

SSC CHSL Tier 1 (Quantitative Aptitude) Feb 7, 2016

Q: 1 - When a number is increased by 24, it becomes 110% of itself. What is the number?

Options:

- 1) 288
- 2) 360
- 3) 216
- 4) 240

Correct Answer: 240

Q: 2 - Reduce $3596 / 4292$ to lowest terms.

Options:

- 1) $29/37$
- 2) $17/43$
- 3) $31/37$
- 4) $19/23$

Correct Answer: $31/37$

Q: 3 - A does 60% of a work in 15 days. He then calls B, and they together finish the remaining work in 5 days. How long B alone would take to do the whole work?

Options:

- 1) 25 days
- 2) 20 days
- 3) 80 days
- 4) 24 days

Correct Answer: 25 days

Q: 4 - If $\cot 60^\circ + \operatorname{cosec} 60^\circ = x$, then the value of x is

Options:

- 1) $(1-2\sqrt{2})/\sqrt{2}$
- 2) $(\sqrt{3}-4)/2\sqrt{3}$
- 3) 1
- 4) $\sqrt{3}$

Correct Answer: $\sqrt{3}$

Q: 5 - Two cars travel from city A to city B at a speed of 42 and 60 km/hr respectively. If one car takes 2 hours lesser time than the other car for the journey, then the distance between City A and City B is:

Options:

- 1) 336 km

2) 280 km

3) 420 km

4) 224 km

Correct Answer: 280 km

Q: 6 - If $\sqrt{[(1 - \cos A)/2]} = x$, then the value of x is

Options:

1) $\cos(A/2)$

2) $\tan(A/2)$

3) $\sin(A/2)$

4) $\cot(A/2)$

Correct Answer: $\sin(A/2)$

Q: 7 - If $1 + \sec A = x$, then the value of x is

Options:

1) $\sin A \tan A / (1 + \cos A)$

2) $\sqrt{[\sin A \tan A / (1 - \cos A)]}$

3) $\sin A \tan A / (1 - \cos A)$

4) $\sqrt{[\sin A \tan A / (1 + \cos A)]}$

Correct Answer: $\sin A \tan A / (1 - \cos A)$

Q: 8 - A cone of radius 7 cm and height 12 cm is completely filled with water. This water is emptied into an empty cylindrical vessel of radius 3.5 cm. What will be the height of water in this vessel?

Options:

1) 16 cm

2) 32 cm

3) 5.33 cm

4) 8 cm

Correct Answer: 16 cm

Q: 9 - What is the length of the side of an equilateral triangle, if its area is $64\sqrt{3}$ sq cm?

Options:

1) 8 cm

2) 16 cm

3) $16\sqrt{3}$ cm

4) $8\sqrt{3}$ cm

Correct Answer: 16 cm

Q: 10 - A vendor buys pens at the rate of 4 for Rs 5 and sells at the rate of 4 for Rs 3. What will be the result?

Options:

- 1) 40 percent gain
- 2) 66.6 percent loss
- 3) 66.66 percent gain
- 4) 40 percent loss

Correct Answer: 40 percent loss

Q: 11 - Simple interest on a certain sum of money for 3 years at 18% per annum is half the compound interest on Rs. 9000 for 2 years at 10% per annum. The sum placed on simple interest is:

Options:

- 1) Rs 3500
- 2) Rs 875
- 3) Rs 1750
- 4) Rs 1400

Correct Answer: Rs 1750

Q: 12 - Find k , if the line $4x - y = 1$ is perpendicular to the line $5x - ky = 2$?

Options:

- 1) 20
- 2) -20
- 3) 4
- 4) -4

Correct Answer: -20

Q: 13 - The mean of marks secured by 55 students in division A of class X is 58, 45 students of division B is 54 and that of 75 students of division C is 52. Find the mean of marks of the students of three divisions of Class X.

Options:

- 1) 53.7
- 2) 54.4
- 3) 53
- 4) 55.8

Correct Answer: 54.4

Q: 14 - Find length of the arc whose central angle is 90° and radius of the circle is 3.5 cm?

Options:

- 1) 11 cm
- 2) 5.5 cm
- 3) 16.5 cm
- 4) 22 cm

Correct Answer: 5.5 cm

Q: 15 - The ratio of present ages of Ratnabali and Shaukat is 8:5. After 22 years the ratio of their ages will be 10:9. At present, what is Ratnabali's age?

Options:

- 1) 5
- 2) 14
- 3) 81
- 4) 8

Correct Answer: 8

Q: 16 - The area of an equilateral triangle is $9\sqrt{3}$ sq cm, find height of the triangle?

Options:

- 1) 6 cm
- 2) $6\sqrt{3}$ cm
- 3) $3\sqrt{3}$ cm
- 4) 9 cm

Correct Answer: $3\sqrt{3}$ cm

Q: 17 - Ticket for an adult is Rs 2200 and a child is Rs 990. One child goes free with two adults. If a group has 23 adults and 11 children, what is the discount the group gets?

Options:

- 1) 17.71 percent
- 2) 32.30 percent
- 3) 26.47 percent
- 4) 25.77 percent

Correct Answer: 17.71 percent

Q: 18 - If $(8 - 10x) - (13x - 2) = -9$, then the value of x is

Options:

- 1) $-19/23$
- 2) $19/23$
- 3) $-1/23$
- 4) $1/23$

Correct Answer: $19/23$

Q: 19 - If $xy = -18$ and $x^2 + y^2 = 85$, then find the value of $(x + y)$.

Options:

- 1) 8
- 2) 10
- 3) 9
- 4) 7

Correct Answer: 7

Q: 20 - A number is greater than twice its reciprocal by $3\frac{1}{4}$. Find the number.

Options:

- 1) 7
- 2) 8
- 3) 9
- 4) 6

Correct Answer: 8

Q: 21 - If $2x - 3(x + 2) < 5 - 2x < -x + 2$, then find the value of x.

Options:

- 1) 2
- 2) 0
- 3) 10
- 4) 12

Correct Answer: 10

Q: 22

Refer the below data table and answer the following Question.

नीचे दिये गए डेटा तालिका के आधार पर निम्नलिखित प्रश्न का उत्तर दें।

	Weight (kg) वजन (किलोग्राम)	Height in meter ऊँचाई (मीटर)
Ahilya / अहिल्या	60	1.8
Aishwarya / ऐश्वर्या	70	1.7
Akanksha / आकांशा	63	1.68
Alisha / अलीशा	67	1.76

Who has the least weight to height ratio?

वजन और ऊँचाई का अनुपात किसका सबसे कम है?

Options:

- 1) Ahilya
- 2) Aishwarya
- 3) Akanksha
- 4) Alisha

Correct Answer: Ahilya

Q: 23 -

Refer the below data table and answer the following Question.

नीचे दिये गए डेटा तालिका के आधार पर निम्नलिखित प्रश्न का उत्तर दें।

Year वर्ष	Company's % Profit कंपनी का लाभ %
2011	25
2012	25
2013	5
2014	25
2015	10

What was the Revenue of the company if its Expenditure was Rs 350 crore in the year when its % profit was the least?

यदि एक कंपनी का व्यय उस वर्ष में 350 करोड़ रूपए था जिसमें उसका लाभ % सबसे कम था, तो कंपनी का राजस्व कितना था?

Options:

- 1) 367.5
- 2) 385
- 3) 402.5
- 4) 350

Correct Answer: 367.5

Q: 24 -

The following table shows the number of children in each house of a society.

निम्न तालिका एक समाज के प्रत्येक घर में बच्चों की संख्या दर्शाती है।

Number of Children बच्चों की संख्या	Number of Houses घरों की संख्या
0	3
1	10
2	12
3	3

What is the average number of children per house?

प्रत्येक घर में बच्चों की औसत संख्या क्या है?

Options:

- 1) 1.79
- 2) 1.54
- 3) 2.04
- 4) 1.29

Correct Answer: 1.54

Q: 25 -

Refer the below data table and answer the following Question.

नीचे दिये गए डेटा तालिका के आधार पर निम्नलिखित प्रश्न का उत्तर दें।

Partners भागीदार	Present % share वर्तमान % हिस्सा
Anand / आनंद	15
Basu / बसु	10
Chinmay / चिन्मय	15
Dhiraj / धीरज	10
Ejaz / एजाज	50

If the company has issued six lakh shares between its five partners and if Chinmay offers to sell 15,000 of his shares to Dhiraj, then Dhiraj will have how many shares?

यदि एक कंपनी ने अपने पांच भागीदारों के बीच छः लाख शेयर जारी किए हैं और अगर चिन्मय धीरज को अपने शेयरों में से 15,000 बेचने का प्रस्ताव करता है, तो धीरज के पास कितने शेयर होंगे?

Options:

- 1) 60000 shares
- 2) 75000 shares
- 3) 90000 shares
- 4) 45000 shares

Correct Answer: 75000 shares