

Section : Numerical Aptitude

Q.1 A certain sum of money becomes 4 times in 12 years when invested at simple interest. In how many years will it become 10 times of itself at the same rate?

- Ans**
- 1. 60
 - 2. 48
 - 3. 24
 - 4. 36

Question ID : 65497818293
Chosen Option : 4

Q.2 The marks obtained by a student in Mathematics, Chemistry and Physics are, respectively, 195 out of 200, 133 out of 180 and 153 out of 160. His average score in per cent (correct to one decimal place) is:

- Ans**
- 1. 84.6
 - 2. 86.7
 - 3. 89.1
 - 4. 96.2

Question ID : **65497818283**
Chosen Option : **3**

Q.3 A man borrowed money and paid back in two equal annual instalments of ₹1,089, at 10% compound interest compounded annually for 2 years. What was the sum (in ₹) borrowed?

- Ans**
- 1. 2,178
 - 2. 2,090
 - 3. 1,890
 - 4. 1,800

Question ID : **65497818292**
Chosen Option : **4**

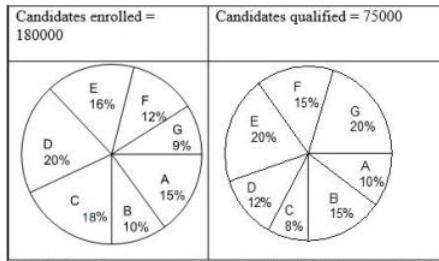
Q.4 The selling price of a chair is $\frac{33}{20}$ times its cost price. What is the gain or loss percentage in the transaction?

- Ans**
- 1. Loss, 35%
 - 2. Loss, 65%
 - 3. Gain, 35%
 - 4. Gain, 65%

Question ID : **65497818287**
Chosen Option : **4**

Q.5 The given pie charts show the number of candidates who enrolled for a medical entrance examination in 2010, and those who qualified the examination in seven medical institutes of India. The total number of candidates who appeared for the entrance examination were 1,80,000, and those who qualified were 75,000.

Study the charts carefully and answer the question that follows.



Note: The data does not represent the actual numbers. It has been created only for mathematical exercise.

What is the ratio of the number of candidates who enrolled in institute A to the number of candidates who qualified in institute G?

- Ans**
- 1. 9 : 5
 - 2. 3 : 4
 - 3. 5 : 9
 - 4. 4 : 3

Question ID : 65497818301
Chosen Option : 2

Q.6 Jack takes thrice as much time as Peter and twice as much as Justin to finish a work; working together they can finish the work in 15 days. The time (in days) Justin will take to finish the work alone is:

- Ans**
- 1. 60
 - 2. 90
 - 3. 75
 - 4. 45

Question ID : 65497818279
Chosen Option : 4

Q.7 The numbers 8, 9, 11, 15, 17, 21 and N are arranged in ascending order. The mean of these numbers is equal to the median of the numbers. The value of N is:

- Ans**
- 1. 24
 - 2. 26
 - 3. 25
 - 4. 22

Question ID : 65497818294
Chosen Option : 1

Q.8 Four solid cubes, each of volume 1728 cm^3 , are kept in two rows having two cubes in each row. They form a rectangular solid with square base. The total surface area (in cm^2) of the resulting solid is:

- Ans**
- 1. 1440
 - 2. 2304
 - 3. 576
 - 4. 1152

Question ID : 65497818296
Chosen Option : --

Q.9 Two similar cylindrical jugs have heights 5 cm and 8 cm, respectively. If the capacity of the smaller jug is 64 cm^3 , what is the capacity (correct to 2 decimal places, in cm^3) of the larger jug?

- Ans**
- 1. 262.14
 - 2. 102.40
 - 3. 294.54
 - 4. 163.84

Question ID : 65497818295
Chosen Option : 2

Q.10 A can do a piece of work in 8 days while B alone can do it in 12 days. They work together for 4 days and the remaining work is completed by C alone in 2 days. They are paid ₹7,200 for the completion of the entire work. The earnings of A, B and C, respectively, are:

- Ans**
- 1. ₹2,400, ₹2,400, ₹2,400
 - 2. ₹3,600, ₹2,400, ₹1,200
 - 3. ₹4,000, ₹2,400, ₹800
 - 4. ₹3,000, ₹3,000, ₹1,200

Question ID : 65497818280
Chosen Option : 2

Q.11 What is the smallest number which when divided by 72 and 96, respectively, leaves a remainder 5 in each case?

- Ans**
- 1. 283
 - 2. 571
 - 3. 581
 - 4. 293

Question ID : 65497818298
Chosen Option : 4

Q.12 What is the simplified value of $\frac{9 \div 9 \text{ of } 9 + 9}{9 \div 9 \times 9 + 9}$?

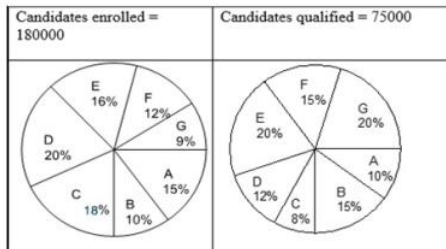
- Ans
- 1. $\frac{1}{324}$
 - 2. 1
 - 3. $\frac{41}{81}$
 - 4. $\frac{81}{41}$

Question ID : 65497818401
Chosen Option : 3

Q.13 The given pie charts show the number of candidates who enrolled for a medical entrance examination in 2010, and those who qualified the examination in seven medical institutes of India.

The total number of candidates who appeared for the entrance examination were 1,80,000, and those who qualified were 75,000.

Study the charts carefully and answer the question that follows.



Note: The data does not represent the actual numbers. It has been created only for mathematical exercise.

Which of the following institutes has the highest percentage of qualified candidates with respect to the number of candidates enrolled in that institute?

Given that the number of candidates enrolled in institutes B, E, F and G are 18,000, 28,800, 21,600 and 16,200, respectively.

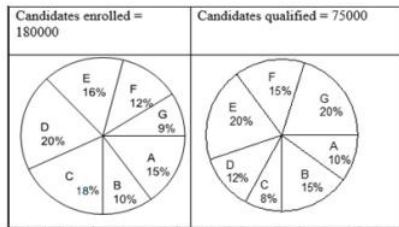
- Ans
- 1. B
 - 2. E
 - 3. G
 - 4. F

Question ID : 65497818303
Chosen Option : --

Q.14 The given pie charts show the number of candidates who enrolled for a medical entrance examination in 2010 and those who qualified the examination in seven medical institutes of India.

The total number of candidates who appeared for the entrance examination were 1,80,000, and those who qualified were 75,000.

Study the charts carefully and answer the question that follows.



Note: The data does not represent the actual numbers. It has been created only for mathematical exercise.

The combined number of candidates who qualified for institutes B and E is what percentage (correct to one place of decimal) of the combined number of candidates who enrolled for institutes C and D?

- Ans**
- ✓ 1. 38.4%
 - ✗ 2. 48.6%
 - ✗ 3. 34.7%
 - ✗ 4. 69.4%

Question ID : 65497818302
Chosen Option : --

Q.15 A girl cycles from A to B, a distance of 25 km in 2 hours 20 minutes. The road from A is a levelled road for 15 km and then it slopes down to B. The average speed of the girl on the levelled road is 10 km/h. Her average downhill speed (in km/h) is:

- Ans**
- ✗ 1. 15
 - ✗ 2. 10
 - ✗ 3. 18
 - ✓ 4. 12

Question ID : 65497818281
Chosen Option : --

Q.16 P and Q are two towns. A man drives from P to Q at an average speed of 50 km/h. He stops at Q for 4 hours and then heads back to P at an average speed of 40 km/h following the same route. What is his average speed (in km/h correct to two decimal places) if he takes 22 hours for the entire trip?

- Ans**
- ✗ 1. 42.42
 - ✓ 2. 36.36
 - ✗ 3. 48.48
 - ✗ 4. 45.00

Question ID : 65497818282
Chosen Option : 3

Q.17 A sum of ₹3,900 is divided among P, Q and R such that R receives two-fifths of P's share and Q receives three times of R's share. What is Q's share (in ₹)?

- Ans**
- 1. 1,500
 - 2. 600
 - 3. 1,800
 - 4. 1,200

Question ID : 65497818289
Chosen Option : 3

Q.18 In the last two weeks of a sale, prices are reduced by 40%, followed by a discount of 25%. What is the final sale price (to the nearest rupee) of a microwave oven that originally costs ₹15,485?

- Ans**
- 1. 6,968
 - 2. 5,419
 - 3. 10,065
 - 4. 6,869

Question ID : 65497818285
Chosen Option : 1

Q.19 A trader purchased 500 kg of sugar at ₹40 per kg. He sold 200 kg of it at a profit of 10% and 120 kg at a loss of 5%. At what rate per kg (in ₹, correct to 2 decimal places) should he sell the remaining sugar to gain 12% on his initial investment?

- Ans**
- 1. 48.67
 - 2. 52.33
 - 3. 50.22
 - 4. 44.80

Question ID : 65497818288
Chosen Option : --

Q.20 A right circular cone is inscribed in a cube of side 9 cm occupying the maximum space possible. What is the ratio of the volume of the cube to the volume of the cone?

(Take $\pi = \frac{22}{7}$)

- Ans**
- 1. 81 : 22
 - 2. 11 : 42
 - 3. 42 : 11
 - 4. 22 : 81

Question ID : 65497818297
Chosen Option : --

Q.21 The average age of a 10-person committee increases by 3 when three men aged 35 years, 48 years and 49 years are substituted by three women. The average age (in years) of the three women is:

- Ans
- 1. 54
 - 2. 74
 - 3. 44
 - 4. 64

Question ID : 65497818284
Chosen Option : 3

Q.22 The number of students in three sections of Grade 10 in a school are in the proportion 3 : 5 : 8. If 15, 30 and 15 more students are admitted in the three sections, respectively, the new proportion becomes 4 : 7 : 9. The total number of students before the new admissions is:

- Ans
- 1. 320
 - 2. 160
 - 3. 240
 - 4. 400

Question ID : 65497818290
Chosen Option : 3

Q.23 The price of a semi-precious stone weighing 48 g, is ₹2,30,400. It is broken into two pieces whose weights are in the ratio of 5 : 7. If the price is proportional to the square of the weight, then the loss (in ₹) incurred, is:

- Ans
- 1. 1,12,000
 - 2. 40,000
 - 3. 1,18,400
 - 4. 78,400

Question ID : 65497818291
Chosen Option : --

Q.24 The value of $12 \times [(9 - 4) \div \{(8 \div 8 \text{ of } 4) + (4 \div 4 \text{ of } 2)\}]$ is:

- Ans
- 1. $\frac{15}{2}$
 - 2. 80
 - 3. $\frac{15}{4}$
 - 4. 20

Question ID : 65497816279
Chosen Option : --

Q.25 An employee gets two successive increments in his salary, as a result of which his salary becomes 2.5 times the initial salary. What was his first percentage increment, if the second percentage increment was 4 times as high as the first?

- Ans**
- 1. 10%
 - 2. 25%
 - 3. 50%
 - 4. 12%

Question ID : 65497818286
Chosen Option : 1