

Section : **Quantitative Aptitude**

Q.1 Rajni purchased an LED TV set for ₹22,500 and spent ₹800 on its transportation and ₹1,000 on installation. At what price should she sell it so as to earn an overall profit of 20%?

- Ans**
- 1. ₹29,180
 - 2. ₹29,150
 - 3. ₹29,160
 - 4. ₹29,170

Question ID : **6549788602**
Status : **Answered**
Chosen Option : **3**

Q.2 If $Y = \tan 35^\circ$, then the value of $(2 \tan 55^\circ + \cot 55^\circ)$ is:

- Ans**
- 1. $\frac{2-Y}{Y^2}$
 - 2. $\frac{2+Y^2}{Y}$
 - 3. $\frac{2}{Y^2}$
 - 4. $\frac{2-Y^2}{Y}$

Question ID : **6549788614**
Status : **Answered**
Chosen Option : **2**

Q.3 Simplify the expression $45 - [36 - \{29 - (25 - \overline{7 + 4})\}]$.

- Ans**
- 1. 22
 - 2. 26
 - 3. 24
 - 4. 28

Question ID : **6549788613**
Status : **Answered**
Chosen Option : **3**

Q.4 Vaibhav and Vignesh each travel a distance of 78 km such that the speed of Vaibhav is faster than that of Vignesh. The sum of their speeds is 91 km/h and the total time taken by both is 3 hours and 30 minutes. The speed of Vaibhav is:

- Ans**
- 1. 45 km/h
 - 2. 52 km/h
 - 3. 54 km/h
 - 4. 48 km/h

Question ID : **6549787385**
Status : **Not Answered**
Chosen Option : --

Q.5 The printed price on a Mathematics book is ₹550. If it is sold at two successive discounts of 20% and 30%, then its selling price will be:

- Ans**
- 1. ₹308
 - 2. ₹312
 - 3. ₹310
 - 4. ₹305

Question ID : **6549788600**
Status : **Answered**
Chosen Option : 1

Q.6 If $x^4 + \frac{16}{x^4} = 27217$, $x > 0$, then the value of $x + \frac{2}{x}$ is:

- Ans**
- 1. 15
 - 2. 11
 - 3. 17
 - 4. 13

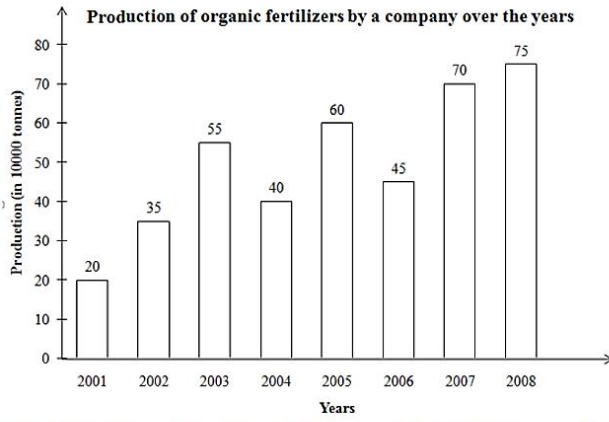
Question ID : **6549788611**
Status : **Answered**
Chosen Option : 4

Q.7 If the area of a right-angled isosceles triangle is 676 cm^2 , then the length of its hypotenuse is:

- Ans**
- 1. 52 cm
 - 2. 53 cm
 - 3. 50 cm
 - 4. 51 cm

Question ID : **6549788598**
Status : **Answered**
Chosen Option : 1

Q.8 Study the given bar graph and answer the question that follows.



In how many of the given years was the production of organic fertilizers more than the average production of organic fertilizers in the given years?

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

Question ID : **6549788617**
Status : **Answered**
Chosen Option : **3**

Q.9 Study the given bar graphs and answer the question that follows.

The bar graphs represent the amount invested in raw materials (in ₹ crore) and the sale of the products, by a textile company in the years 2007– 2012. The X-axis represents the years. The Y-axis represents the amount invested in raw materials (in ₹ crore) in figure 1 and sale of products in figure 2, respectively.



Figure 1

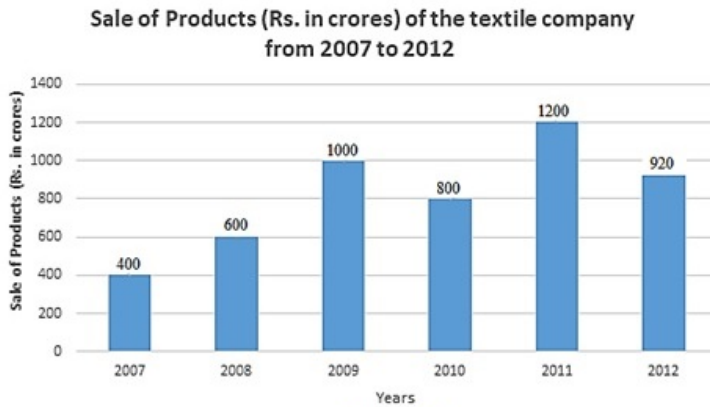


Figure 2

The sum of the amounts invested during the years 2007, 2008 and 2010 is what percentage (correct to one decimal place) of the sum of the sales of products during 2009 and 2011?

- Ans
- 1. 61.4
 - 2. 61.5
 - 3. 60.5
 - 4. 60.4

Question ID : 6549786800
Status : Answered
Chosen Option : 4

Q.10 Two circular football grounds of radius 42 m and 35 m are to be replaced with a bigger circular ground. What would be the radius of this new ground if the new ground has the same area as the sum of the two small grounds?

- Ans**
- 1. $\sqrt{2989}$ m
 - 2. $\sqrt{2999}$ m
 - 3. $\sqrt{2981}$ m
 - 4. $\sqrt{2979}$ m

Question ID : **6549788606**
 Status : **Answered**
 Chosen Option : **1**

Q.11 Three numbers are in the ratio $\frac{3}{4} : \frac{5}{8} : \frac{7}{12}$. If the difference between the greatest and the smallest number is 48, then the value of the greatest number will be:

- Ans**
- 1. 126
 - 2. 226
 - 3. 216
 - 4. 262

Question ID : **6549787391**
 Status : **Answered**
 Chosen Option : **2**

Q.12 X and Y together can do a work in $2\frac{2}{5}$ days, Y and Z together can do the same work in 3 days, and X and Z together can do the same work in 4 days. The time taken by X, Y and Z together to do the same work is:

- Ans**
- 1. 2 days
 - 2. 1 day
 - 3. $2\frac{1}{2}$ days
 - 4. $\frac{1}{2}$ day

Question ID : **6549788596**
 Status : **Answered**
 Chosen Option : **2**

Q.13 If $\tan^2 x - 3\tan x + 2 = 0$ and $(0^\circ < x < 90^\circ)$, then the value of x is:

- Ans**
- 1. 90°
 - 2. 30°
 - 3. 45°
 - 4. 60°

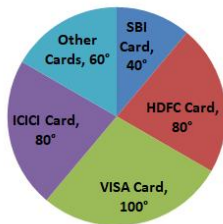
Question ID : **6549788616**
 Status : **Answered**
 Chosen Option : **3**

Q.14 35% of the students in a college are girls and the rest are boys. The total number of students in the college is 2800. 75% of the boys and 85% of the girls passed the final examination. The percentage of total students who passed the final examination is:

- Ans**
- 1. 80%
 - 2. 82%
 - 3. 78%
 - 4. 78.5%

Question ID : **6549787389**
Status : **Not Answered**
Chosen Option : --

Q.15 The pie chart shows the money spent by Aditya through credit cards of different banks. The total money spent by him through the credit cards in a year is ₹3,60,000.



What is the maximum amount spent by Aditya through the credit card of one bank?

- Ans**
- 1. ₹80,000
 - 2. ₹1,80,000
 - 3. ₹1,00,000
 - 4. ₹1,40,000

Question ID : **6549789224**
Status : **Answered**
Chosen Option : **3**

Q.16 A sum of ₹4,000 amounts to ₹5,008 in three years at simple interest at the rate of $x\%$ per annum. If the interest rate becomes $(x + 2.6)\%$, then the revised maturity amount will be:

- Ans**
- 1. ₹5,320
 - 2. ₹5,330
 - 3. ₹5,420
 - 4. ₹5,200

Question ID : **6549787392**
Status : **Answered**
Chosen Option : **3**

Q.17 The area of a circle that is inscribed in a square of area $17\frac{9}{11}$ cm² is:

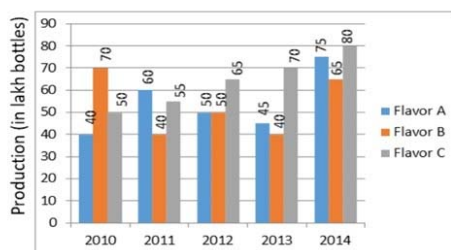
- Ans**
- 1. 22 cm²
 - 2. 28 cm²
 - 3. 16 cm²
 - 4. 14 cm²

Question ID : **6549787393**
 Status : **Not Answered**
 Chosen Option : --

Q.18 Study the given bar graph and answer the question that follows.

A soft drink company prepares drinks of three different flavours A, B and C. The bar graph shows the production of three flavours over a period of five years from 2010 to 2014.

Production of three different flavours A, B and C by a company over the five years (in lakh bottles).



For which of the following years, is the percentage of the rise in production compared to its previous year the maximum with respect to flavour C?

- Ans**
- 1. 2014
 - 2. 2012
 - 3. 2013
 - 4. 2011

Question ID : **6549787408**
 Status : **Not Answered**
 Chosen Option : --

Q.19 If the number 579683pq is divisible by both 5 and 8, then the smallest possible values of p and q will be:

- Ans**
- 1. P = 2, q = 0
 - 2. P = 4, q = 3
 - 3. P = 3, q = 0
 - 4. P = 2, q = 2

Question ID : **6549787400**
 Status : **Answered**
 Chosen Option : 1

Q.20 If $\tan \theta + \cot \theta = 4$, then the ratio of $3(\tan^2 \theta + \cot^2 \theta)$ to $(2 \operatorname{cosec}^2 \theta \sec^2 \theta - 4)$ will be:

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

Question ID : 6549787403
Status : Answered
Chosen Option : 2

Q.21 The three medians RQ, SP and TN of ΔRST intersect at point O. If the area of ΔRST is 48 cm^2 , then the area of the quadrilateral SQON is:

- Ans**
- 1. 20 cm^2
 - 2. 12 cm^2
 - 3. 16 cm^2
 - 4. 18 cm^2

Question ID : 6549788608
Status : Answered
Chosen Option : 3

Q.22 If $8a^3 + b^3 = 16$ and $2a + b = 4$, then find the value of $16a^4 + b^4$.

- Ans**
- 1. 36
 - 2. 38
 - 3. 32
 - 4. 28

Question ID : 6549788610
Status : Answered
Chosen Option : 3

Q.23 If $x - \frac{1}{2x} = 4$, then the value of $8x^3 - \frac{1}{x^3}$ will be:

- Ans**
- 1. 480
 - 2. 540
 - 3. 520
 - 4. 560

Question ID : 6549787397
Status : Answered
Chosen Option : 3

Q.24 In ΔABC , medians BE and CF are perpendicular to each other and intersect at M . If $BE = 9$ cm and $CF = 13$ cm, then the area of ΔABC will be:

- Ans**
- 1. 68 cm^2
 - 2. 76 cm^2
 - 3. 78 cm^2
 - 4. 75 cm^2

Question ID : **6549787395**
Status : **Answered**
Chosen Option : **3**

Q.25 The average of the squares of four consecutive even natural numbers is 126. The average of 8 times of the greatest number and 5 times of the smallest number is:

- Ans**
- 1. 66
 - 2. 74
 - 3. 76
 - 4. 68

Question ID : **6549787387**
Status : **Not Answered**
Chosen Option : **--**