Section : **Numerical Aptitude**

Q.1 A person crosses an 1800-metre long street in 6 minutes. The speed of the person in km/h is:

Ans

✗ 1. 9

✗ 2. 15

✓ 3. 18

✗ 4. 12

Question ID : **65497817170**
Chosen Option : **3**

Q.2 A single discount equivalent to three successive discounts of 10%, 15% and 18%, is:

Ans

✗ 1. 35.36%

✗ 2. 34.17%

✓ 3. 37.27%

✗ 4. 32.68%

Question ID : **65497817174**
Chosen Option : **3**

Q.3 A, B and C can do a piece of work in 10, 15 and 30 days, respectively. If B and C both assist A on every third day, then in how many days will 40% of the work be completed?

Ans

✗ 1. $3\frac{1}{2}$

✗ 2. 5

✗ 3. $2\frac{1}{2}$

✓ 4. 3

Question ID : **65497817169**
Chosen Option : **4**

Q.4 Three articles are bought at ₹180 each. One of them is sold at a loss of 10%. If the other two articles are sold so as to gain 20% on the whole transaction, then what is the gain percentage on the two articles?

Ans

✗ 1. 45%

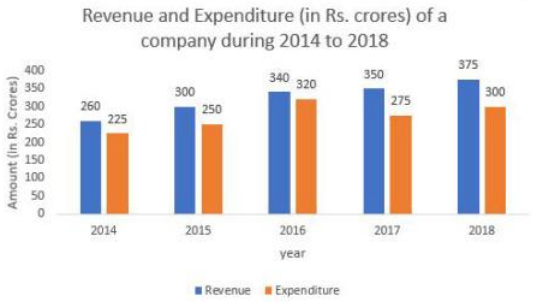
✓ 2. 35%

✗ 3. 37.5%

✗ 4. 42.5%

Question ID : **65497817177**
Chosen Option : **2**

Q.5 Study the given graph and answer the question that follows.



In which year is the percentage increase in the revenue as compared to that in the preceding year the highest?

Ans

✗ 1. 2016

✗ 2. 2017

✓ 3. 2015

✗ 4. 2018

Question ID : **65497817192**
Chosen Option : **3**

Q.6 A field is in the form of a circle. The area of the field is 3850 m^2, and if the cost of fencing around it is ₹11 per metre, then the cost (in ₹) is:

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

Ans

1. 2,200 ✗
2. 2,420 ✓
3. 2,840 ✗
4. 3,000 ✗

Question ID : **65497817185**
Chosen Option : **2**

Q.7 What is the difference (in ₹) between the compound interest, when interest is compounded 6-monthly, and the simple interest on a sum of ₹20,000 for $1\frac{1}{2}$ year at 10% p.a.?

Ans

1. 76.25 ✗
2. 91.5 ✗
3. 87 ✗
4. 152.5 ✓

Question ID : **65497817181**
Chosen Option : **4**

Q.8 A girl spends 80% of her income. If her income increases by 18% and her expenditure increases by 25%, then what is the percentage increase or decrease in her savings (correct to one decimal place)?

Ans

1. 5%, decrease ✗
2. 10%, decrease ✓
3. 10%, increase ✗
4. 5%, increase ✗

Question ID : **65497817175**
Chosen Option : **2**

Q.9 The mean of 100 items is 51. It was discovered that three items, which should have been 50, 70, 60, were wrongly read as 40, 20, 50, respectively. The correct mean is:

Ans

1. 52.3 ✗
2. 51.7 ✓
3. 48.6 ✗
4. 50.8 ✗

Question ID : **65497817183**
Chosen Option : **2**

Q.10 A hall is 18 m long and 12 m broad. If the area of the floor is equal to the sum of the areas of the four walls, the volume (in m^3) of the hall is:

Ans

✗ 1. 876.2

✓ 2. 777.6

✗ 3. 576.4

✗ 4. 675.5

Question ID : **65497817184**
Chosen Option : **2**

Q.11 The incomes of A and B are in the ratio 6 : 11. The ratio of their expenditures is 1 : 2. If A and B save ₹9,000 and ₹11,500, respectively, then the expenditure of B is:

Ans

✗ 1. ₹55,500

✗ 2. ₹54,900

✗ 3. ₹55,800

✓ 4. ₹60,000

Question ID : **65497817180**
Chosen Option : **4**

Q.12 The incomes of A and B are in the ratio 3 : 4, and their expenditures are in the ratio 9 : 5. If the income of A is equal to three times the expenditure of B, then what is the ratio of the savings of A and B?

Ans

✓ 1. 2 : 5

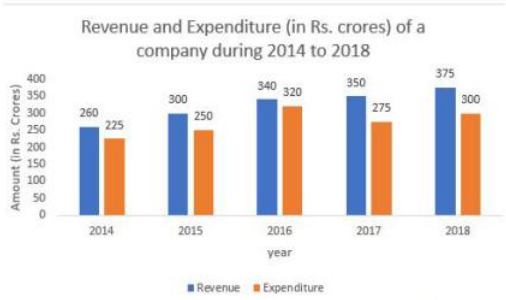
✗ 2. 5 : 3

✗ 3. 5 : 2

✗ 4. 3 : 5

Question ID : **65497817179**
Chosen Option : **1**

Q.13 Study the given graph and answer the question that follows.



What is the ratio of the total expenditure in 2015 and 2017 to that of the revenue of the company in 2016 and 2018?

Ans

✗ 1. 143 : 105

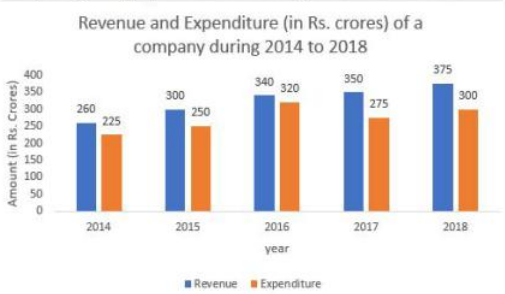
✓ 2. 105 : 143

✗ 3. 115 : 114

✗ 4. 130 : 103

Question ID : **65497817190**
Chosen Option : **2**

Q.14 Study the given graph and answer the question that follows.



The revenue of the company in 2016 is by what percentage more than the average of the revenue in 2014, 2016 and 2018 (correct to the nearest integer)?

Ans

✗ 1. 8%

✗ 2. 7%

✗ 3. 9%

✓ 4. 5%

Question ID : **65497817191**
Chosen Option : **4**

Q.15 The average weight of 6 persons decreases by 2.5 kg when a new person comes in place of one of them weighing 70 kg. What is the weight (in kg) of the new person?

Ans

✗ 1. 60

✗ 2. 75.5

✗ 3. 62.5

✓ 4. 55

Question ID : **65497817173**
Chosen Option : **4**

Q.16 Simplify the following expression $\left[8 \times 5 - 3 \text{ of } \left(2\frac{3}{5} \div 1\frac{2}{5} \times 5 - 3\right)\right] \times \frac{7}{2}$.

Ans

✗ 1. 52

✓ 2. 74

✗ 3. 208

✗ 4. 352

Question ID : **65497817895**
Chosen Option : **2**

Q.17 The curved surface area of a right circular cone is 65π cm^2 and the radius of its base is 5 cm. What is 40% of the volume of the cone, in cm^3?

Ans

✗ 1. 50π

✓ 2. 40π

✗ 3. 180π

✗ 4. 100π

Question ID : **65497817186**
Chosen Option : **2**

Q.18 Two numbers are, respectively, 17% and 50% less than a third number. The ratio of the two numbers is:

Ans

✗ 1. 59 : 35

✗ 2. 35 : 59

✗ 3. 50 : 83

✓ 4. 83 : 50

Question ID : **65497817178**
Chosen Option : **4**

Q.19 A person invested a sum of ₹6,500 at $x\%$ per annum at simple interest and a sum of ₹7,500 at $(x-2)\%$ at simple interest. If total interest earned on both the investments for 3 years is ₹3,750, then the rate of interest on the second investment is:

Ans

✓ 1. 8%

✗ 2. 12%

✗ 3. 14%

✗ 4. 10%

Question ID : **65497817182**
Chosen Option : **1**

Q.20 The cost price of 30 articles is the same as the selling price of 24 articles. If the profit is x%, then the value of x is:

Ans

✗ 1. 18

✗ 2. 30

✓ 3. 25

✗ 4. 24

Question ID : **65497817176**
Chosen Option : **3**

Q.21 A train can travel 40% faster than a car. Both the train and car start from point A at the same time and reach point B, which is 70 kms away from A, at the same time. On the way, however, the train lost about 15 minutes while stopping at stations. The speed of the train in km/h is:

Ans

✗ 1. 100

✗ 2. 80

✓ 3. 112

✗ 4. 90

Question ID : **65497817171**
Chosen Option : **3**

Q.22 If A and B can do a piece of work in 20 days, and A alone can do the same work in 60 days, then in how many days can B alone complete the same work?

Ans

✗ 1. 50

✗ 2. 75

✓ 3. 30

✗ 4. 40

Question ID : **65497817168**
Chosen Option : **3**

Q.23 Let x be the least number divisible by 8, 12, 30, 36 and 45 and x is also a perfect square. What is the sum of the digits of the value of x?

Ans

✗ 1. 6

✗ 2. 7

✗ 3. 4

✓ 4. 9

Question ID : **65497817187**
Chosen Option : **4**

Q.24 A grocer has a sale of ₹9,435, ₹9,927, ₹9,855, ₹9,230 and ₹9,562 for five consecutive months. How much sale (in ₹) must he have in the sixth month so that he gets an average sale of ₹9,500?

Ans

✗ 1. 8,231

✗ 2. 9,991

✓ 3. 8,991

✗ 4. 9,231

Question ID : **65497817172**
Chosen Option : **3**

Q.25 The value of $4\frac{2}{5} \div \left\{\left(1\frac{1}{2} - 3\frac{1}{5}\right) \div 3\frac{2}{5} + \left(2\frac{1}{5} \div 1\frac{1}{2} + 4\frac{2}{5}\right) + \frac{1}{2}\right\}$ is:

Ans

✗ 1. $\frac{4}{7}$

✗ 2. $\frac{3}{7}$

✗ 3. $\frac{3}{5}$

✓ 4. $\frac{3}{4}$

Question ID : **65497815674**
Chosen Option : **4**