



Welcome to the Quant Sir Complete Guide – Your Reliable Partner for SSC CGL Tier I Success

Preparing for the **SSC CGL Tier I** exam requires more than just dedication—it demands a well-structured strategy, a strong command of fundamental concepts, and effective problem-solving skills. This guide is crafted to elevate your preparation through a thorough analysis of the **SSC CGL 2022 Quant Previous Year Paper - 20 April 2022 - Shift 3**, complete with accurate answer keys and detailed step-by-step solutions.

At **Quant Sir**, we go beyond theory. We provide the actual question paper along with clear, comprehensive solutions aimed at helping you decode the exam structure and master key techniques to approach even the toughest problems with confidence. Practicing with real exam-level questions not only enhances your familiarity with the pattern but also sharpens your accuracy and speed.

Whether you're a beginner setting your foundation or a repeat aspirant optimizing your strategy, this guide serves as your essential toolkit for success. With Quant Sir by your side, you're not just putting in the effort—you're preparing strategically and effectively.

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 presents a topic-wise breakdown of the SSC CGL 2022 Quant Previous Year Paper - 20 April 2022 - Shift 3. It outlines the key focus areas along with the number of questions from each topic, giving you valuable insights into the exam's structure and question trends. Use this analysis to identify high-weightage topics and refine your preparation strategy for better efficiency and results.

| Topic | No. of Questions |
|--|------------------|
| Data Interpretation | 4 |
| Algebra | 3 |
| Geometry (Circles + Triangles + Trapezium) | 4 |
| Trigonometry | 2 |
| Time, Speed & Distance | 1 |
| Profit, Loss & Discount | 2 |
| Number System / LCM | 1 |
| Averages / Statistics | 1 |
| Surds / Simplification | 1 |
| Mensuration (3D) | 2 |
| Compound Interest | 1 |
| Partnership | 1 |
| Work & Time | 1 |
| Percentage / Ratio | 2 |

SSC CGL 2022 Quant Previous Year Paper - Tips to Solve



title

- **Understand the Question Thoroughly:** Before jumping into calculations, take a moment to fully grasp what the question demands. This helps avoid careless mistakes and misinterpretation.
- **Start with Your Strengths:** Begin with the topics you're most confident in—such as Simplification, Ratio & Proportion, or Averages. Solving these quickly builds early momentum and saves valuable time.
- **Manage Your Time Wisely:** Allocate a specific time limit to each question. If a question seems time-consuming, skip it for now and come back later if time allows.
- **Learn Smart Techniques and Shortcuts:** Familiarize yourself with quick methods for commonly tested topics like Percentages, Profit & Loss, and Mensuration. These can greatly increase your efficiency in the exam.
- **Prioritize Accuracy Alongside Speed:** Speed matters, but accurate answers fetch marks. Use estimation or back-solving to double-check where necessary and avoid negative marking.
- **Practice Data Interpretation Regularly:** Work consistently with graphs, pie charts, and tables. The more familiar you are with spotting trends and extracting data, the faster you'll solve DI questions.
- **Know Your Formulas Inside-Out:** Master key formulas from Algebra, Geometry, and Trigonometry. Just memorizing isn't enough—understand their application so you can use them flexibly in different scenarios.



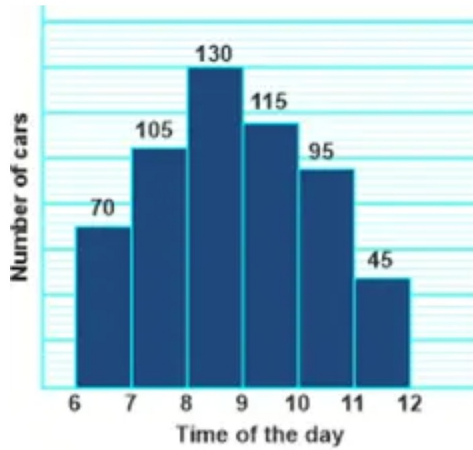
Consistent practice, a clear understanding of concepts, and familiarity with the exam format are your best tools to master the Quant section and boost your score steadily.

SSC CGL 2022 Quant Previous Year Paper - 20 April 2022 - Shift 3

Q:1 The number of cars passing the road near a colony from 6 am to 12 am has been shown in the following histogram. During which hour(s) is the number of cars passed less than the average number of cars passed from 7 am to 12 noon?



title



1. 6-7, 10-11, 11-12
2. 10-11, 11-12
3. 6-7, 11-12
4. 7-8, 8-9, 9-10



Q:2 The distance between the two towns is covered in 7 hours at a speed of 50km/h. By how much should the speed (in km/h) be increased so that 2 hours of traveling time will be saved?

1. 70
2. 20
3. 30
4. 40

Q:3 A is 25% more than B, and B is 40% less than C. If C is 20% more than D, then A is what percentage less than D?

1. 9%
2. 12%
3. 10%
4. 11%



Q:4 if $a + b + c = 6$, $a^2 + b^2 + c^2 = 32$, and $a^3 + b^3 + c^3 = 189$, then the value of $4abc$ is:

1. 8
2. 12
3. 9
4. 16

Q:5 if $(4a - 3b) = 1$, $ab = 1/2$, where $a > 0$ and $b > 0$, what is the value of $(64a^3 + 27b^3)$?

1. 25
2. 15
3. 35
4. 30



Q:6 An article is sold at a certain price. If it is sold at 70% of this price, then there is a loss of 10%. What is the percentage profit, when it is sold at the original selling price?

1. 300/7%
2. 200/7%
3. 100/7%
4. 50/7%

Q:7 Which of the following is the smallest number that is a perfect square and is divisible by each of the numbers 6, 8, and 15?

1. 121
2. 576
3. 225
4. 3600



title

Q:8 Three partners shared the profit in a business in the proportion of 9 : 8 : 11. They invested their capital for 4 months, 6 months, and 18 months, respectively. What is the ratio of their capitals?

1. 27 : 16 : 66
2. 81 : 16 : 66
3. 81 : 48 : 22
4. 27 : 48 : 22

Q:9 If $5\sqrt{3} + \sqrt{75} = 17.32$, then the value of $14\sqrt{3} + \sqrt{108}$ is:

1. 32.46
2. 33.86
3. 34.64
4. 35.64



Q:10 PQRS is a cyclic quadrilateral and PQ is the diameter of the circle. If $\angle RPQ = 23^\circ$, then what is the measure of $\angle PSR$?

1. 157°
2. 113°
3. 123°
4. 147°

Q:11 A person bought a book at a 31% discount on its printed price. If no discount was given, then he would have to pay Rs 2,480 more. How much did he pay (in Rs) for the book?

1. 4560
2. 8000
3. 7000
4. 5520



Q:12 While preparing the results of English of a class, the marks of one student got recored as 95 in place of 57, as a result of which there was an increase in the average score by 0.95. How many students were here in the class?

1. 37
2. 45
3. 57
4. 40

Q:13 The length of the body diagonal of a cube is $8\sqrt{3}$ cm. What is the volume (in cm^3) of the cube?

1. 216
2. 343
3. 512
4. 729



Q:14 In a right-angled triangle PQR, $\angle Q = 90^\circ$. A and B are the mid-points of PQ and Pr respectively. If $PQ = 16$ cm, and $QR = 30$ cm and $PR = 34$ cm, what is perimeter (in cm) of the trapezium ABRQ?

1. 80
2. 40
3. 65
4. 70

Q:15 In $\triangle ABC$, $\angle A = 68^\circ$. If I is the incentre of the triangle, then measure of $\angle BIC$ is:

1. 68°
2. 56°
3. 124°
4. 112°



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Q:16 A ladder of length 3.5m just reaches the top of a wall. If the ladder makes an angle of 60° with the wall, then what is the height of the wall (in m)?

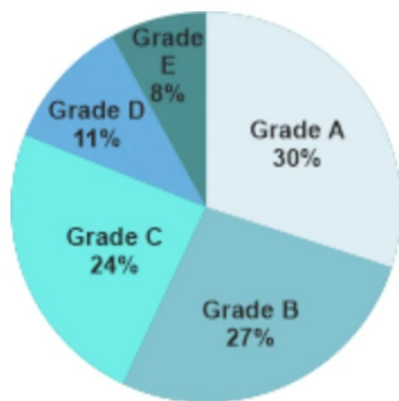
1. 3.5
2. 7
3. 3.9
4. 1.75

Q:17 The value of $(5\cos^2 62^\circ + 5\cos^2 28^\circ - 21)/(7\sin^2 35^\circ + 7\sin^2 55^\circ + 1)$ is:

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



Q:18 The performance of 1800 students in grades has been shown in the following pie chart.



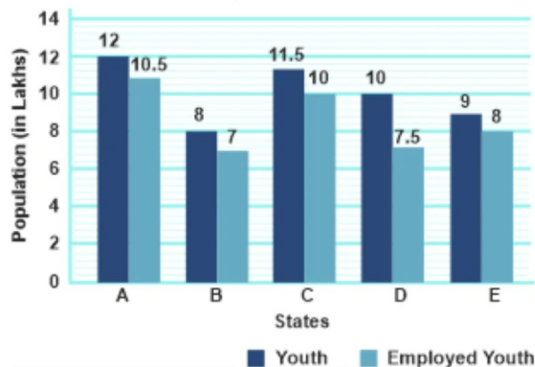
How many more students have obtained grade B than those who have obtained grade C?

1. 50
2. 54
3. 3
4. 60



title

Q:19 The following bar graph shows the number of youth (in lakhs) and the number of employed youth (in lakhs) in five states A, B, C, D, and E.



What is the average number of youth in the five states?

1. 1025000
2. 1010000
3. 1015000
4. 1200000

Q:20 The value of $\frac{[(1 - \cot\theta)/(1 - \tan\theta)]^2 + 1}{2}$, if $0^\circ < \theta < 90^\circ$, is equal to:

1. $\operatorname{cosec}^2\theta$
2. $\sin^2\theta$
3. $\sec^2\theta$
4. $\cos^2\theta$

Q:21 Divide Rs 66,300 between A and B in such a way that the amount A receives after 8 years is equal to the amount that B receives after 10 years, with compounded interest being compounded annually a rate of 10% per annum.

1. A = Rs 36,300, B = Rs 30,000
2. A = Rs 37,000, B = Rs 29,300



3. A = Rs 35,520, B = Rs 30,810

4. A = Rs 35,200, B = Rs 31,100

Q:22 A circle is circumscribed on a quadrilateral ABCD. If $\angle DAB = 100^\circ$, $\angle ADB = 35^\circ$ and $\angle CDB = 40^\circ$, then find the measure of $\angle DBC$.

1. 45°

2. 40°

3. 60°

4. 35°

Q:23 A and B can do a work in 12 days and 18 days, respectively. They worked together for 4 days after which B was replaced by C and the remaining work was completed by A and C in the next 4 days. In how many days will C alone complete 50% of the same work?

1. 18

2. 21

3. 36

4. 24

Q:24 Find the value of the following expression:

$$\frac{1\frac{1}{2} + 1\frac{3}{7} \div \left(1\frac{3}{5} \text{ of } 1\frac{1}{4}\right) \times 2\frac{1}{3}}{2\frac{2}{3} \div \frac{4}{9} \times \frac{5}{6} + 14}$$

1. 13/114

2. 49/114

3. 1/6

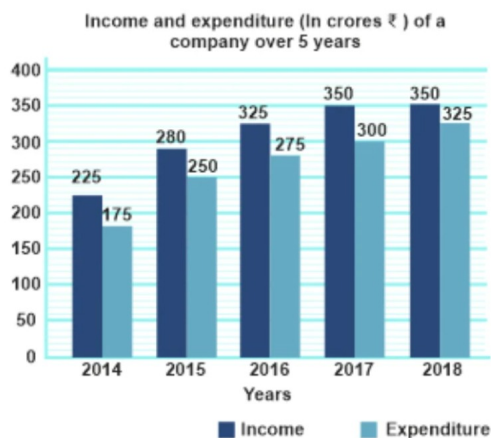
4. 107/34



title

Q:25 The given bar graph shows the income and expenditure (in crores Rs) of a company over 5 years, from 2014 to 2018.

Study the bar graph and answer the question that follows.



What is the difference (in cr Rs) between the expenditure for the years 2017 and 2018 taken together and the income for the years 2015 and 2016 taken together?

1. 15
2. 20
3. 16
4. 18

SSC CGL 2022 Quant Previous Year Paper - Answer Key

You can view your score for this test here.

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



title

Each question in this paper is worth 2 marks. Here's how to assess your performance:

- Scored above 45? Great job! You're well on track to clearing the exam. Keep up the momentum and continue sharpening your problem-solving techniques.
- Scored between 35 and 45? Solid performance! With consistent practice and focused revision, you can push your score even higher.
- Scored below 30? Don't be disheartened—this is a valuable chance to identify weaker areas and work on them systematically. With the right guidance and effort, significant improvement is within reach.

To elevate your preparation, make sure to review the detailed solutions provided for this paper. They'll help you grasp the correct methods, understand common pitfalls, and improve both accuracy and speed.

