



Welcome to the Quant Sir Comprehensive Guide – Your Trusted Companion for SSC CGL Tier I Success

Cracking the **SSC CGL Tier I** exam demands more than just hard work—it calls for a strategic approach, a solid grasp of core concepts, and sharp problem-solving abilities. This guide is designed to elevate your preparation by providing an in-depth analysis of the **SSC CGL 2022 Quant Previous Year Paper - 01 Dec 2022 - Shift 2**, complete with accurate answer keys and step-by-step solutions.

At **Quant Sir**, we deliver the actual exam paper along with detailed, easy-to-follow solutions. Our mission is to help you decode the exam pattern and master proven techniques to solve even the most challenging questions with clarity and confidence. By practicing with real exam questions, you'll not only become familiar with the format but also build the precision and speed needed to excel.

Whether you're just starting out or fine-tuning your strategy, this guide is your go-to resource for boosting your preparation and improving your scores. With **Quant Sir** by your side, you're not just studying hard—you're preparing smart.

SSC CGL 2022 Quant Previous Year Paper - Exam Pattern

Here's the exam pattern for SSC CGL Tier I exam held in 2022.

Tier I: Computer-Based Exam

Section	No. of Questions	Maximum Marks	Time Allotted
General Intelligence & Reasoning	25	50	Total: 60 minutes
General Awareness	25	50	
Quantitative Aptitude	25	50	
English Comprehension	25	50	
Total	100	200	



SSC CGL 2022 Quant Previous Year Paper - Topicwise Weightage

The table below provides a topic-wise analysis of the SSC CGL 2022 Quant Previous Year Paper - 01 Dec 2022 - Shift 2. It highlights the major focus areas and the number of questions asked from each topic, offering useful insights into the exam pattern. Use this breakdown to better understand question trends and fine-tune your preparation strategy for maximum effectiveness.

Topic	Total Questions
Geometry (Circles, Triangles)	3
Mensuration (3D - Cone, Hemisphere)	1
Algebra	2
Trigonometry	3
Number System (Indices, Remainders)	2
Simplification / Basic Arithmetic	1
Averages	1
Profit, Loss & Discount	3
Ratio, Proportion, & Partnership	2
Percentage / Successive Percentage	1
Time, Speed & Distance / Boats	1
Angles / Triangle Angle Sum	1
Data Interpretation (Table, Chart, Graph)	4





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SSC CGL 2022 Quant Previous Year Paper - Tips to Solve

Here are top tips to excel in the SSC CGL Quantitative Aptitude Section

1. **Read the Question Carefully:** Avoid jumping straight into calculations. Take a moment to understand exactly what the question is asking to prevent avoidable mistakes.
2. **Start with Your Strong Areas:** Kick off with topics you're confident in—like Simplification or Ratio & Proportion. Solving these quickly can boost your morale and save time early in the exam.
3. **Time Management is Crucial:** Stick to a fixed time per question. If a problem seems too lengthy, skip it for the moment and return to it if time permits.
4. **Master Shortcuts and Tricks:** Learn efficient methods for frequently asked topics such as Percentages, Profit & Loss, and Mensuration. These can significantly improve your solving speed.
5. **Accuracy Over Speed:** While speed is important, don't compromise on accuracy. Use quick checks or estimation techniques to verify your answers when possible.
6. **Practice Data Interpretation Often:** Familiarize yourself with interpreting charts, graphs, and tables. Focus on spotting key trends and extracting the right information quickly.
7. **Memorize and Apply Formulas:** Be thorough with essential formulas from Algebra, Geometry, and Trigonometry. More importantly, know how and when to apply them.



Consistent practice, a clear understanding of concepts, and familiarity with the exam format are your best tools to master the Quant section and boost your score steadily.

SSC CGL 2022 Quant Previous Year Paper - 01 Dec 2022 - Shift 2



Q:1 O is the center of a circle. Tangent drawn from a point P, touches the circle at Q. If PQ = 24 cm and OQ = 10 cm, then what is the value of OP?

1. 26 cm
2. 52 cm
3. 13 cm
4. 15 cm

Q:2 If the angles of a triangle are $(x - 46)^\circ$, $(x + 96)^\circ$ and $8x^\circ$, then what is the value of $2x$?

1. 15°
2. 24°
3. 26°
4. 13°

Q:3 A hemisphere of lead of radius 4 cm is cast into a right circular cone of height 72 cm. What is the radius of the base of the cone?

1. 1.63 cm
2. 1.35 cm
3. 1.33 cm
4. 1.45 cm

Q:4 What is $\sin \alpha - \sin \beta$?

1. $2\cos\frac{\alpha+\beta}{2} \cdot \sin\frac{\alpha-\beta}{2}$
2. $2\sin\frac{\alpha+\beta}{2} \cdot \sin\frac{\alpha-\beta}{2}$
3. $2\cos\frac{\alpha-\beta}{2} \cdot \sin\frac{\alpha+\beta}{2}$
4. $2\cos\frac{\alpha+\beta}{2} \cdot \cos\frac{\alpha-\beta}{2}$

Q:5 A, B and C can complete a piece of work separately in 10, 20 and 40 days, respectively. In how many days will the work be completed if A is assisted by both B and C every third day?



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1. 58/7

2. 9

3. 32/3

4. 6

Q:6 What is the remainder when 8127 is divided by 8?

1. 5

2. 7

3. 4

4. 6

Q:7 The table given below shows the number of persons participating in a survey from 6 different states.

States	Persons
S1	100
S2	200
S3	400
S4	500
S5	600
S6	800

What is the ratio of the number of people participating in a survey from state S3 to the a number of people participating in a survey from state S4?

1. 3 : 5

2. 5 : 4

3. 4 : 3

4. 4 : 5

Q:8 The following table shows the marks (in percentage) obtained by six students in four subjects in an examination.

Maximum marks in each subject are 100.



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Student	SUBJECT			
	SST	PHYSICS	CHEMISTRY	MATHS
A	92	90	90	80
B	90	80	85	85
C	80	80	65	70
D	85	80	82	75
E	80	75	75	85
F	90	90	90	85

Answer the following question based on the table:

What is the number of students whose overall percentage obtained is 80% and above?

1. 4
2. 5
3. 2
4. 3

Q:9 The following table shows of different items in different shops and respective selling prices per unit.

Shops	Total No. of items	AC : Cooler : Fan	Selling Price per unit		
			Cooler	AC	Fan
A	5000	4 : 5 : 1	8000	25000	8500
B	1800	3 : 2 : 4	10000	20000	16000
C	3400	6 : 4 : 7	60000	42000	15000
D	3600	4 : 2 : 3	12000	32000	8000
E	4000	5 : 1 : 4	8000	26500	12200
F	1210	2 : 4 : 5	11000	28000	11100

Find the percentage of total revenue which comes from cooler from shop E, Considering all given items are being sold from shop E and from all the given shops only given three items are being sold (rounded off to three decimal places)

1. 4.226%
2. 3.516%
3. 10.45%
4. 8.910%

Q:10 The side of an equilateral triangle is 12 cm. What is the radius of the circle circumscribing this equilateral triangle?

1. $6\sqrt{3}$ cm
2. $4\sqrt{3}$ cm



3. $9\sqrt{3}$ cm

4. $5\sqrt{3}$ cm

Q:11 A person lent a certain sum of money at the annual rate of 25 percent on simple interest. In 6 years the interest amounted to Rs.360 more than the sum lent. What is the sum lent?

1. Rs.600

2. Rs.360

3. Rs.720

4. Rs.540

Q:12 The difference between the cost price and the selling price of a pair of shoes is Rs.1,200. If the profit is 15%, and the selling price is:

1. Rs.8,200

2. Rs.9,200

3. Rs.8,000

4. Rs.9,000

Q:13 What is the ratio of the mean proportional between 1.6 and 3.6 and the third proportional of 5 and 8?

1. 2 : 15

2. 5 : 16

3. 3 : 16

4. 4 : 15

Q:14 The value of $(\sin 30^\circ \cos 60^\circ - \cos 30^\circ \sin 60^\circ)$ is equal to:

1. $1/2$.

2. $-1/2$.

3. 1

4. -1

Q:15 Simplify:



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$$x^9 \times x^5 \times x^{-4} \times x^0 \times x^{-6}$$

1. x^4
2. x^{-4}
3. x^{-6}
4. x^6

Q:16 The average of the marks of 25 students in a class is 19. Later, the teacher realized that the marks of two students were taken as 18 and 19 respectively, instead of 14 and 15. Find the new actual average marks of the class.

1. 17.43
2. 16.56
3. 18.68
4. 17.65

Q:17 If the area of the triangle ABC & DEF are $x^2 \text{ cm}^2$ and $y^2 \text{ cm}^2$ respectively, and $EF = a \text{ cm}$ then BC is

1. y^2/a^2x^2
2. y/ax
3. ax/y
4. a^2x^2/y^2

Q:18 The price of a scooter increases successively by 10%, 5%, and 15%. What is the total percentage increase in the price of scooters?

1. 32.825%
2. 32%
3. 33%
4. 32.10%

Q:19 What is the ratio between the HCF and LCM of the numbers whose LCM is 48 and the product of the numbers is 384?

1. 1 : 4
2. 1 : 6



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3. $1 : 3$

4. $2 : 5$

Q:20 What is the value of $2 \sin 15^\circ \cos 15^\circ - 4 \sin^3 15^\circ \cos 15^\circ$?

1. $3/\sqrt{2}$

2. $\sqrt{3}/2$

3. $\sqrt{3}/4$

4. $1/2$

Q:21 A shopkeeper makes a net profit of 44% on selling an article at successive discounts of 10% and 20%. Find the net profit percentage, if the shopkeeper sells the same article at a discount of 15%.

1. 50%

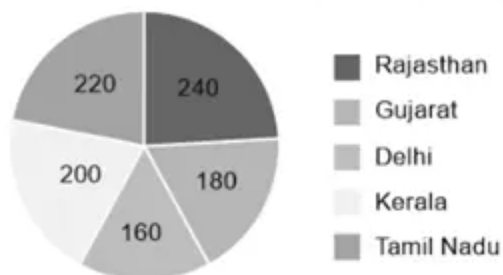
2. 70%

3. 30%

4. 40%

Q:22 Study the given chart and answer the following question.

Production of steel (in mn units)



What is the central angle corresponding to the production of steel by Kerala.?

1. 82°

2. 65.8°

3. 75.2°

4. 72°



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Q:23 A man rows a boat a certain distance downstream in 9 hours, while it takes 18 hours to row the same distance upstream. How many hours will it take him to row three-fifth of the same distance in still water?

1. 9.5
2. 7.2
3. 10
4. 12

Q:24 If $x + 1/x = 4$, then find the value of $x^5 + x^{-5}$.

1. 726
2. 728
3. 724
4. 734

Q:25 k is a negative number such that $k + k^{-1} = -2$, then what is the value of $(k^2 + 4k - 2)/(k^2 + k - 5)$?

1. 7
2. 1
3. -7
4. -1

SSC CGL 2022 Quant Previous Year Paper - Answer Key

You can view your score for this test here.

1. (1)	2. (3)	3. (3)	4. (1)	5. (1)
6. (2)	7. (4)	8. (1)	9. (1)	10. (2)
11. (3)	12. (2)	13. (3)	14. (2)	15. (1)
16. (3)	17. (3)	18. (1)	19. (2)	20. (3)
21. (2)	22. (4)	23. (2)	24. (3)	25. (2)



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Each question in this paper carries 2 marks. Here's how to interpret your performance:

- Scored above 45? Excellent work! You're on the right track to cracking the exam. Keep up the momentum and continue refining your skills.
- Scored between 35 and 45? A strong effort! Stay consistent with your practice to further strengthen your grasp on key topics.
- Scored below 30? Don't worry—this is a great opportunity to identify your weak areas and focus on targeted improvement. With the right approach, progress is absolutely achievable.

To take your preparation to the next level, go through the detailed solutions provided for this paper. They'll help you understand the correct methods, avoid common mistakes, and sharpen your problem-solving skills.

Stay consistent, stay focused—strategic preparation and smart time management are your best allies.

And don't forget to revisit **Quant Sir** for more SSC CGL 2022 papers, complete with answer keys and step-by-step explanations to power your preparation forward!

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