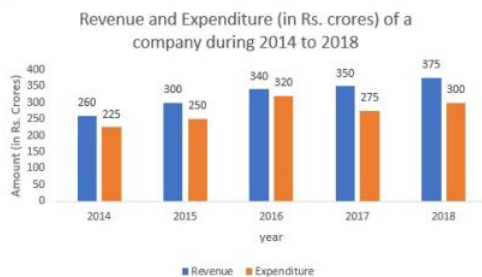


Section : Numerical Aptitude

**Q.1** Study the following 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, between 1% and 3%?

- Ans
- 1. 2015
  - 2. 2017
  - 3. 2018
  - 4. 2016

Question ID : 65497816283  
Chosen Option : 2

**Q.2** The cost price of 30 articles is the same as the selling price of x articles. If the profit is 25%, then the value of x is:

- Ans
- 1. 18
  - 2. 30
  - 3. 24
  - 4. 25

Question ID : 65497816267  
Chosen Option : 3

**Q.3** 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 25% on the whole transaction, then what is the gain percentage on the two articles?

- Ans
- 1. 30%
  - 2. 42.5%
  - 3. 37.5%
  - 4. 45%

Question ID : 65497816268  
Chosen Option : 2

**Q.4** A person invested a sum of ₹6,500 at  $x\%$  per annum at simple interest and a sum of ₹7,500 at  $(x - 2)\%$  per annum at simple interest. If the total interest earned on both the investments for 3 years is ₹3,750, then the rate of interest on the first investment is:

- Ans**
- 1. 14%
  - 2. 10%
  - 3. 8%
  - 4. 12%

Question ID : 65497816273  
Chosen Option : 2

**Q.5** What is the simplified value of  $\left\{\left(1 - \frac{2}{15}\right) + \frac{2}{5}\right\} \div \frac{14}{15} + \left(\frac{2}{3} \text{ of } \frac{6}{7} \div \frac{4}{9} - \frac{1}{6} \times 1\frac{5}{7}\right)$ ?

- Ans**
- 1.  $\frac{11}{15}$
  - 2.  $\frac{33}{14}$
  - 3. 2
  - 4.  $\frac{1}{2}$

Question ID : 65497817391  
Chosen Option : 2

**Q.6** The curved surface area of a right circular cone is  $65\pi \text{ cm}^2$  and the radius of its base is 5 cm. What is half of the volume of the cone, in  $\text{cm}^3$ ?

- Ans**
- 1.  $50\pi$
  - 2.  $100\pi$
  - 3.  $180\pi$
  - 4.  $45\pi$

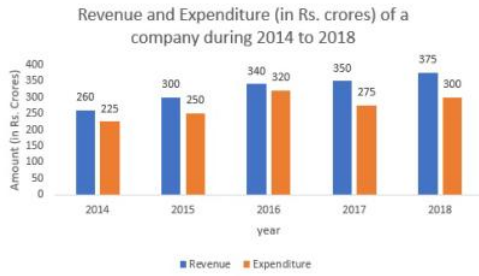
Question ID : 65497816277  
Chosen Option : 1

**Q.7** A girl spends 76% 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. 6.9%, decrease
  - 2. 4.2%, decrease
  - 3. 5.7%, increase
  - 4. 8.4%, increase

Question ID : 65497816266  
Chosen Option : 2

Q.8 Study the following graph and answer the question that follows.



The expenditure of the company in 2016 is what percentage more than the average revenue (per year) in 2014, 2015 and 2018 (correct to the nearest integer)?

- Ans
- ✓ 1. 3%
  - ✗ 2. 5%
  - ✗ 3. 6%
  - ✗ 4. 4%

Question ID : 65497816282  
Chosen Option : 1

Q.9 A single discount equivalent to three simple discounts of 10%, 12% and 15% is:

- Ans
- ✓ 1. 32.68%
  - ✗ 2. 34.17%
  - ✗ 3. 37%
  - ✗ 4. 35.36%

Question ID : 65497816265  
Chosen Option : 1

Q.10 A train can travel 40% faster than a car. Both the train and the car start from point A at the same time and reach point B, which is 70 km away from point A, at the same time. On the way, however, the train lost about 15 minutes while stopping at stations. The speed of the car in km/h is:

- Ans
- ✗ 1. 120
  - ✓ 2. 80
  - ✗ 3. 90
  - ✗ 4. 100

Question ID : 65497816262  
Chosen Option : --

Q.11 6 व्यक्तियों का औसत वजन तब 2.5 kg बढ़ जाता है जब 55 kg वजन वाले एक व्यक्ति के स्थान पर एक नया व्यक्ति आ जाता है। नए व्यक्ति का वजन (kg में) कितना हो सकता है?

- Ans
- ✓ 1. 70
  - ✗ 2. 62.5
  - ✗ 3. 60
  - ✗ 4. 75.5

Question ID : 65497816264  
Chosen Option : 1

**Q.12** The mean of 100 items is 47. It was discovered that three items which should have been 60, 70, 80 were wrongly read as 40, 20, 50, respectively. The correct mean is:

- Ans**
- 1. 48
  - 2. 47
  - 3. 50
  - 4. 51

Question ID : 65497816274  
Chosen Option : 1

**Q.13** Two numbers are, respectively, 17% and 50% more than a third number. The ratio of the two numbers is:

- Ans**
- 1. 39 : 50
  - 2. 50 : 39
  - 3. 59 : 39
  - 4. 39 : 59

Question ID : 65497816269  
Chosen Option : 1

**Q.14** 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 can the work be completed?

- Ans**
- 1.  $8\frac{1}{2}$
  - 2. 5
  - 3. 8
  - 4.  $7\frac{1}{2}$

Question ID : 65497816260  
Chosen Option : 3

**Q.15** एक राशि (₹ में) A, B और C के बीच 5 : 6 : 7 के अनुपात में वितरित की जाती है। यदि B अपने हिस्से में से ₹400 की धनराशि C को देता है, तो A, B और C के हिस्सों का अनुपात 2 : 3 : 4 हो जाता है। शुरुआत में, A और C के हिस्सों (₹ में) का योग कितना था?

- Ans**
- 1. 7,200
  - 2. 14,000
  - 3. 8,400
  - 4. 11,200

Question ID : 65497816271  
Chosen Option : --

Q.16 The value of  $5\frac{5}{29} - \left[ \frac{15}{4} \div \left\{ \frac{3}{4} \times \left( \frac{3}{2} - \frac{1}{5} - \frac{1}{3} \right) \right\} \right]$  is:

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

Question ID : 65497815269

Chosen Option : 3

Q.17 A fruit seller has a sale of ₹10,435, ₹9,927, ₹10,855, ₹10,230 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 ₹10,500?

- Ans
- 1. 9,231
  - 2. 8,231
  - 3. 8,991
  - 4. 11,991

Question ID : 65497816263

Chosen Option : 4

Q.18 If A and B can do a piece of work in 20 days, and A alone can do the same work in 30 days, then in how many days can B alone complete the same work?

- Ans
- 1. 60
  - 2. 40
  - 3. 75
  - 4. 50

Question ID : 65497816259

Chosen Option : 1

Q.19 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. 5 : 2
  - 2. 3 : 5
  - 3. 5 : 3
  - 4. 2 : 5

Question ID : 65497816270

Chosen Option : 4

**Q.20** A hall is 18 m long and 12 m broad. If the sum of the areas of the floor and the ceiling is equal to the sum of the areas of the four walls, the volume (in  $m^3$ ) of the hall is:

- Ans
- 1. 1175.5
  - 2. 1876.2
  - 3. 1555.2
  - 4. 1376.4

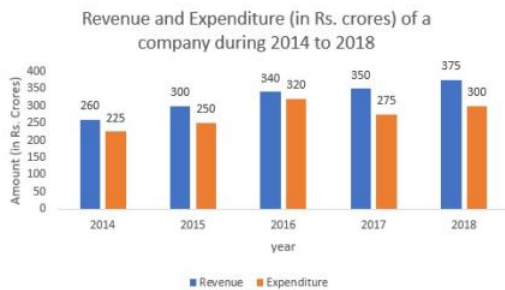
Question ID : 65497816275  
Chosen Option : 3

**Q.21** Let  $x$  be the least number divisible by 8, 12, 30, 36 and 45 and  $x$  is also a perfect square. What is the value of  $x$ ?

- Ans
- 1. 3600
  - 2. 4900
  - 3. 2500
  - 4. 4225

Question ID : 65497816278  
Chosen Option : 1

**Q.22** Study the following graph and answer the question that follows.



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

- Ans
- 1. 143 : 105
  - 2. 130 : 103
  - 3. 115 : 114
  - 4. 105 : 143

Question ID : 65497816281  
Chosen Option : 1

**Q.23** A field is in the form of a circle. The cost of fencing around it at ₹11 per metre is ₹2,420. What is the area (in  $m^2$ ) of the field? (Take  $\pi = \frac{22}{7}$ )

- Ans
- 1. 3850
  - 2. 4500
  - 3. 4250
  - 4. 2700

Question ID : 65497816276  
Chosen Option : 1

**Q.24** A person crosses a 900-metre long street in 6 minutes. The speed of the person in km/h is:

- Ans**  1. 9  
 2. 10  
 3. 15  
 4. 12

Question ID : 65497816261  
Chosen Option : 1

**Q.25** What is the difference (in ₹) between the compound interest, when interest is compounded 6-monthly, and the simple interest on a sum of ₹10,000 for  $1\frac{1}{2}$  years at 10% p.a.?

- Ans**  1. 102.25  
 2. 87  
 3. 76.25  
 4. 91.5

Question ID : 65497816272  
Chosen Option : 3

