: 3.44%

**Q83)** The sum of 6 numbers is 288. Find their average.

**A)** 48 **B)** 49 **C)** 46 **D)** 47

Date: 11/06/2025 Time: 4:30 PM - 6:00 PM Right: 92.17% Wrong: 4.18%

**Q84)** What is the average of the following numbers: 14, 16, 27, 31, 39, 44, 51 and 58.

**A)** 37 **B)** 35 **C)** 39 **D)** 33

Date: 13/06/2025 Time: 4:30 PM - 6:00 PM Right: 92.28% Wrong: 4.01%

**Q85)** A student spends ₹300, ₹250, ₹350, ₹200, and ₹400 on groceries over five weeks. What is the average amount spent per week?

**A)** ₹280 **B)** ₹340 **C)** ₹300 **D)** ₹320

Date: 17/06/2025 Time: 9:00 AM - 10:30 AM Right: 92.28% Wrong: 5.25%

**Q86)** A shop earns ₹500, ₹600, ₹450, ₹550, and ₹400 over five days. What is the average earning per day?

**A)** ₹500 **B)** ₹480 **C)** ₹520 **D)** ₹460

Date: 16/06/2025 Time: 4:30 PM - 6:00 PM Right: 92.57% Wrong: 4.75%

Q87) Find the average of 308, 127, 90, 45, 125 and 103.

A) 135 B) 132 C) 130 D) 133

Date: 06/06/2025

Time: 4:30 PM - 6:00 PM

Right: 92.67%

Wrong: 4.40%

Q88) The average of three numbers is 23. If two of them are 11 and 26, the third number is:

A) 31 B) 33 C) 32 D) 34

Date: 10/06/2025

Time: 12:45 PM - 2:15 PM

Right: 92.67%

Wrong: 4.17%

Q89) The average of Anwar's marks in seven subjects is 75. His average in six subjects excluding Science is 70. How many marks did he get in Science?

A) 105 B) 107 C) 104 D) 106

Date: 11/06/2025

Time: 12:45 PM - 2:15 PM

Right: 92.85%

Wrong: 2.09%

Q90) The average weight (in kg) of a family of five members whose weights are 40 kg, 49 kg, 56 kg, 63 kg and 37 kg is:

A) 49 B) 51 C) 48 D) 50

Date: 10/06/2025

Time: 4:30 PM - 6:00 PM

Right: 92.89%

Wrong: 5.11%

Q91) The average of three numbers is 23. If two numbers are 11 and 25, the third number is:

A) 34 B) 32 C) 35 D) 33

Date: 11/06/2025

Time: 12:45 PM - 2:15 PM

Right: 92.91%

Wrong: 4.08%

Q92) The average of eight numbers is 14. The average of five of these numbers is 14. The average of the remaining three numbers is:

A) 13 B) 16 C) 14 D) 15

Date: 16/06/2025

Time: 9:00 AM - 10:30 AM

Right: 92.95%

Wrong: 3.46%

Q93) If the average of four numbers is 40 and three of the numbers among four are 40, 42 and 55, what will be the fourth number?

A) 29 B) 23 C) 21 D) 27

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 93.09%

Wrong: 3.30%

Q94) A factory produces 15, 20, 25, 10, and 30 units of a gadget over five days. What is the average production (in units) per day?

A) 18 B) 20 C) 24 D) 22

Date: 16/06/2025

Time: 9:00 AM - 10:30 AM

Right: 93.10%

Wrong: 4.68%

**Q95)** A class of 30 students appeared in a test. The average score of 12 students is 60, and that of the rest is 60. What is the average score of the class?

**A) 60 B) 61 C) 59 D) 58**

Date: 06/06/2025 Time: 4:30 PM - 6:00 PM Right: 93.25% Wrong: 3.36%

**Q96)** Raj spent ₹1,200, ₹1,300, ₹1,400, ₹1,100, ₹1,300 and ₹1,200 on six consecutive days of a trip. What was his average daily spending over these six days?

**A) ₹1,300 B) ₹1,250 C) ₹1,150 D) ₹1,350**

Date: 24/06/2025 Time: 4:30 PM - 6:00 PM Right: 93.57% Wrong: 3.76%

**Q97)** A vendor sells 8, 12, 10, 14, and 6 mangoes over five days. What is the average number of mangoes sold per day?

**A) 8 B) 14 C) 12 D) 10**

Date: 17/06/2025 Time: 12:45 PM - 2:15 PM Right: 94.02% Wrong: 3.98%

**Q98)** The temperatures recorded over five consecutive days in a town were: 28°C, 30°C, 32°C, 31°C, and 29°C. What was the average temperature during these five days?

**A) 29°C B) 30°C C) 31°C D) 32°C**

Date: 23/06/2025 Time: 9:00 AM - 10:30 AM Right: 94.99% Wrong: 3.64%

**Q99)** The sum of 6 numbers is 300. Find their average.

**A) 51 B) 49 C) 48 D) 50**

Date: 11/06/2025 Time: 9:00 AM - 10:30 AM Right: 95.65% Wrong: 1.94%

### Answer Key (Q1 to Q99) Average

Q1: 2	Q2: 1	Q3: 1	Q4: 4	Q5: 2
Q6: 2	Q7: 2	Q8: 3	Q9: 3	Q10: 1
Q11: 1	Q12: 3	Q13: 1	Q14: 4	Q15: 2
Q16: 4	Q17: 3	Q18: 3	Q19: 4	Q20: 3
Q21: 3	Q22: 2	Q23: 2	Q24: 1	Q25: 3
Q26: 2	Q27: 4	Q28: 3	Q29: 4	Q30: 3
Q31: 4	Q32: 1	Q33: 2	Q34: 2	Q35: 3
Q36: 2	Q37: 1	Q38: 3	Q39: 4	Q40: 1
Q41: 1	Q42: 1	Q43: 3	Q44: 4	Q45: 4

Q46: 4	Q47: 2	Q48: 1	Q49: 4	Q50: 1
Q51: 4	Q52: 1	Q53: 3	Q54: 4	Q55: 2
Q56: 1	Q57: 1	Q58: 2	Q59: 3	Q60: 1
Q61: 2	Q62: 4	Q63: 4	Q64: 2	Q65: 4
Q66: 2	Q67: 3	Q68: 1	Q69: 2	Q70: 1
Q71: 4	Q72: 1	Q73: 3	Q74: 3	Q75: 3
Q76: 4	Q77: 3	Q78: 2	Q79: 1	Q80: 1
Q81: 3	Q82: 3	Q83: 1	Q84: 2	Q85: 3
Q86: 1	Q87: 4	Q88: 3	Q89: 1	Q90: 1
Q91: 4	Q92: 3	Q93: 2	Q94: 2	Q95: 1
Q96: 2	Q97: 4	Q98: 2	Q99: 4	

## Mensuration

**Q1)** The length and breadth of a cuboid are 70 cm and 96 cm, respectively. If its surface area is  $1488 \text{ cm}^2$ , then what is the length (in cm) of its diagonal?

**A)**  $\sqrt{15402}$  **B)**  $\sqrt{15420}$  **C)**  $\sqrt{15408}$  **D)**  $\sqrt{15412}$

Date: 20/06/2025 Time: 4:30 PM - 6:00 PM Right: 7.32% Wrong: 14.19%

**Q2)** 731 metallic cubes with a side length of 3.6 cm are available to be melted and formed into a machine part consisting of two solid cones with a base radius of 5.4 cm, joined at their bases. The heights of the cones are 49 cm and 35 cm, respectively. How many cubes will be surplus after the formation of the two cones? (Take  $\pi = 3.14$ )

**A)** 666 **B)** 680 **C)** 676 **D)** 668

Date: 13/06/2025 Time: 4:30 PM - 6:00 PM Right: 7.57% Wrong: 8.67%

**Q3)** Five solid cubes, each of volume  $1,09,41,048 \text{ cm}^3$ , are joined end to end to form a cuboid. What is the lateral surface area (in  $\text{cm}^2$ ) of the cuboid?

**A)** 5,91,408 **B)** 5,91,310 **C)** 5,91,663 **D)** 5,91,312

Date: 20/06/2025 Time: 12:45 PM - 2:15 PM Right: 13.68% Wrong: 16.23%

**Q4)** The area of a rectangle increases by  $7 \text{ m}^2$  if its length is increased by 6 m and breadth is decreased by 5 m. If the length is decreased by 6 m and breadth is increased by 7 m, then its area increases by  $31 \text{ m}^2$ . What is the perimeter of the original rectangle (in m)?

**A)** 217 **B)** 215 **C)** 216 **D)** 214

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 14.25%

Wrong: 20.28%

**Q5)** Five solid cubes, each of volume  $5,92,704 \text{ cm}^3$ , are joined end to end to form a cuboid. What is the lateral surface area (in  $\text{cm}^2$ ) of the cuboid?

**A)** 84,774 **B)** 84,898 **C)** 84,672 **D)** 84,863

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 18.02%

Wrong: 13.10%

**Q6)** A right triangle with sides 56 cm, 42 cm and 70 cm is rotated about the side of 56 cm to form a cone. The total surface area (in  $\text{cm}^2$ ) of the cone so formed is:

**A)**  $3446\pi$  **B)**  $4704\pi$  **C)**  $7056\pi$  **D)**  $5760\pi$

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 19.72%

Wrong: 26.52%

**Q7)** If a hemisphere of radius 3 cm is fitted inside a cuboid and then water is filled inside the cuboid, the amount of water (in  $\text{cm}^3$ ) present in the cuboid is:

(Take  $\pi = 3.14$ )

**A)** 57.64 **B)** 49.81 **C)** 51.48 **D)** 55.28

Date: 10/06/2025

Time: 12:45 PM - 2:15 PM

Right: 20.15%

Wrong: 24.74%

**Q8)** The area of a rectangle increases by  $8 \text{ m}^2$  if its length is increased by 5 m and breadth is decreased by 7 m. If the length is decreased by 5 m and breadth is increased by 8 m, then its area increases by  $33 \text{ m}^2$ . What is the perimeter of the original rectangle (in m)?

**A)** 575 **B)** 576 **C)** 573 **D)** 574

Date: 06/06/2025

Time: 12:45 PM - 2:15 PM

Right: 20.19%

Wrong: 18.03%

**Q9)** In a circle of radius 10.5 cm, if the angle of a sector is  $\frac{2\pi}{3}$ , then the perimeter of the sector is (in cm):

(Take  $\pi = \frac{22}{7}$ )

**A)** 40 **B)** 43 **C)** 44 **D)** 41

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 21.72%

Wrong: 40.89%

**Q10)** A right triangle with sides 60 cm, 45 cm and 75 cm is rotated about the side of 60 cm to form a cone. The curved surface area (in  $\text{cm}^2$ ) of the cone so formed is:

**A)**  $4505\pi$  **B)**  $3375\pi$  **C)**  $3125\pi$  **D)**  $4500\pi$

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 22.70%

Wrong: 30.63%

**Q11)** The diameter of a sphere is 2 cm more than the diameter of a smaller sphere. The surface area of the larger sphere is  $528 \text{ cm}^2$  more than the surface area of the smaller sphere. What is the diameter (in cm) of the larger sphere?

$$(\text{Use } \pi = \frac{22}{7})$$

**A)** 43 **B)** 41 **C)** 39 **D)** 45

Date: 18/06/2025

Time: 9:00 AM - 10:30 AM

Right: 24.64%

Wrong: 17.43%

**Q12)** The sum of the perimeter of two cubes, the length of whose edges are  $x$  cm and  $y$  cm, respectively, is 300 cm and the product of edges  $x$  and  $y$  is  $156 \text{ cm}^2$ . Find the sum of the volume of both cubes.

**A)**  $2968 \text{ cm}^3$  **B)**  $2178 \text{ cm}^3$  **C)**  $1756 \text{ cm}^3$  **D)**  $3925 \text{ cm}^3$

Date: 20/06/2025

Time: 4:30 PM - 6:00 PM

Right: 25.10%

Wrong: 16.27%

**Q13)** The volume of a right circular cylinder is  $4851 \text{ cm}^3$  and its curved surface area is  $462 \text{ cm}^2$ . If this cylinder is generated by rotating a rectangle about its length by  $360^\circ$ , what will be the perimeter (in cm) of this rectangle?

$$\text{Use } \pi = \frac{22}{7}$$

**A)** 53 **B)** 49 **C)** 43 **D)** 47

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 26.83%

Wrong: 6.50%

**Q14)** A right triangle with sides 9 cm, 12 cm and 15 cm is rotated about the side of 9 cm to form a cone. The volume (in  $\text{cm}^3$ ) of the cone so formed is:

**A)**  $320\pi$  **B)**  $421\pi$  **C)**  $324\pi$  **D)**  $432\pi$

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 27.43%

Wrong: 36.54%

**Q15)** Find the volume (in  $\text{cm}^3$ , rounded off to two decimal places) of a hemispherical cap having a radius of 33.6 cm.

**A)**  $25,297.58\pi$  **B)**  $25,293.28\pi$  **C)**  $25,288.70\pi$  **D)**  $25,287.05\pi$

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 27.54%

Wrong: 22.51%

**Q16)** In quadrilateral ABCD,  $AB = 17$  cm,  $BC = 8$  cm,  $CD = 9$  cm,  $AD = 12$  cm, and  $AC = 15$  cm. What is the area (in  $\text{cm}^2$ ) of the quadrilateral?

**A)** 105 **B)** 114 **C)** 118 **D)** 121

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 28.66%

Wrong: 20.47%

**Q17)** Calculate the area of the triangle whose sides are 8 cm, 9 cm and 13 cm. (Rounded up to two decimal places)

- A)** 35.97 cm<sup>2</sup> **B)** 35.03 cm<sup>2</sup> **C)** 35.85 cm<sup>2</sup> **D)** 35.50 cm<sup>2</sup>

Date: 11/06/2025

Time: 4:30 PM - 6:00 PM

Right: 30.00%

Wrong: 34.41%

**Q18)** A cylindrical rod has an curved surface area of 4,900 cm<sup>2</sup>. If the length of the rod is 97 cm, then the radius (in cm) of the rod, correct to two places of decimal, is:

$$\text{Take } \pi = \frac{22}{7}$$

- A)** 6.97 **B)** 8.55 **C)** 7.95 **D)** 8.04

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 32.87%

Wrong: 22.88%

**Q19)** Find the volume (in cm<sup>3</sup>) of the largest right circular cone that can be cut out from a cube with an edge of 8 cm.

$$\text{Use } \pi = \frac{22}{7}$$

- A)**  $136\frac{2}{21}$  **B)**  $134\frac{2}{21}$  **C)**  $138\frac{2}{21}$  **D)**  $127\frac{2}{21}$

Date: 06/06/2025

Time: 9:00 AM - 10:30 AM

Right: 32.98%

Wrong: 13.89%

**Q20)** Find the area of four walls of a cube, the length of whose edge is  $(3x + 8y + 5)$  m.

- A)**  $(36x^2 + 124y^2 + 100 + 82xy + 160y + 80x)$  m<sup>2</sup>  
**B)**  $(36x^2 + 256y^2 + 100 + 192xy + 160y + 120x)$  m<sup>2</sup>  
**C)**  $(36x^2 + 256y^2 + 100 + 192xy + 320y + 120x)$  m<sup>2</sup>  
**D)**  $(36x^2 + 184y^2 + 100 + 192xy + 160y + 80x)$  m<sup>2</sup>

Date: 17/06/2025

Time: 4:30 PM - 6:00 PM

Right: 36.46%

Wrong: 19.67%

**Q21)** The volume of a right circular cone is 1078 cm<sup>3</sup>. Find the total surface area of the cone if its height is 21 cm. (Use  $\pi = 22/7$ )

- A)** 154 cm<sup>2</sup> **B)**  $154\sqrt{10}$  cm<sup>2</sup> **C)**  $154(1 + \sqrt{10})$  cm<sup>2</sup> **D)**  $22(7 + \sqrt{10})$  cm<sup>2</sup>

Date: 11/06/2025

Time: 12:45 PM - 2:15 PM

Right: 36.93%

Wrong: 25.06%

**Q22)** The length, breadth and height of a cuboid are  $(2x - 5y + 3)$  m,  $(5x + 7y - 7)$  m and  $(x + y + 3)$  m, respectively. Find the perimeter of the cuboid.

- A)**  $(32x + 12y + 4)$  m **B)**  $(32x + 12y - 4)$  m **C)**  $(16x - 12y + 8)$  m **D)**  $(16x - 12y - 8)$  m

Date: 18/06/2025

Time: 4:30 PM - 6:00 PM

Right: 37.45%

Wrong: 10.16%

**Q23)** A hollow spherical shell is made of a metal of density  $28 \text{ g/cm}^3$ . Its internal and external radii are 2 cm and 5 cm, respectively. What is the approximate weight (in kg) of the shell?

$$\left( \text{Take } \pi = \frac{22}{7}, \text{Density} = \frac{\text{Mass}}{\text{Volume}} \right)$$

**A)** 13.728 **B)** 15.12 **C)** 10.728 **D)** 15.49

Date: 21/06/2025 Time: 12:45 PM - 2:15 PM Right: 37.75% Wrong: 10.93%

**Q24)** A hollow spherical shell is made of a metal of density  $21 \text{ g/cm}^3$ . Its internal and external radii are 8 cm and 9 cm, respectively. What is the weight (in kg) of the shell?

$$\left( \text{Use } \pi = \frac{22}{7}, \text{Density} = \frac{\text{Mass}}{\text{Volume}} \right)$$

**A)** 21.03 **B)** 19.096 **C)** 20.34 **D)** 16.096

Date: 11/06/2025 Time: 12:45 PM - 2:15 PM Right: 37.78% Wrong: 10.63%

**Q25)** A cylinder is surmounted by a cone at one end and a hemisphere at the other end. The common radius is 7 cm, the height of the cylinder is 6 cm and the total height of the structure is 32 cm. Find the volume (in  $\text{cm}^3$ ) of the structure.

$$\text{Use } \pi = \frac{22}{7}$$

**A)** 2621 **B)** 2616 **C)** 2620 **D)** 2618

Date: 24/06/2025 Time: 12:45 PM - 2:15 PM Right: 40.12% Wrong: 7.68%

**Q26)** A river 20 m deep and 36 m wide is flowing at the rate of 2.7 km/hr. The amount of water (in  $\text{m}^3$ ) that runs into the sea per minute is \_\_\_\_\_.

**A)** 30,024 **B)** 32,400 **C)** 30,240 **D)** 34,200

Date: 06/06/2025 Time: 4:30 PM - 6:00 PM Right: 40.32% Wrong: 12.15%

**Q27)** The area of a quadrilateral ABCD is  $299 \text{ cm}^2$ . The lengths of the perpendiculars from the vertices B and D to the diagonal AC are 11 cm and 12 cm, respectively. Determine the length (in cm) of the diagonal AC.

**A)** 26 **B)** 21 **C)** 29 **D)** 24

Date: 17/06/2025 Time: 4:30 PM - 6:00 PM Right: 40.49% Wrong: 10.47%

**Q28)** The area of a quadrilateral ABCD is  $324 \text{ cm}^2$ . The lengths of the perpendiculars from the vertices B and D to the diagonal AC are 12 cm and 15 cm, respectively. Determine the length (in cm) of the diagonal AC.

**A)** 24 **B)** 19 **C)** 27 **D)** 28

Date: 24/06/2025 Time: 9:00 AM - 10:30 AM Right: 40.75% Wrong: 18.07%

**Q29)** Find the area of the sector when the radius of the circle is 16.2 units and the length of the arc is 5 units.

- A)** 42.5 units<sup>2</sup> **B)** 40.5 units<sup>2</sup> **C)** 46.5 units<sup>2</sup> **D)** 44.5 units<sup>2</sup>

Date: 19/06/2025

Time: 12:45 PM - 2:15 PM

Right: 41.41%

Wrong: 8.54%

**Q30)** The curved surface area of a right circular cone is  $5904\pi$  cm<sup>2</sup>, and the diameter of its base is 72 cm. Find the height (in cm) of the cone.

- A)** 158 **B)** 160 **C)** 162 **D)** 159

Date: 13/06/2025

Time: 4:30 PM - 6:00 PM

Right: 42.32%

Wrong: 21.85%

**Q31)** A cylinder is made by rolling a rectangular paper along its breadth. Find the curved surface area of the cylinder, if the length and breadth of the rectangle are 12 m and 7.48 m, respectively. (Use  $\pi = \frac{22}{7}$ )

- A)** 98.66 m<sup>2</sup> **B)** 44.88 m<sup>2</sup> **C)** 100.24 m<sup>2</sup> **D)** 89.76 m<sup>2</sup>

Date: 12/06/2025

Time: 12:45 PM - 2:15 PM

Right: 42.80%

Wrong: 18.37%

**Q32)** A cube of side 5 cm and a cuboid of measurements 35 cm, 15 cm and 15 cm, respectively, of the same metal are melted and made into cubes of side 10 cm each. The number of cubes of side 10 cm thus formed is:

- A)** 9 **B)** 10 **C)** 7 **D)** 8

Date: 18/06/2025

Time: 4:30 PM - 6:00 PM

Right: 43.61%

Wrong: 16.39%

**Q33)** A rectangular tin sheet is 32 cm long and 14 cm wide. It is rolled along its length to form a cylinder, with opposite edges just touching each other. Find the volume (in cm<sup>3</sup>) of the cylinder.

- A)**  $\frac{3585}{\pi}$  **B)**  $\frac{3588}{\pi}$  **C)**  $\frac{3582}{\pi}$  **D)**  $\frac{3584}{\pi}$

Date: 12/06/2025

Time: 12:45 PM - 2:15 PM

Right: 44.22%

Wrong: 14.41%

**Q34)** A hollow spherical shell is made of a metal of density 7 g/cm<sup>3</sup>. Its internal and external radii are 0 cm and 3 cm, respectively. What is the approximate weight (in kg) of the shell?

(Take  $\pi = \frac{22}{7}$ , Density =  $\frac{\text{Mass}}{\text{Volume}}$ )

- A)** 2.208 **B)** 2.14 **C)** 0.792 **D)** 2.15

Date: 24/06/2025

Time: 4:30 PM - 6:00 PM

Right: 44.98%

Wrong: 8.51%

**Q35)** A hemispherical bowl has a 3.5 cm radius. It is to be painted inside as well as outside. Find the cost of painting it at the rate of ₹17 per 10 cm<sup>2</sup>.

(Use  $\pi = \frac{22}{7}$ )

- A)** ₹241.8 **B)** ₹261.8 **C)** ₹251.8 **D)** ₹271.8

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 45.25%

Wrong: 8.08%

**Q36)** A rectangular tin sheet is 17 cm long and 22 cm wide. It is rolled along its width to form a cylinder, with opposite edges just touching each other. Find the volume (in cm<sup>3</sup>) of the cylinder.

- A)**  $\frac{2050}{\pi}$  **B)**  $\frac{2054}{\pi}$  **C)**  $\frac{2057}{\pi}$  **D)**  $\frac{2053}{\pi}$

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 46.02%

Wrong: 12.29%

**Q37)** The diagonals of a rhombus are in the ratio 8 : 15, and the perimeter is 102 cm. Find the area (in cm<sup>2</sup>) of the rhombus.

- A)** 540 **B)** 533 **C)** 546 **D)** 534

Date: 19/06/2025

Time: 9:00 AM - 10:30 AM

Right: 46.22%

Wrong: 7.87%

**Q38)** The curved surface area of a right circular cone is  $2684\pi$  cm<sup>2</sup>, and the diameter of its base is 44 cm. Find the height (in cm) of the cone.

- A)** 123 **B)** 121 **C)** 124 **D)** 120

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 46.29%

Wrong: 24.05%

**Q39)** A hollow spherical shell is made of a metal of density 11 g/cm<sup>3</sup>. Its internal and external radii are 3 cm and 6 cm, respectively. What is the weight (in kg) of the shell?

(Use  $\pi = \frac{22}{7}$ , Density =  $\frac{\text{Mass}}{\text{Volume}}$ )

- A)** 8.712 **B)** 5.712 **C)** 9.87 **D)** 9.82

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 46.61%

Wrong: 8.81%

**Q40)** A solid metallic sphere of radius 10 cm is melted and recast into 125 identical spheres. What is the ratio of the surface area of the original sphere to the total surface area of 6 smaller spheres so formed?

- A)** 49 : 108 **B)** 25 : 6 **C)** 109 : 84 **D)** 25 : 96

Date: 05/06/2025

Time: 4:30 PM - 6:00 PM

Right: 46.64%

Wrong: 11.49%

**Q41)** The length and breadth of a cuboid are 50 cm and 75 cm, respectively. If the length of the diagonal is  $17\sqrt{29}$  cm, then what is the volume (in cm<sup>3</sup>) of the cuboid?

- A)** 60,000 **B)** 60,002 **C)** 60,008 **D)** 59,995

Date: 14/06/2025

Time: 9:00 AM - 10:30 AM

Right: 48.02%

Wrong: 9.58%

**Q42)** The shorter side of a rectangle is 21 cm less than the longer side. The numerical value of its area is equal to 7 times the numerical value of its perimeter. What is the length (in cm) of its longer side?

**A)** 56 **B)** 47 **C)** 39 **D)** 42

Date: 23/06/2025 Time: 12:45 PM - 2:15 PM Right: 49.44% Wrong: 15.78%

**Q43)** The curved surface area of a right circular cone is  $4335\pi \text{ cm}^2$ , and the diameter of its base is 102 cm. Find the height (in cm) of the cone.

**A)** 68 **B)** 64 **C)** 63 **D)** 69

Date: 18/06/2025 Time: 4:30 PM - 6:00 PM Right: 50.31% Wrong: 14.17%

**Q44)** Find the area of a regular hexagon whose side measures  $16\sqrt{2} \text{ cm}$ .

**A)**  $876\sqrt{3} \text{ cm}^2$  **B)**  $786\sqrt{3} \text{ cm}^2$  **C)**  $867\sqrt{3} \text{ cm}^2$  **D)**  $768\sqrt{3} \text{ cm}^2$

Date: 10/06/2025 Time: 9:00 AM - 10:30 AM Right: 50.54% Wrong: 9.15%

**Q45)** The diameter of a metallic solid sphere is 42 cm. It is melted and drawn into a wire with a cross-sectional diameter of 0.6 cm. Find the length (in metre) of the wire.

**A)** 1372 **B)** 1367 **C)** 1362 **D)** 1364

Date: 09/06/2025 Time: 4:30 PM - 6:00 PM Right: 50.62% Wrong: 17.14%

**Q46)** The area of a square is  $2304 \text{ cm}^2$ . Its perimeter is equal to the perimeter of a regular hexagon. What is the area (in  $\text{cm}^2$ ) of the hexagon?

**A)**  $1536\sqrt{3}$  **B)** 1494 **C)**  $1582\sqrt{3}$  **D)** 1510

Date: 10/06/2025 Time: 4:30 PM - 6:00 PM Right: 50.80% Wrong: 9.48%

**Q47)** The slant height of a cone is equal to twice the radius of its base. If the cone has a volume of  $401\pi \text{ cm}^3$ , find the magnitude of the cube of its base radius.

**A)**  $401\sqrt{3}$  **B)**  $412\sqrt{3}$  **C)**  $402\sqrt{3}$  **D)**  $410\sqrt{3}$

Date: 23/06/2025 Time: 4:30 PM - 6:00 PM Right: 51.85% Wrong: 5.70%

**Q48)** Find the circumference (in m) of the largest circle that can be inscribed in a rectangle whose dimensions are given as 281 m and 133 m.

$$\text{Take } \pi = \frac{22}{7}$$

**A)** 411 **B)** 416 **C)** 418 **D)** 428

Date: 19/06/2025 Time: 9:00 AM - 10:30 AM Right: 53.66% Wrong: 8.33%

**Q49)** The shorter side of a rectangle is 21 cm less than the longer side. The numerical value of its area is equal to 5 times the numerical value of its perimeter. What is the length (in cm) of its longer side?

**A)** 32 **B)** 47 **C)** 35 **D)** 38

Date: 20/06/2025 Time: 12:45 PM - 2:15 PM Right: 54.61% Wrong: 7.27%

**Q50)** The sum of the lengths of the edges of a cube is equal to the sum of the lengths of the edges of a cuboid whose length, breadth and height are in the ratio 4 : 3 : 1. Find the volume (in  $\text{cm}^3$ ) of the cuboid if the volume of the cube is  $512 \text{ cm}^3$ .

**A)** 299 **B)** 340 **C)** 324 **D)** 315

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 55.21%

Wrong: 4.24%

**Q51)**

The volume of a solid cylinder is  $5852 \text{ cm}^3$  and its height is 38 cm. What is the total surface area of the solid cylinder? (Round your answer to the nearest integer)

(Use  $\pi = \frac{22}{7}$ )

**A)**  $1969 \text{ cm}^2$  **B)**  $1980 \text{ cm}^2$  **C)**  $1954 \text{ cm}^2$  **D)**  $1936 \text{ cm}^2$

Date: 06/06/2025

Time: 12:45 PM - 2:15 PM

Right: 55.44%

Wrong: 13.82%

**Q52)** A solid metal hemisphere has a radius of 6 cm. If the metal of the hemisphere is melted and recast into a cylindrical shape with the same radius, find the height of the cylinder.

**A)** 12 cm **B)** 8 cm **C)** 6 cm **D)** 4 cm

Date: 18/06/2025

Time: 9:00 AM - 10:30 AM

Right: 55.46%

Wrong: 24.23%

**Q53)** A cube of side 10 cm is cut into cubes of side 2 cm. Calculate the total surface area (in  $\text{cm}^2$ ) of all the small cubes:

**A)** 3000 **B)** 3008 **C)** 3002 **D)** 3010

Date: 10/06/2025

Time: 12:45 PM - 2:15 PM

Right: 56.85%

Wrong: 10.88%

**Q54)** Find the circumference (in m) of the largest circle that can be inscribed in a rectangle whose dimensions are given as 112 m and 281 m.

Take  $\pi = \frac{22}{7}$

**A)** 352 **B)** 348 **C)** 354 **D)** 342

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 57.91%

Wrong: 7.47%

**Q55)** A conical vessel has base radius 31 cm and height 45 cm. Water is poured into the vessel until it is  $\frac{2}{3}$  full. Find the volume (in  $\text{cm}^3$ ) of water in the vessel.

**A)**  $9614\pi$  **B)**  $9611\pi$  **C)**  $9610\pi$  **D)**  $9606\pi$

Date: 05/06/2025

Time: 4:30 PM - 6:00 PM

Right: 57.99%

Wrong: 11.60%

**Q56)** The shorter side of a rectangle is 24 cm less than the longer side. The numerical value of its area is equal to 8 times the numerical value of its perimeter. What is the length (in cm) of its longer side?

**A)** 57 **B)** 48 **C)** 52 **D)** 54

Date: 14/06/2025

Time: 12:45 PM - 2:15 PM

Right: 58.60%

Wrong: 8.88%

**Q57)** The area of the base of a right circular cone is  $3136\pi \text{ cm}^2$  and its slant height is 65 cm. The curved surface area of the cone (in  $\text{cm}^2$ ) is:

- A)**  $3640\pi$  **B)**  $3065\pi$  **C)**  $3460\pi$  **D)**  $3500\pi$

Date: 10/06/2025

Time: 4:30 PM - 6:00 PM

Right: 58.68%

Wrong: 9.63%

**Q58)** A right circular cone is 6.7 cm high, and the radius of its base is 17.6 cm. It is melted and recast into a new right circular cone with a base radius of 8.8 cm. Find the height (in cm) of the new cone.

- A)** 34.5 **B)** 25.5 **C)** 37.5 **D)** 26.8

Date: 20/06/2025

Time: 4:30 PM - 6:00 PM

Right: 58.90%

Wrong: 5.76%

**Q59)** The curved surface area of a right circular cone is  $6500\pi \text{ cm}^2$ , and the diameter of its base is 100 cm. Find the height (in cm) of the cone.

- A)** 125 **B)** 120 **C)** 119 **D)** 115

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 59.98%

Wrong: 12.31%

**Q60)** Find the circumference (in m) of the largest circle that can be inscribed in a rectangle whose dimensions are given as 114 m and 63 m.

$$\text{Take } \pi = \frac{22}{7}$$

- A)** 199 **B)** 202 **C)** 201 **D)** 198

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 60.08%

Wrong: 4.78%

**Q61)** The curved surface area of a right circular cone is  $5400\pi \text{ cm}^2$ , and the diameter of its base is 144 cm. Find the height (in cm) of the cone.

- A)** 16 **B)** 21 **C)** 22 **D)** 20

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 60.63%

Wrong: 11.76%

**Q62)** The surface area of a sphere is  $25\pi \text{ cm}^2$ . The volume of the sphere is:

- A)**  $\frac{509\pi}{3} \text{ cm}^3$  **B)**  $\frac{125\pi}{3} \text{ cm}^3$  **C)**  $\frac{500\pi}{3} \text{ cm}^3$  **D)**  $\frac{125\pi}{6} \text{ cm}^3$

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 61.62%

Wrong: 22.39%

**Q63)** The shorter side of a rectangle is 18 cm less than the longer side. The numerical value of its area is equal to 6 times the numerical value of its perimeter. What is the length (in cm) of its longer side?

- A)** 23 **B)** 21 **C)** 33 **D)** 36

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 61.94%

Wrong: 6.08%

**Q64)** Find the area of a parallelogram, whose base is  $(3x - 5y + 4)$  m and height is  $(x - 5y)$  m.

- A)**  $(3x^2 + 25y^2 - 20xy + 4x - 20y) m^2$  **B)**  $(3x^2 - 25y^2 - 20xy - 4x - 20y) m^2$   
**C)**  $(3x^2 + 25y^2 + 20xy + 4x - 20y) m^2$  **D)**  $(3x^2 - 25y^2 + 20xy + 4x - 20y) m^2$

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 62.72%

Wrong: 9.04%

**Q65)** The shorter side of a rectangle is 15 cm less than the longer side. The numerical value of its area is equal to 5 times the numerical value of its perimeter. What is the length (in cm) of its longer side?

- A)** 30 **B)** 27 **C)** 34 **D)** 38

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 62.75%

Wrong: 5.61%

**Q66)** The length of a rectangular field is  $\left(\frac{2a + 2\sqrt{5}}{4}\right)$  m and breadth is  $\left(\frac{a - \sqrt{5}}{2}\right)$  m. Find the area of the rectangular field.

- A)**  $\left(\frac{a^2 - 5}{2}\right) m^2$  **B)**  $\left(\frac{a^2 - 5}{4}\right) m^2$  **C)**  $\left(\frac{a^2 + 5}{2}\right) m^2$  **D)**  $\left(\frac{a^2 + 5}{4}\right) m^2$

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 63.31%

Wrong: 14.49%

**Q67)** Find the volume (in  $cm^3$ ) of a sphere having a diameter of 4.2 cm, giving your answer correct to two places of decimal.

$$\text{Take } \pi = \frac{22}{7}$$

- A)** 18.8 **B)** 188.8 **C)** 38.8 **D)** 168.8

Date: 19/06/2025

Time: 12:45 PM - 2:15 PM

Right: 63.78%

Wrong: 16.25%

**Q68)** The sum of the area of two squares whose sides are p cm and q cm, respectively, is  $317 cm^2$  and the sum of their perimeters is 100 cm. Find the product of p and q.

- A)**  $154 cm^2$  **B)**  $108 cm^2$  **C)**  $135 cm^2$  **D)**  $147 cm^2$

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 63.81%

Wrong: 6.79%

**Q69)** The length, width and height of a cuboid are in the ratio 10 : 17 : 14, and its total surface area is  $1096 cm^2$ . Find the length (in cm) of the cuboid.

- A)** 17 **B)** 10 **C)** 1 **D)** 5

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 64.41%

Wrong: 11.92%

**Q70)** Find the surface area of a sphere whose diameter is equal to 98 cm.

- A)**  $29,256 cm^2$  **B)**  $39,204 cm^2$  **C)**  $30,184 cm^2$  **D)**  $33,284 cm^2$

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 65.07%

Wrong: 16.20%

**Q71)** The shorter side of a rectangle is 16 cm less than the longer side. The numerical value of its area is equal to 3 times the numerical value of its perimeter. What is the length (in cm) of its longer side?

- A)** 14 **B)** 25 **C)** 19 **D)** 24

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 65.25%

Wrong: 6.07%

**Q72)** The curved surface area of a cylinder is half of its total surface area. If its height is 53 cm, then find its radius (in cm).

- A)** 53 **B)** 49 **C)** 47 **D)** 59

Date: 21/06/2025 Time: 4:30 PM - 6:00 PM Right: 65.31% Wrong: 7.55%

**Q73)** The curved surface area of a cone is  $2970 \text{ cm}^2$ , and its diameter is 70 cm. What is its total surface area (in  $\text{cm}^2$ )?

$$\text{Use } \pi = \frac{22}{7}$$

- A)** 6820 **B)** 6825 **C)** 6827 **D)** 6813

Date: 21/06/2025 Time: 9:00 AM - 10:30 AM Right: 65.56% Wrong: 8.59%

**Q74)** The curved surface area of a cylinder is half of its total surface area. If its height is 102 cm, then find its radius (in cm).

- A)** 103 **B)** 108 **C)** 100 **D)** 102

Date: 11/06/2025 Time: 9:00 AM - 10:30 AM Right: 65.69% Wrong: 7.55%

**Q75)** The curved surface area of a cylinder is half of its total surface area. If its height is 10 cm, then find the volume of the cylinder (in  $\text{cm}^3$ ).

- A)**  $1005\pi$  **B)**  $1000\pi$  **C)**  $993\pi$  **D)**  $992\pi$

Date: 19/06/2025 Time: 12:45 PM - 2:15 PM Right: 66.09% Wrong: 5.57%

**Q76)** The length of each of the two equal sides of an isosceles triangle is 41 cm and the length of its base is 18 cm. The area (in  $\text{cm}^2$ ) of the triangle is:

- A)** 351 **B)** 355 **C)** 360 **D)** 365

Date: 24/06/2025 Time: 4:30 PM - 6:00 PM Right: 66.63% Wrong: 8.83%

**Q77)** The length of the base of a parallelogram is  $(4x^2 - 7xy + y^2)$  m and its height is  $(x + y)$  m. Find the area of parallelogram, when  $x = 3$  and  $y = -2$ .

- A)**  $69 \text{ m}^2$  **B)**  $82 \text{ m}^2$  **C)**  $48 \text{ m}^2$  **D)**  $57 \text{ m}^2$

Date: 14/06/2025 Time: 12:45 PM - 2:15 PM Right: 66.90% Wrong: 6.80%

**Q78)** The curved surface area of a cylinder is half of its total surface area. If the height is 128 cm, then find the radius (in cm).

- A)** 128 **B)** 138 **C)** 122 **D)** 137

Date: 06/06/2025 Time: 4:30 PM - 6:00 PM Right: 67.79% Wrong: 5.56%

**Q79)** The curved surface area of a cylinder is half of its total surface area. If its height is 195 cm, then find its diameter (in cm).

- A)** 393 **B)** 390 **C)** 383 **D)** 381

Date: 16/06/2025

Time: 9:00 AM - 10:30 AM

Right: 68.13%

Wrong: 4.31%

**Q80)** The curved surface area of a cylinder is half of its total surface area. If its height is 12 cm, then find its diameter (in cm).

- A)** 24 **B)** 20 **C)** 33 **D)** 22

Date: 17/06/2025

Time: 4:30 PM - 6:00 PM

Right: 69.12%

Wrong: 7.12%

**Q81)** The diagonals of a quadrilateral are perpendicular bisectors of each other. If the length of one diagonal is 3 cm and the area of the quadrilateral is  $180 \text{ cm}^2$ , find the length (in cm) of the other diagonal.

- A)** 128 **B)** 120 **C)** 115 **D)** 112

Date: 20/06/2025

Time: 12:45 PM - 2:15 PM

Right: 69.92%

Wrong: 3.65%

**Q82)** A solid hemisphere has a radius of 16 cm. Find its total surface area.

- A)**  $764\pi \text{ cm}^2$  **B)**  $760\pi \text{ cm}^2$  **C)**  $761\pi \text{ cm}^2$  **D)**  $768\pi \text{ cm}^2$

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 70.04%

Wrong: 10.73%

**Q83)** The total surface area of a cylinder is  $396 \text{ cm}^2$ , and its radius is 7 cm. Find the volume (in  $\text{cm}^3$ ) of the cylinder.

$$\text{Use } \pi = \frac{22}{7}$$

- A)** 307 **B)** 308 **C)** 314 **D)** 300

Date: 23/06/2025

Time: 4:30 PM - 6:00 PM

Right: 70.99%

Wrong: 7.83%

**Q84)** What is the formula for density?

- A)**  $\text{Density} = \frac{\text{Volume}}{\text{Mass}}$  **B)**  $\text{Density} = \text{Mass} \times \text{Volume}$  **C)**  $\text{Density} = \frac{\text{Weight}}{\text{Volume}}$
- D)**  $\text{Density} = \frac{\text{Mass}}{\text{Volume}}$

Date: 11/06/2025

Time: 4:30 PM - 6:00 PM

Right: 71.25%

Wrong: 23.98%

**Q85)** If the volume of a right circular cone of height 30 cm is  $160\pi \text{ cm}^3$ , find the diameter of its base.

- A)** 13 cm **B)** 16 cm **C)** 8 cm **D)** 7 cm

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 71.36%

Wrong: 9.25%

**Q86)** The ratio between the perimeter and breadth of a rectangle is 3 : 1. If the area of the rectangle is 98 cm<sup>2</sup>, find the perimeter (in cm) of the rectangle.

**A)** 38 **B)** 50 **C)** 42 **D)** 47

Date: 16/06/2025 Time: 9:00 AM - 10:30 AM Right: 71.56% Wrong: 6.08%

**Q87)** The length of a rectangular pitch is 30 m more than its breadth. Its area is 18,271 m<sup>2</sup>. Its breadth (in m) is:

**A)** 131 **B)** 121 **C)** 113 **D)** 124

Date: 14/06/2025 Time: 9:00 AM - 10:30 AM Right: 71.58% Wrong: 8.85%

**Q88)** The volume and height of a cylinder are 8470 cm<sup>3</sup> and 2.2 cm, respectively. Find the radius (in cm) of the cylinder.

$$\text{Use } \pi = \frac{22}{7}$$

**A)** 35 **B)** 44 **C)** 26 **D)** 38

Date: 23/06/2025 Time: 12:45 PM - 2:15 PM Right: 71.93% Wrong: 9.81%

**Q89)** Find the surface area of a sphere whose diameter is equal to 112 cm.

**A)** 36,976 cm<sup>2</sup> **B)** 38,980 cm<sup>2</sup> **C)** 37,948 cm<sup>2</sup> **D)** 39,424 cm<sup>2</sup>

Date: 06/06/2025 Time: 12:45 PM - 2:15 PM Right: 72.09% Wrong: 12.04%

**Q90)** A conical vessel has base radius 6 cm and height 20 cm. Water is poured into the vessel until it is  $\frac{3}{4}$  full. Find the volume (in cm<sup>3</sup>) of water in the vessel.

**A)** 184π **B)** 187π **C)** 180π **D)** 171π

Date: 13/06/2025 Time: 9:00 AM - 10:30 AM Right: 72.47% Wrong: 5.51%

**Q91)** If the volume of a right circular cone of height 11 cm is 297π cm<sup>3</sup>, find the diameter of its base.

**A)** 14 cm **B)** 12 cm **C)** 25 cm **D)** 18 cm

Date: 23/06/2025 Time: 9:00 AM - 10:30 AM Right: 72.70% Wrong: 8.41%

**Q92)** The length of the diagonals of a rhombus are (y + xy + 5) m and (y - xy + 7) m, respectively. Find the area of the rhombus, if x = 2 and y = 1.

**A)** 27 m<sup>2</sup> **B)** 18 m<sup>2</sup> **C)** 21 m<sup>2</sup> **D)** 24 m<sup>2</sup>

Date: 18/06/2025 Time: 9:00 AM - 10:30 AM Right: 72.89% Wrong: 7.15%

**Q93)** A sphere with a radius of 53 cm is melted to form a cone with the same radius at its base. Find the height (in cm) of the cone.

**A)** 219 **B)** 215 **C)** 205 **D)** 212

Date: 13/06/2025 Time: 9:00 AM - 10:30 AM Right: 73.37% Wrong: 5.23%

**Q94)** The volume (in  $\text{cm}^3$ ) of a wire of diameter 6 cm and length 56 m is:

$$\text{Take } \pi = \frac{22}{7}$$

- A)** 1,58,400 **B)** 1,58,800 **C)** 1,59,000 **D)** 1,57,800

Date: 17/06/2025

Time: 4:30 PM - 6:00 PM

Right: 73.51%

Wrong: 5.28%

**Q95)** The radius of the base and the slant height of a right circular cone are 7 cm and 25 cm, respectively. Find the volume (in  $\text{cm}^3$ ) of the given cone.

$$(\text{Use } \pi = \frac{22}{7})$$

- A)** 1062 **B)** 982 **C)** 1232 **D)** 1352

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 73.67%

Wrong: 6.71%

**Q96)** Find the volume (in  $\text{cm}^3$ ) of a hemispherical cap having a radius of 24 cm.

- A)**  $9220\pi$  **B)**  $9208\pi$  **C)**  $9216\pi$  **D)**  $9212\pi$

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 74.63%

Wrong: 9.70%

**Q97)** The capacity of a cuboid tank of water is 70,000 litres. Find the breadth of the tank, if its length and depth are 4 m and 10 m, respectively.

- A)** 1.75 m **B)** 1.85 m **C)** 1.95 m **D)** 1.65 m

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 74.74%

Wrong: 5.66%

**Q98)** The length of a rectangular park is 27 m more than its breadth. Its area is  $2268 \text{ m}^2$ . Its breadth (in m) is:

- A)** 23 **B)** 40 **C)** 38 **D)** 36

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 75.15%

Wrong: 7.23%

**Q99)** The sides of a rectangular field are 169 m and 154 m long. Its area is equal to the area of a circular field. What is the circumference (in m) of the circular field?

$$\text{Take } \pi = \frac{22}{7}$$

- A)** 525 **B)** 540 **C)** 572 **D)** 544

Date: 06/06/2025

Time: 9:00 AM - 10:30 AM

Right: 75.94%

Wrong: 5.65%

**Q100)** The length of a rectangular plot is  $(x^2 + xy + y^2)$  m and its breadth is  $(x^2 - 5xy - y^2)$  m. Find its perimeter, when  $x = 1$  and  $y = -1$ .

- A)** 19 m **B)** 17 m **C)** 8 m **D)** 12 m

Date: 16/06/2025

Time: 9:00 AM - 10:30 AM

Right: 76.33%

Wrong: 7.51%

**Q101)** The volume (in  $\text{cm}^3$ ) of a wire of diameter 14 cm and length 12 m is:

$$\text{Take } \pi = \frac{22}{7}$$

- A)** 1,84,400 **B)** 1,84,300 **C)** 1,84,700 **D)** 1,84,800

Date: 24/06/2025

Time: 12:45 PM - 2:15 PM

Right: 77.51%

Wrong: 4.60%

**Q102)** The base and the corresponding height of a parallelogram are 97 cm and 43 cm, respectively. The area of the parallelogram (in  $\text{cm}^2$ ) will be:

- A)** 4184 **B)** 4191 **C)** 4171 **D)** 4165

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 79.57%

Wrong: 5.25%

**Q103)** The surface area of a sphere is  $4\pi \text{ cm}^2$ . The volume of the sphere is:

- A)**  $\frac{2\pi}{3} \text{ cm}^3$  **B)**  $\frac{5\pi}{3} \text{ cm}^3$  **C)**  $\frac{13\pi}{3} \text{ cm}^3$  **D)**  $\frac{4\pi}{3} \text{ cm}^3$

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 79.67%

Wrong: 6.52%

**Q104)** If the length of a cuboid is 4 cm, breadth is 46 cm and volume is  $8832 \text{ cm}^3$ , then find the height (in cm) of the cuboid.

- A)** 43 **B)** 48 **C)** 41 **D)** 57

Date: 24/06/2025

Time: 4:30 PM - 6:00 PM

Right: 80.70%

Wrong: 6.00%

**Q105)** Find the cost (in ₹) of digging a cuboidal pit that is 6 m long, 64 m broad and 10 m deep at the rate of ₹15 per  $\text{m}^3$ .

- A)** 57,600 **B)** 57,598 **C)** 57,602 **D)** 57,591

Date: 14/06/2025

Time: 12:45 PM - 2:15 PM

Right: 81.82%

Wrong: 3.82%

**Q106)** The surface area (in  $\text{cm}^2$ ) of a sphere of radius 14 cm is:

$$\text{Take } \pi = \frac{22}{7}$$

- A)** 2467 **B)** 2462 **C)** 2465 **D)** 2464

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 81.82%

Wrong: 6.34%

**Q107)** Calculate the volume of the cube having a total surface area of  $216 \text{ cm}^2$ .

- A)**  $343 \text{ cm}^3$  **B)**  $180 \text{ cm}^3$  **C)**  $216 \text{ cm}^3$  **D)**  $125 \text{ cm}^3$

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 82.41%

Wrong: 6.71%

**Q108)** If the length of a cuboid is 33 cm, breadth is 4 cm and volume is  $7524 \text{ cm}^3$ , then find the height (in cm) of the cuboid.

- A)** 60 **B)** 57 **C)** 54 **D)** 67

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 82.45%

Wrong: 5.88%

**Q109)** The sides of a rectangular field are 11 m and 14 m long. Its area is equal to the area of a circular field. What is the circumference (in m) of the circular field?

$$\text{Take } \pi = \frac{22}{7}$$

**A)** 19 **B)** 44 **C)** 85 **D)** 79

Date: 10/06/2025 Time: 9:00 AM - 10:30 AM Right: 83.21% Wrong: 2.92%

**Q110)** The ratio between the length and the breadth of a rectangular park is 3 : 8, and the perimeter of the park is 264 m. Find the area (in  $\text{m}^2$ ) of the park.

**A)** 3460 **B)** 3455 **C)** 3451 **D)** 3456

Date: 20/06/2025 Time: 9:00 AM - 10:30 AM Right: 84.55% Wrong: 3.41%

**Q111)** The volume (in  $\text{m}^3$ ) of a cube, each of whose edges is 42 m, is:

**A)** 74,236 **B)** 74,009 **C)** 74,283 **D)** 74,088

Date: 13/06/2025 Time: 12:45 PM - 2:15 PM Right: 89.89% Wrong: 3.97%

**Q112)** The volume (in  $\text{m}^3$ ) of a cube, each of whose edges is 25 m, is:

**A)** 15,583 **B)** 15,625 **C)** 15,529 **D)** 15,664

Date: 11/06/2025 Time: 4:30 PM - 6:00 PM Right: 92.66% Wrong: 1.64%

### Answer Key (Q1 to Q112) Mensuration

Q1: 4	Q2: 3	Q3: 1	Q4: 4	Q5: 3
Q6: 2	Q7: 3	Q8: 4	Q9: 2	Q10: 2
Q11: 1	Q12: 4	Q13: 2	Q14: 4	Q15: 3
Q16: 2	Q17: 4	Q18: 4	Q19: 2	Q20: 3
Q21: 3	Q22: 2	Q23: 1	Q24: 2	Q25: 4
Q26: 2	Q27: 1	Q28: 1	Q29: 2	Q30: 2
Q31: 4	Q32: 4	Q33: 4	Q34: 3	Q35: 2
Q36: 3	Q37: 1	Q38: 4	Q39: 1	Q40: 2
Q41: 1	Q42: 4	Q43: 1	Q44: 4	Q45: 1
Q46: 1	Q47: 1	Q48: 3	Q49: 3	Q50: 3
Q51: 2	Q52: 4	Q53: 1	Q54: 1	Q55: 3
Q56: 2	Q57: 1	Q58: 4	Q59: 2	Q60: 4

Q61: 2	Q62: 4	Q63: 4	Q64: 1	Q65: 1
Q66: 2	Q67: 3	Q68: 1	Q69: 2	Q70: 3
Q71: 4	Q72: 1	Q73: 1	Q74: 4	Q75: 2
Q76: 3	Q77: 2	Q78: 1	Q79: 2	Q80: 1
Q81: 2	Q82: 4	Q83: 2	Q84: 4	Q85: 3
Q86: 3	Q87: 2	Q88: 1	Q89: 4	Q90: 3
Q91: 4	Q92: 4	Q93: 4	Q94: 1	Q95: 3
Q96: 3	Q97: 1	Q98: 4	Q99: 3	Q100: 4
Q101: 4	Q102: 3	Q103: 4	Q104: 2	Q105: 1
Q106: 4	Q107: 3	Q108: 2	Q109: 2	Q110: 4
Q111: 4	Q112: 2			

## Geometry and Co-Ordinate Geometry

**Q1)** P is any point inside the rectangle ABCD. If  $PA = 69$  cm,  $PB = 27$  cm and  $PC = 38$  cm, then the length of PD (in cm) is:

**A)** 70 **B)** 72 **C)** 78 **D)** 74

Date: 10/06/2025

Time: 12:45 PM - 2:15 PM

Right: 7.99%

Wrong: 26.28%

**Q2)** P is a point outside a circle and is 17 cm away from its centre. A secant drawn from the point P intersects the circle at points A and B in such a way that  $PA = 8$  cm and  $AB = 7$  cm, where  $PB > PA$ . The radius of the circle is:

**A)** 13 cm **B)** 12 cm **C)** 15 cm **D)** 14 cm

Date: 11/06/2025

Time: 12:45 PM - 2:15 PM

Right: 10.54%

Wrong: 35.22%

**Q3)** ABCD is a quadrilateral in which  $AB \parallel DC$ , and E and F are the mid points of the diagonals AC and BD, respectively. If  $AB = 14$  cm,  $BC = 73$  cm,  $DC = 90$  cm and  $AD = 22$  cm, then what is the length (in cm) of EF?

**A)** 34 **B)** 42 **C)** 38 **D)** 43

Date: 11/06/2025

Time: 4:30 PM - 6:00 PM

Right: 12.37%

Wrong: 10.20%

**Q4)** ABCD is a quadrilateral in which  $AB \parallel DC$ , and E and F are the mid points of the diagonals AC and BD, respectively. If  $AB = 30$  cm,  $BC = 20$  cm,  $DC = 86$  cm and  $AD = 84$  cm, then what is the length (in cm) of EF?

**A)** 28 **B)** 31 **C)** 23 **D)** 24

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 14.53%

Wrong: 9.23%

Q5) The sides of a triangle are 109 cm, 171 cm, and 100 cm. What is the length (in cm) of its altitude corresponding to the side with a length of 171 cm?

A) 94 B) 49 C) 60 D) 82

Date: 19/06/2025 Time: 4:30 PM - 6:00 PM Right: 15.61% Wrong: 11.86%

Q6) P is any point inside the rectangle ABCD. If PA = 94 cm, PB = 61 cm and PC = 67 cm, then the length of PD (in cm) is:

A) 95 B) 96 C) 98 D) 102

Date: 20/06/2025 Time: 4:30 PM - 6:00 PM Right: 18.17% Wrong: 20.35%

Q7) ABCD is a trapezium in which  $BC \parallel AD$  and  $AC = CD$ . If  $\angle ABC = 69^\circ$  and  $\angle BAC = 23^\circ$ , then what is the measure of  $\angle ACD$  (in degree)?

A)  $4^\circ$  B)  $7^\circ$  C)  $14^\circ$  D)  $10^\circ$

Date: 06/06/2025 Time: 9:00 AM - 10:30 AM Right: 19.43% Wrong: 12.49%

Q8) There is a polygon of 10 sides. How many triangles can be drawn using the vertices of the polygon?

A) 125 B) 115 C) 120 D) 150

Date: 21/06/2025 Time: 4:30 PM - 6:00 PM Right: 21.14% Wrong: 13.33%

Q9) A (x, 5), B (3, -4) and C (-6, y) are the three vertices of a triangle ABC. If (3.5, 4.5) is the centroid of the triangle, find the point (x + 3, y - 4).

A) (16.5, 8.5) B) (13.5, 12.5) C) (8.5, 16.5) D) (15.5, 9.5)

Date: 23/06/2025 Time: 12:45 PM - 2:15 PM Right: 21.85% Wrong: 10.89%

Q10) The sides (in cm) of a right triangle are (x - 18), (x - 25) and x. Its area (in  $\text{cm}^2$ ) is:

A) 1329 B) 1314 C) 1311 D) 1320

Date: 17/06/2025 Time: 9:00 AM - 10:30 AM Right: 22.76% Wrong: 8.83%

Q11) The sides (in cm) of a right triangle are (x - 13), (x - 26) and x. Its area (in  $\text{cm}^2$ ) is:

A) 999 B) 1014 C) 1010 D) 1012

Date: 06/06/2025 Time: 9:00 AM - 10:30 AM Right: 24.52% Wrong: 9.53%

Q12) POR is the diameter of a circle. PQ and RQ are its two chords. The length of arc  $\widehat{PQ}$  is half of the length of arc  $\widehat{RQ}$ . Find the measure of  $\angle POQ$ .

A)  $30^\circ$  B)  $120^\circ$  C)  $90^\circ$  D)  $60^\circ$

Date: 11/06/2025 Time: 9:00 AM - 10:30 AM Right: 24.92% Wrong: 31.15%

**Q13)** In a circle, two chords, AB and CD, measuring 14 cm and 6 cm, respectively, are parallel to each other on the same side of the centre. If the distance between them is 4 cm, find the length (in cm) of the diameter of the circle.

- A)  $2\sqrt{29}$  B)  $2\sqrt{58}$  C)  $\sqrt{58}$  D)  $\sqrt{29}$

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 25.89%

Wrong: 16.76%

**Q14)** For a regular polygon, the sum of the interior angles is 250% more than the sum of its exterior angles. Each interior angle of the polygon measures  $x^\circ$ . What is the value of  $x$ ?

- A) 140 B) 150 C) 145 D) 120

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 26.63%

Wrong: 18.39%

**Q15)** In quadrilateral PQRS, the bisectors of  $\angle R$  and  $\angle S$  meet at point T (inside the quadrilateral), and  $\angle STR = 8^\circ$ . If the ratio of  $\angle P$  to  $\angle Q$  is 7 : 9, then what is the difference between the measures of  $\angle Q$  and  $\angle P$ ?

- A)  $4^\circ$  B)  $7^\circ$  C)  $2^\circ$  D)  $5^\circ$

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 26.91%

Wrong: 23.66%

**Q16)** If (3, 2) are coordinates of the centroid of a triangle, whose vertices are (0, 4), (-2, 0) and (p, 2), then find the value of p.

- A) 8 B) 10 C) 9 D) 11

Date: 12/06/2025

Time: 12:45 PM - 2:15 PM

Right: 27.83%

Wrong: 15.55%

**Q17)** AB is parallel to CD. A transversal PQ intersects AB and CD at E and F, respectively, and  $\angle PEB = 49^\circ$ . G is a point between AB and CD such that  $\angle BEG = 35^\circ$  and  $\angle GFE = 16^\circ$ . What is the measure of  $\angle EGF$ ?

- A)  $57^\circ$  B)  $60^\circ$  C)  $59^\circ$  D)  $68^\circ$

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 29.31%

Wrong: 8.35%

**Q18)** If an angle of a parallelogram is  $27^\circ$  less than four-fifth of its adjacent angle, then find the smallest angle of the parallelogram.

- A)  $45^\circ$  B)  $70^\circ$  C)  $50^\circ$  D)  $65^\circ$

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 29.55%

Wrong: 24.85%

**Q19)** If  $x^2 + y^2 - 16x + 38y + 425 = 0$ , then the value of  $x^2 + y^2$  is:

- A) 422 B) 432 C) 428 D) 425

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 29.96%

Wrong: 7.49%

**Q20)** AB is parallel to CD. A transversal PQ intersects AB and CD at E and F, respectively, and  $\angle PEB = 59^\circ$ . G is a point between AB and CD such that  $\angle BEG = 50^\circ$  and  $\angle GFE = 33^\circ$ . What is the measure of  $\angle EGF$ ?

**A)**  $76^\circ$  **B)**  $80^\circ$  **C)**  $74^\circ$  **D)**  $88^\circ$

Date: 05/06/2025 Time: 4:30 PM - 6:00 PM Right: 30.45% Wrong: 9.41%

**Q21)** For a regular polygon, the sum of the interior angles is 400% more than the sum of its exterior angles. Each interior angle of the polygon measures  $x^\circ$ . What is the value of  $x$ ?

**A)** 145 **B)** 135 **C)** 150 **D)** 140

Date: 23/06/2025 Time: 9:00 AM - 10:30 AM Right: 30.49% Wrong: 13.54%

**Q22)** AB is parallel to CD. A transversal PQ intersects AB and CD at E and F, respectively, and  $\angle PEB = 42^\circ$ . G is a point between AB and CD such that  $\angle BEG = 21^\circ$  and  $\angle GFE = 34^\circ$ . What is the measure of  $\angle EGF$ ?

**A)**  $29^\circ$  **B)**  $20^\circ$  **C)**  $33^\circ$  **D)**  $24^\circ$

Date: 10/06/2025 Time: 4:30 PM - 6:00 PM Right: 31.25% Wrong: 7.40%

**Q23)** ABCD is a trapezium in which  $BC \parallel AD$  and  $AC = CD$ . If  $\angle ABC = 13^\circ$  and  $\angle BAC = 164^\circ$ , then what is the measure of  $\angle ACD$ ?

**A)**  $164^\circ$  **B)**  $161^\circ$  **C)**  $188^\circ$  **D)**  $174^\circ$

Date: 24/06/2025 Time: 12:45 PM - 2:15 PM Right: 31.33% Wrong: 21.27%

**Q24)** AB is parallel to CD. A transversal PQ intersects AB and CD at E and F, respectively, and  $\angle PEB = 56^\circ$ . G is a point between AB and CD such that  $\angle BEG = 32^\circ$  and  $\angle GFE = 47^\circ$ . What is the measure of  $\angle EGF$ ?

**A)**  $29^\circ$  **B)**  $46^\circ$  **C)**  $37^\circ$  **D)**  $41^\circ$

Date: 05/06/2025 Time: 12:45 PM - 2:15 PM Right: 31.39% Wrong: 8.23%

**Q25)** If  $\triangle ABC \cong \triangle PQR$ , such that  $\angle ABC = 77^\circ$ ,  $\angle BCA = (x - y)^\circ$ ,  $AC = 48$  cm,  $\angle PQR = (3x - 4)^\circ$ ,  $PR = x + 3y$ , then find the value of  $\angle QRP$ .

**A)**  $28^\circ$  **B)**  $32^\circ$  **C)**  $23^\circ$  **D)**  $20^\circ$

Date: 19/06/2025 Time: 4:30 PM - 6:00 PM Right: 34.36% Wrong: 9.10%

**Q26)** For a regular polygon, the sum of the interior angles is 200% more than the sum of its exterior angles. Each interior angle of the polygon measures  $x^\circ$ . What is the value of  $x$ ?

**A)** 155 **B)** 125 **C)** 145 **D)** 135

Date: 24/06/2025 Time: 9:00 AM - 10:30 AM Right: 35.10% Wrong: 9.32%

**Q27)** If  $x^2 + y^2 - 12x + 18y + 117 = 0$ , then the value of  $x^2 + y^2$  is:

**A)** 109 **B)** 121 **C)** 116 **D)** 117

Date: 24/06/2025 Time: 12:45 PM - 2:15 PM Right: 35.12% Wrong: 8.03%

**Q28)** For a regular polygon, the sum of the interior angles is 300% more than the sum of its exterior angles. Each interior angle of the polygon measures  $x^\circ$ . What is the value of  $x$ ?

- A)** 156 **B)** 140 **C)** 134 **D)** 144

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 35.97%

Wrong: 10.41%

**Q29)** The sum of interior angles of a regular polygon is  $1260^\circ$ . Find the number of diagonals of this regular polygon.

- A)** 35 **B)** 27 **C)** 44 **D)** 20

Date: 23/06/2025

Time: 4:30 PM - 6:00 PM

Right: 36.09%

Wrong: 24.59%

**Q30)** AB is a chord in the minor segment of a circle of centre Q. P is a point on the major arc AB. The tangents drawn from external point D to the circle are AD and BD. If  $\angle APB = 39^\circ$ , then find the measure of  $\angle ADB$ .

- A)**  $108^\circ$  **B)**  $98^\circ$  **C)**  $102^\circ$  **D)**  $89^\circ$

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 36.12%

Wrong: 7.20%

**Q31)** Which of the following statements is FALSE?

- A) When a transversal cuts two lines such that the pair of corresponding angles are equal, then the lines have to be parallel.
- B) When a transversal cuts two lines such that the pair of alternate interior angles are equal, then the lines have to be parallel.
- C) When a transversal cuts two lines such that the pair of interior angles on the same sides of the transversal are complementary, then the lines have to be parallel.
- D) When a transversal cuts two lines such that the pair of interior angles on the same sides of the transversal are supplementary, then the lines have to be parallel.

- A)** Only A **B)** Only B **C)** Only D **D)** Only C

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 36.37%

Wrong: 23.44%

**Q32)** A chord AB is drawn in a circle with centre O and radius 6 cm. If the shortest distance between the centre and the chord is 4.5 cm, then find the length of chord AB.

- A)**  $2\sqrt{7}$  cm **B)**  $4\sqrt{7}$  cm **C)**  $3\sqrt{7}$  cm **D)**  $\sqrt{7}$  cm

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 36.89%

Wrong: 18.37%

**Q33)**  $TQ = 6$  cm is a tangent to the circle and TPX is a secant. If  $TP = y$  cm and  $PX = 5$  cm, find  $y$ .

- A)** 4 **B)** 6 **C)** 5 **D)** 3

Date: 18/06/2025

Time: 4:30 PM - 6:00 PM

Right: 37.29%

Wrong: 13.33%

**Q34)** Chords AB and CD of a circle intersect externally at P. If AB = 7 cm, CD = 1 cm and PD = 5 cm, then the length of PB (in cm) is:

- A) 3   B) 4   C) 2   D) 5**

Date: 18/06/2025   Time: 9:00 AM - 10:30 AM   Right: 38.99%   Wrong: 16.18%

**Q35)** The difference between an interior angle and an exterior angle of a regular polygon is  $140^\circ$ . Find the number of sides of the polygon.

- A) 15   B) 16   C) 18   D) 20**

Date: 24/06/2025   Time: 4:30 PM - 6:00 PM   Right: 39.75%   Wrong: 17.34%

**Q36)** In  $\triangle ABC$ ,  $BD \perp AC$  at D and  $\angle DBC = 22^\circ$ . E is a point on BC such that  $\angle CAE = 36^\circ$ . What is the measure of  $\angle AEB$ ?

- A)  $103^\circ$    B)  $102^\circ$    C)  $101^\circ$    D)  $104^\circ$**

Date: 06/06/2025   Time: 4:30 PM - 6:00 PM   Right: 40.66%   Wrong: 12.54%

**Q37)** Select the correct statement regarding the properties of diagonals of a rhombus.

- A)** The diagonals of a rhombus are equal, intersect at right angles and bisect each other.  
**B)** The diagonals of a rhombus are not equal, intersect at right angles and bisect each other.  
**C)** The diagonals of a rhombus are equal, do not intersect at right angles and bisect each other.  
**D)** The diagonals of a rhombus are equal, intersect at right angles and do not bisect each other.

Date: 09/06/2025   Time: 4:30 PM - 6:00 PM   Right: 42.25%   Wrong: 45.49%

**Q38)** In quadrilateral PQRS, the bisectors of  $\angle R$  and  $\angle S$  meet at point T (inside the quadrilateral) and  $\angle STR = 32.5^\circ$ . If the ratio of  $\angle P$  to  $\angle Q$  is 4 : 9, then what is the difference between the measures of  $\angle Q$  and  $\angle P$ ?

- A)  $27^\circ$    B)  $24^\circ$    C)  $25^\circ$    D)  $28^\circ$**

Date: 12/06/2025   Time: 12:45 PM - 2:15 PM   Right: 42.86%   Wrong: 6.68%

**Q39)** In quadrilateral PQRS,  $\angle P$ ,  $\angle Q$ ,  $\angle R$  and  $\angle S$  taken in order are in the ratio 2 : 8 : 3 : 7. Which type of quadrilateral is PQRS?

- A) Trapezium   B) Rhombus   C) Kite   D) Square**

Date: 11/06/2025   Time: 12:45 PM - 2:15 PM   Right: 42.88%   Wrong: 46.90%

**Q40)** Let  $\triangle ABC \sim \triangle PQR$  and  $\frac{(\text{ar}(\triangle ABC))}{(\text{ar}(\triangle PQR))} = \frac{64}{121}$ . If AB = 11 cm, BC = 7 cm and AC = 8 cm, then QR (in cm) is equal to:

- A) 11   B) 9   C) 10   D) 8**

Date: 19/06/2025   Time: 9:00 AM - 10:30 AM   Right: 42.94%   Wrong: 21.41%

**Q41)** Two transversal lines S and T cut a set of distinct parallel lines. S cuts the parallel lines in points A, B, C and D and T cuts the parallel lines in points E, F, G and H. If  $AB = 5$  cm,  $CD = 3$  cm and  $EF = 15$  cm, then the length (in cm) of GH is:

**A) 9 B) 6 C) 8 D) 4**

Date: 12/06/2025 Time: 4:30 PM - 6:00 PM Right: 42.99% Wrong: 5.58%

**Q42)** For a regular polygon, the sum of the interior angles is 50% more than the sum of its exterior angles. Each interior angle of the polygon measures  $x^\circ$ . What is the value of  $x$ ?

**A) 88 B) 96 C) 112 D) 108**

Date: 17/06/2025 Time: 12:45 PM - 2:15 PM Right: 43.08% Wrong: 7.56%

**Q43)** The sides (in cm) of a right triangle are  $(x - 5)$ ,  $(x - 10)$  and  $x$ . Its area (in  $\text{cm}^2$ ) is:

**A) 150 B) 162 C) 158 D) 163**

Date: 18/06/2025 Time: 4:30 PM - 6:00 PM Right: 43.36% Wrong: 7.79%

**Q44)** In  $\triangle ABC$ ,  $DE \parallel AC$ , where D and E are the points on sides AB and BC, respectively. If  $BD = 2$  cm and  $AD = 19$  cm, then what is the ratio of the area of  $\triangle BDE$  to the trapezium ADEC?

**A) 12 : 435 B) 10 : 11 C) 4 : 437 D) 13 : 8**

Date: 19/06/2025 Time: 9:00 AM - 10:30 AM Right: 44.08% Wrong: 5.79%

**Q45)** Let AB and CD be two parallel lines and PQ be a transversal such that PQ intersects AB at the point R and CD at the point S, respectively. If  $\angle BRP = (2x + 13)^\circ$  and  $\angle DSP = (3x - 22)^\circ$ , then find  $\angle CSP$ .

**A)  $105^\circ$  B)  $95^\circ$  C)  $97^\circ$  D)  $83^\circ$**

Date: 06/06/2025 Time: 12:45 PM - 2:15 PM Right: 44.63% Wrong: 13.57%

**Q46)** Let ABC and DEF be two triangles such that  $\angle A = \angle D = 40^\circ$  and  $AB = DE$ . What is the condition required to be met such that ABC and DEF are similar triangles?

**A)  $\angle B = \angle F$  B)  $BC = EF$  C)  $\angle C = \angle F$  D)  $\angle B = \angle D$**

Date: 16/06/2025 Time: 9:00 AM - 10:30 AM Right: 45.55% Wrong: 37.22%

**Q47)** For a regular polygon, the sum of the interior angles is 100% more than the sum of its exterior angles. Each interior angle of the polygon measures  $x^\circ$ . What is the value of  $x$ ?

**A) 100 B) 125 C) 140 D) 120**

Date: 13/06/2025 Time: 9:00 AM - 10:30 AM Right: 45.69% Wrong: 10.25%

**Q48)** The ratio of an exterior angle to the interior angle of a regular polygon A is 1 : 4. Find the number of sides of A.

**A) 8 B) 9 C) 10 D) 12**

Date: 24/06/2025 Time: 12:45 PM - 2:15 PM Right: 46.99% Wrong: 17.08%

**Q49)** Find the co-ordinates of the centroid of a triangle whose vertices are A(1, 4), B(7, 8) and C(10, 12).

- A)** (7, 8) **B)** (6, 8) **C)** (6, 9) **D)** (7, 9)

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 47.01%

Wrong: 7.10%

**Q50)** The number of diagonals in a regular octagon is:

- A)** 20 **B)** 19 **C)** 21 **D)** 24

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 47.28%

Wrong: 32.03%

**Q51)** In  $\triangle ABC$ ,  $DE \parallel AC$ , where D and E are the points on sides AB and BC, respectively.

If  $BD = 10$  cm and  $AD = 17$  cm, then what is the ratio of the area of  $\triangle BDE$  to the trapezium ADEC?

- A)** 344 : 415 **B)** 629 : 100 **C)** 406 : 383 **D)** 100 : 629

Date: 19/06/2025

Time: 12:45 PM - 2:15 PM

Right: 47.68%

Wrong: 6.64%

**Q52)** Let AB and CD be two parallel lines and PQ be a transversal, such that PQ intersects AB at the point R and CD at the point S. If  $\angle ARP = 2x^\circ$ ,  $\angle ARQ = y^\circ$  and  $\angle DSP = 4x^\circ$ , then find the values of x and y, respectively.

- A)** 100; 40 **B)** 120; 30 **C)** 30; 120 **D)** 40; 100

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 48.58%

Wrong: 8.85%

**Q53)** In  $\triangle ABC$ ,  $DE \parallel AC$ , where D and E are the points on sides AB and BC, respectively.

If  $BD = 17$  cm and  $AD = 14$  cm, then what is the ratio of the area of  $\triangle BDE$  to that of the trapezium ADEC?

- A)** 523 : 367 **B)** 289 : 672 **C)** 672 : 289 **D)** 475 : 326

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 49.54%

Wrong: 6.58%

**Q54)** What is the ratio of the angles subtended by a chord at the centre of a circle to the angle subtended at any point on the circumference of the circle?

- A)** 1 : 3 **B)** 2 : 1 **C)** 3 : 1 **D)** 1 : 2

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 51.13%

Wrong: 28.37%

**Q55)** Two concentric circles have radii of 10 cm and 26 cm. Find the length of the chord of the larger circle that is tangent to the smaller circle.

- A)** 20 cm **B)** 48 cm **C)** 50 cm **D)** 52 cm

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 52.12%

Wrong: 14.04%

**Q56)** In a quadrilateral QRST,  $\angle Q = 52^\circ$  and  $\angle R = 44^\circ$ . The bisectors of  $\angle S$  and  $\angle T$  meet at E. What is the measure of  $\angle TES$ ?

- A)**  $48^\circ$  **B)**  $37^\circ$  **C)**  $44^\circ$  **D)**  $59^\circ$

Date: 23/06/2025

Time: 4:30 PM - 6:00 PM

Right: 52.22%

Wrong: 8.58%

**Q57)** If a transversal line intersects a pair of two parallel lines, then each pair of corresponding angles are:

- A)** complementary **B)** unequal **C)** equal **D)** supplementary

Date: 10/06/2025 Time: 4:30 PM - 6:00 PM Right: 52.35% Wrong: 39.50%

**Q58)** If  $\triangle ABC \sim \triangle XYZ$ ,  $AB = 6$  cm,  $XY = 8$  cm,  $YZ = 12$  cm and  $ZX = 16$  cm, then find the perimeter of  $\triangle ABC$ .

- A)** 34 cm **B)** 32 cm **C)** 27 cm **D)** 24 cm

Date: 06/06/2025 Time: 4:30 PM - 6:00 PM Right: 52.89% Wrong: 22.99%

**Q59)** In  $\triangle ABC$ ,  $DE \parallel AC$ , where D and E are the points on sides AB and BC, respectively.

If  $BD = 12$  cm and  $AD = 11$  cm, then what is the ratio of the area of  $\triangle BDE$  to that of the trapezium ADEC?

- A)** 623 : 199 **B)** 385 : 144 **C)** 390 : 413 **D)** 144 : 385

Date: 20/06/2025 Time: 12:45 PM - 2:15 PM Right: 53.34% Wrong: 5.99%

**Q60)** In a regular polygon with n sides, the sum of the interior angles is  $1800^\circ$ . What is the number of sides (n) of the polygon?

- A)** 14 **B)** 10 **C)** 12 **D)** 16

Date: 17/06/2025 Time: 12:45 PM - 2:15 PM Right: 54.02% Wrong: 22.93%

**Q61)** In a quadrilateral ABCD,  $\angle A = 53^\circ$  and  $\angle B = 46^\circ$ . The bisectors of  $\angle C$  and  $\angle D$  meet at O. What is the measure of  $\angle DOC$ ?

- A)**  $60.5^\circ$  **B)**  $44.5^\circ$  **C)**  $49.5^\circ$  **D)**  $46.5^\circ$

Date: 12/06/2025 Time: 9:00 AM - 10:30 AM Right: 54.52% Wrong: 9.14%

**Q62)** The side AB and AC of  $\triangle ABC$  are produced to points D and E, respectively.

The bisectors of  $\angle CBD$  and  $\angle BCE$  meet at P. If  $\angle A = 84^\circ$ , then the measure of  $\angle P$  is:

- A)**  $66^\circ$  **B)**  $56^\circ$  **C)**  $48^\circ$  **D)**  $36^\circ$

Date: 17/06/2025 Time: 4:30 PM - 6:00 PM Right: 58.14% Wrong: 7.86%

**Q63)** The number of diagonals in a regular heptagon is:

- A)** 18 **B)** 15 **C)** 14 **D)** 19

Date: 14/06/2025 Time: 12:45 PM - 2:15 PM Right: 60.71% Wrong: 16.87%

**Q64)** In a circle, the length of a chord is 12 cm and the perpendicular distance from the centre of the circle to the chord is 5 cm. What is the radius of the circle? (Rounded up to two decimal places.)

- A)** 7.81 cm **B)** 6.97 cm **C)** 9.87 cm **D)** 10.25 cm

Date: 05/06/2025 Time: 4:30 PM - 6:00 PM Right: 63.38% Wrong: 11.27%

**Q65)** A tangent is drawn from point P to a circle with centre O. The radius of the circle is 7 cm, and the distance from point P to the centre O is 25 cm. What is the length of the tangent from point P to the point of tangency?

- A)** 24 cm **B)** 27 cm **C)** 31 cm **D)** 21 cm

Date: 10/06/2025 Time: 12:45 PM - 2:15 PM Right: 66.81% Wrong: 9.49%

**Q66)** Find the area of the sector of a circle with diameter 14 cm, if the arc of the sector makes an angle of  $120^\circ$  at the centre of the circle. (Use  $\pi = \frac{22}{7}$ )

- A)**  $51\frac{1}{3}\text{ cm}^2$  **B)**  $51\frac{1}{2}\text{ cm}^2$  **C)**  $150\text{ cm}^2$  **D)**  $154\text{ cm}^2$

Date: 20/06/2025 Time: 4:30 PM - 6:00 PM Right: 68.25% Wrong: 10.88%

**Q67)** The larger of two supplementary angles is  $62^\circ$  more than the smaller one. The smaller angle (in degree) is:

- A)**  $65^\circ$  **B)**  $59^\circ$  **C)**  $57^\circ$  **D)**  $68^\circ$

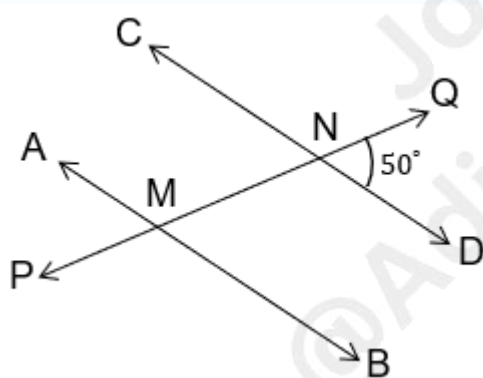
Date: 13/06/2025 Time: 4:30 PM - 6:00 PM Right: 72.36% Wrong: 11.71%

**Q68)** Find the area of a sector with a central angle of  $150^\circ$  in a circle with a radius of 12 cm.

- A)**  $55\pi\text{ cm}^2$  **B)**  $72\pi\text{ cm}^2$  **C)**  $45\pi\text{ cm}^2$  **D)**  $60\pi\text{ cm}^2$

Date: 11/06/2025 Time: 9:00 AM - 10:30 AM Right: 72.49% Wrong: 7.96%

**Q69)** In the given figure, AB and CD are two parallel lines and PQ is a transversal line. Find the measure of  $\angle PMB$ .



- A)**  $50^\circ$  **B)**  $100^\circ$  **C)**  $130^\circ$  **D)**  $120^\circ$

Date: 21/06/2025 Time: 12:45 PM - 2:15 PM Right: 72.59% Wrong: 17.22%

**Q70)** If the measure of each exterior angle of a regular polygon is  $30^\circ$ , then the number of sides of the polygon is:

- A)** 14 **B)** 16 **C)** 12 **D)** 10

Date: 14/06/2025 Time: 9:00 AM - 10:30 AM Right: 73.17% Wrong: 7.39%

**Q71)** Which of the following is NOT a type of quadrilateral?

- A)** Octagon **B)** Trapezoid **C)** Kite **D)** Rhombus

Date: 14/06/2025

Time: 12:45 PM - 2:15 PM

Right: 73.48%

Wrong: 24.47%

**Q72)** ABC and XYZ are two congruent triangles with  $\angle A : \angle B : \angle C = 2 : 4 : 4$ . Find  $\angle X + \angle Z$ .

- A)**  $72^\circ$  **B)**  $90^\circ$  **C)**  $108^\circ$  **D)**  $144^\circ$

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 74.80%

Wrong: 11.01%

**Q73)**  $\triangle ABC$  is similar to  $\triangle PQR$ ,  $QR = 8$  cm,  $BC = 4$  cm and perimeter of  $\triangle PQR = 32$  cm. Find the perimeter of  $\triangle ABC$ .

- A)** 64 cm **B)** 48 cm **C)** 16 cm **D)** 24 cm

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 74.86%

Wrong: 11.85%

**Q74)** Which of the following statements is FALSE if PQRS is a rectangle?

- A)** The diagonals of rectangle PQRS do not bisect each other **B)**  $\angle P = \angle Q = \angle R = \angle S = 90^\circ$   
**C)** Diagonal  $PR =$  Diagonal  $SQ$  **D)**  $PQ = RS$  and  $PS = QR$

Date: 14/06/2025

Time: 9:00 AM - 10:30 AM

Right: 75.55%

Wrong: 15.32%

**Q75)** The lines  $L_1$  and  $L_2$  are parallel lines cut by a transversal. If the measure of one of the corresponding angles is  $75^\circ$ , then what is the measure of the other corresponding angle?

- A)**  $45^\circ$  **B)**  $85^\circ$  **C)**  $65^\circ$  **D)**  $75^\circ$

Date: 13/06/2025

Time: 4:30 PM - 6:00 PM

Right: 76.40%

Wrong: 7.02%

**Q76)** The larger of two supplementary angles is  $50^\circ$  more than the smaller one. The smaller angle (in degree) is:

- A)**  $65^\circ$  **B)**  $67^\circ$  **C)**  $56^\circ$  **D)**  $75^\circ$

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 77.75%

Wrong: 8.60%

**Q77)** MN and XY are two parallel lines, there is a line BK which intersects these lines at points B and K, respectively. If  $\angle NBK = 78^\circ$ , find the measure of  $\angle YKB$ .

- A)**  $92^\circ$  **B)**  $102^\circ$  **C)**  $72^\circ$  **D)**  $82^\circ$

Date: 11/06/2025

Time: 4:30 PM - 6:00 PM

Right: 78.45%

Wrong: 3.88%

**Q78)** The larger of two supplementary angles is  $28^\circ$  more than the smaller one. The smaller angle (in degree) is:

- A)**  $76^\circ$  **B)**  $79^\circ$  **C)**  $80^\circ$  **D)**  $84^\circ$

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 78.61%

Wrong: 6.64%

**Q79)** The ratio of the lengths of two corresponding sides of two similar triangles is 3 : 10. The ratio of the areas of these two triangles, in the order mentioned, is:

- A)** 9 : 100   **B)** 10 : 101   **C)**  $3\sqrt{3} : 10$    **D)** 3 : 10

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 79.55%

Wrong: 8.80%

**Q80)** In an isosceles triangle, the vertex angle measures  $124^\circ$ . What is the measure of each of the base angles?

- A)**  $29^\circ$  and  $41^\circ$    **B)**  $28^\circ$  and  $28^\circ$    **C)**  $24^\circ$  and  $40^\circ$    **D)**  $31^\circ$  and  $25^\circ$

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 80.33%

Wrong: 8.07%

**Q81)** The ratio of the lengths of two corresponding sides of two similar triangles is 9 : 1. The ratio of the areas of these two triangles, in the order mentioned, is:

- A)** 82 : 2   **B)** 9 : 1   **C)** 81 : 1   **D)**  $9\sqrt{9} : 1$

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 82.28%

Wrong: 8.38%

**Q82)** In an isosceles triangle, the vertex angle measures  $14^\circ$ . What is the measure of each of the base angles?

- A)**  $103^\circ$  and  $103^\circ$    **B)**  $86^\circ$  and  $86^\circ$    **C)**  $83^\circ$  and  $83^\circ$    **D)**  $79^\circ$  and  $79^\circ$

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 82.32%

Wrong: 5.46%

**Q83)** The ratio of the lengths of two corresponding sides of two similar triangles is 10 : 9. The ratio of the areas of these two triangles, in the order mentioned, is:

- A)**  $10\sqrt{10} : 9$    **B)** 101 : 82   **C)** 10 : 9   **D)** 100 : 81

Date: 16/06/2025

Time: 9:00 AM - 10:30 AM

Right: 82.47%

Wrong: 7.60%

**Q84)** The larger of two supplementary angles is  $60^\circ$  more than the smaller one. The smaller angle (in degree) is:

- A)**  $67^\circ$    **B)**  $65^\circ$    **C)**  $60^\circ$    **D)**  $64^\circ$

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 82.73%

Wrong: 4.00%

**Q85)** The ratio of the lengths of two corresponding sides of two similar triangles is 15 : 14. The ratio of the areas of these two triangles, in the order mentioned, is:

- A)** 15 : 14   **B)** 226 : 197   **C)** 225 : 196   **D)**  $15\sqrt{15} : 14$

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 84.21%

Wrong: 6.76%

**Q86)** In an isosceles triangle, the vertex angle measures  $44^\circ$ . What is the measure of each of the base angles?

- A)**  $58^\circ$  and  $58^\circ$    **B)**  $65^\circ$  and  $65^\circ$    **C)**  $68^\circ$  and  $68^\circ$    **D)**  $64^\circ$  and  $64^\circ$

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 84.49%

Wrong: 4.63%

Q87) If  $\Delta ABC \sim \Delta PQR$  and  $\frac{\text{area}(\Delta ABC)}{\text{area}(\Delta PQR)} = \frac{25}{49}$ , then what is the value of AB : PQ?

A) 3 : 7 B) 2 : 7 C) 5 : 7 D) 4 : 7

Date: 18/06/2025

Time: 9:00 AM - 10:30 AM

Right: 87.54%

Wrong: 2.24%

### Answer Key (Q1 to Q87) Geometry and Co-Ordinate Geometry

Q1: 4	Q2: 1	Q3: 3	Q4: 1	Q5: 3
Q6: 3	Q7: 1	Q8: 3	Q9: 1	Q10: 4
Q11: 2	Q12: 4	Q13: 2	Q14: 1	Q15: 3
Q16: 4	Q17: 4	Q18: 4	Q19: 4	Q20: 1
Q21: 3	Q22: 1	Q23: 1	Q24: 4	Q25: 4
Q26: 4	Q27: 4	Q28: 4	Q29: 2	Q30: 3
Q31: 4	Q32: 3	Q33: 1	Q34: 1	Q35: 3
Q36: 4	Q37: 2	Q38: 3	Q39: 1	Q40: 1
Q41: 1	Q42: 4	Q43: 1	Q44: 3	Q45: 3
Q46: 3	Q47: 4	Q48: 3	Q49: 2	Q50: 1
Q51: 4	Q52: 3	Q53: 2	Q54: 2	Q55: 2
Q56: 1	Q57: 3	Q58: 3	Q59: 4	Q60: 3
Q61: 3	Q62: 3	Q63: 3	Q64: 1	Q65: 1
Q66: 1	Q67: 2	Q68: 4	Q69: 3	Q70: 3
Q71: 1	Q72: 3	Q73: 3	Q74: 1	Q75: 4
Q76: 1	Q77: 2	Q78: 1	Q79: 1	Q80: 2
Q81: 3	Q82: 3	Q83: 4	Q84: 3	Q85: 3
Q86: 3	Q87: 3			

### Height and Distance

Q1) From the top of a 60 m high building, the angles of depression of the top and bottom of a lamp post are  $30^\circ$  and  $60^\circ$ , respectively. Find the height of the lamp post.

- A) 40 m B) 60 m C)  $40\sqrt{2}$  m D)  $60\sqrt{3}$  m

Date: 13/06/2025

Time: 4:30 PM - 6:00 PM

Right: 36.44%

Wrong: 32.18%

Q2) The angle of elevation of the top of a hill from a point on the ground is  $60^\circ$ . If the hill is 171 m high, find the distance from the given point to the top of the hill.

- A)  $171\sqrt{2}$  m B)  $114\sqrt{2}$  m C) 342 m D)  $114\sqrt{3}$  m

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 50.96%

Wrong: 29.71%

Q3) The length of a vertical rod and its shadow are in the ratio of  $2 : \sqrt{12}$ . Find the angle of elevation of the sun.

- A)  $75^\circ$  B)  $45^\circ$  C)  $60^\circ$  D)  $30^\circ$

Date: 05/06/2025

Time: 4:30 PM - 6:00 PM

Right: 54.89%

Wrong: 22.25%

Q4) The diameter of the base and slant height of a right circular cone are 30 cm and 113 cm, respectively. Find the volume (in  $\text{cm}^3$ ) of the given cone.

(Use  $\pi = \frac{22}{7}$ )

- A) 26,360 B) 26,375 C) 26,400 D) 26,435

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 55.52%

Wrong: 9.85%

Q5) A vertical stick 14 m long, casts a shadow 5 m long on the ground. At the same time, a tower casts a shadow of 44.5 m long on the ground. The height of the tower is \_\_\_\_\_.

- A) 124.6 m B) 128.8 m C) 130.3 m D) 122.2 m

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 57.71%

Wrong: 7.25%

Q6) A ladder 10.6 m long is leaning against a wall. It makes an angle of  $30^\circ$  with the ground. How high does the ladder reach on the wall?

- A)  $5.3\sqrt{2}$  m B) 5.6 m C)  $5.3\sqrt{3}$  m D) 5.3 m

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 60.85%

Wrong: 21.34%

Q7) A ladder leaning against a wall makes an angle  $\theta$  with the horizontal ground such that  $\tan \theta = \frac{15}{8}$ .

If the height of the top of the ladder from the wall is 30 m, find the distance (in m) of the foot of the ladder from the wall.

- A) 18 B) 16 C) 14 D) 20

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 66.48%

Wrong: 5.97%

**Q8)** Find the angle of elevation of the top of a  $250\sqrt{3}$  m high tower, from a point which is 250 m away from its foot.

- A)**  $75^\circ$  **B)**  $60^\circ$  **C)**  $45^\circ$  **D)**  $30^\circ$

Date: 06/06/2025

Time: 12:45 PM - 2:15 PM

Right: 66.77%

Wrong: 17.71%

**Q9)** The angle of elevation of a ladder leaning against a wall is  $60^\circ$  and the foot of the ladder is 4.5 m away from the wall. The length of the ladder is:

- A)** 8 m **B)**  $3\sqrt{2}$  m **C)**  $4\sqrt{2}$  m **D)** 9 m

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 66.90%

Wrong: 12.64%

**Q10)** A person standing 30 metres away from a tower observes the angle of elevation to the top of the tower as  $30^\circ$ . Find the height of the tower.

- A)**  $10\sqrt{3}$  metres **B)**  $10\sqrt{2}$  metres **C)** 30 metres **D)**  $30\sqrt{3}$  metres

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 69.23%

Wrong: 19.99%

**Q11)** From a point P on a level ground, the angle of elevation of the top tower is  $30^\circ$ . If the tower is 50 m high, the distance of point P from the foot of the tower is:

- A)**  $50\sqrt{3}$  m **B)**  $\frac{50}{\sqrt{3}}$  m **C)** 25 m **D)**  $\frac{50}{\sqrt{2}}$  m

Date: 16/06/2025

Time: 9:00 AM - 10:30 AM

Right: 70.68%

Wrong: 13.61%

**Q12)** A tower stands vertically on the ground. From a point on the ground which is 27.6 m away from the foot of the tower, the angle of elevation of the top of the tower is found to be  $45^\circ$ . Find the height of the tower.

- A)** 28.6 m **B)** 27.6 m **C)** 29.6 m **D)** 26.6 m

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 76.24%

Wrong: 4.85%

**Q13)** Two poles of height 12 m and 20 m are fixed to a level ground. The distance between the bottom of the poles is 15 m. What is the distance (in m) between their tops?

- A)** 17 **B)** 20 **C)** 25 **D)** 16

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 77.36%

Wrong: 9.06%

**Q14)** The angle of elevation of the top of a tower from a point on the ground, which is 48 m away from the foot of the tower is  $30^\circ$ . Find the height of the tower.

- A)**  $15\sqrt{3}$  m **B)**  $18\sqrt{3}$  m **C)**  $12\sqrt{3}$  m **D)**  $16\sqrt{3}$  m

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 77.64%

Wrong: 7.79%

**Q15)** From a point 15 m away from the base of a tree, the angle of elevation to the top is  $45^\circ$ . What is the height of the tree?

- A)** 10 m **B)** 18 m **C)** 15 m **D)** 12 m

Date: 11/06/2025

Time: 12:45 PM - 2:15 PM

Right: 81.80%

Wrong: 7.85%

## Answer Key (Q1 to Q15) Height and Distance

Q1: 1	Q2: 4	Q3: 4	Q4: 3	Q5: 1
Q6: 4	Q7: 2	Q8: 2	Q9: 4	Q10: 1
Q11: 1	Q12: 2	Q13: 1	Q14: 4	Q15: 3

## Algebraic Identities

Q1) If  $\alpha$ ,  $\beta$  and  $\gamma$  are the roots of the equation  $6x^3 - 11x^2 + 6x - 1 = 0$ , find  $\Sigma \alpha^2 \beta \gamma$ .

- A)  $\frac{11}{6}$  B)  $\frac{11}{36}$  C)  $-\frac{11}{36}$  D)  $-\frac{11}{6}$

Date: 16/06/2025

Time: 9:00 AM - 10:30 AM

Right: 8.33%

Wrong: 18.23%

Q2) What is the product of the roots of the equation  $kx^3 - 5x^2 - 12x + k = 0$ ?

- A) 1 B) -1 C)  $-\frac{1}{12}$  D)  $\frac{1}{12}$

Date: 23/06/2025

Time: 4:30 PM - 6:00 PM

Right: 11.28%

Wrong: 37.91%

Q3) Given the cubic equation:  $x^3 - 3x^2 + 4x - 12 = 0$ . Find the sum of the products of the roots taken two at a time.

- A) 12 B) -3 C) 4 D) 3

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 14.99%

Wrong: 35.06%

Q4) The cost of 6 pens and 5 pencils is ₹259. If the cost of a pen decreases by ₹9 and the cost of a pencil increases by ₹4, then the cost of 19 pens and 2 pencils is ₹90. What is the original cost of 13 pens and 2 pencils?

- A) ₹202 B) ₹199 C) ₹195 D) ₹197

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 20.09%

Wrong: 9.41%

Q5) Find the sum of roots for the equation  $2x^3 + 7x^2 - 9x + 12$ .

- A)  $\frac{9}{7}$  B)  $\frac{9}{2}$  C)  $-\frac{7}{2}$  D)  $-\frac{2}{7}$

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 20.16%

Wrong: 29.20%

Q6) If the sum of three numbers  $a$ ,  $b$  and  $c$  is 5, the sum of the product of two numbers at a time is  $-2$  and the product of the numbers  $a$ ,  $b$  and  $c$  is 3. Find the value of  $a^3 + b^3 + c^3$ .

- A) 164 B) 148 C) 159 D) 126

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 20.91%

Wrong: 19.39%

**Q7)** If the quadratic equations  $6x^2 - 7x - 20 = 0$  and  $6x^2 + bx - 10 = 0$  have one root in common, find the value of b.

**A)** -11 **B)** 11 **C)** 10 **D)** -10

Date: 18/06/2025 Time: 4:30 PM - 6:00 PM Right: 21.93% Wrong: 20.28%

**Q8)** If the discriminant of quadratic equation is negative, then the roots are:

**A)** real and distinct **B)** complex conjugates **C)** real and equal **D)** real and negative

Date: 17/06/2025 Time: 12:45 PM - 2:15 PM Right: 28.04% Wrong: 42.33%

**Q9)** The cost of 15 pens and 6 pencils is ₹291. If the cost of a pen decreases by ₹9 and the cost of a pencil increases by ₹2, then the cost of 9 pens and 3 pencils is ₹75. What is the original cost of 12 pens and 3 pencils?

**A)** ₹158 **B)** ₹157 **C)** ₹161 **D)** ₹159

Date: 12/06/2025 Time: 12:45 PM - 2:15 PM Right: 29.65% Wrong: 8.60%

**Q10)** If  $x^2 + y^2 - 10x + 26y + 194 = 0$ , then the value of  $x^2 + y^2$  is:

**A)** 190 **B)** 194 **C)** 198 **D)** 200

Date: 24/06/2025 Time: 4:30 PM - 6:00 PM Right: 30.53% Wrong: 7.80%

**Q11)** Let a be an odd positive integer. If the roots of a quadratic equation  $x^2 - (a - 1)x + 4a + 7 = 0$  are integers, then the least value of a is:

**A)** 25 **B)** 19 **C)** 21 **D)** 23

Date: 19/06/2025 Time: 4:30 PM - 6:00 PM Right: 31.00% Wrong: 13.01%

**Q12)** The product of two consecutive positive integers is 247. If the smaller of these two integers is represented by x, which of the following will correspond to the equation for finding out the value of x?

**A)**  $x^2 - x + 247 = 0$  **B)**  $x^2 + x + 247 = 0$  **C)**  $x^2 + x - 247 = 0$  **D)**  $x^2 - x - 247 = 0$

Date: 12/06/2025 Time: 12:45 PM - 2:15 PM Right: 31.35% Wrong: 36.55%

**Q13)** The product of two consecutive positive integers is 960. If the smaller of these two integers is represented by x, which of the options below will correspond to the equation for finding the value of x?

**A)**  $x^2 - x + 960 = 0$  **B)**  $x^2 + x - 960 = 0$  **C)**  $x^2 - x - 960 = 0$  **D)**  $x^2 + x + 960 = 0$

Date: 11/06/2025 Time: 12:45 PM - 2:15 PM Right: 34.11% Wrong: 35.57%

**Q14)** The cost of 4 pens and 3 notebooks is ₹277. The cost of 16 notebooks exceeds the cost of 12 pens by ₹144. What is the cost of 19 pens and 15 notebooks?

**A)** ₹1,342 **B)** ₹1,347 **C)** ₹1,348 **D)** ₹1,345

Date: 16/06/2025 Time: 12:45 PM - 2:15 PM Right: 34.20% Wrong: 11.41%

**Q15)** If the equations  $x^2 + 3x + 2 = 0$  and  $ax^2 + bx + c = 0$  have both roots in common, then which of the following is NOT true?

- A)**  $4a - 2b + c = 0$  **B)**  $a - b + c = 0$  **C)**  $4a = 2c + 2b$  **D)**  $a + c = b$

Date: 17/06/2025 Time: 9:00 AM - 10:30 AM Right: 34.36% Wrong: 16.85%

**Q16)** Find roots of  $x^2 + (2a + 3)x + (a^2 + 3a) = 0$ .

- A)**  $x = -a, -a - 3$  **B)**  $x = a, a + 3$  **C)**  $x = 2a, a + 3$  **D)**  $x = -a, a + 3$

Date: 24/06/2025 Time: 9:00 AM - 10:30 AM Right: 35.52% Wrong: 19.54%

**Q17)** The sum of three numbers  $x, y$  and  $z$  is 12 and their squares sum is 20. What will be the value of  $x^3 + y^3 + z^3 - 3xyz$ ?

- A)**  $-305$  **B)**  $305$  **C)**  $504$  **D)**  $-504$

Date: 13/06/2025 Time: 9:00 AM - 10:30 AM Right: 35.85% Wrong: 16.16%

**Q18)** Sum and product of all roots of  $4x^3 - 8x^2 - 13x + 19 = 0$  is:

- A)**  $4, \frac{-19}{2}$  **B)**  $1, \frac{-17}{4}$  **C)**  $3, \frac{-17}{2}$  **D)**  $2, \frac{-19}{4}$

Date: 06/06/2025 Time: 4:30 PM - 6:00 PM Right: 36.65% Wrong: 9.22%

**Q19)** If the polynomial  $ax^3 + 4x^2 + 3x - 4$  and  $x^3 - 7x + a$  leaves the same remainder, when divided by  $(x - 2)$ , then find the value of  $a$ .

- A)**  $\frac{-17}{5}$  **B)**  $\frac{-24}{7}$  **C)**  $\frac{-36}{5}$  **D)**  $\frac{-21}{8}$

Date: 16/06/2025 Time: 4:30 PM - 6:00 PM Right: 37.46% Wrong: 9.41%

**Q20)** Given that  $12^{0.36} = x$ ,  $12^{0.64} = y$  and  $x^z = y^4$ , then the value of  $z$  is close to:

- A)** 7.11 **B)** 9.48 **C)** 6.89 **D)** 5.52

Date: 10/06/2025 Time: 9:00 AM - 10:30 AM Right: 37.70% Wrong: 13.26%

**Q21)** Find the roots of  $x^{-4} - 10x^{-2} + 9 = 0$ .

- A)**  $\pm 1, \pm \frac{1}{4}$  **B)**  $\pm 1, \pm \frac{2}{3}$  **C)**  $\pm 1, \pm \frac{1}{5}$  **D)**  $\pm 1, \pm \frac{1}{3}$

Date: 20/06/2025 Time: 12:45 PM - 2:15 PM Right: 37.94% Wrong: 10.56%

**Q22)** If 3 times the mother's present age is 36 years more than 5 times her daughter's age, and 3 times the daughter's age is 4 years less than the mother's age, then what is the difference (in years) between the present ages of the mother and the daughter?

- A)** 13 **B)** 20 **C)** 16 **D)** 18

Date: 09/06/2025 Time: 9:00 AM - 10:30 AM Right: 38.78% Wrong: 18.98%

**Q23)** Two quadratic equations,  $x^2 - 5x + 6 = 0$  and  $2x^2 - kx + 6 = 0$ , have one common root. What is the possible value of  $k$ ?

**A)** 5 **B)** 11 **C)** 7 **D)** 9

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 39.18%

Wrong: 30.27%

**Q24)** A quadratic equation  $x^2 + 3x + k = 0$  has a discriminant equal to 9. What is the value of  $k$ ?

**A)** -1 **B)** 1 **C)** 2 **D)** 0

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 39.20%

Wrong: 21.60%

**Q25)** The cost of 3 pens and 12 notebooks is ₹195. The cost of 7 notebooks exceeds the cost of 4 pens by ₹39. What is the cost of 12 pens and 6 notebooks?

**A)** ₹237 **B)** ₹229 **C)** ₹234 **D)** ₹236

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 39.88%

Wrong: 8.02%

**Q26)** If  $a^2 + b^2 = 144$ ,  $a \times b = 24$  and  $a > b$ , then find the value of  $\frac{a-b}{a+b}$ .

**A)**  $\frac{1}{2}$  **B)**  $\sqrt{\frac{1}{2}}$  **C)**  $\sqrt{\frac{1}{3}}$  **D)**  $\frac{1}{3}$

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 40.83%

Wrong: 19.17%

**Q27)** If 3 times the brother's present age is 25 years more than 5 times her sister's age, and 5 times the sister's age is 5 years less than the brother's age, then what is the difference (in years) between the present ages of the brother and the sister?

**A)** 12 **B)** 10 **C)** 8 **D)** 9

Date: 10/06/2025

Time: 4:30 PM - 6:00 PM

Right: 41.13%

Wrong: 14.85%

**Q28)** If both roots of the quadratic equation,  $x^2 + 3x + 2 = 0$ , are also roots of another quadratic equation,  $ax^2 + bx + c = 0$ , then which of the following must be true?

**A)**  $a + 3b + 2c = 0$  **B)**  $a = b = c$  **C)**  $\frac{a}{1} = \frac{b}{2} = \frac{c}{3}$  **D)**  $ax^2 + bx + c$  must be a multiple of  $x^2 + 3x + 2$

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 42.14%

Wrong: 26.16%

**Q29)** For what values of  $b$ , the quadratic equation  $4x^2 + bx + 16 = 0$  has equal real roots?

**A)** 4 and -4 **B)** 16 and -16 **C)** -4 and -8 **D)** 8 and -8

Date: 12/06/2025

Time: 12:45 PM - 2:15 PM

Right: 42.15%

Wrong: 35.16%

**Q30)** If sum and product of the roots of a quadratic equation are  $(4 - 3\sqrt{2})$  and  $-28$ , respectively, then find the quadratic equation.

**A)**  $x^2 - (4 + 3\sqrt{2})x + 28 = 0$  **B)**  $x^2 + (4 + 3\sqrt{2})x + 28 = 0$  **C)**  $x^2 + (4 - 3\sqrt{2})x - 28 = 0$

**D)**  $x^2 - (4 - 3\sqrt{2})x - 28 = 0$

Date: 05/06/2025

Time: 4:30 PM - 6:00 PM

Right: 44.16%

Wrong: 29.54%

**Q31)** If the quadratic equations  $4x^2 + bx + 3 = 0$  and  $8x^2 + 4x + c = 0$  have both the roots common, find the values for b and c, respectively.

**A)** 6, 2 **B)** 2, 4 **C)** 4, 2 **D)** 2, 6

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 44.44%

Wrong: 16.92%

**Q32)** Find the discriminant of the quadratic equation  $3x^2 - 4x + 2 = 0$ , and hence determine the nature of its roots.

**A)** Discriminant =  $-8$ , roots are imaginary **B)** Discriminant =  $8$ , roots are real and equal

**C)** Discriminant =  $-8$ , roots are real and distinct **D)** Discriminant =  $8$ , roots are real and distinct

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 44.86%

Wrong: 19.67%

**Q33)** Given that  $146^{0.93} = x$ ,  $146^{0.22} = y$  and  $x^z = y^7$ , then the value of z is close to:

**A)** 2.61 **B)** 3.6 **C)** 1.66 **D)** 5.05

Date: 11/06/2025

Time: 12:45 PM - 2:15 PM

Right: 44.91%

Wrong: 9.24%

**Q34)** Five times the present age of Vashnavi is 18 years more than seven times the present age of Sooraj, and eight times the present age of Sooraj is 17 years less than five times the present age of Vashnavi. What is the sum of the present ages (in years) of Vashnavi and Sooraj?

**A)** 6 **B)** 10 **C)** 9 **D)** 4

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 45.25%

Wrong: 9.17%

**Q35)** If 3 is a common root of quadratic equations  $x^2 - 8x + P = 0$  and  $x^2 + 4x + Q = 0$ , then find the value of  $P + Q$ .

**A)** 3 **B)**  $-6$  **C)** 6 **D)**  $-3$

Date: 11/06/2025

Time: 4:30 PM - 6:00 PM

Right: 46.18%

Wrong: 15.13%

**Q36)** Find the value of K if the quadratic equations  $2x^2 + Kx + 8 = 0$  and  $3x^2 + 4x + 12 = 0$  have both roots common.

**A)**  $\frac{8}{3}$  **B)**  $\frac{3}{2}$  **C)**  $\frac{5}{3}$  **D)**  $\frac{7}{2}$

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 47.42%

Wrong: 7.93%

**Q37)** Find the nature of the roots of the quadratic equation  $2x^2 + x + 3 = 0$ .

**A)** Rational roots **B)** Real roots and equal **C)** Imaginary roots **D)** Distinct real roots

Date: 24/06/2025 Time: 12:45 PM - 2:15 PM Right: 47.45% Wrong: 29.21%

**Q38)** If  $\frac{x+1}{x} = 33$ , then  $\frac{x^2+1}{x^2}$  is:

**A)** 1091 **B)** 1083 **C)** 1087 **D)** 1089

Date: 23/06/2025 Time: 4:30 PM - 6:00 PM Right: 47.49% Wrong: 23.72%

**Q39)** The roots of the quadratic equation  $3x^2 - 7x + 1 = 0$  are:

**A)**  $\frac{(7 + \sqrt{37})}{1.5}$  &  $\frac{(7 - \sqrt{37})}{1.5}$  **B)**  $\frac{(7 + \sqrt{37})}{6}$  &  $\frac{(7 - \sqrt{37})}{6}$   
**C)**  $\frac{(-7 + \sqrt{37})}{3}$  &  $\frac{(-7 - \sqrt{37})}{3}$  **D)**  $\frac{(-7 + \sqrt{37})}{3}$  &  $\frac{(7 + \sqrt{37})}{1.5}$

Date: 19/06/2025 Time: 12:45 PM - 2:15 PM Right: 48.69% Wrong: 12.24%

**Q40)** If  $\alpha$  and  $\beta$  are the roots of the equation  $x^2 - 6x - 5 = 0$ , then find the equation having the roots  $3\alpha$  and  $3\beta$ .

**A)**  $x^2 - 18x - 48 = 0$  **B)**  $x^2 - 18x - 45 = 0$  **C)**  $x^2 - 15x + 48 = 0$  **D)**  $x^2 - 15x + 45 = 0$

Date: 18/06/2025 Time: 9:00 AM - 10:30 AM Right: 48.72% Wrong: 13.25%

**Q41)** Two quadratic equations,  $2x^2 + 8x + 6 = 0$  and  $kx^2 + 4kx + 3 = 0$ , have both roots common. What is the value of  $k$ ?

**A)** 3 **B)** 1 **C)** 4 **D)** 2

Date: 10/06/2025 Time: 4:30 PM - 6:00 PM Right: 48.94% Wrong: 29.21%

**Q42)** If  $a^2 + b^2 = 132$  and  $a \times b = 36$ , then find  $\frac{(a-b)}{(a+b)}$ , where  $a > b$ .

**A)**  $\sqrt{\frac{5}{17}}$  **B)**  $\sqrt{\frac{11}{17}}$  **C)**  $\sqrt{\frac{5}{11}}$  **D)**  $\sqrt{\frac{17}{37}}$

Date: 23/06/2025 Time: 4:30 PM - 6:00 PM Right: 49.34% Wrong: 9.52%

**Q43)** Factorise the polynomial  $x^4 - 10x^2 + 22$  into product of two quadratic polynomials.

**A)**  $(x^2 - 4 + \sqrt{3})(x^2 - 4 - \sqrt{3})$  **B)**  $(x^2 - 3 + \sqrt{3})(x^2 - 3 - \sqrt{3})$  **C)**  $(x^2 - 2 + \sqrt{3})(x^2 - 2 - \sqrt{3})$   
**D)**  $(x^2 - 5 + \sqrt{3})(x^2 - 5 - \sqrt{3})$

Date: 06/06/2025 Time: 12:45 PM - 2:15 PM Right: 49.49% Wrong: 6.55%

**Q44)** If the sum of two numbers  $p$  and  $m$  is 12 and  $(p^3 + m^3) = 360$ , then find the value of  $pm$ .

- A)** 28 **B)** 44 **C)** 38 **D)** 35

Date: 19/06/2025

Time: 9:00 AM - 10:30 AM

Right: 49.72%

Wrong: 24.38%

**Q45)** Determine the nature of the roots of the quadratic equation  $3x^2 + 2x + 5 = 0$ .

- A)** Complex Roots (Imaginary Roots) **B)** Real and Equal Roots **C)** Real and Distinct Roots  
**D)** More than 2 real roots

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 49.77%

Wrong: 26.61%

**Q46)** The roots of the quadratic equation  $9x^2 - 9x + 1 = 0$  are:

- A)**  $\frac{(9 + \sqrt{45})}{18}$  &  $\frac{(9 - \sqrt{45})}{18}$  **B)**  $\frac{(-9 + \sqrt{45})}{9}$  &  $\frac{(9 + \sqrt{45})}{4.5}$   
**C)**  $\frac{(-9 + \sqrt{45})}{9}$  &  $\frac{(-9 - \sqrt{45})}{9}$  **D)**  $\frac{(9 + \sqrt{45})}{4.5}$  &  $\frac{(9 - \sqrt{45})}{4.5}$

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 50.24%

Wrong: 11.77%

**Q47)** The quadratic equation  $2x^2 + 4x + 8 = 0$  has:

- A)** two equal real roots **B)** two distinct real roots **C)** more than 2 real roots **D)** no real roots

Date: 11/06/2025

Time: 12:45 PM - 2:15 PM

Right: 50.54%

Wrong: 29.62%

**Q48)** Find the value of  $(0.54)^3 + (0.46)^3$ .

- A)** 0.2854 **B)** 0.2584 **C)** 0.2458 **D)** 0.2548

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 50.90%

Wrong: 15.82%

**Q49)**  $X$  varies inversely as  $Y$  and  $Y$  varies inversely as  $Z$ . In a particular case,

$$X = \frac{1}{16} \text{ and } Z = \frac{1}{32}. \text{ What will be the value of } X \text{ when } Z = 3?$$

- A)** 6 **B)** 9 **C)** 8 **D)** 7

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 51.44%

Wrong: 12.38%

**Q50)** Find the possible value of  $x$ .

$$x^4 - 17x^2 + 60 = 0$$

- A)**  $-\sqrt{6}$  **B)**  $-\sqrt{2}$  **C)**  $-\sqrt{3}$  **D)**  $-\sqrt{12}$

Date: 20/06/2025

Time: 4:30 PM - 6:00 PM

Right: 51.79%

Wrong: 17.04%

**Q51)** यदि  $\frac{x+1}{x} = 9$  है, तो  $\frac{x^2+1}{x^2}$  का मान ज्ञात कीजिए।

- A)** 79 **B)** 72 **C)** 78 **D)** 85

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 52.17%

Wrong: 17.28%

**Q52)** If  $a + b = 24$  and  $(a - b)^2 = 268$ , find the value of product of  $a$  and  $b$ .

**A)** 77 **B)** 110 **C)** 68 **D)** 140

Date: 20/06/2025

Time: 12:45 PM - 2:15 PM

Right: 52.80%

Wrong: 17.86%

**Q53)** If  $5x + 4y = 12$  and  $xy = 2$ , then find the value of  $125x^3 + 64y^3$ .

**A)** 288 **B)** 286 **C)** 268 **D)** 258

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 52.91%

Wrong: 10.76%

**Q54)** If  $a + b = 70$  and  $(a - b)^2 = 208$ , find the value of the product of  $a$  and  $b$ .

**A)** 1173 **B)** 1254 **C)** 1223 **D)** 1240

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 53.05%

Wrong: 12.29%

**Q55)** For what value of  $k$  do the quadratic equations:  $2x^2 - 5x + 3 = 0$  and  $4x^2 - (k+1)x + 6 = 0$ , have both roots common?

**A)** 9 **B)** 11 **C)** 7 **D)** 5

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 53.19%

Wrong: 13.22%

**Q56)** If  $a + b = 46$  and  $(a - b)^2 = 612$ , find the value of product of  $a$  and  $b$ .

**A)** 460 **B)** 376 **C)** 405 **D)** 428

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 53.76%

Wrong: 10.26%

**Q57)** If  $a^2 + b^2 = 168$ ,  $a \times b = 27$ , and  $a > b$ , find  $\frac{a - b}{a + b}$ .

**A)**  $\sqrt{\frac{57}{111}}$  **B)**  $\sqrt{\frac{53}{121}}$  **C)**  $\frac{57}{111}$  **D)**  $\frac{55}{121}$

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 54.03%

Wrong: 14.36%

**Q58)** If  $a + b = 32$  and  $(a - b)^2 = 372$ , find the value of product of  $a$  and  $b$ .

**A)** 145 **B)** 163 **C)** 161 **D)** 261

Date: 20/06/2025

Time: 4:30 PM - 6:00 PM

Right: 54.52%

Wrong: 10.42%

**Q59)** If  $a^2 + b^2 = 163$ ,  $a \times b = 27$  and  $a > b$ , then find the value of  $\frac{a - b}{a + b}$ .

**A)**  $\sqrt{\frac{109}{217}}$  **B)**  $\frac{109}{217}$  **C)**  $\sqrt{\frac{119}{227}}$  **D)**  $\frac{119}{227}$

Date: 18/06/2025

Time: 4:30 PM - 6:00 PM

Right: 55.08%

Wrong: 12.27%

**Q60)** Find the value of 'c' so that the quadratic equation  $2x^2 - 3x + c = 0$  and  $x^2 - 9x - 22 = 0$  may have one common root 11.

**A)** -157 **B)** -237 **C)** -107 **D)** -209

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 55.09%

Wrong: 4.30%

**Q61)** What is the discriminant of the equation  $x^2 - 2x + 13 = 0$ ? Also, determine how many real solutions this equation has.

**A)** 44, Two real roots **B)** -48, No real roots **C)** 40, Two equal roots **D)** 46, One real root

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 55.75%

Wrong: 7.47%

**Q62)** If  $a^2 + b^2 = 111$ ,  $a \times b = 27$ , and  $a > b$ , find the value of  $\frac{a-b}{a+b}$ .

**A)**  $\sqrt{\frac{53}{165}}$  **B)**  $\sqrt{\frac{57}{165}}$  **C)**  $\frac{53}{165}$  **D)**  $\frac{57}{165}$

Date: 06/06/2025

Time: 12:45 PM - 2:15 PM

Right: 56.75%

Wrong: 12.26%

**Q63)** Reduce the equation  $x^4 - 13x^2 + 36 = 0$  into a quadratic equation and find the roots of the reduced quadratic equation.

**A)** 9, 4 **B)** 12, 3 **C)** 18, 2 **D)** 6, 6

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 56.88%

Wrong: 13.90%

**Q64)** If 5 times A's age is added to B's age, the sum is 95 years. If 2.2 times B's age is added to A's age, the sum is 63 years. What is B's age (in years)?

**A)** 22 **B)** 21 **C)** 25 **D)** 19

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 57.10%

Wrong: 15.88%

**Q65)** Find the roots of the quadratic equation  $5x^2 - 12x - 17 = 0$ .

**A)**  $1, \frac{-17}{5}$  **B)**  $-1, \frac{17}{5}$  **C)**  $-1, \frac{-17}{5}$  **D)**  $1, \frac{17}{5}$

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 57.61%

Wrong: 23.66%

**Q66)** If  $\frac{x+1}{x} = 11$  then  $\frac{x^2+1}{x^2}$  is:

**A)** 119 **B)** 129 **C)** 114 **D)** 112

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 57.64%

Wrong: 8.03%

**Q67)** The sum of the age of A and 4 times the age of B is 34 years. When 3 times the age of A is added to 7 times the age of B, the result is 97 years. The sum of the ages (in years) of A and B is:

**A)** 28 **B)** 31 **C)** 33 **D)** 30

Date: 11/06/2025

Time: 12:45 PM - 2:15 PM

Right: 57.91%

Wrong: 10.51%

**Q68)** The sum of the age of A and 4 times the age of B is 37 years. When 7 times the age of A is added to 6 times the age of B, the result is 61 years. The sum of the ages (in years) of A and B is:

- A)** 6 **B)** 11 **C)** 10 **D)** 7

Date: 11/06/2025 Time: 4:30 PM - 6:00 PM Right: 58.06% Wrong: 9.41%

**Q69)** For  $7x^2 - 4x + k = 0$ , determine the value of k so that the equation has equal roots.

- A)**  $\frac{4}{7}$  **B)**  $\frac{4}{5}$  **C)**  $\frac{3}{7}$  **D)**  $\frac{4}{11}$

Date: 17/06/2025 Time: 4:30 PM - 6:00 PM Right: 59.27% Wrong: 11.57%

**Q70)** 2 bags and 11 pens together cost ₹505, whereas 10 bags and 10 pens together cost ₹1310. The cost of 8 bags exceeds the cost of 8 pens by:

- A)** ₹618 **B)** ₹619 **C)** ₹616 **D)** ₹617

Date: 13/06/2025 Time: 12:45 PM - 2:15 PM Right: 59.35% Wrong: 10.95%

**Q71)** The cost of 4 pens and 5 pencils is ₹193 and the cost of 3 pens and 6 pencils ₹165. The cost of 4 pens and 6 pencils is:

- A)** ₹202 **B)** ₹198 **C)** ₹201 **D)** ₹206

Date: 17/06/2025 Time: 9:00 AM - 10:30 AM Right: 60.16% Wrong: 12.62%

**Q72)** If  $a^2 + b^2 = 169$ ,  $a \times b = 10$ , and  $a > b$ , find  $\frac{a-b}{a+b}$ .

- A)**  $\sqrt{\frac{158}{199}}$  **B)**  $\frac{158}{199}$  **C)**  $\sqrt{\frac{149}{189}}$  **D)**  $\frac{149}{189}$

Date: 17/06/2025 Time: 4:30 PM - 6:00 PM Right: 60.43% Wrong: 11.45%

**Q73)** If  $a^2 + b^2 = 83$ ,  $a \times b = 6$ , and  $a > b$ , find  $\frac{a-b}{a+b}$ .

- A)**  $\sqrt{\frac{62}{95}}$  **B)**  $\sqrt{\frac{71}{95}}$  **C)**  $\frac{71}{95}$  **D)**  $\frac{62}{95}$

Date: 12/06/2025 Time: 9:00 AM - 10:30 AM Right: 60.94% Wrong: 10.88%

**Q74)** If  $\alpha$  and  $\beta$  are the roots of the equation  $x^2 - x - 6 = 0$ , find the value of  $\alpha^4 + \beta^4$ .

- A)** 100 **B)** 90 **C)** 95 **D)** 97

Date: 21/06/2025 Time: 12:45 PM - 2:15 PM Right: 61.10% Wrong: 8.22%

**Q75)** If the roots of the quadratic equation  $kx^2 - 4x + 1 = 0$  are real and equal, what is the value of k?

- A)** 8 **B)** 4 **C)** 2 **D)** 1

Date: 19/06/2025 Time: 9:00 AM - 10:30 AM Right: 61.28% Wrong: 17.72%

**Q76)** Find the value of  $(K^2 - 5)$ , if the quadratic equation  $2x^2 - 8x + K = 0$  has real and equal roots.

**A)** 65 **B)** 59 **C)** 48 **D)** 51

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 61.54%

Wrong: 6.56%

**Q77)** Simplify  $(2x - 5y)^2 + (5x + 2y)^2 + (2x + 5y)(2x - 5y)$ .

**A)**  $34x^2 - 4y^2$  **B)**  $-34x^2 + 4y^2$  **C)**  $-33x^2 - 4y^2$  **D)**  $33x^2 + 4y^2$

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 61.62%

Wrong: 7.97%

**Q78)** A quadratic equation is given by  $x^2 - 6x + k = 0$ . Find the value of  $k$  for which the equation has equal real roots.

**A)** 5 **B)** 11 **C)** 9 **D)** 7

Date: 13/06/2025

Time: 4:30 PM - 6:00 PM

Right: 62.18%

Wrong: 19.12%

**Q79)** If  $a^2 + b^2 = 179$  and  $a \times b = 14$ , then find  $\frac{(a - b)}{(a + b)}$ , where  $a > b$ .

**A)**  $\frac{411}{445}$  **B)**  $\sqrt{\frac{171}{217}}$  **C)**  $\sqrt{\frac{151}{207}}$  **D)**  $\frac{240}{281}$

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 62.31%

Wrong: 5.28%

**Q80)** 3 bags and 6 pens together cost ₹744, whereas 9 bags and 9 pens together cost ₹1,854. The cost of 6 bags exceeds the cost of 10 pens by:

**A)** ₹565 **B)** ₹568 **C)** ₹564 **D)** ₹567

Date: 14/06/2025

Time: 12:45 PM - 2:15 PM

Right: 62.67%

Wrong: 7.99%

**Q81)** Simplify  $\frac{8x^3 + 27y^3 - 64z^3 + 72xyz}{4x^2 + 9y^2 + 16z^2 - 6xy + 12yz + 8zx}$ .

**A)**  $(2x - 3y + 4z)$  **B)**  $(2x + 3y - 4z)$  **C)**  $(2x + 3y + 4z)$  **D)**  $(2x - 3y - 4z)$

Date: 06/06/2025

Time: 4:30 PM - 6:00 PM

Right: 62.77%

Wrong: 12.23%

**Q82)** If  $x^2 + \frac{1}{x^2} = 83$ ,  $x > 0$ , then find the value of  $x^3 - \frac{1}{x^3}$ .

**A)** 656 **B)** 820 **C)** 720 **D)** 756

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 63.00%

Wrong: 10.19%

**Q83)** If  $x = 2 + \sqrt{3}$ , what is the value of  $x^2 + \frac{1}{x^2}$ ?

**A)** 14 **B)** 16 **C)** 30 **D)** 26

Date: 24/06/2025

Time: 12:45 PM - 2:15 PM

Right: 63.16%

Wrong: 9.10%

**Q84)** 4 chairs and 14 tables cost ₹4,000 and 16 chairs and 12 tables cost ₹5,000. What is the cost of 8 chairs and 4 tables?

- A)** ₹2,002 **B)** ₹1,998 **C)** ₹2,004 **D)** ₹2,000

Date: 18/06/2025

Time: 4:30 PM - 6:00 PM

Right: 63.43%

Wrong: 7.82%

**Q85)** Find the value of  $64x^3 + 27y^3 + 144x^2y + 108xy^2$ , when  $x = 5$  and  $y = -5$ .

- A)** 120 **B)** 125 **C)** 150 **D)** 100

Date: 23/06/2025

Time: 4:30 PM - 6:00 PM

Right: 63.44%

Wrong: 7.71%

**Q86)** Find the value of  $m$  for which it satisfies  $\left(\frac{11}{2}\right)^{12} \times \left(\frac{2}{11}\right)^2 \times \left(\frac{11}{2}\right)^{16} = \left(\frac{2}{11}\right)^{9m+9}$ .

- A)**  $-\frac{37}{9}$  **B)**  $-\frac{35}{9}$  **C)**  $-\frac{38}{9}$  **D)**  $-\frac{43}{9}$

Date: 10/06/2025

Time: 4:30 PM - 6:00 PM

Right: 63.49%

Wrong: 9.14%

**Q87)** Find the value of  $m$  for which it satisfies  $\left(\frac{21}{8}\right)^{12} \times \left(\frac{8}{21}\right)^{14} \times \left(\frac{21}{8}\right)^{14} = \left(\frac{8}{21}\right)^{9m+20}$ .

- A)**  $-\frac{25}{9}$  **B)**  $-\frac{32}{9}$  **C)**  $-\frac{22}{9}$  **D)**  $-\frac{37}{9}$

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 64.09%

Wrong: 6.52%

**Q88)** 4 chairs and 4 tables cost ₹7,000 and 6 chairs and 5 tables cost ₹8,800. What is the cost of 16 chairs and 2 tables?

- A)** ₹4,197 **B)** ₹4,200 **C)** ₹4,198 **D)** ₹4,195

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 65.79%

Wrong: 5.50%

**Q89)** Find roots of  $5m^2 + 18m + 16 = 0$

- A)**  $-\frac{8}{5}$  and 4 **B)**  $\frac{8}{5}$  and -4 **C)**  $\frac{8}{5}$  and 2 **D)**  $-\frac{8}{5}$  and -2

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 66.01%

Wrong: 12.52%

**Q90)** The nature of the roots of the quadratic equation  $3x^2 - 5x + 2 = 0$  is:

- A)** equal real roots **B)** infinite number of roots **C)** two distinct real roots **D)** complex roots

Date: 14/06/2025

Time: 9:00 AM - 10:30 AM

Right: 66.67%

Wrong: 15.60%

**Q91)** 15 chairs and 3 tables cost ₹7,800 and 14 chairs and 6 tables cost ₹9,200. What is the cost of 17 chairs and 18 tables?

- A)** ₹17,598 **B)** ₹17,604 **C)** ₹17,600 **D)** ₹17,596

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 67.21%

Wrong: 5.75%

**Q92)** Find roots of  $4m^2 + 6m + 2 = 0$

- A)  $-\frac{1}{2}$  and  $-4$  B)  $\frac{1}{2}$  and  $1$  C)  $-\frac{1}{2}$  and  $-1$  D)  $-\frac{1}{2}$  and  $4$

Date: 06/06/2025

Time: 9:00 AM - 10:30 AM

Right: 68.20%

Wrong: 14.08%

**Q93)** Simplify  $(5x - 2y)^2 + (2x + 5y)^2 + (5x + 2y)(5x - 2y)$ .

- A)  $-55x^2 + 25y^2$  B)  $-54x^2 - 25y^2$  C)  $54x^2 + 25y^2$  D)  $55x^2 - 25y^2$

Date: 06/06/2025

Time: 12:45 PM - 2:15 PM

Right: 68.37%

Wrong: 7.26%

**Q94)** Find the roots of the equation  $5x^2 - 11x + 2 = 0$  by factorisation method.

- A)  $1, \frac{2}{5}$  B)  $\frac{1}{5}, 2$  C)  $2, \frac{2}{5}$  D)  $5, 2$

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 69.60%

Wrong: 12.15%

**Q95)** If  $x - \frac{1}{x} = 3$ , then the value of  $x^4 + \frac{1}{x^4}$  is:

- A) 19 B) 196 C) 176 D) 119

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 71.17%

Wrong: 10.81%

**Q96)** The sum of the ages of Ramesh and Mahesh is  $(2x^2 - 3x^2y + y^2 + 3xy^2)$  years. Age of Ramesh is  $(x^2 + 3x^2y + y^2 + 3xy^2)$  years. Find the age of Mahesh.

- A)  $(x^2 - 6x^2y)$  years B)  $(x^2 - 6xy)$  years C)  $(x^2 + 6xy)$  years D)  $(x^2 + 6x^2y)$  years

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 71.32%

Wrong: 10.86%

**Q97)** The roots of the quadratic equation  $7x^2 - 10x + 3 = 0$  are:

- A)  $1$  and  $\frac{3}{7}$  B)  $-1$  and  $-\frac{3}{7}$  C)  $-1$  and  $\frac{3}{7}$  D)  $1$  and  $-\frac{3}{7}$

Date: 14/06/2025

Time: 12:45 PM - 2:15 PM

Right: 71.55%

Wrong: 14.69%

**Q98)** For the quadratic equation  $7x^2 - 28x + 21 = 0$ , what is the sum of the roots?

- A) 4 B) 5 C) 2 D) 3

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 71.58%

Wrong: 12.53%

**Q99)** The cost of 8 pens and 2 pencils is ₹96 and the cost of 4 pens and 7 pencils ₹72. The cost of 2 pens and 8 pencils is:

- A) ₹53 B) ₹55 C) ₹54 D) ₹56

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 72.56%

Wrong: 9.24%

**Q100)** Simplify:  $(3z - 9y)^2 + (9z + 3y)^2 - 81z^2$

**A)**  $3z^2 + 81y^2$  **B)**  $9z^2 + 90y^2$  **C)**  $7z^2 + 95y^2$  **D)**  $18z^2 + 91y^2$

Date: 12/06/2025

Time: 12:45 PM - 2:15 PM

Right: 73.04%

Wrong: 8.69%

**Q101)** Find the value of K, for which the quadratic equation  $x^2 + 4x + K = 0$  has equal roots.

**A)** 3 **B)** 5 **C)** 4 **D)** 6

Date: 24/06/2025

Time: 4:30 PM - 6:00 PM

Right: 73.56%

Wrong: 12.87%

**Q102)** If  $a + b = 50$ , and  $a - b = 21$ , find the value of  $(a + b)^2$ .

**A)** 2466 **B)** 2500 **C)** 2504 **D)** 2456

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 73.84%

Wrong: 8.17%

**Q103)** By using a suitable identity, simplify  $10.1^3$ .

**A)** 1003.301 **B)** 1030.301 **C)** 1030.323 **D)** 1030.3001

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 73.91%

Wrong: 13.20%

**Q104)** If  $x + \frac{1}{x} = \sqrt{5}$ ,  $x > 0$ , find the value of  $x^4 + \frac{1}{x^4}$ .

**A)** 7 **B)** 3 **C)** 10 **D)** 9

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 74.64%

Wrong: 10.96%

**Q105)** If  $a + b = 41$ , and  $a - b = 38$ , find the value of  $(a + b)^2$ .

**A)** 1763 **B)** 1733 **C)** 1759 **D)** 1681

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 75.15%

Wrong: 5.30%

**Q106)** Rohan has ₹ $(3x^2 + 5xy + 7y^2)$  in his pocket. He spent ₹ $(2x^2 + 5xy + 4y^2)$  out of it.  
How much money is left with Rohan?

**A)** ₹ $(x^2 - 3y^2)$  **B)** ₹ $(x^2 + 3y^2)$  **C)** ₹ $(x^2 - 3y^2)$  **D)** ₹ $(x^2 + 3y^2)$

Date: 14/06/2025

Time: 9:00 AM - 10:30 AM

Right: 75.39%

Wrong: 14.97%

**Q107)** If  $\alpha$  and  $\beta$  are the roots of the quadratic equation  $y^2 - 9y + 8 = 0$ , then find the value of  $\alpha + \beta - \alpha\beta$ .

**A)** 4 **B)** 1 **C)** 3 **D)** 2

Date: 10/06/2025

Time: 12:45 PM - 2:15 PM

Right: 75.80%

Wrong: 4.17%

**Q108)** If  $a^2 + b^2 = 90$  and  $ab = 27$ , then find the possible value of  $\frac{a+b}{a-b}$ .

**A)** 2 **B)** 4 **C)** 3 **D)** 1

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 76.50%

Wrong: 12.86%

**Q109)** 15 chairs and 19 tables cost ₹5,300 and 19 chairs and 19 tables cost ₹5,700. What is the cost of 12 chairs and 13 tables?

- A)** ₹3,799 **B)** ₹3,800 **C)** ₹3,795 **D)** ₹3,801

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 76.82%

Wrong: 4.73%

**Q110)** If  $x - \frac{1}{x} = 4$ , then the value of  $x^3 - \frac{1}{x^3}$  is:

- A)** 76 **B)** 414 **C)** 420 **D)** 259

Date: 06/06/2025

Time: 9:00 AM - 10:30 AM

Right: 77.31%

Wrong: 8.39%

**Q111)** Simplify the given expression.

$$(5z - 9y)^2 + (9z + 5y)^2 - 81z^2$$

- A)**  $30z^2 + 105y^2$  **B)**  $16z^2 + 114y^2$  **C)**  $25z^2 + 106y^2$  **D)**  $15z^2 + 103y^2$

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 77.35%

Wrong: 3.34%

**Q112)** If  $x + y = 10$ , product of  $x$  and  $y$  is 16, then the value of  $x^4 + y^4$  is:

- A)** 4092 **B)** 4175 **C)** 4073 **D)** 4112

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 77.95%

Wrong: 8.27%

**Q113)** Which of the options below is equivalent to  $216x^3 + 343y^3 + 756x^2y + 882xy^2$ .

- A)**  $(8x + 7y)^3$  **B)**  $(7x + 6y)^3$  **C)**  $(6x + 7y)^3$  **D)**  $(6x + 10y)^3$

Date: 11/06/2025

Time: 4:30 PM - 6:00 PM

Right: 79.24%

Wrong: 6.64%

**Q114)** If  $a + b = 33$ , and  $a - b = 37$ , find the value of  $(a + b)^2$ .

- A)** 1152 **B)** 1101 **C)** 1089 **D)** 1181

Date: 19/06/2025

Time: 9:00 AM - 10:30 AM

Right: 79.93%

Wrong: 5.58%

**Q115)** If  $x - \frac{1}{x} = 10$ , then the value of  $x^3 - \frac{1}{x^3}$  is:

- A)** 986 **B)** 1030 **C)** 992 **D)** 1386

Date: 05/06/2025

Time: 4:30 PM - 6:00 PM

Right: 80.05%

Wrong: 8.06%

**Q116)** If  $x + y = 14$ , product of  $x$  and  $y$  is 45, then the value of  $x^4 + y^4$  is:

- A)** 7177 **B)** 7141 **C)** 7090 **D)** 7186

Date: 09/06/2025

Time: 12:45 PM - 2:15 PM

Right: 80.13%

Wrong: 6.46%

**Q117)** Which of the options below is equivalent to  $216x^3 + 27y^3 + 324x^2y + 162xy^2$ ?

- A)**  $(6x + 3y)^3$  **B)**  $(8x + 3y)^3$  **C)**  $(6x + 6y)^3$  **D)**  $(3x + 6y)^3$

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 80.82%

Wrong: 7.51%

**Q118)** If  $a + b = 50$ , and  $a - b = 42$ , find the value of  $a^2 + b^2$ .

**A)** 2578 **B)** 2503 **C)** 2500 **D)** 2132

Date: 19/06/2025

Time: 12:45 PM - 2:15 PM

Right: 80.87%

Wrong: 8.05%

**Q119)** Ramesh purchased  $(4x - 3y)$  dolls from a shop at the rate of ₹ $(x + y)$  per doll. Find the total money paid by Ramesh to the shopkeeper.

**A)** ₹ $(x^2 - xy + 3y^2)$  **B)** ₹ $(4x^2 + xy - 3y^2)$  **C)** ₹ $(4x^2 - xy + y^2)$  **D)** ₹ $(x^2 - xy + y^2)$

Date: 19/06/2025

Time: 12:45 PM - 2:15 PM

Right: 81.21%

Wrong: 4.79%

**Q120)** If  $x + \frac{1}{x} = 15$ , then the value of  $x^3 + \frac{1}{x^3}$  is:

**A)** 3267 **B)** 3330 **C)** 3298 **D)** 3311

Date: 10/06/2025

Time: 9:00 AM - 10:30 AM

Right: 82.17%

Wrong: 5.80%

**Q121)** If  $x + \frac{1}{x} = 4$ , then the value of  $x^3 + \frac{1}{x^3}$  is:

**A)** 52 **B)** 134 **C)** 151 **D)** 39

Date: 10/06/2025

Time: 12:45 PM - 2:15 PM

Right: 83.52%

Wrong: 5.83%

**Q122)** Simplify the following.

$$(2x + 3)^2 - (x + 1)^2.$$

**A)**  $3x^2 + 10x + 8$  **B)**  $4x^2 + 12x + 8$  **C)**  $4x^2 + 10x + 6$  **D)**  $3x^2 + 7x + 6$

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 83.98%

Wrong: 7.76%

**Q123)** 18 chairs and 4 tables cost ₹7,100 and 18 chairs and 7 tables cost ₹7,700. What is the cost of 18 chairs and 5 tables?

**A)** ₹7,295 **B)** ₹7,298 **C)** ₹7,300 **D)** ₹7,296

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 84.10%

Wrong: 3.73%

**Q124)** What positive value of  $X$  satisfies the equation  $\frac{X}{147} = \frac{48}{X}$ ?

**A)** 84 **B)** 86 **C)** 82 **D)** 83

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 84.26%

Wrong: 6.88%

**Q125)** If 24 is subtracted from three times an unknown number, the difference is 258. What is the unknown number?

**A)** 94 **B)** 70 **C)** 78 **D)** 82

Date: 06/06/2025

Time: 9:00 AM - 10:30 AM

Right: 85.35%

Wrong: 7.78%

**Q126)** Write the expanded form of  $(7a + 6b + 4c)^2$ .

- A)**  $49a^2 + 36b^2 + 16c^2 + 88ab + 48bc + 56ac$  **B)**  $49a^2 + 36b^2 + 16c^2 + 84ab + 48bc + 66ac$   
**C)**  $49a^2 + 36b^2 + 16c^2 + 84ab + 48bc + 56ac$  **D)**  $49a^2 + 36b^2 + 16c^2 + 84ab + 43bc + 56ac$

Date: 10/06/2025 Time: 4:30 PM - 6:00 PM Right: 85.52% Wrong: 6.48%

**Q127)** The product of two numbers  $x$  and  $y$  is 45 and their sum is 14. Find the sum of their cubes.

- A)** 675 **B)** 586 **C)** 854 **D)** 759

Date: 20/06/2025 Time: 12:45 PM - 2:15 PM Right: 86.29% Wrong: 5.19%

**Q128)** What positive value of  $X$  satisfies the equation  $\frac{X}{176} = \frac{99}{X}$ ?

- A)** 132 **B)** 133 **C)** 135 **D)** 130

Date: 17/06/2025 Time: 12:45 PM - 2:15 PM Right: 86.79% Wrong: 4.54%

**Q129)** The sum of two positive numbers  $x$  and  $y$  (where  $x > y$ ) is 15 and their product is 36. Find the difference between the number  $x$  and  $y$ .

- A)** 10 **B)** 9 **C)** 12 **D)** 8

Date: 17/06/2025 Time: 12:45 PM - 2:15 PM Right: 87.74% Wrong: 4.84%

**Q130)** Factorise the given expression.

$$100a^2 + 300ab + 225b^2$$

- A)**  $(15a - 10b)^2$  **B)**  $(10a - 15b)^2$  **C)**  $(10a + 15b)^2$  **D)**  $(15a + 10b)^2$

Date: 12/06/2025 Time: 4:30 PM - 6:00 PM Right: 88.02% Wrong: 4.56%

**Q131)** Kamlesh buys some sarees and suits for ₹10,000. The cost of each saree is ₹1,500, and the cost of each suit is ₹1,000. The total number of sarees and suits is 8. Find the number of suits and sarees.

- A)** 4 sarees and 4 suits **B)** 3 sarees and 5 suits **C)** 2 sarees and 6 suits **D)** 5 sarees and 3 suits

Date: 05/06/2025 Time: 12:45 PM - 2:15 PM Right: 88.60% Wrong: 4.19%

**Q132)** The value of  $691 \times 709$  is:

- A)** 480863 **B)** 492154 **C)** 496860 **D)** 489919

Date: 17/06/2025 Time: 9:00 AM - 10:30 AM Right: 97.38% Wrong: 0.78%

**Q133)** The value of  $596 \times 604$  is:

- A)** 364199 **B)** 366958 **C)** 356822 **D)** 359984

Date: 16/06/2025 Time: 9:00 AM - 10:30 AM Right: 98.33% Wrong: 0.70%

### Answer Key (Q1 to Q133) Algebraic Identities

Q1: 2	Q2: 2	Q3: 3	Q4: 2	Q5: 3
Q6: 1	Q7: 1	Q8: 2	Q9: 4	Q10: 2
Q11: 3	Q12: 3	Q13: 2	Q14: 4	Q15: 3
Q16: 1	Q17: 4	Q18: 4	Q19: 2	Q20: 1
Q21: 4	Q22: 3	Q23: 3	Q24: 4	Q25: 3
Q26: 2	Q27: 4	Q28: 4	Q29: 2	Q30: 4
Q31: 4	Q32: 1	Q33: 3	Q34: 1	Q35: 2
Q36: 1	Q37: 3	Q38: 3	Q39: 2	Q40: 2
Q41: 2	Q42: 1	Q43: 4	Q44: 3	Q45: 1
Q46: 1	Q47: 4	Q48: 4	Q49: 1	Q50: 4
Q51: 1	Q52: 1	Q53: 1	Q54: 1	Q55: 1
Q56: 2	Q57: 1	Q58: 2	Q59: 1	Q60: 4
Q61: 2	Q62: 2	Q63: 1	Q64: 1	Q65: 2
Q66: 1	Q67: 2	Q68: 3	Q69: 1	Q70: 3
Q71: 1	Q72: 3	Q73: 2	Q74: 4	Q75: 2
Q76: 2	Q77: 4	Q78: 3	Q79: 3	Q80: 3
Q81: 2	Q82: 4	Q83: 1	Q84: 4	Q85: 2
Q86: 2	Q87: 2	Q88: 2	Q89: 4	Q90: 3
Q91: 3	Q92: 3	Q93: 3	Q94: 2	Q95: 4
Q96: 1	Q97: 1	Q98: 1	Q99: 3	Q100: 2
Q101: 3	Q102: 2	Q103: 2	Q104: 1	Q105: 4
Q106: 2	Q107: 2	Q108: 1	Q109: 2	Q110: 1
Q111: 3	Q112: 4	Q113: 3	Q114: 3	Q115: 2
Q116: 4	Q117: 1	Q118: 4	Q119: 2	Q120: 2
Q121: 1	Q122: 1	Q123: 3	Q124: 1	Q125: 1
Q126: 3	Q127: 3	Q128: 1	Q129: 2	Q130: 3
Q131: 1	Q132: 4	Q133: 4		

## Mixture and Alligation

**Q1)** Priya bought 45 kg of apples and mangoes for ₹1,240. The prices of apples and mangoes were ₹25/kg and ₹30/kg, respectively. How much money did she spend on mangoes separately?

**A)** ₹650 **B)** ₹700 **C)** ₹690 **D)** ₹676

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 59.27%

Wrong: 11.80%

### Answer Key (Q1 to Q1) Mixture and Alligation

Q1: 3

## Statistics

**Q1)** Following are the ages (in years) of 6 people in a group: 25, 30, 35, 40, 45 and 50. What is the standard deviation of their ages (rounded to two decimal places)?

**A)** 9.26 **B)** 7.38 **C)** 8.54 **D)** 6.57

Date: 06/06/2025

Time: 4:30 PM - 6:00 PM

Right: 7.72%

Wrong: 24.15%

**Q2)** The marks obtained by the students of a class are given. Find the standard deviation of the marks (rounded off to 2 decimal places).

65, 47, 59, 75, 82, 91, 55 and 78

**A)** 12.53 **B)** 13.99 **C)** 14.25 **D)** 15.05

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 7.72%

Wrong: 16.59%

**Q3)** The mean and standard deviation of 100 terms are 50 and 3, respectively. The sum of squares of the 100 terms is:

**A)** 2,49,000 **B)** 2,50,000 **C)** 2,70,000 **D)** 2,50,900

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 9.31%

Wrong: 19.78%

**Q4)** If the mode of the following data is 160, then what is the value of x?

Class	145-150	150-155	155-160	160-165	165-170
Frequency	10	18	31	x	24

**A)** 32 **B)** 31 **C)** 42 **D)** 43

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 13.28%

Wrong: 19.07%

Q5) If the mode of the following data is 125, then what is the value of x?

Class	110-115	115-120	120-125	125-130	130-135
Frequency	13	31	39	x	15

A) 48 B) 40 C) 31 D) 39

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 14.83%

Wrong: 24.10%

Q6) If the mode of the following data is 165, then what is the value of x?

Class	150-155	155-160	160-165	165-170	170-175
Frequency	13	26	37	x	27

A) 54 B) 27 C) 37 D) 57

Date: 13/06/2025

Time: 9:00 AM - 10:30 AM

Right: 15.66%

Wrong: 21.68%

Q7) Find the median from the following data.

Age in years	15-25	25-35	35-45	45-55	55-65	65-75	75-85
No. of patients	11	18	22	30	40	16	33

A) 45 years B) 74 years C) 56 years D) 58 years

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 16.49%

Wrong: 23.17%

Q8) What is the median of the following distribution?

Class	120-170	170-220	220-270	270-320	320-370
Frequency	18	34	17	13	22

A) 227 B) 220 C) 224 D) 216

Date: 17/06/2025

Time: 4:30 PM - 6:00 PM

Right: 17.80%

Wrong: 14.45%

Q9) If the mode of the following data is 165, then what is the value of x?

Class	150-155	155-160	160-165	165-170	170-175
Frequency	23	25	37	x	28

A) 37 B) 54 C) 53 D) 43

Date: 12/06/2025

Time: 12:45 PM - 2:15 PM

Right: 18.03%

Wrong: 17.44%

Q10) What is the median of the following distribution?

Class	140-190	190-240	240-290	290-340	340-390
Frequency	23	13	24	25	35

A) 301 B) 278 C) 290 D) 304

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 18.27%

Wrong: 15.67%

Q11) What is the median of the following distribution?

Class	110-160	160-210	210-260	260-310	310-360
Frequency	16	15	31	24	38

A) 245 B) 262 C) 278 D) 260

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 18.40%

Wrong: 17.57%

Q12) What is the mode of the data given below? [Give your answer correct to 2 decimal places.]

Age in years	15-25	25-35	35-45	45-55	55-65	65-75	75-85
No. of patients	14	32	39	38	10	36	22

A) 40.86 B) 60.47 C) 43.75 D) 36.08

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 20.92%

Wrong: 19.99%

Q13) If the mode of the following data is 140, then what is the value of x?

Class	125-130	130-135	135-140	140-145	145-150
Frequency	30	30	33	x	31

A) 34 B) 33 C) 47 D) 46

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 20.94%

Wrong: 17.92%

Q14) What is the mode of the data given below? [Give your answer correct to 2 decimal places.]

Age in years	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of patients	22	20	23	15	36	17	14

A) 49.91 B) 59.42 C) 55.25 D) 56.88

Date: 19/06/2025

Time: 9:00 AM - 10:30 AM

Right: 22.15%

Wrong: 15.49%

Q15) Find the median from the following data.

Age in years	15-25	25-35	35-45	45-55	55-65	65-75	75-85
No. of patients	37	11	26	10	39	25	18

A) 59 years B) 72 years C) 68 years D) 54 years

Date: 24/06/2025

Time: 12:45 PM - 2:15 PM

Right: 22.89%

Wrong: 15.66%

Q16) What is the median of the following distribution?

Class	140-190	190-240	240-290	290-340	340-390
Frequency	14	37	28	39	12

A) 265 B) 251 C) 275 D) 250

Date: 18/06/2025

Time: 4:30 PM - 6:00 PM

Right: 23.05%

Wrong: 11.31%

Q17) Find the median from the following data.

Age in years	20-30	30-40	40-50	50-60	60-70	70-80	80-90
No. of patients	11	16	14	29	40	21	17

A) 80 years B) 59 years C) 79 years D) 61 years

Date: 24/06/2025

Time: 4:30 PM - 6:00 PM

Right: 24.92%

Wrong: 20.45%

Q18) What is the median of the following distribution?

Class	150-200	200-250	250-300	300-350	350-400
Frequency	20	19	32	27	12

A) 261 B) 286 C) 293 D) 275

Date: 14/06/2025

Time: 9:00 AM - 10:30 AM

Right: 26.32%

Wrong: 9.99%

Q19) What is the mean of the following distribution?

Marks	14	26	44	61	84
No. of Students	91	78	95	36	98

A) 45 B) 46 C) 54 D) 69

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 27.86%

Wrong: 15.60%

Q20) Find the median from the following data.

Age in years	20-30	30-40	40-50	50-60	60-70	70-80	80-90
No. of patients	12	16	30	20	17	38	15

A) 74 years B) 49 years C) 58 years D) 46 years

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 27.88%

Wrong: 16.64%

Q21) If the mode of a data set exceeds its mean by 17.7, then the mode exceeds the median by \_\_\_\_\_.  
(Use empirical formula.)

A) 15.4 B) 9.8 C) 4.8 D) 11.8

Date: 11/06/2025

Time: 4:30 PM - 6:00 PM

Right: 27.96%

Wrong: 13.82%

Q22) What is the mode of the data given below? [Give your answer correct to 2 decimal places.]

Age in years	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of patients	29	35	25	10	18	34	17

A) 39.44 B) 6.56 C) 23.75 D) 22.58

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 28.92%

Wrong: 13.93%

Q23) What is the mean of the following distribution?

Marks	19	31	54	69	95
No. of Students	22	35	64	34	57

A) 60 B) 63 C) 82 D) 49

Date: 10/06/2025

Time: 4:30 PM - 6:00 PM

Right: 30.40%

Wrong: 17.59%

Q24) What is the mode of the data given below? [Give your answer correct to 2 decimal places.]

Age in years	10-20	20-30	30-40	40-50	50-60	60-70	70-80
No. of patients	16	21	14	34	37	32	13

A) 46.12 B) 53.75 C) 34.15 D) 33.05

Date: 23/06/2025

Time: 4:30 PM - 6:00 PM

Right: 30.80%

Wrong: 13.75%

Q25) What is the mean of the following distribution?

Marks	19	36	60	69	85
No. of Students	63	62	59	17	70

A) 54 B) 34 C) 77 D) 52

Date: 05/06/2025

Time: 4:30 PM - 6:00 PM

Right: 31.87%

Wrong: 17.76%

**Q26)** If the mode of a data set exceeds its mean by 37.8, then the mode exceeds the median by \_\_\_\_\_.  
(Use empirical formula.)

**A)** 29.3 **B)** 31.6 **C)** 24.8 **D)** 25.2

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 31.91%

Wrong: 9.01%

**Q27)** What is the mean of the following distribution?

Marks	13	27	59	61	97
No. of Students	95	57	80	98	73

**A)** 31 **B)** 45 **C)** 51 **D)** 74

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 32.31%

Wrong: 13.93%

**Q28)** What is the mode of the data given below? [Give your answer correct to 2 decimal places.]

Age in years	15-25	25-35	35-45	45-55	55-65	65-75	75-85
No. of patients	31	34	13	19	30	28	29

**A)** 23.58 **B)** 17.36 **C)** 39.33 **D)** 26.25

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 32.99%

Wrong: 10.00%

**Q29)** If the mode of a data exceeds its mean by 20.1, then the mode exceeds the median by \_\_\_\_\_. (Use empirical formula)

**A)** 18.6 **B)** 4.4 **C)** 13.4 **D)** 3.9

Date: 14/06/2025

Time: 12:45 PM - 2:15 PM

Right: 33.16%

Wrong: 10.65%

**Q30)** If the mode of a data exceeds its mean by 12.6, then the mode exceeds the median by \_\_\_\_\_.  
(Use empirical formula.)

**A)** 15.9 **B)** 17.6 **C)** 18.2 **D)** 8.4

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 34.14%

Wrong: 11.05%

**Q31)** If the median of a data is 71.24 less than its mode, then the median of the data exceeds its mean by \_\_\_\_\_. (Use the empirical formula)

**A)** 34.14 **B)** 35.62 **C)** 41.97 **D)** 33.91

Date: 18/06/2025

Time: 9:00 AM - 10:30 AM

Right: 39.77%

Wrong: 6.51%

**Q32)** Marks in statistics of 12 students are x, 28, 35, 56, 78, 63, 65, 81, 79, 83, 80, y, where x and y are the lowest and highest marks, respectively. If the range and average of the marks are 70 and 64, respectively, then the ordered pair (x, y) is:

**A)** (23, 93) **B)** (35, 105) **C)** (25, 95) **D)** (30, 100)

Date: 05/06/2025

Time: 12:45 PM - 2:15 PM

Right: 42.10%

Wrong: 19.92%

**Q33)** If the median of a data is 20.8 less than its mode, then the median of the data exceeds its mean by \_\_\_\_\_. (Use the empirical formula)

**A)** 6.32 **B)** 13.72 **C)** 12.43 **D)** 10.4

Date: 20/06/2025 Time: 4:30 PM - 6:00 PM Right: 42.45% Wrong: 7.32%

**Q34)** If the median of a data is 80.32 less than its mode, then the median of the data exceeds its mean by \_\_\_\_\_. (Use empirical formula)

**A)** 38.87 **B)** 36.56 **C)** 40.16 **D)** 44.61

Date: 16/06/2025 Time: 12:45 PM - 2:15 PM Right: 44.11% Wrong: 5.00%

**Q35)** If the median of a data is 45.98 less than its mode, then the median of the data exceeds its mean by \_\_\_\_\_. (Use empirical formula)

**A)** 25.13 **B)** 22.99 **C)** 21.05 **D)** 26.54

Date: 16/06/2025 Time: 9:00 AM - 10:30 AM Right: 44.33% Wrong: 5.83%

**Q36)** The arithmetic mean of 25 real numbers is 110. If 10 numbers are increased by  $12\frac{1}{2}$  each, another 10 numbers are increased by 15 each and the remaining 5 numbers are unaltered, then the new value of the arithmetic mean is:

**A)** 125 **B)** 121 **C)** 120 **D)** 112

Date: 05/06/2025 Time: 12:45 PM - 2:15 PM Right: 44.90% Wrong: 14.13%

**Q37)** If the median of a data is 46.36 less than its mode, then the median of the data exceeds its mean by \_\_\_\_\_. (Use the empirical formula)

**A)** 20.83 **B)** 23.18 **C)** 19.14 **D)** 18.76

Date: 19/06/2025 Time: 12:45 PM - 2:15 PM Right: 45.14% Wrong: 5.31%

**Q38)** The mode and median of a data set is 28.4 and 88, respectively. What is the mean of the data set? (Use empirical formula.)

**A)** 114.2 **B)** 119.2 **C)** 117.8 **D)** 127.7

Date: 05/06/2025 Time: 9:00 AM - 10:30 AM Right: 53.58% Wrong: 12.09%

**Q39)** The mean and the mode of a set of data are 47.4 and 61.6, respectively. Find the median of the data set, using the empirical formula.  
(Round off your answer to one decimal place.)

**A)** 53.8 **B)** 52.1 **C)** 51.7 **D)** 52.7

Date: 11/06/2025 Time: 12:45 PM - 2:15 PM Right: 53.58% Wrong: 16.42%

**Q40)** The mean and the mode of a data set are 33.9 and 40.1, respectively. Find the median of the data, using the empirical formula. (Round off your answer to two decimal places.)

**A)** 35.33 **B)** 36.27 **C)** 35.97 **D)** 34.66

Date: 10/06/2025 Time: 9:00 AM - 10:30 AM Right: 53.80% Wrong: 14.64%

**Q41)** The mode and median of a dataset is 52.7 and 65, respectively. What is the mean of the dataset? (Use empirical formula, and round off your answer to one decimal place.)

**A)** 71.2 **B)** 77.8 **C)** 68.2 **D)** 62.5

Date: 06/06/2025 Time: 9:00 AM - 10:30 AM Right: 56.32% Wrong: 12.33%

**Q42)** The mean and the mode of a data set are 51.5 and 61.7, respectively. Find the median of the data set, using the empirical formula.

**A)** 55.4 **B)** 56.1 **C)** 54.3 **D)** 54.9

Date: 10/06/2025 Time: 12:45 PM - 2:15 PM Right: 57.43% Wrong: 17.75%

**Q43)** The mode and median of a data set is 89.7 and 32, respectively. What is the mean of the data set? (Use empirical formula.)

**A)** 2.6 **B)** 11.26 **C)** 5.9 **D)** 3.15

Date: 06/06/2025 Time: 12:45 PM - 2:15 PM Right: 57.74% Wrong: 11.44%

**Q44)** The mode and median of a data set is 14.2 and 60, respectively. What is the mean of the data set? (Use empirical formula.)

**A)** 80.4 **B)** 88.6 **C)** 82.9 **D)** 86.9

Date: 09/06/2025 Time: 12:45 PM - 2:15 PM Right: 58.65% Wrong: 13.44%

**Q45)** The mode and median of data are 36.3 and 62, respectively. What is the mean of the data? (Use the empirical formula)

**A)** 74.85 **B)** 76.15 **C)** 79.75 **D)** 68.95

Date: 06/06/2025 Time: 4:30 PM - 6:00 PM Right: 58.80% Wrong: 10.73%

**Q46)** Following are the marks obtained by 5 students in a test: 45, 67, 80, 56 and 72. What is the range of the marks?

**A)** 40 **B)** 45 **C)** 80 **D)** 35

Date: 05/06/2025 Time: 4:30 PM - 6:00 PM Right: 60.90% Wrong: 20.20%

**Q47)** The mean of a data is 43 and its median is 78. The mode (using empirical relation) of the data is:

**A)** 80 **B)** 213 **C)** 148 **D)** 102

Date: 20/06/2025 Time: 9:00 AM - 10:30 AM Right: 70.38% Wrong: 6.61%

**Q48)** The mean of a data is 42 and its median is 53. The mode (using empirical relation) of the data is:

- A)** 169 **B)** 75 **C)** 24 **D)** 100

Date: 20/06/2025

Time: 12:45 PM - 2:15 PM

Right: 71.34%

Wrong: 7.15%

**Q49)** What is the median of the following data?

61, 55, 18, 49, 52, 80, 60, 33, 54, 56, 28

- A)** 54 **B)** 54.5 **C)** 55 **D)** 53.5

Date: 16/06/2025

Time: 4:30 PM - 6:00 PM

Right: 71.46%

Wrong: 19.13%

**Q50)** The mean of a data is 76 and its median is 100. The mode (using empirical relation) of the data is:

- A)** 148 **B)** 60 **C)** 174 **D)** 77

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 73.86%

Wrong: 5.91%

**Q51)** The mean of data is 56, and its median is 76. The mode (using empirical relation) of the data is:

- A)** 105 **B)** 116 **C)** 93 **D)** 203

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 75.92%

Wrong: 4.19%

**Q52)** The median of the observations 76, 83, 30, 11, 81, 52, 18, 34, 84, 35 and 27 is:

- A)** 30 **B)** 35 **C)** 52 **D)** 34

Date: 05/06/2025

Time: 9:00 AM - 10:30 AM

Right: 76.57%

Wrong: 14.42%

**Q53)** What is the median of the following data?

34, 78, 58, 65, 64, 73, 21, 88, 13, 11, 70

- A)** 64 **B)** 63.5 **C)** 64.5 **D)** 65

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 76.86%

Wrong: 13.76%

**Q54)** What is the median of the following data?

15, 70, 34, 37, 25, 36, 74, 36, 54, 78, 33

- A)** 37 **B)** 36 **C)** 35.5 **D)** 36.5

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 77.31%

Wrong: 16.49%

**Q55)** The median of the observations 54, 65, 77, 34, 68, 66, 60, 70, 33, 71 and 15 is:

- A)** 61 **B)** 66 **C)** 68 **D)** 65

Date: 24/06/2025

Time: 4:30 PM - 6:00 PM

Right: 77.37%

Wrong: 15.43%

Q56) What is the median of the following data?

74, 85, 67, 27, 47, 16, 41, 32, 98, 38, 88

A) 46.5 B) 47 C) 47.5 D) 48

Date: 18/06/2025

Time: 4:30 PM - 6:00 PM

Right: 77.41%

Wrong: 10.90%

Q57) What is the median of the following data?

59, 34, 84, 70, 56, 99, 98, 49, 76, 19, 69

A) 69.5 B) 70 C) 69 D) 68.5

Date: 14/06/2025

Time: 9:00 AM - 10:30 AM

Right: 77.61%

Wrong: 12.24%

Q58) The median of the observations 93, 38, 12, 55, 70, 98, 60, 49, 53, 11 and 38 is:

A) 49 B) 53 C) 55 D) 60

Date: 12/06/2025

Time: 9:00 AM - 10:30 AM

Right: 78.24%

Wrong: 13.96%

Q59) What is the median of the following data?

65, 67, 32, 16, 64, 27, 37, 16, 43, 85, 77

A) 44 B) 42.5 C) 43 D) 43.5

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 78.89%

Wrong: 9.59%

Q60) What is the median of the following data?

13, 43, 81, 27, 25, 28, 87, 57, 77, 89, 73

A) 57 B) 57.5 C) 58 D) 56.5

Date: 13/06/2025

Time: 4:30 PM - 6:00 PM

Right: 79.13%

Wrong: 10.36%

Q61) What is the median of the following data?

72, 47, 98, 52, 20, 86, 85, 69, 59, 81, 53

A) 69.5 B) 69 C) 68.5 D) 70

Date: 14/06/2025

Time: 12:45 PM - 2:15 PM

Right: 79.51%

Wrong: 10.26%

Q62) What is the median of the following data?

46, 19, 87, 72, 80, 91, 82, 15, 53, 86, 26

A) 71.5 B) 72 C) 72.5 D) 73

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 79.68%

Wrong: 9.17%

**Q63)** The median of the observations 87, 56, 79, 81, 11, 53, 94, 45, 32, 99 and 98 is:

**A)** 81 **B)** 56 **C)** 53 **D)** 79

Date: 09/06/2025

Time: 4:30 PM - 6:00 PM

Right: 79.94%

Wrong: 13.29%

**Q64)** What is the median of the following data?

75, 69, 45, 17, 22, 57, 79, 28, 18, 91, 32

**A)** 46 **B)** 45.5 **C)** 44.5 **D)** 45

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 80.37%

Wrong: 9.59%

**Q65)** The median of the observations 49, 91, 24, 46, 90, 20, 21, 14, 66, 32 and 92 is:

**A)** 46 **B)** 24 **C)** 49 **D)** 32

Date: 10/06/2025

Time: 12:45 PM - 2:15 PM

Right: 81.40%

Wrong: 11.42%

**Q66)** The median of the observations 85, 62, 20, 72, 20, 43, 35, 90, 68, 56 and 79 is:

**A)** 62 **B)** 72 **C)** 56 **D)** 68

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 81.57%

Wrong: 11.14%

**Q67)** The median of the observations 31, 40, 74, 47, 14, 44, 46, 29, 36, 97 and 87 is:

**A)** 47 **B)** 40 **C)** 44 **D)** 46

Date: 16/06/2025

Time: 12:45 PM - 2:15 PM

Right: 81.67%

Wrong: 11.41%

**Q68)** The median of the observations 60, 43, 24, 61, 72, 26, 39, 62, 49, 95 and 38 is:

**A)** 43 **B)** 60 **C)** 62 **D)** 49

Date: 17/06/2025

Time: 4:30 PM - 6:00 PM

Right: 81.67%

Wrong: 10.15%

**Q69)** The median of the observations 87, 56, 27, 31, 13, 39, 18, 80, 98, 92 and 25 is:

**A)** 25 **B)** 56 **C)** 39 **D)** 31

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 81.74%

Wrong: 11.50%

**Q70)** The median of the observations 71, 95, 67, 55, 78, 45, 58, 44, 69, 41 and 88 is:

**A)** 55 **B)** 69 **C)** 67 **D)** 58

Date: 10/06/2025

Time: 4:30 PM - 6:00 PM

Right: 81.97%

Wrong: 11.14%

**Q71)** The median of the observations 34, 58, 98, 42, 83, 62, 12, 11, 87, 75 and 15 is:

**A)** 75 **B)** 58 **C)** 42 **D)** 62

Date: 16/06/2025

Time: 9:00 AM - 10:30 AM

Right: 82.13%

Wrong: 11.88%

Q72) What is the median of the following data?

19, 98, 77, 24, 99, 71, 70, 56, 80, 12, 88

A) 71 B) 70.5 C) 72 D) 71.5

Date: 20/06/2025

Time: 12:45 PM - 2:15 PM

Right: 82.41%

Wrong: 9.76%

Q73) The median of the observations 59, 67, 17, 38, 88, 61, 80, 91, 30, 48 and 80 is:

A) 61 B) 59 C) 67 D) 58

Date: 18/06/2025

Time: 9:00 AM - 10:30 AM

Right: 83.09%

Wrong: 11.30%

Q74) The median of the observations 21, 36, 73, 71, 35, 38, 49, 37, 26, 66 and 73 is:

A) 37 B) 38 C) 36 D) 35

Date: 17/06/2025

Time: 9:00 AM - 10:30 AM

Right: 87.00%

Wrong: 6.29%

Q75) What is the mode of the following data?

53, 47, 43, 42, 52, 54, 54, 51, 42, 53, 53, 48, 46, 43, 43, 40, 43, 41

A) 47 B) 53 C) 42 D) 43

Date: 23/06/2025

Time: 4:30 PM - 6:00 PM

Right: 87.56%

Wrong: 7.17%

Q76) What is the mode of the following data?

41, 55, 45, 48, 40, 47, 41, 47, 54, 44, 49, 48, 53, 54, 50, 53, 41, 46

A) 41 B) 55 C) 48 D) 45

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 88.64%

Wrong: 5.24%

Q77) What is the mode of the following data?

77, 86, 89, 74, 69, 84, 87, 80, 60, 64, 79, 63, 83, 82, 81, 89, 80, 69, 73, 74, 87, 68, 74, 77, 67, 74

A) 74 B) 86 C) 89 D) 77

Date: 11/06/2025

Time: 12:45 PM - 2:15 PM

Right: 88.73%

Wrong: 4.91%

Q78) The mode of the observations 4, 3, 8, 7, 3, 7, 3, 1, 1, 3, 8, 3, 3, 5 and 3 is:

A) 4 B) 7 C) 3 D) 8

Date: 06/06/2025

Time: 12:45 PM - 2:15 PM

Right: 89.20%

Wrong: 5.67%

Q79) The mode of the observations 21, 27, 25, 31, 21, 35, 23, 25, 32, 27, 21, 29, 32, 29 and 31 is:

A) 27 B) 31 C) 25 D) 21

Date: 20/06/2025

Time: 4:30 PM - 6:00 PM

Right: 89.27%

Wrong: 5.95%

**Q80)** What is the mode of the following data?

78, 75, 86, 90, 83, 86, 74, 70, 67, 90, 81, 64, 83, 78, 90, 66, 60, 87, 72, 78, 66, 78, 84, 68, 66, 85, 78

**A)** 86 **B)** 75 **C)** 78 **D)** 90

Date: 11/06/2025 Time: 4:30 PM - 6:00 PM Right: 89.31% Wrong: 4.44%

**Q81)** What is the mode of the following data?

49, 54, 54, 43, 52, 49, 51, 46, 53, 43, 53, 49, 44, 45, 46, 44, 40, 50, 52, 49

**A)** 49 **B)** 43 **C)** 54 **D)** 52

Date: 24/06/2025 Time: 12:45 PM - 2:15 PM Right: 89.59% Wrong: 4.19%

**Q82)** The mode of the observations 35, 32, 28, 27, 25, 32, 31, 27, 32, 30, 32, 27, 31, 34, 32 and 22 is:

**A)** 28 **B)** 32 **C)** 35 **D)** 27

Date: 19/06/2025 Time: 9:00 AM - 10:30 AM Right: 89.78% Wrong: 4.24%

**Q83)** The mode of the observations 8, 7, 4, 7, 9, 4, 5, 4, 7, 2, 4, 5, 8, 5, 4 and 5 is:

**A)** 8 **B)** 7 **C)** 2 **D)** 4

Date: 17/06/2025 Time: 12:45 PM - 2:15 PM Right: 89.99% Wrong: 4.45%

**Q84)** The mode of the observations 20, 20, 20, 35, 29, 34, 25, 33, 35, 32, 33, 27, 22, 31 and 31 is:

**A)** 20 **B)** 29 **C)** 34 **D)** 35

Date: 21/06/2025 Time: 4:30 PM - 6:00 PM Right: 90.00% Wrong: 4.18%

**Q85)** The mode of the observations 9, 6, 4, 2, 5, 2, 9, 2, 1, 9, 4, 5, 9, 5, 4 and 8 is:

**A)** 2 **B)** 4 **C)** 6 **D)** 9

Date: 13/06/2025 Time: 9:00 AM - 10:30 AM Right: 90.19% Wrong: 4.58%

**Q86)** The mode of the observations 24, 33, 32, 24, 28, 24, 29, 25, 25, 34, 27, 26, 22, 34, 27, 24 and 30 is:

**A)** 33 **B)** 28 **C)** 24 **D)** 32

Date: 21/06/2025 Time: 12:45 PM - 2:15 PM Right: 91.26% Wrong: 3.12%

**Q87)** The mode of the observations 35, 27, 27, 32, 25, 24, 27, 24, 32, 20, 31, 21, 29, 22, 27, 20 and 26 is:

**A)** 35 **B)** 25 **C)** 27 **D)** 32

Date: 19/06/2025 Time: 12:45 PM - 2:15 PM Right: 91.40% Wrong: 4.04%

**Q88)** The mode of the observations 3, 6, 5, 7, 8, 4, 3, 3, 2, 5, 3, 6, 4, 8 and 5 is:

**A)** 7 **B)** 5 **C)** 6 **D)** 3

Date: 18/06/2025 Time: 12:45 PM - 2:15 PM Right: 91.43% Wrong: 4.52%

**Q89)** The mode of the observations 4, 1, 5, 2, 8, 6, 7, 4, 3, 5, 1, 6, 4, 9 and 4 is:

**A) 4 B) 5 C) 2 D) 1**

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 92.54%

Wrong: 2.56%

### Answer Key (Q1 to Q89) Statistics

Q1: 3	Q2: 2	Q3: 4	Q4: 2	Q5: 4
Q6: 3	Q7: 3	Q8: 2	Q9: 1	Q10: 3
Q11: 4	Q12: 3	Q13: 2	Q14: 3	Q15: 4
Q16: 1	Q17: 4	Q18: 4	Q19: 1	Q20: 3
Q21: 4	Q22: 3	Q23: 1	Q24: 2	Q25: 4
Q26: 4	Q27: 3	Q28: 4	Q29: 3	Q30: 4
Q31: 2	Q32: 3	Q33: 4	Q34: 3	Q35: 2
Q36: 2	Q37: 2	Q38: 3	Q39: 2	Q40: 3
Q41: 1	Q42: 4	Q43: 4	Q44: 3	Q45: 1
Q46: 4	Q47: 3	Q48: 2	Q49: 1	Q50: 1
Q51: 2	Q52: 2	Q53: 1	Q54: 2	Q55: 4
Q56: 2	Q57: 3	Q58: 2	Q59: 3	Q60: 1
Q61: 2	Q62: 2	Q63: 4	Q64: 4	Q65: 1
Q66: 1	Q67: 3	Q68: 4	Q69: 3	Q70: 3
Q71: 2	Q72: 1	Q73: 1	Q74: 2	Q75: 4
Q76: 1	Q77: 1	Q78: 3	Q79: 4	Q80: 3
Q81: 1	Q82: 2	Q83: 4	Q84: 1	Q85: 4
Q86: 3	Q87: 3	Q88: 4	Q89: 1	

### Trigonometry

**Q1)** If  $\cot\theta = \frac{3}{4}$ , then find the value of  $\sin 3\theta$ .

**A)  $\frac{44}{125}$  B)  $\frac{117}{125}$  C)  $\frac{81}{125}$  D)  $-\frac{117}{125}$**

Date: 06/06/2025

Time: 4:30 PM - 6:00 PM

Right: 20.83%

Wrong: 34.26%

Q2) Simplify  $(\sec\theta - \frac{1}{\sec\theta}) \times (\operatorname{cosec}\theta - \frac{1}{\operatorname{cosec}\theta}) \times (\sin\theta - \frac{1}{\sin\theta})$ .

- A)  $\cos^3\theta$  B)  $-\sin^3\theta$  C)  $\sin^3\theta$  D)  $-\cos^3\theta$

Date: 12/06/2025

Time: 4:30 PM - 6:00 PM

Right: 31.98%

Wrong: 25.67%

Q3) If  $\sec\theta + \tan\theta = 2$ , then what is the value of  $3\sec\theta + 4$ ?

- A)  $\frac{31}{4}$  B)  $\frac{15}{4}$  C)  $\frac{17}{4}$  D)  $\frac{33}{4}$

Date: 18/06/2025

Time: 12:45 PM - 2:15 PM

Right: 37.49%

Wrong: 10.83%

Q4) Simplify:  $\frac{\cot\theta}{\operatorname{cosec}\theta + 1} + \frac{\operatorname{cosec}\theta + 1}{\cot\theta}$

- A)  $2 \operatorname{cosec}\theta$  B)  $2 \sin\theta$  C)  $2 \sec\theta$  D)  $2 \cos\theta$

Date: 23/06/2025

Time: 12:45 PM - 2:15 PM

Right: 39.22%

Wrong: 19.66%

Q5) If  $3 \cot A = 2$ , then find the value of  $\sqrt{\frac{3(\operatorname{cosec}^2 A - 1)}{(\sec^2 A - 1)}}$ .

- A)  $\frac{2\sqrt{3}}{9}$  B)  $\frac{2\sqrt{3}}{3}$  C)  $\frac{4\sqrt{3}}{9}$  D)  $\frac{4\sqrt{3}}{3}$

Date: 19/06/2025

Time: 4:30 PM - 6:00 PM

Right: 39.41%

Wrong: 21.78%

Q6) If  $\sqrt{2} \operatorname{cosec} A = 2 \sec A$ , find the value of  $\tan A \sec A$ .

- A)  $\frac{\sqrt{3}}{2}$  B) 4 C)  $\sqrt{3}$  D)  $\frac{1}{2}$

Date: 23/06/2025

Time: 9:00 AM - 10:30 AM

Right: 40.45%

Wrong: 18.13%

Q7) If  $\frac{\sec\theta - \tan\theta}{\sec\theta + \tan\theta} = \frac{3}{5}$ , then  $2\sin\theta$  is equal to:

- A)  $\frac{1}{2}$  B)  $\frac{1}{4}$  C)  $\frac{1}{8}$  D) 1

Date: 17/06/2025

Time: 12:45 PM - 2:15 PM

Right: 40.51%

Wrong: 21.46%

Q8) Find the value of  $\frac{3}{\sin^2 A \sec A} \times 3\sqrt{\tan^2 A - \sin^2 A}$ .

- A)  $3 \sin A$  B) 3 C)  $9 \tan A$  D) 9

Date: 20/06/2025

Time: 9:00 AM - 10:30 AM

Right: 40.77%

Wrong: 16.77%

Q9) If  $\cos\alpha = \frac{3}{5}$  and  $\cos\beta = \frac{15}{17}$ , then find the value of  $\sin(\alpha + \beta)$ .

- A)  $\frac{36}{85}$  B)  $\frac{84}{85}$  C)  $\frac{15}{85}$  D)  $\frac{77}{85}$

Date: 10/06/2025

Time: 4:30 PM - 6:00 PM

Right: 41.17%

Wrong: 19.77%

Q10) The value of  $3 + \tan^2 \theta + \cot^2 \theta - \sec^2 \theta \operatorname{cosec}^2 \theta$  is:

- A) 1 B) 2 C) -1 D) 0

Date: 09/06/2025

Time: 9:00 AM - 10:30 AM

Right: 43.80%

Wrong: 20.36%

Q11) The value of  $(\sec \theta - \tan \theta)^2 (1 + \sin \theta)^2 \div \cos^2 \theta$  is

- A) -2 B) 2 C) 0 D) 1

Date: 11/06/2025

Time: 9:00 AM - 10:30 AM

Right: 45.80%

Wrong: 15.95%

Q12) Find the value of  $\left[ \frac{2\cos A}{(1 - \sin A)} + \frac{2\cos A}{(1 + \sin A)} \right] \times 3\sqrt{\sec^2 A - 1}$ .

- A)  $12 \sec A \tan A$  B)  $4 \sec A$  C)  $18 \sec A \tan A$  D)  $12 \tan A$

Date: 21/06/2025

Time: 4:30 PM - 6:00 PM

Right: 47.13%

Wrong: 9.92%

Q13) The numerical value of  $\frac{4}{\sec^2 \theta} + \frac{3}{1 + \cot^2 \theta} + \sin^2 \theta$  is:

- A) 3 B) 4 C) 2 D) 1

Date: 19/06/2025

Time: 9:00 AM - 10:30 AM

Right: 49.07%

Wrong: 14.47%

Q14) Simplify:  $\sqrt{\frac{1 + \sin A}{1 - \sin A}} + \sqrt{\frac{1 - \sin A}{1 + \sin A}}$

- A)  $2 \cos A$  B)  $2 \sec A$  C)  $2 \operatorname{cosec} A$  D)  $2 \sin A$

Date: 24/06/2025

Time: 12:45 PM - 2:15 PM

Right: 49.42%

Wrong: 23.85%

Q15) Solve for  $\theta$ :  $\frac{\cos \theta}{1 - \sin \theta} + \frac{\cos \theta}{1 + \sin \theta} = 4$

- A)  $90^\circ$  B)  $30^\circ$  C)  $60^\circ$  D)  $45^\circ$

Date: 23/06/2025

Time: 4:30 PM - 6:00 PM

Right: 49.75%

Wrong: 21.30%

Q16) If  $\sqrt{3} \tan A = 3 \sin A$ , find the value of  $(2\sqrt{3} \operatorname{cosec} A \times \tan A)$ .

- A) 6 B)  $\sqrt{3}$  C)  $2\sqrt{3}$  D) 2

Date: 20/06/2025

Time: 12:45 PM - 2:15 PM

Right: 50.13%

Wrong: 16.94%

Q17) If  $\sin 5A = \cos(A - 42^\circ)$ , where  $5A$  is an acute angle, find the value of  $A$ .

- A)  $21^\circ$  B)  $22^\circ$  C)  $20^\circ$  D)  $23^\circ$

Date: 13/06/2025

Time: 12:45 PM - 2:15 PM

Right: 50.40%

Wrong: 13.60%

Q18) Evaluate  $\cos 42^\circ \cdot \cos 18^\circ - \sin 42^\circ \cdot \sin 18^\circ$ .

- A) 1 B)  $\frac{1}{2}$  C)  $\frac{1}{4}$  D)  $\frac{1}{3}$

Date: 24/06/2025

Time: 9:00 AM - 10:30 AM

Right: 50.65%

Wrong: 23.36%

Q19) If  $\tan\theta = \frac{7}{8}$ , then evaluate  $\frac{(1 + \sin\theta)(1 - \sin\theta)}{(1 + \cos\theta)(1 - \cos\theta)(\cot\theta)}$ .

- A)  $\frac{8}{7}$  B)  $\frac{7}{8}$  C)  $\frac{49}{64}$  D)  $\frac{64}{49}$

Date: 06/06/2025

Time: 9:00 AM - 10:30 AM

Right: 50.70%

Wrong: 19.35%

Q20) If  $\cot\theta = \frac{7}{8}$ , then evaluate  $\frac{8(1 + \sin\theta)(1 - \sin\theta)}{7(1 + \cos\theta)(1 - \cos\theta)}$ .

- A)  $\frac{7}{8}$  B)  $\frac{49}{64}$  C)  $\frac{64}{49}$  D)  $\frac{8}{7}$

Date: 14/06/2025

Time: 9:00 AM - 10:30 AM

Right: 51.22%

Wrong: 21.95%

Q21) If  $\sin^4\theta - \cos^4\theta = \frac{1}{2}$ , find the value of  $2\sin^2\theta - 1$ .

- A) 1 B)  $\frac{1}{2}$  C)  $\frac{\sqrt{3}}{2}$  D)  $\frac{1}{\sqrt{2}}$

Date: 12/06/2025

Time: 12:45 PM - 2:15 PM

Right: 51.76%

Wrong: 16.33%

Q22) Find the value of  $\frac{(3 + 3\tan^2A)\cot A}{(1 + \cot^2A)\sec A}$ .

- A)  $\tan A$  B)  $\sin A$  C)  $3\sin A$  D)  $3\tan A$

Date: 21/06/2025

Time: 9:00 AM - 10:30 AM

Right: 53.31%

Wrong: 13.13%

Q23) Find the value of  $7\sec A(1 + \sin A)(\sec A - \tan A) - 4$ .

- A) 7 B) 3 C) 10 D) 4

Date: 21/06/2025

Time: 12:45 PM - 2:15 PM

Right: 56.19%

Wrong: 8.55%

Q24) If  $3\tan A = 4$ , then find the value of  $\frac{(1 - \sec A)(1 + \sec A)}{(1 - \operatorname{cosec} A)(1 + \operatorname{cosec} A)}$ .

- A)  $\frac{64}{9}$  B)  $\frac{256}{81}$  C)  $\frac{80}{27}$  D)  $\frac{16}{9}$

Date: 20/06/2025

Time: 4:30 PM - 6:00 PM

Right: 57.62%

Wrong: 14.80%

Q25) If  $m = a \cos^3\beta$  and  $n = b \sin^3\beta$ , then find the value of  $\left\{\frac{m}{a}\right\}^{\frac{2}{3}} + \left\{\frac{n}{b}\right\}^{\frac{2}{3}}$ .

- A) 3 B) 0 C) 1 D) 2

Date: 24/06/2025

Time: 4:30 PM - 6:00 PM

Right: 61.12%

Wrong: 7.20%

Q26) If  $\sin A = \frac{3}{4}$ , then calculate  $\frac{2\cos A}{\sqrt{7}}$ .

- A)  $\frac{\sqrt{7}}{2}$  B)  $\frac{\sqrt{7}}{4}$  C)  $\frac{1}{2}$  D)  $\frac{1}{4}$

Date: 10/06/2025

Time: 12:45 PM - 2:15 PM

Right: 66.31%

Wrong: 13.16%

Q27) Find the value of  $\frac{\cos 35^\circ}{\sin 55^\circ} + \frac{\sin 11^\circ}{\cos 79^\circ} - 2\cos 27^\circ \operatorname{cosec} 63^\circ$ .

A) 0 B) 1 C) -1 D) 2

Date: 18/06/2025 Time: 9:00 AM - 10:30 AM Right: 67.64% Wrong: 11.39%

Q28) A ladder is leaning against a wall such that it makes an angle of  $60^\circ$  with the ground. If the length of the ladder is 10 metres, how far is the foot of the ladder from the wall?

A) 8 metres B) 6 metres C) 5 metres D) 10 metres

Date: 11/06/2025 Time: 4:30 PM - 6:00 PM Right: 68.82% Wrong: 17.01%

Q29) If  $\sin A = \frac{4}{5}$ , then find the value of  $(2 + \tan A)(4 + \cos A)$ .

A)  $\frac{3}{46}$  B)  $\frac{15}{208}$  C)  $\frac{46}{3}$  D)  $\frac{208}{15}$

Date: 17/06/2025 Time: 4:30 PM - 6:00 PM Right: 69.86% Wrong: 8.75%

Q30) If  $\sin B = \frac{\sqrt{3}}{2}$ , then find the value of  $(\sqrt{3} \operatorname{cosec} B + \sec B - 4)$ .

A) 3 B)  $\sqrt{3}$  C) 0 D) 2

Date: 19/06/2025 Time: 12:45 PM - 2:15 PM Right: 70.33% Wrong: 7.33%

Q31) If  $\sin A = \frac{3}{4}$ , then calculate  $\cos A \cot A$ .

A)  $\frac{12}{7}$  B)  $\frac{7}{12}$  C)  $\frac{6}{7}$  D)  $\frac{7}{6}$

Date: 18/06/2025 Time: 4:30 PM - 6:00 PM Right: 70.75% Wrong: 6.95%

Q32) Find the value of  $\frac{\sin^2 68^\circ + \sin^2 22^\circ}{2(\cos^2 17^\circ + \cos^2 73^\circ)}$ .

A) -1 B) 0 C) 1 D)  $\frac{1}{2}$

Date: 14/06/2025 Time: 12:45 PM - 2:15 PM Right: 72.45% Wrong: 11.99%

Q33) A ladder leans against a wall, making an angle of  $30^\circ$  with the ground. If the ladder is 8 m long, what is the height it reaches on the wall?

A) 4 m B) 6 m C) 10 m D) 8 m

Date: 12/06/2025 Time: 9:00 AM - 10:30 AM Right: 73.95% Wrong: 12.66%

### Answer Key (Q1 to Q33) Trigonometry

Q1: 1	Q2: 4	Q3: 1	Q4: 3	Q5: 3
Q6: 1	Q7: 1	Q8: 4	Q9: 2	Q10: 1
Q11: 4	Q12: 1	Q13: 2	Q14: 2	Q15: 3

Q16: 1	Q17: 2	Q18: 2	Q19: 1	Q20: 1
Q21: 2	Q22: 3	Q23: 2	Q24: 2	Q25: 3
Q26: 3	Q27: 1	Q28: 3	Q29: 3	Q30: 3
Q31: 2	Q32: 4	Q33: 1		

**हिंदी माध्यम**

# रेलवे गणित

**ALP, TECHNICIAN, RPF, NTPC, GROUP D & RRB JE**

**2ND EDITION**

- Type-wise & Level-wise
- Chapter-wise Test
- Smart Approach and Short Tricks

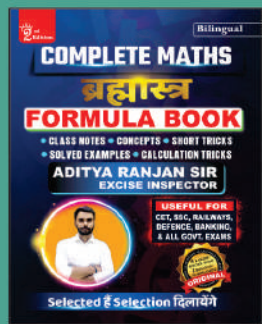
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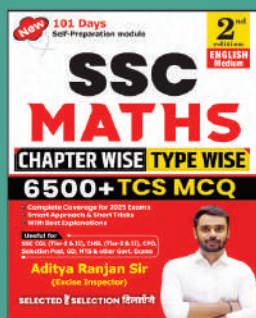
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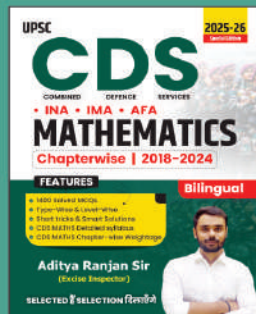
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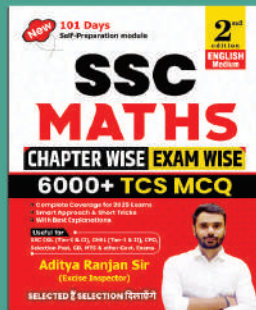
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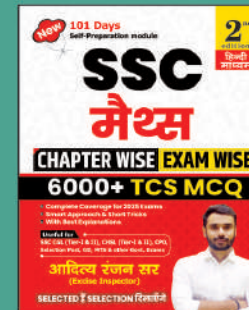
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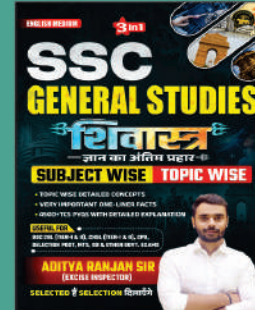
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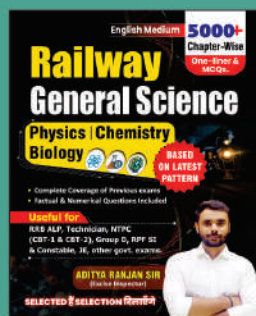
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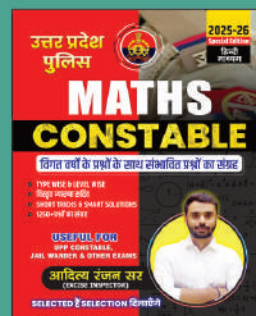
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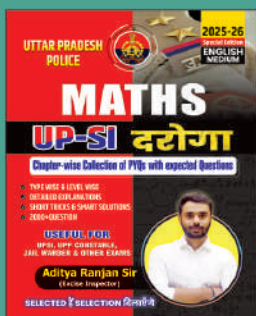
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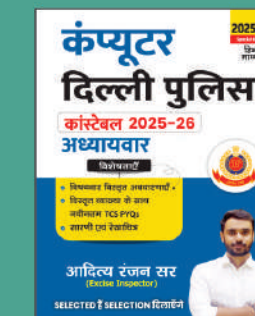
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