

Section : Part C Elementary Mathematics

Q.1 The difference between the compound interest and the simple interest on a certain sum at 8% per annum for 2 years is ₹144. What is the amount (in ₹)?

- Ans**
- 1. 20,500
 - 2. 24,500
 - 3. 40,000
 - 4. 22,500

Question ID : **65497830295**
Status : **Answered**
Chosen Option : **4**

Q.2 The value of $75 \div 30 - \frac{3}{4}$ of $\left(\frac{5}{7} \div \frac{9}{14}\right) - \left(3\frac{1}{3} - 1\frac{2}{3}\right)$ is:

- Ans**
- 1. 0
 - 2. 10
 - 3. 1
 - 4. 5

Question ID : **65497830298**
Status : **Answered**
Chosen Option : **1**

Q.3 After applying successive discounts of 10% and 5% on the marked price of an article, it was sold for ₹3,420. Find the marked price of the article.

- Ans**
- 1. ₹5,000
 - 2. ₹4,400
 - 3. ₹6,000
 - 4. ₹4,000

Question ID : 65497830301
Status : Answered
Chosen Option : 4

Q.4 12 spherical balls of radius 10 cm are dropped in a bucket which is full of water up to the brim. The water flowed out is collected in a cylindrical jar of radius 20 cm. What is the height (in cm) of the water in the jar? (Take $\pi = \frac{22}{7}$)

- Ans**
- 1. 45
 - 2. 32
 - 3. 40
 - 4. 18

Question ID : 65497830297
Status : Answered
Chosen Option : 3

Q.5 Raghu and Raman start together to walk a certain equal distance at a speed of 10 km/h and 8 km/h, respectively. Raghu arrives 30 minutes before Raman arrives. Find the distance between the start and the end point.

- Ans**
- 1. 25 km
 - 2. 28 km
 - 3. 24 km
 - 4. 20 km

Question ID : 65497830299
Status : Answered
Chosen Option : 4

Q.6 The sum of two numbers m and n is 84 ($m > n$) and their difference is 6. What is the ratio of the two numbers?

- Ans**
- 1. 4 : 3
 - 2. 17 : 15
 - 3. 9 : 8
 - 4. 15 : 13

Question ID : 65497830316
Status : Answered
Chosen Option : 4

Q.7 Soni and Gita together can complete a job in 8 h and Arti alone can complete the job in 12 h. In how many hours can Gita alone complete the job?

- Ans**
- 1. 48
 - 2. 12
 - 3. 24
 - 4. 14

Question ID : **65497830302**
 Status : **Marked For Review**
 Chosen Option : **3**

Q.8 The speed of a train is 110 km/h. It is increased by 20% and then runs at uniform speed. The train driver sees the 'Slow Down' sign, so he reduces the speed of the train by 40% of the speed at that moment. What is the final speed (in km/h, correct to one decimal place) of the train?

- Ans**
- 1. 69.2
 - 2. 75.5
 - 3. 66.5
 - 4. 79.2

Question ID : **65497830312**
 Status : **Answered**
 Chosen Option : **4**

Q.9 The average weight of 24 persons in a group is 72 kg. If 3 persons with average weight 78 kg leave the group and 4 persons of average weight 75 kg join the group, then what will be the average weight (in kg) of the persons in the group now?

- Ans**
- 1. 66.5
 - 2. 71.76
 - 3. 67.74
 - 4. 67.8

Question ID : **65497830306**
 Status : **Answered**
 Chosen Option : **2**

Q.10 Let x be a number between 1420 and 1780 such that when x is divided by 10, 15, 24 and 32, the remainder in each case is 7. The sum of the digits of x is:

- Ans**
- 1. 22
 - 2. 13
 - 3. 16
 - 4. 19

Question ID : **65497830305**
 Status : **Answered**
 Chosen Option : **3**

Q.11 The least number of square tiles required to pave the floor of a room with dimensions 15 metres and 12 metres will be:

- Ans
- 1. 20
 - 2. 16
 - 3. 15
 - 4. 60

Question ID : 65497830303
Status : Answered
Chosen Option : 1

Q.12 A can do a certain piece of work in 20 days. B is 25% more efficient than A, and C is 20% more efficient than B. A and C work together for 5 days. B alone will complete the remaining work in:

- Ans
- 1. 9 days
 - 2. 8 days
 - 3. 6 days
 - 4. 5 days

Question ID : 65497830313
Status : Answered
Chosen Option : 3

Q.13 By selling an article for ₹170, a man loses 15%. What per cent will he gain or lose, if he sells it for ₹206.40?

- Ans
- 1. Loss, 1.6%
 - 2. Loss, 3.2%
 - 3. Gain, 3.2%
 - 4. Gain, 1.6%

Question ID : 65497830309
Status : Answered
Chosen Option : 3

Q.14 Seema is younger than Reema by 8 years. If 4 years back, their ages were in the ratio 1 : 2, then the age (in years) of Seema after 6 years from now will be:

- Ans
- 1. 24
 - 2. 18
 - 3. 20
 - 4. 12

Question ID : 65497830296
Status : Answered
Chosen Option : 2

Q.15 A trader sells an item for ₹805 after offering a discount of 12.5% on its marked price. Had he not offered the discount, he would have earned a profit of 15%. What is the cost price (in ₹) of the item?

- Ans
- 1. 780
 - 2. 700
 - 3. 800
 - 4. 750

Question ID : 65497830315
Status : Answered
Chosen Option : 3

Q.16 The speed of a boat in still water is 10 km/h. The time taken by the boat to go 35 km downstream is 1.25 times the time taken by it to go 14 km upstream. How much time (in hours) will it take to go 60 km downstream?

- Ans**
- 1. 3
 - 2. 3.5
 - 3. 4
 - 4. 4.5

Question ID : **65497830314**
 Status : **Answered**
 Chosen Option : **4**

Q.17 The marked price of an article is ₹450. It is sold for ₹267.30, after offering three successive discounts of 10%, x %, and 20%. What is the value of x ?

- Ans**
- 1. 16.5
 - 2. 17.5
 - 3. 18
 - 4. 19

Question ID : **65497830311**
 Status : **Answered**
 Chosen Option : **2**

Q.18 P sold a lamp to Q at a profit of 20%. Later, Q sold the same lamp to P at a profit of 30%, thereby making a profit of ₹108. How much (in ₹) did P pay originally for the lamp?

- Ans**
- 1. 300
 - 2. 330
 - 3. 320
 - 4. 280

Question ID : **65497830294**
 Status : **Answered**
 Chosen Option : **1**

Q.19 A number is decreased by 25% and then increased by 25%. The net percentage increase or decrease is:

- Ans**
- 1. 2.5% decrease
 - 2. $6\frac{1}{4}$ % decrease
 - 3. $3\frac{2}{3}$ % increase
 - 4. 4% decrease

Question ID : **65497830304**
 Status : **Answered**
 Chosen Option : **2**

Q.20 A certain sum amounts to ₹8,640 in 2 years at simple interest and to ₹9,720 in 3 years. The sum (in ₹) and the rate of interest p.a., respectively, are:

- Ans
- 1. ₹6,450 and 15%
 - 2. ₹6,450 and $16\frac{2}{3}\%$
 - 3. ₹6,480 and $16\frac{2}{3}\%$
 - 4. ₹6,480 and 15%

Question ID : 65497830308
Status : Answered
Chosen Option : 3

Q.21 The ratio of the incomes of A and B is 4 : 5 and the ratio of their expenditures is 2 : 3. If A and B save ₹7,200 and ₹6,000, respectively, then the income (in ₹) of A is:

- Ans
- 1. 19,200
 - 2. 20,000
 - 3. 24,000
 - 4. 18,000

Question ID : 65497830307
Status : Answered
Chosen Option : 1

Q.22 The average weight of 56 students in a group is 55 kg. If 12 students of average weight 60 kg leave and 6 students of average weight 52.5 kg join the group, then the average weight of the remaining students in the group decreases by:

- Ans
- 1. 2 kg
 - 2. 1.8 kg
 - 3. 1.5 kg
 - 4. 2.5 kg

Question ID : 65497830310
Status : Answered
Chosen Option : 3

Q.23 The value of $[6 + 3 \text{ of } 7 - 5] \div 2 \text{ of } 11$ is:

- Ans
- 1. 22
 - 2. 11
 - 3. 1
 - 4. 121

Question ID : 65497830300
Status : Answered
Chosen Option : 3

Q.24 Three solid metallic cubes of sides 6 cm, 8 cm and 10 cm, respectively, were melted to form a new solid cube.

Find the side (in cm) of the new solid cube.

- Ans
- 1. 9
 - 2. 12
 - 3. 8
 - 4. 12.5

Question ID : 65497830318
Status : Answered
Chosen Option : 2

Q.25 The difference between the compound interest and the simple interest on a certain sum at 5% per annum for 2 years is ₹152. What is the amount (in ₹)?

- Ans
- 1. 50,500
 - 2. 60,000
 - 3. 60,800
 - 4. 10,500

Question ID : 65497830317
Status : Answered
Chosen Option : 3