

SSC CHSL Tier 1 (Quantitative Aptitude)- Feb 3, 2016

Q: 1 - In a class of 60 students there are 30 girls. The average weight of these girls is 58 Kg and average weight of the full class is 63 kgs. What is the average weight of the boys of the class?

Options:

- 1) 67
- 2) 66
- 3) 68
- 4) 65

Correct Answer: 68

Q: 2 - Two students appeared for an examination. One of them secured 21 marks more than the other and his marks were 80% of the sum of their marks. The marks obtained by them are

Options:

- 1) 88 and 67
- 2) 89 and 68
- 3) 28 and 7
- 4) 98 and 77

Correct Answer: 28 and 7

Q: 3 - Pannalal has done 1/3rd of a job in 20 days, Saiprasad completes the rest of the job in 10 days. In how many days can they together do the job?

Options:

- 1) 12 days
- 2) 6 days
- 3) 3 days
- 4) 24 days

Correct Answer: 12 days

Q: 4 - If Giridhar's salary is $\frac{5}{3}$ times of Hariraj's and Shaunak's is $\frac{2}{3}$ times of Hariraj's, what is the ratio of Giridhar's salary to Shaunak's.

Options:

- 1) 9:10
- 2) 10:9
- 3) 5:2
- 4) 2:5

Correct Answer: 5:2

Q: 5 - If $\sec -7\pi/4 = x$, then the value of x is

Options:

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

Correct Answer: $\sqrt{2}$

Q: 6 - What should be the missing digit so that the number 275_476 becomes exactly divisible by 11?

Options:

- 1) 6
- 2) 4
- 3) 2
- 4) 3

Correct Answer: 3

Q: 7 - If $\tan(A/2) = x$, then the value of x is

Options:

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

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

Q: 8 - If $(\sec A - \tan A)^2 = x$, then the value of x is

Options:

- 1) $(1 + \sin A)/(1 - \sin A)$
- 2) $\sqrt{[(1 - \sin A)/(1 + \sin A)]}$
- 3) $(1 - \sin A)/(1 + \sin A)$
- 4) $\sqrt{[(1 + \sin A)/(1 - \sin A)]}$

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

Q: 9 - If a cylinder of radius 4 cm and height 8 cm is melted and constructed into a cone of the same radius, what will be the height of this cone?

Options:

- 1) 48 cm
- 2) 24 cm
- 3) 8 cm
- 4) 12 cm

Correct Answer: 24 cm

Q: 10 - Points P and Q lie on side AB and AC of triangle ABC respectively such that segment PQ is parallel to side BC. If the ratio of AP:PB is 2:3, and area of Δ APQ is 8 sq cm, what is the area of trapezium PQCB?

Options:

- 1) 50 sq cm
- 2) 18 sq cm
- 3) 14 sq cm
- 4) 42 sq cm

Correct Answer: 42 sq cm

Q: 11 - Find equation of the perpendicular bisector of segment joining the points (2,-5) and (0,7)?

Options:

- 1) $x - 6y = 5$
- 2) $x + 6y = -5$
- 3) $x - 6y = -5$
- 4) $x + 6y = 5$

Correct Answer: $x - 6y = -5$

Q: 12 - Raghunandan sells a machine for Rs 45 lakhs at a loss. Had he sold it for Rs 55 lakh, his gain would have been 9 times the former loss. Find the cost price of the machine.

Options:

- 1) Rs 54 lakhs
- 2) Rs 46 lakhs
- 3) Rs 60 lakhs
- 4) Rs 38 lakhs

Correct Answer: Rs 46 lakhs

Q: 13 - What is the measure of an interior angle of a regular decagon?

Options:

- 1) 120°
- 2) 140°
- 3) 144°
- 4) 150°

Correct Answer: 144°

Q: 14 - The circumference of a circle is 88 cm, find its area?

Options:

- 1) 616 sq cm
- 2) 308 sq cm
- 3) 154 sq cm

4) 77 sq cm

Correct Answer: 616 sq cm

Q: 15 - At 15% discount the selling price of a microwave oven is Rs 34000, what is the selling price if the discount is 37.5%?

Options:

1) Rs 25000

2) Rs 15625

3) Rs 17968.75

4) Rs 29218.75

Correct Answer: Rs 25000

Q: 16 - Coefficient of x in $(x + 9)(8 - 5x)$ is

Options:

1) 37

2) -53

3) -37

4) 53

Correct Answer: -37

Q: 17 - At what rate of compound interest per annum will a sum of Rs 10000 become Rs 12321 in 2 years?

Options:

1) 22 percent

2) 11 percent

3) 7 percent

4) 15 percent

Correct Answer: 11 percent

Q: 18 - If $x - y = -9$ and $xy = -20$, then find $x^2 + y^2$

Options:

1) 61

2) 41

3) 85

4) 113

Correct Answer: 41

Q: 19 - Two cars travel from city A to city B at a speed of 36 and 54 km/hr respectively. If one car takes 3.5 hours lesser time than the other car for the journey, then the distance between City A and City B is

Options:

1) 454 km

2) 567 km

3) 302 km

4) 378 km

Correct Answer: 378 km

Q: 20 - Product of digits of a 2-digit number is 72. If we add 9 to the number, the new number obtained is a number formed by interchange of the digits. Find the number.

Options:

1) 98

2) 89

3) 78

4) 87

Correct Answer: 89

Q: 21 - If $4x - 5(2x - 1) > 2x + 3 > 2 - 3x$; then x can take which of the following values?

Options:

1) 1

2) 0

3) 2

4) -3

Correct Answer: 0

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।

	Number of employees कर्मचारियों की संख्या	Annual salary (in lakhs) वार्षिक वेतन (लाखों में)	Bonus as percent of annual salary वार्षिक वेतन के प्रतिशत के रूप में बोनस
Manager / प्रबंधक	1	60	60%
Executive / कार्यकारी	5	16	30%
Trainee / प्रशिक्षु	1	2	20%

What is the average bonus (in rupees)?

औसत बोनस (रुपये में) कितना है?

Options:

1) 862857

2) 6039999

3) 260000

4) 412000

Correct Answer: 862857

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।

	2011	2012	2013	2014	2015
Company A / कंपनी A	3000	4000	3000	3000	3000
Company B / कंपनी B	2000	2000	1000	4000	2000
Company C / कंपनी C	4000	3000	1000	3000	1000

For which of the following pairs of years the total exports from the three Companies together are equal?

(Note: Figures given are in lakh rupees)

निम्न में से वर्षों की कौन सी जोड़ी के लिए तीनों कंपनियों का कुल निर्यात बराबर है?
(नोट: दिए गए आँकड़े लाख रुपए में हैं)

Options:

- 1) 2011 & 2013
- 2) 2013 & 2015
- 3) 2011 & 2012
- 4) 2014 & 2015

Correct Answer: 2011 & 2012

Q:24 -

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	Profit or (-Loss) in Rs Crore करोड़ रूपये में लाभ या (-नुकसान)
2011	-25
2012	-20
2013	-5
2014	20
2015	-20

What was the total Profit or loss of the company in last 5 years?

पिछले पांच वर्षों में कंपनी का कुल लाभ या नुकसान कितना था?

Options:

- 1) Profit of Rs 50 crores
- 2) Loss of Rs 60 crores
- 3) Loss of Rs 50 crores

Correct Answer: Loss of Rs 50 crores

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।

India's exports in 2015 वर्ष 2015 में भारत का निर्यात	Value in million US\$ मिलियन डॉलर में मूल्य
Jewellery / जेवर	1000
Software / सॉफ्टवेयर	725
Cotton / कपास	700
Steel / इस्पात	700
Electronics / इलेक्ट्रॉनिक्स	700

Jewellery was what percent of total exports?

जेवर का निर्यात भारत के कुल निर्यात का कितना प्रतिशत था?

Options:

- 1) 28.64 percent
- 2) 31.14 percent
- 3) 23.64 percent
- 4) 26.14 percent

Correct Answer: 26.14 percent